# **Precinct Plans** 03

Cudgegong Road Station and Precinct



#### 3.1 Precinct Context

Cudgegong Road Station is the first rail station to be constructed as part of the Sydney Metro Northwest project.

Cudgegong Road Station is within the North West Growth Centre and will support the delivery for approximately 4,400 new dwellings within the Area 20 and Riverstone East precincts. The proposed development area makes provision for the Sydney Metro Northwest rail corridor, railway station and commuter car parks. It also provides links to a future village centre which will catalyse \_ Socially active secondary and primary development growth for this area of North West Sydney.

Cudgegong Road public domain spaces respond and reflect aspects of the station's immediate context and provides a vegetated setting for the station architecture.

The precinct includes a series of bridges across the rail cutting to provide a high level of connectivity within the station precinct. The precinct landscape responds to and enhances the Cumberland Plain woodland setting. Tree lined streets with a formal avenue setout provide a graceful setting to the precinct, with the four bridges across the cutting providing access and views to the station.

Key views of the station canopy are achieved from arrival points into the precinct. This allows views of the canopy to be orientation markers and enhance identity of the station. Commuter car parking is well vegetated and shaded with pedestrian movement guided towards the station. Transport intermodal requirements are all within the inner precinct streets.

The station is simple in its program and intuitive for the customer. Entries are well organised concourse with an even distribution of passengers to platform level.

The Cudgegong Road Station will deliver:

- \_ A network of socially connected civic spaces
- Seamless interchange from pedestrian, cycle, bus, taxi, kiss and ride, and commuter car parking
- station plazas
- \_ Visible, comfortable, protected and safe station entrances
- High quality proactive customer service within a modern, uplifting station environment
- \_ An intuitive journey to the train.

#### 3.1.1 Purpose and Scope

This section of the Sydney Metro Northwest provided from adjacent precinct streets to a Urban Design and Landscape Corridor Plan (UDCLP) provides an overall description of the built elements, their context and the design drivers for the precinct at Cudgegong Road Station. This section should be read in conjunction with other sections of the UDCLP to gain an appreciation of the strategic context, design vision and system wide componentry of the project.

> This section establishes the following for Cudgegong Road Station:

- Sets out the project context and vision
- Describes the local context
- Outlines the key relevant issues
- \_ Describes the urban design, landscape and architectural design approach
- \_ Describes and details the built elements within the precinct site.

The proposed station facilities include:

- Precinct Streets A, B and C
- Commuter car parking spaces
- \_ Two Primary Plazas
- \_ Two station entries
- A covered paid concourse
- \_ An Island platform
- \_ Landscaped terracing to either side of the rail corridor
- \_ Two levels of service buildings
- Cycle facilities
- Pedestrian and cycle bridge
- Provision for potential future third platform.

#### 3.1.2 Overview of Precinct Project

Cudgegong Road Station is located between Rouse Hill Station and the Sydney Metro Trains Facility (SMTF). The platform is orientated on an east west axis with Cudgegong Road to the east, Tallawong Road to the west and Schofields Road to the south.

The platform is located in a cutting between Cudgegong Road and Precinct Street C bridges. An additional unpaid cross corridor bridge connection is provided to the western end of the station for pedestrians and cyclists.

Unlike the other open cut stations, Cudgegong Road Station has a third track to the northern side of the station providing additional operational capacity to the SMTF. Space proofing for a future side platform is also provided to the northern side of the cutting to safeguard the extension of the line to Marsden Park.

Refer Figure 3.1\_Cudgegong Road Station Precinct Plan and Figure 3.2\_Aerial View of Cudgegong Road Station.

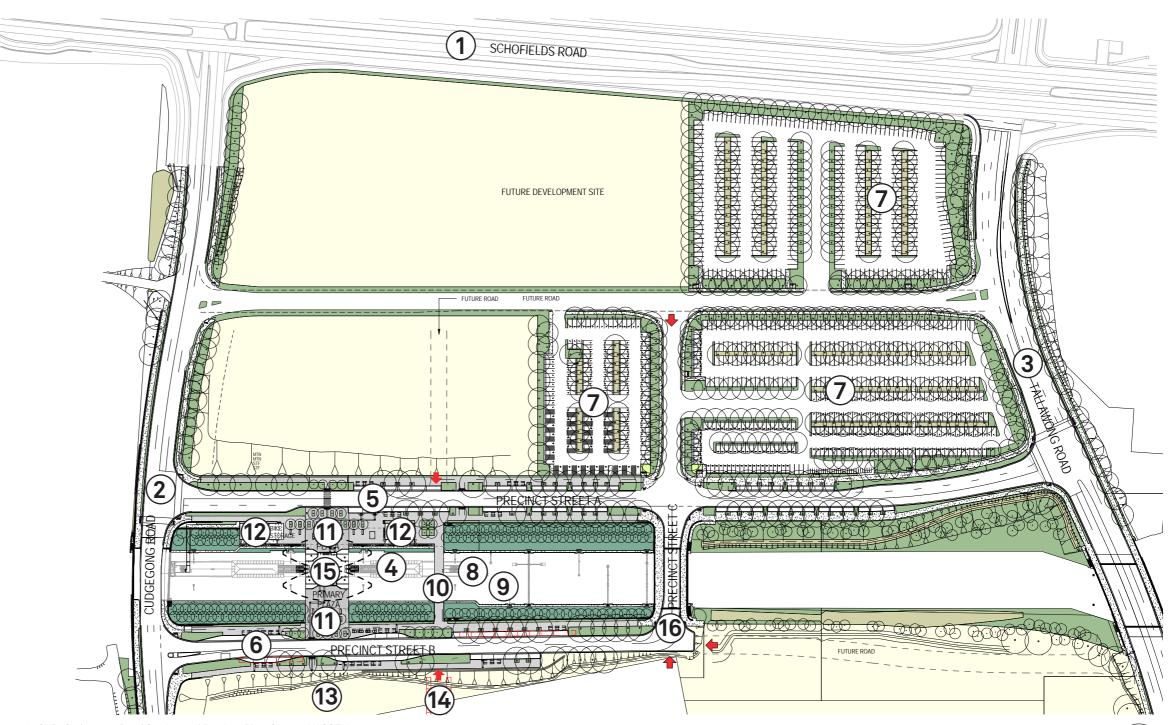


Figure 3.1CUD\_Cudgegong Road Station and Precinct Plan. Source: HASSELL.

The following are the key components of Cudgegong Road Station:

- 1. Schofields Road
- Cudgegong Road
   Tallawong Road
   Platform Canopy

- 5. Kiss and Ride Bays6. Bus Stands and Taxi Ranks
- 7. Commuter Car Park
- 8. Island Platform in Cutting
- 9. Potential Future Third Platform
  10. Pedestrian / Cycle Bridge
  11. Station Entry
  12. Station Services Building

- 13. Future Local Centre
- 14. Future High Street 15. Concourse Canopy 16. Precinct Street C

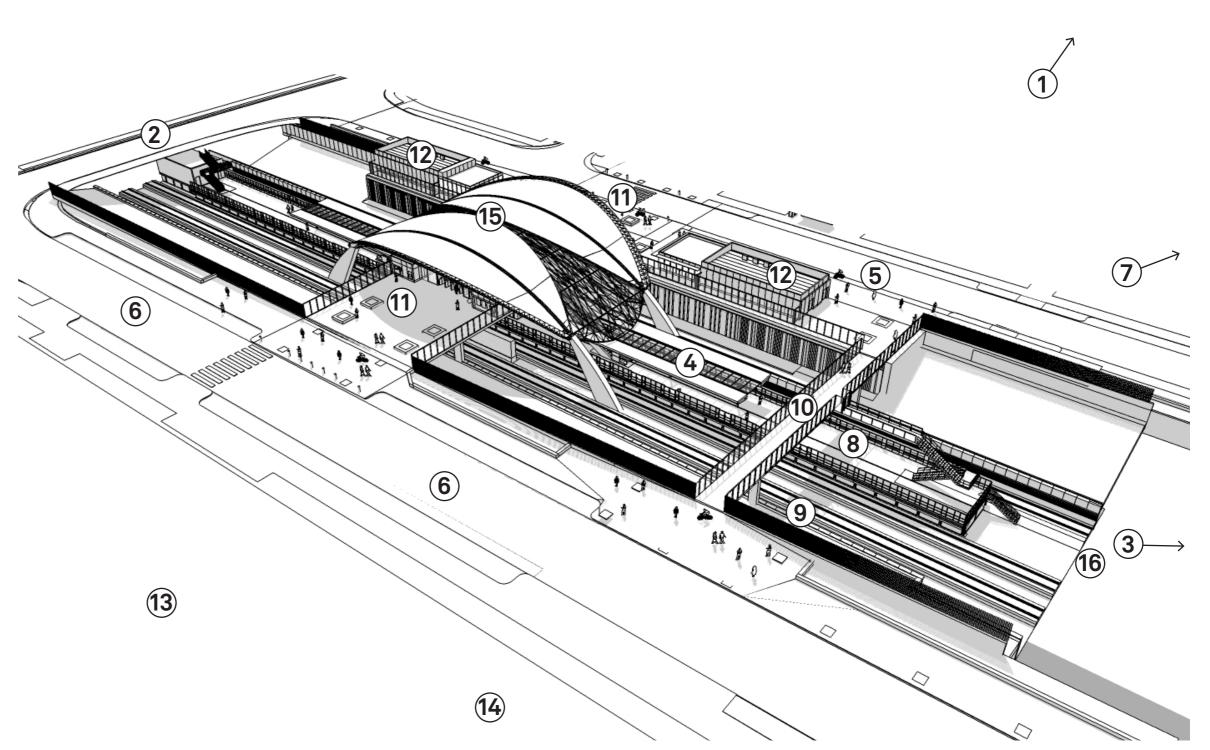


Figure 3.2CUD\_Aerial View of Cudgegong Road Station. Source: HASSELL.

#### 3.1.3 Location

#### Regional Location

Cudgegong Road Station is located in Blacktown City Council. It is the western most station of the Sydney Metro Northwest. The station is located parallel to Schofields Road between Cudgegong Road and Tallawong Road. The existing landscape is essentially rural / rural residential in character with open pasture / grassland with a number of large stands of remnant Cumberland Plain Woodland.

Cudgegong Road Station is 48 km north west of Sydney CBD.



Figure 3.3CUD\_Aerial View of Cudgegong Road Station. Source: Google Maps.



#### **Local Context**

Figure 3.4 is taken from the Cudgegong Road Structure Plan from the North West Rail Link Corridor Strategy (NSW Planning 2013) and illustrates the Cudgegong Road Station precinct's location within the structure plan study area and existing surrounding land uses. The legend identifies the key existing local places of note.

Located in the heart of the North West Growth Centre, the new Cudgegong Road Station will become the transport hub for residential growth at places like The Ponds and western parts of Rouse Hill.

There will be a strong emphasis placed on pedestrian access at the station and a dedicated pedestrian bridge across the rail line providing direct connections to the future village.



Figure 3.4CUD\_Cudgegong Road Structure Plan Aerial. Source: Planning NSW 2013.

#### 3.1.4 Statutory Context

At the local level, the main statutory controls for the Cudgegong Road precinct are the Cudgegong Road Structure Plan and the Cudgegong Road (Area 20) Precinct Plan (Refer Figures 3.5 and Figure 3.6). Features of these plans are outlined below.

#### Cudgegong Road Structure Plan

The area surrounding the station will primarily become medium density residential use within 800 metres of the station. This comprises a mixture of 3-6 storey apartment buildings and 2-3 storey townhouses. Additional low rise housing will replace rural residential uses in other areas, particularly within Riverstone East.

Open space links will be reinforced along First and Second Ponds Creek. These links will become significant recreational links for residents and also provide habitat for wildlife.

#### Cudgegong Road (Area 20) Precinct Plan

The Area 20 Plan presents an indicative layout prepared by the NSW Government to refine and represent acknowledged developments to the Cudgegong Road Structure Plan, some of which include:

- Residential dwelling yield increase
- \_ Increased provision of open space
- Updated boundaries to Second Ponds Creek riparian corridor
- Some revisions to the precinct road network to reflect the finalised rail design and the associated traffic studies.

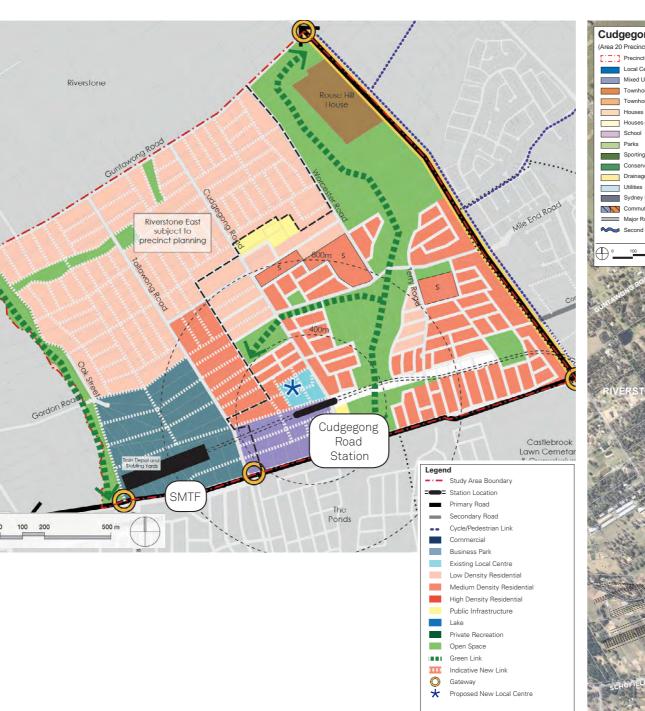




Figure 3.5CUD\_Cudgegong Road Structure Plan. Source: Planning NSW 2013.

Figure 3.6CUD\_Cudgegong Road (Area 20) Precinct Layout. Source: NSW Government Planning and Environment June 2015.

#### 3.1.5 Precinct Access

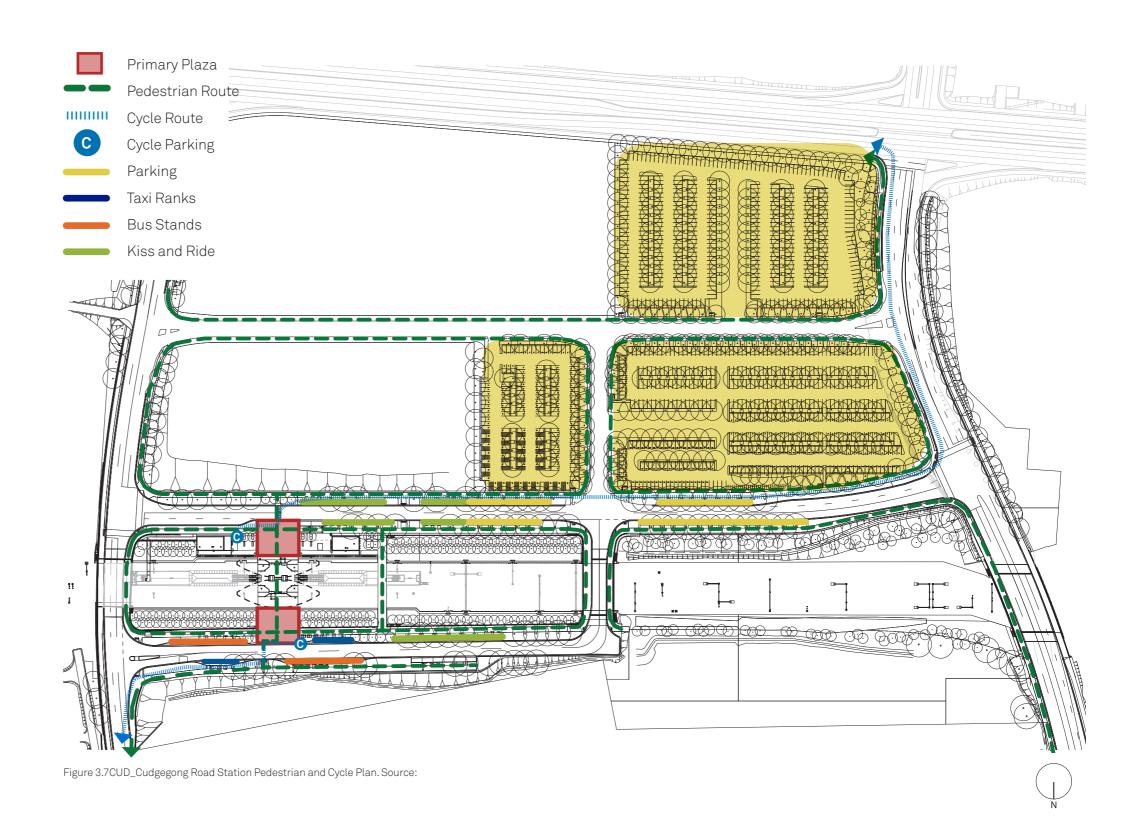
The Station Access Plans describe traffic requirements and related pedestrian movement for the precinct. These have informed the precinct kerbside provisions for bus, taxi, kiss and ride and on-street parking.

The Sydney Metro Northwest Pedestrian-Cycle Network and Facilities Strategy contains recommendations for district cycle and pedestrian access requirements for the precinct. The Cudgegong Road Station precinct designs integrates off road cycle access routes to and from the station. Locations for provision of bicycle parking with these recommendations.

# 3.1.6 Parking, Pedestrian, Cyclist Access Arrangements and Facilities

The parking, pedestrian and cyclist access arrangements and facilities are consistent with the requirements of the station access plans and pedestrian cyclist strategy. They are illustrated in summary form in Figure 3.7.

- Location of bus stands and taxi ranks are located on Precinct Street B. They are in a good location to serve future town centre connections.
- Kiss and Ride bays are located on Precinct Street A as a day one provision. Along with the car park access points this street priorities private transport for efficient traffic circulation flow. Some Kiss and Ride bays are to be relocated to Precinct Street B when the future town centre is built.
- On street car parking is located on Precinct Street A beyond the Kiss and Ride bays.



#### 3.1.7 Precinct Planning and Design Issues

The key issues identified at the Cudgegong Road Station precinct are summarised below:

- 1. Activity and Character\_activity and distinctive character of the primary plaza and secondary areas of public domain particularly in relation to approaching the station from two directions
- 2. Walk to Car Parks\_character and safety of the public domain to car parks
- 3. Landscape Edges\_function and character of the landscape edge either side of the station
- **4. Pedestrian connections**\_pedestrian connection across Schofields Road and through to east/west riparian zones

#### 3.1.8 Precinct Design Principles

The key precinct principles developed for Cudgegong Road Station are summarised below:

- North South Connections visible and direct connection to the future local centre high street
- Double Sided Station station entry address to the north and south, each with a different long and short term function
- Improved Streets new streets running north and south of the alignment improve access, visibility and activity around the station precinct
- Facilitate visual connection and pedestrian connectivity between the northern station entry and proposed town centre.

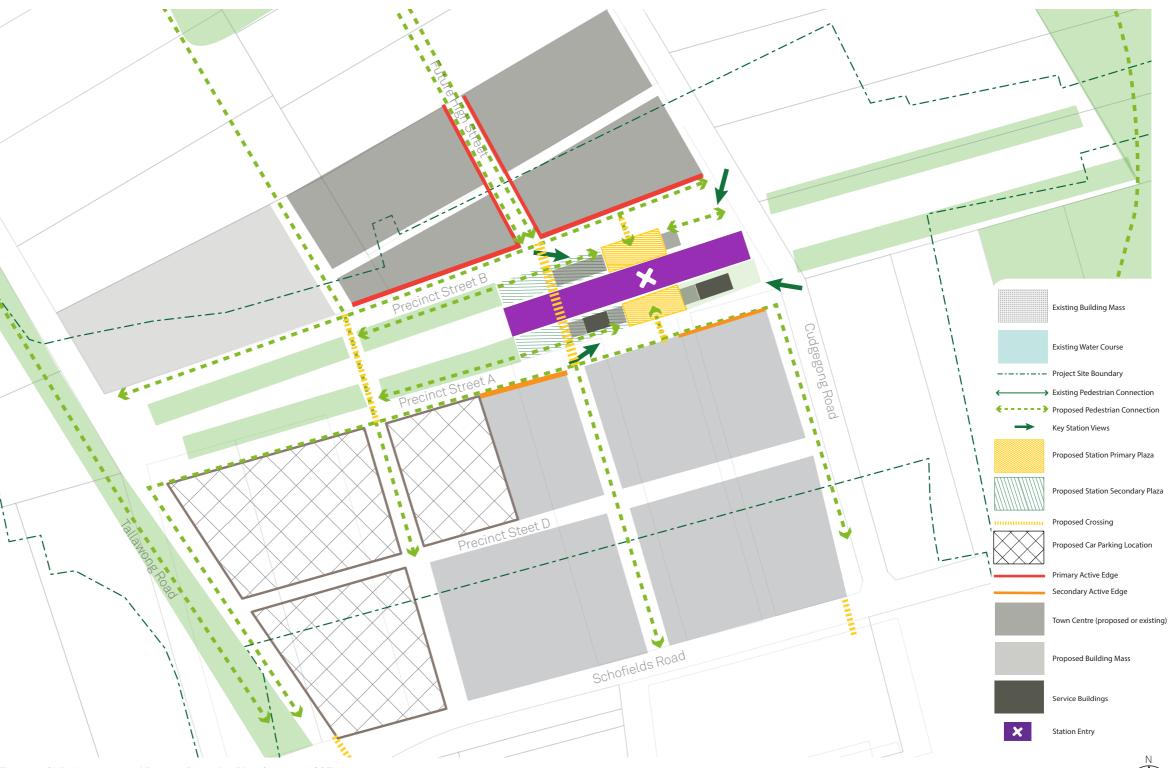


Figure 3.8CUD\_Key Issues and Precinct Principles Plan. Source: HASSELL.



# **Station Type** Open cut

Depth below Concourse 7.2m

**Centre Type Future Neighborhood Centre** 

**Catchment Predominantly Residential** 

**Local Government Area** Blacktown City Council

#### 3.1.9 Precinct Design Drivers

The key design drivers informing Cudgegong Road Station precinct are summarised below:

- Integration of station and interchange with future town centre located to the north
- Creation of a robust 'day one' station precinct and identity
- Establishing a legible street level address to the station
- Integration of large scale commuter parking facilities and pedestrian routes
- Responding to the Cumberland Plain ecology and landscape character
- Creation of village scale streetscapes and pedestrian /bicycle priority.



 $\label{thm:condition} \textit{Figure 3.9CUD\_Artist Impression of Cudgegong Road Station.} Source: \textit{Ai3D}.$ 



## 3.2 Urban Design and Landscape Plan

This section contains descriptions of the proposals for the urban and landscape design of Cudgegong Road station and its immediate surrounds in the context of the wider precinct. Plans have been prepared in accordance with the strategies documented in Section 2 of this UDCLP using the componentry documented in Section 4 of this UDCLP.

#### 3.2.1 Site Interactions

Interactions between the Cudgegong Road Station and its immediate surrounds that have informed the design are summarised in the adjacent diagrams. Refer Figures 3.10 to 3.13.

#### 1. Linear Cutting

Opportunity to provide a distinctive landscape character within the cutting.

#### 2. Green Link

Opportunity to extend corridor planting through the precinct and connect to the SMTF facility through streetscape, buffer and car park planting.

#### 3. Bridges Across the Cutting

Opportunity to provide bridges across the cutting to ensure the track line is not a barrier within the public domain.

#### 4. Future Town Centre to the North

Opportunity to provide links to the future town centre which will be adjacent to and form an edge to the station precinct.

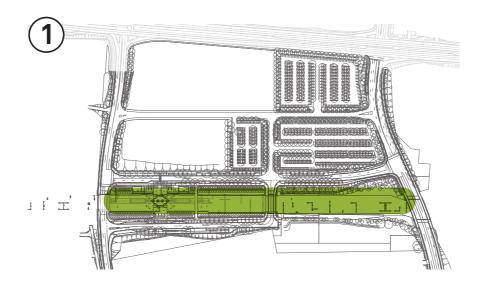


Figure 3.10CUD\_Linear Cutting. Source: HASSELL.

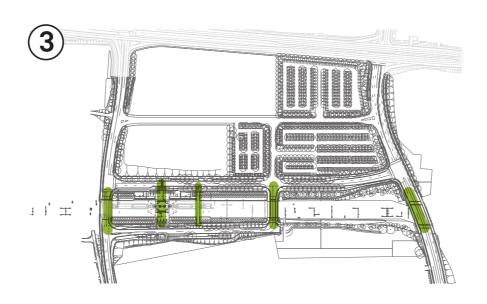


Figure 3.12CUD\_Bridges Across the Cutting. Source: HASSELL.

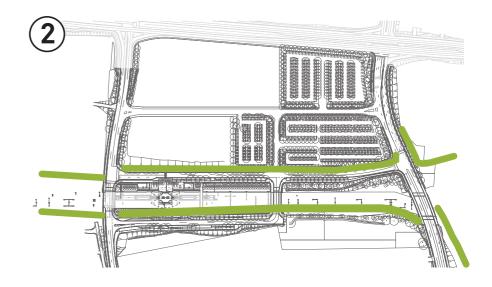


Figure 3.11CUD\_Green Link. Source: HASSELL.

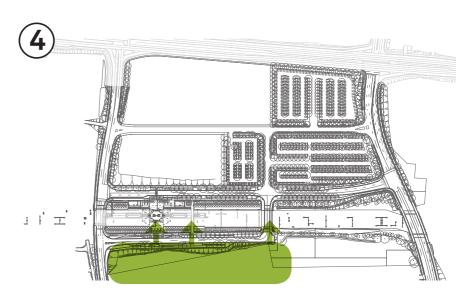


Figure 3.13CUD\_Future Town Centre Links. Source: HASSELL.



#### 3.2.2 Design Opportunities

The design opportunities informing the design of the Cudgegong Road station and its immediate surrounds that have informed the precinct are summarised in the adjacent diagrams. Refer Figures 3.14 to 3.17.

# 1. Cumberland Plain Woodland Station Setting

Opportunity to provide a station within a Cumberland Plain Woodland setting. Key views down streets, around the station and into the woodland are maximised.

#### 2. Station Identity

Opportunity to create an easily identifiable station through the design of the Station Canopy and the Public Art.

#### 3. Shady Public Domain

Opportunity to create a comfortable place for pedestrians though a clear hierarchy of spaces and the design of shady settings where possible.

#### 4. Activation and Connections

Opportunity to provide a setting for a variety of active and passive activities while providing distinctive landscape treatments which assist with way finding. The use of the public spaces is discussed in further detail in Section 3.2.3.

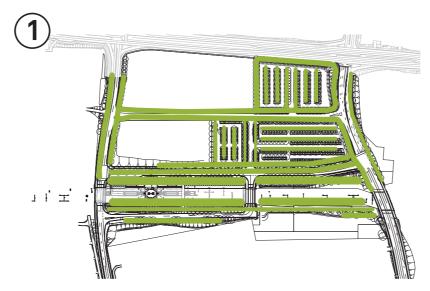


Figure 3.14CUD\_Station Setting. Source: HASSELL.

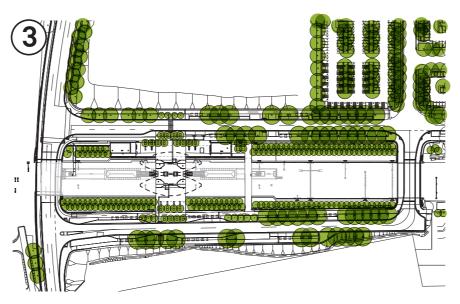


Figure 3.16CUD\_Shady Public Domain. Source: HASSELL.

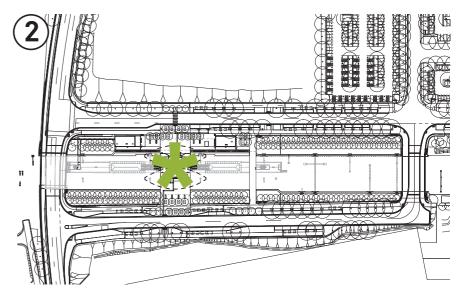
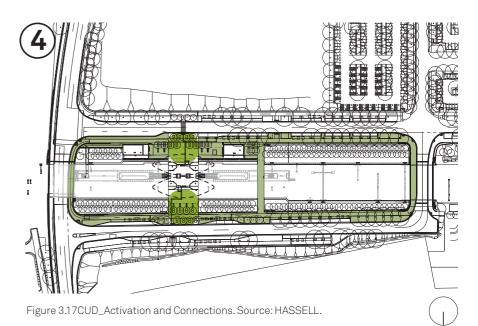


Figure 3.15CUD\_Station Identity. Source: HASSELL.



#### 3.2.3 Landscape Site Plan and Precinct **Elements**

The main Cudgegong Road Station precinct elements are summarised below and located on Figure 3.18\_ Cudgegong Road Landscape Site Plan.

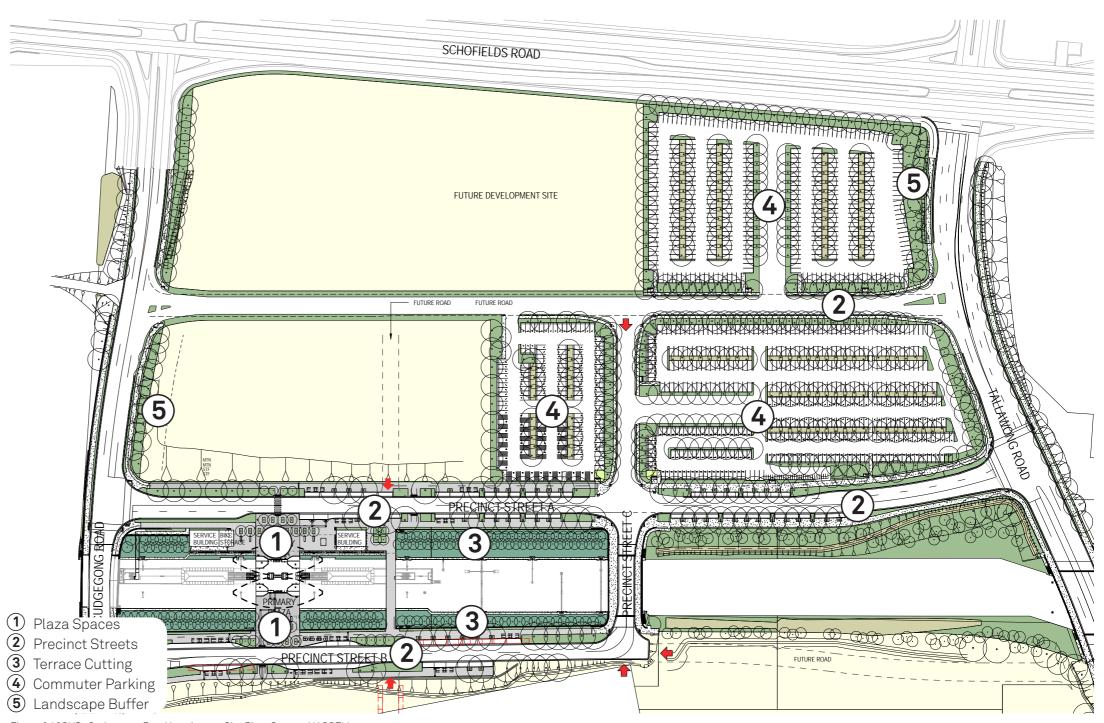


Figure 3.18CUD\_Cudgegong Road Landscape Site Plan. Source: HASSELL.

#### Plaza Spaces

Plaza Spaces are the social spaces for Cudgegong Road Station. The primary plaza spaces are located to both sides of the station to service the doubled sided entry in response to day one and future town centre access.

The main spaces in the plaza and their attributes are described below and illustrated in Figure 3.19.

- Trees are arranged in a formal grid to complement the organic character of the station canopy architecture. They are signature trees to identify the entry to the station and will provide a strong contrast to the Cumberland Plain street trees. Along the kerb edge of the plaza the trees, planting and furniture are arranged to deter vehicular access to the plaza space.
- The primary plaza paving is a continuation of the concourse paving and is designed to allow unimpeded pedestrian movement in and out of the station.
- Secondary plaza spaces to each side of this central movement line are intended to accommodate social gathering, meeting and waiting activities. There is inclusion of seating elements to promote stopping and resting, with these being located near trees for shade.
- \_ Cycle parking is located close to the station entry. The location of a bike hub here will provide a catalyst for plaza activation.

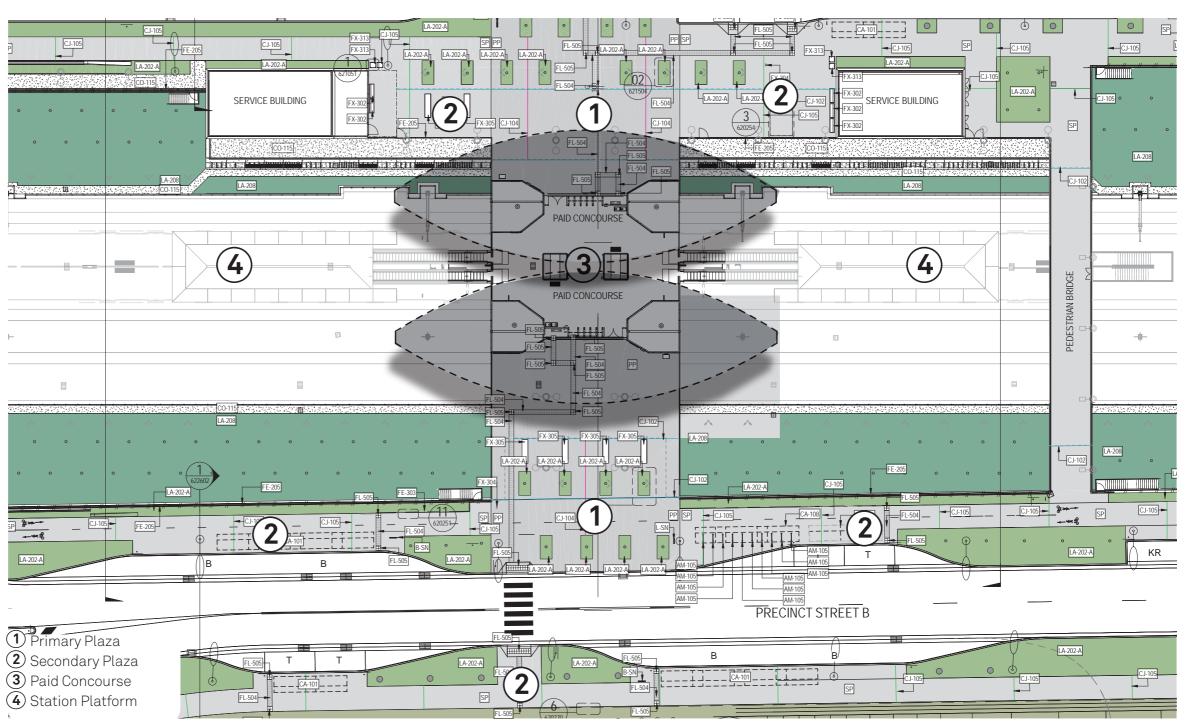


Figure 3.19CUD\_Cudgegong Road Station Landscape Plaza Plan. Source: HASSELL.



#### **Precinct Streets**

The formal linear boulevard character of precinct streets reflects the strength of the rail cutting as it passes through this precinct and responds to the grid layout of the future town centre. Future street junctions are safeguarded.

Set out of streetscape elements ensures no obstruction to the smooth flow of bus, taxi and kiss and ride users.

Where kerb-side activities allow, massed planting beds run along the inside of the footpaths. This introduces permeable planting bed surface and minimizes hard non-permeable surfaces.

#### Platform Terrace Cutting

The terrace design is restrained with the focus on the provision of generous planting beds. This allows the station platforms experience to be of planted surroundings.

Sight lines from the platform to the public domain are important, illustrated in Figure 3.20. Species selected are a mix of ground covers and low trees to allow views to the precinct spaces and sky.

#### Commuter Car Park

The commuter car parks are leafy and well-vegetated with regular swale planting breaking up the expanse of hard surface.

#### Landscape Buffer

Cudgegong Road Station precinct has a vegetated buffer, which provides a landscaped setting and allows this precinct to have a vegetated connection with the rail corridor to the east and with the Sydney Metro Trains Facility (SMTF) precinct to the west.

The tree lined Tallawong Road and Cudgegong Road signify the arrival to the precinct.

The establishment of tree lined streets and planted boundaries provide amenity for future adjacent and surrounding landuses.

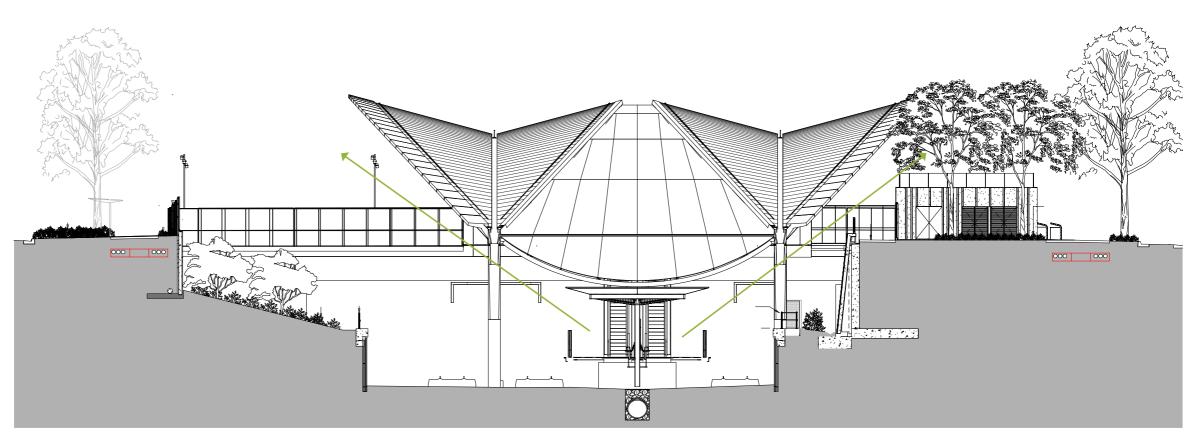


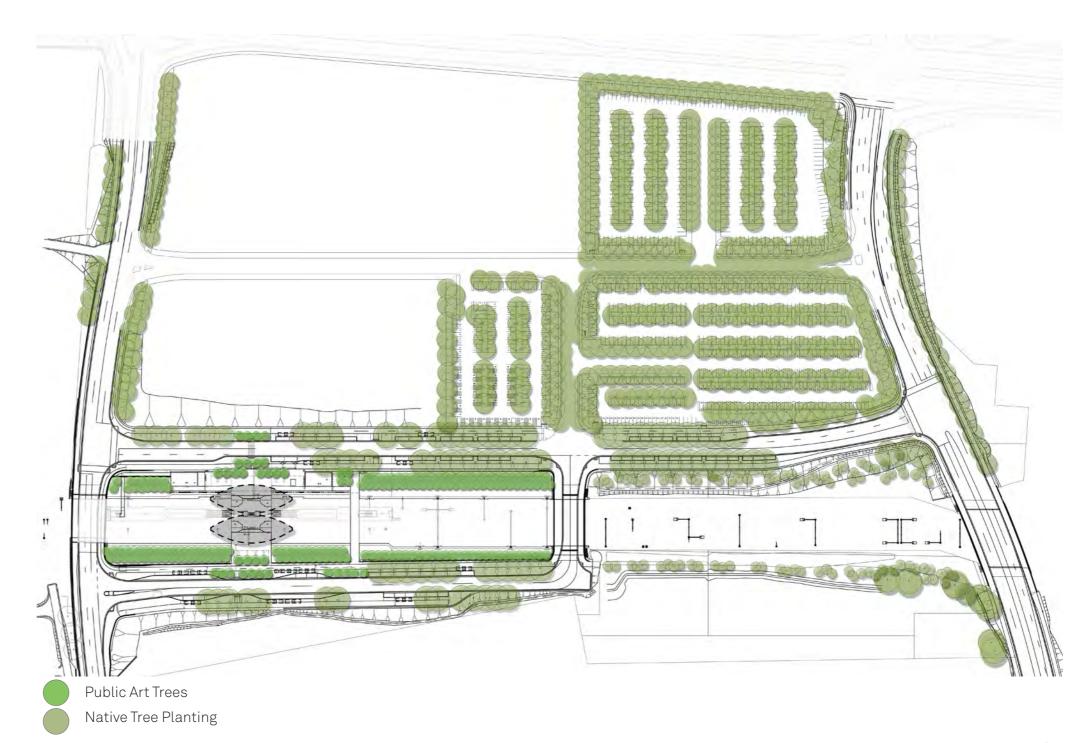
Figure 3.20CUD\_Section showing planting in terrace cutting and clear sight lines from the station platform. Source: HASSELL.

## 3.2.4 Sustainable Landscape Design

The key sustainable landscape design strategies used at Cudgegong Station include the following (Refer Figure 3.21):

- Generous planted areas are provided to maximise permeable surfaces
- Trees close to the station provide shade beyond the built canopy. Light coloured surfaces are used where possible to reduce the urban heat island effect
- Employment of WSUD practices including swale drainage throughout commuter car parks
- Tree planting throughout car parks, streets and plaza spaces provide shade, shelter and cooling microclimate benefits
- Cumberland Plain woodland species used in vegetation buffers around the precinct provides connected planted corridors
- Incorporation of continuous massed planting beds along streetscapes where footpath and plaza requirements allow
- Selection of diverse mix of drought tolerant, native plant species used.

Refer to Section 4.5 of this UDCLP for further detail on the project wide Sustainable Design and Maintenance initiatives.





# 3.2.5 Heritage Interpretation, Interactions and Public Art

#### Heritage Interpretation

Heritage interpretation will be in accordance with the guidelines in Section 4.10 of this UDCLP.

#### Heritage Interactions

There are no heritage interactions in the Cudgegong Road Station Precinct.

#### Public Art

Public art for Cudgegong Road Station will be in accordance with the public art plan *Light Line Social Square.* Refer Sections 2.5.4 and 4.11 of this UDCLP. Elements are arranged and orchestrated to make a cohesive composition fusing together architecture, landscape, engineering, lighting, science and art.

Figure 3.22 shows the layout and organisation of *Light Line Social Square* elements at Cudgegong Road Station. They comprise:

- 1. Urban Grove-Cultural Trees
- 2. Social Spheres Sculptural + Play Elements
- 3. Incidental Play- Ground Play Elements4. Light Line- Platform and ThresholdLighting
- 5. Light Screens-Vertical Transport



Fraxinus griffithii Murraya paninculata Vinca minor 'Alba'

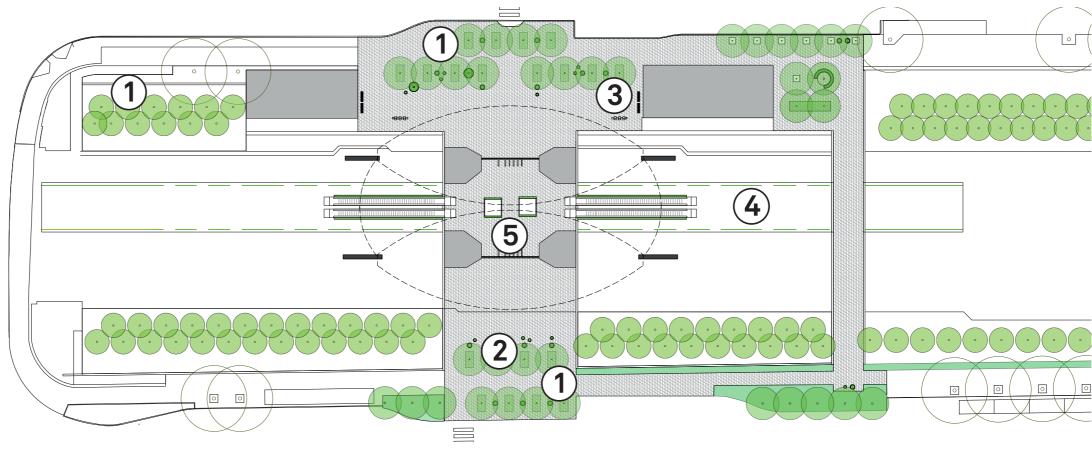


Figure 3.22CUD\_Cudgegong Road Station Public Art Precinct Plan. Source: MWA with T+C Studio.



#### 3.2.6 Planting Design

Planting design for Cudgegong Road
Station is consistent with the project wide
design themes discussed in Section 2.5
Urban and Landscape Design Values and
Approach and Section 4.3 Landscaping
Measures to Minmise, Mitigate and /or
Offset the Impacts of the SSI, of this UDCLP.
Different vegetation characters responding
to functional requirements and situation,
are proposed throughout the precinct.
These are summarised below and
illustrated on the adjacent Figures 3.25.

#### 'Public Art' Trees

Located in a formal grid at the station primary plaza the 'Public Art' trees defines the station entry areas and assist with orientation and location of the station's access points from the wider public domain.

Simple wide terraces planted with 'Public Art' trees in a grid and broad\_scale ground covers provide a green setting for the immediate station and platform environs and provides a backdrop for views of the platforms from precinct streets and bridge crossings.

#### **Boulevard Streets**

Avenues of Cumberland Plain trees in a formal set out provide a graceful streetscape experience within the broader public domain beyond the station areas.

#### Landscape Buffers And Car Park

Car park planting with maximum integration of swales, softens the hardscape car park character, providing shade and shelter.

Plant mixes have been selected to be low maintenance. Irrigation is provided initially on a temporary basis to ensure that plants are established well during the early years of growth although it is expected that the trees will become independent of irrigation by the end of the first growing season.

Refer to Section 4.3.7 Planting Design for further detail on the project wide tree and understorey planting strategies.



Figure 3.23CUD\_Artist Impression of Public Art Trees. Source: Ai3D.



Figure 3.24CUD\_Artist Impression of Landscape Terraces. Source: Ai3D.

Figure 3.25 illustrates the Cudgegong Road Station precinct planting.

#### **Boulevard Streets**

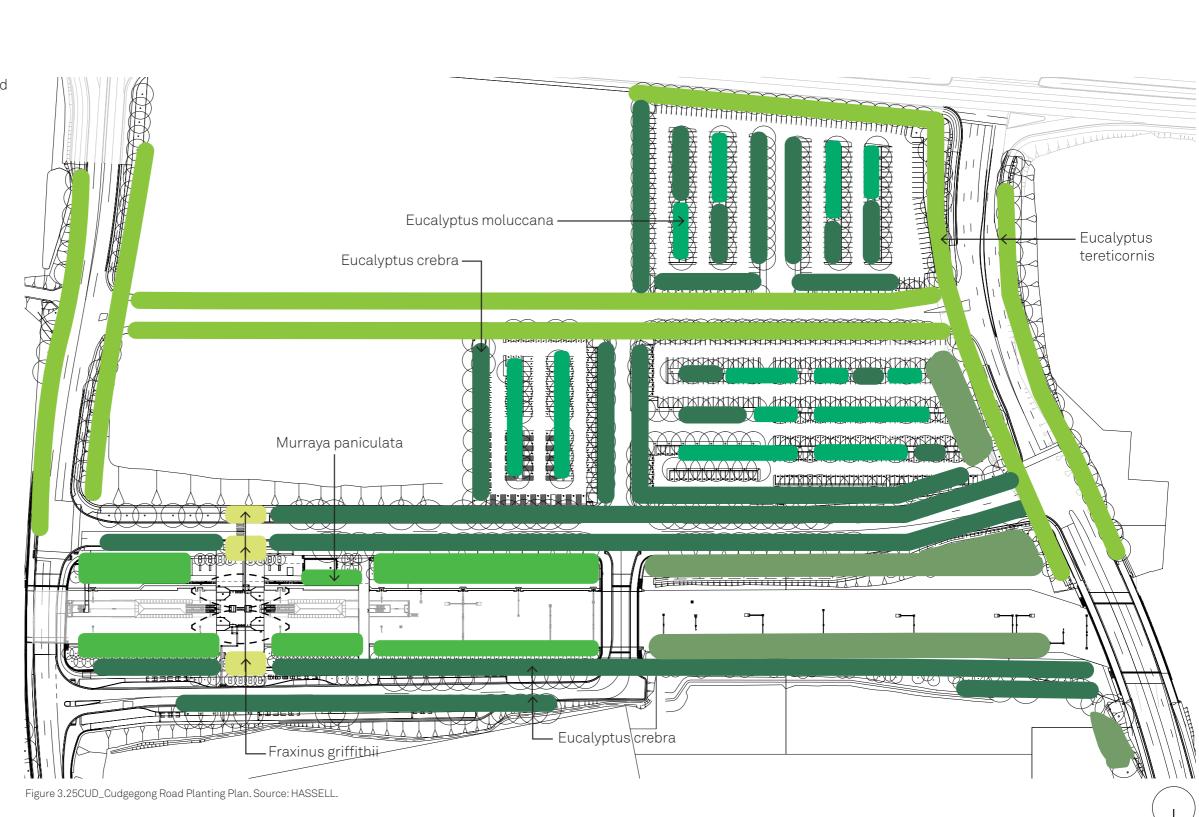
- Eucalyptus crebra
- Eucalyptus moluccana
- Eucalyptus tereticornis

#### 'Public Art' Trees / Shrubs

- Murraya paninculata
- Fraxinus griffithii

# Landscape Buffers and Car Parks

- Eucalyptus crebra
- Eucalyptus moluccana
- Eucalyptus tereticornis
- Melaleuca decora
- Melaleuca styphelloides



# 3.3 Architectural Design

Cudgegong Road Station design is based on a suite of components and systems that form part of the system wide approach to design, as well as site specific responses to the precinct. Refer to Section 4.12 for further detail on the design of these elements.

There are eight new stations along Sydney Metro Northwest with three station typologies. Cudgegong Road Station is part of the open cut type.

## 3.3.1 Built Elements Typology - Open Cut

Key aspects of the open cut typology at Cudgegong Road Station include:

- The platform is in a cutting at the depth below street level of approx 7.2m
- landscaped terraces transition between street level and trackway
- the station entry is via a paid concourse located centrally to the platform below
- \_ the station services are located on two levels and integrated with the southern side of the cutting
- a new precinct street network is provided with public access from both sides of the station. An unpaid connection is provided to create a permeable precinct and integrated community

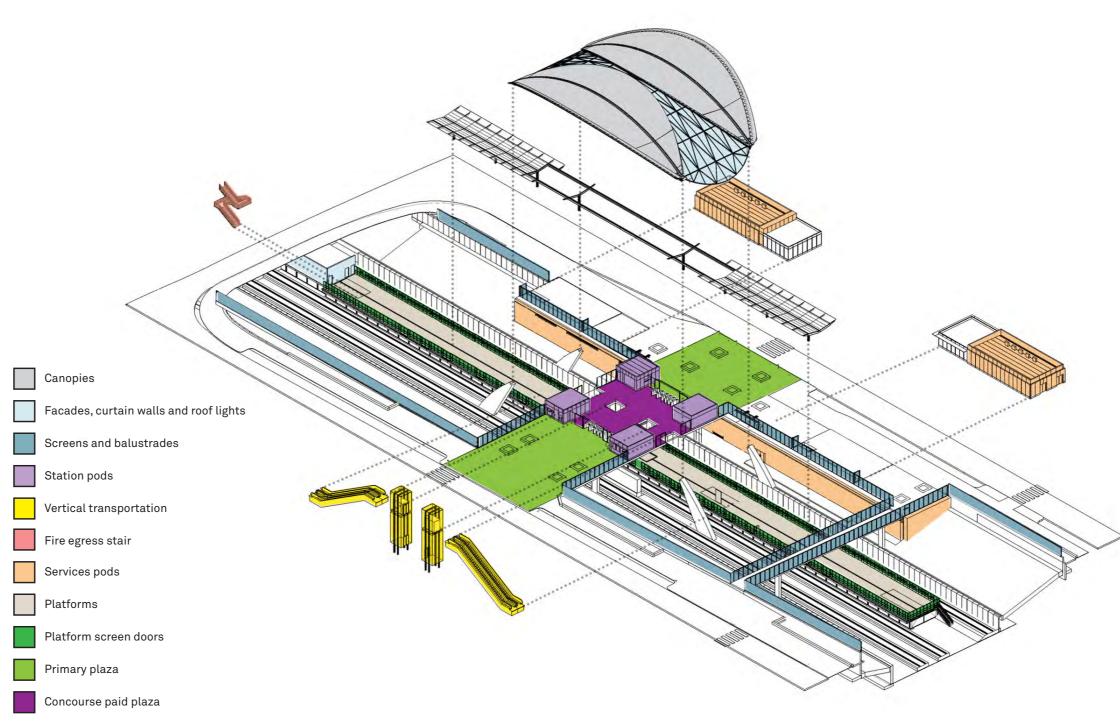


Figure 3.26CUD\_Cudgegong Road Station exploded diagram showing the main elements of the built form. Source: HASSELL.

#### 3.3.2 Built Elements Design Opportunities

The arrangement of the built elements at Cudgegong Road Station, to deliver an integrated station and precinct that optimises transport interchange and community amenity, has the following features.

#### 1. Station Precinct

An integrated station and precinct design to optimise transport interchange and community integration

#### 2. Terraces

Landscaped terracing to maximise customers visual connection with street level from the platform

#### 3. Concourse

Open concourse and gate line free from obstructions with clear circulation routes and sight lines to destination

#### 4. Station Entry

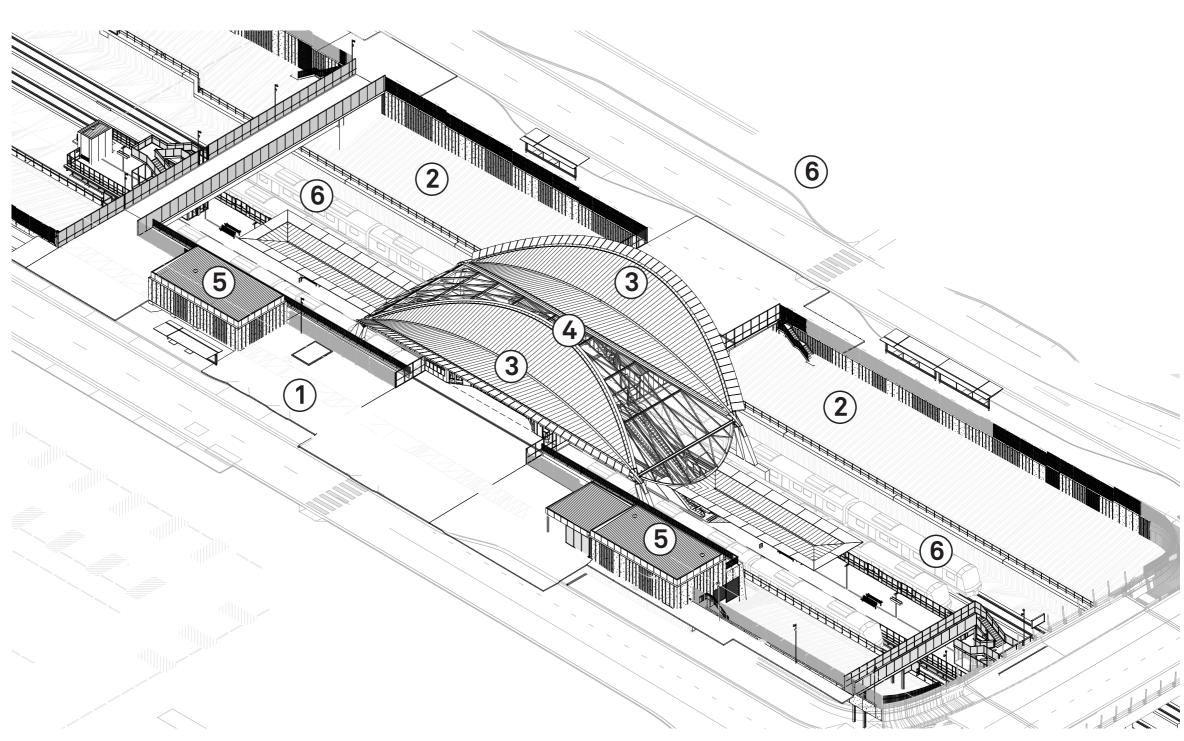
Station entry and paid concourse to be centrally located above platform with dual lifts and escalators to allow even distribution of passengers to platform

#### 5. Service Buildings

Minimise service buildings at street level to reduce visual and physical impact to precinct. Create active edges to street level buildings to create a vibrant and engaging pedestrian environment

#### 6. Future Third Platform

Space proofing for potential future third platform and associated vertical transportation and canopy structures.



 ${\it Figure~3.27CUD\_Cudgegong~Road~Station~Diagram.~Source:} \ {\it HASSELL}.$ 

#### 3.3.3 Built Elements Design

Cudgegong Road Station's key built elements are summarised below and illustrated on the adjacent Figure 3.28. Refer Section 4.12 for further detail on the design of these elements.

#### **Station Configuration**

Key components of the Cudgegong Road Station include:

- \_ An island platform 7.2m below street
- A station entry and primary plaza at both Precinct Street A and Precinct Street B provide access to a single paid concourse centrally located to the platform below
- Vertical transportation consisting of two lifts and two pairs of escalators
- Concourse and platform canopies providing weather protection
- Customer facilities including toilets and parent room are located on the paid concourse
- Station management room located on the paid concourse
- Two service buildings are located on Precinct Street A. A single underground service building is located at the lower level to the southern side of the cutting and extends to the full extent of the service buildings above
- \_ Two emergency egress stairs from either end of the platform to street level.
- A shared cycle and pedestrian bridge is provided to the country end of the station connecting Precinct Street A and B.
- Landscape terraces provide a transition from platform level to street level
- Space proofing is provided for a future third platform.

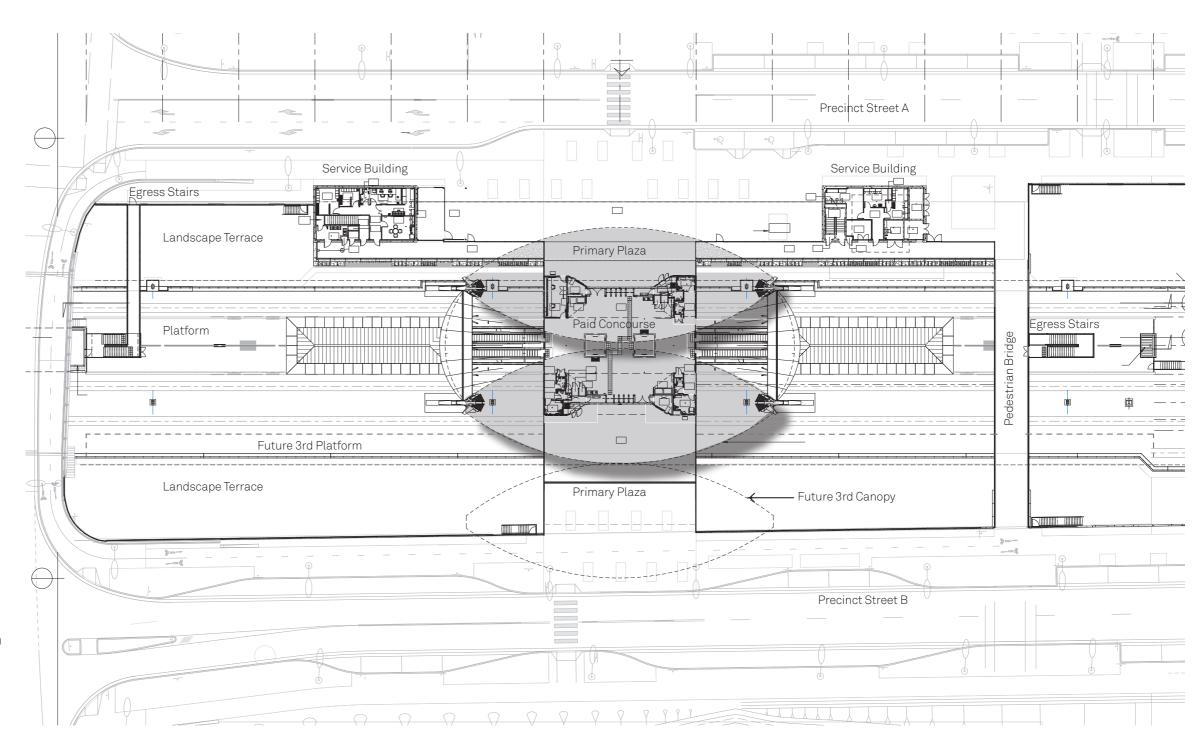


Figure 3.28CUD\_Cudgegong Road Station Configuration. Source: HASSELL.



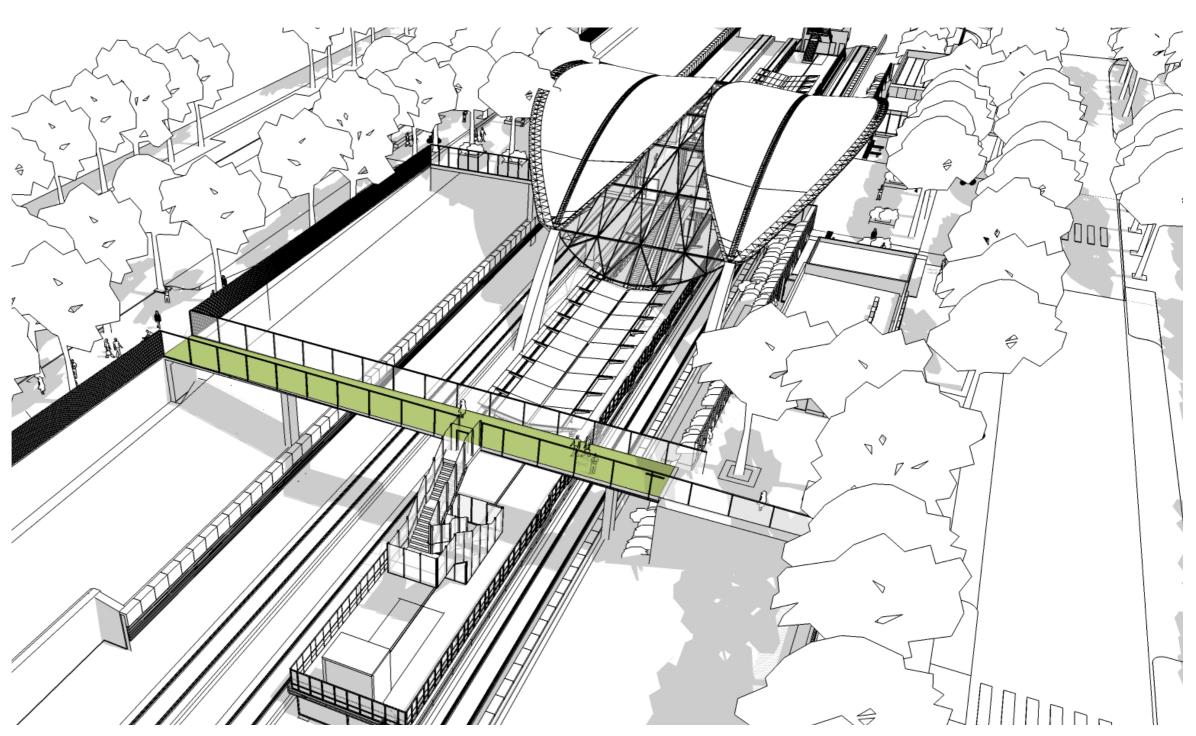
## Shared Pedestrian and Cycle Bridge

A shared pedestrian and cycle bridge is proposed at Cudgegong Road Station to:

Link the northern and southern portions

- Link the northern and southern portions of the precinct
- Accommodate pedestrian and cyclist movement
- Provide a visual connection across the corridor along the extended alignment of the proposed main street
- Accommodate emergency egress from the country end of the platform

The precinct is very permeable with four unpaid cross corridor connections within a distance of 520m.



 $\label{thm:condition} \textit{Figure 3.29CUD\_Shared Pedestrian Cycle Bridge. Source: HASSELL.}$ 

#### Rail Over Bridges

There are three rail over bridges in the Cudgegong Road Station precinct at Precinct Street C, Cudgegong Road and Tallawong Road.

The design of the over bridges within the Cudgegong Road Station precinct has been undertaken in accordance with RMS Design Guidelines: Bridge Aesthetics 2012 with consideration given to the following:

- The relationship between the three over bridges to each other and their location within the precinct
- Provision of consistency in details across the three bridges
- The superstructure depth has been minimised with open mesh screens used to optimise the visual slenderness ratio
- Location and coordination of maintenance access stairs with precinct layout and relationship to views from the station platforms
- Coordination of bridge abutment and screens to align with the precinct retaining wall and screens to provide a cohesive precinct design
- Coordination of detailing to ensure modular and consistent set out of bridge road barriers, throw screen posts and ioints
- Consideration of jointing detailing of bridge abutments and selection of concrete finish
- Coordination of finish to bridge footpaths to be consistent with adjoining street footpaths for coordinated streetscape design

The RMS throw screen has been adopted, and the RMS guideline for Bridge Aesthetics has been used as a guideline for the design of these throw screens. This is particularly important for the transition to the safety screens, where there must be an elegant transition from the surrounding fence types within the Cudgegong Road station precinct and the standard RMS screen type.

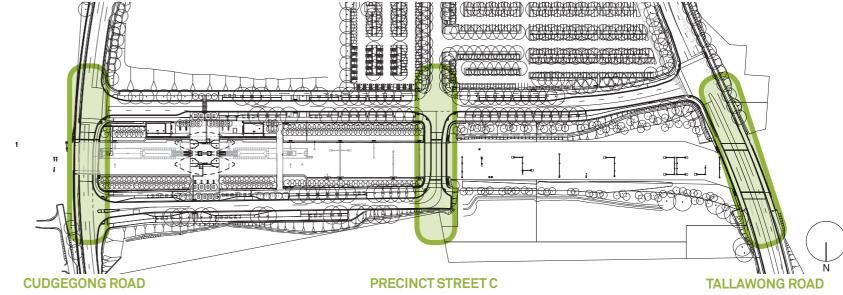


Figure 3.30CUD\_Cudgegong Road Rail Over Bridge Locations. Source: HASSELL.

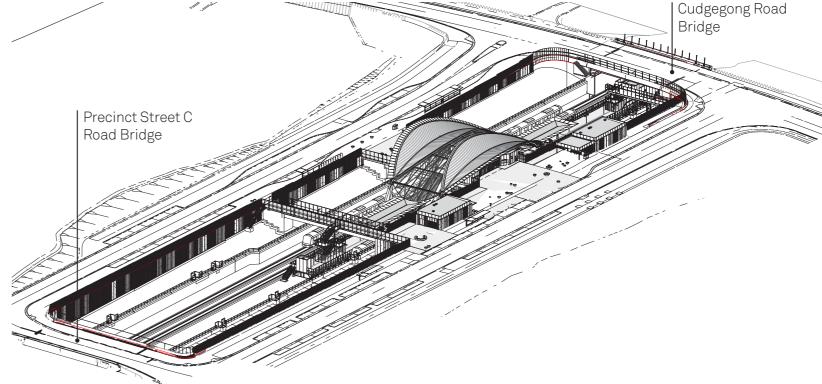


Figure 3.31CUD\_Cudgegong Road Axonometric showing Cudgegong Road and Precinct Street C Rail Over Bridges. Source: HASSELL.

#### Station Entry

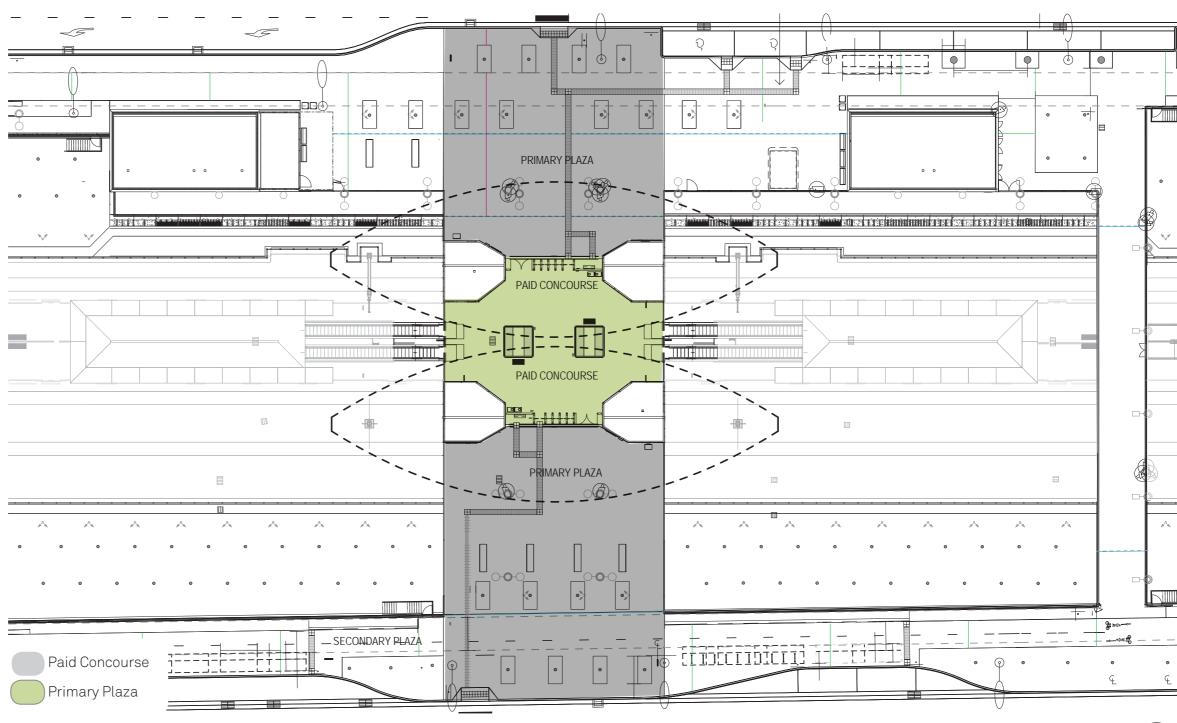
The station can be accessed from both Precinct Street A and B. At each entry a primary plaza is provided to orientate the customer and provide direct and legibility wayfinding to the station entry and ticket gate line.

The Precinct Street A entrance has a Primary Plaza, which is flanked by active edges including secure bike enclosure to the eastern edge and provision for future retail to the western edge.

The Precinct Street B entrance has a Primary Plaza, which is designed to accommodate access to a potential third future platform. 'Day one' design includes a general plaza space.

The paid concourse area is fully covered by the main station canopy. Customer and staff functions that are essential to the paid concourse are provided within four 'concourse pod' buildings. Customer information, ticketing and associated facilities are provided on the front face of each.

The scale and position of built forms within the station entry and paid concourse areas have been carefully considered to ensure the environment is as open and transparent as possible.



 $\label{thm:concourse} \textit{Figure 3.32CUD\_Concourse Level Layout Plan. Source: HASSELL.}$ 



#### Station Accommodation Strategy

The station accommodation has been categorised into four types and has been integrated with the precinct and station to enhance the customer experience both physically and visually.

#### 1. Customer Facilities

Located on the paid concourse at street level in three pods and arranged to best suit customer interaction.

#### 2. Staff Facilities

The Station Manager's Room has been placed on the paid concourse to satisfy operational requirements.

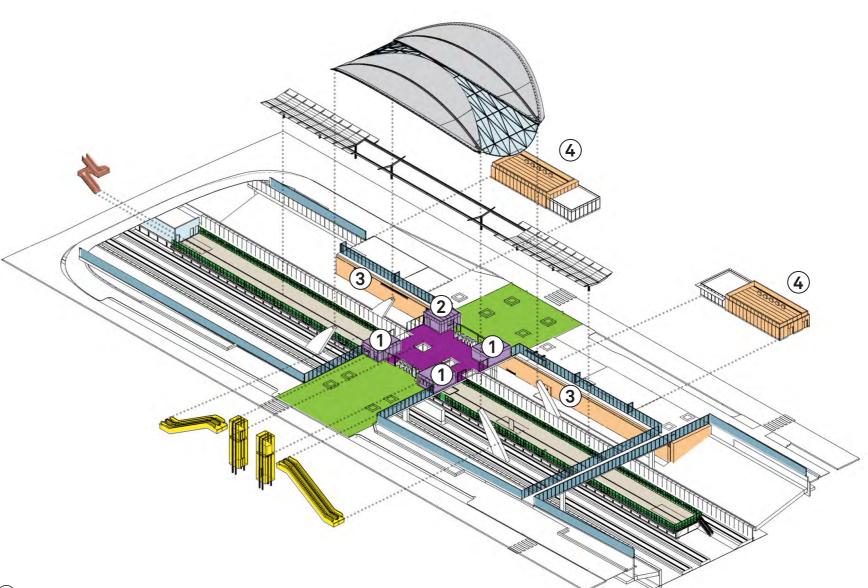
#### 3. Back of House

The remaining station services accommodation has been placed at the lower level and integrated into the southern side of the cutting. The two levels have been stepped to minimise visual impact to customers at platform level.

Service critical rooms relating to train services are strategically located at platform level with access off platform end areas to enable speedy access and recovery in case of failure.

#### 4. Station Service Buildings

Staff back of house and maintenance rooms have been placed in the two street level service buildings. The accommodation has been split into two buildings to minimise the impact of a single large building. This also allows both the primary plaza ends of the building to be sleeved with activation. A small number of station service rooms are located in the western service building at street level due to critical access requirements.



- 1 Customer Facilities
- 2 Staff Facilities 3 Back of House
- (4) Station Service Buildings

Figure 3.33CUD\_Cudgegong Road Station Accommodation Strategy. Source: HASSELL.

#### 3.3.4 Future Opportunities

Potential opportunities for the location of commercial facilities and the expansion of station facilities (where appropriate) have been identified in the design refinement of the stations. In the future, retail opportunities will be developed at this station and potential locations where such uses are likely to be suitable are identified on Figure 3.34. The final locations will be subject to further design and viability assessment.

An objective for commercial activity is that it should contribute positively to customer journeys. The following commercial opportunities have been identified.

#### Retail

The station design has safeguarded for potential future retail space adjacent to the entry from Precinct Street A. The retail opportunity could be integrated with the service building and focused towards the primary plaza and station entry, creating an active edge.

#### **Vending Machines**

Provision has been made for three vending machines within the paid concourse. This space has been integrated with a concourse pod to provide seamless integration with the architecture and not impact customer circulation or wayfinding.

#### Advertising

Advertising will be integrated with the station architectural design and finishes as part of the design development process in future stages.

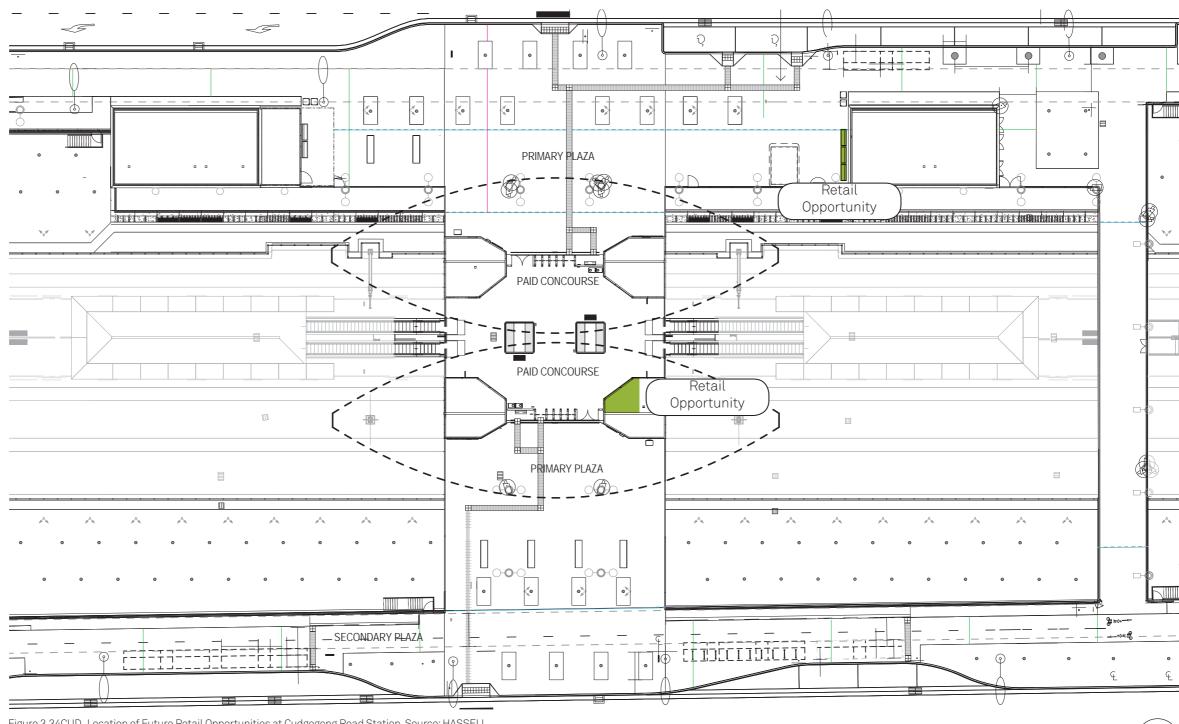


Figure 3.34CUD\_Location of Future Retail Opportunities at Cudgegong Road Station. Source: HASSELL.

#### Future Platform Expansion

There is a potential for a future third platform as part of the extension of the rail line to Marsden Park.

Spatial provision has been made in the design for the potential future third platform.

When constructed, the station layout could be delivered as represented in the diagram opposite. Key aspects include:

- \_ 3m wide side platform
- \_ two escalators and two lifts from concourse to platform level
- provision for an additional two escalators
- gate line relocated towards Precinct Street B
- ticketing and customer facilities relocated to new gate line position
- platform canopy and arched concourse roof form duplicated to provide weather protection to third platform and extended concourse

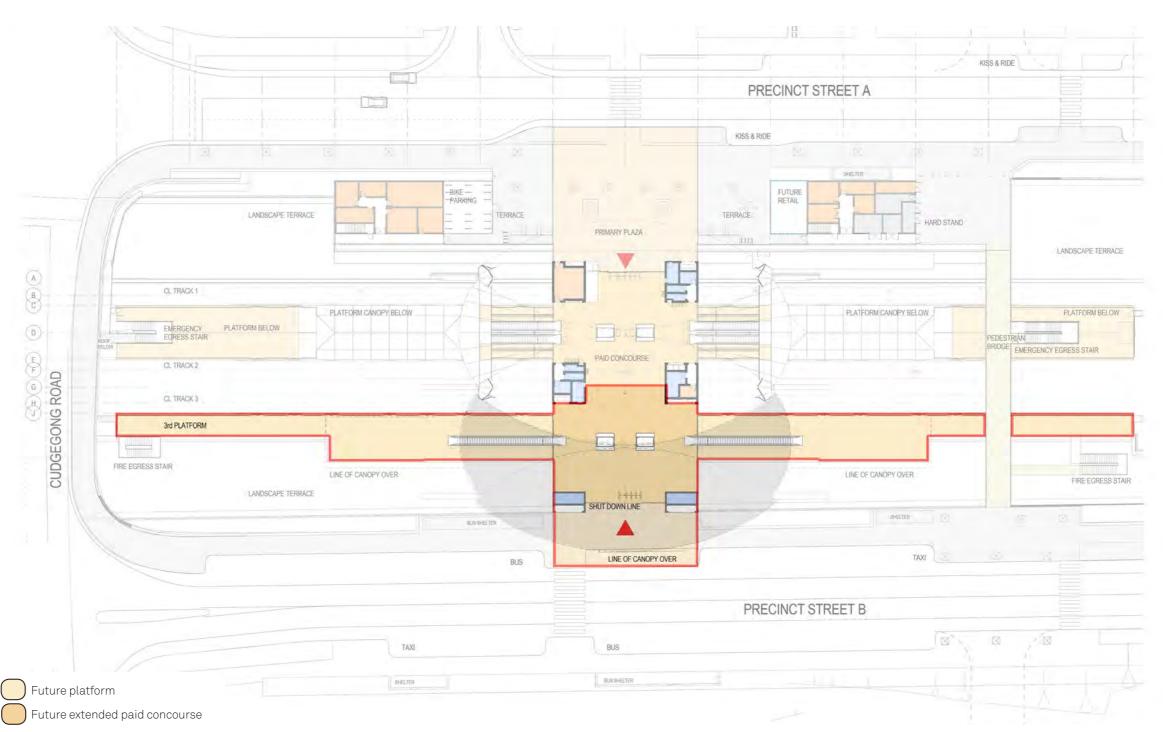


Figure 3.35CUD\_Future Expansion Diagram. Source: HASSELL.



#### 3.3.5 Signage and Wayfinding

The Sydney Metro Northwest stations are designed to be open, accessible and intuitively navigable with a wayfinding and signage strategy that will enhance these features. The wayfinding strategy provides directional and location information through simple clear signage, messages and use of pictograms, and aims to provide the right information at the right location so customers can navigate their way around the stations safely and efficiently.

The wayfinding strategy and associated signage is designed to optimise the navigation experience inside and around the stations. This will be integrated with the station architecture.

The right location for signing is usually at a decision point and at the Station, there are primarily two key decision points. One of these is on entering the concourse where the correct platform has to be selected for travelling in the right direction and the other is when exiting the concourse to access the local area and other transport interchange modes. The other main choice customers face is the mode of vertical transportation and whether to use the lifts or escalators to travel between the station concourse and platform below.

There are specific considerations at Cudgegong Road Station in that this will be a terminating station, with passive provision to accommodate an additional third platform.

#### **Precinct Signing**

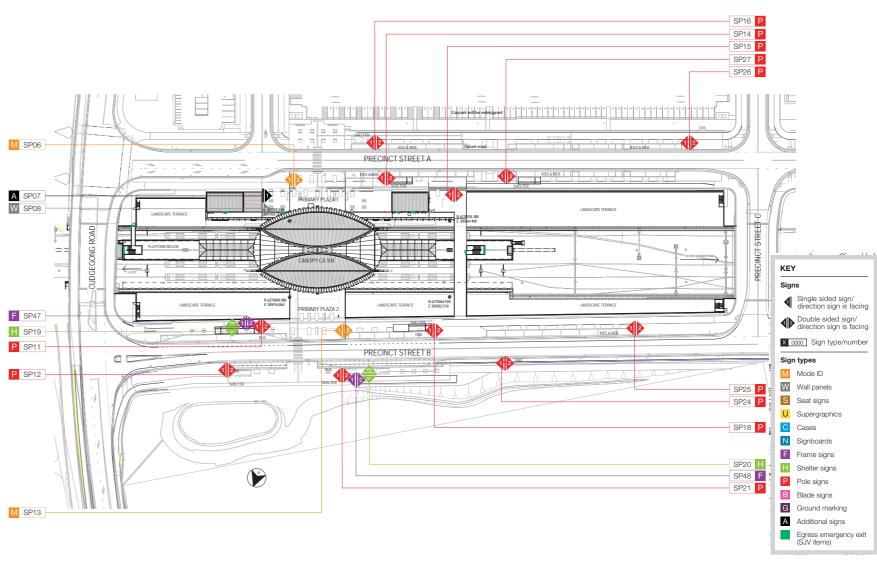
At Cudgegong Road Station the precinct initially provides a 'park and ride' function plus small-scale transport interchange.

Extensive car parking is provided plus secure bike storage, bus stands and a taxi rank. Precinct signing will identify and direct passengers to these facilities, primarily through the use of a standard TfNSW finger-post sign and to a lesser extent the use of a TfNSW blade sign.

The blade sign has the added advantage of incorporating poster information which can take the form of local area maps.

With Cudgegong Road Station being built on a greenfield site there is little detailed information as to the development planned for the surrounding area. Any significant housing or retail developments will need to be signed for so passengers can easily locate these on-going destinations. An initial assessment of the minimum precinct signing required is shown in the diagram.

Precinct signs will include station totem signs, using the two (different sized) standard post mounted products developed by TfNSW.



 $\label{prop:signing} \textit{Figure 3.36CUD\_Extract of Precinct Signing in Primary Plaza. Source: BlueSky. \\$ 

