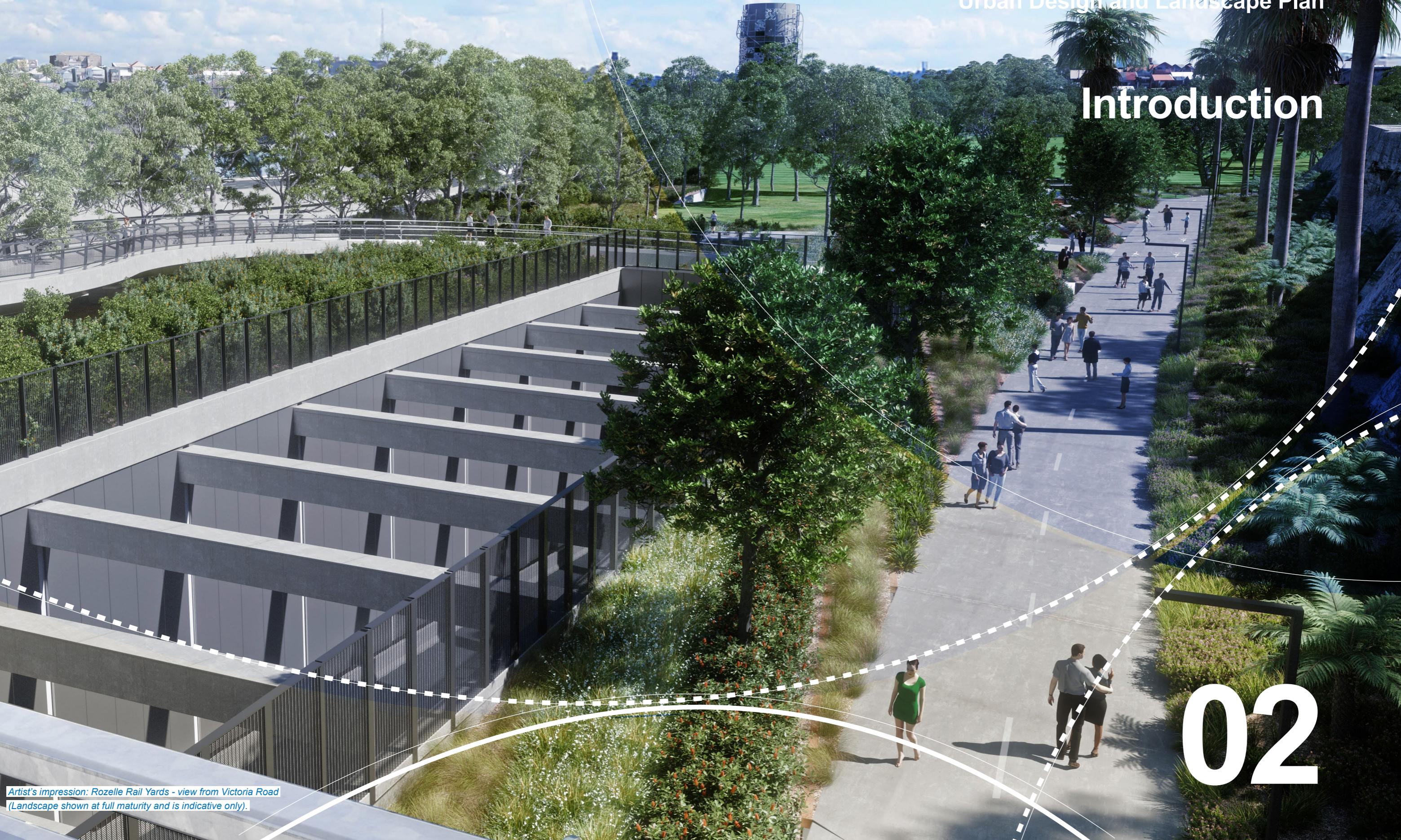


# Introduction

02



Artist's impression: Rozelle Rail Yards - view from Victoria Road  
(Landscape shown at full maturity and is indicative only).



## 2 Introduction

### 2.1 Purpose of the Urban Design and Landscape Plan

The WestConnex Rozelle Interchange Project is being designed and constructed by the John Holland CPB Contractors Joint Venture (JHCPB).

This Urban Design and Landscape Plan has been prepared by HASSELL, Willow + Studio Colin Polwarth, Studio Chris Fox and WSP Arcadis Joint Venture (WAJ) for JHCPB to satisfy the Ministers Conditions of Approval E133 - E134 (SSI7485).

The Plan provides a comprehensive outline of the Urban Design and Landscape strategies for the WestConnex Rozelle Interchange Project. The Plan also demonstrates compliance with the Project Deed scope and requirements within this Deed (also called the Scope of Works and Technical Criteria (SWTC).

#### M4-M5 Link Environmental Impact Statement and Ministers Conditions of Approval

The M4-M5 Link Environmental Impact Statement (EIS) for the Project was released on 18 August 2017 for public exhibition and comment. In January 2018 a Submissions Report was prepared in response to submissions received during the EIS exhibition period.

The EIS and Submissions Report were considered by the Department of Planning, Infrastructure and Environment (DPIE) and informed the Minister for Planning's assessment of the project's approval.

On 17 April 2018, planning approval for the WestConnex M4-M5 Link project was received from the Minister for Planning.

The WestConnex M4-M5 Link is being delivered in two stages:

- Stage 1, the Mainline Tunnels , which includes the construction and operation of the M4-M5 Link Tunnel between the M4 East at Haberfield and the New M5 at St Peters, and
- Stage 2, the Rozelle Interchange, which will connect the Stage 1 mainline tunnels to the surrounding surface road network and includes the construction and operation of:
  - An interchange at Lilyfield and Rozelle, including a connection to the proposed future Western Harbour Tunnel and Beaches Link project, and
  - A tunnel connection between the Anzac Bridge and Victoria Road, east of Iron Cove Bridge.

This Urban Design and Landscape Plan only applies to Stage 2 of the M4-M5 Link, the Rozelle Interchange Project (the Project). It addresses the Conditions of Approval, including E133 - E134 which are specific to Urban and Landscape Design.

These Conditions of Approval are contained in Section 2.6 of this Plan. Compliance with the Conditions is noted and includes the location in this Plan where each Condition is addressed.

#### EIS urban design objectives

Objectives used in the urban and landscape design are derived from the M4-M5 Link Environmental Impact Statement (EIS) and the Roads and Maritime Services (Roads and Maritime) urban design guideline Beyond the Pavement and are covered in Section 3 of this Urban Design and Landscape Plan.

The Urban Design Objectives for the Project include the following:

- An integrated and collective approach
- An environmental vision
- Cross scale connections of spaces
- A motorway integrated within its context
- Place sensitive design
- A multidimensional user focus
- Revitalisation, opportunity and economics.

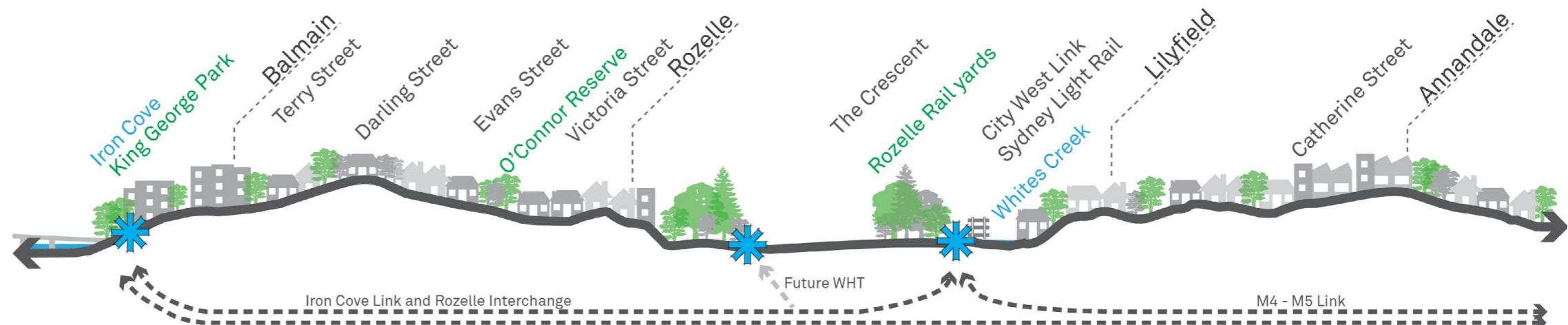


Figure 2-1: Indicative section illustrating the major landscape features along the alignment - not to scale

## 2.2 Project description

The project is generally located within the Inner West Council local government areas (LGA) and is located approximately two kilometres west of the Sydney central business district (CBD) and would cross the suburbs of Leichhardt, Lilyfield and Rozelle.

A general description of the project is provided below:

- An underground interchange at Leichhardt and Annandale that would link the mainline tunnels (Stage 1) with the Rozelle interchange and the Iron Cove Link (Stage 2)
- A new interchange at Lilyfield and Rozelle (the Rozelle interchange) that would connect the M4-M5 mainline tunnels with:
  - City West Link
  - Anzac Bridge
  - The Iron Cove Link
  - The proposed future Western Harbour Tunnel and Beaches Link
- Construction of connections to the proposed future Western Harbour Tunnel and Beaches Link project as part of the Rozelle interchange, including:
  - Tunnels that would allow for underground mainline connections between the M4 East and New M5 motorways and the proposed future Western Harbour Tunnel and Beaches Link (via the M4-M5 Link mainline tunnels)
  - A dive structure and tunnel portals within the Rozelle Rail Yards, north of the City West Link / The Crescent intersection
  - Entry and exit ramps that would extend north underground from the tunnel portals in the Rozelle Rail Yards to join the mainline connections to the proposed future Western Harbour Tunnel and Beaches Link
  - A ventilation outlet and ancillary facilities as part of the Rozelle ventilation facility
- Twin tunnels that would connect Victoria Road near the eastern abutment of Iron Cove Bridge and Anzac Bridge (the Iron Cove Link). Underground entry and exit ramps would also provide a tunnel connection between the Iron Cove Link and the New M5 / St Peters interchange (via the M4-M5 Link mainline tunnels)
- The Rozelle surface works, including:
  - Realigning The Crescent at Annandale, including a new bridge over Whites Creek and modifications to the intersection with City West Link
  - A new intersection on City West Link around 300 metres west of the realigned position of The Crescent, which would provide a connection to and from the New M5/St Peters interchange (via the M4-M5 Link mainline tunnels)
  - Widening and improvement works to the channel and bank of Whites Creek between the light rail bridge and Rozelle Bay at Annandale, to manage flooding and drainage for the surface road network
  - Reconstructing the intersection of The Crescent and Victoria Road at Rozelle, including construction of a new bridge at Victoria Road
  - New and upgraded pedestrian and cyclist infrastructure
  - Landscape works, including the provision of new open space within the Rozelle Rail Yards
- The Iron Cove Link surface works, including:
  - Dive structures and tunnel portals between the westbound and eastbound Victoria Road carriageways, to connect Victoria Road east of Iron Cove Bridge with the Iron Cove Link
  - Realignment of the westbound (southern) carriageway of Victoria Road between Springside Street and the eastern abutment of Iron Cove Bridge
  - Modifications to the existing intersections between Victoria Road and Terry, Clubb, Toelle and Callan streets
- Landscape works and the establishment of pedestrian and cycle infrastructure
- Three motorway operations complexes; two at Rozelle (Rozelle West and Rozelle East) and one at Iron Cove Link (MOC4). The types of facilities that would be contained within the motorway operations complexes would include substations, water treatment plants, ventilation facilities and outlets, offices, on-site storage and parking for employees
- Tunnel ventilation systems, including ventilation supply and exhaust facilities, axial fans, substations, ventilation outlets and ventilation tunnels
- Two new ventilation facilities, including:
  - The Rozelle ventilation facility at Rozelle Rail Yards
  - The Iron Cove Link ventilation facility at Iron Cove, Rozelle
- Drainage infrastructure to collect surface and groundwater for treatment at dedicated facilities. Water treatment would occur at:
  - An operational water treatment facility at the Rozelle West motorway operations complex
  - The constructed wetland within the Rozelle Rail Yards Parklands
- Treated water would flow back to existing watercourses via new, upgraded and existing infrastructure
- Ancillary infrastructure and operational facilities for electronic tolling and traffic control and signage (including electronic signage)
- Emergency access and evacuation facilities, including pedestrian and vehicular cross and long passages and fire and life safety systems
- Utility works, including protection and/or adjustment of existing utilities, removal of redundant utilities and installation of new utilities.

## Project works

The main design elements across the Project are listed following:

- 1 ROZELLE RAIL YARDS PARKLANDS  
Built on the former rail yards, the Rozelle Rail Yards Parkland will feature a minimum of 9ha of public open space. The Rozelle Rail Yards Parkland will become an enduring legacy of the Project's commitment to green infrastructure.
- 2 ROZELLE WEST MOTORWAY OPERATIONS COMPLEX  
Located in the western end of the Rozelle Rail Yards, the Rozelle west Motorway Operations Complex (MOC) will be comprised of the majority of the motorway operations facilities for the Rozelle Interchange, including:
  - Maintenance and operations facility
  - Substation
  - Fire water pumps and deluge tanks
  - Water treatment plants
  - Space-proofing for Western Harbour Tunnel Project's facilities
- 3 ROZELLE VENTILATION FACILITIES  
Location of the ventilation outlet and fresh air supply buildings integrated within the Rozelle Rail Yards Parkland.

#### 4 CITY WEST LINK PORTALS AND PEDESTRIAN BRIDGES

Two cut and cover portals will be constructed along the City West Link with two pedestrian bridges providing much needed north-south pedestrian connectivity to Annandale and the Light Rail.

#### 5 ANZAC BRIDGE PORTALS

Dive portals will be located on the eastern end of the Rozelle Rail Yards Parklands, providing connections to and from Anzac Bridge.

#### 6 IRON COVE LINK PORTALS

Dive portals located in the centre of Victoria Road will allow motorists to enter the motorway and effectively by-pass surface traffic.

#### 7 Iron Cove Link ventilation facilities

A ventilation outlet facility will be constructed near the portals at Iron Cove.

#### 8 TUNNEL INTERIORS

Two new carriageways, extending from the M4-M5 Link, will connect to Victoria Road at Iron Cove, Anzac Bridge and City West Link. (Not subject to this UDLP).



Figure 2-2: Location of main project design elements - not to scale

## 2.3 Structure of the report

This report describes the urban design response and approach to the Project.

The design drawings visualise the design quality, technical understanding and commitment to delivering the urban design outcomes of the Project.

The suite of visualisations in this document illustrate a number of Project outcomes and distinct settings. These images illustrate the transformations proposed by the Project.

The structure of this document is broadly outlined as follows:



01

**Executive summary**



02

**Introduction**



03

**Urban design objectives**



04

**Urban design concept**



05

**Landscape design**

Building upon the broader urban design objectives, principles and strategies, the Project has developed a landscape concept that responds to site memory and sound ecological principles.



06

**Tunnel portals and approaches**

This section provides an overview of the design philosophy and concepts for the tunnel portals at Rozelle Rail Yards and Iron Cove Link.



07

**Tunnel services buildings**

This section describes the Project's architectural design approach to operational buildings and facilities at Rozelle and Iron Cove.



08

**Bridges**

A number of pedestrian bridges are proposed for the Project and are described in this section.



09

**Retaining walls**

Description of retaining wall locations and finishes used throughout the Project as they form a key visual element for road users, adjacent residential properties, pedestrians and cyclists.



10

**Public realm elements**

Adopting a Project-wide approach to public realm elements, this section describes the Project's approach to public furniture, materials and finishes.



11

**Pedestrian and cycle implementation strategy**

The strategy includes a safety audit of existing and proposed pedestrian and cycling facilities, details of selected routes and connections to existing local and regional routes, infrastructure details (lighting, safety, security), standards compliance, as well as signage and wayfinding measures.



12

**Rozelle rail yards lighting and wayfinding strategy (MCoA E134q)**

The strategy details the use of effective, safe and innovative lighting and wayfinding throughout the Rozelle Rail Yards land and also explores lighting as a public art opportunity.



13

**Heritage**

This section includes information on the location of existing heritage item and the design intent and reuse of heritage items throughout the project.



14

**Lighting**

Description of operational lighting throughout the project.



15

**Monitoring and maintenance**

Landscape establishment and maintenance requirements for the project, including a summary table of maintenance requirements, is included within this section.

## 2.4 Standards and guidelines

The development of the Project's urban and landscape design has been an iterative process and has included:

- A thorough review of briefing materials and associated working papers, including the WestConnex Urban Design Framework
- Inspections of the route and its environs
- Numerous design workshops and meetings involving JHCPB's Project design team members
- A review of current Sydney Motorway Corporation (SMC) and Roads and Maritime design standards and industry construction methods

The Project has prepared the urban and landscape design for the Project to achieve the objectives and design principles of:

- Roads and Maritime Beyond the Pavement
- WestConnex Urban Design Framework
- Roads and Maritime Urban Design Guidelines
- M4 East Urban Design and Landscape Plan
- New M5 Urban Design and Landscape Plan
- M4-M5 Link EIS - Chapter 13: Urban design and visual amenity
- M4-M5 Link EIS - Appendix L: Urban design

### Beyond the Pavement

In Beyond the Pavement, Roads and Maritime nominates urban design goals and physical design outcomes that are sought on all Roads and Maritime projects. It states that road projects must fit sensitively with the landform and built, natural and community environments; contribute to the accessibility and connectivity of communities and permeability of movement; and contribute to the overall quality of the public domain for the community.

The document lists nine urban design principles that should govern the planning and design of road infrastructure:

- Contributing to urban structure and revitalisation
- Fitting with built fabric
- Connecting modes and communities
- Fitting with the landform
- Responding to natural patterns
- Incorporating heritage and cultural contexts
- Designing roads as an experience in movement
- Creating self-explaining road environments
- Achieving integrated and minimal maintenance design



Figure 2-3: RMS Urban Design guidelines

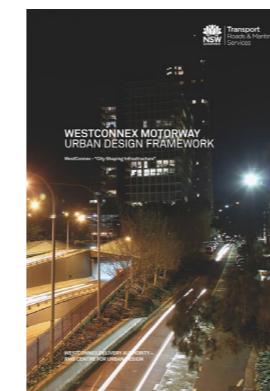
### WestConnex Urban Design Framework

HASSELL was engaged by Roads and Maritime to produce the WestConnex Urban Design Framework, which provides specific urban design direction for the city-shaping project. The framework sets out the overall vision for the Motorway.

'The WestConnex Motorway shall be a sustainable, high quality and transformational project for the people of Sydney and NSW. Exhibiting design excellence as a whole and in all constituent parts, it should be sensitively integrated into the natural and built environment, help build communities and contribute to the future liveability of the city - Australia's 'Global City'.

The project team has applied the WestConnex Urban Design Framework to the urban and landscape design for the Project.

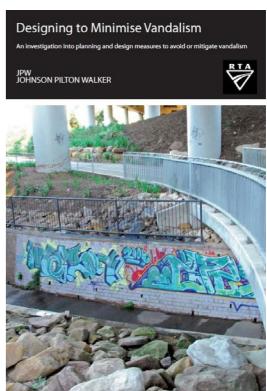
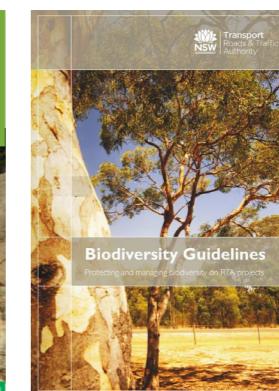
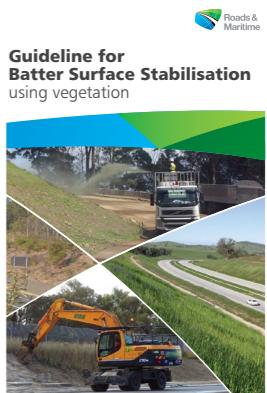
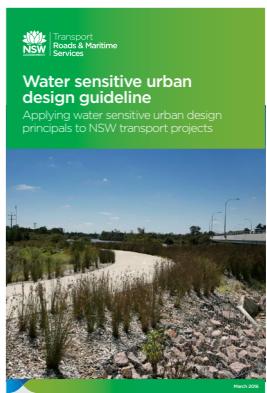
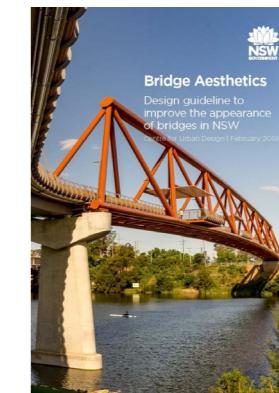
Refer to Section 3 of this report for the project team's urban design objectives.



### Roads and Maritime Urban Design Guidelines

The Roads and Maritime Urban Design Guidelines have also been used in the developing urban and landscape design proposals for the Project. These guidelines include:

- Tunnel urban design guideline
- Bridge aesthetics
- Landscape design guideline
- Noise wall design guideline
- Shotcrete design guidelines
- Biodiversity guidelines
- Designing to minimise vandalism
- Water sensitive urban design guideline
- Guideline for Batter Surface Stabilisation



## M4 East Urban Design and Landscape Plan

The WestConnex M4 East project was designed and constructed by the CPB Contractors Samsung John Holland (CSJ) Joint Venture.

This Urban Design and Landscape Plan was prepared by HASSELL for CSJ to satisfy the Minister's Condition of Approval. The plan provides a comprehensive outline of the Urban Design and Landscape strategies for the WestConnex M4 East project.

The document will be used to ensure consistency across the WestConnex projects in regards to urban design elements.

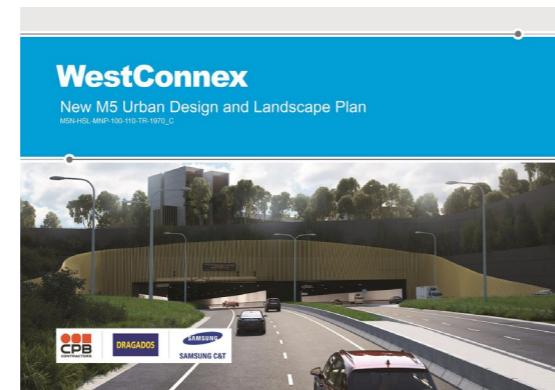


## New M5 Urban Design and Landscape Plan

The WestConnex New M5 project is being designed and constructed by the CPB Contractors Dragados Samsung (CDS) Joint Venture.

This Urban Design and Landscape Plan was prepared by HASSELL for CDS to satisfy the Minister's Condition of Approval. The plan provides a comprehensive outline of the Urban Design and Landscape strategies for the WestConnex New M5 project.

The document will be used to ensure consistency across the WestConnex projects in regards to urban design elements.



## M4-M5 Link EIS: Chapter 13 - Urban design and visual amenity

Chapter 13 of the EIS provides an assessment of the urban design, landscape character and visual amenity for the M4-M5 Link project.

### M4-M5 Link EIS: Appendix L - Urban design

This report provides the principles by which the Project would demonstrate design excellence and integrate with surrounding neighbourhoods, particularly at areas of surface intervention. These principles are based on the Roads and Maritime guideline Beyond the Pavement and the WestConnex Urban Design Framework, and include:

- An integrated and collective approach
- An environmental vision
- Cross scale connection of spaces
- A motorway integrated within its context
- Place sensitive design
- A multidimensional user focus
- Revitalisation, opportunity and economics

The document will be used to ensure that the urban design solutions shown in this UDLP are consistent with the EIS.



## M4-M5 Link EIS: Appendix O - Landscape Character and Visual Impact Assessment

This report has informed the EIS by addressing the Secretary's Environmental Assessment Requirements (SEARs). The report provides an assessment of the landscape character and visual impacts of the project and considers the potential impacts (adverse and beneficial) that are likely to occur as a result of the project. It also identifies mitigation measures and design recommendations to avoid, minimise or improve potential landscape and visual impacts.

The UDLP has been prepared with consideration of the recommendations made in this document as they relate to the urban design outcomes for the project. This is outlined further in section 2.7.



## M4-M5 Link EIS: Appendix N - Active Transport Network

This report provides outlines the investigation of a regional active transport network (ATN) and the role of the M4-M5 Link in this network. The report recommends a number of new strategic links and the delivery mechanisms for them, including identification of the sections that would be delivered by the project.

Active transport is non-motorised forms of transport that include physical activity for example walking or cycling.

In relation to the Rozelle Interchange, this report recommends a number of active transport routes as follows:

- A - Rozelle Rail Yards link
- B - Johnston Street link
- C - Victoria Road - Iron Cove link
- D - Whites Creek link
- E - Johnstons Creek Valley link

The UDLP has been prepared with consideration of the recommendations made in this document which is outlined further in Section 11 of this UDLP.



## 2.5 Strategic context

The Project's process has involved a thorough review of key state-led strategic policy documents prepared by Urban Growth, the Department of Planning & Environment and the Government Architect of NSW including:

- Better Placed
- Green Places
- Urban Tree Canopy
- Sydney Green Grid
- The Bays Precinct, Sydney Transformation Plan

The Urban and Landscape Design for the Project has adopted relevant objectives and principles from these documents seeking to deliver design excellence in all built form and open space elements.

### Better Placed, Government Architect, Government Architect NSW, 2017

*Better Placed* is a policy that seeks to create a clear approach to ensure good design that will deliver the architecture, public spaces and environments people want to inhabit now and for the future.

It will form part of the terms of reference to support the delivery of design excellence processes, including Design Review Panels which are required during the design of the Rozelle Interchange.

The document outlines seven distinct objectives that have been created to define the key considerations in the design of the built environment. These are:

- Better fit
- Better performance
- Better for community
- Better for people
- Better working
- Better value
- Better look and feel

These objectives have formed part of the urban design approach and considerations to the Project.



Figure 2-4: Department of Planning Guidelines

### Greener Places, Government Architect NSW, 2017

*Greener Places* is a draft Green Infrastructure policy to guide the planning, design and delivery of Green Infrastructure in urban areas.

It defines Green Infrastructure as the network of green spaces, and natural and semi-natural systems that are strategically planned and designed to support a good quality of life in an urban environment.

It outlines the following four key principles of Green Infrastructure:

- Integration
- Connectivity
- Multifunctionality
- Participation

Where possible, the project has sought to maximise opportunities for Green Infrastructure. This has been achieved through the implementation of new public open space with networks of swales, water quality treatments, dense tree canopy coverage and green walls on structures.



### Urban Tree Canopy Guide, Government Architect NSW, 2017

A renewed focus has been placed on the importance of the urban tree canopy, its capacity to improve urban climate, ecosystem and human health, and enhance well-being for communities.

*The Urban Tree Canopy Guide* has identified that an overwhelmingly high percentage of Sydney suburbs have less than 10% canopy cover. As a consequence, this document provides objectives, recommendations and targets to preserve and enhance the urban tree canopy.

The target is to achieve 40 per cent urban tree canopy cover across the Greater Sydney Region by 2036. The Project is committed to positively contributing to this vision for a 'greener' Sydney.



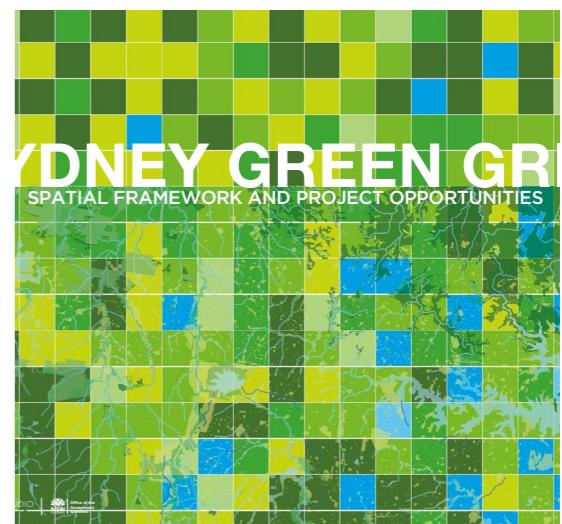
### Sydney Green Grid, NSW Department of Planning and Environment, 2017

*The Sydney Green Grid* promotes the creation of a network of high quality open spaces that support recreation, biodiversity and waterway health.

The *Green Grid* establishes the framework that will create a green network that strategically connects district and local centres, public transport hubs and residential areas.

In the vicinity of the Project, the following opportunities were identified:

- (4) Sydney Harbour foreshore and Parramatta River Walk
- (17) White Bay foreshore and open space
- (29) Lilyfield Road active transport corridor
- (33) Sydney Harbour Bays Green Links - Balmain & Rozelle.
- (39) Whites Creek & Whites Creek Lane

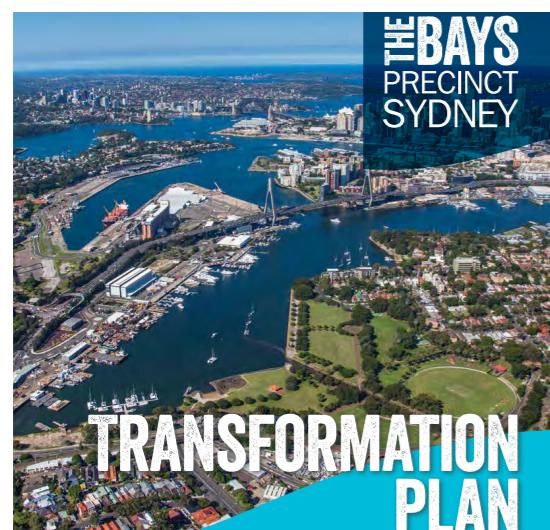


## The Bays Precinct, Sydney Transformation Plan, 2015

The Transformation Plan for the Bays Precinct, Sydney represents a blueprint to transform the Bays Precinct into a bustling hub of enterprise, activity and beautiful spaces. It establishes a high-level spatial planning framework and objectives for immediate, medium-term and long-term use and activity.

The Plan identifies the following eight 'Destinations' as priority precincts, two of which directly interface with the Project:

1. Bays Waterfront Promenade
2. White Bay Power Station
3. Bays Market District
4. Wentworth Park
5. Rozelle Bay and Bays Waterways
6. Rozelle Rail Yards
7. White Bay
8. Glebe Island



The adjacent Figure illustrates the eight destinations

Prior to this project, the Rozelle Rail Yards was intended primarily for affordable house and employment areas.

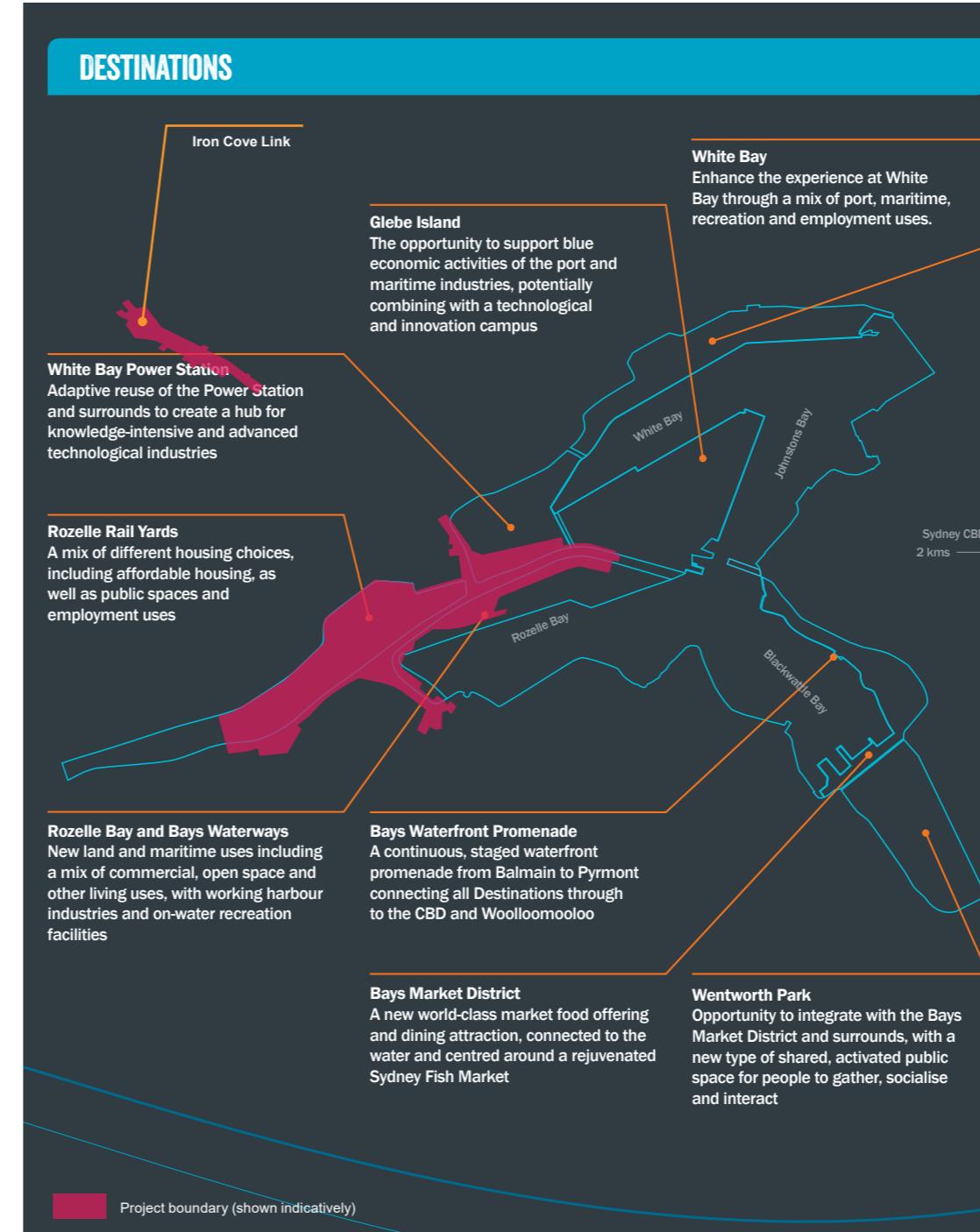


Figure 2-5: The '8 Destinations' of the Bays Precinct Transformation Plan

## 2.6 Minister for Planning Conditions of Approval

An Environmental Impact Statement (EIS) for the Project was released on 18 August 2017 for public exhibition and comment. In January 2018, a Submissions Report was prepared in response to submissions received during the EIS exhibition period.

The EIS and Submissions Report were considered by the Department of Planning and Environment (DPE) and informed the Minister for Planning's assessment of the project's approval.

On 17 April 2018, planning approval for the WestConnex M4-M5 Link project was received from the Minister for Planning. The approval was subject to Conditions of Approval, including E133 - E134 which are specific to this Urban Design and Landscape plan.

The Conditions of Approval specific to this plan are listed in Table 2-1 along with a reference to where each condition is addressed within this Plan. Other Conditions of Approval relevant to urban and landscape design are listed in Table 2-2, with a reference to where each condition is referenced within this Plan.

**Table 2-1: Minister for Planning Conditions of Approval Specific to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
E133	An Urban Design and Landscape Plan(s) (UDLP) must be prepared based on the detailed design, and in accordance with the project objectives, and the commitments made in Chapters 13 and 29 of the EIS and updated in Part E of the SPIR.	Section 2	This plan has been prepared to comply with this condition. Section 2 outlines how the project has been designed in accordance with the objectives and commitments made within the EIS and the Submissions Report.
E134	The Urban Design and Landscape Plan(s) must be prepared by a suitably qualified and experienced person(s) in consultation with the relevant council(s), UrbanGrowth NSW, the community and affected landowners and businesses. The UDLP(s) must include, but not necessarily be limited to:	Section 2.1, Section 2.8, UDLP Consultation Report	This plan has been prepared by HASSELL, Willow + Studio Colin Polwarth, Studio Chris Fox and WSP Arcadis Joint Venture (WAJ). Consultation will be completed with relevant Council's, Urban Growth NSW (now TfNSW Greater Sydney Division), the community and affected landowners and businesses as part of the development of this plan. The outcomes of this consultation will be outlined within Section 2.8 and the UDLP Consultation Report.
<b>Objectives, Principles and Standards:</b> (a) demonstrated consideration of design objectives, principles and standards including:			The urban design for the project considered the objectives, principles and standards in items (i) – (x) as outlined below.
(i) local environmental and heritage values			Section 3, Section 13 Non-indigenous and indigenous heritage values were analysed during the development of the project urban design (refer to section 3.1), with the reuse and interpretation of heritage items considered in the design of the Rozelle Rail Yards park (refer to section 13).
(ii) urban design context			Section 3 An analysis of the Project corridor was undertaken to understand existing conditions with the following natural, built and community contexts examined: land use, local government areas and suburbs, connectivity, open space, geology, hydrology, soil landscapes, vegetation, non-indigenous heritage and indigenous heritage. This analysis is summarised in section 3.1.
(iii) sustainable design and maintenance			Section 3.7 One of the project's urban design objectives is "Leading edge environmental responsiveness" which is implemented through the integration of sustainable principles into the urban design as outlined in section 3.7 of this plan.
(iv) community safety, amenity and privacy including 'safer by design' principles where relevant			Section 3 Sections 3.8 and 3.9 outline project's approach to consider community safety, amenity and the 'safer by design' principles.
(v) relevant design standards and guidelines			Section 2 The relevant design standards and guidelines which were considered and complied with during the development of the urban design are outlined in section 2.4.
(vi) prioritising the visual amenity and values of adjoining receivers over the road user experience			Section 3 The visual amenity of receivers adjoining the project has been prioritised through the implementation of measures outlined in section 3.9

**Table 2-1: Minister for Planning Conditions of Approval Specific to this plan**

<b>CoA</b>	<b>Condition Requirements</b>	<b>Document Reference</b>	<b>How Addressed</b>
	(vii) minimising the footprint of the project (including operational facilities), and	Section 7	The project has developed a ventilation system which sits predominantly underground, significantly reducing the footprint of operational facilities on the surface and within the Rozelle Rail Yards Park. Further details on operational facilities are included in Section 7 & Section 3.11 outline further ways the footprint has been reduced.
	(viii) the urban design principles outlined in the document referred to in Condition A1, and	Section 3	Sections 3.5 and 3.6 of this plan outline how the project design aligns with the urban design objectives and principles in the EIS and Submissions Report.
	(ix) the urban design principles outlined in Better Placed and Greener Places by the NSW Government Architect; and	Section 2	Section 2.5 of this plan outlines how the project design aligns with the urban design principles outlined in Better Placed and Greener Places.
	(x) DRP review.	Section 2	The urban design for the project has been reviewed by the Design Review Panel established under condition of approval E125. Section 2.9 provides further detail of this review
<b>Consultation</b>		UDLP Consultation Report	The UDLP Consultation Report of this plan outlines the recommendations made by the Design Review Panel and how these were considered and incorporated into the urban design.
	(b) details of where and how recommendations from the Design Review Panel have been incorporated into the plan		
	(c) evidence of consultation with the relevant council(s), UrbanGrowth NSW and the community on the proposed urban design and landscape measures, prior to finalisation of the UDLP, and details of how the outcomes of this consultation have informed the development of the UDLP	UDLP Consultation Report	Consultation will be completed with relevant Council's, Urban Growth NSW (now TfNSW Greater Sydney Division), the community and affected landowners and businesses as part of the development of this plan. The outcomes of this consultation will be outlined within the UDLP Consultation Report.
<b>Context and Form</b>		Section 3	An analysis of the Project corridor was undertaken to understand existing conditions with the following natural, built and community contexts examined: land use, local government areas and suburbs, connectivity, open space, geology, hydrology, soil landscapes, vegetation, non-indigenous heritage and indigenous heritage. This analysis is summarised in section 3.1.
	(d) an analysis of the built, natural and community context and the urban design objectives, principles and standards for the CSSI		
	(e) detailed consideration of integration and continuity with urban design and landscape outcomes for the M4 East and New M5 projects taking into account the respective UDLP(s) for each project	Section 2	The JHCPB urban design team includes members who were also part of the urban design teams on the M4 East and New M5 projects. The UDLPs for these projects were reviewed to ensure consistency across the WestConnex projects as outlined in section 2.4.
	(f) landscaping and building design opportunities to mitigate the visual impacts of road infrastructure and operational fixed facilities (including ventilation outlets, tunnel portals, Motorway Operations Complexes, noise walls etc.), including:	Section 4, Section 5, Section 6, Section 7	Sections 4, 5, and 6 outline how the visual impact of the project has been mitigated through landscape, building and structural design. Section 7 provides details of the ventilation outlet façade which includes a living green wall and other sculptural elements.
	i) building placement, designs and landscaping that are reflective of the local built form ii) a living vertical garden(s) or alternative treatment for ventilation outlets consistent with the requirements of Condition E118		

**Table 2-1: Minister for Planning Conditions of Approval Specific to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
<b>Access:</b>			
(g) the Pedestrian and Cycle Implementation Strategy identified in Condition E60	Section 11	A Pedestrian and Cycle Implementation Strategy has been included in section 11 of this plan.	
(h) the following interim park infrastructure must be provided at Rozelle Rail Yards to support passive recreational uses of the land: toilet facilities, seating, bins and bicycle parking	Section 10	Public realm elements will be supplied by the project to support the use of the park and are outlined within section 10 of this plan.	
(i) details of staging to maximise progressive public access and use of the Rozelle Rail Yards site	Section 15	The urban design within this plan, including the delivery of the Rozelle Rail Yards Parklands, will be completed prior to operation of the project	
<b>Design</b>			
(j) the design of the project landform and earthworks	Section 4	The landform for the Rozelle Rail Yards and Iron Cove Link sections of the project is outlined within sections 4 of this plan.	
(k) the design of the CSSI elements including their form, materials and detail (including the City West Link pedestrian and cycling green link identified in Condition E120)	Section 4, 5, 6, 7, 8 and 9	The design of the elements which make up the project are described in sections 4, 5, 6, 7, 8 and 9, with details on the green link bridge included in section 8.	
(l) a description of the CSSI design features, including graphics such as sections, perspective views and sketches of key elements of the CSSI	All inclusive	The design of the project has been described in this plan with sections, perspective views and sketches of key elements included in sections 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13.	
(m) visual screening requirements	Section 4	Details of screening incorporated into the project at the Rozelle Rail Yards and Iron Cove Link sections of the project are outlined within sections 4 of this plan.	
(n) development and delivery of public art opportunities throughout the Rozelle Rail Yards using local artists	Section 4	Section 4 outlines the opportunities provided as part of the project, where public art could be displayed.	
(o) demonstrated integration of Crime Prevention Through Environmental Design principles into the detailed design process	Section 3.8, Section 11.3	Crime Prevention Through Environment Design principles have been integrated into the project design as outlined in sections 3.8, 11.3 and 11.9	
<b>Lighting</b>			
(p) an assessment of the location, design and impacts of operational lighting associated with the CSSI and measures proposed to minimise lighting impacts in accordance with Conditions E122, E123 and E124	Section 14	The operational lighting design of the project was assessed, with mitigation proposed to minimise lighting impacts. Section 14 of this document includes a summary of this assessment and the mitigation proposed.	
(q) development of a Rozelle Rail Yards Lighting and Wayfinding Strategy that provides for effective, safe and innovative lighting and wayfinding throughout the Rozelle Rail Yards land and that also explores lighting as a public art opportunity whilst ensuring adherence to conditions E122, E123 and E124	Section 12	The Rozelle Rail Yards Lighting and Wayfinding Strategy is included in section 12 of this plan.	
<b>Heritage</b>			
(r) the location of existing heritage items	Section 3, Section 13	Section 13 of this plan outlines the location of existing heritage items within the boundary of the Project.	

**Table 2-1: Minister for Planning Conditions of Approval Specific to this plan**

<b>CoA</b>	<b>Condition Requirements</b>	<b>Document Reference</b>	<b>How Addressed</b>
	(s) information on the reuse of heritage items and items of significance to the urban form and landscape character including identification of opportunities for interpretative and innovative reuse of salvaged items from the Rozelle Rail Yards to ensure the character of the land remains connected to previous and surrounding industrial, transport and maritime land uses	Section 3, Section 13	Non-indigenous and indigenous heritage values were analysed during the development of the project urban design (refer to section 3.1), with the reuse and interpretation of heritage items considered in the design of the Rozelle Rail Yards park (refer to section 13).
	<b>Landscaping</b> (t) a description of disturbed areas (including construction ancillary facilities) and details of the strategies to progressively rehabilitate, regenerate and/or revegetate these areas	Section 4, Section 5	A description of disturbed areas of the project are included in section 4, with the strategy to progressively revegetate the project included in section 5.4. Section 5 provides details of the landscape works design which will be implemented to revegetate these disturbed areas.
	(u) details on the location of existing vegetation and proposed landscaping (including use of endemic and advanced tree stock where appropriate). Details of species to be replanted/revegetated must be provided, including their appropriateness to the areas and habitat for threatened species	Section 5	Section 5 outlines the proposed landscape works for the project, including details of species which will be used and their appropriateness for reuse on the project.
	(v) demonstrated integration of water-sensitive urban design principles into the detailed design process and maximisation of integration of existing and enhanced water features into the open space features of the site including enhancements to Whites Creek and other waterways as well as the constructed wetland	Section 5	Section 5.3 provides a summary of the water sensitive urban design principles which have been integrated into the project's design.
	<b>Implementation and monitoring:</b> (w) the timing for implementation of access, landscape and open space initiatives; and	Section 15	The urban design outlined within this report, including access paths, landscape works, architectural elements and open space will be completed prior to operation of the project.
	(x) monitoring and maintenance procedures for the built elements, rehabilitated vegetation and landscaping (including weed control) including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail.	Section 15	Section 15 provides a summary of the monitoring and maintenance procedures which will be implemented on the project. These will be further detailed in Operation Environmental Management Plan which will be completed prior to operation of the project.

**Table 2-2: Minister for Planning Conditions of Approval relevant to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
E55	The CSSI (including new or modified local roads, parking, pedestrian and cycle infrastructure) must be designed to meet relevant design, engineering and safety guidelines including the Austroads Guide to Traffic Management	Section 11	The active transport connections for the project were designed in accordance with Roads and Maritime specifications and guidelines, project specific requirements developed by Roads and Maritime, Austroad guidelines and relevant Australian Standards outlined in Section 11.5.
E56	An independent Road Safety Audit(s) is to be undertaken by an appropriately qualified and experienced person during detailed design to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure provided as part of the CSSI (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management. Audit findings and recommendations must be actioned prior to construction of the relevant infrastructure and must be made available to the Secretary on request.	Section 11	Road safety audits have been undertaken for the design of the project by a qualified and experienced person. Details are included in section 11.5.
E58	The Proponent must provide improved connectivity for cyclist and pedestrians between Roberts Street and Springside Street, and incorporate these in the Pedestrian and Cycle Implementation Strategy required by Condition A1.	Section 11	The cyclist and pedestrian connection between Roberts Street and Springside Street is outside of the scope of JHCPB. This condition will be complied with by others.
E59	Enhanced cycle facilities at Rozelle Bay and Leichhardt North light rail stops must be investigated and implemented if possible in consultation with Transport for NSW and incorporated into the Pedestrian and Cycle Implementation Strategy required by Condition E60.	Section 11	Details of enhanced cycle facilities at the Rozelle Bay light rail stop are included in section 11.8, connection E1.

**Table 2-2: Minister for Planning Conditions of Approval relevant to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
E60	<p>A detailed Pedestrian and Cycle Implementation Strategy must be included as a component of the Urban Design and Landscape Plan required by Condition E133 and reviewed by the Design Review Panel. The Strategy must be prepared in consultation with relevant council(s) and Bicycle NSW. The Strategy must be consistent with the Active Transport Strategy in Volume 2F, Appendix N of the EIS and must incorporate the requirements of Conditions E58 and E59 and include:</p> <ul style="list-style-type: none"> <li>(a) pedestrian and cycle engineering and safety standards;</li> <li>(b) a safety audit of existing and proposed pedestrian and cycle facilities to address the above standards;</li> <li>(c) details of selected routes and connections to existing local and regional routes;</li> <li>(d) timing and staging of all works;</li> <li>(e) infrastructure details, including lighting, safety, security, and standards compliance;</li> <li>(f) signage and wayfinding measures; and</li> <li>(g) details of associated landscaping works.</li> </ul> <p>All identified works arising from this condition are to be implemented prior to the commencement of project operations, except as permitted by this approval.</p>	Section 11	<p>This strategy has been developed as a section within the Urban Design and Landscape Plan. Details of consultation are included within section 11.4 of this strategy. Consistency with the EIS, Appendix F, has been demonstrated in section 11.6.</p> <ul style="list-style-type: none"> <li>a) Relevant pedestrian and cycle engineering and safety standards are outlined within section 11.5 of this strategy.</li> <li>b) Road safety audits of existing and proposed active transport connections were completed as outlined in section 11.5.</li> <li>c) Details of proposed pedestrian and cycle connections are outlined in Section 11.8, including details of connections to the existing network.</li> <li>d) The proposed staging of the works is outlined in section 11.12 of this strategy.</li> <li>e) The pedestrian and cycle paths for the Project were design with the safety of pedestrians, cyclists, maintenance personnel and drivers in mind. Details have been provided in section 11.9.</li> <li>f) The Rozelle Rail Yard Lighting and Wayfinding Strategy was developed (refer to Section 12) and outlines measures which will be implemented regarding signage and wayfinding. A summary is included in Section 11.11.</li> <li>g) Section 5 of the UDLP includes details of the landscape works proposed for the project. A summary of landscape works associated with pedestrian and cyclist connections is provided in section 11.10.</li> </ul> <p>The proposed staging of the works is outlined in section 11.12 of this strategy</p>
E117	The Proponent must investigate, and implement where reasonable, opportunities to consolidate operational ancillary facilities at the Rozelle Rail Yards to maximise the amount of open space across the site.	Section 4 and Section 7	The Project has developed a ventilation system which sits predominantly underground, significantly reducing the footprint of operational facilities on the surface and within the Rozelle Rail Yards Park Parkland. Further details on operational facilities are included in Section 7.
E118	The ventilation outlets at Rozelle and Iron Cove must incorporate a living vertical garden over their total areas. Notwithstanding, a reduced coverage or an alternative living green design treatment (such as wall climbers or landscape shielding) can be implemented subject to review by the Design Review Panel. The green elements are to be an integrated part of the architectural composition in aesthetic balance with the non-green elements and addressing key view corridors.	Section 7	Section 7 provides details of the ventilation outlet façade which includes a living green wall and other sculptural elements. The façade with a reduced green wall was reviewed by the Design Review Panel on 2 August and 1 November 2019.

**Table 2-2: Minister for Planning Conditions of Approval relevant to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
E119	The design of the landscape verge associated with the Iron Cove Link (Area 01, figure 5.24 of Appendix L, Volume 2F of the EIS) must maximise planting opportunities.	Section 5	Landscape works on the southern verge of Victoria Road was maximised as shown in Section 5 of this plan.
E120	A pedestrian and cycling green link, as described in the EIS, to be provided from the Rozelle Rail Yards and spanning City West Link to the park adjacent Chapman Road, must have adequate soil depth to facilitate planting across the bridge of a diverse range of vegetation consistent with the cross section provided at Figure 5.8 of Appendix L, Volume 2F of the EIS. The bridge must be a minimum width of 15 metres, where the pedestrian and cycling green link spans from Rozelle Rail Yards across the City West Link including the slip lane onto The Crescent, unless otherwise agreed by the Secretary.	Section 7	A green link with pedestrian and cycle connectivity has been provided from the Rozelle Rail Yards park to the Rozelle Bay Light Rail Station (subject to approval of modification SSI-7485-Mod-2). Details of this bridge including a cross section of the bridge is included in section 7 of this plan.
E121	The connection between the pedestrian and cycling green link and the park adjacent to Chapman Road must be designed to integrate with the open space and active transport infrastructure within the park in a manner that maximise the safe movement of pedestrians and cyclists and provide a contiguous path between the Rozelle Rail Yards open space and the park adjoining Chapman Road.	Section 5	The pedestrian and cycle green link connection provides continuous connections between the Rozelle Rail Yards, Rozelle Bay Light Rail Station and Chapman Road park. Landscape works will be provided as outlined in Section 5.
E122	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to residential properties. All lighting associated with the construction and operation of the CSSI must be consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces. Notwithstanding, the Proponent must provide mitigation measures to manage any residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	Section 14	Section 14 of this plan outlines the operational lighting design of the project and mitigation proposed to minimise lighting impacts.
E123	The Proponent must construct and operate the CSSI with the objective of avoiding adverse or distracting lighting configuration, spillage or intensity to aircraft operations. All lighting associated with the construction and operation of the CSSI must adhere to the Lighting in the Vicinity of Aerodromes: Advice to Lighting Designer (CASA, 1999) and National Airports Safeguarding Framework Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports (DIRD, 2012). Notwithstanding, the Proponent must provide mitigation measures to manage any residual night lighting impacts to protect aircraft operations, in consultation with CASA and DIRD.	Section 14	Operational lighting for the project will be developed in consultation with CASA and DIRD, to ensure adherence with the <i>Lighting in the Vicinity of Aerodromes: Advice to Lighting Designer (CASA, 1999)</i> and <i>National Airports Safeguarding Framework Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports</i> . Further details are provided within Section 14 of this plan.
E124	Notwithstanding <b>Condition E123</b> , the Proponent must consult with CASA, DIRD and Sydney Airport Operators prior to the commencement of construction to determine the need and potential positioning of aviation hazard lighting on any equipment or built form component associated with the CSSI where such consultation deems it necessary.	Section 14	Operational lighting for the project will be developed in consultation with CASA, DIRD and Sydney Airport Operators. Outcomes of this consultation. Outcomes of this consultation will be provided in the UDLP Consultation Report.
E125	The Proponent must establish a Design Review Panel during detailed design and prior to construction.	Section 2.9	A Design Review Panel was established during the detailed design phase of the project, prior to the commencement of construction.

**Table 2-2: Minister for Planning Conditions of Approval relevant to this plan**

<b>CoA</b>	<b>Condition Requirements</b>	<b>Document Reference</b>	<b>How Addressed</b>
E126	During design development of the CSSI, the Design Review Panel must review the design (excluding the tunnels between portals) to assess whether it is consistent with the commitments and outcomes made in the documents listed in Condition A1.	Section 2.9	The Design Review Panel has met on numerous occasions to review the project urban design and its consistency with the outcomes in the EIS and Submissions Report. Details of these meetings are provided in the UDLR Consultation Report.
E127	The Design Review Panel must refine the design objectives for place making, public realm and urban and heritage interpretation applicable to the length of the project and provide advice on the application of the objectives to key design elements in relation to place making, architecture, heritage, urban and landscape design and public art and aesthetic aspects of the CSSI. The Panel must also review all Urban Design and Landscape Plan(s) prior to these being submitted to the Secretary. Evidence of this review and the Proponent's consideration of the review is to be provided to the Secretary.	Section 2.9	On the 2 August 2019 the Design Review Panel met and reviewed the design objectives for the project. These objectives were confirmed to be appropriate for the project.  The UDLR will be reviewed by the Panel prior to submission with the DPIE.
E128	The Design Review Panel must be comprised of, a suitably qualified, experienced and independent professional in each of the fields of:  (a) architecture;  (b) urban design;  (c) landscape design; and  (d) Aboriginal cultural heritage and non-Aboriginal heritage.  The NSW Government Architect (or representative) is to be the Chair of the Panel. The Proponent and its contractor(s) are to be invited onto the Panel as observers only and to provide technical advice. The Proponent is to provide independent secretarial resources to the Panel. The Design Review Panel may seek specialist advice from UrbanGrowth NSW (when the Panel convenes to discuss matters relating to the Rozelle Rail Yards and its surrounds).	Section 2.9	The Design Review Panel consists of experts from the fields of architecture, urban design, landscape design and heritage. A delegate of the NSW Government Architect chairs the panel  Urban Growth NSW (now TfNSW Greater Sydney Division) attended the panel meeting on 29 May 2020 and were invited to the meeting on 26 June 2020.
E129	The Design Review Panel members must be nominated by the Proponent and approved by the Secretary in accordance with the timeframes in Condition E125.	Section 2.9	The Design Review Panel members were approved by DPIE on 17th December 2019

**Table 2-2: Minister for Planning Conditions of Approval relevant to this plan**

CoA	Condition Requirements	Document Reference	How Addressed
E130	Nomination and appointments of the Design Review Panel must comply with the Public Service Commission's Appointment Standards: Boards and Committees in the NSW Public Sector guideline.	Section 2.9	The appointment of the Design Review Panel was compliant with the Public Service Commission's Appointment Standards: Boards and Committees in the NSW Public Sector guideline, with members of the Panel approved by DPIE on 17th December 2019.  These guidelines are also referenced in the Panel's Terms of Reference.
E131	Once the Design Review Panel is composed, and prior to the detailed design of the CSSI, a Design Review Panel Terms of Reference is to be developed and endorsed by all panel members. The Terms of Reference must be submitted to the Secretary for information and:  (a) establish best practice governance and protocols for the operation of the Design Review Panel;  (b) include a Code of Conduct;  (c) outline the agreed frequency of Design Review Panel meetings, coordinated with Proponent program requirements, to ensure timely advice and design adjustment; and  (d) outline secretariat functions and administration including the recording and storing of meeting agendas, minutes and actions.	Section 2.9	Terms of Reference for the Design Review Panel were developed and endorsed by all panel members at the first panel meeting on 2 August 2019.
E132	The Design Review Panel is to be operated and managed in accordance with the approved Design Review Panel Terms of Reference and in accordance with the NSW Government Boards and Committees Guidelines (Department of Premier and Cabinet, September 2015).		Terms of Reference for the Design Review Panel were developed and endorsed by all panel members at the first panel meeting on 2 August 2019. They reference the requirements of the NSW Government Boards and Committees Guidelines.
E166	The Proponent must investigate options for utilising salvaged rail related infrastructure from the Rozelle Rail Yards into the landscaping of the Rozelle Rail Yards. How the items are to be used is to be detailed in the Urban Design and Landscape Plan required by Condition E133.	Section 13	The project will investigate opportunities to reuse salvaged heritage items, following the process outlined in the Heritage Management Plan
E177	The CSSI must be designed to retain as many trees as possible. Where trees are to be removed, the Proponent must provide a net increase in the number of replacement trees. Replacement trees must be planted within, and on public land up to 500 metres from the CSSI boundary. Replacement tree plantings can be undertaken beyond 500 metres on public land within the local government areas to which the CSSI approval applies if no more plantings are practicable within and up to 500 metres from the CSSI boundary. The location of the trees must be determined in consultation with the relevant authority(s).		The project has been designed to retain as many trees as possible. The project will provide a net increase in the number of replacement trees. The location of these trees will be determined in consultation with the relevant authority(s).
E178	Replacement trees are to have a minimum pot size of 75 litres except where the plantings are consistent with the pot sizes specified in a relevant authority's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant authority(s).		Replacement trees will have a minimum pot size of 75 litres, except where the planting is consistent with the pot sizes specified in the relevant authority's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant authority(s).
E179	The Proponent must submit to the Secretary a report which details the type, size, number and location of replacement trees. The report must demonstrate how any replacement plantings with a pot size less than 75 litres are consistent with the requirements of Condition E178. The report must be submitted to the Secretary one (1) month prior to operation.		As required by Condition of Approval E179 the project will prepare a report which details the type, size, number and location of replacement trees to be provided. This report will be submitted one month prior to operation.



Artist's impression - Aerial view over City West Link  
(Landscape shown at full maturity and is indicative only).

## 2.7 Revised Environmental Management Measures

An Environmental Impact Statement (EIS) was prepared in response to the Director Generals Environmental Assessment requirements and was placed on public exhibition on 18 August 2017.

In January 2018, a Submissions Report, which considers submissions to the EIS made during the exhibition period was submitted to the Department of Planning, Infrastructure and Environment (DPIE).

On 17 April 2018, planning approval for the WestConnex Rozelle Interchange project was received from the Minister for Planning. The approval was subject to Conditions of Approval, including clauses E133 - E134 which are specific to Urban and Landscape Design.

The Revised Environmental Management Measures from the Submissions Report, which are specific to urban design, are listed below along with a reference to where each measure is addressed within this Plan.

**Table 2-3: Revised Environmental Management Measures**

Impact	Ref	Environmental management measure	Comment
Urban design of project infrastructure	UD1	Prepare an Urban Design and Landscape Plans Plan (UDLPs) for permanent built works and landscaping in consultation with relevant councils, stakeholders and the community. The construction of permanent built works will not commence until the element is included in a suitably prepared and approved UDLP, unless otherwise agreed to by the Secretary.	This Urban Design and Landscape Plan has been prepared for consultation with relevant councils, stakeholders and the community.
	UD3	Specific design measures at surface operational infrastructure to prevent crime, based on principles of CPTED, will be identified and implemented at each facility prior to the commencement of facility operation.	Crime Prevention Through Environment Design principles have been integrated into the project design as outlined in sections 3.8, 11.3 & 11.9.
	UD5	Establish an Urban Design Review Panel to provide advice and input into the development of the UDLP and associated sub-plans. Where an UDLP is required to address heritage matters, the panel will include an independent heritage architect.	A Design Review Panel was established during the detailed design phase of the project, prior to the commencement of construction. The Design Review Panel has met on numerous occasions to review the project urban design and its consistency with the outcomes in the EIS and Submissions Report. Details of these meetings are provided in the UDLP Consultation Plan. The panel includes a heritage expert.
Loss of trees	B6	As many trees as possible will be retained during construction. In the event that tree removal cannot be avoided, a tree replacement strategy will be prepared. Replacement trees will be included in the relevant UDLP. Opportunities for the provision of replacement trees outside the project boundary will be investigated in consultation with local councils.	As required by Condition of Approval E179 the project will prepare a report which details the type, size, number and location of replacement trees to be provided. This report will be submitted one month prior to operation.
General impacts to landscape and visual amenity	LV8	Visible elements of operational facilities will be designed to satisfy functional requirements and adopt the design principles detailed in the M4-M5 Link Urban Design Report. The proposed designs will be documented in the relevant UDLP for the project.	Details for the design of the project's operational facilities are included in Section 7, including the application of the urban design principles in the M4-M5 Link Urban Design Report.
	LV9	The slopes of vegetated batters that form part of the final urban design and landscaping solution will be limited to no more than 1:4 where possible in order to maximise the impact of vegetation on these batters and minimise maintenance.	Cut and fill embankments throughout the project have been designed to be no steeper than 4H:1V, except where works tie-in to existing embankments that are steeper than 4H:1V or the designed surface is required to be no steeper than 3H:1V
Impacts to visual amenity at the Rozelle interchange	LV13	Integrate the new open space at Rozelle with the Lilyfield Road streetscape through considered street tree planting and associated landscape works in accordance with Austroads guidelines.	The landscape works design for the Rozelle Rail Yard park includes two rows of avenue trees planted along the main footpath, connecting the Lilyfield Road streetscape with the park. This is shown in the landscape drawings in Section 5.
	LV14	Implement urban design and landscape measures that allow permeable views between the City West Link carriageway and the new open space to provide a sense of openness and connection with the open space for motorists and the community.	Permeable views between the City West Link carriageway and the Rozelle Rail Yards park are provided at the western wetlands and eastern extent of the park. This is further discussed in Section 4.
	LV15	Investigate measures to minimise view impacts of the project to sensitive residential receptors in the vicinity of the Rozelle Rail Yards as described in this assessment and include in the relevant UDLP where reasonable and feasible.	The Rozelle Rail Yards site will be transformed into new public parkland resulting in a new park edge condition along Lilyfield Road. A combination of street trees, parkland trees and screen planting have been adopted to minimise view impacts of nearby residents. Refer to Section 5.

**Table 2-3: Revised Environmental Management Measures**

<b>Impact</b>	<b>Ref</b>	<b>Environmental management measure</b>	<b>Comment</b>
	LV16	Develop a design that aims to incorporate the ventilation outlets at the Rozelle Rail Yards as an integral component of the larger open space composition, with reference and consideration to the Ventilation Facility Design Review (Annexure 2 of Appendix L (Technical working paper: Urban design).	Section 7 provides details of the ventilation outlet façade at Rozelle which includes a living green wall and other sculptural elements, integrating with the Rozelle Rail Yards Park. The façade was reviewed by the Design Review Panel on 2 August and 1 November 2019.
	LV17	Consult with UrbanGrowth NSW regarding the interface between the project footprint and the White Bay Power Station precinct. Design the interface to optimise compatibility between the two areas from a landscaping, visual, heritage and active transport connectivity perspective.	Representatives from UrbanGrowth NSW (now TfNSW Greater Sydney Division) attended the Design Review Panel meeting on 29 May 2020.
	LV18	Investigate options to retain the mature trees of high retention value adjacent to the light rail corridor at the corner of The Crescent and City West Link and to provide screen planting alongside the retaining wall edge of the light rail corridor, to minimise landscape and visual impacts. Implement options where feasible and reasonable with consideration of site constraints.	The project investigated option to retain mature trees of high retention value adjacent to the light rail, however due to the footprint of temporary and permanent works no trees could be retained. The project also investigated opportunities to include screen planting along the retaining wall, however due to the close proximity of the landbridge and ramp to this wall adequate space with sunlight is not available.
Impacts to visual amenity at Iron Cove Link	LV19	Investigate vegetative and other screening measures along Victoria Road to improve the visual amenity of the streetscape and reduce impacts associated with the ventilation outlet and increased glare from the portals to residential dwellings to the north of Victoria Road. Reasonable and feasible landscaping measures will be included in the relevant UDLP.	Landscape works have been provided within all remaining project land beyond the roads to improve visual amenity along Victoria Road. The Ventilation outlet has been developed to incorporate green wall systems to blend into the surrounding landscape. Glare from road lighting has been minimised by the use of anti-glare shields.
Visual amenity impacts associated with design of ventilation outlets at Rozelle, Iron Cove Link and St Peters	LV22	Investigate measures during detailed design to reduce the height, bulk, scale and enhance the landscape setting of the ventilation outlets, subject to achieving desired ventilation outcomes, and in accordance with the design principles detailed in the M4-M5 Link Urban Design Report.	The project has developed a ventilation system which sits predominantly underground, significantly reducing the footprint of operational facilities on the surface and within the Rozelle Rail Yards Park. Further details on operational facilities are included in section 7.  Section 7.2 provides details of the ventilation outlet façade which includes a living green wall and other sculptural elements. The façade with a reduced green wall was reviewed by the Design Review
General heritage impacts	NAH02	An Interpretation Strategy will be developed and implemented to identify and interpret the key heritage values and stories of the heritage areas affected by the project and inform the development of the Urban Design and Landscape Plan for the project, in accordance with Interpreting Heritage Places and Items Guideline (NSW Heritage Office 2005). The Interpretation Strategy will:  Build on themes, stories and initiatives proposed as part of other stages of WestConnex to ensure a consistent approach to heritage interpretation for the project  Include themes and stories including the Rozelle railways historic functions, trains and trams transport, industrialisation and The Rozelle-Darling Harbour Goods Line Identify how the rail related infrastructure salvaged from the Rozelle Rail Yards will be reused.	A Heritage Interpretation Plan will be developed for the project which will identify:  Opportunities to reuse salvaged heritage elements within the urban design Interpretive signage Interpretive initiatives to be implemented within the Rozelle Rail Yards parklands which do not include reuse of salvaged items.

**Table 2-3: Revised Environmental Management Measures**

Impact	Ref	Environmental management measure	Comment
Potential impact to White Bay Power Station	NAH11	The potential for impacts to the railway cutting on the eastern side of Victoria Road, associated with the White Bay Power Station, will be considered during the development of the detailed design for the realigned Victoria Road and associated bridge. The final design will seek to avoid impact to the railway cutting and maintain the visual relationship between the cutting and the White Bay Power Station site. Landscaping sympathetic to the relationship, developed in consultation with a heritage specialist, will be included in the UDLP for the project.	The project's design has been developed to minimise impacts to the railway cutting near Victoria Road. Landscape works has been developed, as outlined in Section 5 in consultation with a heritage specialist.
Loss of trees	OB9	"The UDLP will include compensatory planting for trees removed by the project. The plan will include: A tree replacement strategy Species recommendations for the landscape design to consider, including foraging trees for the Grey-headed Flying-fox Relevant project specific rehabilitation and revegetation measures associated with the M4 East and New M5 projects, where there is an overlap in use of project footprint."	A report will be developed by the project in accordance with condition E179 which outlines the replacement trees which will be provided by the project. This report will be submitted to DPIE one month prior to operation. It will include details of the landscaping outlined in Section 5 of this Plan.
Operational impacts on surface water quality	OSW15	The constructed wetland at the Rozelle interchange will be appropriately designed considering Water Sensitive Urban Design Principles to cater for the continuous release of treated groundwater from the water treatment plant and onsite stormwater flows and lined to prevent potential interaction with groundwater.	Section 5 provides a summary of the water sensitive urban design principles which have been integrated into the project's design, including the design of the wetlands which treat groundwater from the tunnel and water treatment plan.
Active Transport Network	TT20	An Active Transport Network Implementation Strategy will be prepared for the project. The strategy will be consistent with the Active transport strategy in Appendix N of the EIS. The strategy will be prepared in consultation with relevant councils and Bicycle NSW and implemented prior to the commencement of project operations or as otherwise agreed to by the Secretary of NSW Department of Planning and Environment.	The Pedestrian and Cycle Implementation Strategy outlined in Section 11 fulfils the purpose and requirements of the Active Transport Network Implementation Strategy. It is consistent with the requirements of the Active transport strategy in Appendix N of the EIS, as demonstrated in Table 11-1.

## 2.8 Stakeholder and community consultation

This Plan, the Urban Design and Landscape Plan (UDLP), and a series of illustrative plan drawings have been prepared for the purposes of presentation and public display.

This Plan will be exhibited for consultation with relevant council's, UrbanGrowth NSW (now TfNSW Greater Sydney Division), the community and affected landowners and businesses. Following this consultation period feedback received will be reviewed and included in this plan as required.

### Consultation with councils

Councils have been consulted through a series of workshops which have been attended by Council staff, JHCPB design and construction teams as well as RMS representatives. Further discussion and consultation has also occurred at interface meetings with each Council.

At the time the release of the UDLP for public display, the following stakeholder consultation as required by MCoA condition E134 had been undertaken with:

- A meeting on 3 May 2019 with Inner West Council to discuss the overall project design approach
- A meeting on 20 June 2019 with Inner West Council and City of Sydney to discuss their recreational needs
- A meeting on 30 August 2019 with Inner West Council to discuss opportunities for Aboriginal heritage interpretation
- A workshop on 27 September 2019 with Inner West Council and representatives from the local Aboriginal community to discuss the history, stories and background of the Rozelle Interchange project and possible opportunities in collaboration to help shape the Rozelle Interchange Railyards design and to give it a Connection to the Country
- A meeting on 4 October 2019 with Inner West Council to provide a project overview and discuss further topics to collaborate on relating to urban design
- A meeting on 18 October 2019 with Inner West Council to discuss active transport connections, play areas and Aboriginal interpretation
- A meeting on 21 February 2020 with Inner West Council to discuss the park furniture and Aboriginal interpretation opportunities within the Rozelle Rail Yards Parklands, and
- A meeting on 27 March 2020 with Inner West Council to discuss the Rozelle Rail Yards Parklands and interpretation opportunities

### Consultation with community

Community consultation on the UDLP will be undertaken in 2020.

To promote the exhibition and to enhance the communities understanding of the UDLP, a comprehensive program of engagement activities will be undertaken, which includes:

- UDLP made available on the WestConnex website
- Copies of the UDLP made available at the Rozelle Interchange Community Information Centre (Monday to Friday, 9am to 5pm)
- Copies were provided to the DRP members for review and comment
- Virtual presentations for key stakeholder groups, and
- One-on-one virtual Q&A sessions for the community with subject matter experts.

### Responses to UDLP Consultation

Following consultation submissions and feedback received will be reviewed and included in this plan as required.

A record of all consultation including responses to submissions, will be included in the UDLP Consultation Report.

## 2.9 Design Review Panel

A Design Review Panel (DRP) has been established to provide advice and guidance during detailed design and the preparation of the Urban Design and Landscape Plan as required by Planning Approval conditions E125 - E132, respectively.

The Design Review Panel refined the design objectives for place making, public realm and urban and heritage interpretation applicable to the length of the project, and provide advice on the application of the objectives to key design elements in relation to place making, architecture, heritage, urban and landscape design, and public art and aesthetic aspects of the CSSI.

The Design Review Panel is comprised of a suitably qualified, experienced and independent professional in each of the fields of:

- architecture
- urban design
- landscape design
- Aboriginal cultural heritage and non-Aboriginal heritage

The NSW Government Architect's representative is the Chair of the Panel.

The Design Review Panel terms of reference was developed and endorsed by all panel members, and notes the following:

*The Panel will provide independent and impartial advice on the quality of the Rozelle Interchange Project urban design to the Chair, whose summary recommendations will be informed by the Panel members' advice. The Chair will be the Government Architect or representatives.*

*The Panel will evaluate the project against the design objectives, commitments and outcomes*

*within the M4-M5 Link Environmental Impact Statement and M4-M5 Link Submissions and Preferred Infrastructure Report, and abides by the UK's Commission for Architecture and the Built Environment's (CABE) Principles of Good Design Review (Annexure C) as well as the Department of Planning and Environment Code of Conduct (Annexure A).*

*The Design Review Panel must:*

- *Refine the design objectives for place making, public realm and urban and heritage interpretation applicable to the length of the project (refer to Annexure B),*
- *Provide advice on the application of the objectives to key design elements in relation to place making, architecture, heritage and urban and landscape design and public art and aesthetic aspects of the project with reference to the TfNSW 'Beyond the Pavement' Urban Design Policy, and*
- *Review the Urban Design and Landscape Plan(s) and provide consideration prior to being submitted to the Department of Planning and Environment for approval.*

At the time the release of the UDLP for public display, consultation with the Design Review Panel has been undertaken on the following dates:

- 2 August 2019
- 1 November 2019
- 2 April 2020
- 29 May 2020

### Outcomes of consultation

Following consultation submissions and feedback received will be reviewed and included in this plan as required.

A record of all consultation including responses to submissions, will be included in the Consultation Report.



Artist's impression - The constructed wetlands at Rozelle Rail Yards Parklands  
(Landscape shown at full maturity and is indicative only).

## 2.10 Construction compound for the proposed Western Harbour Tunnel Project

This Urban Design and Landscape Plan describes the urban design and landscape design which will be implemented for the Rozelle Interchange Project.

A portion of this design will not be implemented by the Rozelle Interchange Project Team and will be completed in the future by Transport for New South Wales (or their delegate).

This area within the Rozelle Rail Yards Parkland (refer to Figure 2-6) will be utilized as a construction compound by the proposed Western Harbour Tunnel Project (subject to approval), during late construction and operational stages of the Rozelle Interchange Project. Following the completion of construction works for the proposed Western Harbour Tunnel Project this area will be rehabilitated in accordance with the design presented within this Plan.



Figure 2-6: Location of the construction compound for the proposed Western Harbour Tunnel Project



Aerial view over Rozelle Rail Yards overlaid with the WHT construction compound  
(Landscape shown at full maturity and is indicative only).

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