

## Appendix C: Final Place Plan



# MetCONNX



## BYFORD RAIL EXTENSION

ARMADALE STATION (ELEVATED) FINAL PLACE PLAN

DOCUMENT NO. R30-WWH-RPT-PN-225-00003

23 MAY 2023

THIS PROJECT TAKES PLACE ON THE ANCESTRAL LANDS OF THE NOONGAR PEOPLE.  
WE ACKNOWLEDGE AND PAY RESPECT TO WHADJUK NOONGAR PEOPLE, THE TRADITIONAL  
CUSTODIANS OF THIS *KWOBIDAK BOODJAR* (BEAUTIFUL COUNTRY).

WE ACKNOWLEDGE THE FIRST AUSTRALIANS AS THE TRADITIONAL CUSTODIANS OF THE  
CONTINENT, WHOSE CULTURES ARE AMONG THE OLDEST LIVING CULTURES IN HUMAN HISTORY.

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#### CULTURAL TERMS

The term 'Noongar' is used throughout this document to refer to Aboriginal people of the South-West region of Western Australia. Noongar was originally an oral language. Written recordings offer different spelling types. APPARATUS uses the orthography endorsed by the Noongar Language Centre – Noongar Boodjar Language Cultural Aboriginal Corporation – unless otherwise advised by the METRONET Noongar Reference Group.

#### PREPARED FOR



Government of Western Australia  
Public Transport Authority



#### PROJECT TEAM

NOP	Laing O'Rourke, KBR & Pritchard Francis
ARCHITECTURE & URBAN DESIGN	Hames Sharley & Weston Williamson + Partners
LANDSCAPE ARCHITECTURE	UDLA
PUBLIC ART & INTERPRETATION	APPARATUS
DDA	O'Brien Harrop Access (OHA)

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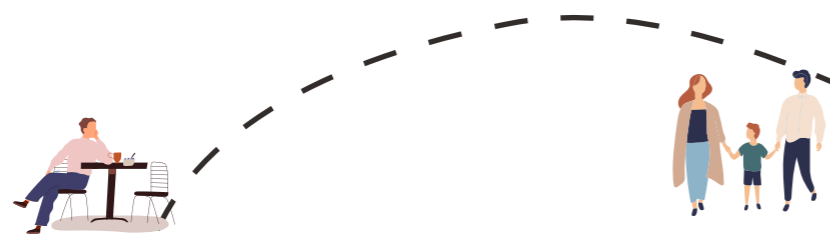
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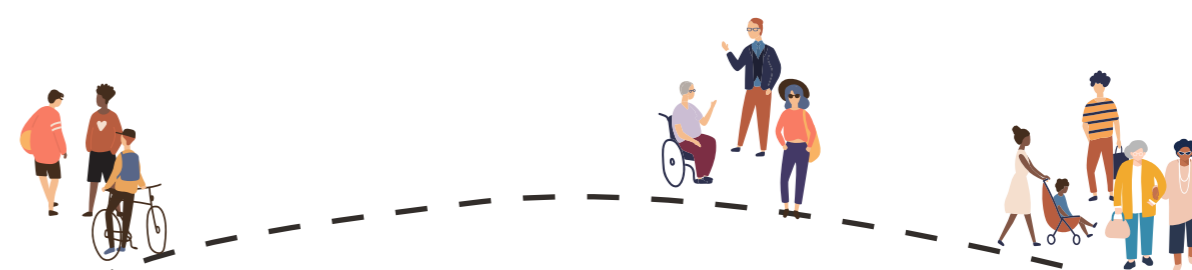


# DEFINITIONS

EMBANKMENT	Is a rail corridor treatment whereby the track sits on an elevated bank, usually a combination of earth and retaining walls. Crossing of the rail corridor is limited at these points.
PRECINCT CORE	Is the area within a 500m radius of the train station.
STATION PRECINCT	Is the area within a 1km radius of the train station.
VIADUCT	Is a rail corridor treatment whereby the track sits on an elevated structure. The rail track is supported by a series of pylons, which allows space under the track to be accessible to the public.

# ABBREVIATIONS

AHD	Australian Height Datum
BRE	Byford Rail Extension
CPTED	Crime Prevention Through Environmental Design
ICIP	Indigenous Cultural Intellectual Property
FPP	Final Place Plan
NCCD	Noongar Cultural Context Document
NOP	Non-Owner Participant
NRG	Noongar Reference Group
MNRG	METRONET Noongar Reference Group
PTA	Public Transport Authority
PPP	Preliminary Place Plan
PPAP	Preliminary Public Art Plan
PSP	Principal Shared Path
SOPS	Sense of Place Statement
SPDG	Station Precinct Design Guide
SPP 7.0	State Planning Policy 7.0 – Design of the Built Environment
UHI	Urban Heat Island
WSUD	Water Sensitive Urban Design



# EXECUTIVE SUMMARY

As part of the METRONET Byford Rail Extension project, the Armadale Station (Elevated) Final Place Plan sets out the place planning, public art strategy and landscape concept for the Armadale station and its surrounds. The plan focusses on the METRONET deliverables within the project boundary in the area of 500m around the train station at 'Day One' of opening, with some considerations for these station surrounds to adapt to future built form as the need for park and ride spaces is reduced.

The report summarises the METRONET objectives and translates these into three tangible touchstones to achieve in the station precinct: a smooth and comfortable transfer, pleasant and meaningful time spending and embedding in the community.

Analysis of the current situation, aboriginal significance, community perception, station precinct users, the planning framework, together with the station access strategy, form the base for the Final Place Plan. At the core of the plan sits the site-specific Sense of Place Statement. This guides the place planning, public art strategy and design of the architecture (not part of this document) and the public realm (in collaboration with traffic and civil engineering).

The highlights of the design are explained underneath using the DesignWA framework of 10 Principles of Good Design.

## CONTEXT & CHARACTER

*Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*

The Sense of Place Statement, based on the context and place analysis and specifically formulated for the Armadale station precinct, guides the precinct design. The statement is composed around three themes: 'hills town', 'reveal' an 'connecting', each standing for a rich diversity of experiences. Everything in the station precinct concept design sets out to contribute to this Sense of Place, and be a 'good neighbour' by enhancing and celebrating Armadale.

## LANDSCAPE QUALITY

*Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.*

The landscape concept for the Armadale Station focuses on creating a public place for people and reconnecting the precinct to the surrounding landscape. Increasing planting and tree canopy throughout in order to create a naturally shaded and cooler environment. New paths and pedestrian-friendly crossings connect the station precinct with its urban surrounding. A Welcome Place 'hub' connects east and west through the precinct, and is designed for urban life, including aboriginal people and youth, while smooth pedestrian flows provide a base-presence of people to attract more people.

## BUILT FORM & SCALE

*Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*

The design of the new railway station and tracks will confidently relate to the future scale of buildings of Armadale City Centre, while view lines on street level are opened up. The connection of these new facilities will breathe life into the centre, creating the opportunity for new homes, shops, community facilities and workplaces that will breathe new life into areas beyond.

## FUNCTIONALITY & BUILD QUALITY

*Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*

New station infrastructure will be a long-term asset for the city. As a once-in-a-generation investment, the design focusses on simple and durable constructions that 'get better with age'. The precinct is designed as a multi-modal transport hub, balancing the functional requirements of all users. The rail elevation introduces the efficiency of activities in overlapping spaces, with new public uses under and beside the railway.

## SUSTAINABILITY

*Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*

The new Armadale station precinct will fundamentally improve the existing public transport facilities and encourage all active travel modes, as lower carbon alternatives to the car. The plan focusses on reducing the substantial heat island around the Armadale station. Increasing the tree canopy coverage will provide cooling and improve comfort for a walkable environment.

## AMENITY

*Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.*

Public places near or under the rail infrastructure will be spacious, shaded with green and naturally lit to promote a safer, welcoming and engaging environment. They will be inclusive and universally accessible, to promote use by people of all ages, cultures, genders and abilities. The Station Precinct will include a kiosk and other amenities to support the diversity of social life in Armadale.

## LEGIBILITY

*Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*

The design of Armadale station precinct is designed with intuitive wayfinding in front of mind. Signage is needed only as a second option. The design of these environments will blend naturally with the street and signal the importance of the station as the hub of the Strategic Centre, from east to west.

## SAFETY

*Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.*

The station precinct needs to feel safe in order to support public transport and urban liveliness. Clear sight-lines, smooth level changes and de-cluttered spaces facilitate passive surveillance throughout. The public realm is designed for a diverse array of users, encouraging activation to support safety through activity, whether it be passive or structured.

## COMMUNITY

*Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*

The spaces underneath the railway will connect communities on either side of the rail line. The social benefits in focusing mixed-use development around the new station will create areas for locals to interact and build on the strengths of existing relationships within Armadale. Inviting the community into the Welcome Place, creating a 'hub' of activity from socialising and knowledge sharing, to youth activities and community events.






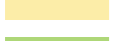





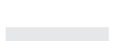



## AESTHETICS

*Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*

New rail infrastructure will be a part of the Armadale Strategic Centre long into the future. While the design of the station and the public realm is kept simple, with an emphasis on functionality and space flexibility, the look and feel reflect the Sense of Place themes of 'hills town', 'connecting' and 'reveal'.

This Final Place Plan is an important consideration for the detailed design phase of the Byford Rail Extension project. The Sense of Place Statements and recommendations it contains set the expectations for an Armadale Station design that relates to the local context and meets the DesignWA framework of 10 Principles of Good Design.

**LEGEND**

-  TRAIN STATION
-  RAIL VIADUCT
-  BUILDING (EXISTING)
-  BUILDING (PLANNED)
-  DEVELOPMENT OPPORTUNITY
-  PLAZA
-  PARKLAND
-  WATER
-  PSP
-  PEDESTRIAN CONNECTION
-  CENTRE ROUTE
-  BUS STATION
-  ROAD (EXISTING)
-  ROAD (PLANNED)
-  CAR PARK & ACCESS

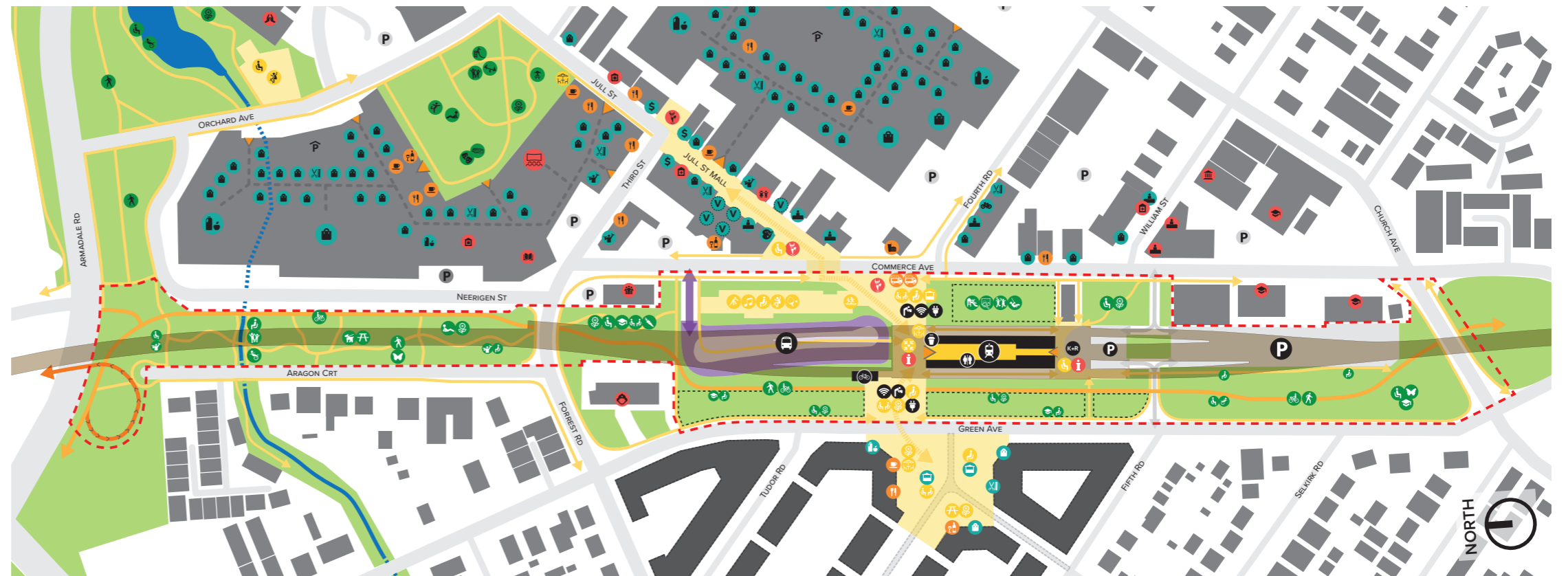
**PLACE ACTIVATION**

BLACK = EXISTING / WHITE = NEW

-  STATION AMENITIES
-  FOOD & BEVERAGE
-  COMMERCIAL
-  COMMUNITY
-  PLAZA ACTIVITIES
-  PARKLAND ACTIVITIES



**FIGURE 1. PLACE PLAN - DAY ONE**



**FIGURE 2. PLACE PLAN - FUTURE**





# 01

## INTRODUCTION & PURPOSE

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# INTRODUCTION

## BACKGROUND

As part of the METRONET Byford Rail Extension (BRE) Project, the *Armada Station (Elevated) Final Place Plan* (FPP) sets out the place planning, public art strategy and landscape concept for Armadale Station and its surrounds. Prior to this, in 2021 a Preliminary Place Plan (PPP) report was produced by WSP/PLACE Laboratory/CONIGLIO AINSWORTH ARCHITECTS for Armadale Station and its surrounding precinct, based on the station being at-grade. However, since that time, a decision was made by METRONET to elevate Armadale Station.

The BRE project is currently in the detailed design phase, therefore, the NOP has prepared this document utilising relevant content from the original report as a foundation for key elements of this FPP including drawings and diagrams prepared during detailed design phase. Items within each that read concurrently are cross-referenced, where appropriate. In addition, this document provides enhancements to the analysis with urban surrounds implications arising from an elevated station solution outlined.

The transition from an at-grade station to an elevated station provides specific urban design opportunities and potential for future urban development adjacent. Therefore, this FPP highlights and responds to these nuances, providing an urban design, landscape and public art framework to guide future development.

Throughout this report, the contextual and urban design analysis and response is considered at the project boundary and a 400-500m radius from the station, known typically as the precinct core (refer Figure 1: Location Plan). Some considerations are also the station precinct area, which is a 1km radius from the station.

## VALUE OF PLACE PLANNING

This report summarises the METRONET objectives and translates these into three vital elements to achieve in the station precinct:

- a smooth and comfortable transfer;
- a pleasant and meaningful time; and
- embedded in the community.

The BRE project is viewed as a once-in-a-generation opportunity to revitalise existing neighbourhoods by creating new train stations, community open spaces and removing unsafe level crossings. It encompasses the construction of approximately 8km of new track and a new end-of-line station at Byford. The intent is for Armadale Station to be elevated on a viaduct and expanded with longer platforms to accommodate six-car trains and an additional platform for the Australind line, as well as improve access for users and revitalise the surrounding precinct.

The result of this investment is an opportunity for urban renewal, where a new inner city elevated rail station will integrate with its existing neighbourhood – creating new opportunities to live, work and recreate. It will open up opportunities for catalytic development, driven by enhanced connectivity of existing neighbourhoods and providing the impetus for high-quality public realm upgrades.

## A DESIGN-LED APPROACH

A typical focus for rail infrastructure projects is on the efficient operation of trains and passenger movement. Compared to many other rail projects, the BRE will introduce major infrastructure interventions into existing neighbourhoods, therefore, the impacts and opportunities are wide-reaching and require thoughtful integration to ensure positive contributions to the communities that live around each station.

The infrastructure delivered for the BRE project (railway tracks, viaducts, embankments and station buildings) will not exist in isolation of the neighbourhoods served. Lessons from other cities have shown that the success of elevated rail can be directly linked to design quality. If the stations and rail infrastructure are well designed, it will help to create safe and well-used places near stations and below viaducts. The positive impacts of high-quality redevelopment can follow, creating residential, commercial and civic uses that blend with this new rail infrastructure.

On the contrary, if infrastructure is poorly designed, it can become a social and economic cost to the community that will be very difficult to change. It can also have compounding impacts on safety, freedom of pedestrian movement and future development potential of the surrounding area.

In that regard, the objective of the Armadale Station (Elevated) FPP is to help facilitate delivery of high-quality rail infrastructure that:

- Contributes to the delivery of State Government infill targets by providing the impetus for urban renewal and revitalisation of the station precinct;
- Delivers high-quality public spaces that contribute to an enhanced green network;
- Attracts business and residential investment through public domain and other amenity improvements; and
- Enables urban design outcomes that maximise connectivity across the rail corridor and promote cycling and pedestrian movement.



**FIGURE 3. LOCATION PLAN**

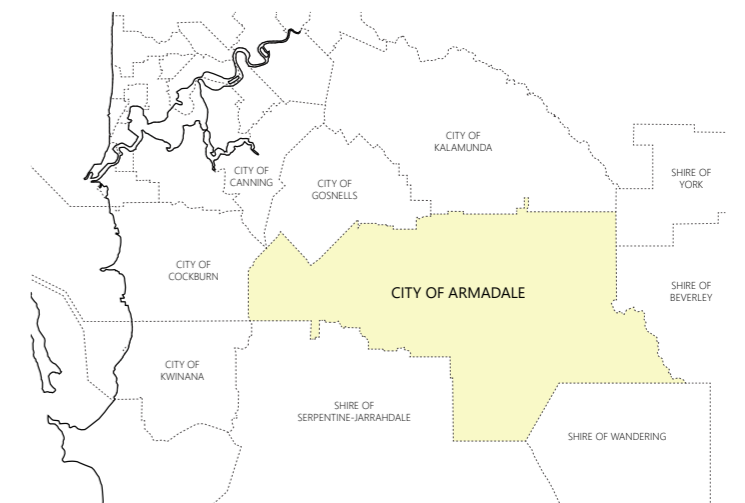
Source: Byford Rail Extension – Concept Design, ‘Armadale Station Precinct Preliminary Place Plan’, WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

**ARMADALE**

The City of Armadale, 28km south-east of Perth and covering an area of 560sqkm, is a multi-purpose centre that provides diverse economic and community services to the local population and those in the wider catchment area.

The area is known for its natural features – in particular its relationship to state forests, which rise into the Darling Scarp to the east, the City of Armadale is bordered by the City of Gosnells and Shire of Kalamunda to the north, the Shire of Beverley to the east, the Shires of Wandering and Serpentine-Jarrahdale to the south and the City of Cockburn to the west.

In 2016, the City’s population was 82,267, with this forecast to grow to 100,759 in 2022 and 141,177 by 2036, an overall increase of 72% (profile.id accessed 10/03/22). This growing community will benefit from a station precinct that complements the existing Strategic Metropolitan Centre’s activities and provides an attractive, safe and lively public transport hub as an integrated, welcoming heart of Armadale.



**SURROUNDING LOCAL GOVERNMENTS**

# WHAT IS A PLACE PLAN?

The vision for METRONET is a well-connected Perth with more transport, housing and employment choices achieved through delivery of integrated land use and transport solutions, where station precincts become desirable places to work, live, play and invest. Central to the success of this philosophy is careful consideration of the broader context in which each precinct, station and infrastructure intervention sits. This vision is one of the primary drivers behind the preparation of this FPP.

As illustrated in Figure 2, the Preliminary Place Plan is typically established prior to commencement of the concept design stage. Its role is carried forward through the Final Place Plan to construction. The document is the foundation for orderly, well-integrated and coordinated delivery of METRONET station precincts and infrastructure. In that regard, the purpose of the Armadale Station (Elevated) FPP is to:

- Provide a response to METRONET Strategies, Station Precinct Design Guide (SPDG) and the Design WA policy suite;
- Provide a basis for integration with future precinct design and precinct planning in the surrounding station precinct;
- Inform station infrastructure engineering, architectural design and decision-making;
- Inform evaluation of station infrastructure proposals and delivery of detailed design and planning at delivery stage (including procurement and development applications); and
- Inform design review and development assessment of station infrastructure and precinct planning proposals.

## METHODOLOGY

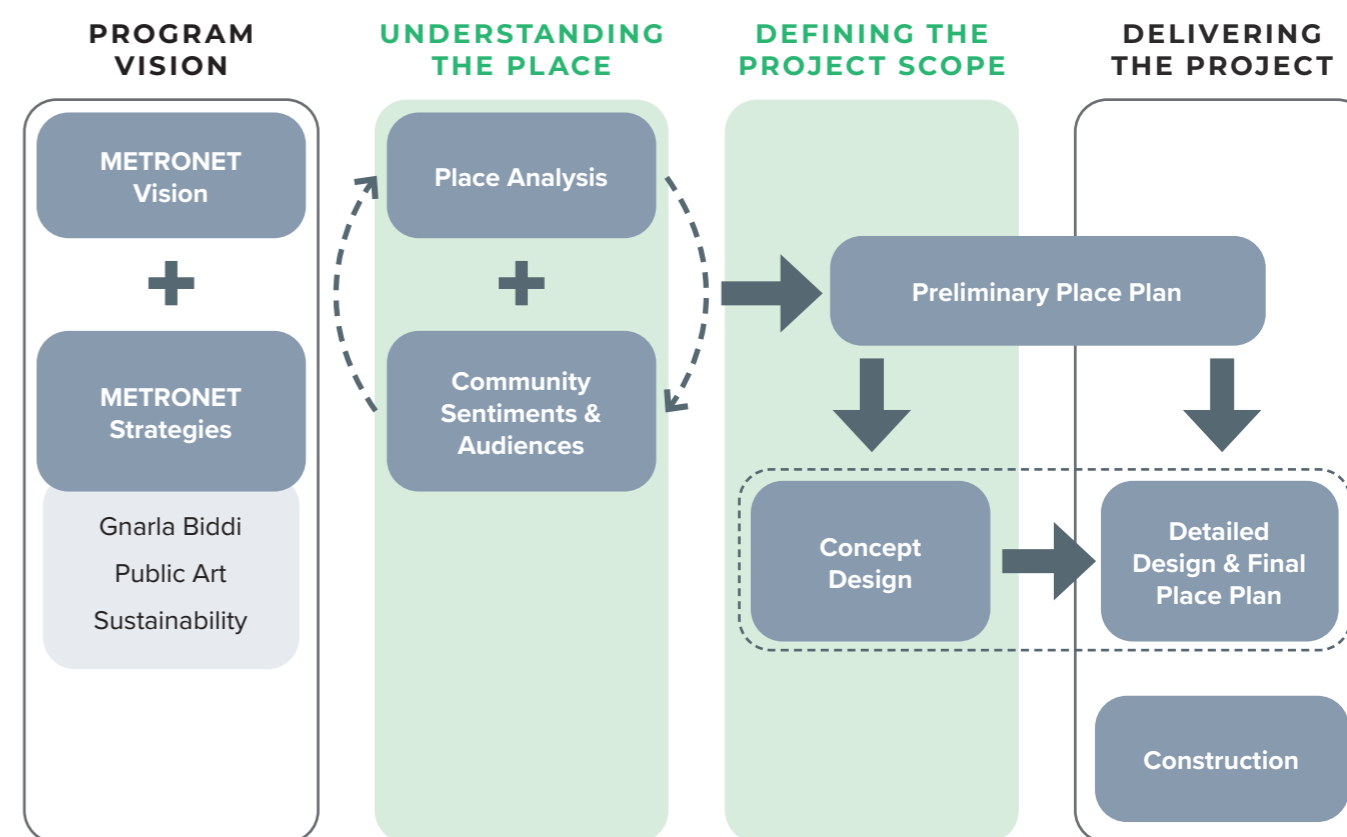
This FPP represents the second step in a detailed urban design process that identified items such as station location and track typologies (eg. viaduct and embankment types), with the findings based on a number of options supplied by METRONET/Public Transport Authority (PTA). This is further explored on the following page.

## STRUCTURE

This FPP includes the following sections:

1. INTRODUCTION & PURPOSE
2. PLANNING FRAMEWORK: Assessment of METRONET Strategies, SPDG and Design WA, and relevant planning documents.
3. CONTEXT ANALYSIS: Review of the broader area and local context to assist with definition of opportunities and constraints.
4. NARRATIVE ANALYSIS: Analysis of future users and current sentiments about the place.
5. SENSE OF PLACE: Identification of stories and definition of Sense of Place Statement (SOPS).
6. FINAL PLACE PLAN: Includes Place Principles, METRONET policy response, public realm intent and Place Plan.
7. LANDSCAPE: Landscape context and investment levels.
8. ARCHITECTURE: Relationship between Sense of Place Statements and the architectural approach.
9. PUBLIC ART: Preliminary Public Art Plan
10. IMPLEMENTATION: Ways the design considers the Sense of Place Statement.

FIGURE 4. THE ROLE OF A PLACE PLAN



The main activities in the Place Planning exercise are highlighted in green.

## FIGURE 5. PLACE PLAN TO MEET METRONET OBJECTIVES

Besides the traditional range of technical engineering, operational and costs aspects, METRONET sets out to deliver easily accessible travel options, communities with a sense of belonging and unlock development potential around stations. The FPP translates the five METRONET Objectives, outlined on page 16, into tangible requirements for the station precinct. The resulting three 'touchstones' are identified below.



### SMOOTH AND COMFORTABLE TRANSFER

Delivering better connections and easy access to travel choices requires more than train and bus infrastructure. The ease that the traveller experiences through the whole journey, from door-to-door, determines the overall travel experience.

### PLEASANT AND MEANINGFUL TIME SPENDING

An inevitable aspect of traveling is waiting. Being able to spend your time in a pleasant or useful way contributes to a pleasant journey. Unlike driving a car, which demands attention to vehicles and traffic, travelling by public transport has the potential to provide more freedom to do other things. To achieve user satisfaction, the travelling spaces need to support these other things a traveller might want to do.

### EMBEDDED IN THE COMMUNITY

METRONET sets out to create communities with a sense of belonging, embedded in integrated land uses. This means station precincts need to be more than just transport hubs – not stand-alone areas that feel anonymous, but lively places with stories, activities and personality, that feel occupied and 'owned' by the communities they service.

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



# 02

## PLANNING FRAMEWORK

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# METRONET STRATEGIES

## METRONET OBJECTIVES

The METRONET program is a catalyst to turn large areas of land around new stations into desirable places for investment in housing, jobs and services for growing communities.

METRONET plans consider what people need for work, living and recreation within these future urban centres with a train station at their heart. The five objectives underpinning the METRONET program are: economically viable; accessible to all; community; future proofing and integrated land use.

Each station precinct has unique physical and functional characteristics that will affect its potential to develop as a liveable, vibrant urban centre. Land use and infrastructure planning for each station precinct must support the place-specific outcomes sought, in consideration of the long-term sustainable growth and development of Perth.

To unlock these unique characteristics and achieve appropriate outcomes per station precinct, METRONET has developed the SPDG. This guide together with the PTA movement hierarchy (refer diagram opposite Figure 3) provide the foundation for urban design decisions that result in vibrant, activated station precincts that welcome and serve their communities, enhancing movement to, through and within station precincts.



### Economically viable

Support economic growth with better connected businesses and greater access to jobs.



### Accessible to all

Deliver infrastructure that promotes easy and accessible travel and lifestyle options.



### Community

Create communities that have a sense of belonging and support Perth's growth and prosperity.



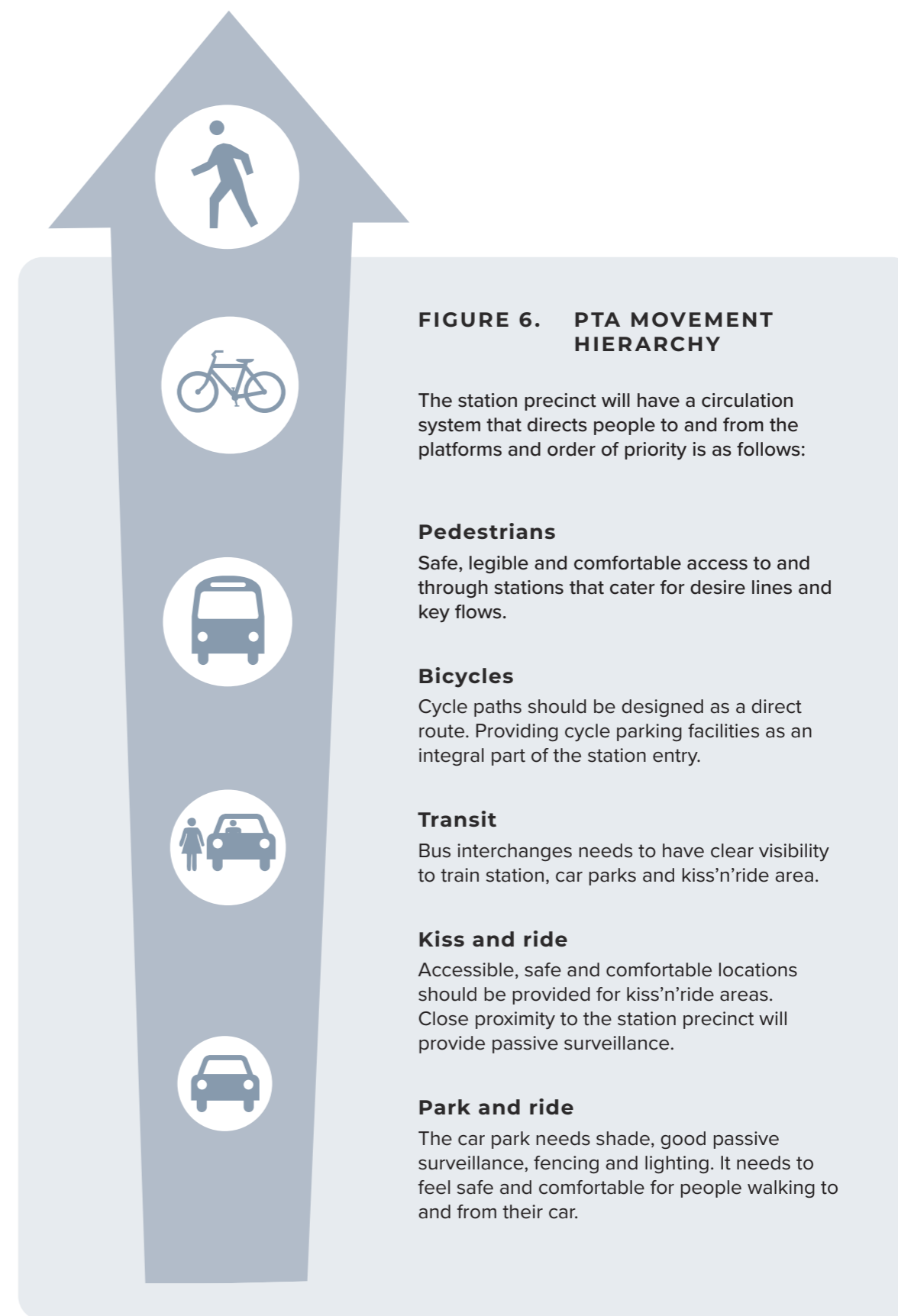
### Future proofing

Plan for Perth's future growth by making the best use of our resources and funding.



### Integrated land use

Lead a cultural shift in the way government, private sector and industry work together to achieve integrated land use and transport solutions for the future of Perth.



**FIGURE 6. PTA MOVEMENT HIERARCHY**

The station precinct will have a circulation system that directs people to and from the platforms and order of priority is as follows:

#### Pedestrians

Safe, legible and comfortable access to and through stations that cater for desire lines and key flows.

#### Bicycles

Cycle paths should be designed as a direct route. Providing cycle parking facilities as an integral part of the station entry.

#### Transit

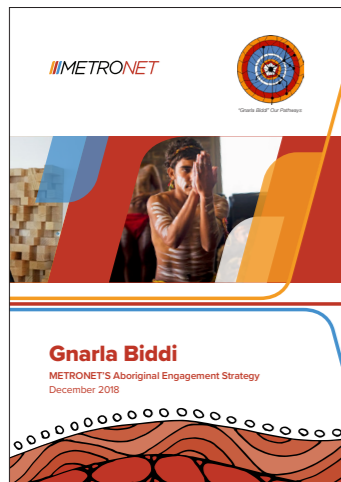
Bus interchanges needs to have clear visibility to train station, car parks and kiss'n'ride area.

#### Kiss and ride

Accessible, safe and comfortable locations should be provided for kiss'n'ride areas. Close proximity to the station precinct will provide passive surveillance.

#### Park and ride

The car park needs shade, good passive surveillance, fencing and lighting. It needs to feel safe and comfortable for people walking to and from their car.



## GNARLA BIDDI STRATEGY

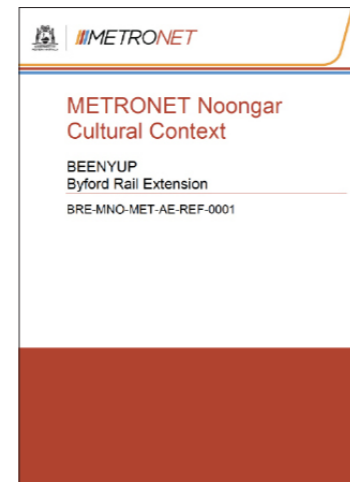
METRONET's Gnarla Bididi Aboriginal Engagement Strategy ensures positive contribution and engagement of Aboriginal stakeholders. For the BRE project more broadly, Noongar culture is acknowledged by:

- Planning to include Noongar culture in the infrastructure designed and built as part of the METRONET program;
- Educating those involved in METRONET on the significance of Noongar culture;
- Noongar input provided into project planning and delivery processes through the Noongar Reference Group (NRG); and
- Planning to include Workforce and Industry participation for Noongar and other Aboriginal people.

For the Armadale Station Precinct, this will be achieved by:

- Respecting and discussing the significance of Noongar culture as a project delivery team;
- Investigating opportunities to celebrate Noongar language and place names in line with the Gnarla Bididi Stream 2 objectives and the Public Art Strategy. Opportunities may include entry statements, public art, wayfinding, interpretive signage or other methods; and
- Investigating ways that workforce and Industry participation for Noongar and other Aboriginal people could be included in the project.

This work will be progressed in consultation with the METRONET NRG.



## NOONGAR CULTURAL CONTEXT

Each METRONET project has its own Noongar Cultural Context Document (NCCD) specific to the place. The NCCD for the BRE project is the METRONET Beenyup / Byford NCCD.



## SUSTAINABILITY STRATEGY

METRONET contributes to Perth's sustainable future by offering people alternative and sustainable travel choices. The METRONET Sustainability Strategy outlines how the program and projects maximise positive environmental, social and economic outcomes for communities served by METRONET projects, and the broader impact on the Perth metropolitan area.

The project affects all four key pillars of sustainability set out in the METRONET Sustainability Strategy, being People and Place, Environment, Economic and Governance. Therefore, this PPP contributes to METRONET's sustainability objectives for station precincts by:

- **PEOPLE AND PLACE:** Delivering adaptable, accessible and connected places for people;
- **ENVIRONMENT:** Conserving and protecting natural ecosystems and resources;
- **ECONOMY:** Supporting equitable economic development opportunities; and
- **GOVERNANCE:** Initiatives and programs to achieve sustainability objectives will be delivered through more detailed planning for the project.

This PPP provides guidance for more detailed planning for sustainability initiatives including (but not limited to) landscaping, tree planting, water sensitive urban design (WSUD), and improving access to public transport through increased connectivity, walkability, cycle routes and amenity in and around station precincts.



## PUBLIC ART STRATEGY

Public art plays an important role in the cultural life of places providing social, economic and environmental benefits. The METRONET Public Art Strategy will ensure the program's legacy of transformative transport infrastructure links the projects together and the transport infrastructure contributes to the broader place's identity.

Public art for the project should be delivered against the overarching theme, exploring the sub-themes 'connections' and 'place'. Where possible, the following opportunities should be explored:

- Noongar language/names in placemaking (eg. incorporation into interpretive signage around the station, referencing local heritage, stories, flora and fauna, through hard landscaping and other appropriate design treatments); and
- Assist with synergies that achieve mutually beneficial landscaping outcomes between the Sustainability Strategy, Gnarla Bididi and the Public Art Strategy. This can be achieved by integrating the story of water/topography and flora and fauna into landscaping.

A Preliminary Public Art Plan has been prepared as part of the Armadale Station (Elevated) PPP, detailed in the later sections of this report. This work will be progressed in consultation with the METRONET NRG, through the METRONET Gnarla Bididi Strategy Coordinator.

# METRONET STATION PRECINCT DESIGN GUIDE

## STATION TYPOLOGY

The Station Precinct Design Guide (November 2019) defines six types of station precincts. The Armadale Station Precinct is defined as a Strategic Centre (SP2), which is defined as below:

*“Strategic centre station precincts are places with well-integrated connections to quality transit and a comprehensive range of retail, commercial, service and community facilities and employment opportunities. These station precincts have significant transit-oriented development potential and include station precincts located in established and redeveloping major mixed-use activity centres, and newly developing major activity centres in greenfield locations being established around rail services.”*



City Centre



Strategic Centre



Town Centre



Neighbourhood Centre



Specialised Centre



Transport Node

The table, right, summarises the expected outcomes regarding the design and integration of various station precinct functionalities and amenities within this station precinct typology.



STRATEGIC CENTRE SP2		
		CORE & FRAME
INTERSECTION & CROSSINGS	Preferred	Controlled four way intersection, no splitter lanes
	Considered	Micro roundabout
TRANSIT INTEGRATION – RAIL	Preferred	
	Considered	
TRANSIT INTEGRATION – BUS	Preferred	On street
	Considered	Integrated or stacked interchange
STATION TYPE	Station transit function	Stations in strategic centres can serve as a major focal point and destination for the metropolitan area, whilst also serving the local residential community
	Preferred	Integrated station
	Considered	Active pavilion Underground station
STATION DEDICATED PARKING	Preferred	No park'n'ride
	Considered	
STATION PRECINCT PARKING	Preferred	On street Stacked or decked
	Considered	Decked
PUBLIC REALM & PUBLIC OPEN SPACE	Preferred	People streets Plaza or square Pocket park
	Considered	Urban park Play space

TABLE 1. STRATEGIC CENTRE SP2 GUIDELINES

## INFRASTRUCTURE DESIGN

A typical focus for rail infrastructure projects is for efficient operation of trains and passenger movement, but the impacts and opportunities are much wider than this. If infrastructure is well designed for its location, it will create safe and well-used places below and beside stations and rail tracks. The positive impacts of high-quality redevelopment can follow, creating residential, commercial and civic uses that blend with the new rail infrastructure.

However, if infrastructure is poorly designed, it can become a social and economic cost to the community that will be very difficult to change and can have compounding impacts on safety, freedom of pedestrian movement and future development potential.

The opportunity here is also for new desire lines, helping to stitch and connect both side the rail reserve together as well as create new public realm spaces for civic and recreational uses and vegetated landscapes.

Place planning questions that should inform design in future phases include:

- How well does the station relate to its surroundings – ie. the landscape and built environment, including shops, homes and civic buildings?
- Does the station offer safe and active community uses beside or under tracks?
- Does the station create places that the community can feel proud of and take ownership over?
- Will infrastructure ‘get better with age’ as development occurs and landscapes mature?

## ARMADALE STATION – ELEVATED

### CURRENT PROPOSED STATUS

The extent of elevated viaduct reaches approximately 1.1km from Armadale Rd to Church Ave. The station building is positioned as to address the existing urban connections to Jull Street Mall and Fourth Rd, yet also align with the future public plaza west of Green Ave.

### KEY POINTS

### IMPROVED EXPERIENCE

- Considered positioning on site to preserve as many existing pedestrian desire lines as possible for a seamless community legibility.
- Create new desire lines, helping to stitch and connect both sides of the rail reserve together.
- Create new public realm spaces for civic and recreational uses and vegetated landscapes, as well as a Welcome Plaza of suitable civic scale.
- Curate views from elevated platforms to the existing and emerging town centre, as well as district and Darling Scarp.
- The elevation of the rail creates enhanced opportunities for new desire lines, helping to stitch and connect both side the rail reserve together as well as create new public realm spaces for civic and recreational uses and vegetated landscapes.

### IMPROVED SAFETY

- Respecting and maintaining PTA's Movement Hierarchy with pedestrian primacy.
- Crime Prevention Through Environmental Design (CPTED) principles foremost in mind when designing building line interfaces and nodes – maintaining clear passive surveillance throughout the station precinct.

### IMPROVED VALUE FOR MONEY

- Employ kit-of-parts approach to streamline construction process.
- Minimise building extent and mass to reduce structure and façade cladding.
- Reduced maintenance and cleaning to building envelope.

TABLE 2. PRELIMINARY STATION DESIGN SUMMARY

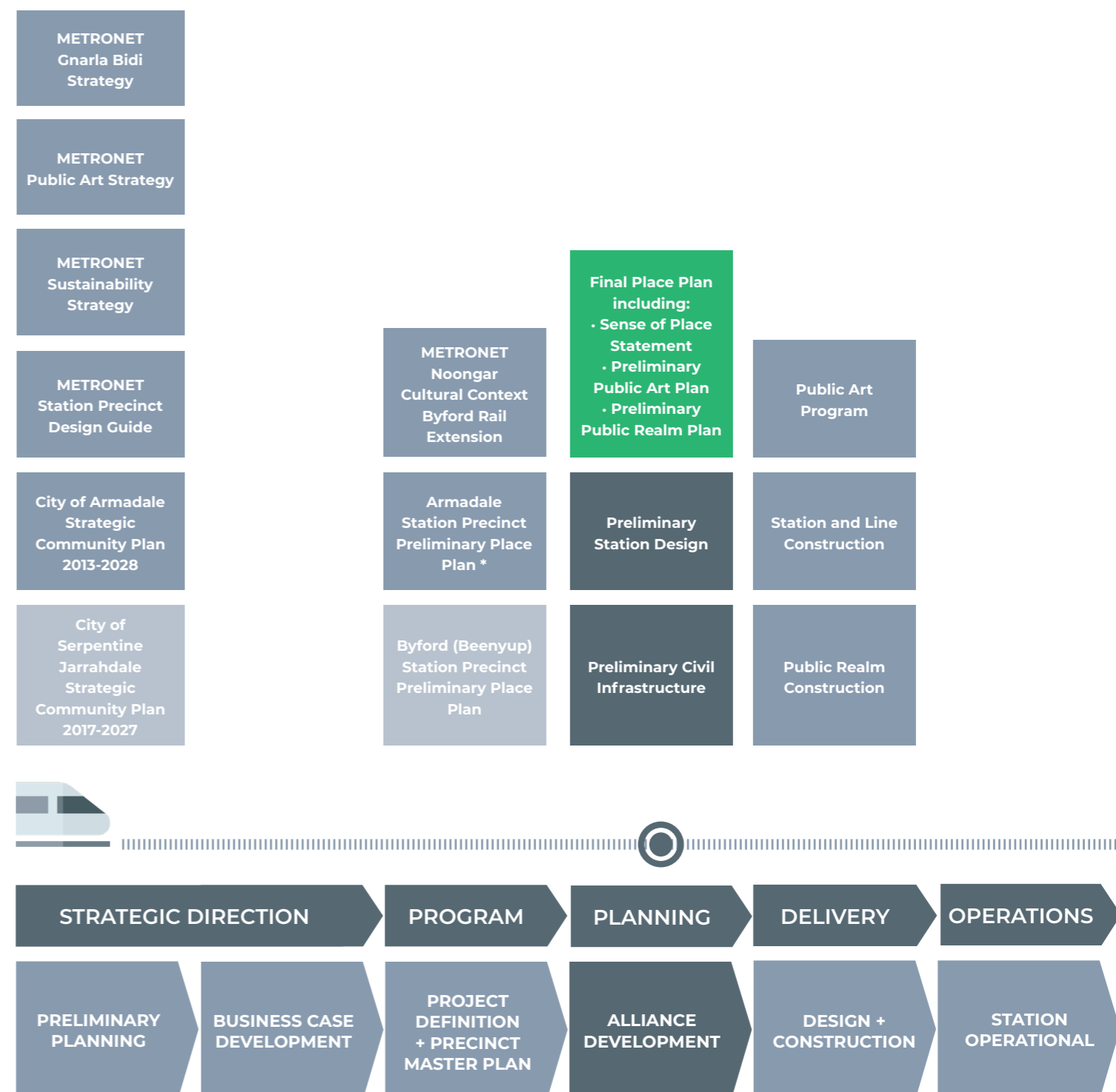
# STRATEGIC PLANNING CONTEXT

The BRE will be delivered by a range of contractors and delivery partners. To ensure the outcomes are achieved, METRONET has developed and provided a suite of documents to guide planning and delivery:

- METRONET Gnarla Bidi 'Our Pathways' Strategy;
- METRONET Beenyup / Byford NCCD;
- METRONET Public Art Strategy;
- METRONET Sustainability Strategy;
- Armadale Station Precinct PPP 'At-grade' (PLACE Laboratory);
- Byford (Beenyup) Station Precinct PPP (PLACE Laboratory);
- City of Armadale Strategic Community Plan 2013-2028; and
- City of Serpentine-Jarrahdale Strategic Community Plan 2017-2027.

Delivery partners will continue to respond to these strategies, to develop the project in alignment with the overarching project vision, with the aim to undertake a holistic and integrated design approach that puts people first.

The project will consider the relevant strategies, guidelines and policies at play within the region of the site to ensure seamless integration with the community's expectations and the best outcome for all parties involved.



\* The Armadale Station Precinct Preliminary Place Plan, prepared by WSP and PLACE Laboratory, was required to be superseded by the Armadale Station (Elevated) Preliminary Place Plan to reflect the METRONET decision to elevate Armadale Station.

FIGURE 7. STRATEGIC PLANNING CONTEXT

## PERTH AND PEEL@3.5 MILLION

Perth and Peel@3.5million is a suite of strategic land use planning documents that provide a framework for future growth to 2050. The strategy recognises the benefits of a consolidated and connected city utilising the region's previous historic patterns of urban growth. It is divided into four sub-regional frameworks, which provide more detailed guidance on future land use and development for a city of 3.5 million people.

The Armadale Station Precinct is within the Central Metropolitan Sub-regional Planning Framework area, which identifies 10 principles and a number of precinct types, all of which support a coordinated approach to urban consolidation. The framework suggests infill development should be focussed in activity centres, station precincts and along urban corridors. It also identifies that industrial centres should be preserved and that an established green network is required. The precinct is identified as an activity centre that can support future urban consolidation.

Having consideration for the above, it is important that the Armadale Station (Elevated) PPP promotes a high-quality urban design that creates opportunities to:

- Stimulate revitalisation of the precinct to attract business and residential investment to an area;
- Contribute towards driving urban renewal and meeting the State's urban infill targets;
- Improve pedestrian and cycling connectivity;
- Improve public domain and amenity in existing areas; and
- Address gaps in open space provision to support an enhanced green network.



## CITY OF ARMADALE STRATEGIC COMMUNITY PLAN 2013-2028

The City of Armadale Strategic Community Plan defines the city as a rapidly growing strategic regional metropolitan centre, with outstanding recreation facilities, lush bushland, scenic rivers and hills, enviable residential lifestyles and an expanding commercial/industrial precinct, making the City an ideal place to live, work and visit. This report draws on the community and place values outlined in the community strategic plan to help define what is unique and authentic about Armadale that, in turn, assists with guiding design outcomes.

### PRECINCT SPECIFIC DOCUMENTS

- Armadale Activity Centre Design Guidelines, Local Planning Policy – PLN 3.11, 2018 (Nov)
- Structure Plan Report, 2018 (Oct)
- Development Business Case, 2018 (Dec)
- Armadale City Centre West of Railway Precinct Design Guidelines, 2016 (June)
- Armadale Strategic Metropolitan Activity Centre Structure Plan, Parking Supply and Management Strategy, 2019 (Oct)
- Local Biodiversity Strategy, Complete Report, 2009 (Oct)
- Overnight Visitor Factsheet 2017/18/19
- Rediscover Armadale's Heritage Trees
- Tourism Strategy 2015-2019
- Walks and Trails
- Armadale Settlers Common Strategic Directions, 2002
- Urban Forest Strategy
- Water Resource management for land development, 2015 (Dec)

### MRA DOCUMENTS

- Armadale Redevelopment Area, 2017 (Aug)
- Armadale Redevelopment Scheme 2, 2017 (July)
- City West Structure Plan, 2017 (Aug)
- Heritage Inventory, Armadale Redevelopment Area, 2017 (July)

# PLANNING FRAMEWORK

Armadale's City centre has undergone important strategic planning exercises to encourage coordinated growth. The planning framework in this area cascades from state based documents to local strategies and plans.

The Perth and Peel @3.5 million frameworks classify the City of Armadale as a strategic metropolitan centre, meaning it is a multi-purpose centre that provides diverse economic and community services for the local community and catchment.

Armadale is part of the South Metropolitan Peel Region, which is anticipated to accommodate job growth from 143,970 in 2011 to 437,730 by 2050. The south-east sector is expected to reach 137,030 jobs. Unlike other strategic centres such as Fremantle, Rockingham, Midland and Joondalup, Armadale needs to function at a more mature level with a richer mix of uses and services to attract regional employment.

Diversification of the town centre has already started. As recently in mid-2020 the government announced a \$22.6 million inner-city TAFE which is anticipated to help revitalise the Armadale City Centre. The TAFE will cater for over 200 full-time equivalent students per day, generating over 50 direct ongoing jobs and many more indirect jobs through related services and industries.

ITEM	2017	FUTURE
Total area covered by the Activity Centre Structure Plan	85 hectares	85 hectares
Estimated number of dwellings	236	1250-2300
Estimated population	456	5000-7000
Estimated non-residential floor space	54,900	80,000
Estimated area and percentage of public open space given over to: <ul style="list-style-type: none"> <li>Regional open space (Parks and Recreation Reserve)</li> <li>Local open space</li> </ul>	7%	7.5%
Estimated employment (number of jobs) in the activity centre area	3,046	18,000

TABLE 3. ARMADALE CITY CENTRE PROJECTIONS

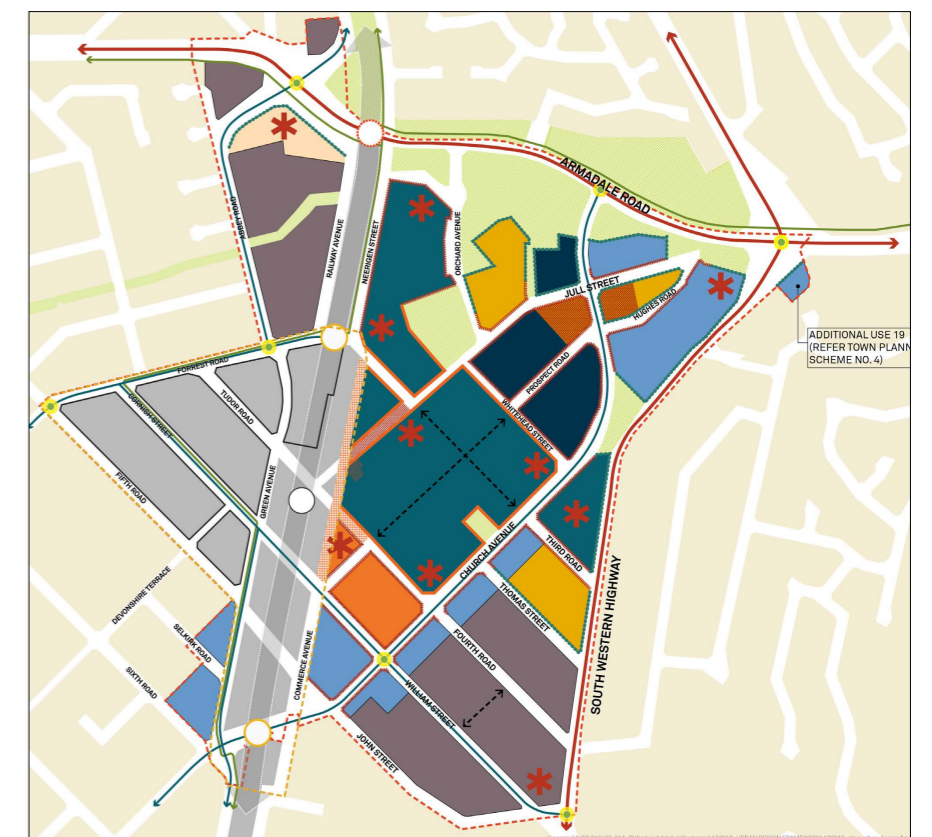
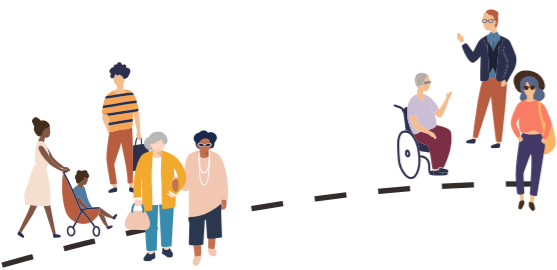


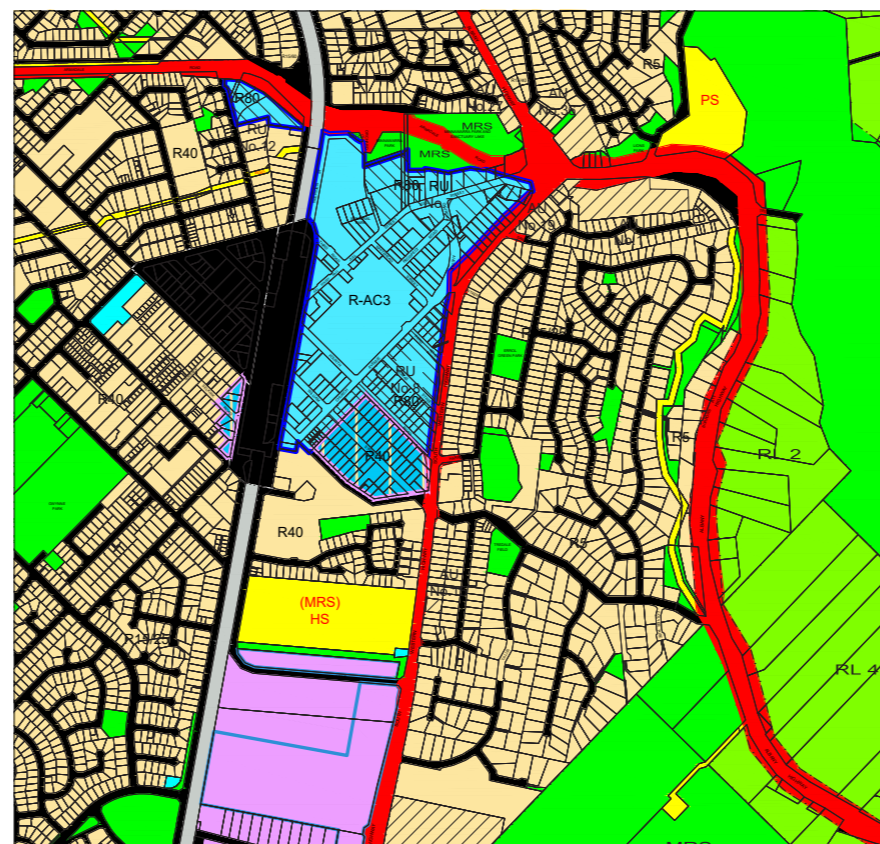
FIGURE 8. ARMADALE CITY CENTRE ACTIVITY CENTRE PLAN



Locally, the Armadale City Centre Structure Plan and Car Parking Strategy acknowledges that unlike other strategic centres lacks diversity of land use and employment opportunities. In this, it recognises the centre is under-performing according to State Policy for employment, service provision and residential density. It identifies the station precinct is central to the regeneration of the city centre and subsequently is required to be a high-quality civic place which integrates into the surrounding urban context. The Plan stipulates all surrounding developments must reinforce the station precincts status as a place for public life with an active ground plane of retail, food and beverage; and hospitality land uses while office and residential use are located on the upper floors.

Urban design elements outlined in 'Liveable Neighbourhoods' relevant to Armadale Activity Centre include providing an integrated and diverse range of land-use within the centre, active ground floor development with residential or commercial development above, a high-quality public realm that encourages walking and off-street parking sleeved by buildings.

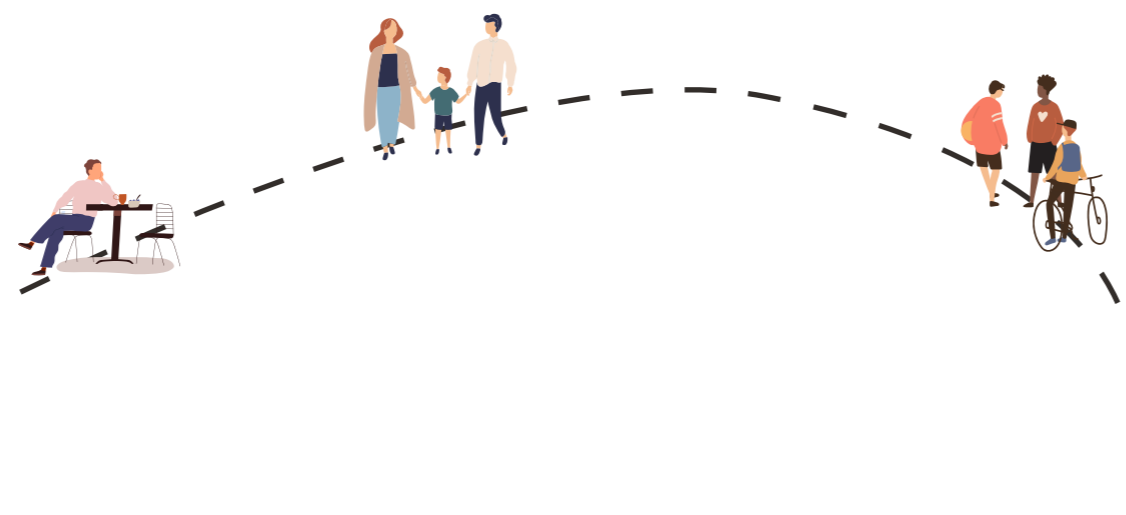
The Development WA (through the former Metropolitan Development Authority) has controlled the City Centre West of the Railway Precinct within the Armadale Redevelopment Area via a structured plan. The triangular area of 10.84 ha bounded by Green Ave, Forest Road and Fifth Road. This area is in the process of being normalised back to the City, though Development WA's plans have encouraged higher density residential and mixed use development. To promote east-west connections across either side of the railway reserve, a new street connection to the future Armadale Station would be possible through Cornish Street.



**FIGURE 9. ARMADALE TOWN CENTRE DEVELOPMENT PLAN**



**FIGURE 10. ARMADALE CITY CENTRE WEST OF RAILWAY CONCEPT PLAN (DEVELOPED BY MRA)**







# 03

## CONTEXT ANALYSIS

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# PERTH RAILWAY CHARACTER

Perth's railway network spans a range of different conditions across hundreds of kilometres. The character of each train line (and portions within) varies, as they are responsive to their physical, social and functional context. Each has unique features that the design of stations, and surrounding landscape and spaces can capitalise on. For the Armadale line this is the view and connection to the hills landscape.

Overall, Perth will have six train lines with one spur line. These lines are listed below, with a description and list of their unique features:

LINE	DESCRIPTION	UNIQUE FEATURES
<b>ARMADALE/ THORNLIE</b>	Travels south-east direction to Armadale. The Australind continues along the same track to Bunbury. A spur line to Thornlie.	Views of the hills.
<b>FREMANTLE</b>	Goes in westerly direction towards Fremantle. Major stations include Subiaco and Claremont. When trains arrive at Perth they continue through to the Midland Line.	Views of the ocean and river crossing.
<b>JOONDALUP</b>	Heads in northern direction, along the Mitchell Freeway corridor. Future expansion plans provide for the extension of the line to Yanchep.	Predominantly Freeway experience with diverse surrounding views.
<b>MANDURAH</b>	Travels southward on the Kwinana Freeway to Kwinana, then curving south-west towards Rockingham through a bush landscape and then south to Mandurah	Leda Nature Reserve and Lake Coo loongup.
<b>MIDLAND</b>	Goes east towards Midland. TransWA services diverge and continue to Kalgoorlie (the Prospector) and to Merredin (the AvonLink).	Travels through the historical suburbs.
<b>MORLEY/ ELLENBROOK</b>	This future line will travel north-east to Ellenbrook. It starts in Morley which has an establish suburban feel, Malaga which has views to the hills, Whiteman Park which is a bush setting and then Ellenbrook which has a rural town vibe.	Whiteman Park bush setting with Tram transfer.

**TABLE 4. METROPOLITAN RAIL LINE CHARACTERS**

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



**LEGEND**

- Train line
- Ⓡ Railway river crossing
- ✈ Airport
- 🎓 University
- 🏥 Hospital
- 📍 City
- 🌊 Significant beach
- 🌿 Wildlife attraction

**CHARACTER STATIONS**

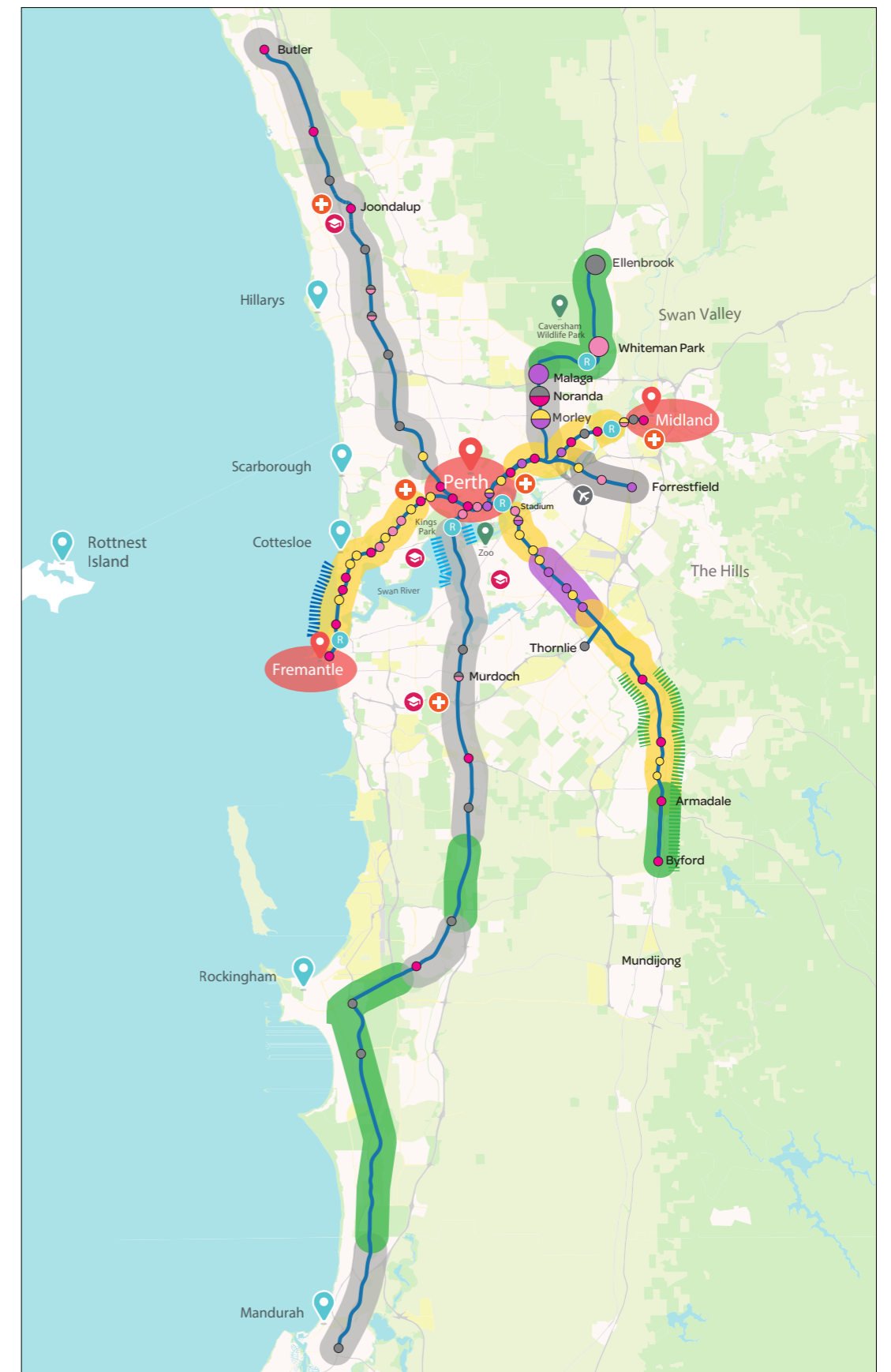
- Suburban
- Parking lot
- Main street
- Industrial

**CHARACTER TRAIN LINE**

- Historical suburban
- Bush feel
- Freeways, highways
- Tunnel
- City
- Ocean views
- Hills views
- River views

**LAND-USE**

- Forest and recreation
- Ports and industrial
- Rural
- Urban Living



**FIGURE 11. RAILWAY CHARACTER ON METROPOLITAN SCALE**

# BYFORD RAIL EXTENSION

As part of the wider Perth railway network, the Byford Rail Extension is an eight kilometre extension of the Armadale Line, from Armadale Station to Byford Town Centre. A series of rail and station upgrades, and additions will improve public transport services to the established and emerging neighbourhoods in this area. Armadale Station sits within the Armadale City Centre, which is sited amongst open spaces and walking trails that connect to the foothills.

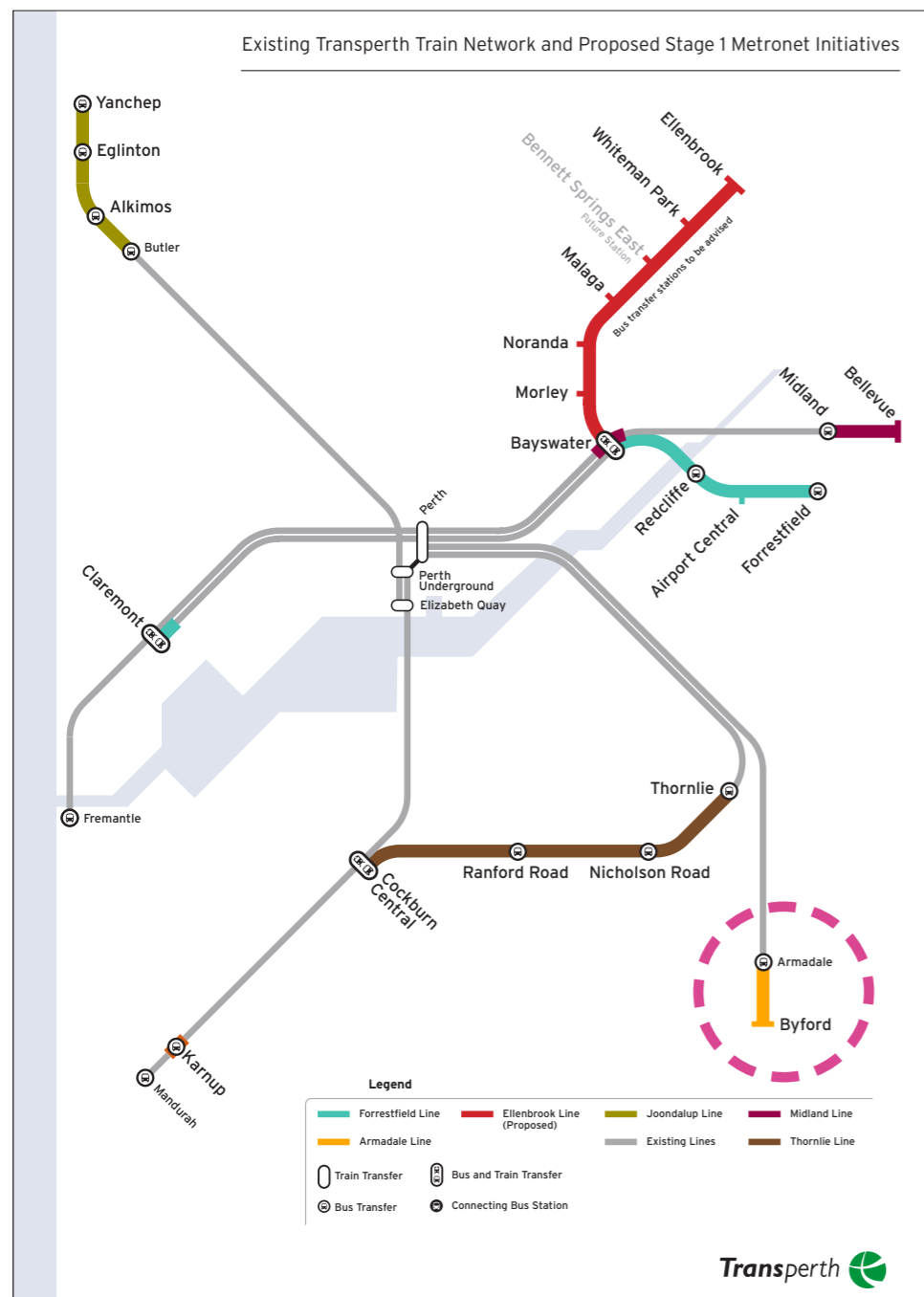


FIGURE 12. PTA FUTURE SYSTEMS PLAN METRONET

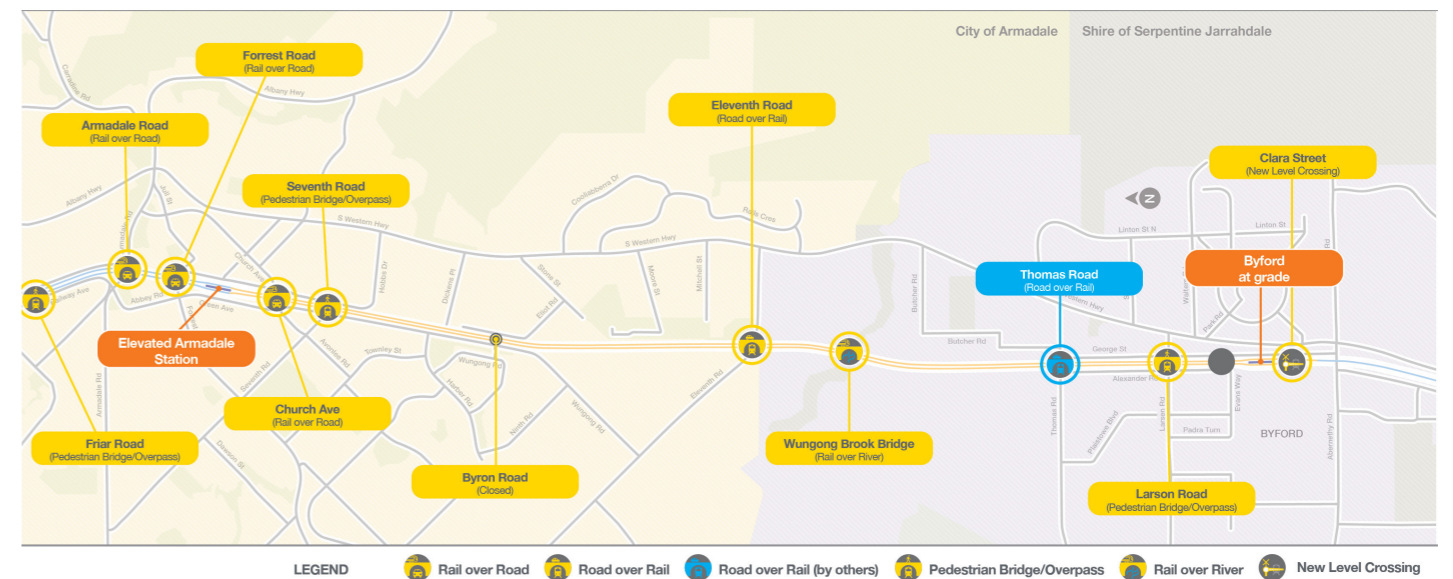


FIGURE 13. PLAN BYFORD RAIL EXTENSION - BASE CASE

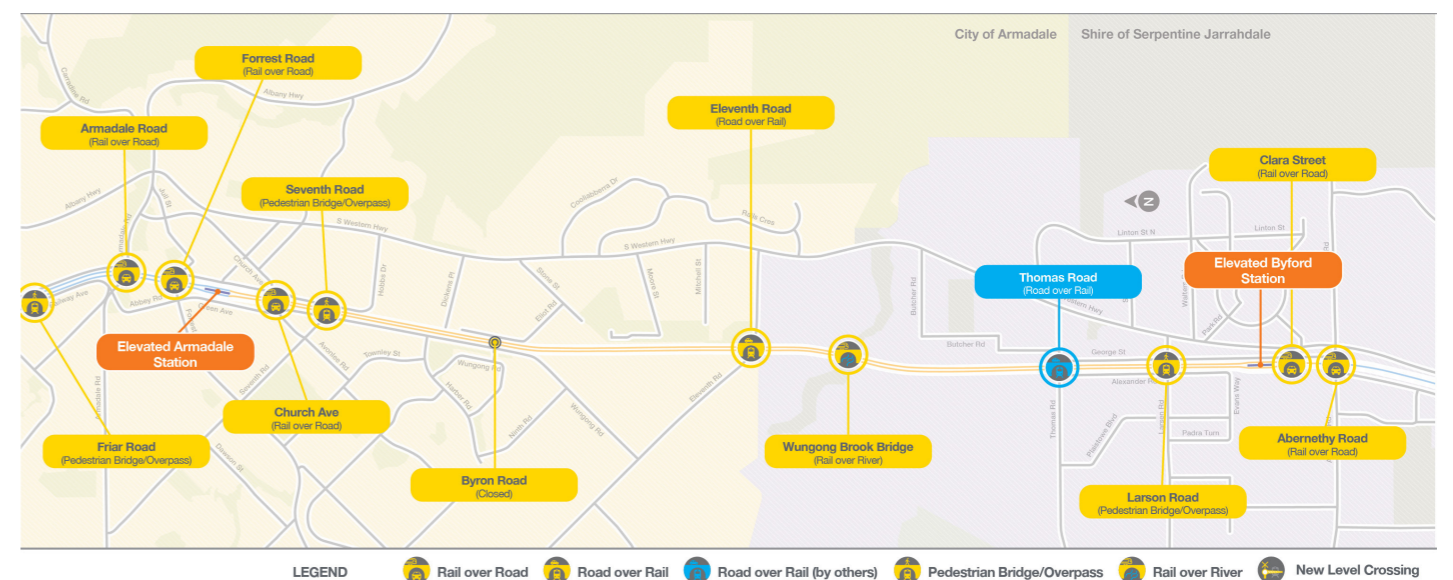


FIGURE 14. PLAN BYFORD RAIL EXTENSION - ELEVATED OPTION



Armadale Hills Visitor Centre



Minnowarra Park



Settler's Common Walking Trails



Bungendore Park



Wungong Gorge



The Pavilion Park



Brickwood Reserve



# RELATION TO COUNTRY AND LANDSCAPE SYSTEMS

## RELATION TO COUNTRY

Armadale and Byford Stations sit on an ancient songline that goes from north to south, skirts the hills to the east and the wetlands to the west. Armadale is an important access point to the eastern scarp, with Mt Nasura and Mt Richon being the first hills to welcome people to the range and mark the threshold between the high and low lands.

At Armadale, Neerigen Brook is a culturally significant water system that the station precinct should refer to in the Noongar placemaking. Refer insert B in Figure 5 for an indicative representation of the significant landscape systems.

Around Byford is low open forest woodland with traditional hunting grounds, farming and other land management practices, and was framed and dominated by the power of the high hills looming to the east. There are many culturally significant water systems that should be celebrated and emphasised in the station precinct through Noongar placemaking. Refer insert C for an indicative representation of the significance of the landscape.

## LANDSCAPE SYSTEMS & FEATURES

The foothills and scarp are an area of transition with the Darling Scarp rising sharply from approx. 35m Australian Height Datum (AHD) to 185m AHD in approximately two kilometres. The geology also experiences a range of transitions from Granite, Laterite, Gravel and Gneiss with valley-fill deposits of clayey, sandy silts and clayey gravelly sands of the hills, past the Darling Fault and on to the clayey sands overlain with sands of the Swan Coastal Plain.

The two river systems originating in the Hills both pass through the foothills and scarp area with the Canning River flowing through Kelmscott and the Wungong River through Wungong east. Additionally, the major Wungong River tributary; Neerigen Brook passes through Armadale collecting much of the drainage from the urban area of the City. The Beenyup Brook Drain passes through Byford, there is also Oakland Drain to the north and Cardup Brook to the South.

The foothills watercourses tend to be quite deeply incised with narrow floodplains and as they progress into more heavily built up areas, they become substantially linked to constructed urban drainage systems, and in many cases are piped in sections. The Hills localities have several constructed water supply dams, principally the Canning Dam, Wungong Dam and Churchman Brook Dam.

One of the long-term impacts of colonisation has been a significant shift in landscape ecology. Clearing of native vegetation and development creates isolated natural areas surrounded by extensive areas of pasture, houses, roads, and exotic plants. This is a significant problem on the coastal plain and foothills and makes it increasingly difficult for fauna to move across the coastal plain in either an east-west or north south direction.

Wetlands and waterways have a key part to play in the biodiversity and water resources of the Swan Coastal Plain. They not only serve an important role in keeping watercourses and groundwater clean, but they support a wide variety of species. Forrestdale Lake is the largest, the most important and protected single wetland area. The water bodies are also significant to Noongar people as both a source of food and providing spiritual connection to country.

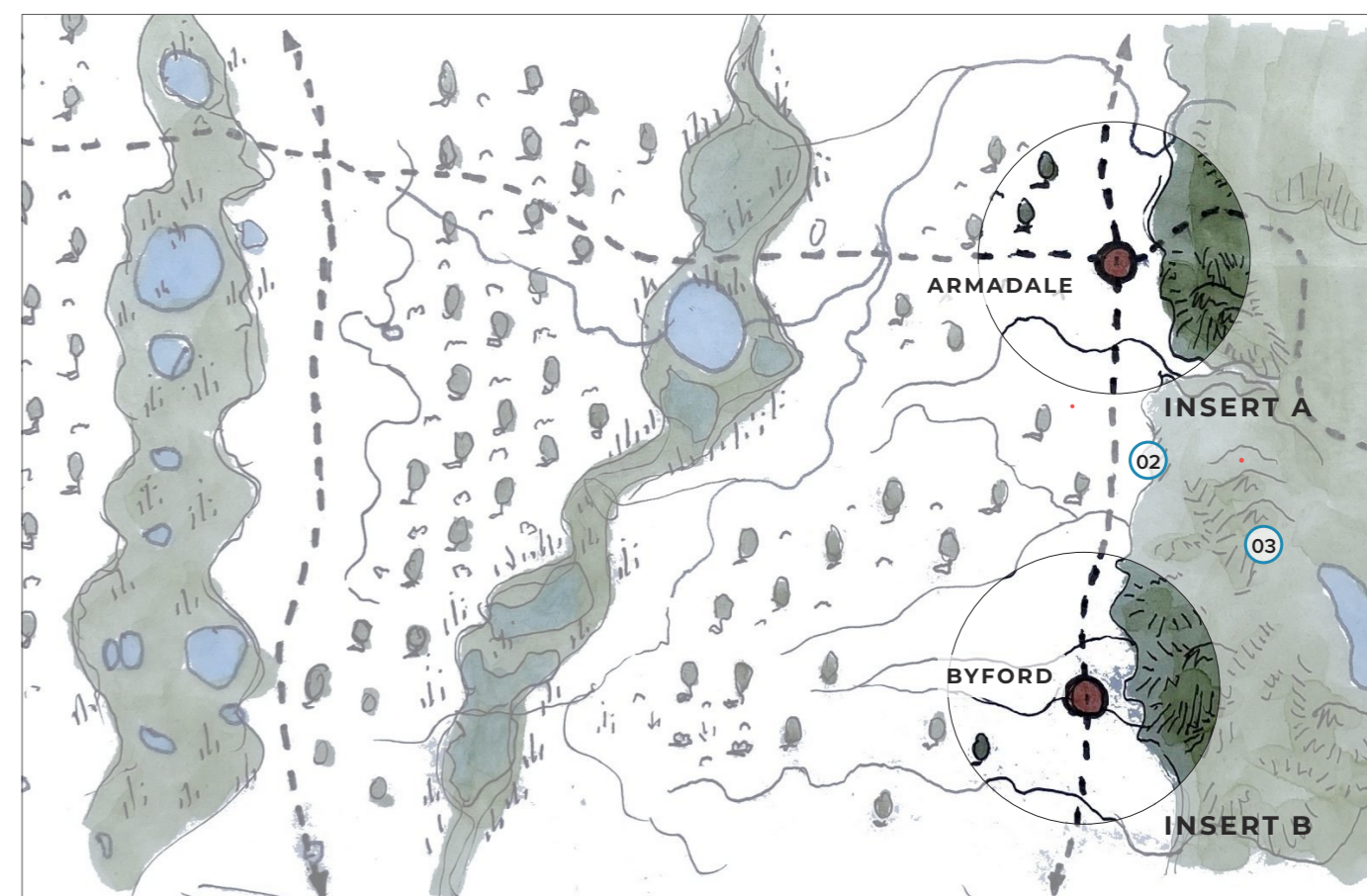
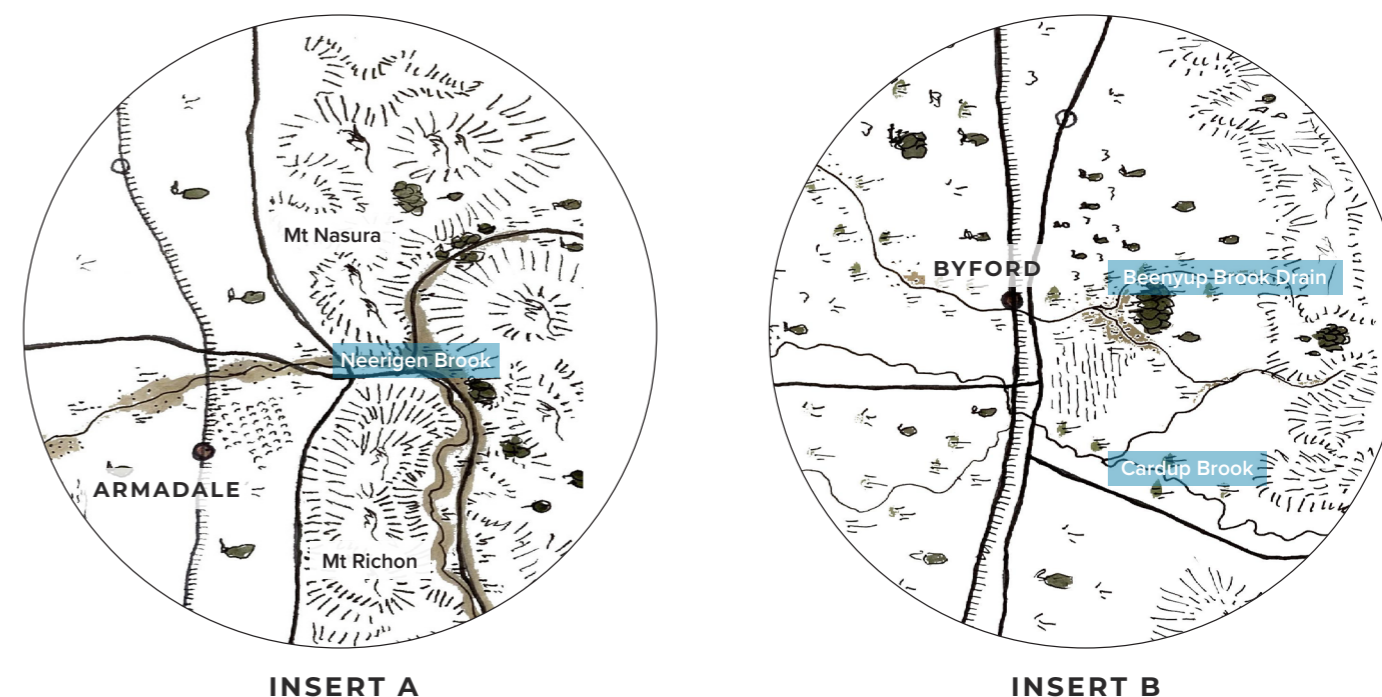


FIGURE 15. LOCATION PLAN – RELATION TO COUNTRY

Source: Byford Rail Extension – Concept Design, ‘Armadale Station Precinct Preliminary Place Plan’, WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

SOIL TYPES	DOMINANT PLANT SPECIES	COUNTRY TYPES	
Dwellingup	<i>E. wandoo, E. marginata</i>	<b>01 Gandoo</b> - inland running parallel to Booyeembara, a "sandy division and abounds with that species of Eucalyptus called Mahogany [Jarrah]"	Surface Water Drainage Systems
Murray Valleys	<i>E. wandoo, E. marginata</i>	<b>02 Warget</b> - along the foot of the Darling Ranges described as an area rich in "clay, red loam, and alluvial plains" and blue and flooded gums.	Perth Regional Ecological Links
Forrestfield	<i>E. marginata, E. calopylla and B. grandis</i>	<b>03 Moorda</b> - the Darling Ranges.	Aboriginal Significant Places
Pinjarra	<i>E. melaleuca spp, E. rudis</i>		
Bassendean	<i>Banksia</i>		
Spearwood	<i>E. gomphocephala, E. marginata</i>		
Vasse	<i>Paperbarks and sedges</i>		
Quindalup	<i>Callitris pressii</i>		



**GUILDFORD FORMATION**

Pale grey / brown sandy clay



**RIDGE HILL SANDSTONE & YOGANUP FORMATION**

Yellow / brown sandstone with shale rock & Pale grey quartz sand



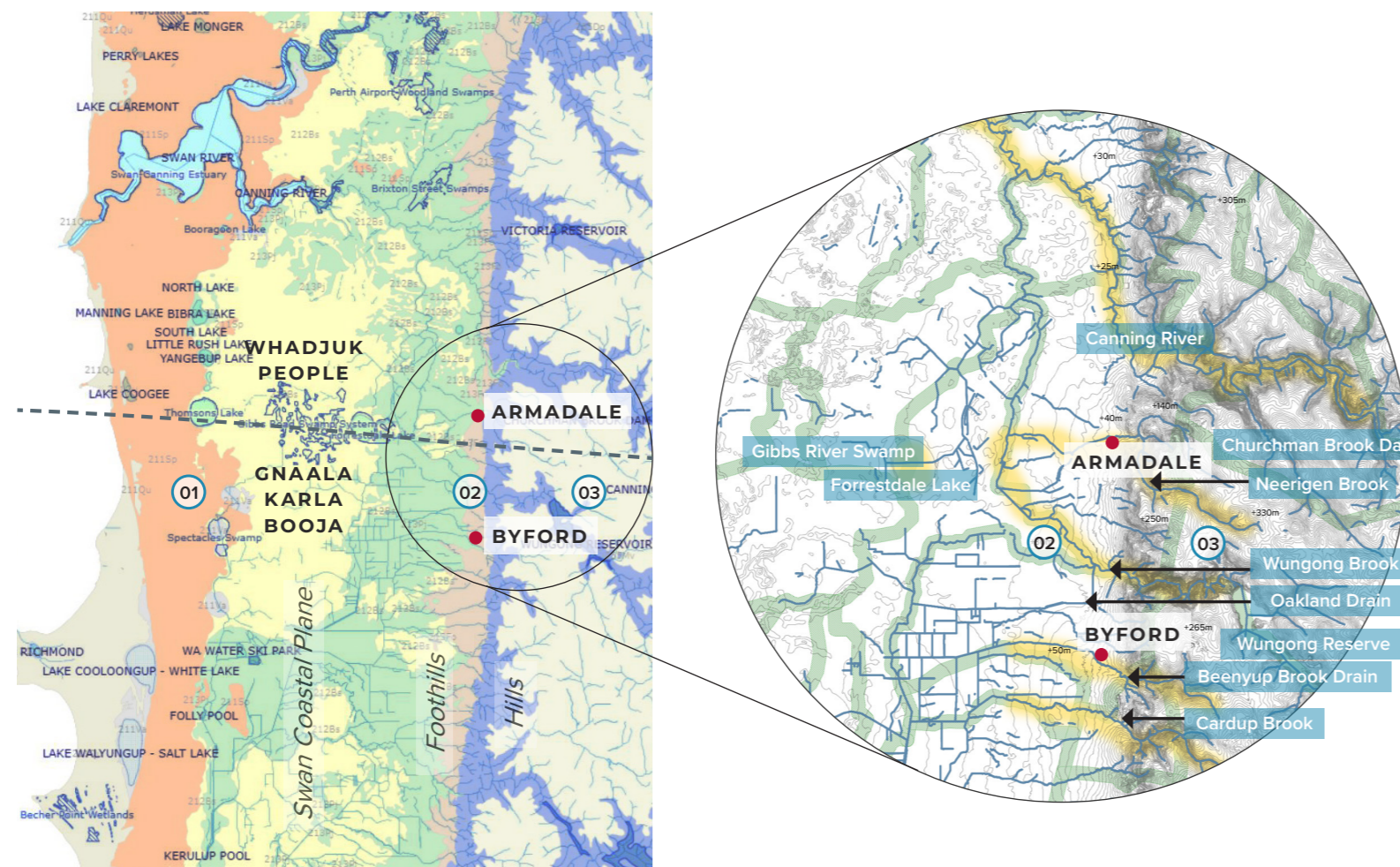
**RIDGE HILL SHELF**

Banksia shrublands



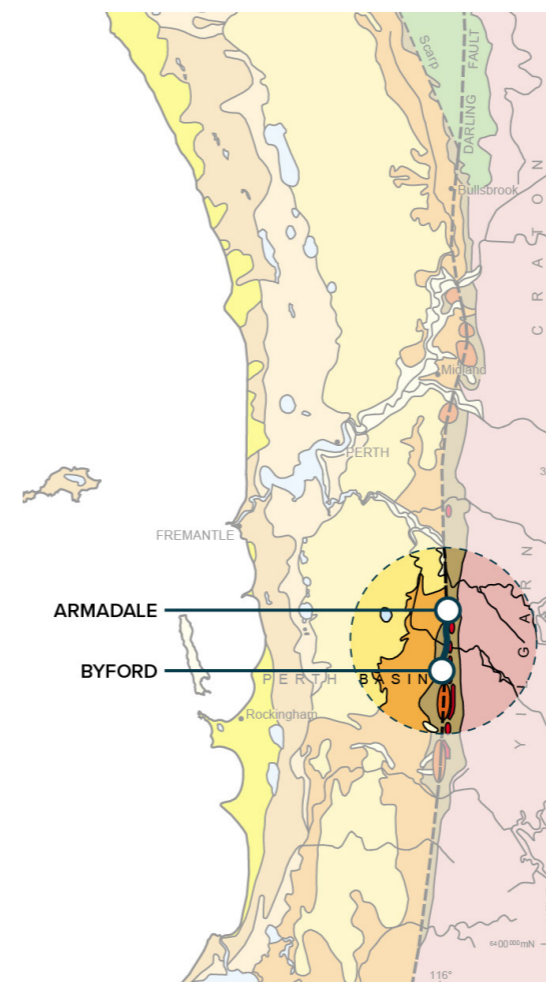
**PINJARRA PLAIN**

Jarrah / Banksia open woodlands



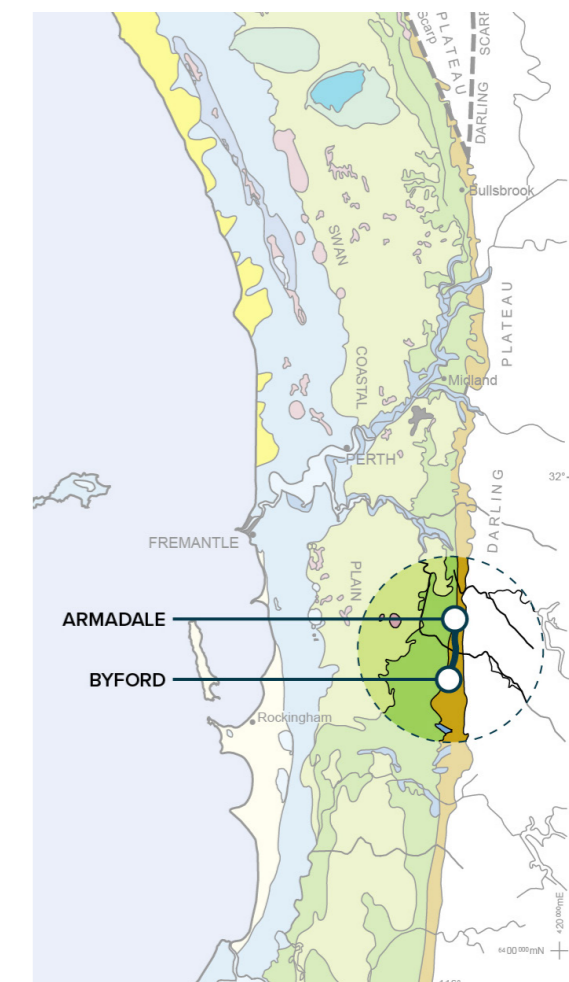
**FIGURE 16. SOIL LANDSCAPE AND SURFACE WATER SYSTEMS**

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



**SOILS ASSOCIATION**

Plan Reference: "Geology and Landforms of the Perth Region" by JR (Bob) Gozzard. Pg. 7



**FLORA FORMATIONS**

Plan Reference: "Geology and Landforms of the Perth Region" by JR (Bob) Gozzard. Pg. 15



# ENVIRONMENT

The plan on the right shows an overview of the existing tree canopy and drainage at the Armadale station precinct's surrounding context at the district level.

The images underneath include feature spatial characteristics in the area.

## LEGEND

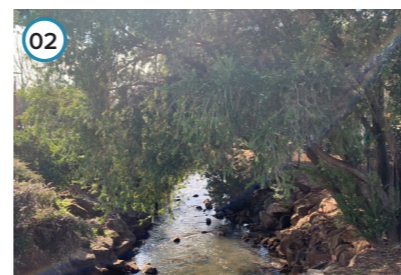
- ▬▬▬▬ Rail Line
- 🚂 Train Station
- 💧 Water
- 🌿 Ecological Links
- Heritage Tree Trail
- Tree Canopy on Private Land
- Tree Canopy on Public Land
- 0-5% Tree Coverage
- 5-10% Tree Coverage
- 10-15% Tree Coverage
- 15-20% Tree Coverage
- 20-25% Tree Coverage
- 25-30% Tree Coverage
- 30-40% Tree Coverage
- > 40% Tree Coverage



**FIGURE 17. ARMADALE – ENVIRONMENT**



Greenery at station plaza



Neerigen Brook



Mature trees by the railway



Neerigen Brook under the railway



Nearby bush

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

# BUILT FORM AND URBAN HEAT

The plan on the right shows an overview of the car parks, roads and buildings and the heat island effect on a district level around the Armadale station precinct's surrounding context at the district level.

The images underneath show spatial characteristics placed within this environment, demonstrating the need for heat amelioration in areas to encourage more pedestrian comfort.

## LEGEND

- ||||| Rail Line
- Train Station
- Street
- Major roads
- Highway
- Water
- Built form
- Parking
- <0°C Urban Heat Island
- 0-1°C Urban Heat Island
- 1-3°C Urban Heat Island
- 3-5°C Urban Heat Island
- 5-7°C Urban Heat Island
- >7°C Urban Heat Island

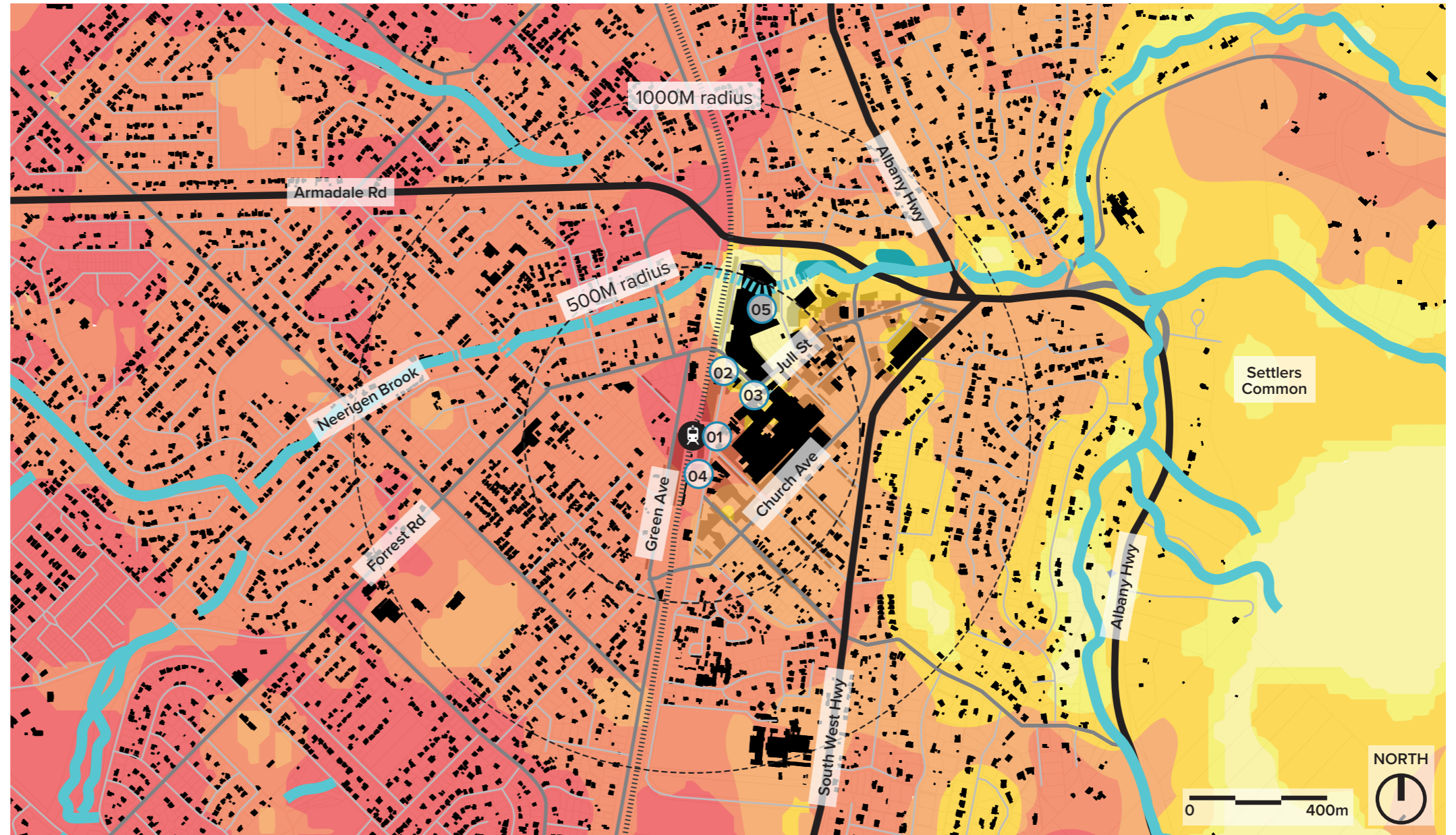
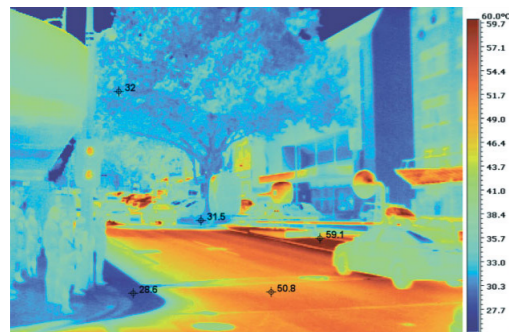


FIGURE 18. ARMADALE – BUILT FORM AND URBAN HEAT



Urban heat thermal image



01 Pedestrian crossing to train station



02 PSP along Neerigen St



03 Pedestrian crossing at Jull St Mall



04 Parking at train station (east)



05 Back of house on Neerigen St

# LAND USE

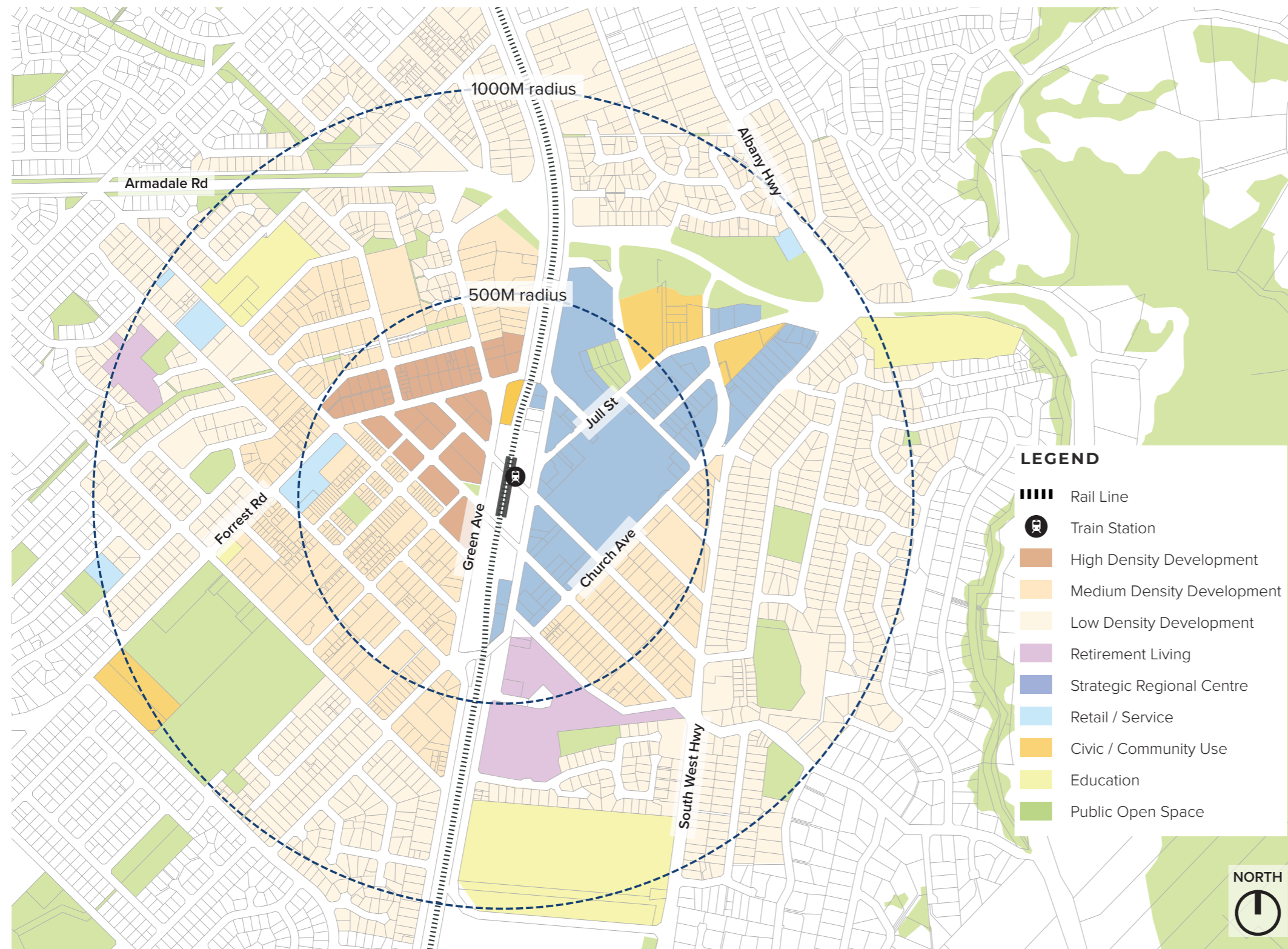


FIGURE 19. ARMADALE - LAND USE

## ARMADALE STATION (ELEVATED) STATION PRECINCT PLAN - LAND USE

Currently, Armadale Town Centre's land uses are focused on retail activities. It is a known challenge that Armadale lacks a diverse employment offering. There is very little employment mix, particularly in professional service industries, which may be seen as a logical maturation of town centre land use activity. Therefore, to fulfil Armadale's role as a strategic metropolitan centre, the precinct must deliver greater opportunities for commercial development.

The current zoning of land uses around the Armadale Station Precinct indicates the potential to be a major urban centre with a range of land uses including residential, commercial, retail, community, cultural and civic. It serves a broad and diverse catchment and acts as a hub for the surrounding community.

The medium to high density residential zoning around the station precinct promotes an increasing community of people living in the area.

The zoning also enables greater growth in non-residential floorspace and opportunities for employment, particularly at ground levels.


















The integration of the eastern and western parts of the precinct, afforded by the upgraded station, will promote the opportunity for business agglomeration, therefore, a greater quantum of commercial floor space could be reasonably expected. Further, with defined links and connectivity to the city centre west of the rail precinct, greater opportunities for ground floor activation could be supported in the revitalised precinct.

# DISTRICT LEVEL DESTINATIONS

The plan on the right shows an overview of the existing destinations and activities on a district level around the Armadale station precinct's surrounding context at the district level.

The images underneath include feature spatial characteristics in the area.

## LEGEND

-  Rail Line
-  Train Station
-  Principal Shared Path
-  Trails
-  Bridle Trails
-  Pedestrian Crossover
-  Vehicle Crossover
-  Street
-  Major Roads
-  Highway
-  Bus Network
-  Shopping Area
-  Offices
-  Industrial
-  Green Space
-  Water
-  Area of Aboriginal Significance\*

\* For further details, see the Noongar Cultural Context Document 'Beenyup'

-  Civic & Education
-  Recreation

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/ PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

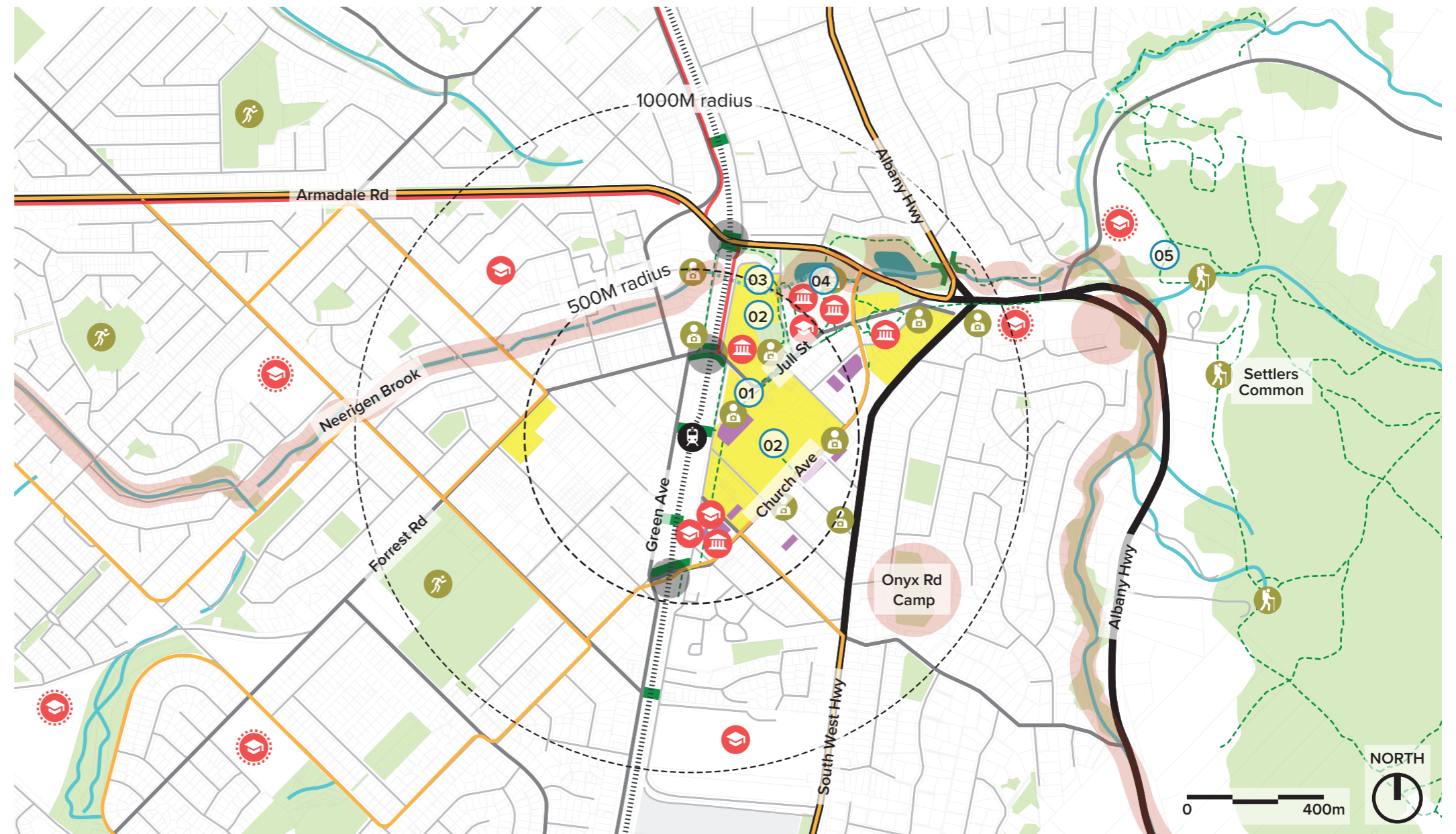


FIGURE 20. ARMADALE – ACTIVITIES, MOVEMENT AND DESTINATIONS



# LOCAL ACTIVITIES

The plan on the right shows an overview of the local activities layered across the Armadale city centre. Civic, commercial, hospitality and commercial activities are clustered on the eastern side of the railway line (around Jull Street Mall), with further concentration of commercial uses south (between Forth Avenue and Jull Street). These activities are serviced by car parking that is usually concealed behind buildings.

Stronger connections across the rail line, through the introduction of a new station environment, will help to encourage activity west.

On the next page is a photo essay of the local activities in the area.

## LEGEND

- ▬▬▬▬ Rail Line
  - 🚂 Train Station
  - Principal Shared Path
  - Foot Path
  - ▬ Pedestrian Crossover
  - ▬ Vehicle Crossover
  - Street
  - Major Roads
  - ▬ Highway
  - ▬ Green Space
  - ▬ Water
  - ▬ Area of Aboriginal Significance
- 
- Civic
  - Commercial
  - Hospitality
  - Parking

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

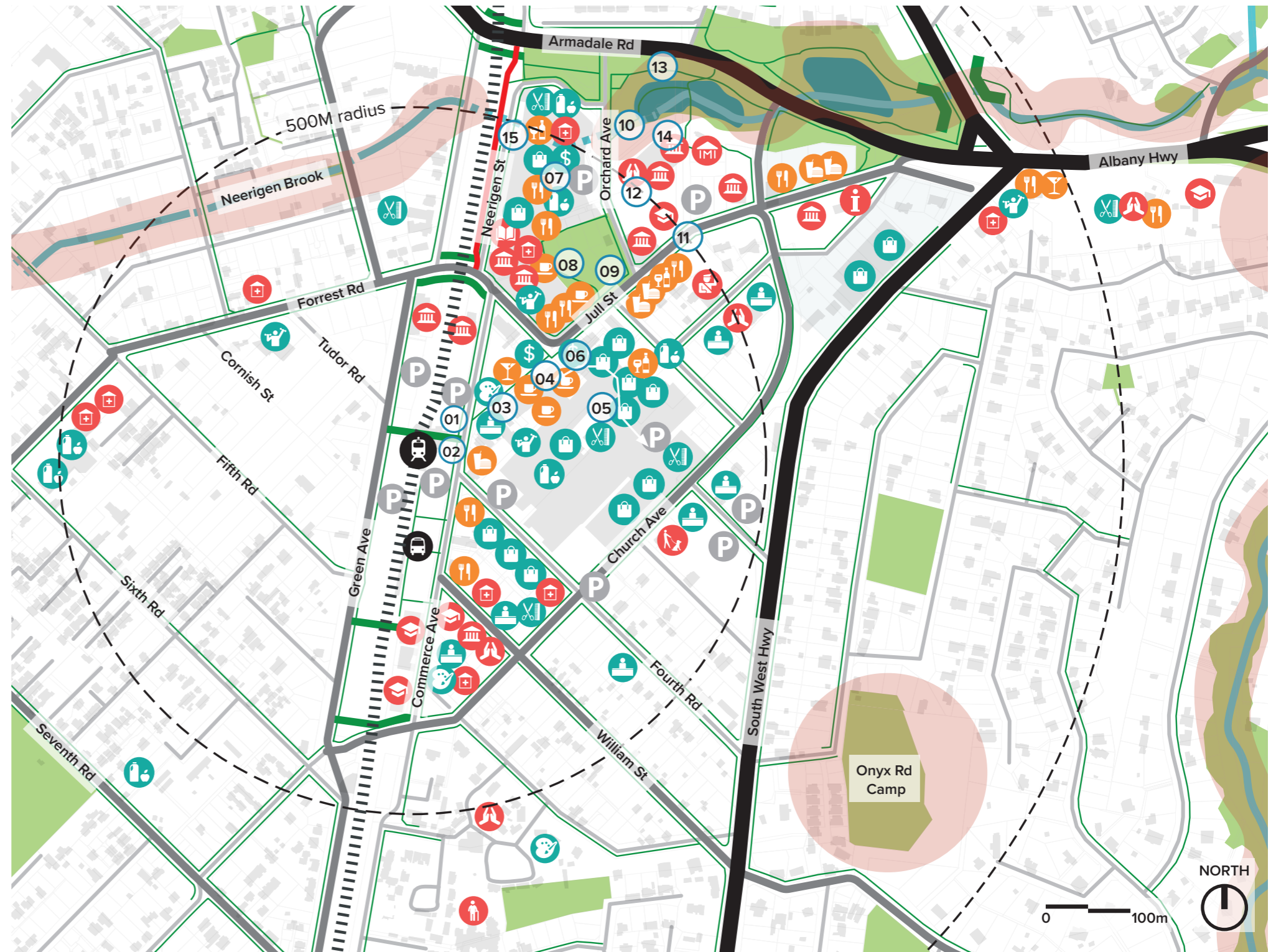


FIGURE 21. ARMADALE – LOCAL ACTIVITIES



01 The approach to the station from Jull Street Mall



02 Seating with the station plaza has limited social surveillance



03 Empty tenants along Jull Street Mall



04 Limited public realm activity in the Jull Street Mall



05 Big box retail has limited interaction with the town centre and Jull St Mall



06 Heritage trails weave through the town centre



07 Big box retail is designed for people arriving via vehicles and contributes to the inactive town centre



08 Limited entries from the big box architecture that houses retail and public amenity to Memorial park



09 Playground for younger children



10 Youth orientated skate park



11 Larger scaled offices



12 City of Armadale Administration Office and civic area



13 Minnowarra Park offers recreational space with Neerigen Brook running through as feature



14 Heritage buildings overlook Minnowarra Park



15 PSP into Armadale along Neerigen St

# PEDESTRIAN ACCESS ROUTES

The elevated rail provides important opportunities to improve the pedestrian linkages in the centre of Armadale. The limitations of existing rail crossings are removed and replaced by uninterrupted pedestrian connections.

A new Welcome Place connecting Jull Street Mall to the east and the new neighbourhood plaza to the west will provide an activated public place in the City Centre, connecting east and west.

Additional connections north of Forrest Road will further improve the pedestrian permeability around the City Centre. A new parkland around and underneath the elevated rail continues the green open space network north of the City Centre all the way to the train station.

## LEGEND







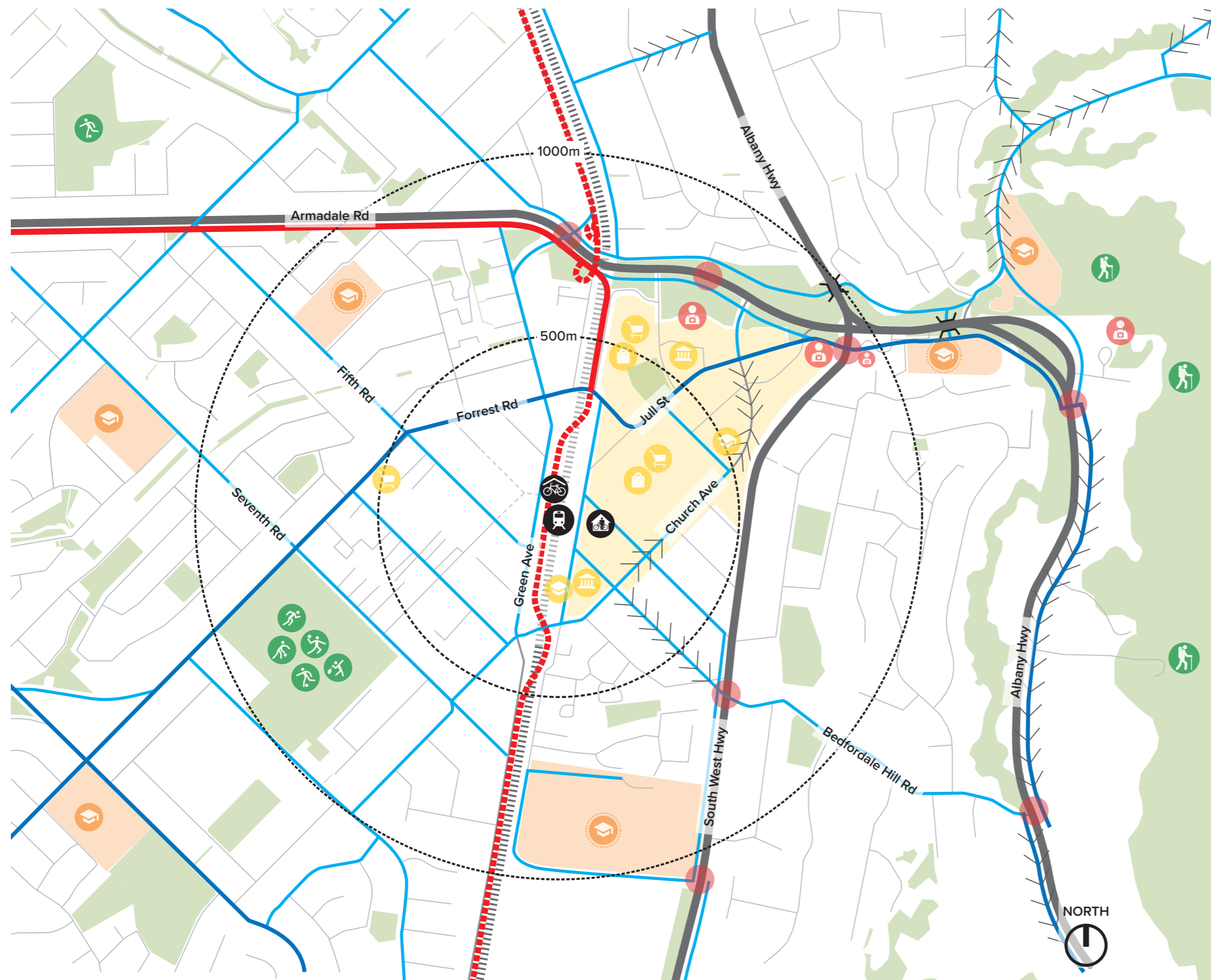
- Footpath (existing & planned)
  - Pedestrian Mall & Plazas
  - Shopping Malls (private space)
  - Parkland (proposed)
  - Rail corridor connections (proposed)
  -  Underpass
  - Pedestrian priority crossing
  - Challenging crossing
  - Rail (at grade & proposed elevated)
  - Arterial road
  - Street
- Destinations**
-  Train Station
  -  City Centre
  -  School (primary & secondary)
  -  Sport & Recreation
  -  Tourism
  - City Centre
  - Parkland
  - Schoolground



FIGURE 22. ARMADALE – PEDESTRIAN NETWORK

# CYCLE ACCESS ROUTES



Enhancing the Principal Shared Path (PSP) and cycling linkages between the station and key local destinations such as the Armadale Senior High School as well as higher density urban development is the basis for the future precinct strategy for elevated rail. This includes the continuation of the PSP to Byford.

Additionally, providing a network of secondary routes that link to key destinations and provide safe, high-amenity cycling environments will assist in increasing patronage from the immediate catchment. Bicycle boulevards such as on Fifth Rd will be one means of raising the priority of active transport to access the station.

The purpose is to ensure that the future path infrastructure provides a well-connected, accessible and enjoyable walking environment through the Armadale Strategic Centre.

It is important to note that detailed design of the PSP is currently under development, so its proposed alignment may change.

## LEGEND

- PSP (existing & proposed)
  - Secondary cycle route
  - Good cycle environment
  - Underpass
  - Gradient arrow
  - Secure bike parking (proposed)
  - Bicycle shop
  - Challenging crossing
  - Rail (at grade & proposed elevated)
  - Arterial road
  - Street
- Destinations**
- Train Station
  - City Centre
  - School (primary & secondary)
  - Sport & Recreation
  - Tourism
  - Parkland
  - Schoolground

FIGURE 23. ARMADALE - CYCLING NETWORK



# BUS ACCESS ROUTES














While the integration of buses into the station precinct is vital for multi-modal transport options, it is critical to separate bus movements from pedestrian flows and, therefore, cross-precinct bus movement is not desired. Primarily, the bus routes in place to service the locality are proposed to remain as is.

A potential reroute along Commerce Avenue between William Street and Church Avenue will reduce distance and, consequently, lead to less time spent on buses; these quicker travel routes will provide patrons with alternatives to using private vehicles to drive to, and park at the station.

In addition, it is anticipated there will be implementation of new Transperth bus routes to service the new growth areas surrounding Armadale Station, as outlined within Transperth's Service Development Plan.

*It is important to note that confirmation of future bus routes is still subject to future Transperth/PTA planning.*

## LEGEND

- Line 519
- Line 219, 220
- Line 251, 252, 253, 254
- Line 243, 244, 245
- Line 250
-  Bus Station
-  Public Transport Zone Boundary
-  Rail (at grade & proposed elevated)
-  Arterial road
-  Street
- Destinations**
-  Train Station
-  City Centre
-  School (primary & secondary)
-  Sport & Recreation
-  Tourism
-  City Centre
-  Parkland
-  Schoolground

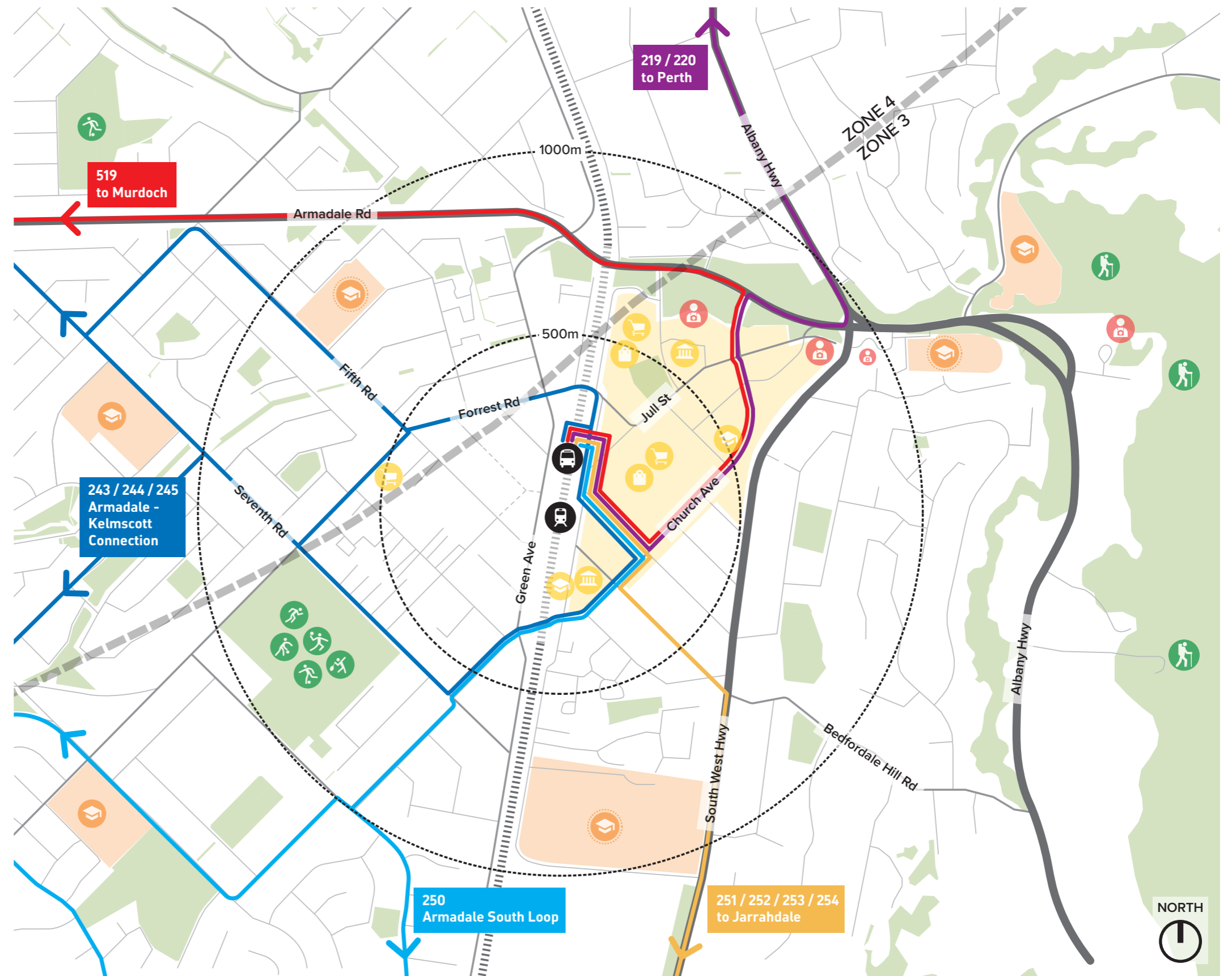


FIGURE 24. ARMADALE - BUS NETWORK

# VEHICLE ACCESS ROUTES



The key road access routes for private vehicles are outlined on the plan to the right. These provide access to station parking and surrounding shopping, education and civic destinations.

The road network surrounding the station offers a balance between providing adequate access to these land uses and the drop off of passengers to the station in a safe and timely manner, with the desire for a precinct that emphasises walking and cycling as modes of travel.

## LEGEND

- Arterial road
  - Local vehicular route to station
  - ▼ Station parking entrance
  - P Park & Ride parking
  - K+R Kiss'n'Ride parking
  - Street
  - Rail (at grade & proposed elevated)
- Destinations**
- 🚉 Train Station
  - 🏠 City Centre
  - 🎓 School (primary & secondary)
  - 🏃 Sport & Recreation
  - 🏨 Tourism
  - City Centre
  - Parkland
  - Schoolground

FIGURE 25. ARMADALE - PRIVATE VEHICLE NETWORK

# ENGAGING WITH AUDIENCES

Station precincts have a dual role as a service point for public transport infrastructure and as a high-quality public realm that is welcoming and inclusive. Universal access, safe and efficient circulation and movement of pedestrians, cyclists, cars and buses is a standard design requirement for the success of all the station precinct as it needs to cater for a diverse range of people of different needs and abilities. Understanding the users of the station precinct is essential to delivering a well patronised and vibrant place. As identified by WSP and PLACE Laboratory in 'Armada Station Precinct Preliminary Place Plan' (BRE-MNO-WSP-PL-RPT-0003), the six audiences / user types of Armadale Station, and its wider precinct, can be segmented as:

- Peak Hour Commuters
- Occasional Commuters
- Local Residents & Workers
- Local Traders & Retailers
- Tourists & Visitors
- Youth

The reasons each group is in the precinct, their mindset, essentials the station visit should provide them and the specific amenities they seek is outlined opposite. The Place Plan and station design responds to these needs, offering a place of: smooth and comfortable transfer; pleasant and meaningful time spending; and embedded in the community.

As identified by WSP and PLACE Laboratory in 'Armada Station Precinct Preliminary Place Plan' (BRE-MNO-WSP-PL-RPT-0003), collaboration with the local government and other stakeholders to develop a PPP has been limited. Therefore, engagement with local governments, stakeholders and the wider community is advised to occur in the following stages of this project to address the needs and requirements of these various audiences. This will enable the precinct delivery to appropriately provide amenity and comfort that addresses their travel and dwell needs at key times during the day/ evening and week.

## NOONGAR CULTURAL CONTEXT

METRONET is committed to Gnarla Bidji, it's Aboriginal Engagement Strategy. An important aspect of this is engagement with the METRONET Noongar Reference Group (MNRG) and the development of a NCCD for each project, on advice from and acceptance by the MNRG. For the BRE, a NCCD has been developed by Material Thinking with Uncle Neville Collard, in close collaboration with senior Noongar elder Dr Richard Walley and the MNRG. The 'Beenyup' NCCD has shaped previous reporting, and consequently this Place Plan. For a full understanding of the narratives, the Beenyup NCCD and its appendices should be consulted by all designers on this project, whether they be engineers, place designers or artists.



### PEAK HOUR COMMUTERS

#### Why are they at the station precinct?

They are travelling to the CBD, work, school, university and TAFE.

#### What is their mindset?

Peak hour commuters frequent the station precinct in the morning and afternoons. It is part of their everyday journey and should be as seamless as possible.

#### The station precinct needs to provide?

Morning: The station precinct needs to be clear, direct and generous.

Afternoon: It needs to be a welcoming place and ensure a quick journey home.

#### Specific amenity

- Morning coffee.
- Afternoon seating for waiting.
- Retail opportunities.



### OCCASIONAL COMMUTERS

#### Why are they at the station precinct?

Typically they are travelling to health facilities, events, recreation, retail and/or visiting friends and family.

#### What is their mindset?

They use the station for incidental requirements like shopping, appointments and errands. Typically, they have more time, so the station experience can be more leisurely.

#### The station precinct needs to provide?

A sense of place, identity and orientation.

#### Specific amenity

- Place to stop, rest and socialise.
- Places to eat, drink, shop and play.
- Cycle share facilities.
- Lockers for shopping.

## TABLE 5. AUDIENCE TYPOLOGIES

Source: Byford Rail Extension – Concept Design, 'Armada Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



## LOCAL RESIDENTS & WORKERS

### Why are they at the station precinct?

Typically local residents and workers travelling to and from home, work and nearby local destinations.

### What is their mindset?

Locals experience the station precinct as part of the surrounding context.

### The station precinct needs to provide?

Public open space to encourage different activities for a diverse range of people.

### Specific amenity

- Place to stop, rest and socialise.
- Places to eat, drink, shop and play.
- Flexible spaces (ie. markets and performances).



## LOCAL TRADERS & RETAILERS

### Why are they at the station precinct?

Local traders and retailers travelling to and from work and taking lunch breaks.

### What is their mindset?

The local traders and retailers contribute vibrancy and activation to the site and could potentially extend their commercial activities into the public realm.

### The station precinct needs to provide?

To bring together commuters, traders and residents to create a vibrancy. There need to be short and long-term opportunities that support local traders.

### Specific amenity

- Retail spaces with good foot traffic.
- High-quality public spaces.
- Power and services for vendors.



## TOURISTS & VISITORS

### Why are they at the station precinct?

They are travelling via the station precinct to visit the area.

### What is their mindset?

Tourists traveling by public transport are alert to the station at which to alight. When they arrive at the station precinct they look for the way to get to their next mode of transport or their ultimate destination.

### The station precinct needs to provide?

Contribute to the tourist precinct by showcasing what is unique to the area and by providing wayfinding directional signage.

### Specific amenity

- Places to stop and rest (ie. eat, shop and play).
- Cycle share facilities.



## YOUTH

### Why are they at the station precinct?

Typically 13 -18 or old enough to be out without parental supervision. Looking for places to hang out and socialise. Interested in active play experiences.

### What is their mindset?

Experience the station precinct before and after school and weekends, as a place to hang out and meet friends.

### The station precinct needs to provide?

Safe public open spaces to meet friends. Wi-Fi for research, study and youth-orientated recreational activities.

### Specific amenity

- Place to stop, rest, play sport and socialise.
- Places to eat, drink, shop and play.



# OPPORTUNITIES & CONSTRAINTS

The plans to the right summarise the opportunities and constraints presented by the site context. They are shown at city centre and precinct scales.

The opportunities and constraints are based on the initiative to realise an elevated rail from the north side of Armadale Road to south of Church Avenue, combined with the analysis on the previous pages.

The analysis considers the challenges and potential for the wider area to achieve integration of the station precinct with its surrounds. However, the plan boundaries form a constraint for the execution of the proposals in this FPP (e.g. the BRE project will deliver on what it can within its project boundary, but further opportunities, connections and improvements would fall outside of the scope of this project). This plan, furthermore, focuses on the character and place-related aspects as is appropriate for the urban design, landscape and public art. The technical requirements and constraints that need to be met, are under development and are therefore not included.

## GENERAL OBSERVATIONS

The urban structure of Armadale is characterised by two distinct halves, separated by the railway corridor. The eastern side is the traditional town centre heart, which includes differing lot sizes ranging from major shopping centre developments to small-scale main street tenancies. The core on the eastern side is quite walkable as a result of the hybrid grid structure, with key connectors such as Jull St and Fourth Rd providing important links to Armadale Station.

Currently, the primary barrier to pedestrian movement within the station precinct is the railway corridor itself. An elevated rail design will improve connections between the existing centre and the area west of the railway line, improving the urban structure greatly. This would also help to facilitate growth of the town centre, which is currently hindered by barriers such as Armadale Road, South Western Highway and the railway corridor.

Given the elevated nature of the design, this provides great opportunity to define spaces that utilise the local Sense of Place.

All efforts should be made to ensure the areas around, under and adjacent to the raised platforms and viaducts are designed as public accessible areas and not seen as places to be excluded from the public realm. Spaces under the viaducts and platforms should be used to create activated areas that are safe and inviting. Furthermore, using these spaces for station-related infrastructure, such as bus interchange and park'n'ride, can allow for more advantageous uses of the zones parallel to the rail viaduct.

Soft and hard landscape areas that lead through and around the underside of the viaducts and raised platforms can be brought to life with areas equipped to support food trucks and street performances.

## LEGEND (CITY CENTRE SCALE)

- |  |   |
|--|---|
| Rail line                              | Tourism destination                             |
| Proposed elevated rail                 | Recreation & sport destination                  |
| Station destinations                   | Tourism & recreational route                    |
| Grade-separated connection opportunity | Tourism route opportunity                       |
| Street                                 | Bush-line enhancement opportunity               |
| Proposed PSP                           | Hill-view opportunities from elevated platforms |
| Significant urban heat stress          | Planned urban stream route                      |
| City Centre                            | Higher density residential (existing & planned) |
| City Centre destination                | School  |
| City Centre walking route              | Neighbourhood destination                       |
| Hills bushland                         | Planned neighbourhood plaza & route             |
| Parkland                               |   |
| Area of aboriginal significance        |   |

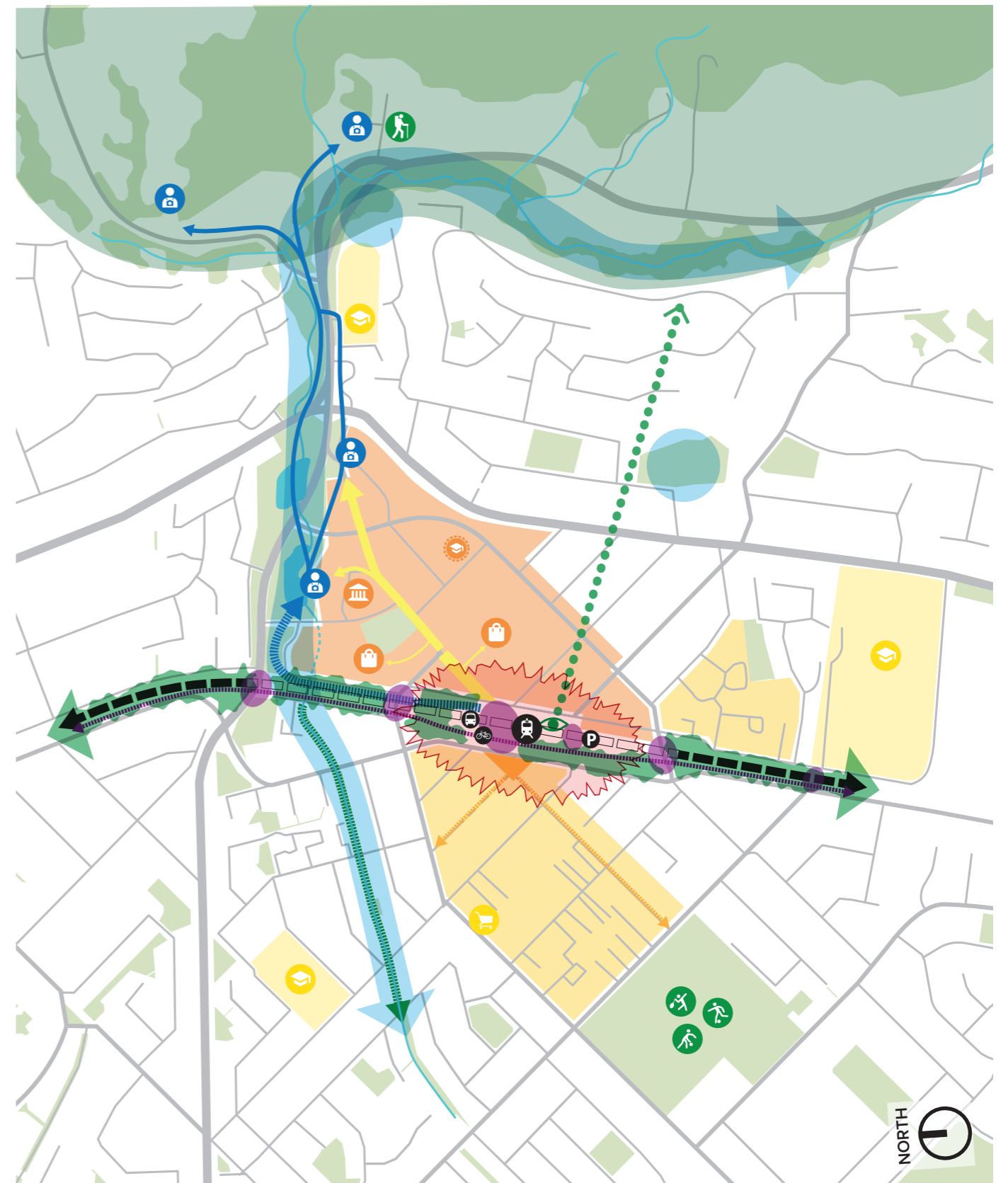





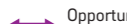
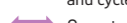





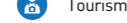









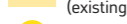




FIGURE 26. OPPORTUNITIES & CONSTRAINTS PLAN - CITY CENTRE SCALE

## LEGEND (PRECINCT SCALE)

-  Rail line
-  Proposed elevated rail with tree restriction zone
-  Station destinations
-  Street
-  Proposed PSP
-  Opportunity for improved pedestrian and cycle connection
-  Opportunity for connective urban plaza
-  City Centre
-  City Centre destination
-  Jull Street Mall & shopping route
-  Under-performing Main Street activity
-  Tourism destination
-  Parkland
-  Tourism & recreational route
-  Area of aboriginal significance
-  Hill-view opportunities from elevated platforms
-  Tourism route opportunity
-  Planned urban stream route
-  Bush-line enhancement opportunity
-  Monumental & significant trees to retain
-  Higher density residential (existing & planned)
-  School
-  Planned neighbourhood plaza & route
-  Significant urban heat stress
-  Social safety attention spot

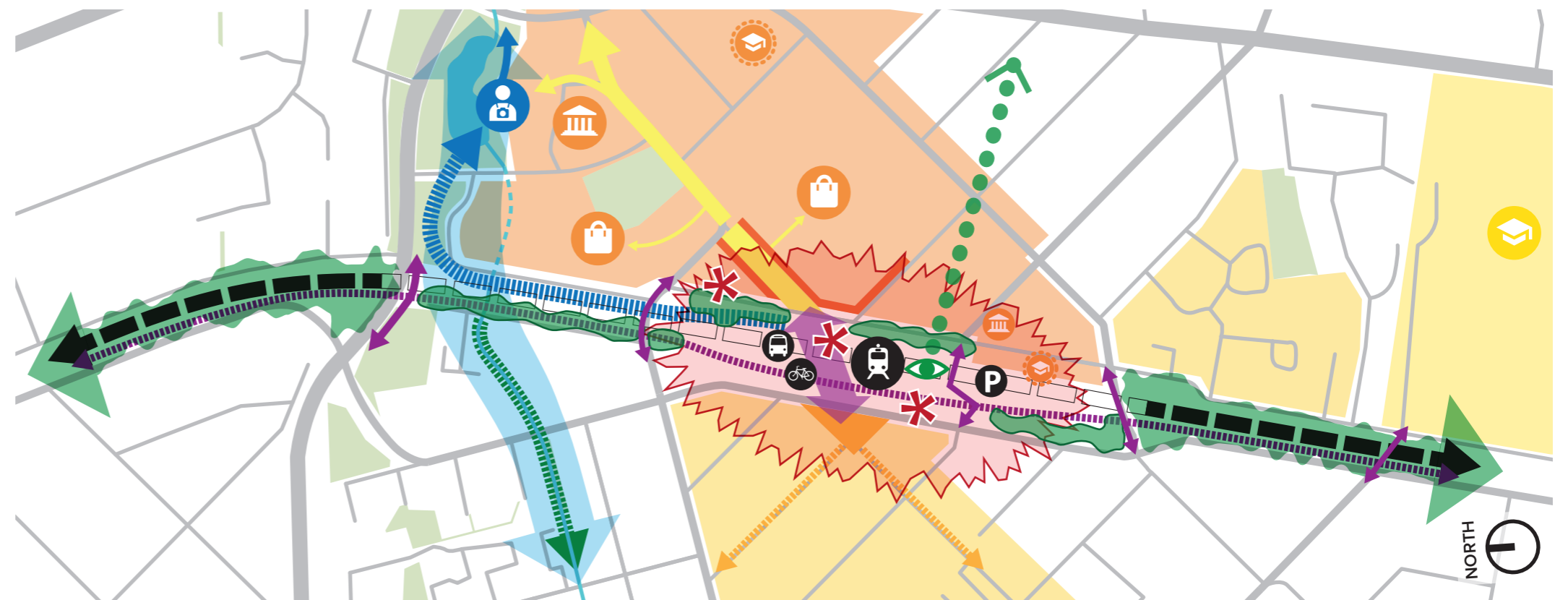


FIGURE 27. OPPORTUNITIES & CONSTRAINTS PLAN - PRECINCT SCALE

### OPPORTUNITIES

The main precinct opportunities for an elevated Armadale Station are:

- Creating a compliant and future-proofed train station;
- Improving connections across the rail, in particular at the station itself and the viaduct portions, to make them seamless, smooth and attractive to move east-west;
- Creating a welcoming arrival at the station, connecting to both the east and west side;
- Locating station precinct functions underneath the viaduct, e.g. bus interchange and kiss'n'ride parking to improve the interface between station precinct and Armadale City Centre, grow the urban forest and reduce urban heating.
- Enhance future development opportunities for active frontage along the Welcome Place and surrounding streets, improving the interface between station and City Centre;
- Improving social safety in the public realm of the precinct by encouraging more activity and high quality landscaped areas beside and underneath the viaduct;

- Celebrating the connection to the hills landscape and a view into Armadale City Centre that is afforded by elevated tracks and platforms;
- Improving legibility to all directions especially pedestrian walkability across the railway corridor, and for secondary loop connections into the town centre north along the brook;
- Celebrating the history and Aboriginal values of the place through initiatives such as strengthened connections to places like Minnowarra Park and the hills beyond, and including Noongar language through place-making outcomes;
- Contributing to easing the urban heat island with providing shade with the rail viaduct and shade and cooling with additional tree planting; and
- Preserving mature trees, particularly in the City Centre West of Railway Precinct, to provide amenity and contribute to local biodiversity.
- Development opportunities may exist on the western side of the rail in the long term, though space constraints due to the viaduct alignment will limit the ability for all development types to be delivered in this area.

### CONSTRAINTS

The main constraints regarding the precinct relate to the topography of the site:

- Considerable level changes between Commerce Ave and Green Ave, as well as along the length of the rail corridor, including the new Church St rail overpass;
- Retaining of mature trees as new infrastructure is introduced along the rail corridor;
- Tree-free zones along the rail viaduct limit capacity to plant trees for urban cooling;
- Challenges for the station precinct to fully integrate (at day one) into an interesting town centre where not all future developments have been determined/realised;
- Development potential for future commercial or increased housing diversity in the precinct is dependent on government land ownership and implementation of the area west of the railway line, for example, for higher density and mixed use development; and
- Limited space for the PSP overpass ramps across Armadale Road and connections to existing PSPs.



# 04

## NARRATIVE ANALYSIS

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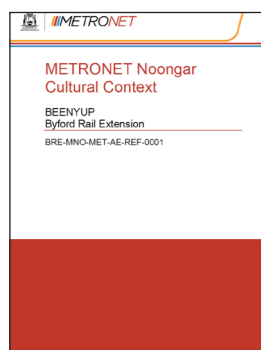


# NOONGAR CULTURAL CONTEXT

METRONET is committed to Gnarla Bididi, it's Aboriginal Engagement Strategy. An important aspect of this is the engagement with the METRONET Noongar Reference Group (MNRG) and the development of a Noongar Cultural Context Document (NCCD) for each project, on advice from and acceptance by the MNRG.

For the Byford Rail Extension a specific NCCD is being developed by Material Thinking with Uncle Neville Collard, in close collaboration with senior Noongar elder Dr Richard Walley and the MNRG. The Noongar Cultural Context Document 'Beenyup' is provided as input for the sense of place vision developed in this Final Place Plan.

The following summary and interpretation of the Noongar narratives in Beenyup NCCD has not yet been communicated with or checked by the METRONET Noongar Reference Group. It is essential that the appropriate Aboriginal Stakeholders are engaged and permission asked as to how this traditional, historical and contemporary information is summarised and integrated in this Place Plan before the plan is finalised and any of the narratives are taken forward.



METRONET Gyinning Noongar Cultural Context Document November 2019

(1\*) The summary of Noongar narratives in this Place Plan is an interpretation of the Beenyup Noongar Cultural Context Document and has NOT yet been communicated with or checked by the METRONET Noongar Reference Group (MNRG). It is essential that the appropriate Aboriginal Stakeholders are engaged and permission is asked to how this traditional, historical and contemporary information is integrated before the Final Place Plan is finalised and any of the narratives are taken forward.

The Beenyup NCCD includes a wealth of information. Summarising this will inevitably reduce the richness and depth of the stories, themes, concepts and protocols described. For a full understanding of the narratives, the Beenyup NCCD including all the appendices should be consulted. All designers on the project, whether engineers, place designers or artists, should be aware of the content and it's significance.

## BEENYUP

The Beenyup NCCD includes powerful story lines to inspire a sense of place for the Byford Rail Extension and include in their designs. For the Final Place Plan the wealth is summarised in five story lines:

- Noongar Boodjar
- Waterways/Waugal
- Bididi 'pathways'
- Storytelling
- Hard Labour - Noongar Rail History

There is also reference to Woolberr, Elder and recognised healer, who was killed in 1907 on the railway. He travelled through across significant parts of the region around Perth. Woolberr was associated with the spirit of water through Waugal and had knowledge of the origin of fire; both fire and water playing and important role in powering the first trains.

The Beenyup NCCD indicates the Western Australian Government Railways have consistently and repeatedly violated the haunts of the Waugal. Paying respect to Woolberr could initiate a reconciliation and healing process.

The use of Aboriginal names for the stations would also be a way of showing respect to Noongar peoples. Advice of the MNRG would need to be sought on appropriate Noongar names.



## BEENYUP NOONGAR BOODJAR

Byford (Beenyup) is located in Beeliar country, and is the territory of legendary Noongar elder Midgegooroo. Beenyup is known as 'Place for digging holes for the warrain (native potatoes). The Byford Rail Extension covers two general geographical areas within Beenyup: Gandoo and Warget.

**Gandoo**, inland running parallel to Booyeembara, a "sandy division and abounds with that species of Eucalyptus called Mahogany [Jarrah]",

**Warget**, along the foot of the Darling Ranges described as an area rich in "clay, red loam, and alluvial plains" and blue and flooded gums.

The Armadale Byford line is (generally) located between the Canning catchment (the Southern tributary) to the north and the headwaters of the Serpentine to the south-west. The Byford Rail Extension runs north-south along the boundary of the Ridge Hill Shelf and the Pinjarra Plain intersecting several westerly flowing streams, including (but not limited to) Wungong, Cardup and, further south, Manjedal Brooks.

The water sources were linked by north-south and east-west biddi travelled and visited seasonally. The swamp/wetland on nearby Forrest Road also has significance to Aboriginal people as places for camping and hunting and as part of a chain of water bodies plain which Aboriginal people travelled along.



## WATERWAYS/WAUGAL

The Pinjarra Plain system is characterised by a series of interconnected water bodies significant to Noongar people as both a source of food and providing spiritual connection to country. In addition to their connection to the Waugal creation journey, the waterways hold general spiritual significance as places of life and abundance.

The layered significance of the waterways are reflected in the observations by O'Connor,

*"Regional wetlands', for example, are 'spiritual repositories, not in the sense of the ubiquitous Waugal myth ... but in a more general sense which draws on the fundamentals of Aboriginal philosophic-religious belief. In this belief system all living creatures, including humans, share a common spiritual essence and therefore, by extension, every living being represents a part of the wider spiritual universe. The region's wetlands, as breeding grounds for numerous living creatures, are therefore repositories of this spiritual essence realised generationally by individuals."*

When European settlers arrived their colonial tracks, road networks and eventually rail networks developed along the established routes created by Noongar people between the waters.

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



### CORROBORREE GROUNDS & BIDDI 'PATHWAYS'

'Places' are not isolated territories, but places on biddi, like knots in a string figure. Noongar define places relationally as the crossings of biddi, where there is shelter, water and warmth. Corroborree grounds represent important meeting and ceremony places within the biddi network.

Station precincts should not be seen as individual places, but as parts of larger, intricate networks of connection, ecology, knowledge, meaning, health and storytelling.

The Noongar concept of 'biddi' is more complex than its English translation 'pathways', as described by Noongar Dr Richard Walley:

*"Since the Koondarm (our creation) our ancestral pathways have guided us through Noongar Boojar (our land) from significant place to significant place, from one water body to another. Now we work together to strengthen Gnarla Biddi (our pathways), the way that people travel and connect to places, still linked to our shared history and culture."*

There is an obvious parallel with METRONET's brief to improve rail 'pathways' by extending links, building stations and bringing people together. However, the concept of biddi reaches much further. They are guides to country. Biddi has a poetic and spiritual richness that includes:

**Traditional ecological knowledge** - The way Noongar people moved from one part of the country to the other, leading to the best watering places and resources. Biddi is not a straight line, but weaving and following natural systems.

**Ancestral knowledge** - They are memory paths. Walking biddi is walking the footsteps of the ancestors, connecting the traveller to those who have gone before, and keeping the paths open for people yet to pass.

Keeping the 'living body' of the country alive like the veins forming part of the blood circulation in a body, biddi do the work of breathing and moving. Any static picture would be misrepresenting them.

**Health** - to travel the biddi respectfully, carefully, at the right times and according to the right protocols strengthens the human body while it keeps the waters, the trees and the animals well.

**Connecting people** - camping places for instance, located at meeting places along tracks, are not only associated with water; they are fire places, generating warmth, storytelling and conviviality, draw people together in peaceful ways.

**Governance** - a relational thinking, involving a politics of linkage and sense of citizenship able to integrate local attachments, regional custodianship and global self-awareness.

**A third and fourth dimension** - Biddi is embedded in the flesh of the country and tied to the six seasons of the year.



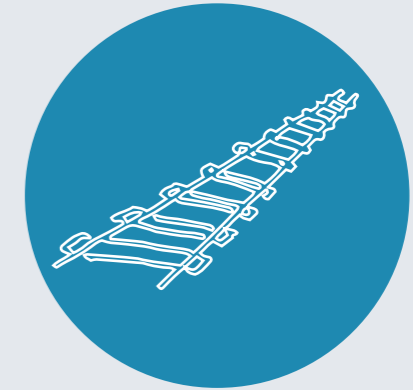
### STORY TELLING

To tell and listen to a story is to go on a journey. The point of the story is to ensure people travel safely through country, paying respect to the spirits of the place, guided to country rich in resources, respectful of other people's boundaries.

All places are inter-related and exist simultaneously in consciousness. If you start your story line here, you already have other places, other intersections in mind. The web of stories criss-cross the country and form a well-knotted network.

Traveling the network of stories is episodic and radial. Inside every 'local story' or episode, there is always a larger 'plot' or narrative that extends regionally. A passenger may leave the train at the first stop or continue to the end of line, participating in more or less of a journey.

The key point is that content generation, design and programming occurs at a network level, not at the level of individual stations. Once stories are collected, they are divided into episodes. Individual episodes can be read/seen/encountered anywhere in the network anytime.



### HARD LABOUR, NOONGAR RAIL HISTORY

Many Noongar people worked on the Western Australian Government Railways (WAGR) from the earliest days. The system spread families over the diverse railwork sites through the State and risked splitting them up. But it also provided the means of bringing them back together: families were dotted across the system and the new mobility became a means of staying in touch.

As workers and their families moved up and down the line, off and on country, improvising new homes, leading the double life of the Noongar six season economy and the colonial timetable of fixed appointments and places, they showed extraordinary sophistication and adaptability. Furthermore, a disproportionate number of Noongar men have been seriously injured on the railway; and a disproportionate number fatally so. This needs to be remembered, the sacrifice commemorated.

The Noongar rail experience should be told in a way that is consistent with Noongar connection to country. This connection is not truncated and detachable, and boundaries are inappropriate. The Noongar culture needs to be presented as a living body spread throughout the region.

# SHARED HISTORY AND CULTURAL SIGNIFICANCE



Always was always will be



**1856**

Narrogin Inn signalled the beginnings of the township of Armadale



**1889**

Railway line from Perth to Armadale was completed



**1900**

Orchards developed in Roleystone and Karragullen around the time of Italian migration



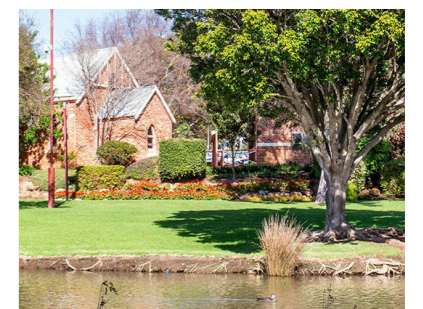
**1909**

The Township of Armadale was gazetted



**1985**

Minnawarra Historic Precinct was built



**FUTURE**

Armadale continues to grow with other significant developments such as: St Matthews Anglican Church, RSL Hall, Armadale fire station etc.

## HISTORICAL AND CULTURAL SIGNIFICANT LOCATIONS:



Area of Aboriginal significance

01

Memorial Park. The War Memorial was erected in 1916 as an honour roll to the local men who had left the district to serve in the Great War. Reportedly the oldest WWI memorial in Australia.

02

Minnawarra Historic Precinct incorporates the Historic School and Church buildings, relocated in 1987.

03

Italian Memorial commemorates the input the Italian community has made to the development to the City both socially and economically.

04

Old Narrogin Inn a once a popular watering spot for coach travellers in the 1800s. Holds the oldest Liquor Licence in WA. The present building was erected in 1937.

05

Armadale Post Office has been a prominent and distinctive feature of the streetscape at the western end of Jull Street for over a hundred years.

06

RSL Hall has been used for commemorative events for RSL members and for various community events throughout its history.

07

Armadale Fire Station was constructed in the 1960s following extensive lobbying by the former Armadale-Kelmscott Roads Board for a volunteer fire station in Armadale since the 1930s.

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

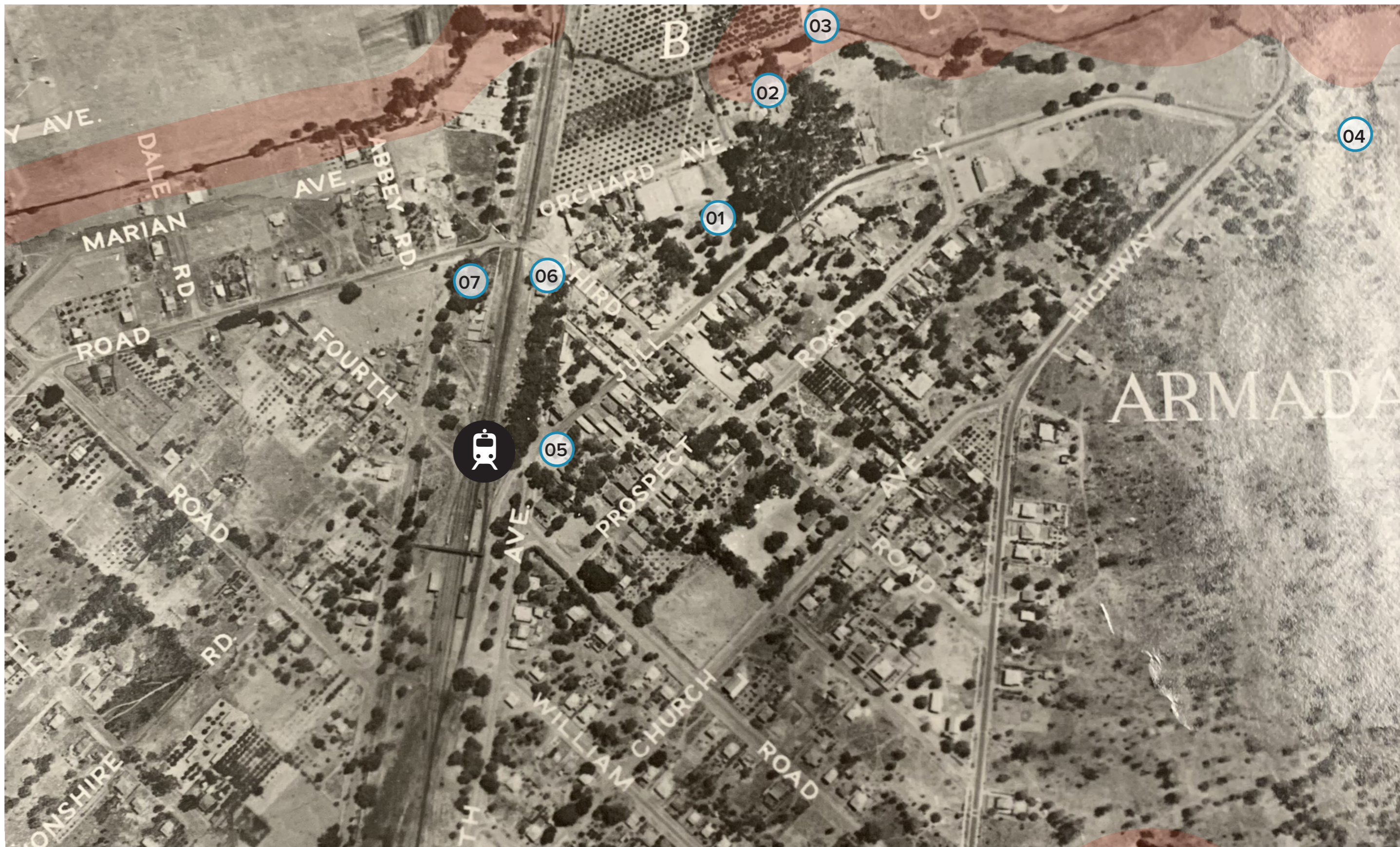


FIGURE 28. ARMADALE HISTORICAL AERIAL PHOTO (RAAF 1942)

# COMMUNITY PERCEPTIONS

The community survey METRONET conducted for the BRE project did not have enough respondents from Armadale or surrounding suburbs to draw reliable conclusions. Therefore the following analysis of community perceptions is based on:

- The Strategic Community Plan '16-'30 (reviewed version 2018), by the City of Armadale;
- The Community Scorecard Survey (2018), by Markyt for the City of Armadale (502 valid responses across the local government area);
- Online discussion platforms: [www.PerthPoms.com](http://www.PerthPoms.com) (220 reviews), [www.essentialbaby.com.au](http://www.essentialbaby.com.au) (10 reviews), [www.homely.com.au](http://www.homely.com.au) (25 reviews) and [www.quora.com](http://www.quora.com) (10 reviews), many are short others are longer or even elaborate;
- Location reviews on Google.maps of specific locations in Armadale City Centre: Armadale Station (nine reviews with comments), Memorial Park (117 reviews with comments), Minnowarra Park (84 reviews with comments), Armadale Central Shopping Centre (266 reviews with comments) and Armadale Shopping;
- Centre (878 reviews with comments), in both cases individual shops not included; and
- Eight newspaper articles in WA Today, Your Local Examiner and ABC.

## SUBURB CHARACTER

Based on the reviewed sources above, several local values and characteristics clearly emerge, as depicted in the graphic, right.

THE HILLS

The nearby Perth Hills come up as a clear positive in online discussions. They are both a daily pleasure and valued for relaxing and getting out of the city, such as bushwalking.

"It's great driving home looking at the Hills."

Armadale is "a beautiful city centre to the wonderful green of the Hills".

TOWN CENTRE

The town centre is valued for its shops, especially the supermarkets and available parking. Further opinions vary widely, from friendly to rude, from humble folk to colourful people, and from dull to wonderful shopping.



Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)



"I have shown many of my friends and family just how wonderful Armadale is and they are all quite gob-smacked how nice it is."

**GREEN SPACE**

According to the Community Scorecard 2018, Armadale's parks, such as Minnowarra, are the most valued aspect of the City. In addition to history and heritage, they contribute to the relaxed, almost country-style quality of the City.

"...turning a diamond from its dark yesteryears."

**SAFETY**

'Community Safety' and 'Anti-social Behaviour' are first and fourth most mentioned priorities in the Community Scorecard 2018. The perception of the issues, however, differs widely.

**REPUTATION**

Despite some negativity in reputation, including due to social safety concerns, people also express what they like about the City.





# 05

## SENSE OF PLACE

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# SENSE OF PLACE PURPOSE

The purpose of the Sense of Place Statement (SOPS) is to outline what is culturally essential to the precinct. It will then act as a guide to ensure that any design decision making for the project aligns with these identified values.

## PLACE VALUE

METRONET sets out to deliver station precincts with public realm infrastructure that contributes to communities with a sense of belonging and support Perth's growth and prosperity. To achieve this, the Armadale Station Precinct needs to be more than just a space for transport – not a stand-alone area or space that feels anonymous, but a place that feels occupied and 'owned' by the communities it services. It should be a living place, with an authentic character that reflects the spirit of the place and the community. This requires a Sense of Place that the community can connect with, generating local pride and care.

Achieving an embedded station precinct has benefits for all users, travellers and local community alike. It will make the place safer, cared for, activated by more people and more engaging to spend time.

A distinct Sense of Place, meshed into the urban and social fabric, also has economic benefits. In the current world, urban centres are no longer functioning just for their own 'catchment'. People want experiences, and for that they easily travel outside the traditional localised catchments. Urban centres have the potential to work much like the beaches in Perth. People have their favourite beach that they frequently visit. But they also visit other beaches, because of their different character, atmosphere and amenities.

Embedded station precincts with a distinct Sense of Place contribute to this different experience. They attract people, to visit, work, live and invest in the precinct. This both stimulates the urban economy and creates a competitive advantage for the precinct over others.

### THE SENSE OF PLACE STATEMENT:

- Focuses on the feel and experience of the place, not describing planning terminology;
- Needs to be distinct; if the statement could also be applicable for another station precinct in Perth, it is not representing this place sharply enough;
- Is developed based on the analysis of the local character; and
- Is to be used as an inspiration and touchstone for all further design works of the station precinct; all engineering, architectural and landscape designs and detailing contribute to making the Sense of Place a lived experience.
- Is developed as a combination of three qualities. In their interaction they define a unique Sense of Place. Every aspect of the design should somehow relate to all three qualities.
- Follow the delicate balance of being descriptive enough to define a Sense of Place, but be poetic and open enough to offer the flexibility for architects, landscape architects, engineering designers and public artists to interpret.

*Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)*

# LINE-WIDE SENSE OF PLACE

The Sense of Place Statement is supplemented by themes and stories. This framework for the integration of stories into the engineering, station and public realm design takes a project-wide approach, drawing inspiration and advice from the METRONET NCCD, and the Place Plans as well as desktop research.

Armadale and Byford are in geographic proximity and so there are some stories and values that are shared and some that are specific. This project-wide approach responds to the shared / specific nature of the BRE project.

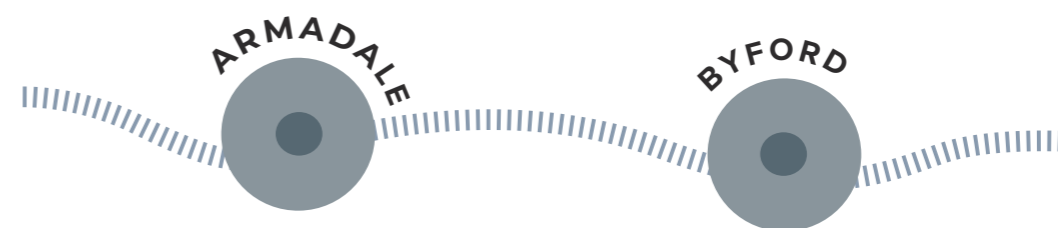
The SOPS, Themes and Stories are then used to guide the conceptual design of all public realm and built infrastructure supporting the Inner Armadale Line, stations and precinct areas.

The approach ensure the SOPS, Themes and Stories guide interpretive elements, public artwork, landscape design, station architecture, and engineering, revealing and supporting culture, history, landscape and place. This approach to public realm delivery runs across the BRE project using a framework of key themes, and connected and specific projects.



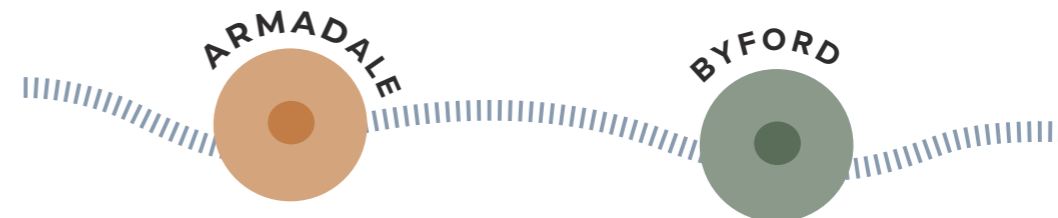
## KEY THEMES

The Key Themes for the Byford Rail Extension are high level motifs to which all of the stories can be connected.



## CONNECTED STORIES

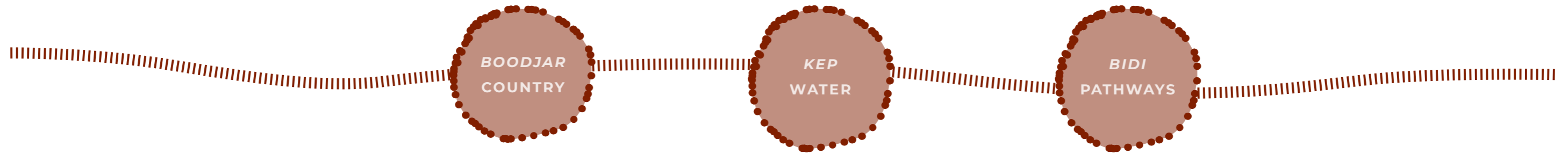
The Byford Rail Extension project shares common stories, values and public realm treatments that connect both project areas. These are predominately Noongar, paying respect to First Nations people and celebrating their unique culture. They are direct extracts from the METRONET NCCD – Byford Rail Extension. Connected stories will become identifiers for the Byford Rail Extension project.



## SPECIFIC STORIES

Individual stories, values and public realm treatments that define and belong to Armadale or Byford as a unique place, or community are gathered together under the 'specific' heading. These can be related to each station and its surrounds. Specific works will become local place identifiers for the Byford Rail Extension project.

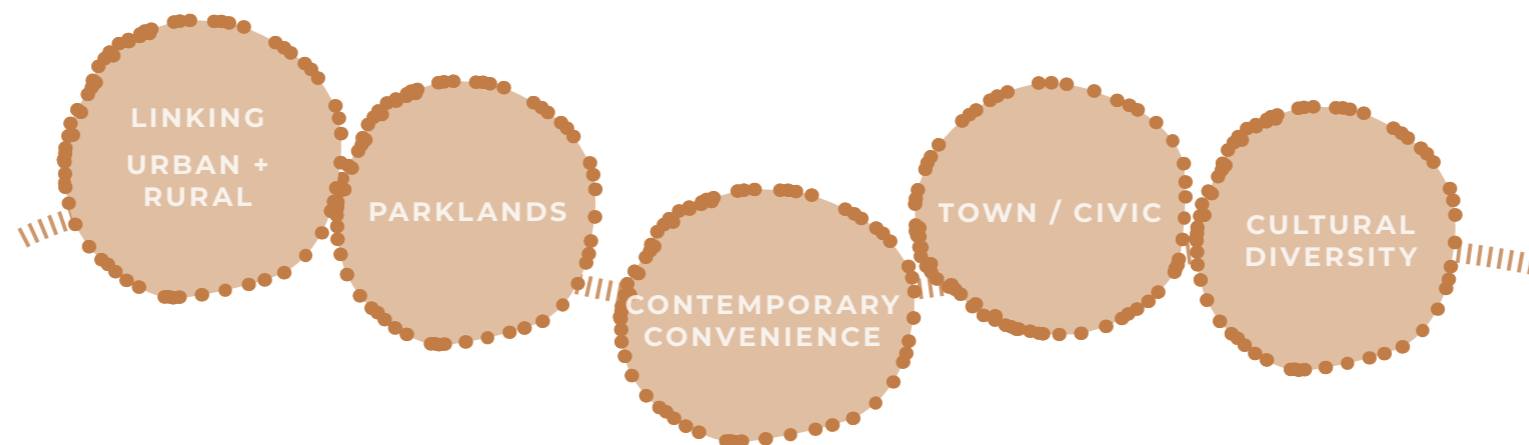
## KEY STORIES – ARMADALE + BYFORD



## CONNECTED STORIES – ARMADALE + BYFORD



## SPECIFIC STORIES – ARMADALE



# SENSE OF PLACE STATEMENT ARMADALE

## ARMADALE

Within the Metropolitan rail network, Armadale Station currently sits at the end of a heritage line, moving into a bush-like experience. Traveling through the suburban setting, views to the Hills become apparent. Arriving at Armadale Station is arriving in the centre of town. It is a town that is growing into a city, as one of five Strategic Centres in the Perth Metropolitan Area.

Both history and the Hills present themselves straight away, with the old post office in front of the station, the topography of the streets and views to the Hills. It is a place to explore, to wander and discover gems like the specialty shops, the Monument Park playground, Minnawarra Chapel (1903), or the Neerigen Brook. It is also a place that is working hard to overcome challenges.

*It is a place of connecting people, to jobs, to education, to past and future, to country, and to each other. All these elements, combined with the themes of the Beenyp NCCD, start to tell a story of place that is essentially Armadale.*



### HILLS TOWN

- / City With A Town Feel
- / Omnipresent Hills & Trees
- / Of The People
- / Human Scale
- / Civic
- / Contemporary
- / Convenience

Hills Town refers to the city at the foothills of Moorda. Where Fremantle is a 'port town' and Kalamunda a 'hills village', Armadale is the only city centre in the metropolitan area directly connected to the hills. It is a 'city' in function and a 'town' in feel.



### CONNECTING

- / Grounded
- / Open & Inviting
- / Bridging Differences
- / Growing
- / Urban + Rural
- / Coastal Plains + Darling Scarp

This is a place of connecting in many different ways - physically linking places, connecting people, advancing from anonymity, relating to past and future, telling stories. The place relates to both 'corroboree grounds' gathering and to rail holding yards, where products were connected to their next destination in Perth and Fremantle.



### REVEAL

- / More Than The Eye Can See
- / Not Obvious
- / Discover
- / Surprise

Although it is easy to find your way, Armadale has hidden layers: places to discover, interesting people, diversity of destinations, waves of activities, many things that make the centre attractive to go to, to stay and to revisit. There is always something to explore.

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

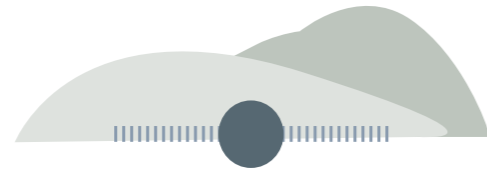


# 06

## FINAL PLACE PLAN

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# PLACE PRINCIPLES

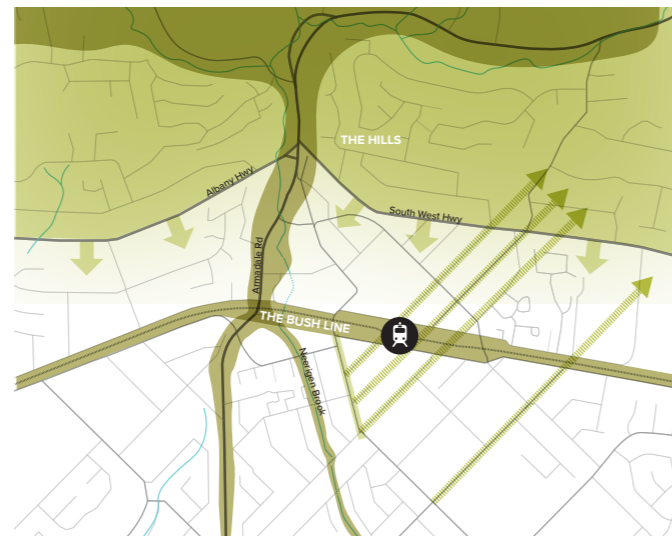


## HILLS TOWN

The station precinct enhances the Hills Town character of Armadale City Centre, providing scenic views to the Hills, celebrating topography and adding an abundance of trees for shade and cooling.

### DESIGN RESPONSE:

- Enhancing the 'bush' character of the rail line (see page 27) by retaining mature trees where possible in the station precinct and adding an abundance of new trees and soft landscaping in and about the station.
- Celebrating the topography in the precinct as a natural part of the public realm, minimising the use of retaining walls, for instance, with the landscaped slope along the west side of the rail to enhance an urban forest edge.
- The new elevated platform allows for vistas to the Darling Scarp, providing a strong visual connection to the Hills.
- Selecting local and natural species for all new trees, further strengthening the Hills connection.

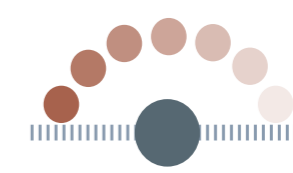


## CITY LOOP AND CONNECTIONS

The station precinct contributes to improving loops for people to explore the city with all its diversity, and enhances connectivity across the rail.

### DESIGN RESPONSE:

- The connection to Jull St Mall is improved with direct views from the station entrance through to the old post office, and an improved pedestrian experience crossing Commerce Ave.
- Creating an active and narrative-rich parkland route from the station towards Minnowarra Park, adding a new tourism route to the City Centre, and completing the city axis into a full city loop.
- The viaduct removes the at-grade crossings at Church Ave, Armadale Rd and Forrest Rd, greatly improving access to the city centre for all modes of movement.
- The elevated rail improves the pedestrian connectivity across the rail corridor from a few single points to multiple fine-grain opportunities.

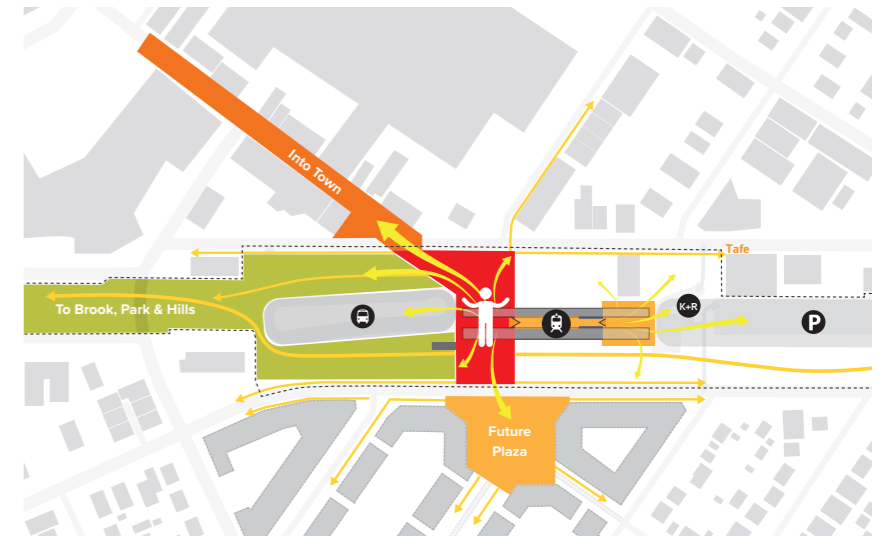


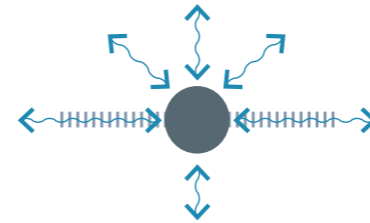
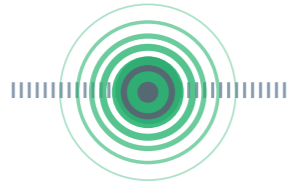
## WELCOMING

The station precinct is a welcoming place that opens out and connects people to both the existing city centre and the future residential area on the west side of the rail.

### DESIGN RESPONSE:

- A high-quality designed Station Plaza / Welcome Place creates the feeling of being welcomed in to the City of Armadale.
- The Welcome Place 'hub' design continues across Commerce Ave, connecting to Jull St Mall with prioritised pedestrian crossings.
- The Welcome Place and parklands provide amenities and attractive spaces for various audiences, welcoming all walks of life.
- The connection between the Welcome Place and the bus interchange is at-grade, without stairs, improving access and comfort for transfer.
- The station precinct provides comfortable and weather-protected connections.
- The new PSP, combined with secure bike storage, welcomes cyclists to the station. The PSP considers cross-precinct connections into existing networks.



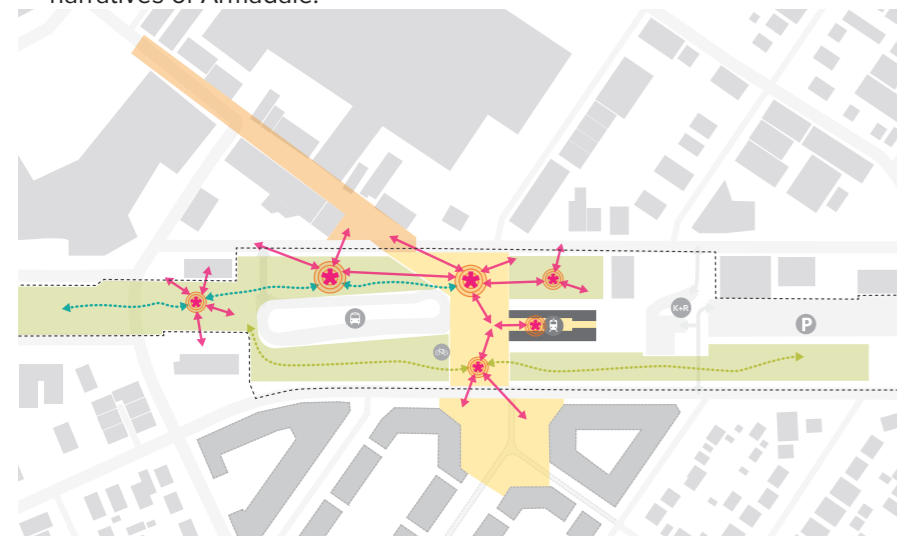


## STAGE FOR LIFE

The station precinct includes inviting community places on both sides of the rail, for people of all generations and cultures to come together in a vibrant, safe and engaging setting to interact and share stories.

### DESIGN RESPONSE:

- Increasing the tree canopy to the station precinct assists in reducing the urban heat island effect, essential to creating a cooler micro-climatic environment for urban life to be encouraged in and around the station.
- The Welcome Place is designed with amenities that are attractive to all including local community, youth and visitors to Armadale – public accessible Wi-Fi, playgrounds, basketball areas, skate-able furniture, hang out zones – create a platform for youth to contribute to the City's liveliness.
- Pedestrian connections in all directions are integrated, adding people's presence to the station precinct, strengthening the base for attracting and inviting people to use and experience the place, because people attract people.
- A variety of seating opportunities, formal and informal, that support people to stay and socialise.
- Linear parklands under and along the viaduct provide a variety of experiences and recreational uses that describe urban stories and narratives of Armadale.

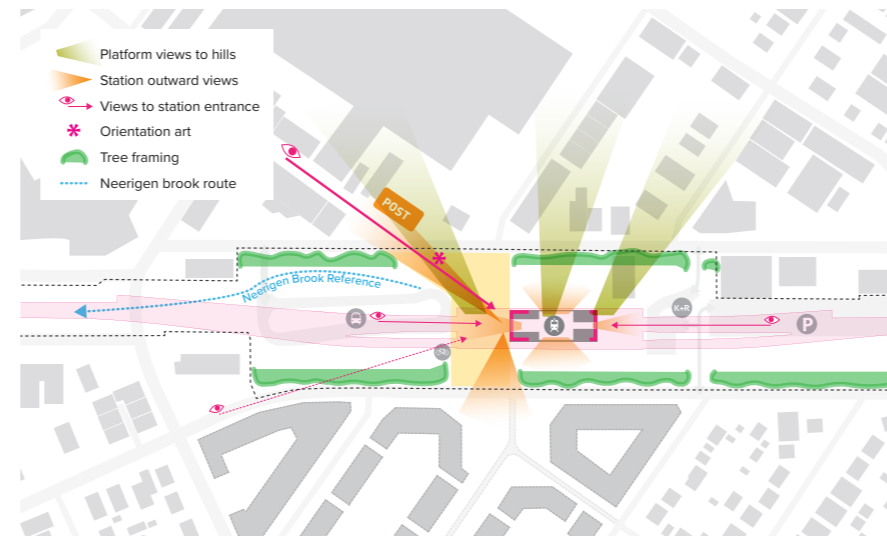


## INTUITIVE WAYFINDING

Clear view lines from and to the station overpass are the base for the intuitive wayfinding, and are supported by comfortable and logical pedestrian routes.

### DESIGN RESPONSE:

- Views from the station platforms to the hills and City provide intuitive ways for public transport users to orientate themselves in the Armadale centre at arrival.
- A de-cluttered Welcome Place provides clear views to all surrounding destinations. A direct viewline to the old post office and Jull St Mall, highlight the City Centre.
- A wayfinding public art work in the viewline of Jull St Mall marks the station location from far within the City centre. Closer by, Jull St Mall has direct views to the station entrance.
- The new landscaped walk to the north, along the rail corridor, provides an easy-to-follow route to Minnowarra Park, the heritage precinct and on to the Hills.
- Views from the surrounding to the elevated rail viaduct indicate the station's location. Closer by, the tree-lined streets open up to the Welcome Place.

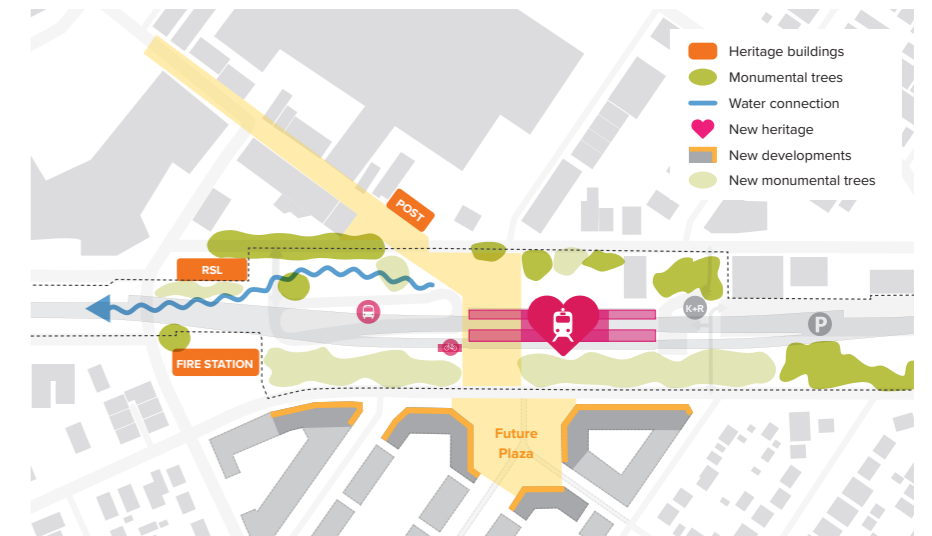


## LIVING HERITAGE

The station precinct acknowledges the town's rich heritage and Noongar culturally significant places. It is a place that reveals layers of history, while also connecting to the future.

### DESIGN RESPONSE:

- First Nations' values are celebrated with integrated art and Gnarla Biddi cultural references embedded into the design of the public realm and public art approach.
- The 'heritage gardens' between the historic RSL and Fire Station seek to reference the history of Armadale, creating interest for Armadale residents and tourists alike.
- Retention of mature native trees and complementing them with seating and story-telling strengthens the heritage tree walk and connection to the natural landscape.
- Visible stormwater capture and public water-art acknowledges the significance of water to Noongar culture and creates links to the Neerigen Brook.
- Designing the Welcome Place as a key pedestrian 'hub' environment that is part of the surrounding streetscape contributes to the future development of residential density west of the station precinct.





# STATION PRECINCT SPACE TYPOLOGIES

Core to METRONET is to deliver technically and operationally well-functioning rail and bus infrastructure within budget. In addition, METRONET has set the goal to achieve more than that. METRONET also aims to deliver easily accessible travel options, communities with a sense of belonging and to unlock development potential around the stations.

To translate these objectives into tangible requirements, the Place Plan is focussing on achieving three touchstones:

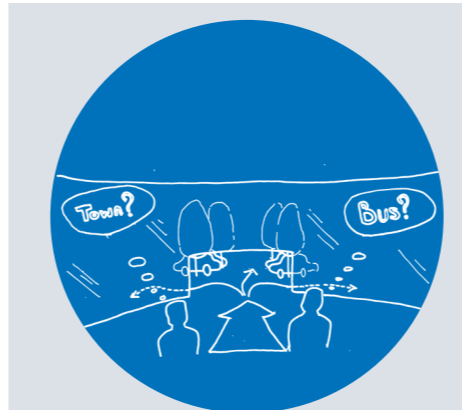
- Smooth and comfortable transfer
- Pleasant and meaningful time spending
- Embedded in the community

These qualities need to be achieved within the localised context of the station infrastructure, including the train station, bus interchange, park and ride, and the public realm types that connect these places to each other and to the surrounding urban network: the welcome place, the streets and the parks and landscape zones.

The plans to the right indicate the layout of these spatial typologies within the Armadale station precinct. The following pages state what experiences these spaces should provide, through defining the Sense of Place that should be achieved through the design, the functioning of the places on Day 1 of delivery and the spatial vibe or aesthetics. The following Public Art Strategy further supports these experiences. The Landscape Concept at the end of this chapter provides a high-level demonstration how the place requirements can be translated into a physical design for the public realm.

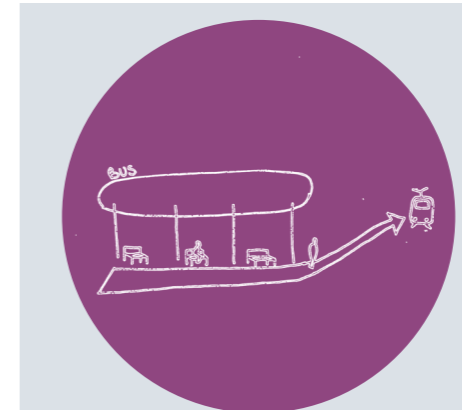
Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/ PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003)

## TRANSPORT BASED SPACE TYPOLOGIES



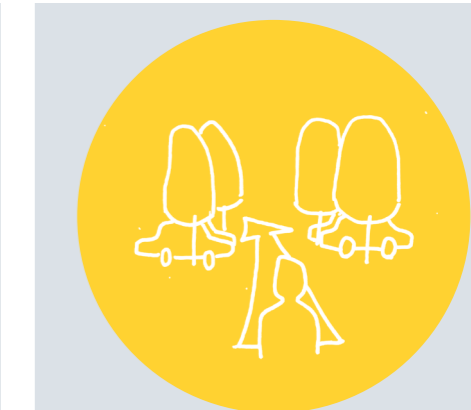
### TRAIN STATION

As people arrive at the train station the experience must be quick and easy. The space needs a design organised around smooth flows and intuitive wayfinding - no searching for where you need to go to, but a space that provides all the clues before relying on signage.



### BUS TRANSFER / STATION

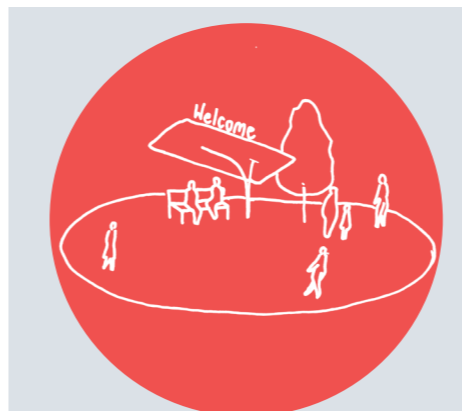
The bus transfer / station need to be easily identifiable for travellers. It needs to accommodate the technical requirements of buses, without compromising the vibrancy of people's places. It should incorporate seating, shade, lighting and weather protection to ensure travellers' comfort and safety.



### PARK AND RIDE

Car parking tends to take up large areas. It should not be a harsh environment, only accommodating large numbers of cars, but also needs provide for pedestrians' comfort and contribute to the surrounding (urban) landscape.

## PEOPLE AND LOCATION SPECIFIC SPACE TYPOLOGIES



### WELCOME PLACE

The welcome place is the core of the station precinct. It is the place where people arrive in the town or suburb, that shows the community's pride. It is also the place where people need to make decisions if they transfer. It needs to be appropriately connected and scaled.



### MAIN STREET

The main street needs to have a direct relationship to the entry of the station precinct. This connection should provide a strong local presence, good accessibility to the station and connection to the Armadale to provide a sense of place. It should be 40km/hr speed limit and appropriate public domain treatments to signal its function.



### CONNECTIONS TO LANDSCAPE

The pedestrian and cyclist linkages need to provide direct, comfortable, safe and prominent pedestrian / cycle connections between station entrances, kiss and ride and the key destinations both within the precinct and the greater surrounds.

FIGURE 29. STATION PRECINCT SPACE TYPOLOGIES

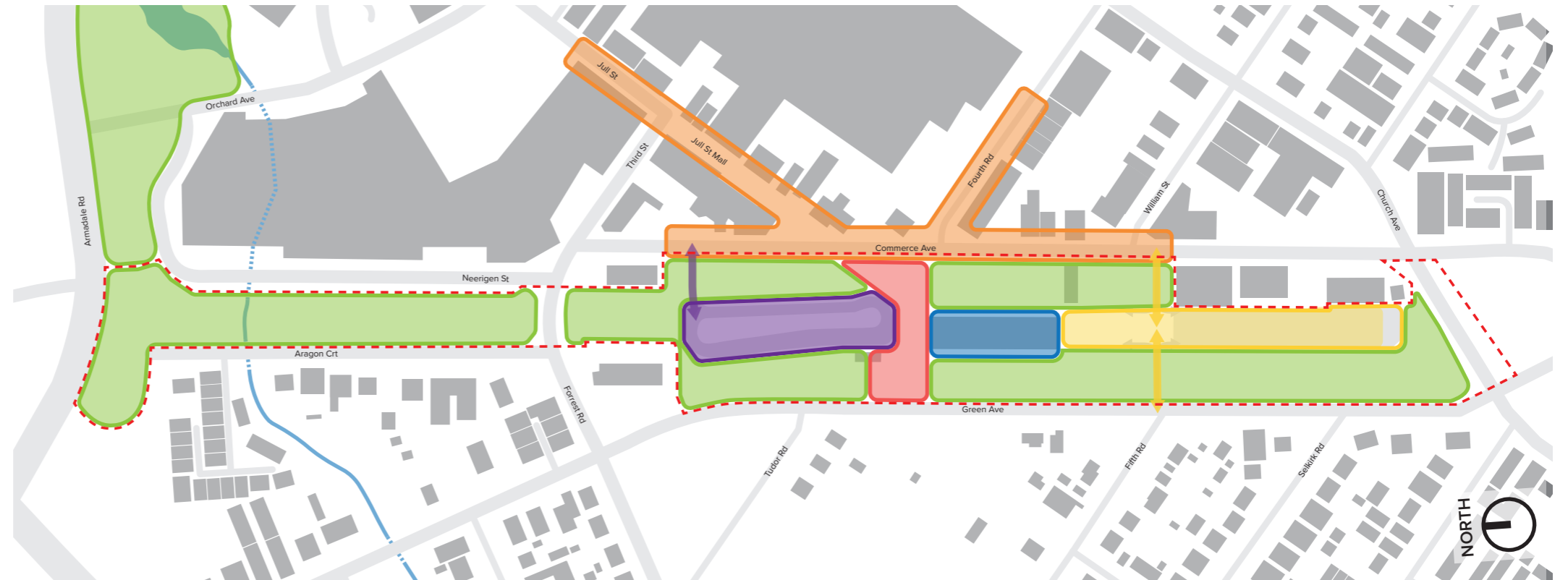


FIGURE 30. PLACE TYPOLOGIES – DAY ONE

**LEGEND**

- Train Station
- Welcome Place
- Main Street
- Connections to Landscape
- Bus Station
- Park and Ride
- Existing buildings
- Planned buildings
- Development potential

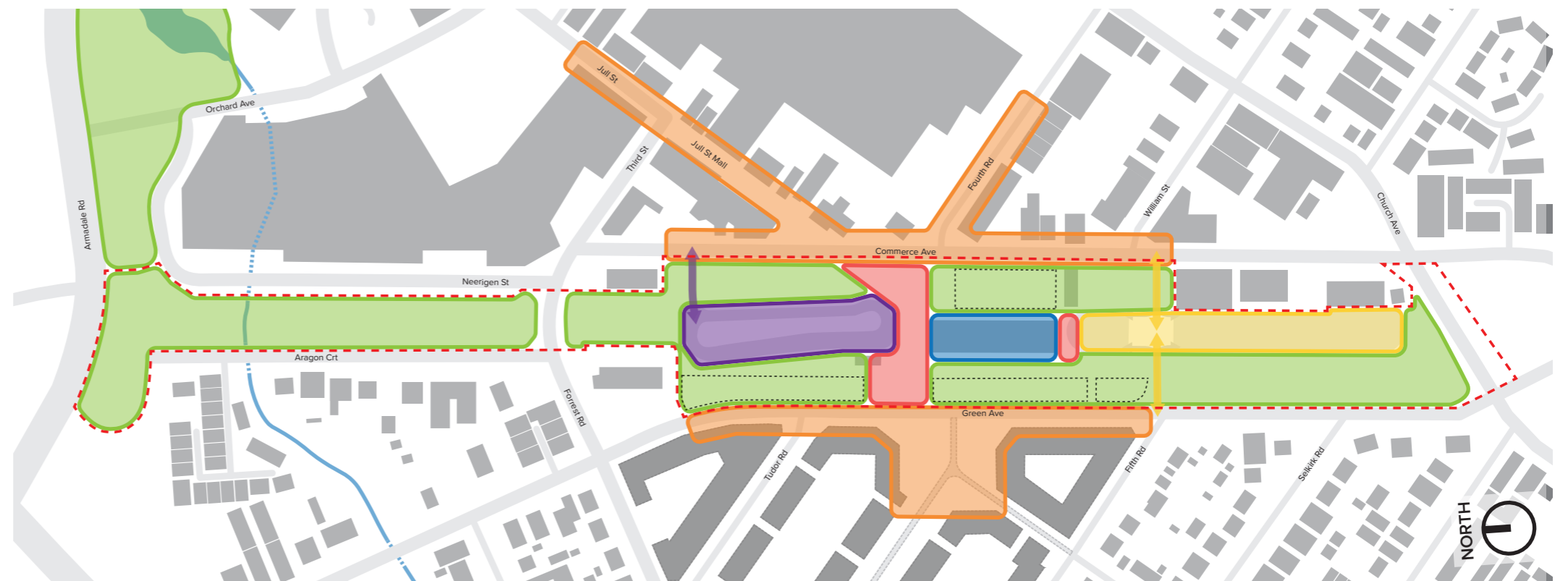


FIGURE 31. PLACE TYPOLOGIES – FUTURE

# PLACE PLAN - DAY ONE

The place plan diagram highlights design considerations and actions to ensure Armadale Station is embedded in its urban and landscape context, from day one and into the future. The following pages demonstrate the intent to be carried through to detailed design.

## LEGEND

	TRAIN STATION		PSP	<b>PLACE ACTIVATION</b> BLACK = EXISTING / WHITE = NEW		STATION AMENITIES
	RAIL VIADUCT		PEDESTRIAN CONNECTION			FOOD & BEVERAGE
	BUILDING (EXISTING)		CENTRE ROUTE			COMMERCIAL
	BUILDING (PLANNED)		BUS STATION			COMMUNITY
	PLAZA		ROAD (EXISTING)			PLAZA ACTIVITIES
	PARKLAND		ROAD (PLANNED)			PARKLAND ACTIVITIES
	WATER		CAR PARK & ACCESS			



FIGURE 32. PLACE PLAN - DAY ONE

- 01 Meeting point and City information.
- 02 Proposed new station kiosk to provide activity and services to public transport passengers and the wider community.
- 03 Relaxation lawn, multi-use and events space with access to power and water.
- 04 Eastern Welcome Place 'hub' with seating, public accessible wifi, natural shade, and meet and greet environment.
- 05 Yarning circle with shade and proposed feature lighting; to be designed in collaboration with Noongar elders and artists.

- 06 Wayfinding art at view line of Jull Street Mall, incorporating public announcements and visitor information.
- 07 Shared space / pedestrian priority crossing linking the Welcome Place to Jull St Mall.
- 08 Revitalisation of Jull St Mall (by others).
- 09 Junior play space with interpretive water theme.
- 10 Youth plaza with amenities such as basketball, skate-able elements, drink fountain and hangout zones.
- 11 Bus station integrated under railway viaduct.

- 12 Educative heritage garden linked to the form and function of the RSL Club.
- 13 Linear parkland linking the station to Neerigen Brook and on towards to Minnowarra Park and the hills, with activities and attractions for residents, City-centre visitors and tourists.
- 14 Shared space and PSP with seating and dog walking options close by.
- 15 Neerigen Brook crossing with seating and more natural POS and water/drainage environment.
- 16 Linear remnant old growth trees with PSP.

- 17 Secure bike storage.
- 18 Western Welcome Place with seating steps, natural shade, accessible ramp and strengthened connection with western residents
- 19 Pedestrian priority crossing over Green Ave.
- 20 Meeting point, City information and Kiss'n'Ride.
- 21 Urban lounge and seasonal gardens.
- 22 Park + Ride carpark.



# PLACE PLAN - FUTURE

## FUTURE WITHOUT DEVELOPMENT IN THE RAIL ZONE

- 23 Widening of the rail viaduct to accommodate additional rail line and eastern station platform.
- 24 Second station entrance.
- 25 Future neighbourhood plaza connecting to Green Avenue and the Western Welcome Plaza, surrounded by mixed-use development.
- 26 Future medium-density residential development.
- 27 Future extension of Cornish Street and Devonshire terrace.
- 28 Children's adventure playground (subject to agreement between the State and Local Governments).

### LEGEND

	TRAIN STATION		BUS STATION
	RAIL VIADUCT		ROAD (EXISTING)
	BUILDING (EXISTING)		ROAD (PLANNED)
	BUILDING (PLANNED)		CAR PARK & ACCESS
	PLAZA	<b>PLACE ACTIVATION</b> BLACK = EXISTING / WHITE = NEW	
	PARKLAND		STATION AMENITIES
	WATER		FOOD & BEVERAGE
	PSP		COMMERCIAL
	PEDESTRIAN CONNECTION		COMMUNITY
	CENTRE ROUTE		PLAZA ACTIVITIES
			PARKLAND ACTIVITIES

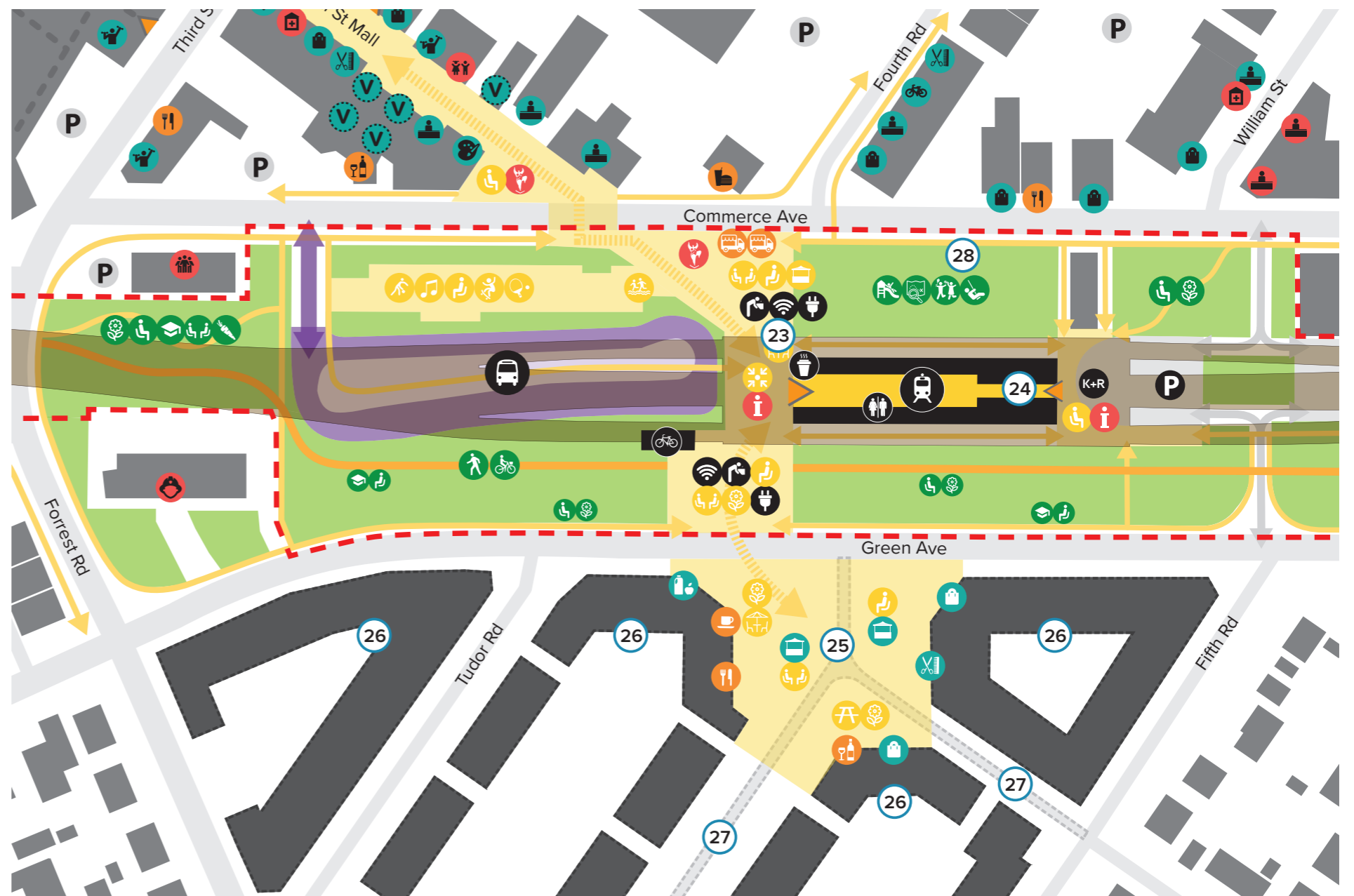
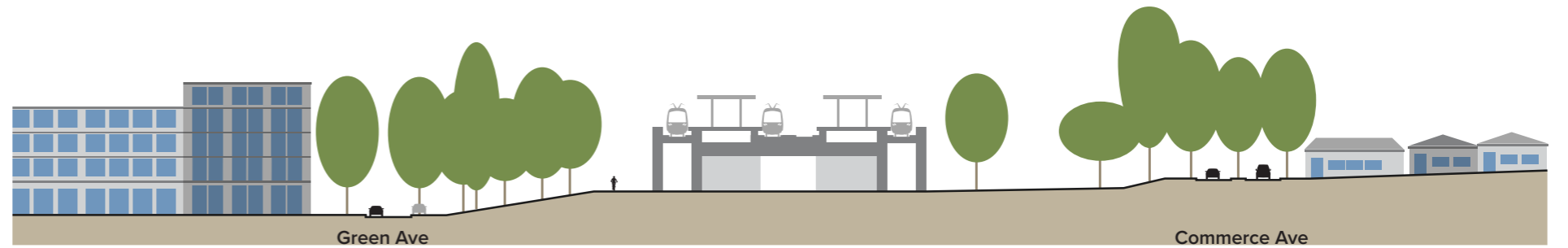
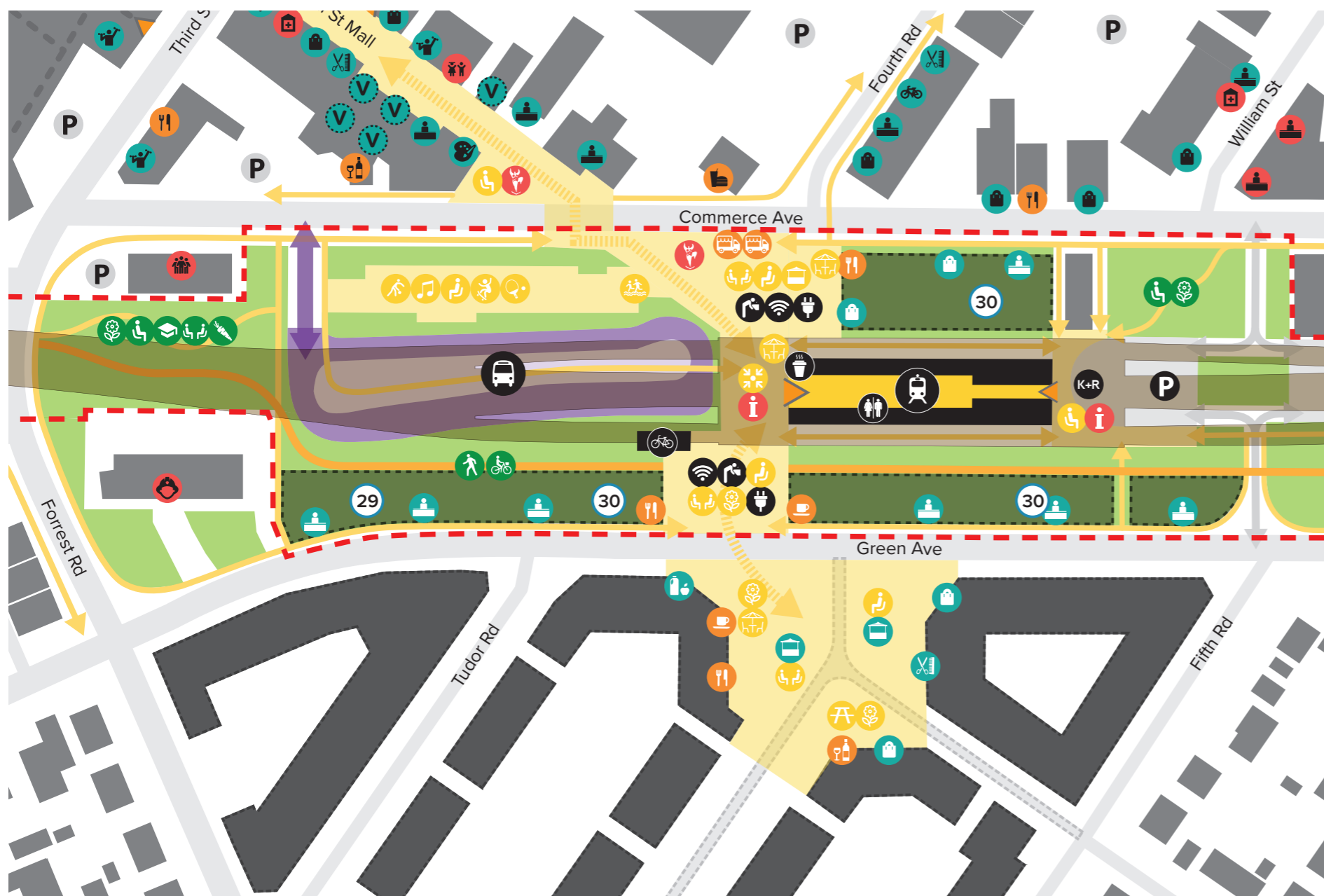
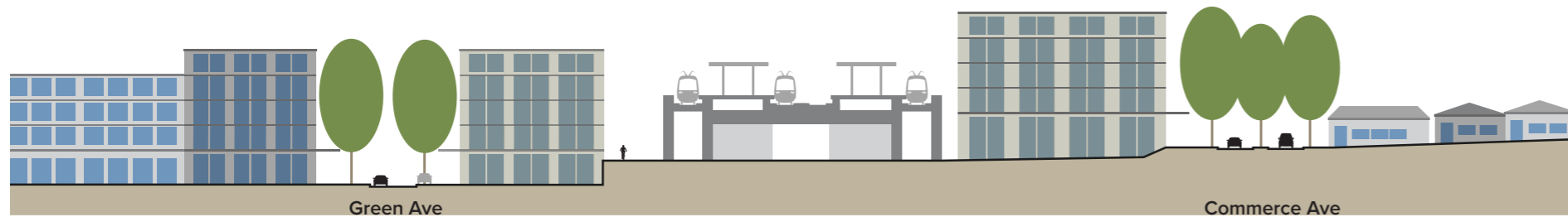


FIGURE 33. PLACE PLAN - FUTURE



### FUTURE WITH ADDITIONAL DEVELOPMENT IN THE RAIL ZONE

- 29 Future development possibility to frame Green Avenue with multi-story buildings, in accordance with the Armadale City Centre West of Railway Precinct Structure Plan.
- 30 Future development possibilities to frame Green Avenue, building on the Armadale City Centre West of Railway Precinct intend and frame the Western Welcome Plaza (subject to detailed design at that time if pursued)
- 31 Future development opportunity to frame the Eastern Welcome Plaza and Commerce Avenue with active frontage (subject to detailed design at that time if pursued).

### LEGEND

	TRAIN STATION		BUS STATION
	RAIL VIADUCT		ROAD (EXISTING)
	BUILDING (EXISTING)		ROAD (PLANNED)
	BUILDING (PLANNED)		CAR PARK & ACCESS
	DEVELOPMENT OPPORTUNITY	<b>PLACE ACTIVATION</b> BLACK = EXISTING / WHITE = NEW	
	PLAZA		STATION AMENITIES
	PARKLAND		FOOD & BEVERAGE
	WATER		COMMERCIAL
	PSP		COMMUNITY
	PEDESTRIAN CONNECTION		PLAZA ACTIVITIES
	CENTRE ROUTE		PARKLAND ACTIVITIES

FIGURE 34. PLACE PLAN – FUTURE WITH DEVELOPMENT OPPORTUNITIES

# DAY ONE STATION WELCOME PLACE

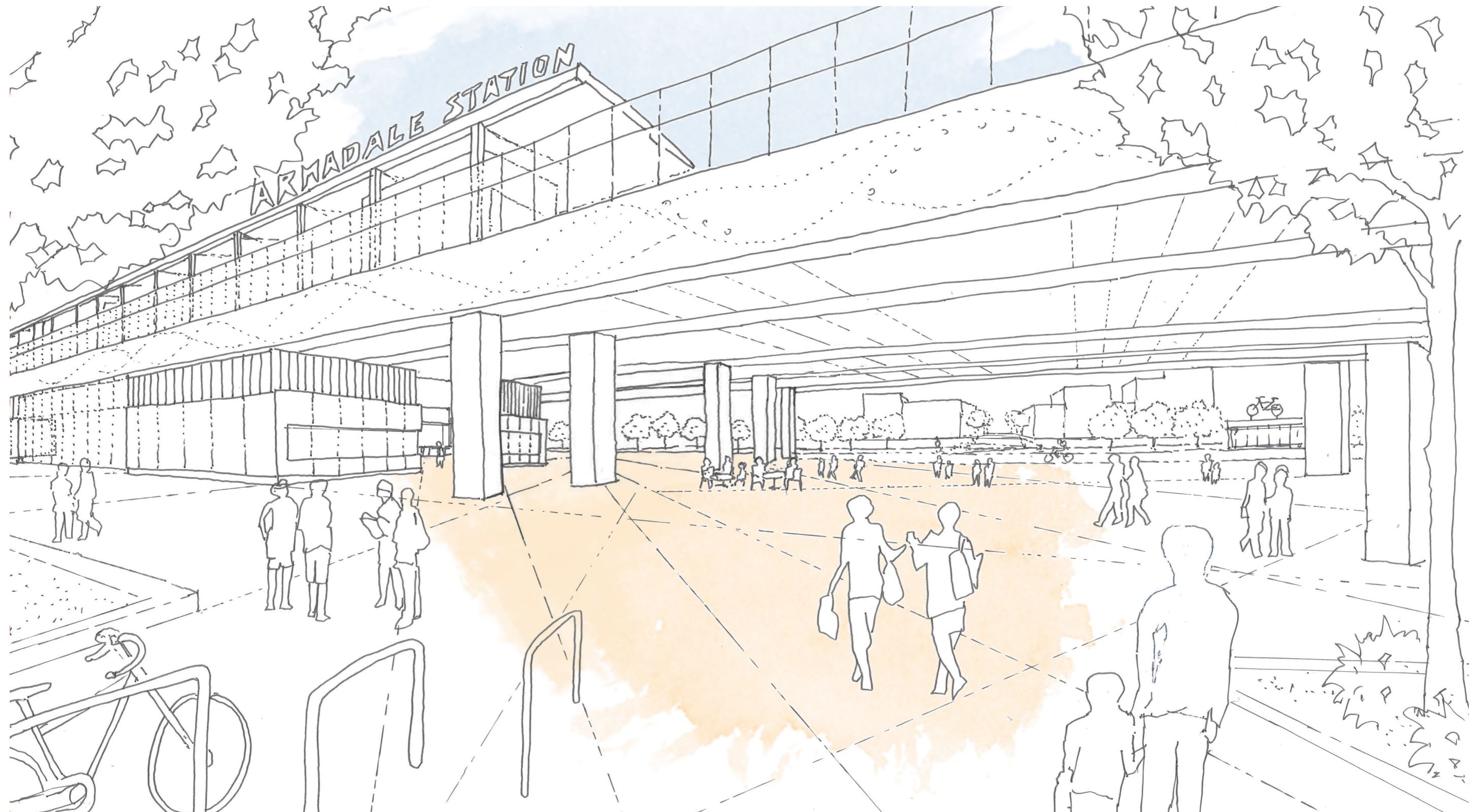


FIGURE 35. DAY ONE STATION WELCOME PLACE IMPRESSION

# DAY ONE JOURNEYS AND ACCESSIBILITY

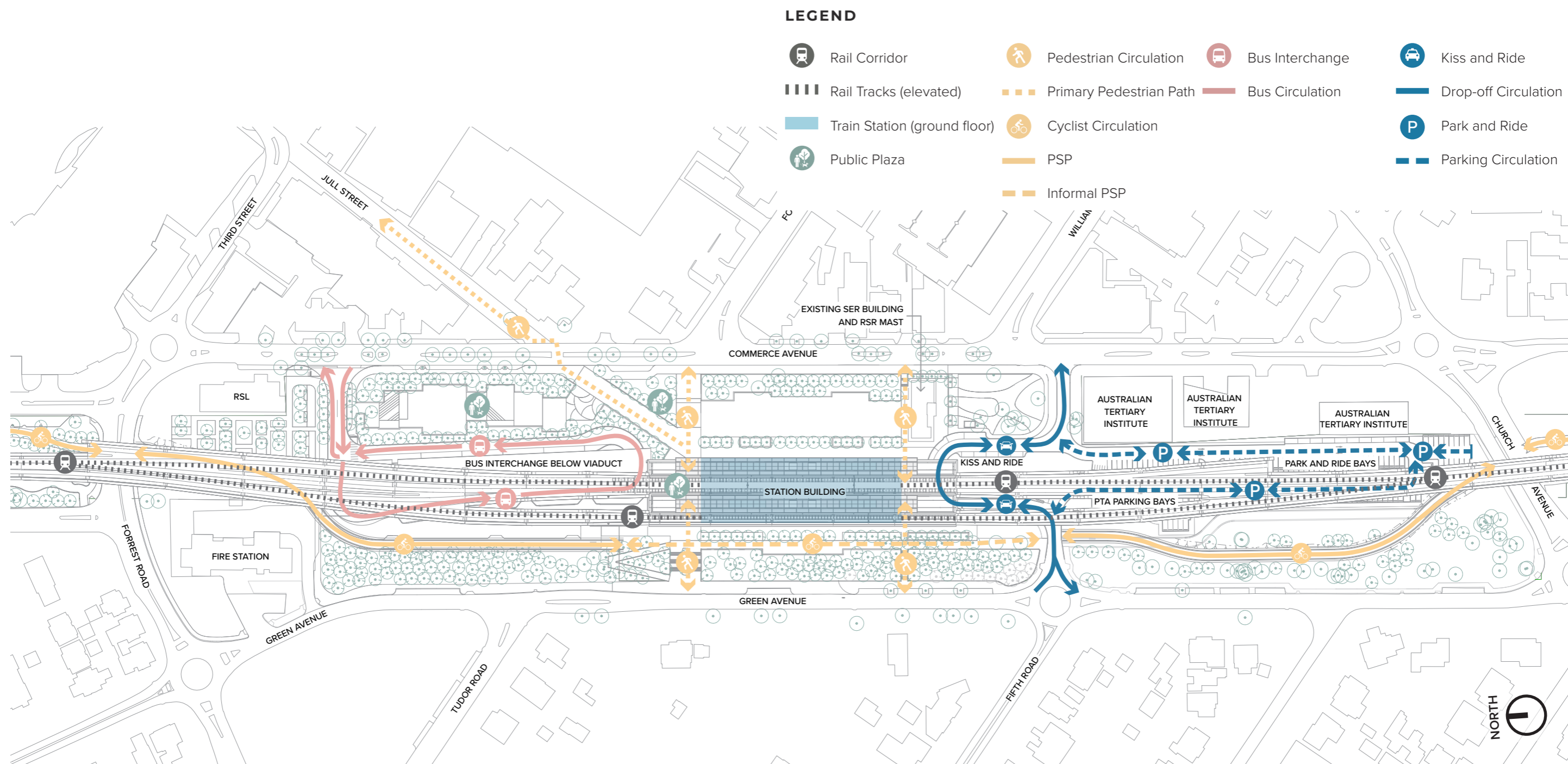


FIGURE 36. DAY ONE JOURNEYS AND ACCESSIBILITY





# 07

## LANDSCAPE

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# LANDSCAPE PLAN

## DESIGN PRINCIPLES

This Landscape Design identifies high-level opportunities that will be further developed in the next stage of works for the BRE project.

The landscape design approach seeks to utilise the viaduct heights to allow for previously disused land to be reintroduced for community use as functional and safe recreational spaces. The goal is to encourage as many people to use these spaces as possible by creating a community-sought destination.

This also presents good passive surveillance due to its occupancy to surrounding streets and surrounding spaces for local residents, workers and the broader visiting community. The aim, critically, is not to hide the station through landscape but to complement its architectural form, to integrate with the existing surrounds and seek to engage objectives within the Urban Forest Strategy provided by the City of Armadale.

There needs to be provision for clear sight lines through the station grounds to encourage adjacent businesses and developments to respond to the precinct by opening out onto, rather than turning away and internalising their active edges.

The masterplan on the following page illustrates the station landscape design concept. From the station entry to the Jull Street Mall (east) and to Green Ave (West), the areas around the station should provide a generous arrangement of seating walls, turfed areas and small play space to encourage occupancy. The concept explores the development of a place to meet friends or to simply grab a bite to eat and 'hangout'. It also explores opportunity for small community events, fairs and food trucks. Though limited by infrastructure offsets, such as the rail viaduct, the placement of trees in and about the station is explored also in order to maximise natural shade and amenity.

The station precinct's public realm design focuses on providing a strong welcoming experience, a place to stay, meet, gather for events and provide linkages east/west and north/south through the landscape.

## FIVE KEY DESIGN PRINCIPLES



### 01 CLEAR & INTUITIVE

I know where I'm going.  
A generous and clear groundplane with an enhanced sense of arrival. Strengthen east/west connectivity



### 02 SAFE & WELCOMING

I feel safe. I can stay or just pass through at night or day.  
Clear connections from beyond the precinct. Clear sightlines and lighting to enhance feelings of safety.



### 03 MULTI-FUNCTIONAL

Flexibility of the public realm to allow for a number of different uses & functions.



### 04 SIMPLE & ROBUST

Simple, robust and timeless treatments. Simple spaces provide opportunities



### 05 CULTURALLY INCLUSIVE

Spaces that promote social, cultural and knowledge exchange.

## THREE LINEAR PROGRAMS

### 01 COMMUNITY

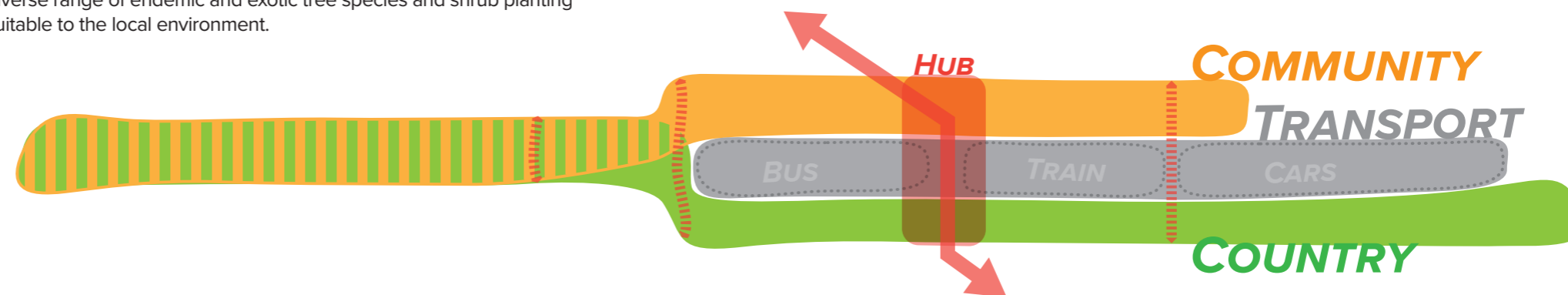
Via an active park edge to the east of the station connecting with the Jull St Mall and City Centre. It features a generous multi-use urban area, seating throughout, turfed areas, junior play space, youth active area, diverse range of endemic and exotic tree species and shrub planting suitable to the local environment.

### 02 TRANSPORT

A consolidated use of space linking all sources of transport (Bus, Rail, Car, Motorcycle and Bicycle) and Station accessibility.

### 03 COUNTRY

Opportunity to provide a strong urban forest edge and connecting 'green link' through the precinct.



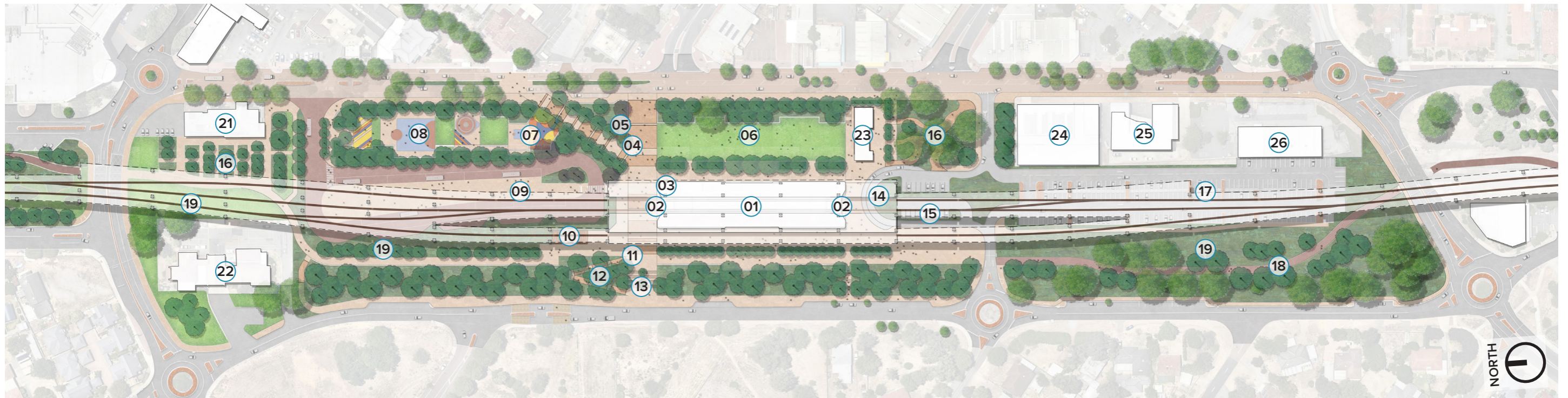


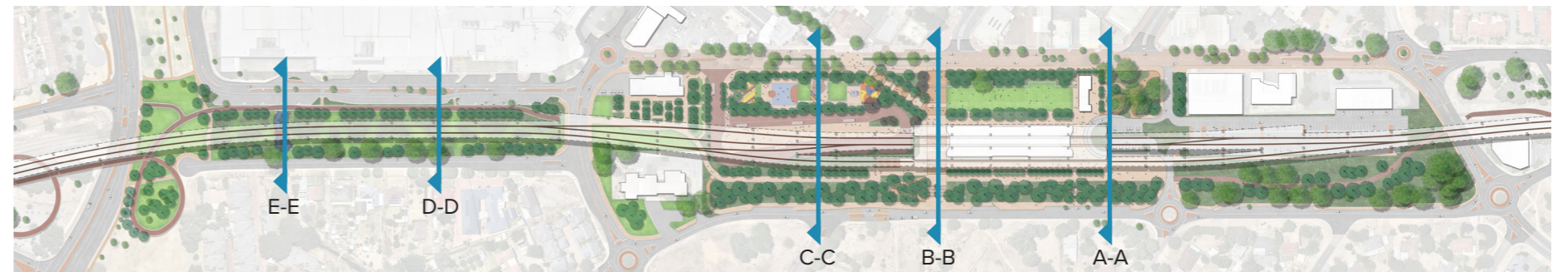
FIGURE 37. LANDSCAPE MASTER PLAN - SOUTH OF FORREST ROAD



FIGURE 38. LANDSCAPE MASTER PLAN - NORTH OF FORREST ROAD

- |                                   |                          |  |
|-----------------------------------|--------------------------|--|
| 01 Train Station                  | 11 Welcome Place West    | 21 RSL                                     |
| 02 Entrance to Station            | 12 Ramp Access           | 22 Old Fire Station                        |
| 03 Kiosk                          | 13 Stair Access          | 23 Station Signalling Equipment Room (SER) |
| 04 Welcome Place East             | 14 Kiss & Ride           | 24 Australian Tertiary Institute           |
| 05 Yarning Circle                 | 15 Staff Parking         | 25 TAFE                                    |
| 06 Gardens/ Turf/ Multi-use Areas | 16 Urban Lounge          | 26 Polytechnic West                        |
| 07 Junior Playspace               | 17 Public Parking        |  |
| 08 Youth Active Area              | 18 Principle Shared Path |  |
| 09 Bus Terminal                   | 19 WSUD                  |  |
| 10 Bicycle Shelter                | 20 Neerigen Brook        |  |

# SECTIONAL STUDY



SECTION LOCALITY PLAN

Sections are also provided on subsequent pages to highlight how the design can respond to levels challenges from east to west, and the scale of spaces under the viaduct where these interact with the welcome place, park and ride and station buildings/infrastructure.



FIGURE 39. SECTION A-A

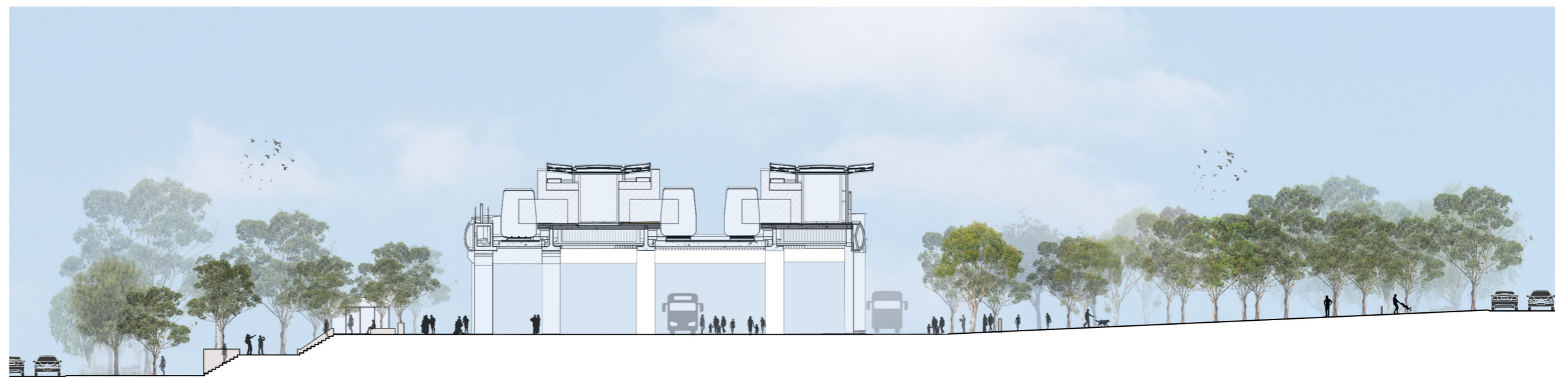


FIGURE 40. SECTION B-B



**FIGURE 41. SECTION C-C**



**FIGURE 42. SECTION D-D**



**FIGURE 43. SECTION E-E**

# TREES AND SHADE

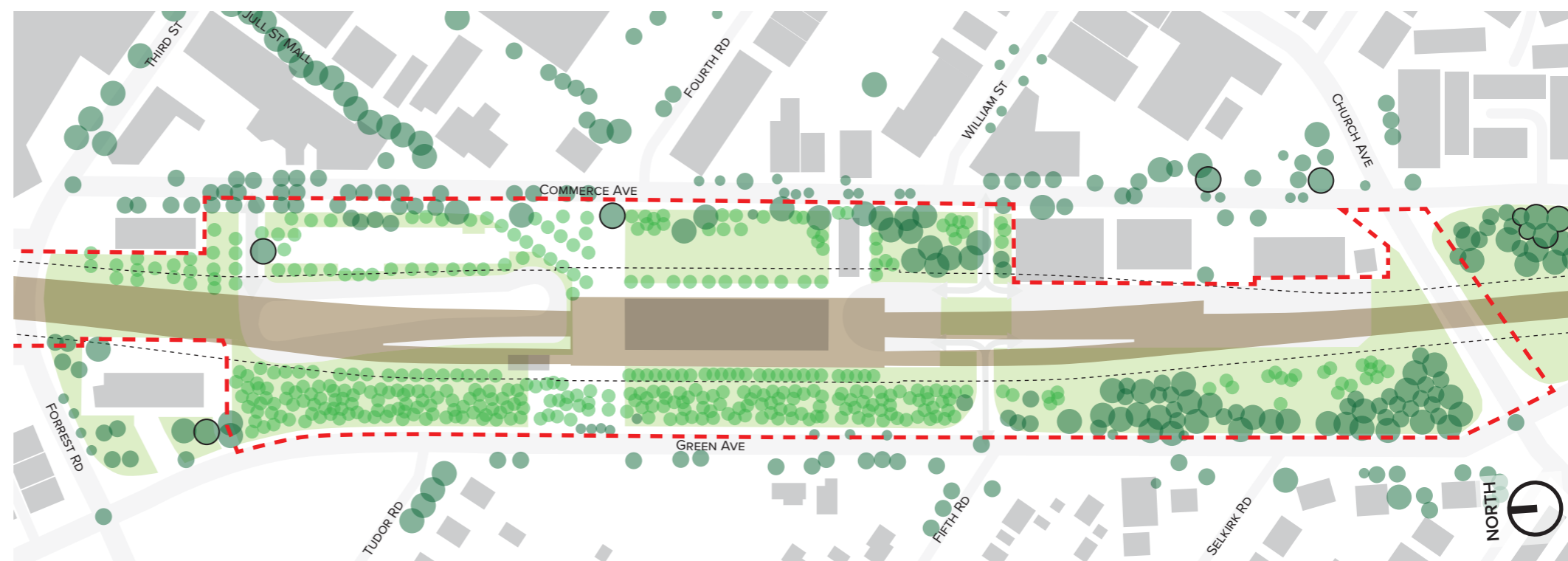
The retention of existing mature trees is essential to ensuring continuity of the wider habitat and ecosystem of Armadale whilst reducing the need for irrigated areas.

Trees with Heritage status are to be protected and celebrated as part of the context of site.

The proposed trees will be strategically located to increase shade, canopy coverage and reduce the urban heat island effect from the proposed infrastructure. They will contribute to the overall look and feel of the site.

Tree selection, where appropriate, should be tall and linear with a connecting canopy that provides abundant natural shade. The aim should be to soften views to the overhead railway power lines, while not deterring attention from the station's building, its entry and surrounding public spaces.

Suitable plants may need to be exotic to compliment native selections and the local environment.



**FIGURE 44. TREES AND SHADE PLAN - SOUTH OF FORREST ROAD**



**FIGURE 45. TREES AND SHADE PLAN - NORTH OF FORREST ROAD**

## LEGEND

- Trees to be retained
- Heritage Tree Walk trees (to be retained)
- New tree
- Planted landscape contributing to cooling
- Rail viaduct shade (Day One)
- Tree-limitation zone due to rail infrastructure

**RETAINING MONUMENTAL TREES**



Sugar Gum in the current north-east carpark



Sugar Gums and Marri trees at the bus entrance



Monumental trees between the rail line and fire station

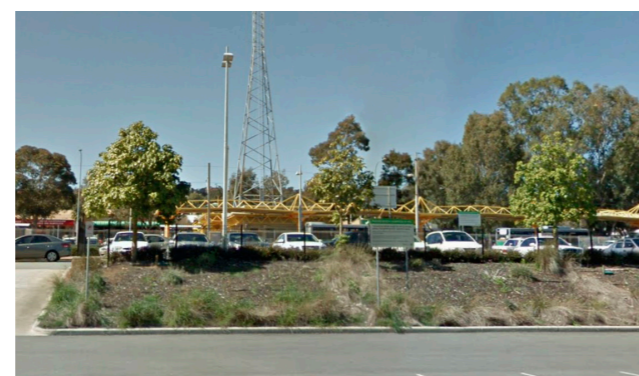


Flooded Gums and Marri between Aragon Court and the rail line

**RELOCATING EXISTING TREES**



Jacaranda trees in the current train station forecourt



Platanus Acerifolia trees in the current median of the western carpark

**OPPORTUNITIES TO FURTHER INCREASE TREE CANOPY AND REDUCE URBAN HEAT**



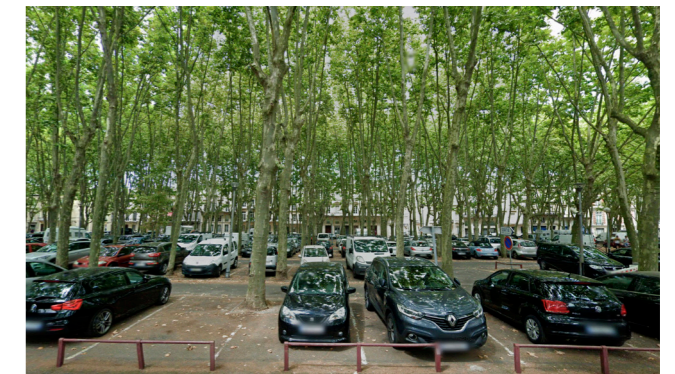
Dense tree canopy providing shade and cooling to plazas



Dense tree planting at car parking areas



Dense tree planting at construction to realise urban cooling (example Southbank Blvd, Melbourne)



Shaded parking allowing drivers to return to a cooler car (example: Place des Quinconces, Bordeaux)

**OPPORTUNITIES TO IMPROVE GROWING CONDITIONS IN PAVED AREAS**



Permeable paving improve growing conditions, allow for stormwater infiltration and reduce urban heat



Bardi Lane, OneOneFive Hamilton Hill, Cockburn permeable paved parking bays around new trees



# LANDSCAPE CHARACTER - HARDSCAPE

The consolidation of hardscape materials and fixture selection ensures continuity across the whole site. It takes into account the site aesthetic, the needs of the end user, and the operational and ongoing maintenance requirements.

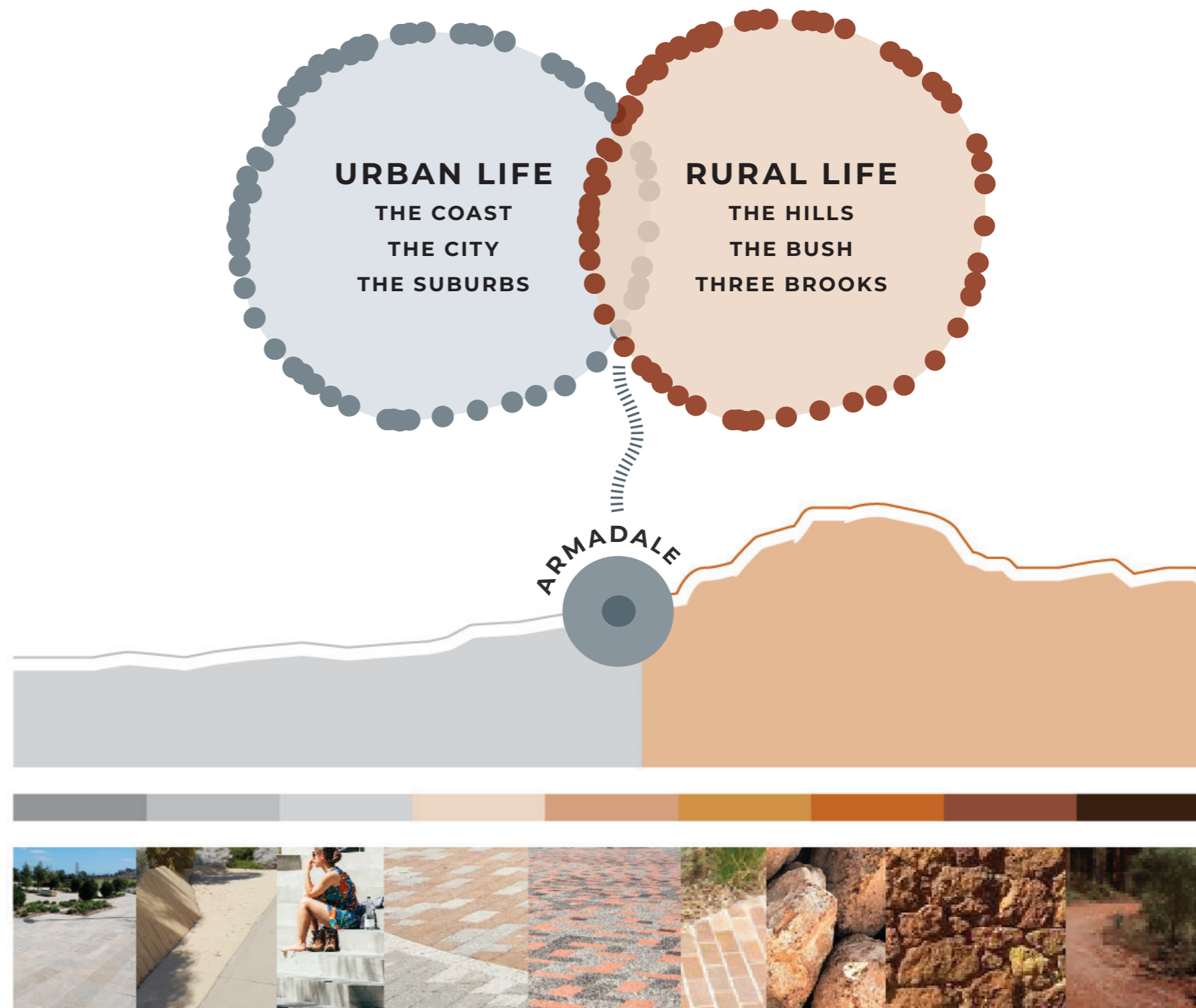
A palette has been selected to be implemented site wide in order to complement the overall identity and feel of the Armadale Rail Station. Aim is to demonstrate a relationship to both the natural landscape and historic and new town centre.

## MATERIAL PALETTE

The material palette references the location of the Armadale Station being at the nexus of several edges and intersections:

- The Swan Coastal Plain and the Darling Scarp;
- The intersection of major transport routes - road and rail line; and
- The Coast, City and Urban life and the Hills, Scarp and rural life.

A key theme is the meshing or intertwining of the underlying soils and geology of the Swan Coastal Plain, the Darling Scarp and Hills area. It also builds on the historic links in the area with the colour and textures of the local architecture and flora.



## SURFACES

The material palettes reference both the underlying soils and geology of the local area, as well as the colours and textures from the local architecture and flora in the area. The soils and geology are a mosaic of red gravels, yellow and brown clays and sands, and red brown laterites.

This mosaic is represented in a random pattern of unit paving which melds the laying style in to a more contemporary design. This melding of the historic and contemporary reflects the sites current location as the nexus of the rural and suburban zones of Perth.

Surface materials:

- Trafficable pathway option - unit paver with varied colour and tones with an opportunity to use recycled bricks where appropriate
- Trafficable pathway option - exposed aggregate concrete which reflects the broader colour palette

## SEATING

Opportunities for seating are located throughout the Armadale Station landscape including along the Welcome Plaza, Western Entry, Youth Plaza and Linear Parkland (to be detailed). Simple and robust seating supports activities and aids circulation.

Seating and decking materials:

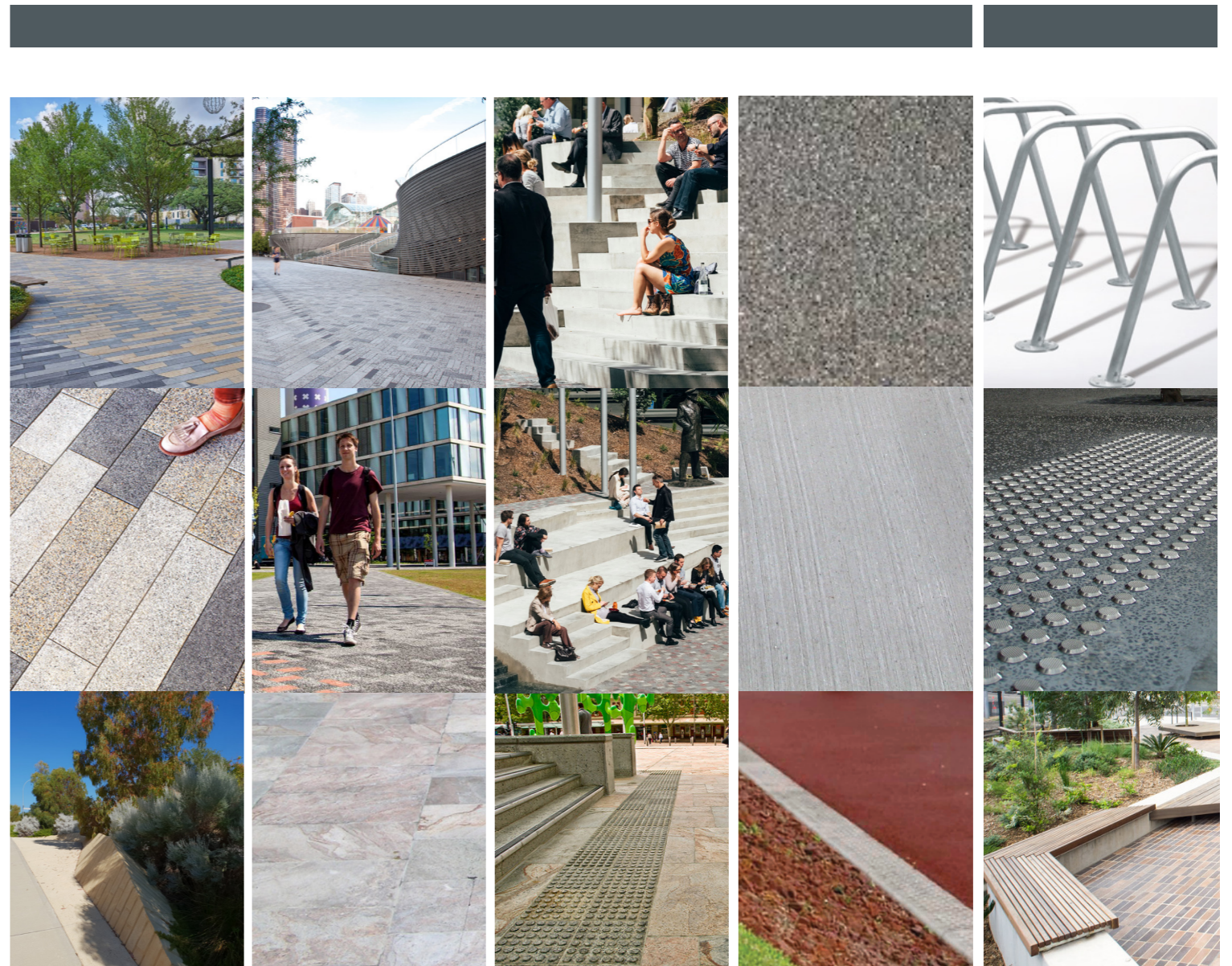
- Decking - seasoned, hardwood timber decking
- Seating walls - concrete with varied tones to match the broader palette and seating with back and arm rests

## PLAY SPACES

The youth and play spaces seek to provide an all ages playground with seating and turfed areas. It is to provide an inclusive community space in the centre of town.

## PAVING TREATMENTS

## DETAILS



# LANDSCAPE CHARACTER - SOFTSCAPE

The planting character references the 'nexus' of the Swan Coastal Plain and Darling Scarp and Hills landscape characters coming together at the station. The use of strategically placed deciduous trees reinforce the historic and contemporary character of Armadale.

The use of tree species aligns with the City of Armadale's 'Urban Forest Strategy' to further reinforce the broader landscape narrative and character of Armadale and the surrounds.

## WATER SENSITIVE URBAN DESIGN (WSUD)

Water Sensitive Urban Design (WSUD) is key to providing effective ways to minimise impacts of the rail development on waterways within the site. The site will provide treatment of storm water and overland water flow pollutants onsite for treatment via vegetated swales and planting. The design and implementation of WSUD systems will be jointly coordinated with Civil, Hydrology and Landscape. These will be reflected in our design drawings noting size and volume of treatment areas, choice of filtration media and selection of specific plant species for the job.

## URBAN FOREST EDGE

The City of Armadale has been foremost in understanding that with a rapidly growing population and urban development there is a reduction in large areas of native vegetation and loss of private open space. The vision of the City of Armadale Urban Forest Strategy aims "to strengthen a diverse landscape character through allocating suitable tree diversity, be proactive with landscape planning while showcasing the City's botanic heritage and to distinguish an expanding 'tree-change' destination from the existing Perth vernacular."

The Place Plan acknowledges the City's aspiration and features along Green Avenue an Urban Forest edge that links existing tree-scapes along the north/south aspect as well as maintaining ecological links through the Armadale city centre.



DJILBA

MAKURA

DJERAN

KAMBARANG

BIRAK

BUNURU



Building on the 'Bush Plaza' typology of Beenyup Station a selection of flowering feature endemic plants is utilised. The arrangement of the planting and flowering times provides a succession of colour over the seasons and reflects the indigenous 'Six Seasons' with specific plants selected to indicate the different seasons.

The selection of plant species should be prefaced with the fact there is no 'perfect' tree. The selection of either endemic (ie. trees that are specific to a particular local area), 'native' (ie. grow naturally in Australia), or exotic (ie. origin outside of Australia) should be balanced with the knowledge that urban sites are radically different to the natural spaces that many endemic and native trees have evolved.

Locating the right plant, in the right location for the right reason are underpinned by the following considerations:

- higher average temperatures from hardstand, carparks and buildings;
- sightlines, views and safety for users;
- mature size of planting;
- less permeable surfaces and compacted soils and root disturbance from excavation and underground services;
- canopy shading and solar requirements;
- maintenance required e.g. tree litter , pruning, root management etc.
- longevity and structural integrity of plant species;
- spaces above and below ground for plant establishment;
- aesthetic and 'sense of place' selections;
- endemism of species where suitable and appropriate; and
- clearance for vehicles, pedestrians and cyclists.

# INVESTMENT LEVELS

Not every area in the public realm of the station precinct needs the same level of investment.

Some areas are more important for people than others; comparable to somebody's house, where its residents spend more attention to the living room than the laundry room. Important areas present pride, showcase the place, and are used more intensely by people, both regular users and visitors. Their maintenance levels are higher too. Other areas also need to function well, but can do with less ambition. The investment levels relate to budgets per square metre for capital works and for maintenance.

In general, four investment levels can be formulated for urban areas – premium, high quality, standard and basic. For the station precincts, the 'premium' level might be too ambitious. The other three levels are generally applicable and the locations within the Armadale Station precinct that each should be applied to is as follows:

- LEVEL 2 – HIGH QUALITY: Welcome Place
- LEVEL 3 – STANDARD: Streets, parks and bus transfer station
- LEVEL 4 – BASIC: Car parking

## NOTES ON SQUARE METRE RATES

The rates are to be used as benchmark indicators and can be used for budget planning of urban realm spaces. Using the rates in relation to competitive market bids is highly disputable, since the quality of the design and finishes costed in those bids might not be the comparable.

The square metre rates indicated in this section are benchmark rates for the construction of all surface finished – hardscape and softscape, including street furniture. Demolition and site preparation works, utility services, architectural features, preliminaries, professional fees, contingencies and escalations are not included.

Various factors have a direct influence on the square metre rates. The ratio between hardscape and softscape is an obvious one. A city park with lots of turf is cheaper to construct than a city square with the same importance in the city's users. Other important factors are the special features; the complexity of custom-made elements (water features, public art, feature lighting, etc.) has a big impact on the square metre rate.

The indicated rates are based on the price levels of 2020.



## LEVEL 2 – HIGH QUALITY

**\$400–\$500 / SQM**

For instance: • Town Plaza, Albany• Curtin Main Street, Curtin University Bentley Campus• Cecil Avenue, Canning City Centre

Typically, finishes are higher quality unit pavers, in-situ concrete with exposed aggregate or intricate patterning. Seating and retaining walls in concrete finish with some feature details. Selection of high-quality off-the-shelf furniture elements. Select areas with feature lighting, shade structures, lighting and public art. Extensive soil improvement, medium density planting (min 140mm). Generally 200lt to 500lt trees. Permanent irrigation to all.



## LEVEL 3 – STANDARD

**\$200–\$300 / SQM**

For instance: • The Parkway, Ellenbrook• Scarborough Beach Road, Mount Hawthorn• Curtin Guild Court, Curtin University• Seppings Parade Plaza, Lakelands Shopping Centre

Typical finishes are in-situ concrete, black/red asphalt and small size basic concrete unit pavers for drivable spaces – brick paver and unit paver footpaths, limited patterning. Off-the-shelf street furniture, no retaining wall and standard lighting. A basic level of soil improvement to all garden areas. A medium density 140mm planting size or high-density tubestock. Generally 100lt to 200lt trees and limited rolled on turf areas – permanent irrigation to all.



## LEVEL 4 – BASIC

**\$100–\$150 / SQM**

For instance: • Standard suburban street• Basic arterial road• Car parks

Typically treatments are black asphalt for drivable surfaces; grey concrete extruded kerbing, broomed concrete footpaths – no street furniture besides incidental street light. Use of on-site soil, limited soil improvement, tube stock size planting, mulch treatment and turf seasonally mowed only. Trees of 45lt to 100lt. Permanent irrigation to trees only and tubestock to be winter planted.

**TABLE 6. INVESTMENT LEVELS FOR PUBLIC REALM**

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003).

Notes:

- The investment levels have a hierarchy according to function and use.
- High Quality areas are focused around the train station building, welcome plaza and the interface between Commerce Avenue and Green Avenue.

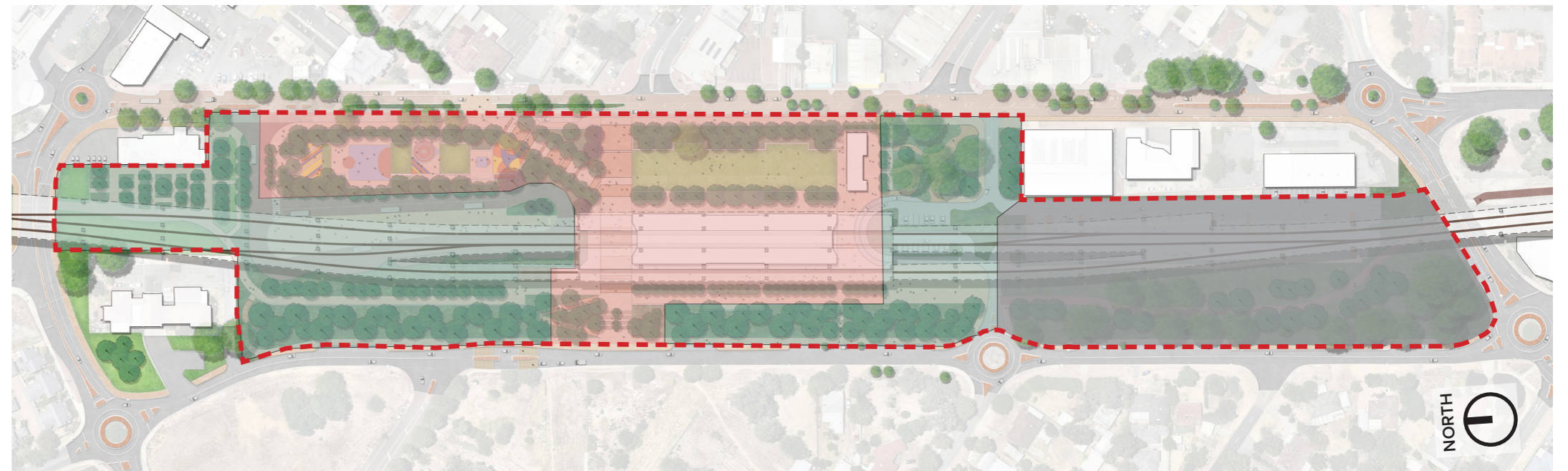


FIGURE 46. INVESTMENT LEVELS PLAN – SOUTH OF FORREST ROAD

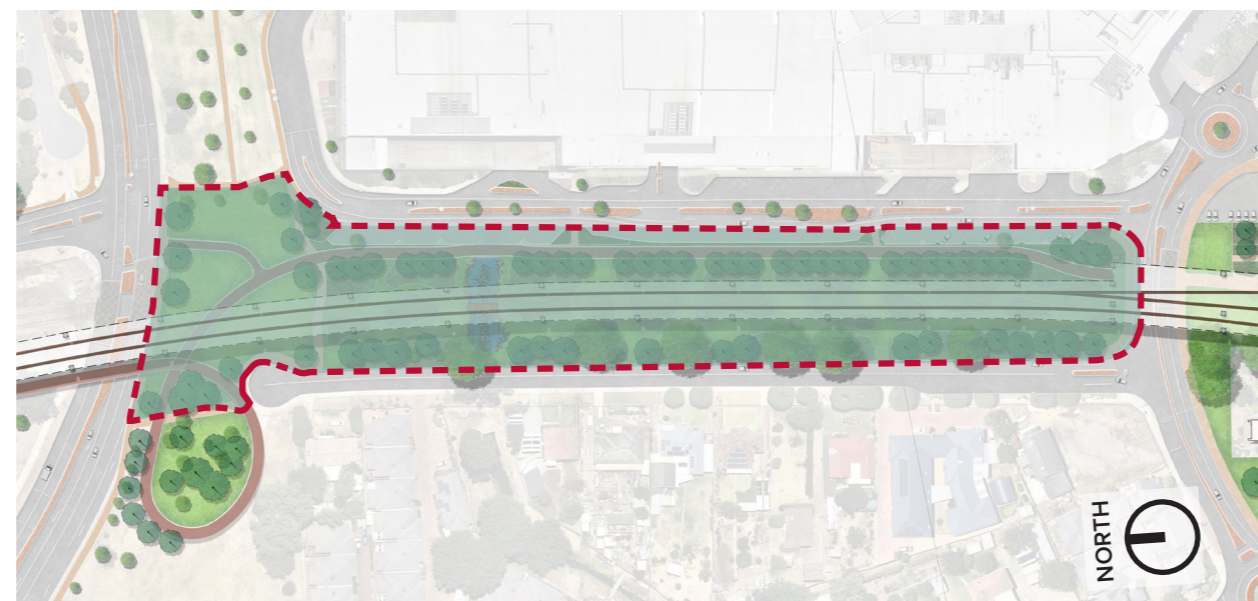


FIGURE 47. INVESTMENT LEVELS PLAN – NORTH OF FORREST ROAD

**LEGEND**

- Landscape Extent of Works
- Level 2 - High Quality
- Level 3 - Standard
- Level 4 - Basic



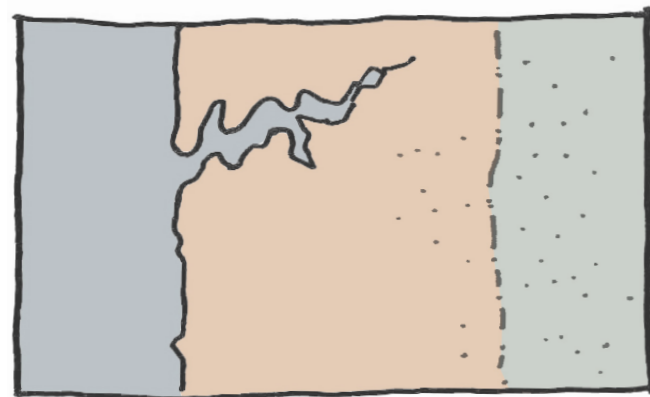
# 08

## ARCHITECTURE

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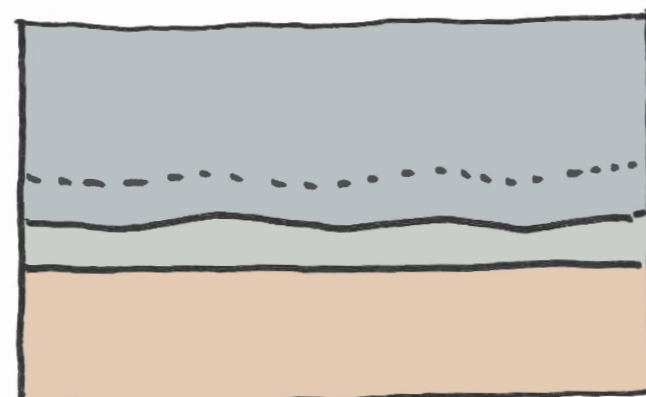


# LINE-WIDE DESIGN NARRATIVE



## DARLING SCARP

The Darling Scarp forms a distinctive presence in the Perth landscape. This low escarpment running north-south to the east of the Swan Coastal Plain leaves a powerful geological mark which has shaped by wind and water over millennia the entire area. The design takes inspiration from this natural phenomenon using the themes of horizontal lines and water which form part of the design narrative.



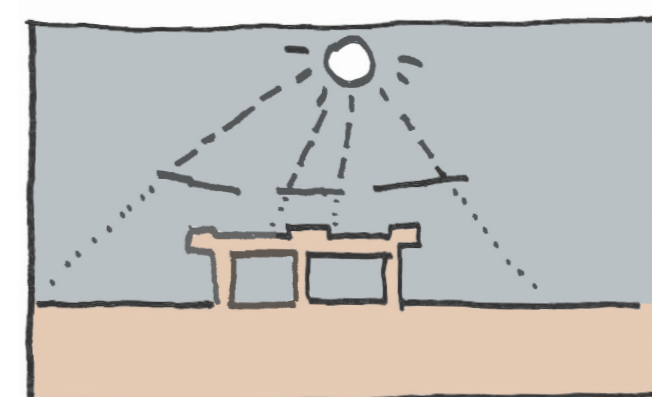
## HORIZONTAL LINES

The characteristics of Western Australia especially around south-east region is dictated by the strong horizontality of lines. This sense of vastness is breathtaking, and the linearity is visible looking at the horizon where the sky meets the land. This horizontality is also celebrated by the layers of sedimentary formation showing a variety of different geological layers. Our Station Precincts design reference this beautiful natural formation celebrating the horizontal lines of the Station buildings and the elevated rail and platform canopy.



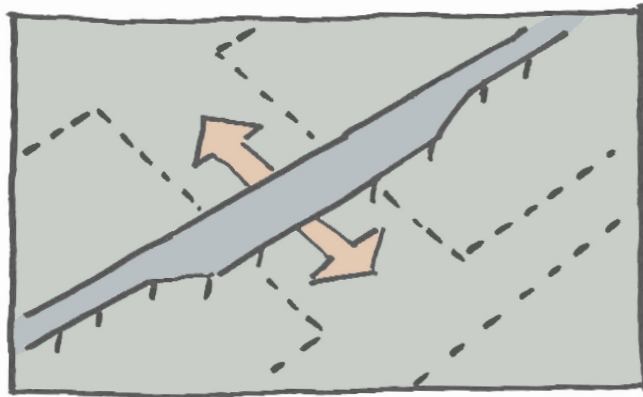
## LANDSCAPE AND PATTERN

The natural pattern of the landscape informs the Station architecture and surrounding public realm. The existing trees in the foothills of the Darling Scarp, the rock formation, the water and wind, all form this natural pattern where our proposed design borrows those lines for the nature, and in return it applies that to shape the architecture, the paving, the garden beds, and the selection of the materials throughout the site.



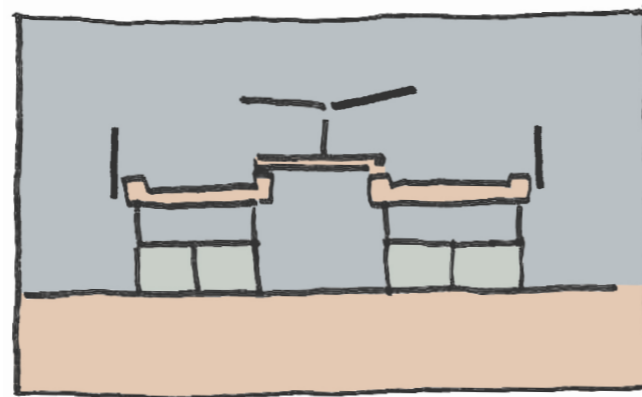
## SHADE & LIGHT

Stations are designed to provide a gentle transition between internal and often bright and hot external conditions. The use of the viaduct for the elevated rail option offers the opportunity for a logical design approach, e.g. providing shade during the hot summer days by leveraging the structure above. The natural light will be filtering throughout the station from the platform canopy to the concourse level.



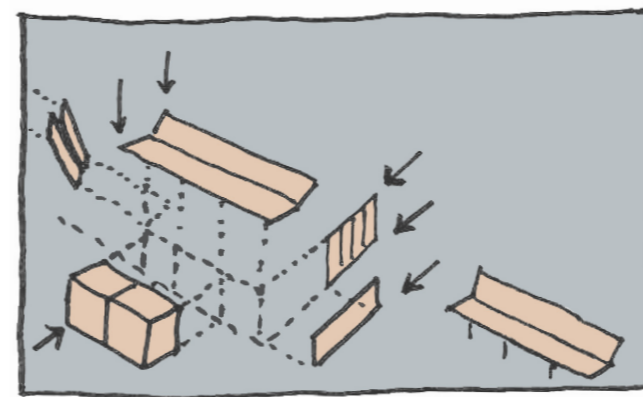
### ELEVATED RAIL TRANSITION

The important aspect of the design is the transition between the rail element and the public realm. This intuitive wayfinding approach has been adopted for the elevated rail design, where the journey from the platform to concourse level below is intuitive and straight-forward. The use of glazed facade also provides the station users an inner-outer visual link to navigate easily through the building.



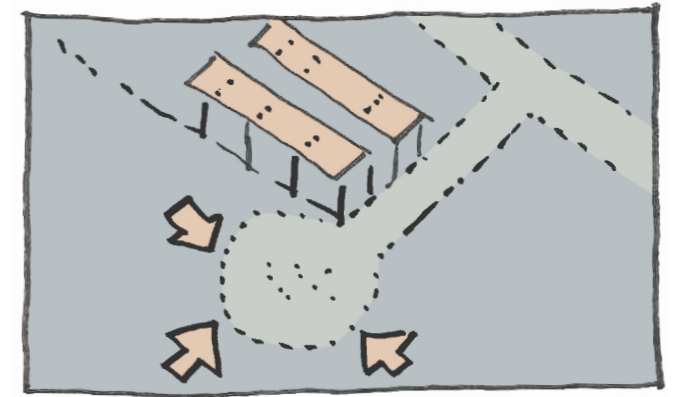
### MODULAR APPROACH

The basis of our proposed design utilises modular elements. Canopies, stairs, screens, louvres, and cladding elements are all designed to be modular and yet provide a unique and flexible configuration. Constructability sequence was also taken into considerations by using a symmetrical approach, where the station 'pods' are designed to be constructed in sequence without a particular order, that allows flexibility during construction phase.



### KIT OF PARTS DFMA

DFMA stands for Design for Manufacturing and Assembly. Our design utilises this method to optimise the use of a kit of parts approach to balance line-wide communality with unique responses for each precinct.



### PLACE MAKING AND COMMUNITY

Station and precincts are configured to allow connectivity throughout the site in response to the METRONET vision for the BRE project. The importance of linking the east and west side previously cut off by the rail corridor is paramount, as well as removing all level crossings by providing a safer and quality public realm. The place making aspect is very important including the vision of future development across the precinct to become a the civic community hub for the future of Armadale.

# STATION DESIGN

## DESIGN PRINCIPLES

The station shall be an open, porous architecture with clear and cohesive movement, while being integrated with the fluid and natural landscape.

The station shall be identifiable Armadale in its architectural expression. The following five design principles guide the architectural design:

### FIVE KEY DESIGN PRINCIPLES



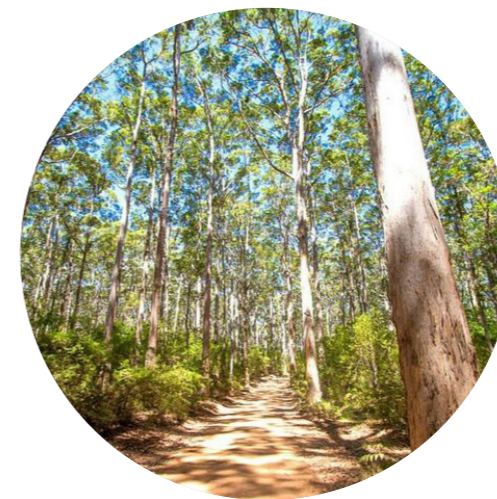
01 LATERAL MOVEMENT



02 HORIZONTAL STRIATIONS



03 A NATURAL FILIGREE TEXTURE



04 VERTICAL ECOSYSTEMS WITH  
DAPPLED LIGHT AND SHADOW



05 AN HONEST ELEMENTAL  
VERNACULAR

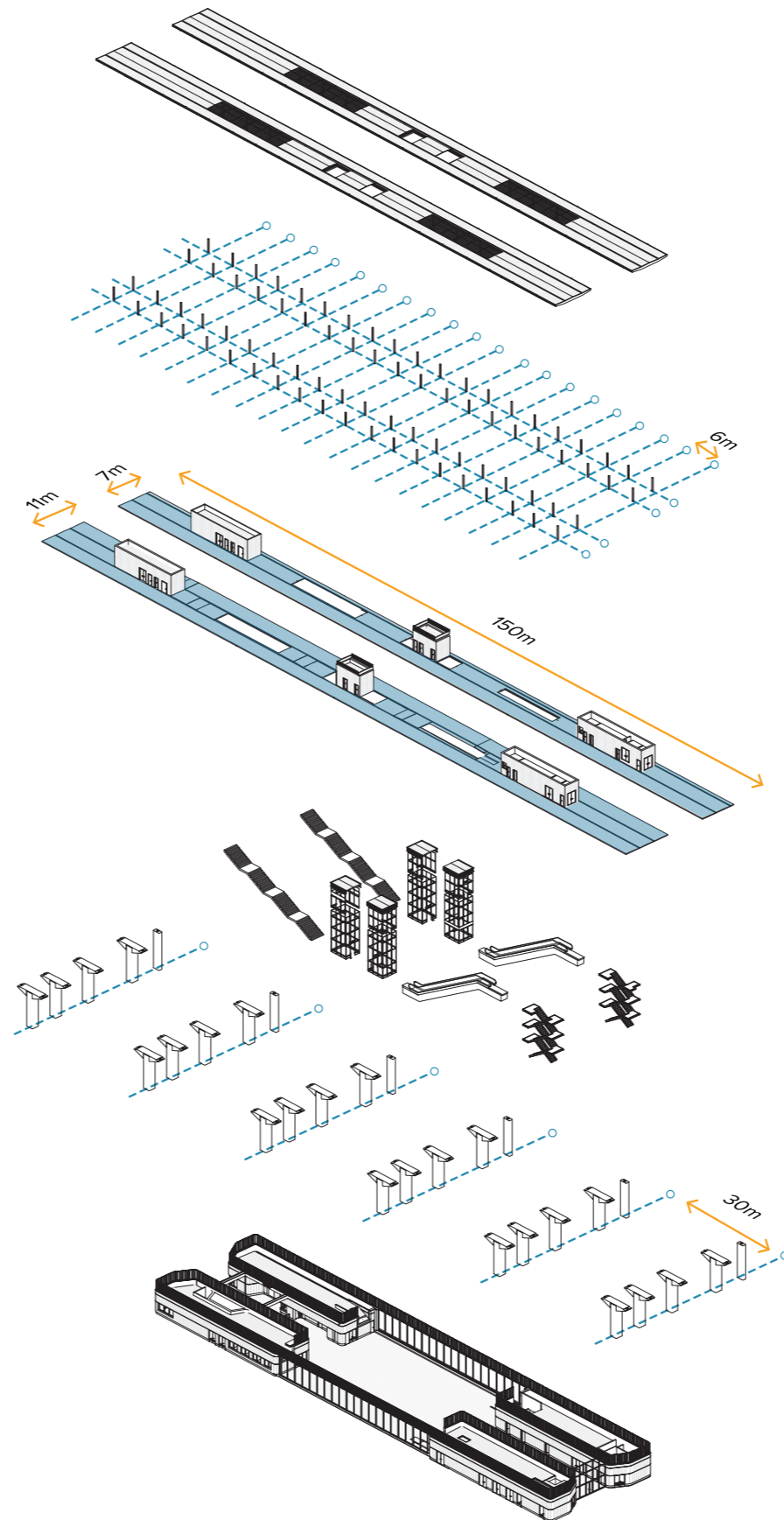
## ASSEMBLY

The modular design creates a common design language across both stations of the Byford Rail Extension through building components and forms. This approach will also provide a great level of flexibility to allow each station to retain its own identity.

The Armadale Station design has taken into consideration the procurement aspect as well, and the materials selected will be mostly sourced locally to shorten the supply chain and reduce procurement risks.

The diagram shows the main kit of parts component that forms the station design at Armadale Station elevated rail option:

- Canopies
- Structural components
- Platforms
- Vertical transportation (stairs, lifts and future escalators)
- Super structure of the viaduct
- Station accommodation (toilets, offices, station amenities, BoH areas)



• CANOPIES

• STRUCTURAL COMPONENTS

• PLATFORMS

• VERTICAL TRANSPORT

• STRUCTURAL GRID VIADUCT

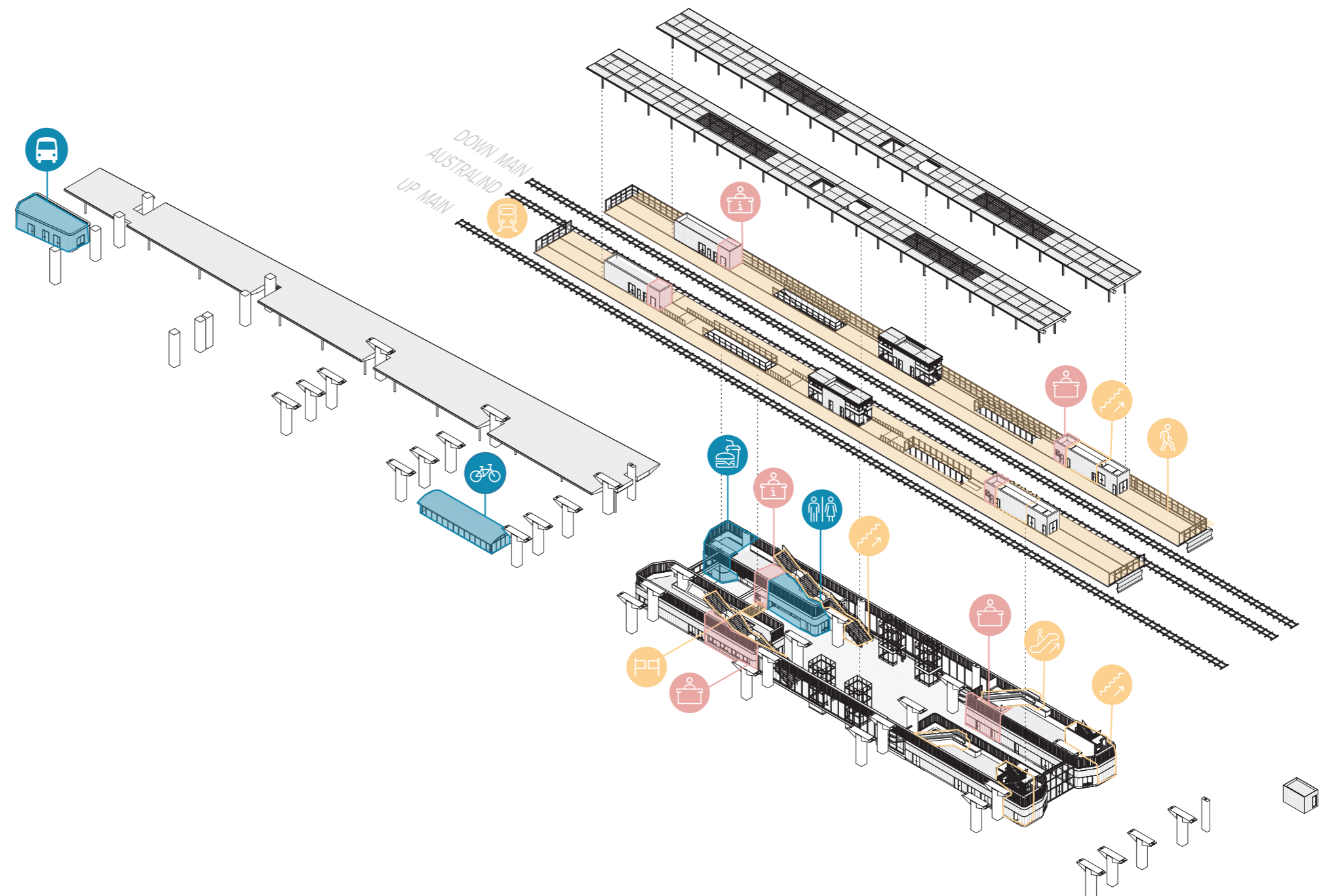
• STATION ACCOMMODATION

**FIGURE 48. ARMADALE STATION – ASSEMBLY**

# STATION AMENITIES

The station accommodation layout for Armadale Station is simple and straightforward: it is divided in four 'Pods' to allow clear sightlines and improve on CPTED and Human Factors' principles.

Each 'Pod' is designed to accommodate the SWTC and Station Accommodation Schedule requirements. In particular, the BoH area is located on the south-east pod, and PTA station amenities for PTA staff is located on the south-west and north-east corner. All the public amenities including toilets and drinking fountain are on the north-west pod. The PSP and the Kiosk are located on the north side to allow a better public space engagement in the station plaza.



## LEGEND











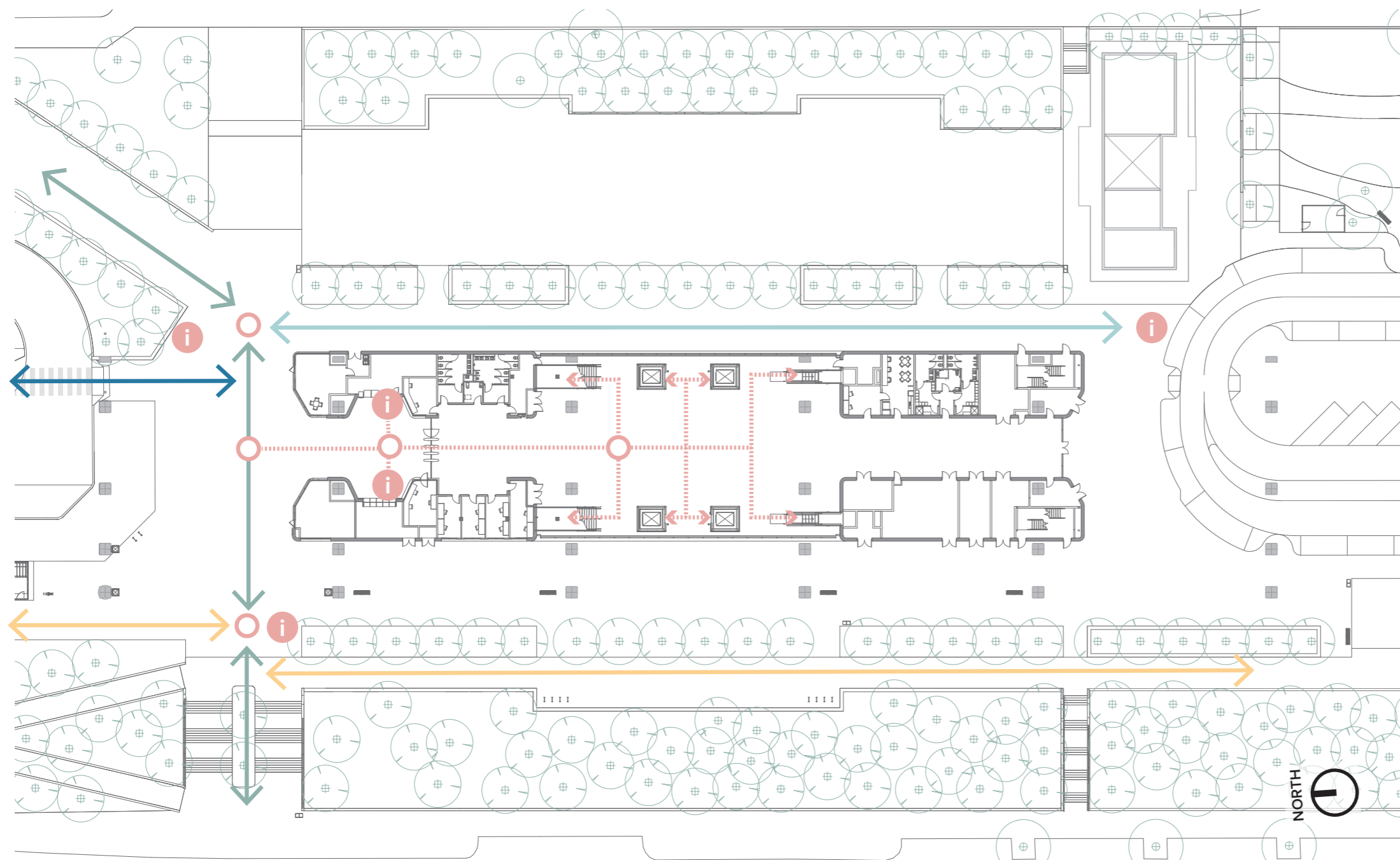
-  Train Lines
-  Platforms
-  Entry / Fare Gates
-  Escalators
-  Stairs
-  Passenger Information
-  Staff Areas
-  Kiosk
-  Amenities
-  Bike Shelter

FIGURE 49. ARMADALE STATION – AMENITIES

# FORMAL WAYFINDING

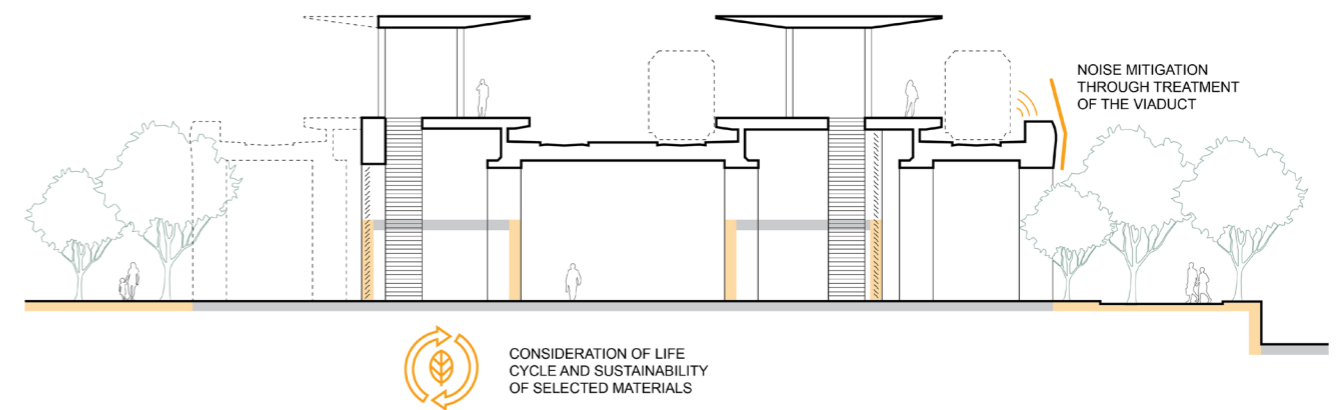
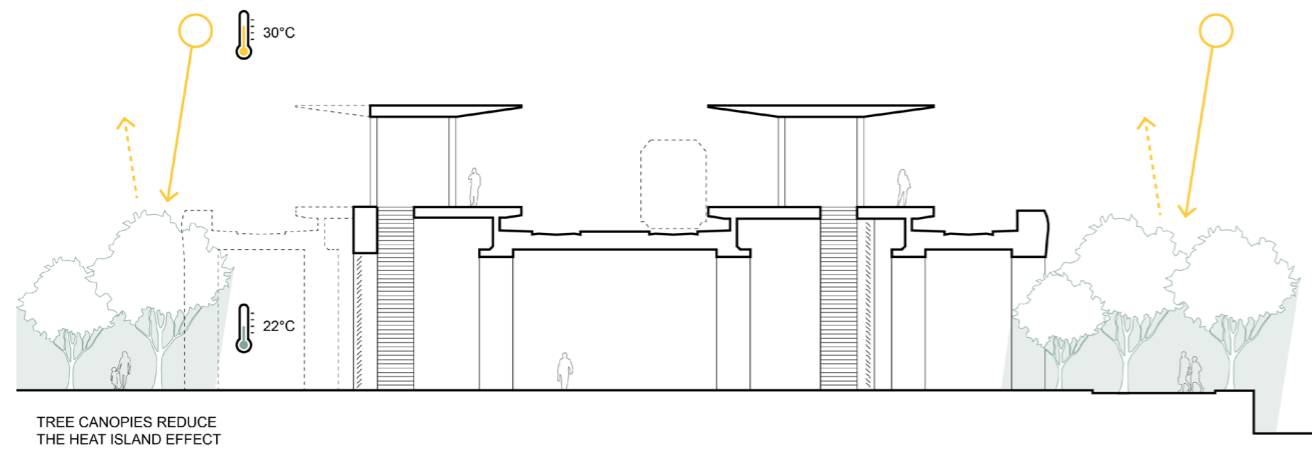
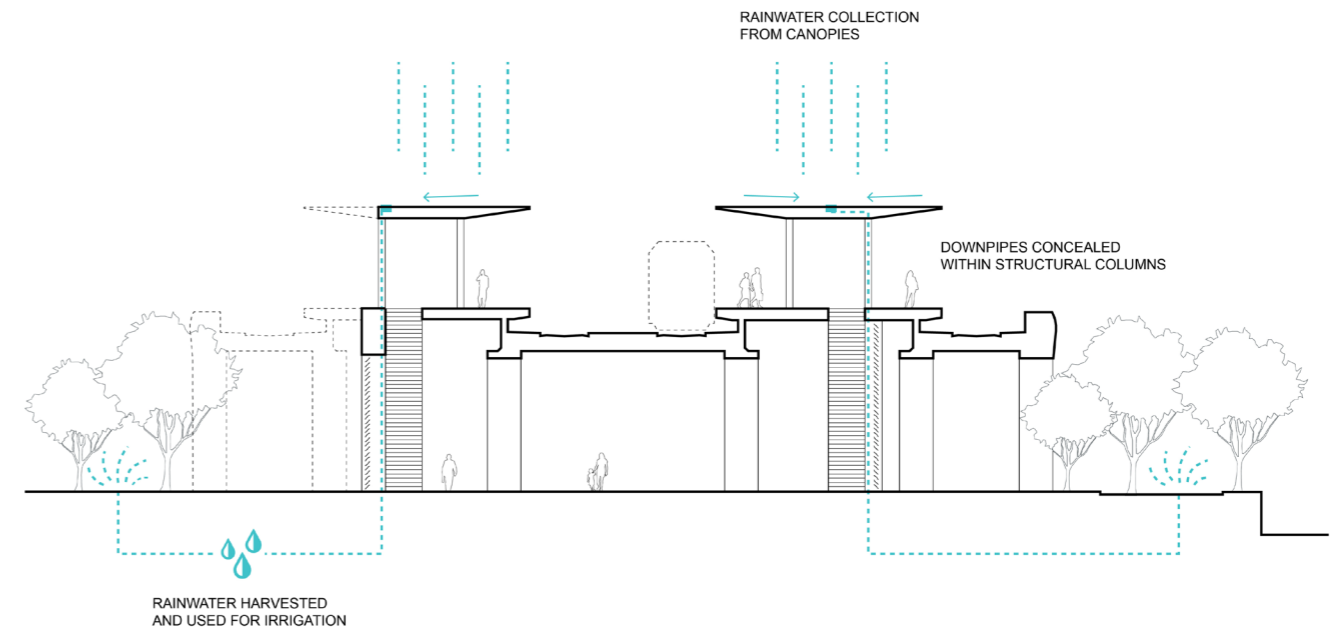
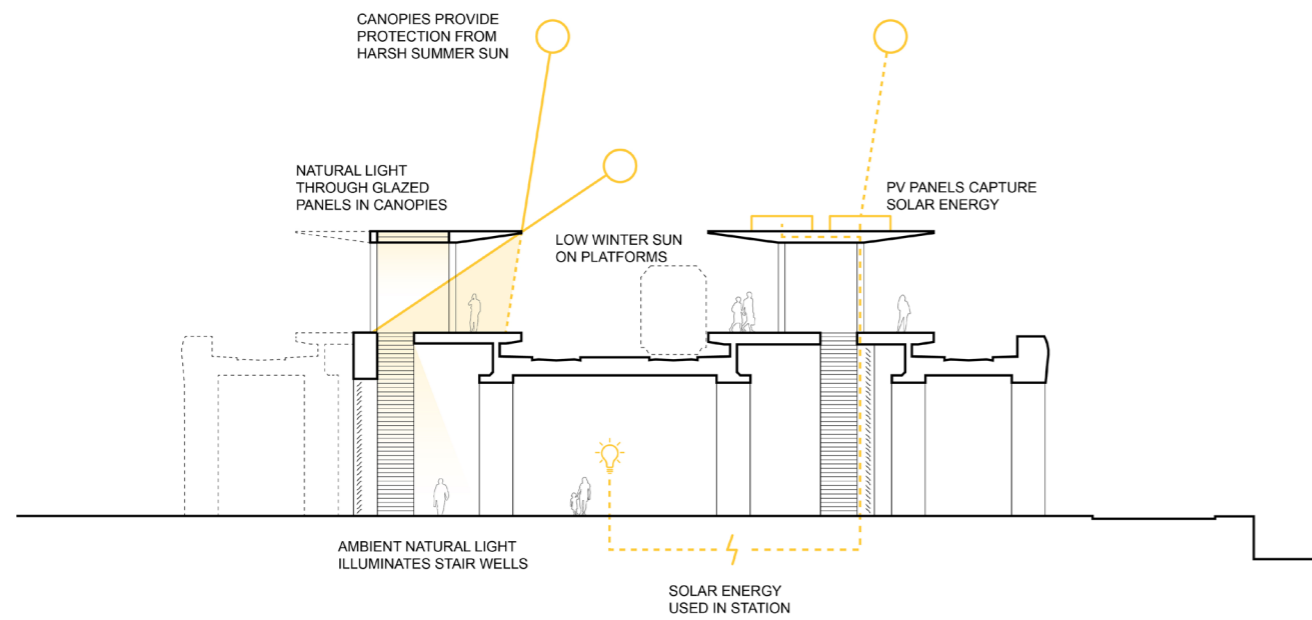


## LEGEND

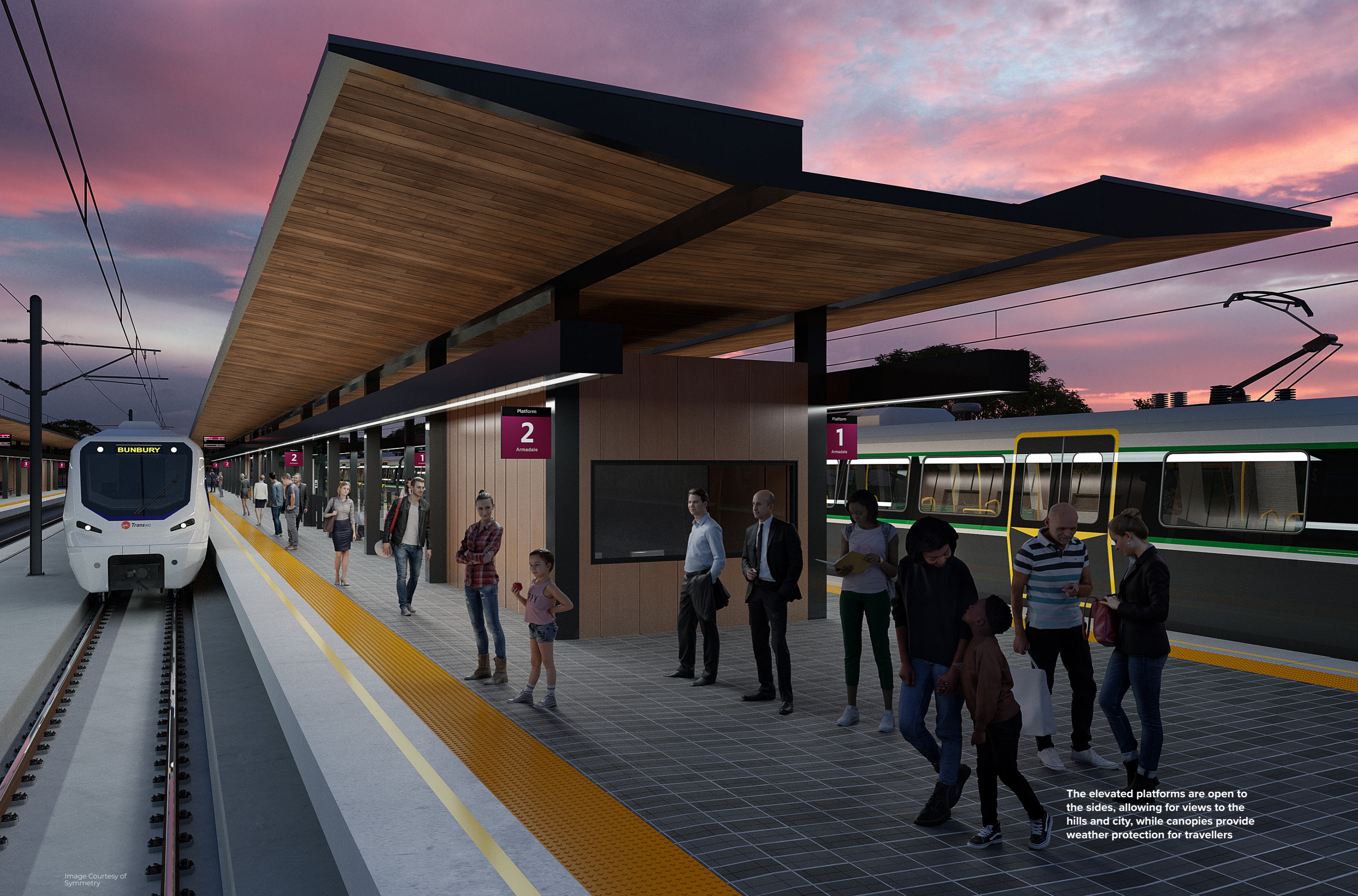
- i Information Point
- Pedestrian Flow
- To / From Bus Interchange
- To / From Kiss'n'Ride and Prak'n'Ride
- East-West Pedestrian Link
- Principal Shared Path

FIGURE 50. ARMADALE STATION - FORMAL WAYFINDING









The elevated platforms are open to the sides, allowing for views to the hills and city, while canopies provide weather protection for travellers



The kiosk has been relocated and is now integrated in the north-east corner of the station building, allowing for direct views from the station concourse to the Welcome Plaza and bus interchange

Platform  
**1** to Byford  
**2** to Bunbury

Platform  
**3** to Perth



Large glass walls on the sides of the concourse provide views to the surrounding, assisting in intuitive wayfinding for travellers coming down from the platforms

The spacious station concourse provides connection behind the fare gates for smooth transfer to the platforms on the level above

Image Courtesy of Symmetry



The kiosk is integrated in the north-east corner of the station building, contributing to the activation of the Welcome Plaza

Unobstructed views to the station entrance provide clear intuitive wayfinding

Creating a new station building integrated with a new viaduct - adding a modern, contrasting building that accentuates the layers of history in Armadale.

Large glass walls on the sides of the concourse provide views to the surrounding, assisting in intuitive wayfinding for travellers coming down from the platforms

# ARMADALE STATION





# 09

## PUBLIC ART

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# PRELIMINARY PUBLIC ART PLAN

This Preliminary Public Art Plan (PPAP) identifies high-level opportunities that will be further developed in the next stage of works for the Byford Rail Extension. APPARATUS prepared the public art content contained within this FPP.

The PPAP will be developed in close collaboration with all related consultancy disciplines, METRONET and the Office of the Government Architect. This includes alignment with METRONET's commitments to aboriginal and non-aboriginal engagement through the process. The PPAP will be further developed in the next stage of program works, including wider consultation, such as the City of Armadale and the Shire of Serpentine Jarrahdale and other stakeholders who may be involved with public art commissions as part of works within the greater BRE precinct areas. As works progress, concepts may change and creative consultants may consider alternative opportunities and ideas.

The BRE Station Public Art Plan will guide the delivery of creative interventions undertaken as part of the BRE project. The purpose of the Public Art Plan is to:

- Provide cultural and creative considerations to inform contractors delivering design and construction activities associated with the BRE project.
- Confirm the PTA and METRONET expectations for integration of creative practice into the planning and delivery of the BRE project.
- Provide a curatorial framework to assist contractors and delivery partners in the preparation of pricing for artwork commissions
- Ensure consistency across the whole creative program.
- Ensure that the design and delivery of permanent artworks are of consistently high quality.
- Collate project specifics on art, process and funding into one document.

It is envisioned that the BRE Public Art Plan will be used by artists, architects, art coordinators, landscape architects, project managers, contractors, procurement officers, community groups, and developers as part of the Byford Rail Extension program of works.



Bina Parkland Artworks, Arterial Design, 2021. Photo: Jessica Wyld

# METRONET'S TYPES OF PUBLIC ART

Public art has a broad scope with many possibilities for the form, function, materials and degree of permanency of the artwork, and how it is located and/or integrated into its setting. The DLGSC's Public Art Commissioning Guidelines define five main categories of public art as follows, recognising that the boundaries between the art types often overlap.

Note: not all five types of public art are currently accommodated in the Public Art Plan for the Armadale station precinct.



**STAND ALONE ART** is three dimensional and free-standing (rather than embedded into the structure of a building or built space).



**INTEGRATED ART** is integrated into a building, structure, or built space, such as ceilings, walls, glazing, screens and floors, landscaping and paving. The work has the potential to span both the interior and exterior spaces of a built structure. Integrated artwork may also assist in defining or separating space.



**TEMPORARY ART** is non-permanent work that may include performance art, dance and temporary installations.



**APPLIED ART** is applied to an interior or exterior surface. This type can include commissioned paintings, tapestries and murals.



**INSTALLATION ART** is where the artwork and the site are integral to each other. The artwork could be comprised of a number of elements, but the ensemble may be viewed as a whole. The space may be created with a particular work in mind, or the artist may respond to a given space. In addition, installation art may include land art.

Source: Byford Rail Extension – Concept Design, 'Armadale Station Precinct Preliminary Place Plan', WSP/PLACE Laboratory (2021) (BRE-MNO-WSP-PL-RPT-0003).



# PUBLIC ART STRATEGY ALIGNMENT

The METRONET Public Art Strategy guides the delivery of public art, drawing inspiration from Perth's Aboriginal and non-Aboriginal local culture, history, landscape and place. The Strategy is used by all stakeholders involved in developing public art for the Armadale and Byford Station Precincts from artists, art coordinators, architects, landscape architects, project managers, contractors, procurement officers, community groups, developers, local government authorities and state government agencies.


## PUBLIC ART STRATEGY THEMES

METRONET's direction is that public art should respond to the overarching themes - 'Our Pathways' - exploring sub themes 'Connection' and 'Place'. These themes are expanded into four further sub-themes, below. These overarching themes have guided the development of the Sense of Place Statement, Key Themes and Stories.



## METRONET PUBLIC ART PRINCIPLES

- 

**PLACEMAKING**  
Public art contributes to placemaking and interpretation. It can aid the understanding of the area's heritage, provide new interpretations and meaning or how people use a space.
- 

**SITE SPECIFIC**  
Public art is designed specifically for the site and is responsive to the site context – its surrounds, its use and users – and reflects the relevant precinct art themes.
- 

**SCALE TO FIT**  
The scale of artwork is to be consistent with the artwork intent. Artwork scale also needs to be responsive to the site context, such as the surrounding landscape, buildings and pedestrian circulation.
- 

**UNIVERSAL ACCESSIBILITY**  
Public art is accessible to all members of the community, irrespective of their age, abilities or cultural background.
- 

**ATTRACTOR**  
Public art can be an attractor for visitors and tourists, particularly for places with landmark artworks or seasonal art programs.
- 

**SUSTAINABLE**  
Public art is designed to consider key environmental, social and economic opportunities for both procurement/delivery and ongoing function and use.
- 

**WELL CONSIDERED & MANAGED**  
Public art is designed and constructed in accordance with best practice, risk and asset management. It is designed with consideration of public safety, straightforward and low-cost maintenance, resistance to vandalism, and constructed with robustness appropriate for the lifespan of the artwork.

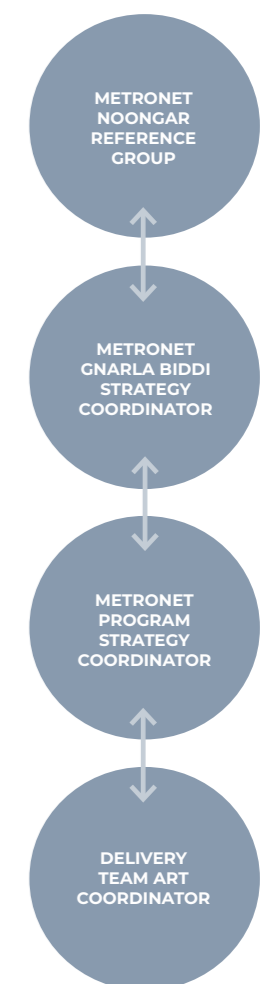
## GNARLA BIDDI STRATEGY

The METRONET Aboriginal Engagement Strategy outlines the WA State Government commitment to embed genuine engagement with the Aboriginal community across the METRONET program. It recognises that appropriate and authentic Aboriginal engagement can contribute to the delivery of enhanced place and project delivery outcomes, whilst also achieving significant community, social and economic benefits through cultural contribution and participation.

The METRONET Gnarla Biddi Strategy and Framework is designed to achieve three outcomes:

1. Noongar and other Aboriginal people working on METRONET projects.
2. Noongar and other Aboriginal people delivering METRONET projects.
3. Noongar Culture being acknowledged and recognised in what METRONET does day-to-day, and in what METRONET designs and builds.

Opportunities for Noongar culture to be embedded into the station through public art and Noongar artist engagement identified in the Public Art Plan. These opportunities are indicative, pending consultation with the METRONET Noongar Reference Group via the METRONET Gnarla Biddi Strategy Coordinator.



# PUBLIC ART IMPLEMENTATION

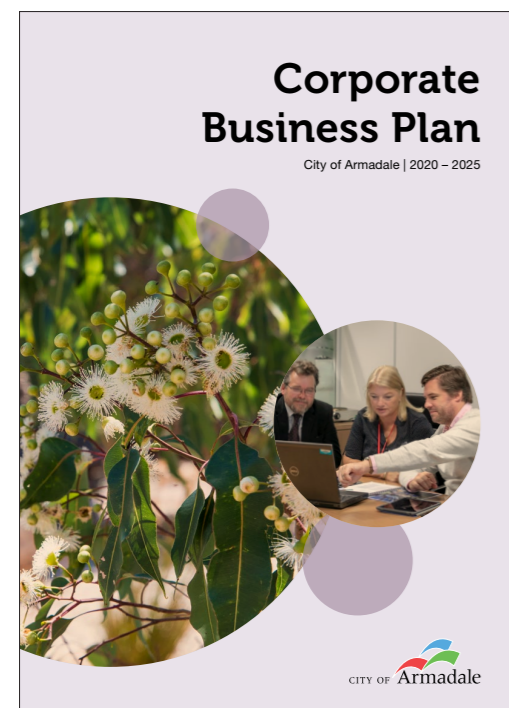
## LOCAL GOVERNMENT CONTEXT

The City of Armadale's Corporate Business Plan 2019-2024 identifies the following ways it aims to value and celebrate diversity and heritage:

- Investigate new opportunities to collect and share the stories of Armadale's history;
- Facilitate partnerships with the Aboriginal community; and
- Facilitate opportunities to showcase local culture.

The City also aims to encourage initiatives that improve perceptions of safety, including the activation of local spaces.

Armadale has approximately 34 pieces of public art, situated throughout the suburbs and the city centre.



## CITY OF ARMADALE PUBLIC ART STRATEGY

The City of Armadale recognises the contribution of public art in creating vibrant and attractive places and is committed to the incorporation of stimulating and relevant public art that enriches the character and identity of local communities.

The Public Art Strategy is in line with the City of Armadale Strategic Community Plan and directly reflects the following strategic goals:

- 1.3 Access to a wide range of cultural, arts and learning opportunities.
  - 1.3.2 Promote and support community arts and events.
  - 1.3.2 Promote and support initiatives that enable community to enjoy a variety of cultural experiences.
- 2.2 A revitalised City of Armadale.
  - 2.2.2 Plan and implement projects to revitalise the Armadale City Centre.
- 2.4 Attractive and user-friendly streetscapes, and open space.
  - 2.4.1 Implement townscape, streetscapes, and parkland improvements to enhance the distinctive character of the City.

## PUBLIC ART DELIVERY

To deliver the Project Public Art Plan, the FPP identifies themes and approaches and inspires the project's overall design and delivery, ensuring connectivity with place and community. The delivery team will engage a public art coordinator/team with demonstrated experience in managing public art projects, who will work collaboratively with the delivery team and the METRONET Program Strategy Coordinator. Together, they will identify public art projects for the METRONET delivered station buildings, associated infrastructure and public realm in consultation with relevant stakeholders.



# PUBLIC ART OPPORTUNITIES

## OPPORTUNITIES

These opportunities are considered appropriate for Armadale Station and precinct.

**A PLACE ACTIVATION + BIDDI**  
GROUND PLANE TREATMENT

Public Realm activation applies to ground paving, fixing furniture elements and landscape features.

**B BUS INTERCHANGE SCREENS**  
INTEGRATED + FUNCTIONAL

Artwork opportunities to be integrated into the bus shelter canopies and screens in the bus interchange station.

**C UNDER THE VIADUCT - LIGHTING**  
INTEGRATED + FUNCTIONAL

Artist designed lighting elements under the viaduct transforming the appearance of the underpass and public realm under the platforms.

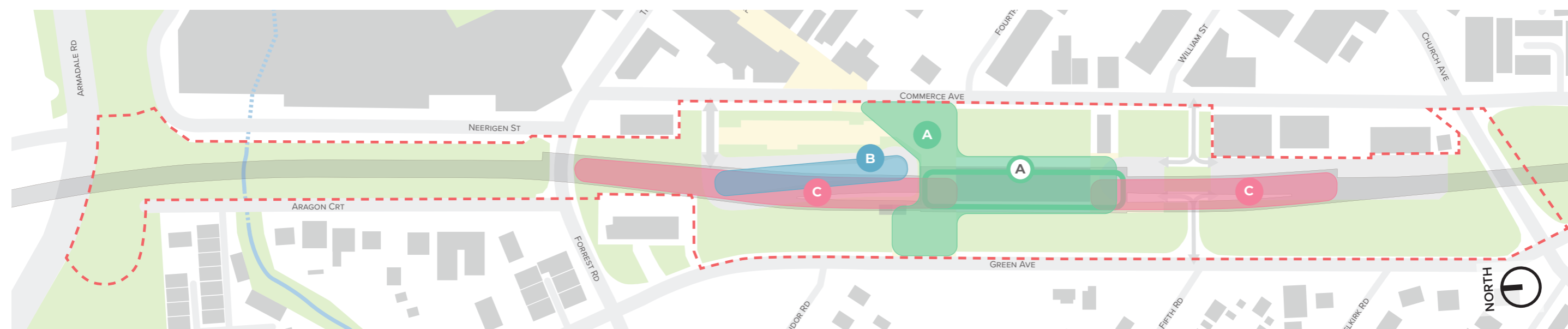
**A BATTEN + BAFFLE SCREENS**  
INTEGRATED INTO ARCHITECTURE

There is the opportunity to integrate artwork into specified battens and baffles that clad the Station Building and platform canopies.

**UNDER THE VIADUCT - MURAL**  
INTEGRATED + FUNCTIONAL

Artist designed murals or painted components can be applied to the structural elements, walls and retaining feature under the viaduct.

The areas indicated on the plans below are the zones to be considered for the implementation of the specific public art opportunity or additional recommendation. It is not the intend that the whole area will be covered with public art.



**FIGURE 51. PUBLIC ART OPPORTUNITIES PLAN**

## ADDITIONAL RECOMMENDATIONS

These further recommendations are to be considered for Armadale Station and precinct.

- 1 VIADUCT ARTWORK**  
Public art treatment to the external face of the Viaduct
- 2 VIADUCT RETAINING WALLS**  
Public art treatment to the external face of the retaining walls at the abutments.
- 3 PEDESTRIAN BRIDGE ARTWORK** (Byford only.)
- 4 SIGNAL GROVE ARTWORK RELOCATION**  
Removal, restoration and relocation of the existing artwork "Signal Grove" at Armadale Station.
- 5 PLACE ACTIVATION EXTENSION**  
Extension of the Place Activation Artwork

The objective of these additional recommendations is to:

- Deliver high-quality public spaces that contribute to an enhanced green network;
- Attracts business and residential investment through public domain and other amenity improvements;
- Enable urban design outcomes that maximise connectivity across the rail corridor and promote cycling and pedestrian movement;
- Improving connections across the rail, in particular at the station itself and the viaduct portions, to make them seamless, smooth and attractive to move east-west;
- Improve legibility to all directions especially pedestrian walkability across the railway corridor, and for secondary loop connections into the town centre north along the Neerigen Brook (through Sanctuary Lake);
- Enhance future development opportunities for active frontage along the Welcome Place and surrounding streets, improving the interface between station and City Centre;
- Celebrating the connection to the hills landscape and a view into Armadale City Centre that is afforded by elevated tracks and platforms;
- Celebrating the history and Aboriginal values of the place through initiatives such as strengthened connections to places like Minnowarra Park and the hills beyond, and including Noongar language through place-making outcomes;
- Improve social safety in the public realm of the precinct by encouraging more activity and high quality landscaped areas beside and underneath the viaduct; and
- Provide quality and cost effective outcomes for the Armadale community.

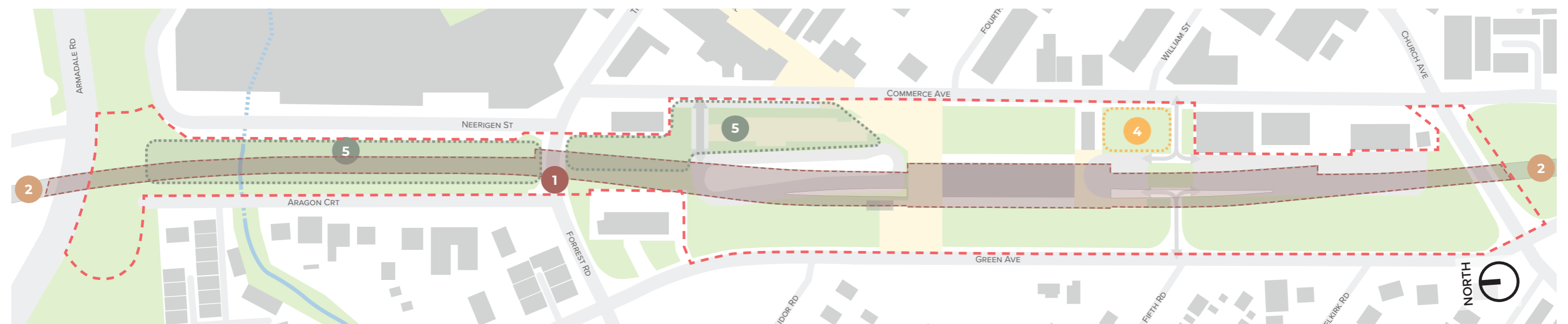


FIGURE 52. PUBLIC ART ADDITIONAL RECOMMENDATIONS PLAN

# CURATORIAL RATIONALE

The Preliminary Public Art Plan was developed with three things in mind:

- the specific considerations for planning public art for public transport rail infrastructure; and
- developing a unique experience that responds to the Sense of Place Statement; and
- the idea of the Byford Rail Extension being a place of connections.

The Byford Rail Extension project is sited at the nexus of several edges and intersections:

- the Swan Coastal Plain and the Darling Scarp;
- the intersection of the Three Brooks that cross the rail line; and
- the Coast, City and Urban life and the Hills, Scarp and rural life.

All of the artworks recommended for the Byford Rail Extension are embedded into the station for the enjoyment of all station users.

The Public Art Plan ensures and alignment with the METRONET Public Art Strategy by recommending a diversity of artwork types and artwork approaches and a procurement methodology that involves working with the local communities. The three key considerations important to the planning of public art for public transport rail infrastructure are:

- limitations;
- considerations; and
- opportunities.

## LIMITATIONS

### FUNCTION FIRST

- Priority of the project is building transport infrastructure.
- Public Art Program should enhance the asset without complications
- Opportunities should be planned to work with the critical path

## CONSIDERATIONS

### PROGRAM

- Planned to ensure no interference with the project critical path.

### INTEGRATED

- Durable, robust and zero to low maintenance.
- Planned, designed and built to be unsouvenirable.

### SUSTAINABLE

- Developed in concert with the community, for the community.
- Designed to be pro-social - evoke a sense of pride and identity.
- Planned to use sustainable materials and production techniques as much as possible.

## OPPORTUNITIES

### INTEGRATED

- Opportunities that can be retro fitted should be considered priority projects.
- Opportunities that won't disappear if the design changes should be considered – public art integrated into 'must have' station elements.
- Elements that might be included are screens, glazing, the ground plane, seating, bus shelters and canopies, lighting, and other built form integrated design elements.



Tikkurila Daycare; Graphic Concrete

## A PLACE ACTIVATION + BIDDI

### GROUND PLANE TREATMENT

The Public realm activation and Biddi is the commencement of the kerb to concourse through to platform carriage narrative. Artwork elements drawn from the themes and translated in text and imagery will be embedded or etched into the pathways leading station users along a path of discovery as they travel on foot to the station.

The opportunities for the ground plane treatment are:

- Noongar language and other text, drawings or imagery;
- artwork treatment embedded into the ground plane pathway at both concourse and platform levels.

### ROLE AND FUNCTION

- Interpretation of local stories.
- Revealing cultural heritage.

### FORM

Interpretive elements potentially including text and images integrated into landscape, pathways and design elements.

### LOCATIONS

The artwork elements would be located in intervals along the pedestrian passages leading to the entrance of the station.

### STORIES

Refer to the Sense of Place Statement.



Bulletin Place, Duece Design + Aspect, Sydney, NSW



Marysville Heart, Arterial Design, VIC



Quay Quarter, Jonathan Jones + Aspect, Sydney, NSW

Photo: Sydney Living Museums (left) / Mark Pokorny (right)

## A BATTEN / BAFFLE CLADDING

### INTEGRATED + FUNCTIONAL

There is the opportunity to integrate artwork into specified battens that clad the Station Building. There are two main areas these battens occur in the architectural design. The first being the battens on the building facade at concourse level located in an elevated position above the stone entry wall cladding. The other on the underside of the station canopies at platform level. The intention for the artwork is to enhance these architectural elements with the integration and interpretation of colour and rhythm for a portion of battens. The artwork concept will be drawn from the themes and colour, further consolidating the architectural narrative

### ROLE AND FUNCTION

- Interpretation of local stories.
- Revealing cultural heritage.

### FORM

Interpretive batten elements potentially including colour and rhythm of battens which are part of the Architecture. The opportunities may include a portion of these elements, in close collaboration with the architectural design intent.

### LOCATIONS

The artwork elements would be integrated into the battens that clad the building wall/s and batten soffit lining to the platform canopies at Armadale Station.

### STORIES

Refer to the Sense of Place Statement.

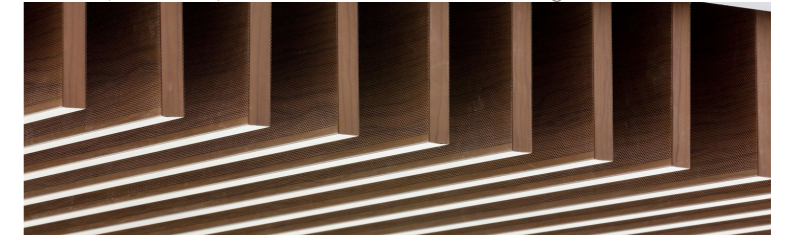


Alinga Street Impression, Canberra Light Rail, ACT



MG-GT Office, TheFulcrum.Agency (previously CODA) and Mark Phillips Architect, Kununurra, WA

Punmu and Parnngurr Aboriginal Health Clinics, Kaunitz Yeung Architecture, Puntukurnu Aboriginal Medical Service



Timber baffles

## B BUS INTERCHANGE SCREENS

INTEGRATED + FUNCTIONAL

The Bus Interchange is a place of arrival. The intention is for the artwork to be visible on the Bus Interchange screens, transforming a utilitarian element into an interesting and engaging design. The artwork will be highly visible and will welcome station users. The artwork concept will be drawn from the themes and translated in imagery, further consolidating the station narrative.

### ROLE AND FUNCTION

- Interpretation of local stories.
- Revealing cultural heritage.

### FORM

Interpretive elements potentially including text and images integrated into landscape design.

The opportunities may include laser cut or perforated metal screens.

### LOCATIONS

The artwork elements would be integrated into the Bus Interchange and bus shelters at the Armadale Station.

### STORIES

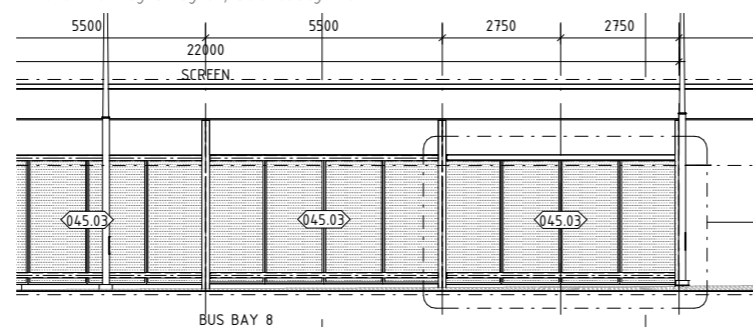
Refer to the Sense of Place Statement.



Midland Advocacy Centre, Paula Hart, Midland, WA; Photo: Frances Andrijich



Marri Mia (Tree House), Kylie Graham, Perth Stadium, WA; Photo: Bewley SHaylor; Courtesy: Form



Typical Bus Canopy Design

## C UNDER THE VIADUCT - SCULPTURAL LIGHTING

INTEGRATED + FUNCTIONAL

Artist designed lighting element under the viaduct transforming the appearance of the underpass and public realm under the Viaduct. The artwork will be contemporary refined, in keeping with the landscape and architectural design.

### ROLE AND FUNCTION

- Enhance perception of a safe, welcoming environment
- Be integrated into and accentuate the public realm design.
- Destination experience for pedestrians.
- Activating the space both day and night.
- Increases visibility at night – safety through design.
- Assisting with wayfinding.
- Enrich the user experience.

### FORM

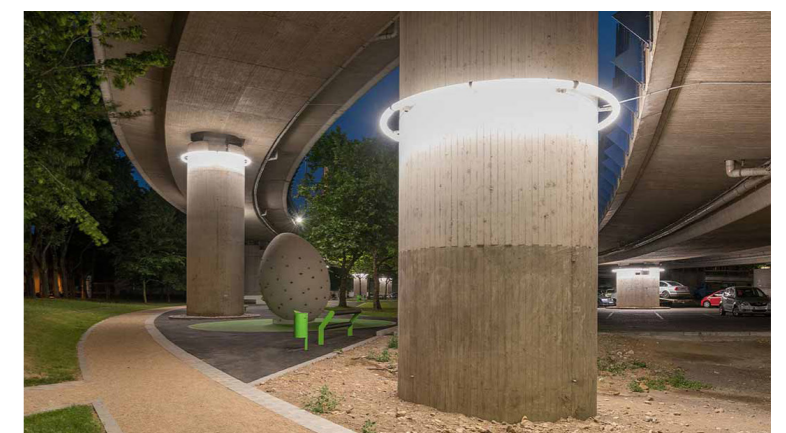
- Dynamic LED lighting.
- Projection

### LOCATIONS

Potentially integrated seamlessly into the underside of the rail bridge.

### STORIES

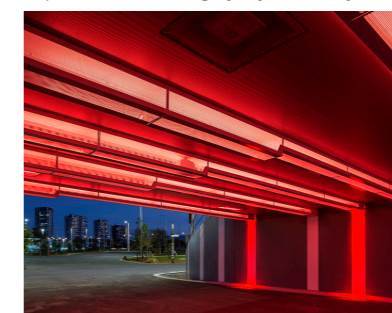
Refer to the Sense of Place Statement.



LED Luminous Wall, Koblenz, Germany



Aspire, Warren Langley, Pyrmont, Sydney, NSW



Sound & Colour, Chris Nixon and Tom Lucey, Perth Stadium, WA



Underpass Artworks, Herman Kuijter, Zutphen, Netherlands

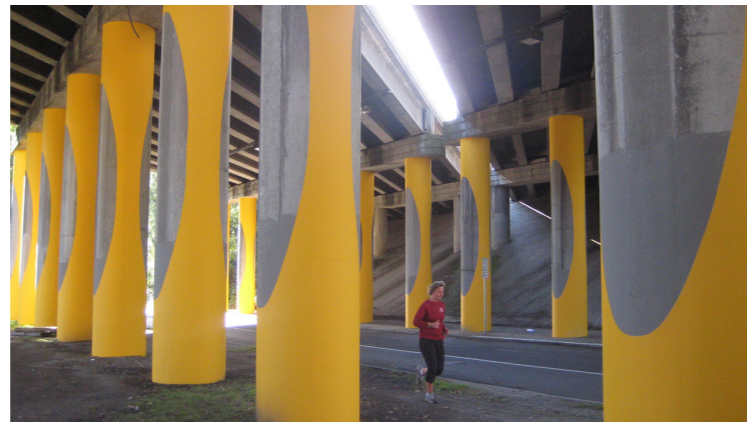
Photo Bewley Shaylor courtesy of form.



## UNDER THE VIADUCT - MURAL

INTEGRATED + FUNCTIONAL

Artist designed murals or painted components can be applied to the structural elements, walls, columns and retaining features under the viaduct. The use of Painted artworks allows for public art to be applied to a large area in an economical way onto elements that exist for the infrastructure, structure and architecture. The Artworks also aims to allow for a vast amount of public art under an area which spans a significant distance. The artwork will help to activate the area and be collaborated into the landscape and public realm design.



Columnseum, Sheila Klein, I-5 Overpass, Seattle, Washington, USA

### ROLE AND FUNCTION

- Enhance perception of a safe, welcoming environment
- Be integrated into and accentuate the public realm design.
- Destination experience for pedestrians.
- Activating the space both day and night.
- Increases visibility at night – safety through design.
- Assisting with wayfinding.
- Enrich the user experience.



Floodlines, Alice Lang, Brisbane, QLD

### FORM

- Applied anti graffiti or similar paint.
- Simple or more complicated pattern.

### LOCATIONS

Potentially integrated seamlessly into the underside of the rail bridge.

### STORIES

Refer to the Sense of Place Statement.



George Domahidy, Esperance Indoor Sports Stadium, WA

Photo: Dan Paris



Jacaranda Lace Fence, Paula Hart, Woolworths Mount Pleasant, WA



# 1 VIADUCT ARTWORK

INTEGRATED + FUNCTIONAL

Artwork treatment transforming the appearance of the viaduct from utilitarian transport infrastructure device to structure that speaks of the place. The artwork will be contemporary, refined, in keeping with the built form design, applied onto the precast glass reinforced concrete viaduct panels and integrated seamlessly into the rail bridge, to create a 'building skin'. This would be an art and architecture collaborative design process.

## ROLE AND FUNCTION

- Design identifier for the Armadale community and BRE
- Be integrated onto and accentuate the necessary infrastructure
- Destination experience
- Enrich the user experience.

## FORM

- Applied onto the specified viaduct panels constructed from PCP Patterned Glass Reinforced Concrete Panels to be specified by Architect.
- Simple graphic repetitive pattern.
- Paint application with anti graffiti coating or perforated screen.
- Work to be post applied onto the panels.

## LOCATIONS

The artwork elements would be located on the side of the viaduct around Armadale Station Precinct, see budgets for extent. Current recommendation for artwork is a significant length either side of station- approximately total length 1-2km.

## STORIES

Refer to the Sense of Place Statement.



Sydney Gateway Viaduct, Westconnex at St Peters interchange linked to Sydney Airport, NSW (Artist Impression)



Decatur Overpass Mural, Milagros Collective (Joey Filastre and Felici Asteinza)



Graphic screens, Big Spoon Art Services, Shenton Quarter, Shenton Park, WA



Sylvia Park, South Eastern Arterial Road, Isthmus, NZ

# 2 VIADUCT RETAINING WALLS

INTEGRATED + FUNCTIONAL

Collaborative design transforming the appearance of the viaduct retaining walls. The artwork will be contemporary refined, in keeping with the landscape and architectural design. Integrated seamlessly into these walls as 'building skin'. This would be an art and architecture collaborative design process. The Artwork will be applied to the surface or into the precast glass reinforced concrete viaduct panels.

## ROLE AND FUNCTION

- Design identifier for the BRE and specifically the Viaduct
- Be applied onto and accentuate the necessary infrastructure
- Destination experience
- Enrich the user experience.

## FORM

Artwork design will be applied onto the specified viaduct panels. Viaduct to be constructed from PCP patterned glass reinforced concrete panels. Panel profile to be determined by Architect. Work to be post applied onto the panels. Coloured or similar graphic pattern repeated and applied with Anti-graffiti paint or an applied perforated screen.

## LOCATIONS

Potentially integrated seamlessly into the underside of the rail bridge. Current recommendation for artwork is the entire length of the retaining walls.

## STORIES

Refer to the Sense of Place Statement.



Images Extracted from- Harrison See and Lyndall Adams Construction Reference Group (CRG) Wanneroo Road / Joondalup Drive Interchange Meeting 4 Report



Avenida Libertador & General Paz Bridge, Martín Ron, Buenos Aires, Argentina



Djerring Linear Parks and Trail, Caulfield to Dandenong Level Crossing Removal Project; Photo Good Design Australia

## 4 SIGNAL GROVE ARTWORK RELOCATION

INTEGRATED + FUNCTIONAL

To re-purpose is “the process by which an object with one use value is transformed or redeployed as an object with an alternative use value.”

Re purposing of the existing artwork provides a significant opportunity to integrate an additional public artwork in the BRE project with minimal cost. In addition the artwork is already established as a part of the collective history of the area and should be part of the evolution of the Station precinct.

### ROLE AND FUNCTION

- Re- Interpretation of existing artwork
- Revealing cultural and project histories
- Sustainability

### FORM

Rejuvenation and relocation works to the existing 5 sculptures and the clock within the new Armadale Station precinct. The opportunities may include reconfiguring the existing wooden railway sleeper platform.

### LOCATIONS

The artwork elements would be integrated into the landscape design within the new Armadale Station Precinct Urban Lounge.

### STORIES

Refer to the Sense of Place Statement.



Signal Grove, Tony Jones, Armadale Station piazza, Armadale WA

## 5 PLACE ACTIVATION EXTENSION

GROUND PLANE TREATMENT

The Public realm activation and Bidji is the commencement of the kerb to concourse through to platform carriage narrative. Artwork elements drawn from the themes and translated in text and imagery will be embedded or etched into the pathways leading station users along a path of discovery as they travel on foot to the station.

The opportunities for the ground plane treatment are:

- Noongar language and other text, drawings or imagery;
- artwork treatment embedded into the ground plane pathway at both concourse and platform levels.

### ROLE AND FUNCTION

- Interpretation of local stories.
- Revealing cultural heritage.

### FORM

Interpretive elements potentially including text and images integrated into landscape, pathways and design elements.

### LOCATIONS

The artwork elements would be located in intervals along the pedestrian passages leading to the entrance of the station.

### STORIES

Refer to the Sense of Place Statement.



Kelmscott Plaza, Margret Dillion, Kelmscott, WA



Beemarra Serpent, Colleen and Mauretta Drage with Kalya Hampton, Kalbarri Skywalk, WA



Granite Sidewalk, Ken Hiratsuka, Rhys PaddockBina Parkland New York, USA



# 10

## IMPLEMENTATION

DESIGN GUIDANCE

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# DESIGN GUIDANCE

The concluding section offers guidance of how the Place Plan has the potential to shape the architectural design of Armadale Station. The SOPS guide public realm, architecture, art and place planning with the themes of Hills Town; Connecting and Reveal providing impetus for the design responses bringing people together, evolving and developing the Armadale station precinct over time.

## ACHIEVING THE SENSE OF PLACE

The Sense of Place at Armadale does not exist on its own; it is realised through the place planning, architectural and landscape designs, engineering and public art, working together with local layers of human activity. They all contribute to making the Sense of Place a lived experience.

They provide examples of how the SOPS could be implemented and is to be used as an inspiration and touchstone for all further design works of the station precinct. It is essential that the final design is based on the SOPS and can explain how they are realised in the intended experience.



### HILLS TOWN

- / City With A Town Feel
- / Omnipresent Hills & Trees
- / Of The People
- / Human Scale
- / Civic
- / Contemporary
- / Convenience

Hills Town refers to the City at the foothills of Moorda. Where Fremantle is a 'port town' and Kalamunda a 'hills village', Armadale is the only city centre in the metropolitan area directly connected to the hills. It is a 'city' in function and a 'town' in feel.

### CONNECTING

- / Grounded
- / Open & Inviting
- / Bridging Differences
- / Growing
- / Urban + Rural
- / Coastal Plains + Darling Scarp

This is a place of connecting in many different ways – physically linking places, connecting people, advancing from anonymity, relating to past and future, telling stories. The place relates to both 'coroboree grounds' gathering and to rail holding yards, where products were connected to their next destination in Perth or suburbs beyond.

### REVEAL

- / More Than The Eye Can See
- / Not Obvious
- / Discover
- / Surprise

Although it is easy to find your way, Armadale has hidden layers: places to discover, interesting people, diversity of destinations, waves of activities, many things that make the centre attractive to go to, to stay and to revisit. There is always something to explore.

### PLACE PLANNING

- The Welcome Place is located and aligned with Jull St Mall on the east, accentuating the arrival to the historic town.
- The Welcome Place also aligns with the envisioned Development WA/City of Armadale town square to the west to create a harmonious public realm.
- The elevated platform offers views across the site and towards Darling Scarp.
- The linear parkland along the rail viaduct strengthens the 'bush' character of the rail line, while improving human comfort at the same time by providing shade and reducing urban heat.
- The recreational parkland with heritage narratives under and along the rail viaduct create an additional route to the City's Heritage Precinct and strengthen the 'Hills Town' experience.
- The elevated rail removes the biggest east-west barrier at the Armadale City Centre. Church Ave, Forrest St and Armadale Rd will no longer experience temporary closures due to crossing trains. The under-viaduct parkland transforms the railway from a barrier into a connector.
- Locating the Welcome Place in line with Jull St Mall, together with widening the Commerce Ave pedestrian crossing and introducing pedestrian priority crossings on both Commerce Ave and Green Ave, smooths the east-west connectivity.
- Including linear parklands between the Welcome Place and Forrest Rd, and onwards to Armadale Rd, adds to the permeability of the town centre, connecting towards Minnowarra Park, Neerigen Brook and the heritage tree walk west of the rail.
- The new PSP enhances the Armadale cycle network.
- The current physical and view barriers due to level differences between the east and west side are reduced by removing the retaining walls and smoothing level changes with soft and hard landscaping.
- Providing a central Youth Plaza next to the Welcome Place 'hub' provides a welcoming area for young people in the community, visible to all instead of on the margins.
- Including a cultural meeting place that celebrates Noongar culture in the heart of town.
- A bulletin board, intuitive wayfinding and signage are integral to the success of the Sense of Place, which is programmed to reveal information to patrons and visitors about the Hills Town attractions and heritage.

TABLE 7. DESIGN GUIDANCE TO ACHIEVE THE SENSE OF PLACE

	HILLS TOWN	CONNECTING	REVEAL
PUBLIC REALM DESIGN	<ul style="list-style-type: none"> <li>On the west side, the Hills topography is celebrated with extensive landscaped slopes.</li> <li>Mature trees are retained where possible for their contribution to the Hills Town feel.</li> <li>The linear parkland along the whole length of the precinct, with an abundance of new trees improve the Hills character and assist in cooling the area.</li> <li>The design uses endemic planting and tree species, and materials of the region, such as coffee rock, granite and timber, strengthening the Hills character.</li> <li>The Youth Plaza under the mature trees along Commerce Ave is celebrating the future of Hills Town.</li> <li>The 'heritage gardens' adjacent to the RSL building are designed to reference local orchards, produce, the rail and timber histories of Armadale.</li> </ul>	<ul style="list-style-type: none"> <li>Many formal and informal seating opportunities throughout the precinct allow for informal resting and socialising. These areas are complemented with an array of user amenities (drink water, Wi-Fi, events power, etc.)</li> <li>An informal Yarning Circle nestled within the Welcome Place, to be designed in collaboration with Noongar Elders and artists.</li> <li>A special designed Youth Plaza provides an inclusive platform for youth to socialise and proudly show off their abilities to the community.</li> <li>Continuing the pavement of the Welcome Place across Commerce Ave, designed as a shared space or pedestrian priority crossing, improves the connection with Jull St Mall and helps car users feel like a guest, reinforcing the town centre as a place for people.</li> </ul>	<ul style="list-style-type: none"> <li>The spaces in front of both entrances of the new station building are uncluttered and opened up to their surroundings.</li> <li>Several seating spots with stories to discover are included throughout the new linear landscape areas.</li> <li>Design references in the public realm reveal Armadale's history, including the area's contribution to food production for Perth, and produce and timber transportation.</li> <li>Stormwater gardens and swales reveal the drainage system, allowing people to experience what happens with the rain water, and re-connecting people to local water paths.</li> <li>Opportunity for embedded patterns in surfaces provide interesting elements that highlight Noongar and non-Noongar stories of the place.</li> </ul>
ARCHITECTURE	<ul style="list-style-type: none"> <li>The elevated train platforms are kept open to the sides, offering wide views to the hills.</li> <li>Adding a new station and viaduct to the city, in contemporary and contrasting architecture, accentuates the layers of history in Armadale.</li> <li>Inspiring the design of the station building and viaduct on the original landscape, with horizontal striations, natural filigree texture, and attention for dappled light and shadow, contributes to the Hills Town character.</li> </ul>	<ul style="list-style-type: none"> <li>The station includes a kiosk directly connected to the Welcome Place, providing convenient food and beverages for travellers and plaza users alike, creating opportunities for people to connect.</li> <li>Station entry is clearly visible from the Welcome Place.</li> <li>The spacious station concourse has an open axis connecting both entries, while large glass walls along the sides provide visual connections to the surrounding centre.</li> <li>At platform level, unobstructed vistas to the Hills and the CBD connect users to the place.</li> </ul>	<ul style="list-style-type: none"> <li>Elevating the rail on a viaduct reveals the previously 'hidden' other side of the tracks, creating new possibilities of interaction.</li> <li>The viaduct creates framed views across the railway. Crossing streets and the Welcome Place go through large open spaces that reveal parts of the city beyond.</li> <li>The spacious, opened out station concourse reveals the surrounding city to travellers coming down the lift, stairs and elevators.</li> </ul>
PUBLIC ART	<ul style="list-style-type: none"> <li>Public artworks inspired on the Hills Town narrative are integrated in symbiosis with the architectural and engineering design.</li> <li>A wayfinding art work in the viewline of Jull St Mall enhances the visual connection between the Welcome Place and town centre.</li> </ul>	<ul style="list-style-type: none"> <li>Noongar related place activation art in the public realm creates a connection to Noongar culture.</li> <li>The procurement of public art creates opportunities to engage the Armadale community, enhancing their connection to the station precinct.</li> </ul>	<ul style="list-style-type: none"> <li>Aboriginal stories inspired public art integrated in the landscape design, which reveals the connection of the historical place, the water stream nearby and its importance for life.</li> <li>The place activation public art contributes to intuitive wayfinding and revealing that the Neerigen Brook is nearby.</li> </ul>





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