



## **METRONET Stage 1: Morley-Ellenbrook Line**

# **Whiteman Park Station Development Approval Report**

**MEL-MLCX-AR-PER-00003**

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## Acronyms

<b>ACROD:</b> Australian Council for Rehabilitation Of Disabled	<b>MRS:</b> Metropolitan Region Scheme
<b>AEP:</b> Annual Exceedance Probability	<b>PA:</b> Public Access
<b>ASS:</b> Acid Sulphate Soils	<b>PCA:</b> Planning Control Area
<b>BMP:</b> Bushfire Management Plan:	<b>P&amp;D Act:</b> Planning & Development Act 2005
<b>BEEP:</b> Bushfire Emergency Evacuation Plan	<b>PnR:</b> Park and Ride
<b>CBD:</b> Central Business District	<b>PSP:</b> Principle Shared Path
<b>CCTV:</b> Closed Circuit Tele Vision	<b>PTA:</b> Public Transport Authority
<b>CPTED:</b> Crime Prevention Through Environmental Design	<b>PUDO:</b> Pick Up Drop Off
<b>DA:</b> Development Application	<b>SP:</b> Station Precinct
<b>dB:</b> Decibel	<b>SPP:</b> State Planning Policy
<b>DCP:</b> Development Control Policy	<b>SWTC:</b> Scope of Works and Technical Criteria
<b>KnR:</b> Kiss and Ride	<b>TIA:</b> Transport Impact Assessment
<b>LAeq:</b> Equivalent sound level	<b>TOD:</b> Transport Orientated Development
<b>LGA:</b> Local Government Area	<b>VT:</b> Vertical Transport
<b>LPS:</b> Local Planning Scheme	<b>WA:</b> Western Australia
<b>MEL:</b> Morley Ellenbrook Line	<b>WSUD:</b> Water Sensitive Urban Design
<b>MELConnx:</b> A partnership between Laing O'Rourke and the Public Transport Authority	<b>USB:</b> Universal Serial Bus

## 1. Executive Summary

Urbis acts as the planning consultant on behalf of the *MELConnx Consortium*, the appointed contractor to deliver the METRONET Morley - Ellenbrook Line (MEL) on behalf of the Public Transport Authority (the delivery agency for the METRONET program). This development application seeks planning approval for the Whiteman Park Station and associated infrastructure, being one of five new train stations proposed as part of the METRONET MEL project.

Whiteman Park Station will be located approximately 22km northeast of Perth and will be the fourth station on the MEL, which extends from Bayswater Station to Ellenbrook Station.

Once operating, Whiteman Park Station is expected to reduce travel times for passengers, providing a journey time of 25 minutes from the station to the Perth CBD. Whiteman Park Station will provide efficient transport links to the growing communities of Henley Brook, Dayton, West Swan and Brabham, connecting thousands of visitors and tourists to Whiteman Park.

Whiteman Park Station is located within the City of Swan municipality and will be built just south of the Whiteman Drive East entrance to Whiteman Park. The station is designed as a multi-modal interchange station, and will comprise the following:

- A main station building with typical station amenities. Whiteman Park Station is an elevated rail station, with an at grade entry building and elevated station platform.
- A Welcome Place located immediately south-west of the station entry building, designed as a meeting place where people can congregate or dwell before proceeding on their journeys. This area is to be developed with high quality landscaping and artworks and will form the heart of the station precinct.
- A bus interchange located immediately west of the Whiteman Park Station building, including 10 active bays and 6 layover bays, with buses circulating around a central island platform in an anti-clockwise direction. A dedicated vehicle access point from Whiteman Drive East is provided for the bus interchange to minimise interactions between buses and standard vehicles.
- A high quality, landscaped pedestrian and cycle underpass below Drumpellier Drive south of Youle-Dean Road. This will link the Whiteman Park Station to the Principal Shared Path / Shared Path network, as well as the Brabham District Activity Centre to the east.
- Kiss-and-Ride bays are located adjacent to the Welcome Place, with traffic circulation proposed in a clockwise direction.
- Park-and-Ride bays are located to the west and south-west of the site. All vehicle access to the passenger car park is provided via Whiteman Drive East connecting to Drumpellier Drive.
- Bicycle storage is located adjacent to the pedestrian underpass and adjacent to the station entry building beneath the elevated rail. This ensures a convenient and weather protected space for the bike storage.
- A grade separated 'rail over road' bridge over Whiteman Drive East, immediately north of the station building. The elevated rail structures have been subject to various option testing, with the proposed design providing a slimline profile whilst also meeting structural requirements.

Connectivity for pedestrians walking to the station as well as departing other modes to access the station has been prioritised with efficient connections, clear sight lines and sheltered walkways. Passenger toilets, seating and universal access considerations also ensure comfort and convenience.

A key objective in the station design is to apply principles which support a future neighbourhood station precinct, encourage non-private vehicle use, and deliver an appropriate interface and opportunities for interaction with Whiteman Park. The pragmatic requirement for car parking facilities for a new train station has also been acknowledged and provided for in a way that appropriately interfaces existing and future development in Brabham.

To strike an appropriate balance between these competing objectives, the following infrastructure hierarchy has been specifically applied to the station design:

- Pedestrian desire lines and accessibility have been key drivers in the station design. This is demonstrated through inclusion of a pedestrian underpass below Drumpellier Drive connecting the station building to existing and future development to the east.
- Bus service convenience, with the bus interchange being located immediately adjacent to the station. This bus interchange connects transferring passengers to the station via the Welcome Place with a continuous canopy cover provided from the interchange to the station entry.
- Drop-off and pick-up area adjacent to the Welcome Place and within a short walk of the station entrance, which provides for on-demand transport options. This design enables patrons to conveniently use the Welcome Place and avoids potential conflict between pedestrians and vehicles.
- Segregated all day commuter parking is provided along the periphery of the site, and has been designed and distributed to reduce the perceived scale of the parking.

This hierarchy encourages patrons to consider private car alternatives by delivering these as a more convenient mode of transport with a highly positive user experience, as well as removing the impact of large at grade parking from the highest pedestrian area immediately adjoining the station.

This report considers the planning context and merit of the proposed development, including an overall explanation of the station and key design drivers. This includes an assessment of the application against the relevant planning framework, including the requirements of State Planning Policy No. 7 – Design of the Built Environment and the METRONET Station Precinct Design Guide. As demonstrated through this report, the thorough technical reporting, stakeholder consultation and careful design consideration have all come together through the Whiteman Park Station design to produce a transformative asset for the region.

#### Acknowledgement of Country

MELconnx acknowledges the Whadjuk People of the Noongar Nation as the Traditional Custodians of the land and waters on which the Morley-Ellenbrook Line Project is located. We pay our respect to their Elders, both past and present and thank them for their continuing connection to the country, culture and community.

## 2. Project overview

### 2.1 Morley Ellenbrook Line Background

METRONET is a key project of the West Australian State Government and the single largest investment in public transport ever undertaken in Perth. METRONET will positively change how people live and travel in Perth and significantly improve connectivity across the metropolitan area.

The Morley Ellenbrook Line (MEL) project will deliver 21km of rail line spurring from the new Bayswater Station to Ellenbrook. The project includes the delivery of 5 new stations at Morley, Noranda, Malaga, Whiteman Park and Ellenbrook, as well as future proofing works for a future station at Bennett Springs.

The MEL is part of METRONET Stage 1, with the Public Transport Authority (PTA) being the lead agency delivering the MEL project. The project will design and deliver all rail infrastructure and ancillary works to support operational passenger rail between Bayswater and Ellenbrook, including stations with inter-modal bus and rail, and associated road works at Bayswater, Morley, Noranda, Malaga, Whiteman Park and Ellenbrook stations.

Key works on the project include the following:

- A 21km rail spur from the Midland Line east of the Bayswater Station, travelling north in the Tonkin Highway median, east through land north of Marshall Road and north on the western side of Drumpellier Drive into Ellenbrook
- Stations at Morley, Noranda, Malaga, Whiteman Park and Ellenbrook with future-proofing for a station at Bennett Springs East
- Parking and bus interchanges/facilities at stations
- Significant grade separations at key road crossings
- Tunnels to allow the rail line to enter and exit the Tonkin Highway median
- Shared / Principal Shared Path for walking and cycling access along the rail line
- Track and associated infrastructure to connect to the existing Midland Line
- Road and bridge reconfiguration works

A contextual summary of the MEL extension is illustrated in Figure 1.



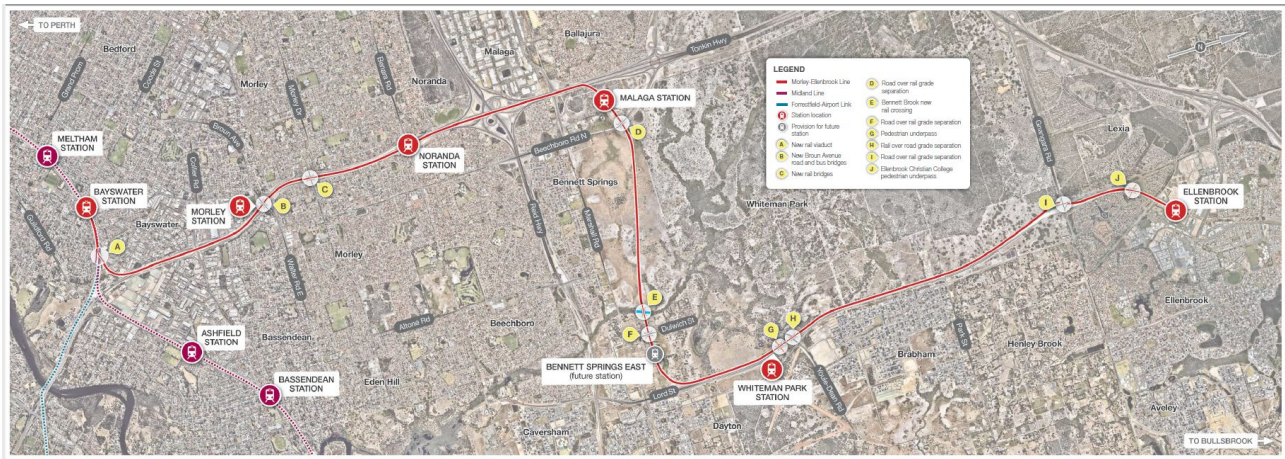


Figure 1-MEL Alignment

Source: METRONET

## 2.2 Supporting Works Packages

Recognising the complexity of delivering the transport infrastructure for the MEL, the overall project works have been divided into three broad programs of work which make up the Ellenbrook Line – Program of Works:

1. New Bayswater Station (Evolve Alliance) – New station at Bayswater (to relocate and replace the existing station), including associated turnback infrastructure to allow the MEL to connect to the Midland Line.
2. Tonkin Gap and Associated Works (Tonkin Gap Alliance) – this project is being delivered by Main Roads and includes significant civil and structural works between Bayswater and Malaga, to prepare the Tonkin Highway median for access to/from and construction of the new rail line and stations.
3. Main MEL Project Works (MELconnx Consortium) – includes all rail systems and infrastructure from Bayswater, all stations and facilities within the Tonkin Highway median and road reserve, and all works north of Malaga to Ellenbrook

This development application only applies to the Whiteman Park Station, which forms part of the Main MEL Project Works.

## 2.3 METRONET Scope and Requirements

In September 2020, the MELconnx Consortium (Laing O'Rourke Australia Construction) was named as the preferred proponent to design and construct the MEL, including the Whiteman Park Station and associated 'land-side' station infrastructure.

As the MEL is a METRONET project, the funding for the project has been allocated by the State and Federal Governments, with the scope of the project being approved by Parliament of WA in the form of a Project Definition Plan. The scope of the project is captured within the contractual arrangements, including the METRONET specified Scope of Work and Technical Criteria (**SWTC**). This SWTC also sets the design criteria, standards and guidelines for the station design.

The SWTC for the Whiteman Park Station defines the following design parameters relevant to the scope of this development application:

- The Whiteman Park Station will be designed as a 'Closed Station'; with automatic fare gates controlling access to and from the station platforms.
- Station platforms, with a minimum length of 150m, are designed to suit the operation of six car B and C series rail cars. The station platforms are required to have 70% of the operational platform length under cover. The platforms are required to accommodate dedicated seating, passenger information facilities, staff amenity facilities, station operational facilities and a staff office.
- A one-way movement bus interchange with at least 10 active bus bays (8 standard bays and 2 articulated bays), as well as 6 bus layover bays including two articulated bays. The active bus bays are to be as close as practically possible to the station entry.
- Bicycle parking facilities, including a secure bicycle parking shelter incorporated within the station building. A further 10 open U-rails adjacent to the station entry building. Provision must also be made for additional secure bicycle parking shelters to be added in the future.
- Landscaping to streets, forecourts and public open space on PTA controlled land.
- Car parking spaces, including a combination of long-term car parking, short term and set down bays, taxi bays, staff parking bays and tenant parking.

- A minimum of 20 covered motorcycle bays.

Importantly, the SWTC also sets key qualitative station design measures, such as:

- The requirement to deliver a multi-modal station with bus interchange and rail station. The bus interchange and rail station are to be located west of Drumpellier Drive and shall incorporate a grade separated platform.
- Station building specifications, including specifications for the paid and unpaid areas of the station. These specifications are:
  - Unpaid Concourse Area: requirement to provide access to the unpaid concourse area of the station. The unpaid concourse area shall include public service facilities (automatic teller machine, vending machine and pay phone), passenger ticketing/information facilities, station administration/office facilities, kiosk and associated stores.
  - Paid Concourse Area: a requirement to provide public toilet facilities (male toilet, female toilet and unisex accessible toilet), staff amenity facilities (crib room, male toilet, female toilet, unisex accessible toilet and staff changing areas), station storage/cleaning facilities (cleaners room and storeroom), stair, lift and escalator access.
- A specification that the bus interchange includes a continuous canopy shelter between the bus interchange and the station entrance, as well as weather protected seating and passenger information facilities at each bus stand.
- Various measures to ensure high quality landscaping is delivered, including the requirement for landscaping to be designed by a landscape architect.

This SWTC therefore sets the basic building blocks for the delivery of a highly functional and contemporary multi-modal train station. The role of the MELconnx Consortium is to interpret these requirements and apply them to the detailed station design, as proposed through this development application.

The station development envelope is also strictly defined by several factors, including landowner negotiations and environmental constraints, such as the clearing of significant vegetation and associated environmental offsets.

In terms of the development approvals process, this essentially means that there are some fixed aspects to the project, and as a result there are limitations on the ability to make fundamental changes to the design scope and requirements. However, the opportunity to make pragmatic changes which remain consistent with the scope of the SWTC and environmental approvals may still be considered.

### 3. Site Location and Context

#### 3.1 Lots Subject to this application

The legal details of the lot(s) directly affected by works for the Whiteman Park Station and requiring development approval are detailed in **Table 1** and **Table 2** below. **Figure 2** below provides an overlay of the development application limit of works with the lot cadastral boundaries.

A copy of the Certificates of Title are enclosed within this application in **Appendix A**.

Table 1–Affected Lots

Lot	Plan	Vol/Folio	Proprietor
98	P022611	2134/989	Western Australian Planning Commission
811	P405371	2925/245	Western Australian Planning Commission
600	DP73193	2798/595	Western Australian Planning Commission

**Table 2** provides details of any encumbrances registered on the above Certificates of Title.

Table 2 – Registered encumbrance(s)

Lot	Encumbrance	Details
98	Refer to Title	A number of limitations and notifications are listed on the Title, but all are outside the area impacted by the proposed development.
811	Refer to Title	
600	Refer to Title	

Figure 2-Cadastre Plan



## 3.2 Site Context

The Whiteman Park Station will be situated approximately 22km north-east of the Perth CBD and is located at the edge of Whiteman Park and the suburb of Brabham. Both are part of the City of Swan Local Government area. The station precinct is mostly located in the “Lord Street Lands” of Whiteman Park. This area is an important buffer between the Park’s core and the suburban developments to the east.

Whiteman Park is a unique conservation and recreation reserve, covering 4,000 hectares of natural bushland and leisure facilities. The Park is a centre for environmental heritage and conservation of endangered fauna. Whiteman Park is also one of Western Australia’s most visited attractions with more than 1 million visitors each year, varying from local families to international tourists. Located on the doorstep of the Swan Valley, it includes a range of attractions and facilities, including the Whiteman Village, Motor and Tractor Museums, Caversham Wildlife Park, the heritage tram line, and an array of recreational facilities, from playgrounds and picnic areas to walking tracks and an extensive cycle network.

The suburban development of Brabham on the eastern side of Drumpellier Drive is part of the Albion District Structure Plan. The area is being developed via various Local Structure Plans by different land developers. The suburb includes homes, schools, shops and recreational areas. The future shopping centre, for which the Activity Centre Structure Plan has been approved in 2018, is located at approximately 800m walking / cycling distance of the Whiteman Park Station (taking the proposed street pattern into account). From the train station east, an activity focused main street type development with increased residential density is proposed, connecting towards both the shopping centre and the future high school.

An aerial photograph showing the proposed station (in red) and site context is provided in **Figure 3**.

Figure 3 –Current Aerial Photo

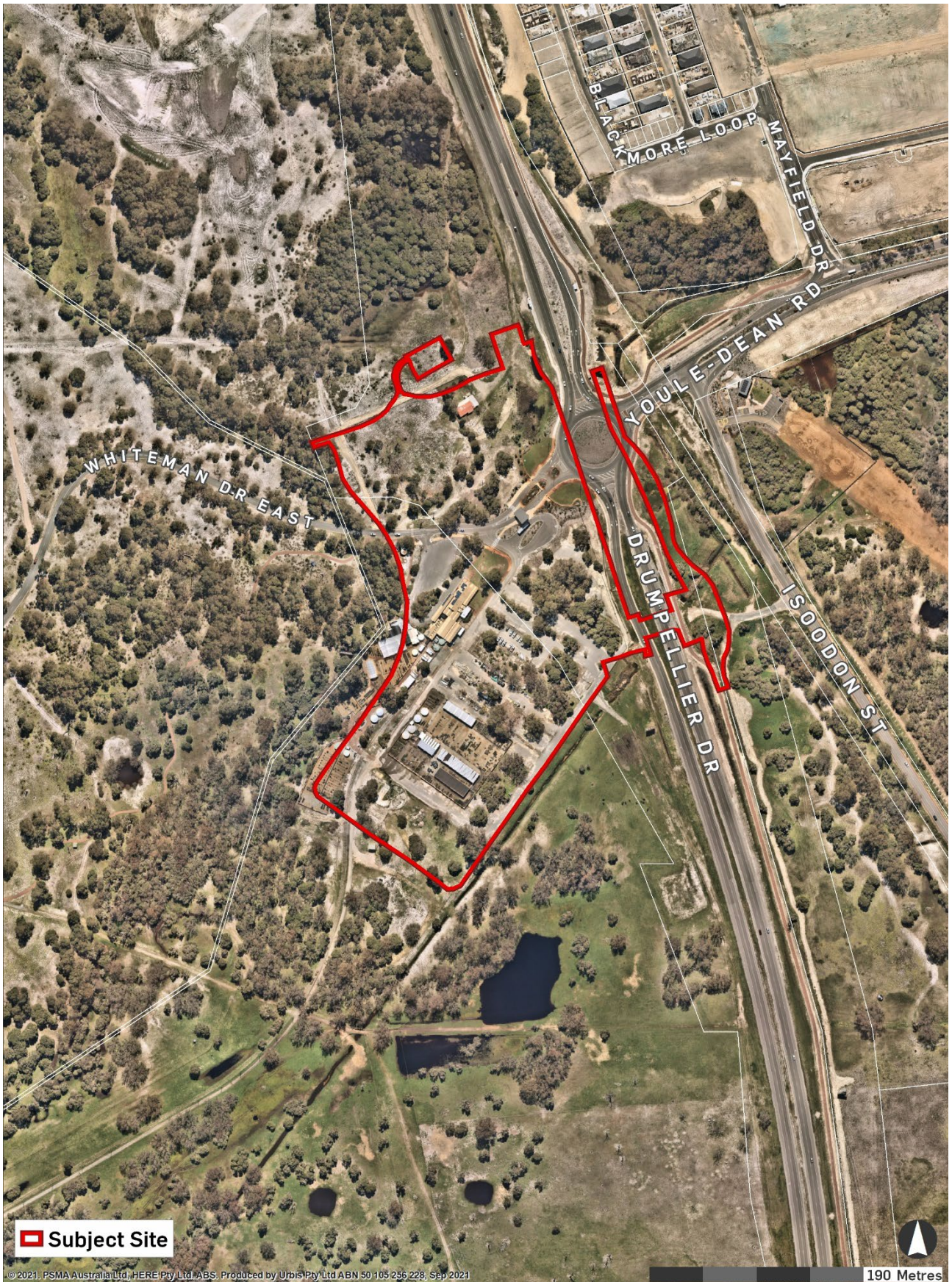


Table 3—Contextual Summary

Contextual Feature	Details
1. Whiteman Park entry	<p>The site is the entry to Whiteman Park which is a nature reserve and recreational tourist attraction. Whiteman Park Station will act as a primary arrival point for main tourist and recreation destination of Whiteman Park and potential future development.</p> <p>The Station compliments the natural setting of Whiteman Park, and enables the Station to act as an attractive gateway between the Brabham town centre to the east and Whiteman Park to the west</p> <p>Existing bushland surrounding the site is a special landscape setting that will be integrated into the station design.</p>
2. Drumpellier Drive	<p>Drumpellier Drive is a four-lane Local Distributor road running north south directly east of the site. It provides a local connection between Reid Highway and Gnangara Road. The posted speed limit is 70kph south of the site before becoming 80kph north of Youle-Dean Road. It carries approximately 16,000 vehicles per day (Main Roads WA Traffic Map, 2021).</p>
3. Existing Buildings	<p>Existing buildings within the subject site area will be demolished through this development application, with operations relocated as required.</p>
4. Existing Residential Areas	<p>The suburban development of Brabham on the east side of Drumpellier Drive is part of the Albion District Structure Plan. The area is being developed via various Local Structure Plans by different land developers. The suburb includes homes, schools, shops and recreational areas. The future shopping centre, for which the Activity Centre Structure Plan has been approved in 2018, is located at approximately 800m walking / cycling distance of the future train station (taking the proposed street pattern into account).</p> <p>The establishment of Whiteman Park Station and the MEL will provide the surrounding population with public transport connectivity to the CBD.</p>
5. Immediate Surroundings	<p>Drumpellier Drive is located immediately to the east of the Whiteman Park station building.</p> <p>Land surrounding the station to the north, south and west of the Whiteman Park Station building is predominately bushland, but includes a carpark, nursery, tram line, manicured trees and lawns.</p>
6. Existing Tram Line	<p>The Whiteman Park heritage tram line connects the Mussel Pool and the Village to the Whiteman Park entry. Part of the tram line will be realigned in the future to achieve better connectivity to the Whiteman Park Station, with a tram stop located adjacent the to Welcome Place.</p>



7. Whiteman Drive East	<p>Whiteman Drive East is currently a low speed road which provides access to Whiteman Park and existing development within the site.</p> <p>Whiteman Drive East will be realigned with the upgrades at the Drumpellier Drive / Youle-Dean Drive intersection, and will provide the main point of vehicle access for the Whiteman Park Station. The road will remain at-grade, with the elevated 'rail over road' bridge travelling above.</p>
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Figure 4 –Context Plan



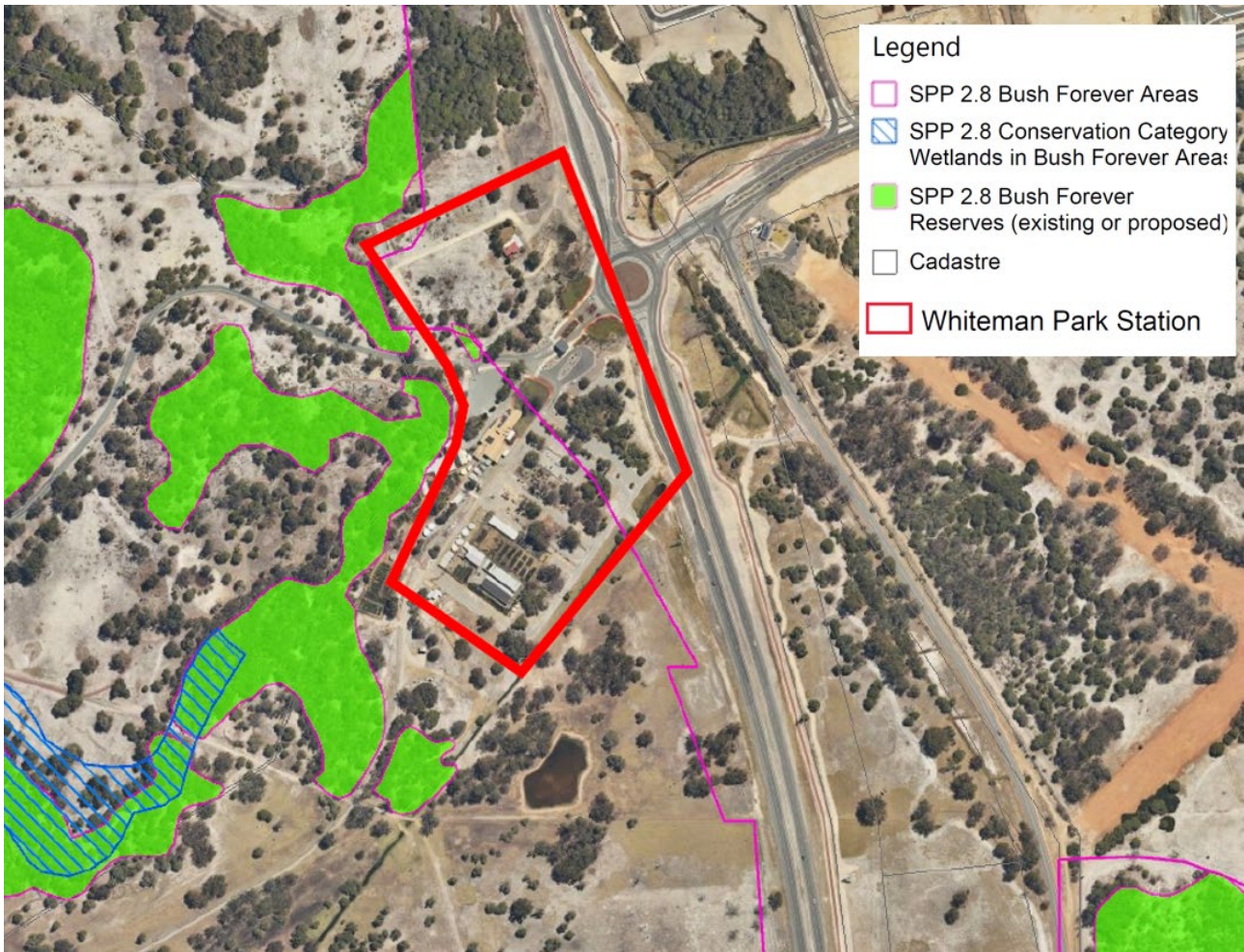
### 3.3 Environmental Considerations

The following table provides a summary of environmental considerations applicable to the subject site, and proposed actions (where relevant).

Table 4–Summary of Environmental Conditions

Item	Summary
Bushfire Prone Areas	The Whiteman Park Station is identified as being located within a Bushfire Prone Area. A Bushfire Management Plan has been prepared to accompany this development application (refer <b>Appendix J</b> ).
Contamination	The site is <u>not</u> an identified contaminated site.
Acid Sulphate Soils (ASS)	The site and surrounds are identified as moderate to low risk of ASS occurring within 3m of natural soil surface but high to moderate risk of ASS beyond 3m of natural soil surface.  Further geotechnical investigations and management will be undertaken as part of the construction management plan.
Aboriginal Heritage	Lots subject to this application contain a registered Aboriginal heritage site no. 552. Site 552 is a ceremonial, water source and mythological site held under Open Access.  Site 552 is located outside of the limit of works for the entire MEL project, including the Whiteman Park Station development application, ensuring this site remains protected.
European Heritage	Whiteman Park is a registered heritage site (Place number 25868) and has aesthetic value as a natural setting of Swan Coastal Plain flora. Whiteman Park also has social value as a place of recreation for Western Australians, where the community can amongst other activities, picnic at Mussel Pool, experience transport heritage and bush walk through the Park’s bushland and wetland areas.  Whilst all of Lot 811 is subject to heritage listing, the location of carparking and vehicle access within this Lot will not impact on the heritage values of the site.
Bush Forever	Whiteman Park as a whole is identified as a Bush Forever Area. Importantly, the Whiteman Park Station envelope is located outside of the identified ‘Bush Forever Reserves’ for the purpose of State Planning Policy No. 2.8. Refer to <b>Figure 5</b> below.  The proposed development will not impact on conservation category vegetation or wetlands. Where possible existing significant vegetation will be retained and incorporated into the station design to achieve improved amenity and a sense of place from day one. Clearing permits have been obtained to clear vegetation associated with the proposed development.

Figure 5 - Bush Forever Reserve



## 4. Proposed Works and Operating Hours

This development application seeks approval for the Whiteman Park Station, which is a multi-modal station accommodating the main station building and platforms, a bus interchange, car parking areas and pedestrian / cyclist links / underpass into the station.

The Whiteman Park Station is an elevated rail station, with an at-grade station entrance and elevated platforms. This format of station was required for Whiteman Park to enable a grade separated rail over road crossing at Whiteman Drive East, immediately north of the station building.

The Whiteman Park Station is proposed to be open for operation in 2024. The Station building will operate between 4.30am and 12.30am each day of the year, with the station building to be locked outside of these hours to prevent the public from entering.

During the peak period of 7am – 9am and 4pm – 6pm, the station will provide five services per hour in each direction, reducing to four services per hour during off-peak.

**Figure 6** below provides an overall visual layout of the Whiteman Park Station, demonstrating how the various elements of the station come together to formulate a functional station with clearly delineated links and quality landscape outcomes.

Development plans for the station work are provided at **Appendix B** of this report.

Figure 6 - Overall Station Design



## 4.1 Supporting Works

The scope of this development application is limited to the station building, elevated rail viaduct structure and supporting facilities. However, it is noted that the scope of this development application does not include the following:

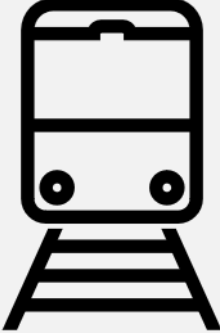
- Wider road network modifications, including upgrades to Drumpellier Drive / Youle-Dean Road, which are considered METRONET Works.
- Operational infrastructure associated with the wider rail network, which are also considered METRONET Works.

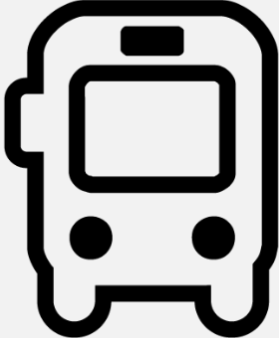


Refer to **Section 7.2** for further discussion on the 'METRONET Works' and associated legislation.



## 5. Design Principles

The Whiteman Park Station design has been informed by a combination of functional design requirements and architectural / landscape design objectives. The Table 5 below provides an overall summary of these design inputs, with supplementary sections providing a detailed description of the design drivers.

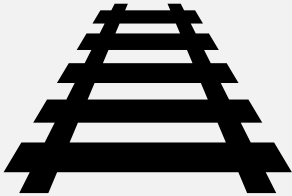
Table 5–Station Works Subject to this Application

PROPOSED	DETAILS
<p data-bbox="204 1160 485 1189"><b>Train Station Building</b></p> 	<p data-bbox="557 938 1418 1115">Whiteman Park Station is an elevated station building with an at-grade station entry concourse and elevated station platforms. The station building has a single public access point to the west. Section 5.10 provide a detailed overview of the station, with <b>Figures 9 and 10</b> providing artistic renders of this station form.</p> <p data-bbox="557 1162 890 1191">The station building includes:</p> <ul style="list-style-type: none"> <li data-bbox="584 1223 1382 1435">▪ <b>Unpaid Concourse Area</b> which includes:                     <ul style="list-style-type: none"> <li data-bbox="679 1261 1382 1323">- public service facilities (automatic teller machine, vending machine and pay phone)</li> <li data-bbox="679 1335 1182 1364">- passenger ticketing/information facilities</li> <li data-bbox="679 1375 1137 1404">- station administration/office facilities</li> <li data-bbox="679 1415 1043 1444">- kiosk and associated stores</li> </ul> </li> <li data-bbox="584 1447 1382 1733">▪ <b>Paid Concourse Area</b> which includes:                     <ul style="list-style-type: none"> <li data-bbox="679 1485 1382 1547">- public toilet facilities (male toilet, female toilet and unisex accessible toilet)</li> <li data-bbox="679 1559 1382 1621">- staff amenity facilities (crib room, male toilet, female toilet, unisex accessible toilet and staff changing areas)</li> <li data-bbox="679 1632 1334 1695">- station storage/cleaning facilities (cleaners' room and storeroom)</li> <li data-bbox="679 1706 1350 1736">- stair and lift and escalators to access the platform level</li> </ul> </li> <li data-bbox="584 1767 1414 1868">▪ A station platform of approximately 10 metres wide and 150m in length, accommodating typical station amenities such as seating and ticketing.</li> </ul>

<p><b>Bus Interchange</b></p> 	<p>A one-way movement bus interchange with:</p> <ul style="list-style-type: none"> <li>▪ 10 active bus bays (eight standard bays and two articulated bays)</li> <li>▪ Six bus layover bays including two articulated bays</li> <li>▪ A continuous canopy weather shelter to the bus interchange linking to the station building</li> </ul>
<p><b>Station Parking</b></p> 	<p>Park and Ride car parking with 886 spaces, including:</p> <ul style="list-style-type: none"> <li>▪ 846 standard all day bays</li> <li>▪ 13 standard short-term bays</li> <li>▪ One tenant bay</li> <li>▪ Future proofing infrastructure to support two EV charging bays</li> <li>▪ 17 ACROD bays</li> <li>▪ Two service/loading bays</li> <li>▪ Four staff bays</li> <li>▪ One taxi bay</li> </ul> <p>Kiss and Ride car parking with 14 spaces, including:</p> <ul style="list-style-type: none"> <li>▪ 13 standard pick-up/drop-off bays (PUDO)</li> <li>▪ One accessible PUDO bay</li> <li>▪ 20 sheltered motorcycle bays</li> </ul> <p>Bicycle parking, including;</p> <ul style="list-style-type: none"> <li>▪ Secure bicycle storage shelters, with storage for up to 43 bicycles</li> <li>▪ 10 U-rail bicycle stands located within the station precinct</li> </ul>
<p><b>Pedestrian and Cyclist Access</b></p> 	<p>Pedestrian / cyclist connections into the station is as follows:</p> <ul style="list-style-type: none"> <li>• The main 20m wide (approx.) landscaped pedestrian and cycle underpass below Drumpellier Drive south of Youle-Dean Road to connect the station precinct and the future Brabham residential development in the east. This pedestrian path leads directly to the Welcome Place 'meeting ground', which functions as an inform que to emphasise the station forecourt as a destination.</li> </ul> <p>This area is established as a shared environment through the use of distinct materials, feature planting and non-linear lines, providing natural quest to encourage cyclists to slow at the station approach.</p> <ul style="list-style-type: none"> <li>• Additional pedestrian pathway connecting the station to Whiteman Park East and connection road networks, and connections into Whiteman Park.</li> </ul>

<p style="text-align: center;"><b>Landscaping</b></p> 	<p>The MEL landscape principles of practical tree retention, low maintenance and water use species selection, water sensitive urban design and using landscaping design to assist in wayfinding remains key elements of the Whiteman Park Station landscape design. These principles are universal to all stations on the MEL alignment.</p> <p>Due to its location within Whiteman Park, achieving high quality landscape and vegetation retention outcomes is a high priority for the Whiteman Station. This has resulted in a comprehensive landscape architect response to landscape for Whiteman Park, which is described in detail within <b>Section 5.2.2</b> of this report.</p> <p>The landscape plan is provided at <b>Appendix C</b> of this report.</p>
<p style="text-align: center;"><b>Public Art</b></p> 	<p>Public art within the station will be delivered in accordance with the requirements of the WA State Government Percent for Art.</p> <p>This artwork will be delivered as part of the 'METRONET Public Art Strategy', with the thematic framework strongly built around the Gnarla Biddi story of 'Our Pathways'.</p> <p>The integration of this artwork into the station design will be further developed through the detailed design phase, and it is expected that an associated standard condition of approval will be applied.</p> <p>Regardless, a Public Art Plan identifying public art opportunities and key themes is provided at <b>Appendix I</b> of this report. This notes the key areas of focus for the public art will be:</p> <ul style="list-style-type: none"> <li>• The pedestrian underpass: With opportunities for art integration identified in the walls, soffit and paving treatments.</li> <li>• Playspace in Welcome Place: with opportunities for artwork to integrate into the landscape design.</li> <li>• Bike store: including opportunities for perforated metal panels in the structure.</li> <li>• Station building skylight: with opportunities for fitted glass artwork.</li> <li>• At key pedestrian entry points: to announce arrival to the station.</li> </ul>



<p><b>Rail Bridge</b></p> 	<p>A grade separated 'rail over road' crossing is provided across the Whiteman Drive East entry road to enable the MEL rail alignment to continue north. Due to the proximity to the Whiteman Park Station, this requires both the station building and associated rail line to be elevated.</p> <p>The 'twin piers' design accommodates the structural requirements, whilst also being refined to be as slim as possible, and maximise circulation space and clearances within the station concourse. The slim shapes reduce the perceived mass of the piers and makes them more visually permeable and assisting sight lines and wayfinding.</p> <p>Refer to <b>Appendix D</b> for plans of the rail bridge structure.</p>
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## 5.1 Architectural Design Statement

The scope of works set by the projects SWTC includes a number of qualitative design measures which must be met in the station's architectural design. These requirements have been interpreted and applied by the project architects Woods Bagot, which has resulted in common line-wide architectural themes and a site-specific interpretation for Whiteman Park Station. These themes and design drivers are best summarised as follows.

### Line wide Architecture Overview

The design approach for the Morley-Ellenbrook Line is to create a family of buildings tied together through a common design language to establish a line-wide identity. The approach is to have a degree of commonality between the five stations while also allowing the stations to have unique elements to convey their own local identity and speak to the community in which they are located. A 'kit-of-parts' approach has been taken to identify standardisation of components (where appropriate) to maximise efficiency of construction and maintain similar elements that informed the shared language across all the stations. Thus, Whiteman Park Station shares line-wide consistencies with the other stations on the Morley-Ellenbrook Line in terms of the simple roof geometries, materiality, geometric form, kit of parts assembly and modular designs.

### Whiteman Park Station Architecture

The Whiteman Park Station Precinct is located at the edge of Whiteman Park, within the suburb of Brabham. Both are part of the City of Swan Local Government area.

The station will act as a primary arrival point for the main tourist and recreation destination that is Whiteman Park, and planned potential future developments. The station building is unique in that it is the only elevated station on the Morley – Ellenbrook line with an at grade concourse and an elevated island platform supported on a elevated rail structure.

As noted earlier in the report, the rail at Whiteman Park is required to be elevated due to the proximity to Whiteman Drive East. But this is also an opportunity for the station, as an elevated island platform enables an at-grade pedestrian underpass / link from the station directly to the Brabham town centre. The station entry is to the south west of the station building and accessed directly from the Welcome Place to the west. A dedicated pedestrian link is also located south of the station. The station and precinct ultimately provides an attractive gateway to Brabham town centre and Whiteman Park.

The architectural design considers a holistic approach where the station building forms an integral part of the precinct and the surrounding context to support and enhance the local character of Whiteman Park. The approach to design has considered the projects' functional requirements, the need to deliver a sustainable, efficient, and cost-effective design, and the desire to create a built environment that is sensitive to the significant local culture, historical and environmental context. Of significance, is the consideration of how people will experience the station and the associated precinct in their day-to-day lives.

The elevated station and rail structure are highly visible from Drumpellier Drive and the surrounding precinct, and due consideration has been given to the architectural design as seen from all views from a massing, scale and detailing point of view. This includes a series of design iterations and testing to the elevated rail structures, with a 'twin piers' designed selected as the preferred structure (see **Figure 7**). This design testing is demonstrated in **Figure 8** below.

The station architecture has a clear hierarchy of simple architectural forms. The station building being the highest, then the station entry, services and finally the canopies, each element scaled down to reflect the hierarchy. The roof has a hipped geometry and 'floats' above the raised platform providing natural light and weather protection. There is a clear legibility to the design, with visual transparency from the pedestrian link into the station and from the Welcome Place to the entrance, providing clear legibility, intuitive wayfinding and a welcoming approach that feels open and connected to the station precinct.

The precinct urban design consists of distinct yet interconnected areas, comprising of the at grade bus interchange, the car park, shared pedestrian and bicycle paths, a narrative and interpretive Welcome Place and the link connecting the residential neighbourhoods to the station precinct. The Welcome Place has been designed with organic landscape elements which helps in the creation of a narrative unique to Whiteman Park Station and the surrounds. Opportunities for art integration has also been considered throughout the Welcome Place creating a culturally significant space which prompts the users an introspection on the significance of the park in the overall context of Perth as a city.

The bus interchange has been aligned with PTA requirements and functions as a centrally loaded interchange with busses circulating in an anti-clockwise direction. Tree retention has been a key factor in the approach to the urban design, both within the Welcome Place and in the placement of the car parking areas to maximise retainment of the mature trees just west of the creek. The car park has a significant focus on swale planting and ensuring water sensitive urban design principles are followed throughout the design.

Figure 7 - Illustration of Ground Level Concourse



Figure 8 - Elevated Rail Structure Design Testing

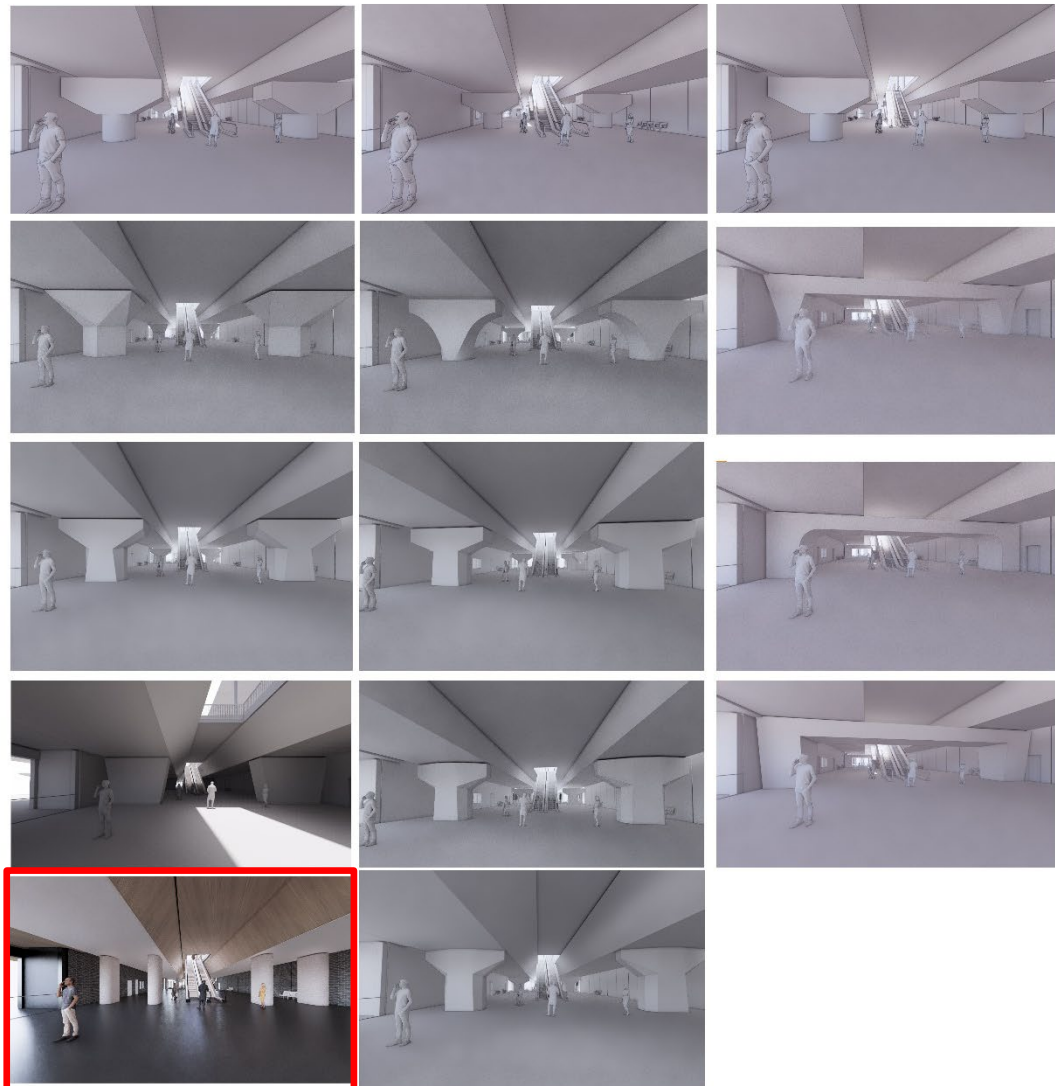


Figure 9 – Artistic impression of 'Twin Pillars'



The following figures illustrate the Whiteman Park Station building as viewed from key locations in the site.

Figure 10 - Station Building, as viewed from the kiss-and-ride



Figure 11 - Station Building, as viewed from the pedestrian underpass



Figure 12 - Illustrative Render of Welcome Place and Station Building



## 5.2 SPP 7.0 – Assessment of Good Design

MELconnx have referenced the 10 Principles of Good Design, outlined under, 'State Planning Policy 7.0 Design of the Built Environment, to develop an appropriate design response and sense of place for the station design. The following sections provide detailed information illustrating the measures incorporated to achieve a high-quality design and built form outcome.

### 5.2.1 Context and Character

**Design Principle Statement: Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place**

Whiteman Park Station is the heart of the bushland experience of the Morley – Ellenbrook Line. The station will connect Whiteman Park, an important cultural and ecological landmark in Perth, with the city. The station is designed as a SP3 (specialised centre station) station, with the aim to provide access to the Whiteman Park tourism destination. The future residential developments of Brabham to the east have also been considered in the station and precinct design. The station is designed as a multi-model interchange station to allow for interconnectivity between trains and busses. The station forecourt / Welcome Place acts as the central connector, connecting the at grade bus interchange, car park, vehicular drop off, future heritage tram stop, shared paths, and the pedestrian and cyclist underpass that links the station to the future development to the east.

The overarching aim of the Welcome Place is to make visitors feel welcome and comfortable. The design approach is to focus on the cultural stories around the park, with a strong focus on Noongar story interpretation and bringing about play opportunities. The Welcome Place and associated play area have also been identified as an opportunity to integrate art into the precinct. The heritage tram lines, which are unique to Whiteman Park and an ode to the tram history in Perth, has also been designed to connect the station precinct in the future. This further connects the station with the park and its history. **Figure 13** below provides an overview of the contextual considerations influencing the station design.

Figure 13 - Context and Character Considerations

#### Context



## 5.2.2 Landscape Quality

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

Whiteman Park provides a significant natural setting for the location of the Station building. The qualities of Whiteman Park have been reflected in the landscape design ensuring an identity to Place, including the use of materials, arbour structures, planting, artwork, rectilinear layout, and a strong civic quality.

This landscape strategy is categorised into a number of key areas, as summarised in **Table 6** and **Figure 14** below.

Table 6 Summary of Landscape Strategy

AREA OF FOCUS	LANDSCAPE OUTCOMES
<p><b>The Arrival Experience</b></p> <p>This relates to the precinct entry road as both a distributor for station patrons and visitors to Whiteman Park.</p>	<p>The intent is to create a ‘parkland boulevard’ experience leverages off views to Whiteman Park, whilst supplementing the borrowed landscape with a pleasant landscaped address for the precinct and mitigating the presence of hard infrastructure.</p> <p>Landscape treatments are proposed to include a generously sized path to the south side of the entry, a combination turf lawn and ‘six seasons’ inspired wildflower garden beds, new tree planting, selective architectural screening and fencing in key areas and interpretative wayfinding elements and signage to assist precinct navigation.</p>
<p><b>The Central Link</b></p> <p>The ‘Central Link’ refers to the main proposed pedestrian and cycle thoroughfare that links the east and west sides of the precinct and reticulates under both Drumpellier Drive and the rail viaduct. This unique linking space is generous in width, but constrained by the height, scale and ‘visual weight’ of overhead structure, whilst additionally traversing areas and structures that are operated and maintained by different authorities. Furthermore, the space between Drumpellier Drive and the viaduct constitutes an area in which it is desirable not to permit unfettered public access. The success of the Central Link as a public thoroughfare is contingent upon the perception of safety and providing a pleasant public realm experience.</p>	<p>Investment will be focused on high-quality treatments, interesting design and potential elevation of the user experience through a combination of art installations, special lighting and the obvious presence of CCTV infrastructure to make the link as positively engaging and safe as possible. Key landscape and architectural elements and treatments proposed for the link include:</p> <ul style="list-style-type: none"> <li>• Large feature boulders and shade tolerant planting to ‘draw nature through’ the portal structures and soften the presence of hard infrastructure;</li> <li>• A ‘woodland creek’ inspired paving arrangement to create visual interest;</li> <li>• Feature lighting, potentially with multi-media, audio-visual art installation;</li> <li>• Decorative screening between the viaduct and Drumpellier portal retaining abutments to limit public access to uncontrolled areas and provide a pleasant and engaging back-drop to the thoroughfare;</li> <li>• The precinct secure bike store;</li> <li>• Elevated rail soffit treatments to conceal services and improve visual appearance.</li> </ul>

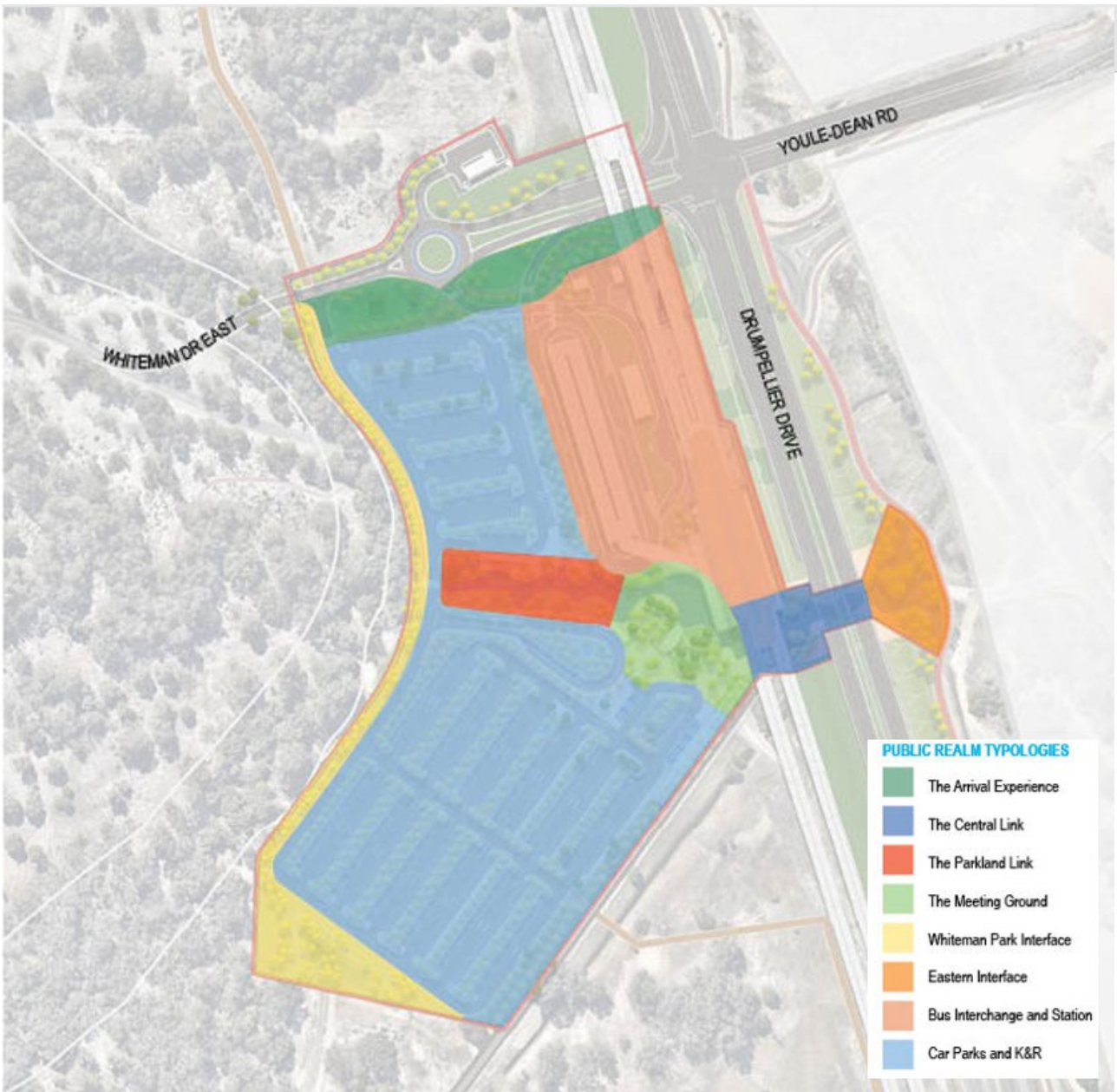


AREA OF FOCUS	LANDSCAPE OUTCOMES
<p><b>The Parkland Link</b></p> <p>The Parkland Link extends from the central Meeting Ground to the western edge of the precinct, which when combined on journey through the Meeting Ground and Central Link creates continuous, generous shared pedestrian and cycle landscape connection between the (future) Brabham development and Whiteman Park.</p>	<p>Parkland Link features a strong, long-distance sight line from Whiteman Park footpath connection uninterrupted all the way to the station entry. The ‘woodland creek’ inspired paving arrangement proposed in the Central Link is intended to extend all the way to the Whiteman Park interface, creating an opportunity for artistic interpretation and story-telling. A raised/flush pedestrian priority link (‘Wombat Crossing’) is proposed at the end of the Parkland Link to tie in with the Whiteman Park path network.</p> <p>The proposed strong presence of trees, garden beds and lawn spaces will accentuate the casual parkland ‘feel’, whilst providing a pleasant experience for users and spaces for groups of different sizes to gather. Supplementary urban feature is proposed to provide rest points for people of different ages and abilities, whilst the combination of generous lawn and paved space with power and water provision, will support food and beverage vans to provide the opportunity for additional activation in the space.</p>
<p><b>The Meeting Ground</b></p> <p>The Meeting Ground is the public realm heart of the precinct, proposed to provide an engaging and comfortable landscape hub to accommodate station patrons or visitors passing through on their way to Whiteman Park. It is proposed to be ‘story-telling nucleus’ for the precinct, using the landscape, surface treatments and art installations to provide a rich user experience.</p>	<p>The proposed features of the Meeting Ground include:</p> <ul style="list-style-type: none"> <li>• A slightly-raised informal, nature-inspired ‘play’ and casual relaxation space with gravel trails, existing trees, large feature boulders, site-salvaged balance logs and steppers;</li> <li>• A raised informal stage edge supported with power provision to accommodate the potential for activation by musicians or cultural events;</li> <li>• A central linking path connecting the southern car park to the station entry, enhanced by a lightweight arbour or pergola structure for shade provision and potential artistic interpretation;</li> <li>• An open ‘woodland grove’ of elegant, smooth stemmed trees with open canopy to provide a delicate filigree of shade over a relaxed informal seating area containing stabilised gravel pavements, architecturally selected planting, large feature boulders, custom seat-walls and catenary lighting;</li> <li>• Safe, convenient and attractive DDA compliant footpath links to all surrounding areas;</li> <li>• Space-proofed provision for future tram stop and 40m x 8m shelter is provided on the southern edge of the Meeting Ground, allowing for future area for tram patrons to comfortably congregate without compromising the broader function of the Meeting Ground; and,</li> <li>• Supplementary feature boulders and urban furniture to support comfortable use and provide hostile vehicle mitigation / deterrence.</li> </ul>

AREA OF FOCUS	LANDSCAPE OUTCOMES
<p><b>Whiteman Park Interface</b></p> <p>The Whiteman Park interface is primarily proposed as a vegetated edge to the western verge of the car park spine road and the southern edge of the southern car park. At the southern end, a vegetated infiltration basin is proposed as part of the precinct drainage strategy, whilst a perimeter fauna fence encloses the car park behind a vegetated buffer to ameliorate its visual impact.</p>	<p>Two gated pedestrian / cycle entry points are proposed – one at the end of the Parkland Link and one slightly further north which makes use of the remnant existing entry road. Both of these gated (for fauna control) links connect into existing the Whiteman Park footpath network, providing convenient access to the proposed relocated Whiteman Park private bus pick-up loop. The proposed 2.5m entry road path that connects into the Drumpellier / Youle-Dean intersection is proposed to cross the spine road and reticulate south to the northern path connection rather the following the line of the vehicular entry road into Whiteman Park. The reason for this is to minimise the width of new road construction through the sensitive ephemeral creek environment.</p>
<p><b>Eastern Interface</b></p> <p>The eastern precinct interface predominantly relates the connection to the PSP east of Drumpellier Drive, potential future connections to the Brabham development and treatment of Drumpellier Road batters.</p>	<p>The pedestrian / cycle connection to the PSP is proposed to be the eastern origin point of the ‘fluid / wetland creek’ inspired design language, providing a visual signifier that the nature of the space has changed from the high-speed, linear mode of the PSP into a more relaxed, pedestrian friendly space.</p> <p>A combination of low walls, garden beds, tree planting and stone pitching is proposed to soften the visual impact of the Drumpellier Drive portal structure. To promote the use of the Central Link it is proposed that a hierarchy of interesting interpretative wayfinding markers be considered along the PSP approach to facilitate the navigation of station users and Whiteman Park visitors from adjacent developments to the Central Link.</p>
<p><b>Bus Interchange, Northern Viaduct and Station</b></p> <p>The bus interchange, northern viaduct area (i.e. the area under the viaduct, north of the station up to the entry road) and immediate station surrounds are largely functional areas distinctive in the need to accommodate large flows of people or house supporting station and precinct services. Public access in these areas is tightly controlled by road furniture and fencing to guide patrons to safe paths of travel, whilst curtailing unauthorised areas.</p>	<p>Landscape and architectural cues, such as canopies, pavement treatments and urban furniture provide a visual indication of intended routes, whilst providing weather protection, integrated lighting, CCTV cameras and signage. Pavement treatments to the immediate forecourt of the station entry are proposed to be of high-quality, transitioning to standard treatments in the bus interchange and basic gravel and path treatments under the viaduct.</p> <p>Noting that some areas under the viaduct will briefly be visible to road users on Drumpellier Drive, a decorative two-tone gravel arrangement that utilises the same fluid design language as the Central Link / Meeting Ground / Parkland Link is proposed. Furniture will comply with typical PTA standards in these functional zones.</p>

<p><b>Car Parks and K&amp;R</b></p> <p>Car parking at Whiteman Park station has been designed with tree retention strategies in mind. Parking bays are intended to have a “bush-like” feel with trees interspersed within the swales.</p>	<p>The landscape treatments of the car parts and K&amp;R are proposed to comprise of basic finishes and materials for pavements, whilst providing shade, visual interest and softening through the strong presence of planted swales and trees</p> <p>The use of landscaped swales within the car park provides improved water sensitive urban design resulting in less underground infrastructure and enhanced future tree canopy coverage / shading (as trees have better rootzones to support tree health and growth) to mitigate urban heat island impacts.</p> <p>The swales also support increased biodiversity outcomes as optimised garden bed sizes support more diverse planting schemes that can respond to Wildflower Capital initiative and ‘six seasons’ planting schemes – in turn supporting a precinct-wide approach to cultural engagement and Gnarla Biddi.</p>
<p><b>Drumpellier Drive</b></p> <p>Landscaping within Drumpellier Drive outside of the station precinct will be in accordance with Main Roads landscaping specifications.</p>	<p>All other landscaping within Drumpellier Drive will be under the care and control of Main Roads WA as a Primary Regional Road reservation. Landscaping in these areas will be in accordance with Main Roads specifications accordingly.</p>

Figure 14 - Summary of Landscape Strategy



Tree retention has been a key factor in the approach to the urban design, both within the Welcome Place and in the placement of the car parking areas to maximise retainment of the mature trees just west of the creek. The car park has a significant focus on swale planting and ensuring water sensitive urban design principles are followed throughout the design. **Figure 15** below displays the strategy to retain trees throughout the site.



50-70+ years old  
*Melaleuca preissiana*  
Paperbark



50-70+ years old  
*Corymbia calophylla*  
Marri



5-50+ years old  
Bushland: Marri, Native Peppermint  
Paperbark: Grass tree and Native Grasses

- Integrate existing trees into the precedent design to:
- Provide day one shade and amenity
- Create strong living link between past and present of Whiteman Park
- Meaningfully care for the land as a part of the Gnarla Biddi strategy



Figure 15 - Summary of Tree Retention Strategy

### 5.2.3 Built Form and Scale

**Design Principle Statement: *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.***

Whiteman Park station is unique on the Morley-Ellenbrook line in that it is the only elevated station on the line with an at grade concourse and an elevated island platform. The elevated form of the station works well in creating a presence. The form also means that it rises above the elevated Drumpellier Drive and can be seen from the other side of the road, grounding its presence in the precinct. The raked 'A' formed columns that support the roof canopy, the roof soffit and skylight are elements that are replicated in other stations on the line.

The built form, being an elevated station conveys a great sense of unique identity and presence within the overall precinct and context of the site. The tall, airy, and light roof is reminiscent of the surrounding tree canopies, with the skylights mimicking the dappled light through the trees. The timber look soffits, the colours and textural quality of materials reflect the surrounding landscape. The overall architectural language respects the sensitivities of the site, a light touch with simple geometric forms that seek to find the balance between creating a prominent destination station and grounding and integrating the station as 'a station in the park'. A place of shared cultural and heritage significance that will promote knowledge and strengthen culture.

The design of the station and the Welcome Place draws upon inspiration taken from the surrounding context and cultural significance. Opportunities to integrate and convey Noongar stories have been identified throughout the Welcome Place.

#### **5.2.4 Functionality and Build Quality**

**Design Principle Statement: *Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full lifecycle.***

Being the tourist destination that it is Whiteman Park, the station design facilitates visitors in an accessible and generous way, inviting them into the station and concourse area, enabling ease of flow between accommodation and up to the platform. The station and precinct design incorporates quality robust materials, flexible and adaptable spaces, future proofing, station functionality, articulation and built forms.

The entry to the station concourse has been purposefully located at the south west corner of the building to facilitate intuitive wayfinding and transparency from all approach lines to the station, including the bus interchange, car park, drop off and the pedestrian link. The entrance is covered by a large canopy that provides protection from rain and the western sun allowing large groups to congregate and orientate themselves on arrival.

The entry into the station is through the unpaid concourse. The unpaid concourse is connected to the bus interchange, the kiss and ride, the bike shelter, and the pedestrian link through the Welcome Place. The unpaid concourse area includes public service facilities (automatic teller machine, vending machines and pay phone), passenger ticketing/information facilities phones), station administration/office facilities, fire indicator panel, Third Party and localised services cupboards, and kiosk. The bike shelter and the queuing area at the entrance are in direct line of vision from the station. The fare gates, three manual and one automatic accessible type, allows the passengers into the paid concourse zone. These provide access control to the paid concourse area of the station.

Upon entering the paid concourse area in the station building, visitors and staff will find accommodation units organised around a central atrium and are provided with clear sightlines and intuitive access to the vertical transportation elements which in turn connects directly to the elevated platform, (paid zone). The paid concourse area has public toilet facilities, inclusive of male toilet, female and a separate unisex accessible toilet, staff amenity facilities (Crib Room, staff toilet and staff changing areas), and station storage/cleaning facilities, (Cleaners room and Storeroom).

The atrium has been designed with the intention to cater for large tourist groups. The concourse consists of two rows of accommodation units, detached and moved out from under the elevated rail to bring more natural light into the concourse. Due consideration has been given to clear sight lines and intuitive wayfinding throughout the station concourse and planning. The lifts, the escalators and the stairs are directly visible from the station entry. The public amenities and toilets are directly across from the station entry / exit making them easy to find and along the path of travel. Staff areas have been located so that they are not within direct public circulation pathways, and the services units are further removed from the concourse and accessed via an external service corridor on the eastern side of the station building.

### 5.2.5 Sustainability

**Design Principle Statement: 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.**

The principles of the Metronet sustainability strategy have been incorporated in the design, including social sustainability by providing connectivity, amenity, resilience and adaptability. It is also a sensitively designed environment that considers biodiversity, water and the local climatic conditions providing optimal shading and natural vegetation.

The following key environmental & sustainability initiatives have been developed as part of the design package.

- Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.
- Sustainable landscape and urban design adhere to established water-sensitive urban design principles, minimises negative impacts on existing natural features and ecological processes and facilitates green infrastructure at all project scales.
- Passive environmental design measures are considered at various scales, responding to local climate and site conditions by providing optimal orientation, shading, thermal performance and natural ventilation.
- Passive design considerations reduce reliance on technology for heating and cooling minimizing energy use, resource consumption and operating costs over the life-cycle of the project.
- Sustainable products, recycled/reused materials, good waste management practices, re-use of materials and existing structures, harnessing of renewable energy sources, and total water cycle management are implemented wherever possible.

Figure 16 Summary of Sustainability Outcomes

#### Our Response

			
<p><b>Connectivity</b>                  Station incorporate a highly connected network of pathways for all people using all methods of movement.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Generous pedestrian pathways</li> <li>• Open, free-flowing public spaces</li> <li>• Ample parking and storage for all</li> <li>• Strategic placement of signage and wayfinding</li> </ul>	<p><b>Amenity</b>                  Implement a Public Art Strategy reflecting the rich character and heritage to each station and the overall project. Provide high quality public amenity to users and visitors of all backgrounds.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Accessible &amp; compliant furniture and amenity</li> <li>• Engagement of a Public Art Coordinator and Cultural Heritage Design Advisor</li> <li>• Enhanced canopy coverage</li> </ul>	<p><b>Resilience &amp; Adaptability</b>                  Design that is highly durable and able to withstand the climate of the region as well as the high frequency of foot and vehicle traffic at each Station precinct.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Hardy, drought tolerant planting</li> <li>• Durable materials, furniture and planting.</li> </ul>	<p><b>Environment</b>                  Ensure environmental values are kept as a primary focus and inform design for each Station precinct and the overall project.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Hardy, rough tolerant planting</li> <li>• Maximised tree canopy</li> <li>• Local planting species</li> </ul>
			
<p><b>Biodiversity</b>                  Incorporating a range of plant species native to the site and surrounding region that enhance flora and fauna biodiversity.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Extensive native planting palette</li> <li>• Species that attract beneficial native fauna.</li> </ul>	<p><b>Water</b>                  Designs to reflect water sensitive urban design through swale design and use of waterwise plant species and efficient irrigation design.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Extensive car-park drainage swales</li> <li>• Hardy, drought tolerant planting species</li> <li>• Mostly non-irrigated garden beds</li> </ul>	<p><b>Waste</b>                  Opportunity to salvage materials from site to minimise imported materials and maintain the local vernacular where possible across all stations.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Salvaging fallen trees for timber to use as informal furniture elements etc.</li> <li>• Stockpile of site mulch and topsoils for re-spreading to landscape areas where suitable</li> </ul>	<p><b>Local</b>                  Using local sub-consultants, suppliers etc where possible to engage local community and to boost local economies.</p> <p><u>Integrated initiatives</u></p> <ul style="list-style-type: none"> <li>• Local tree procurement strategies</li> <li>• Engagement of local Cultural Heritage design Advisor</li> <li>• Public Art opportunities</li> <li>• Material (WA brick) and plant selection.</li> </ul>

### 5.2.6 Amenity

**Design Principle Statement: 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.**

Spaces have been designed to be welcoming and comfortable, universally accessible with good levels of natural daylight and natural ventilation.

The canopy linking the bus interchange to the station entrance provides appropriate shade and weather protection and creates cooler spaces for user. Amenities such as appropriately located seating walls and general seating furniture have been provided in the Welcome Place. Future provisions such as water, power, (to allow for activation through markets and events), and USB charging stations are accommodated for in the design. Spatial provisions have been considered to cater for and promote flexible activity and amenity. These include shaded seating and a flexible lawn space providing an open area for activity. The provision of shade through native tree planting and built canopies provides weather protected areas for users of the Welcome Place.

Figure 17 – Summary of Pedestrian Entrance Experience

### “Meeting Grounds” at the Edge of Whiteman Park



### 5.2.7 Legibility

**Design Principle Statement: 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 station building is the central identifiable element with clear sightlines from all modes of transport to and from the building. There is a clear hierarchy of architectural elements from the larger station building to lower canopies that assist wayfinding and provide identifiable elements. Landmark structures within the Welcome Place such as public art and arbour structures provide further legibility to the station entrance and forecourt. This is further enforced by clear pedestrian and cycling connectivity to wider networks, with path connections focusing on desire lines.

A key intent in the Whiteman Park Station design is to provide clear visual connects to Whiteman Park from the upper levels of the Station. This is matched with direct connectivity and legibility at the ground level, clearly directing visitors to the shuttle bus/tram line departure point and pedestrian networks that lead to the Park entrance. **Figure 18** below provides an overview of the sightlines from key points throughout the site.



The entry to the station concourse has been purposefully located at the south west corner of the building to facilitate intuitive wayfinding and transparency from all approach lines to the station, including the bus interchange, car park, drop off and the pedestrian link.

There are three types of vertical transportation modules within the concourse. There are two ‘through lifts’ designed to be direct visible from the station entry. The lifts are designed to accommodate elevated work platforms that may be taken up to platform level for maintenance purposes.

The escalators are also in direct visibility from the station entry. Escalators will be installed for operation on day 1 of the station opening.

The stairs, each at 1,500 mm clear width, are located at the far end of the station concourse. While, removed from the station entry, visual connection is still maintained from the station entry. Pedestrian flows are presumed to be predominantly up the escalator to the platform level and down the stairs by arriving passengers from the platform to the concourse level.

The design includes a network of off-road cycle paths or shared paths to connect to the college and library that are within walking distance. There is particular emphasis on the path along the rail corridor, which will bring people into the Welcome Place of the station. Pathways from all existing and future pedestrian and cycle pathways connect to bicycle shelter and bicycle parking area. All access does not create cross flows with pedestrian traffic.

An underpass connects the future shops, schools and urban activity in Brabham to the station and by extension to the park. Clear legibility of the connections to the underpass from neighbouring areas are provided and considered crucial to ensure usage and safety.

Figure 18 - Summary of Key Sightlines



### 5.2.8 **Safety**

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

Safety is a primary consideration for this station, given that it will be isolated from more populous and activated areas. The fundamentals of CPTED have been integrated into the design, including lighting, clear sightlines, clear ownership and boundaries, elimination of entrapment spots, elimination of movement predictors, legible wayfinding, landscaping, and activation.

Natural / passive surveillance and unimpeded views across the precinct and station areas has been considered with:

- The use of low-lying planting, the tree selection plus considering under-pruned tree canopies and key sight-line studies
- Tree canopies are underlit
- Shade canopies are underlit / downlights at night
- Precinct parking areas that are well lit, have low planting and under-pruned tree canopies to provide clear, unimpeded views and passive surveillance
- The use of landscaping that does not provide an opportunity to hide
- Bike shelters that are transparent (open mesh construction) – eliminates potential hiding spots
- For windows from staff occupied areas within the station to provide views out onto the car park, drop off and bicycle shelter area

Natural access control measures include:

- Planting, trees and landscaping structures will act as barriers to limit access into non-public / service building areas
- Public routes, pathways, PSPs etc. are carefully located to follow natural routes and are clearly identified through the use of materiality, lighting and landscape design
- Design provides a clear indication of where people are allowed and where they are not allowed
- Where additionally necessary, bollards standing approximately 1100mm high will direct access and halt vehicle crossing

Further consideration to lighting and sightlines associated with the pedestrian underpass proposed to the east of the Station building will be undertaken through the detailed design process. In addition, the precinct is monitored by 24/7 CCTV surveillance. CCTV viewsheds have been modelled to assess impacts of tree development over time to ensure sufficient surveillance coverage.

Figure 19 - Summary of Crime Prevention Through Design Measures



### 5.2.9 Community

**Design Principle Statement: 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.**

Whiteman Park station precinct has been designed as a place that feels occupied and owned by the community it services. This requires a sense of place with an authentic character that reflects its context and serves the developing local community’s aspirations, making the place welcome, cared for, safer and activated. The station has a strong visual presence and scale both at a local level and at a wider contextual level, all the while set in a friendly and inviting landscape precinct. On entering or leaving the station, one embarks upon “a journey through the landscape”, reiterating the underlying idea of “a station in a park.”

The station and station precinct is however also distinctive and of its location. The built form, being an elevated station conveys a great sense of unique identity and presence within the overall precinct and context of the site. The overall architectural language respects the sensitivities of the site, a light touch with simple geometric forms that seek to find the balance between creating a prominent destination station and grounding and integrating the station as ‘a station in the park’.

### 5.2.10 Aesthetics

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

The Station building provides a simple relationship between the upper and lower levels of the station, with materials of the upper level linked to that of the lower. The design aims to be an attractive and welcoming station and precinct that is unique to Whiteman Park. Public art, aboriginal culture, local materiality and local elements integrated into the architecture and landscape giving it a clear sense of place and character.

An amenity strategy has been developed for the Welcome Place, that considers the requirements from the Place Plan, SWTC and as a general goal, the provision of a welcoming space for all users. Amenities such as appropriately located seating walls and general seating furniture have been provided. Future provisions such as water, power, (to allow for activation through markets and events), and USB charging stations are accommodated in the design. Spatial provisions have been considered to cater for and promote flexible activity and amenity. These include shaded seating and a flexible lawn space providing an open area for activity. The provision of shade through native tree planting and built canopies provides weather protected areas for users of the Welcome Place.

## 6. Technical Reports

### 6.1 Acoustic Report

A Whiteman Park Station Acoustic Design Report is provided at **Appendix E** of this report. The key points identified within the Acoustic Report are noted below.

- Overall environmental rail noise levels, when assessed at nearby potential noise sensitive premises are expected to comply with applicable state noise regulations and planning policy. Rail vibration levels are expected to be compliant with recommended levels.
- Noise from car parking areas, local vehicle traffic and bus movements will increase significantly in the area from current conditions but are expected to remain compliant with relevant state policies.
- Car parking areas should avoid the use of speed humps, loose laid road coverings or smooth concrete surfaces to minimise noise emissions.
- Design of the station plant and facilities such as mechanical services, public address and crowding areas to meet applicable environmental noise regulations may be achieved through conventional / industry standard design approaches and therefore is not anticipated to require specialist design input.
- The elevation of the rail has been fully accounted for in the 3D noise and vibration models, down to screening elements within platform areas and the additional noise that may arise from the use of track slab arrangements. The elevation of the rail is predicted to have negligible noise impact to residential areas given the separation distances involved around Drumpellier Drive.

Stations on the Morley Ellenbrook Line (MEL) Project are required to meet the following acoustic requirements:

- Environmental Protection (Noise) Regulations 1997
- Green Star Design and As-built Requirements for Railway Stations (v1.1) Credit 14.

The above key requirements will formulate the basis for detailed acoustic design to ensure that Whiteman Park Station arrives at an acceptable and compliant acoustic outcome. Specific construction advice in line with the architectural intent will be provided during the design and coordinated with other technical disciplines to ensure compliance with SPP 5.4 – Road and Rail Noise.

### 6.2 Transport Impact Assessment

A Transport Impact Assessment (**TIA**) is provided at **Appendix F** of this report. This TIA considers the Whiteman Park Stations impact on the wider transport networks, including consideration on the areas existing and future transport context, changes to the transport network and integration with surrounding land uses and an analysis of the development's traffic impact.

Current development in Brabham, to the east of the site is largely residential - ranging from medium (R30/R40) to high (R80/R100) density in the town centre. A substantial landholding is currently undeveloped directly to the east of the site, where significant opportunity exists for an integrated transport / land-use approach. Future high density residential development, including Whiteman Edge District Centre, will be within the walkable catchment of the station, enabling local residents to access the station by active methods.

Given the existing site is largely undeveloped, the introduction of a transit node connecting the surrounding area to high capacity public transport creates a crucial need for significant transport infrastructure upgrades.

In order to facilitate safe and efficient access to support the station, a comprehensive upgrade to the existing active transport and road network, including feeder public transport services, is needed.

Major changes to support the Whiteman Park station include:

- Conversion of the existing roundabout located at Drumpellier Drive/ Youle-Dean Road-Whiteman Drive into a four-way at-grade signalised. This proposed intersection will support access of vehicles to the station's PnR and KnR facilities along Whiteman Drive and a number of new bus services to the bus interchange.
- A bus priority lane located along the eastern approach of Youle-Dean Road provisioned to provide better access into the bus interchange and reduce delays at the intersection. This priority lane extends to the western exit lane of the intersection which connects to the Whiteman Park Station Bus Interchange.
- Isoodon Street to be converted into a cul-de-sac and bus only link to Youle-Dean Road. This will sever the connection for general traffic southeast of the site to Youle-Dean Road.
- Addition of a new roundabout along Whiteman Drive, approximately 105 metres west of Drumpellier Drive, which will provide access for buses accessing and egressing the bus interchange. This access will only be utilised by Transperth buses, emergency vehicles and other authorised Transperth vehicles.
- Addition of a new priority controlled intersection on Whiteman Drive, approximately 190 metres west of Drumpellier Drive, which will provide access for vehicles associated with the Whiteman Station Park n Ride and Kiss n Ride facilities.

Specifically, the following notable outcomes are drawn from the assessment:

- The wider transport network performance surrounding the Whiteman Park Station precinct remains functional 10-years post opening of the station, with all intersections maintaining an average intersection LOS C or below.
- The critical approaches at the Drumpellier Drive/ Youle-Dean Road-Whiteman Drive intersection are the south and west approaches during the AM and PM peaks respectively. Critical approaches continue to operate within capacity 10-years post opening of the station, with the AM peak expected to perform with 80.3% degree of saturation. The west approach is indicated to perform with a LOS D and queue length of approximately 30 metres.
- The performance at the two station access intersections continue to operate with good performance, continuing to operate with an average intersection LOS A.

The TIA concludes that the station is fit for purpose and well serviced by the proposed surrounding transport network, facilitating safe and adequate access for pedestrians, cyclists, buses and general vehicles.

### 6.3 Stormwater Considerations

A preliminary stormwater plan is provided at **Appendix G** of this report.

The drainage philosophy for the Whiteman Park Station Precinct can be summarised as follows:

- Capture all runoff from the site for water quality treatment.
- Discharge runoff at a rate equivalent to the existing condition to ensure no increased flood risk to the downstream environment.
- Protect the environment and infrastructure.
- Minimise adverse impacts in operation of all discharge water from the precinct, with water quality goals identified, modelling and/or prediction of water discharges and impacts on the existing receiving waterway.

Key criteria which will inform the design are as follows:

- Treatment of 1EY 1 hour runoff within bioretention areas in the carpark.
- 10% AEP flood level to be kept below the pavement level.
- Depth of the 1% AEP flood on the pavement does not exceed 200mm on the pavement surface.

The preliminary stormwater design is provided to indicatively demonstrate water management design principles. The final stormwater design is expected to be delivered as a condition of approval, similar to previous METRONET station projects. Specifically, the following condition has generally been applied to previous METRONET station development approvals:

*A Drainage Management Plan shall be submitted and approved by the Western Australian Planning Commission, on the advice of the Department of Water and Environmental Regulation and the City of Swan, prior to the commencement of relevant building works. Once approved, the plan is to be implemented in its entirety.*

## 7. Exemptions Legislation and Considerations

The nature of this project will require a substantial component of infrastructure to support the functional operation of the station. For the Whiteman Park Station, this will require a number of supporting road connections / upgrades and rail related infrastructure. The majority of this infrastructure supporting the Whiteman Park Station is considered exempt from the requirement for planning approval and is therefore outside the scope of this development application. The following sections outline the head of power which underpins these exemptions.

### 7.1 Section 6 Public Works

Section 6 of the *Planning and Development Act 2005* states provides exemption for the requirement to obtain planning approval under the relevant local planning scheme for 'public works' or the taking of land associated with that public work.

To achieve this public works test, the following two tests must be met:

1. The authority undertaking the work is an agent of the crown; and
2. The scope of works meets the definition of 'public work' as defined by the *Public Works Act 1902*.

The PTA is considered an 'Agent of the Crown', and the MELconnx Alliance acts on behalf of the PTA. The proposed forward works will therefore meet the first test of public works.

Section 2 of the *Public Works Act 1902* includes the following within the definition of 'Public Work'.

- (2) any railway authorised by special Act or any work whatsoever authorised by any Act;
- (20) any road, stock route, viaduct, or canal;

Given the proposed Whiteman Park Station works are included within the scope of the METRONET Act enabling legislation, the proposed works also meet this second test.

The Whiteman Park Station works will thereby meet the Section 6 exemption and does not require approval under the City's local planning scheme.

### 7.2 Railway (METRONET) Act 2018

The *Railway (METRONET) Act 2018* (METRONET Act) is the enabling legislation applicable to the construction of the METRONET railway extensions. Section 3 specifically provides the authority to construct the MEL. The legislation constitutes a special Act for the purposes of the *Public Works Act 1902*.

From a planning approvals perspective, this enabling legislation introduced a number of exemptions from planning approval beyond what is provided for within the PD Act and MRS. Specifically, Section 6 of the METRONET Act provides the following exemption applicable to this application:

*Despite anything in the Metropolitan Region Scheme, the following development may be commenced or carried out without the approval of the Planning Commission —*

- (B) METRONET works on non-railway land.

'METRONET Works' defined as follows:

*means works for the purpose of, or in connection with, a METRONET railway but does not include the construction or alteration of a railway station, or any related car parks, public transport interchange facilities or associated means of pedestrian or vehicular access;*



This clause will provide an exemption from planning approval for METRONET works which extend beyond the Railways reservation. Importantly, for the construction or alteration of a railway station, or any related car parks, public transport interchange facilities or associated means of pedestrian or vehicular access, the requirements under the Metropolitan Region Scheme will apply.

As this development application fundamentally involves the construction of a railway station, a development application is required. However, some works ancillary to the station will be exempt from approval under this clause.

### 7.3 Metropolitan Region Scheme (MRS) Exemptions

The site identified as Regional Reserves (i.e. – Primary Road reserve and Parks and Recreation) under the MRS. For reserved land, exemptions available under the MRS are provided through Clause 16 of the MRS.

Section 16(2) of the MRS enables reserved land owned by or vested in a public authority to be used or developed for any other purpose approved by the Commission with or without approval of the Commission.

Importantly, for this METRONET project, the enabling legislation of the METRONET Act re-instates the majority, but not all, of these exemptions.

### 7.4 Supporting Works Exempt from Approval

The following table outlines these supporting works relevant to the Whiteman Park Station, but which are not in the scope of the development application.

In the case of Whiteman Park Station, as the future station land is not zoned 'Railways' under the MRS, the key legislation guiding exemptions is the METRONET Act. The below table provides a summary of how the exemptions have been applied to the station.

Table 7–Supporting Works Outside of Scope

Works	Summary
Shared / Principal Shared Path outside of the subject site	<p>The MEL scope of works will generally fill gaps in the existing Shared / Principal Shared Path network. These connections are considered exempt from planning approval where they are outside of the 'limit of works' as this is considered the point where the pathway does not provide 'direct' access to the station.</p> <p>However, the pedestrian underpass has been included in recognition that this provides direct access to the station.</p>
Youle-Dean Road / Drumpellier Drive Intersection Upgrades	<p>The intersection of Drumpellier Drive and Youle-Dean Road, immediately adjacent to the Whiteman Park station, will be removed and replaced with a signalised intersection north of the current location. The upgrade is required to comply with grade requirements as a result of Drumpellier Drive being elevated for the pedestrian underpass and also to provide better pedestrian and cyclist access.</p> <p>These works form part of the regional road network, and are considered METRONET works for the purpose of the METRONET Act.</p>

<p>Piling and Underground Structures for Elevated Rail Structure</p>	<p>The elevated rail which travels over Whiteman Drive East is included within the scope of this development application.</p> <p>The underground works associated with the elevated rail, such as piling, are considered to be METRONET Works for the purpose of the METRONET Act, and exempt from requiring approval.</p>
<p>All operational infrastructure</p>	<p>All operational infrastructure is directly associated with rail operations are considered exempt from approval under the METRONET Act. For example, access tracks, monopoles, telecommunication towers, signalling structures, rail monopoles etc.</p>

## 8. Planning Considerations

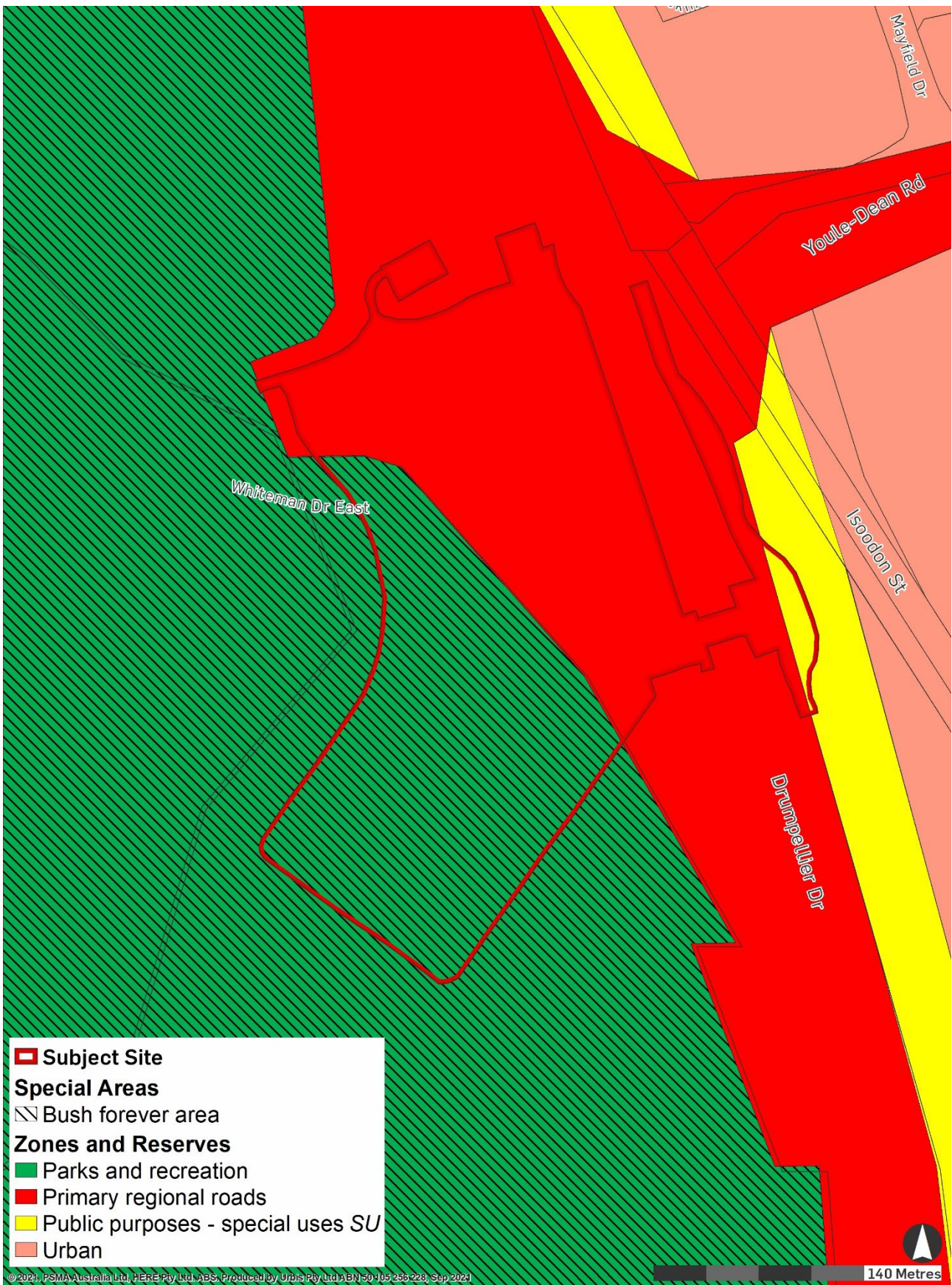
### 8.1 State Planning Assessment

Table 8--Summary of State Planning Assessment

Item	Summary
MRS	<p>The site is reserved for 'Parks and Recreation' and 'Primary Regional Road' under the MRS. A small portion of the pedestrian underpass is also within the 'Special Use' reservation, which is understand to be a redundant reservation.</p> <p>The Whiteman Park Station will provide complementary infrastructure for both these reserve functions, as it provides tourist transportation to Whiteman Park, and assists in alleviating traffic congestion on the regional road network by delivering alternative forms of transport.</p>
SPP 2.8 Bushland Forever Policy	<p>SPP 2.8 recognises the protection and management of significant bushland areas as a fundamental consideration in the planning process.</p> <p>The proposed development is located outside of the 'Bush Forever Reserves' as identified by SPP2.8, and will not impact on the objectives of SPP 2.8. Further clearing permits have been obtained by the State government to clear vegetation required to support the proposed development.</p> <p>Notwithstanding the above a number of measures have been included to ensure significant vegetation is retained where possible to assist with achieving improved environmental and aesthetic outcomes for the Whiteman Park station.</p>
SPP 2.10 – Swan - Canning river system	<p>SPP 2.10 applies to the Swan and Canning rivers and their immediate surrounds. Whilst the proposed development is located outside of the policy precincts, Lot 811 is identified as a MRS Park and Recreation reserve in Figure 1 of the policy.</p> <p>Lot 811 contains a number of creek lines, including one located to the south west of the site which forms a tributary flowing into the Swan river. Importantly, the site is located within a separate catchment to this tributary, with water runoff contained and disbursed within the localised area.</p> <p>As water runoff from the proposed development will be contained onsite there is minimal potential for any impact on the river system.</p>
State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas (SPP 3.7)	<p>The project area has been designated as bushfire prone in accordance with the Department of Fire and Emergency Services Map of Bushfire Prone Areas. On this basis, a Bushfire Management Plan (BMP) has been prepared to address requirements under Policy Measures 6.2 and 6.5 of <i>State Planning Policy 3.7 Planning in Bushfire-Prone Areas</i>.</p> <p>The proposed development is considered to be a vulnerable land use which triggers additional requirements under Policy Measure 6.6 of SPP 3.7. In accordance with Policy Measure 6.6.1 and Section 5.5 of the Guidelines, development applications for vulnerable land uses require a Bushfire</p>

Item	Summary
	<p>Emergency Evacuation Plan (BEEP) detailing the emergency management provisions for the facility, accompanies the BMP.</p> <p>For this project, it is proposed that a BEEP is not prepared at this time but is included as a future implementation measure within the BMP and conditioned as part of the DA approval.</p> <p>The BMP confirms that with appropriate implementation actions, the proposed development is able to conform to the relevant provisions of SPP 3.7.</p> <p>A copy of the BMP is provided at <b>Appendix J</b></p>
<p>SPP 5.4–Road and Rail Noise</p>	<p>SPP5.4 guides the interface of noise sensitive development and major road and rail transport routes, with the overall aim of protecting significant transport routes whilst minimising the adverse impact of transport noise on sensitive development.</p> <p>As all new proposed railways are required to meet the specified noise targets of SPP5.4, a noise and vibration assessment has been completed in support of the Whiteman Park Station.</p> <p>Sensitive land uses within 100m of Whiteman Park Station such as future residential development to the east may require ‘quiet house’ design standards being applied. Managing the existing and future sensitive land uses around Whiteman Park Station is a key consideration for the PTA in the delivery of Whiteman Park Station.</p> <p>The project is committed to further assessment of potential railway noise and vibration mitigation measures associated with a future TOD surrounding Malaga Station, to ensure outcomes are consistent with stakeholder expectations. While railway infrastructure and system works are excluded from the development approvals process and as such this application, design of these elements will further consider and where necessary seek to reduce noise and vibration outcomes associated with the railway. The project will also continue to work closely with the METRONET Office and other key stakeholders in planning for the adjacent precinct, with a view to achieving best practice outcomes from an integrated transport and land use planning perspective.</p>

Figure 20 - MRS Map



### 8.1.1 METRONET Station Precinct Design Guide

The METRONET Station Precinct Design Guide provides specific design guidance aimed at the design and planning of station precincts, including objectives which are fundamental to the delivery of a METRONET station.

Importantly, the METRONET Station Precinct Design Guide emphasises that a 'one-size-fits-all' approach cannot be applied to station design, and instead a station must be designed on a case-by-case basis considering the transit function, context and development potential over time. This is particularly relevant to the MEL stations given the surrounding centres are in a state of transition, and the ultimate activity centre station design may vary as the supporting activity centre development evolves.

The Station Precinct Design Guide sets out 8 critical element objectives which require the specific planning response to support successful long-term station development. These requirements vary depending on the station precinct type.

The Preliminary Place Plan & Indicative Layout Response prepared for the Whiteman Park Station has identified the station starts as a Transit Node (SP6) and Specialised Centre (SP3) type station precinct, providing access to the Whiteman Park tourism destination. In the future the station precinct will be a neighbourhood (SP5) type station precinct associated with the urban development and activity components of Brabham.

The respective descriptions of these station typologies are as follows:

#### Transit Node

*Transit node precincts primary role is to provide access to stations for a wide catchment with the provision of park and ride and/or transit interchange from other services.*

#### Specialised Centre

*Specialist station precincts have a primary role as a major public and institutional Centre. These primary uses generate significant levels of activity, employment and demand for transit from a wide range of destinations*

#### Neighbourhood

*Neighbourhood station precincts are primarily residential communities with good transit accessibility and support a basic mix of uses to meet the needs of local residents.*

Many of these 'critical elements' are most applicable to future development to the east of the station and is beyond the scope of the Whiteman Park station development. However, the applicable aspects are:

- Critical Element 4: Intersections and Crossings
- Critical Element 5a: Transit Integration – Rail
- Critical Element 5b: Transit Integration – Bus
- Critical Element 6: Station Type
- Critical Element 7a: Station Dedicated Parking
- Critical Element 8: Public Realm and Public Open Space.

The following table applies these critical elements to the proposed Whiteman Park station design.

Table 9–Station Critical Element

STATION CRITICAL ELEMENT	DETAILS
<b>Critical Element 4: Intersection and Crossings</b>	
<p><i>Preferred: controlled four way intersection, no splitter lanes.</i></p> <p><i>Considered: Micro roundabout</i></p>	<p>All intersections within the PTA car park and busway are sign-controlled intersections with no splitter lanes. The busway service roads are designed to the required swept path (noting that this area will accommodate over-sized articulated buses).</p>
<b>Critical Element 5a: Transit Integration - Rail</b>	
<p><i>Considered –</i></p> <p><i>Elevated on Viaduct</i></p>	<p>The Whiteman Park Station is designed as an elevated station with stairs, lifts and elevators providing access to the station elevated platforms.</p> <p>Whilst this is not a preferred design for the station typology, it is a suitable station design, and allows the station to integrate well with the bushland setting and existing and future urban development to the east.</p> <p>There are a number of advantages to a grade separated station in a bushland setting including:</p> <ul style="list-style-type: none"> <li>• Ability to capitalise on views of Whiteman Park and create a sense of place immediately upon arrival</li> <li>• Limited segregation as a rail over road crossing can be provided beyond the station, and improves pedestrian movement across the rail alignment.</li> </ul>
<b>Critical Element 5b: Transit Integration – Bus</b>	
<p><i>Preferred: on street.</i></p> <p><i>Considered: Integrated/stacked interchange</i></p> <p><i>Loop at grade</i></p>	<p>The Whiteman Park station provides an at grade bus interchange immediately adjacent to the station building, which loops back into the road network. This is consistent with the preferred approach.</p>
<b>Critical Element 6: Station Type</b>	
<p><i>Preferred: integrated station, underground station.</i></p> <p><i>Considered: active pavilion underground station</i></p>	<p>The following design elements demonstrate that the Whiteman Park Station is best classified as an integrated station, consistent with the ‘preferred’ approach for a Transport Node / Specialised Centre / Neighbourhood station.</p> <p><u>Integrated into the streetscape / form a seamless part of the urban streetscape</u></p> <p>Multiple aspects of the station have been designed to appropriately interface with surrounding future development. This includes the integration of the station building with the adjacent Welcome Place, a wide pedestrian / cyclist underpass beneath Drumpellier Drive</p>

STATION CRITICAL ELEMENT	DETAILS
	<p>and locating the rail line alongside Drumpellier Drive as much as possible to minimise it's footprint on Whiteman Park.</p> <p>Upgrading the existing roundabout at Youle-Dean Road, immediately north of the station, with a new signalised intersection will also provide improved connectivity to existing and future communities to the east.</p> <p><u>Streetscape to be dedicated for entry ways to the station</u></p> <p>The entrance experience for the Whiteman Park Station is enhanced by the use of a high quality arbour, Welcome Place and open space area. Combined, these areas create clear wayfinding cues to the station entrance, as well as creating a pleasant entrance experience.</p>
<p><b>Critical Element 7a: Station Dedicated Parking</b></p>	
<p><i>Transit Node</i></p> <p><i>Moderate adjacent park'n'ride (ok at grade)</i></p>	<p>The Whiteman Park Station provides at grade parking for passengers. This is recognised as a preferred form of parking for a transit node station type, which is the current categorisation of the station.</p> <p>Providing some degree of parking is a requirement of the SWTC, and is therefore politically a necessary component of delivering the train station.</p> <p>The focus is therefore delivering this parking with the least impact on station amenity, whilst also retaining significant vegetation where possible and incorporating it into the carpark and Welcome Place design. As at-grade parking requires the least structural investment, this form of parking is more conducive to urban redevelopment, as compared to stacked or decked parking.</p> <p>In terms of integration with the surrounding areas, the car parking layout is deliberately contained within two separate cells to the west of the station building, to assist with maximising retention of significant vegetation, minimising clearing of significant vegetation and breaking up the built form mass to better respond to the bushland setting.</p>



### Critical Element 8: Public Realm and Public Open Space

Preferred: people streets  
plaza/square, pocket parks, urban  
park, playing fields

The station precinct is the Park's forecourt, a Welcome Place at the gathering of pathways, old and new, relaxed and dynamic, natural and human, as set in a natural bushland.

This area is to be developed with high quality landscaping and artworks and will be the heart of the station precinct and the Whiteman Park entrance.

#### 8.1.2 Planning Control Area No. 148 (PCA 148)

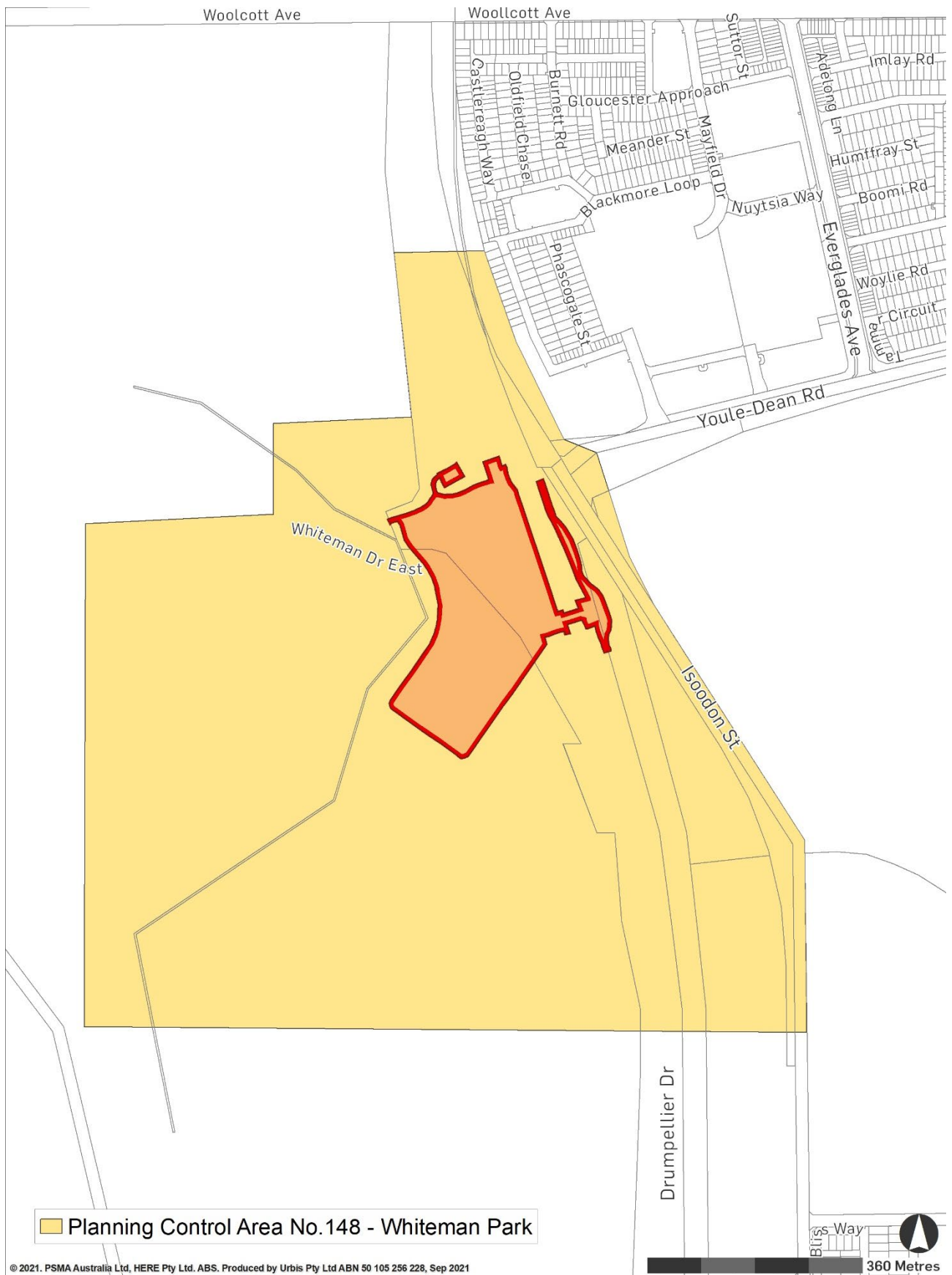
The proposed Whiteman Park Train Station works are wholly located within PCA148, which has been established for the purpose of facilitating the development of the land for the purpose of railways and other related road widening purposes.

The Planning and Development Act 2005 (PD Act) outlines the planning processes for a PCA. This process is summarised as follows:

- The development application is to be lodged with the City of Swan. The local authority is to forward the application and its recommendation to the WAPC within 30 days of receiving the application (Section 115(3) of the PD Act).
- The Commission must then make a decision within 60 days of receiving the forwarded application (Section 250(3) of the PD Act).

Under Section 130 of the PD Act, the PCA provisions prevail over every other provision of the PD Act, including any region planning scheme or local planning scheme. However, this alone does not negate the requirement to obtain approval under the region planning scheme or local planning scheme, where applicable.

Figure 21-PCA 148



## 8.2 Local Planning Framework

As noted earlier in this report, the proposed development meets the categorisation of 'Public Works' and is exempt under Section 6 of the *Planning and Development Act 2005*. Regardless, as the interface between the Whiteman Park Station and surrounding areas is an essential consideration in the successful station planning design, and the driving principles and objectives of the surrounds have been considered for this application.

### 8.2.1 City of Swan Local Planning Scheme No. 17

The City of Swan Local Planning Scheme No. 17 (LPS 17) sets out the local government's planning aims and intentions for the Scheme area. Lot 98 is reserved for the purpose of Primary Regional Road and Lot 811 is reserved for the purpose of Parks and Recreation.

Both Lots shown as "Regional Reserves" on the Scheme Map are lands reserved under the Metropolitan Region Scheme and are shown on the Scheme Map for the purposes of the Planning and Development Act, 2005. These lands are not reserved under the Scheme. The approval of the local government under the Scheme is not required for the commencement or carrying out of any use or development on a Regional Reserve.

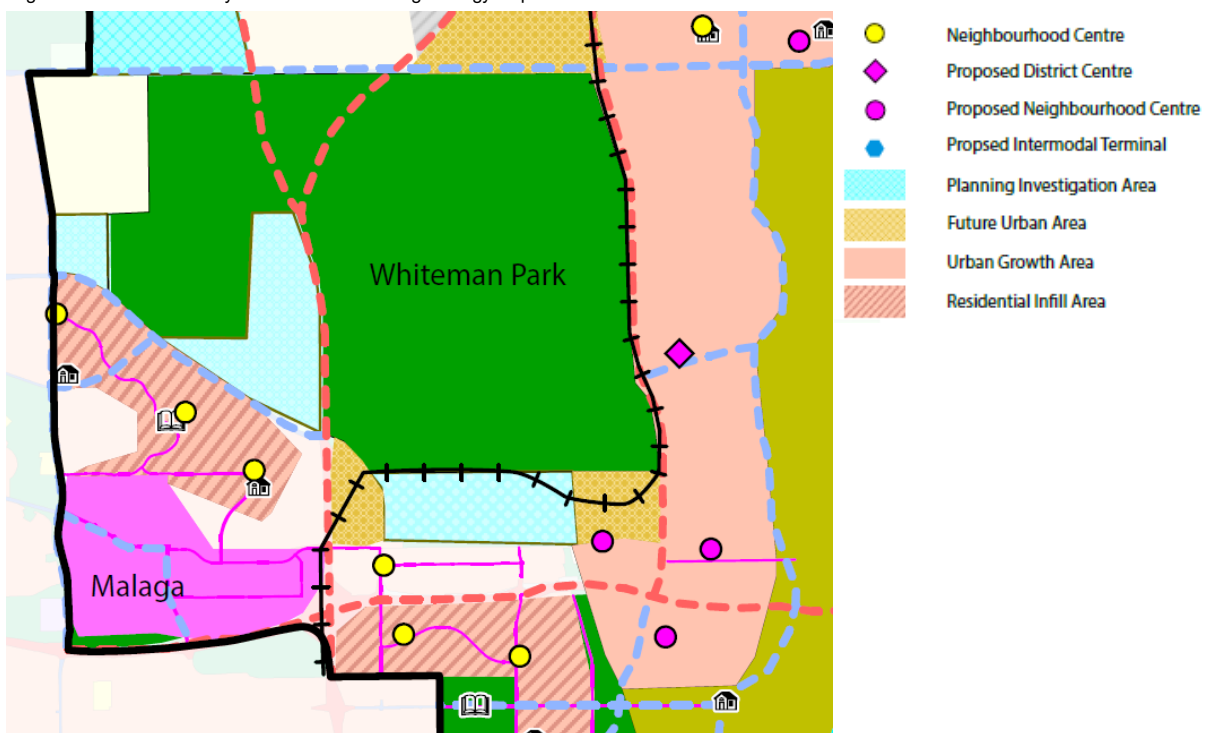
Clause 9.1.2 (note 3b) acknowledges that applications for planning approval for land zoned under the MRS and within a declared Planning Control Area are to be referred by the local government to the Commission in accordance with the requirements of the MRS.

### 8.2.2 City of Swan Local Planning Strategy

The City of Swan Local Planning Strategy sets out the long-term planning and development direction of the City, with consideration to the State Government's long term growth strategy Perth and Peel @3.5 million.

The Local Planning Strategy acknowledges and plans for a new passenger rail line from the existing Midland Line to the Ellenbrook town centre. The Strategy acknowledges the City will take an integrated approach to transport and land use planning, through its land use decision making processes and seeks to increase residential densities near centres of employment shopping and high frequency public transport routes.

Figure 22 -Extract of the City of Swan Local Planning Strategy Map 1



### 8.2.3 Perth and Peel @ 3.5 million

Perth and Peel @ 3.5 million guides the future growth of the Perth and Peel regions as a compact consolidated and connected city that can accommodate a population of 3.5 million by 2050. Perth and Peel @3.5 million and the North-East Sub Regional Planning Framework identify Brabham as a future District Activity Centre and a key growth area for the Perth Metropolitan Area.

These high-level strategic policies directly identify a new rail line from the existing Midland Line to the Ellenbrook town centre. The MEL METRONET initiative is noted as an integral part of service provision within the northeast corridor to provide greater connection with the surrounding areas as well as the Perth CBD.

Whiteman Park Station is therefore entirely consistent with the overarching strategic framework. The Station will formulate an integral component of the future Brabham District Activity Centre and will assist with the service provision for the emerging population of the sub- region.

Whiteman Park Station is located within the North-East Sub-region with the population predicted to more than double by 2050 – growing from 209,000 people in 2011 to over 450,000 people by 2050. It is expected that this population growth will predominately occur within the City of Swan with an additional 73,450 dwellings required in the City over the next 30 years.

Whiteman Park Station provides a critical piece of transport infrastructure underpinning future urban expansion of the North-East Sub-region.

## 9. Supporting Approvals and Management Plans

The following table provides a summary of those approvals.

Table 10–Summary of Supporting Approvals and Management Measures

CONSIDERATION	DETAIL
<p><b>Environmental Approvals</b></p>	<p>The Morley to Ellenbrook Line clearing works were granted approval by the EPA in December 2020 (Ministerial Statement No. 1156). This approval included the clearing required to:</p> <p><i>Construct and operate a new 13 kilometre railway line between Malaga and Ellenbrook in the City of Swan. The proposal includes the construction of new train stations and associated facilities at Malaga, Whiteman Park and Ellenbrook, and a potential future station at Bennett Springs.</i></p> <p>Approval was granted for the clearing and disturbance if no more than 249ha (of which 152.1ha is native vegetation) for the alignment. <b>Figure 23</b> below outlines the approved disturbance footprint for this alignment.</p> <p>This clearing approval was subject to a number of notable conditions, including the requirement to establish offsets and management plans to mitigate the environmental impacts of clearing.</p> <p>The Ministerial Statement No. 1156 is provided at <b>Appendix H</b> of this report, and outlines these measures in detail.</p>
<p><b>Noise Monitoring Program</b></p>	<p>A noise monitoring program will be implemented within three months of the opening of the MEL line, and again at 18 months, to assess the effectiveness of noise mitigation. Specifically the program will:</p> <ul style="list-style-type: none"> <li>• Confirm the as-built and operating railway achieves the Policy target LAeq (Day) 55 dB and LAeq (Night) 50 dB unless higher levels are permitted due to the incorporation of specified house facade protection.</li> <li>• Assess the accuracy of the pre-construction noise modelling predictions that were used to determine noise reduction treatments.</li> </ul> <p>The PTA also has existing procedures for receiving noise complaints, which will be extended to the MEL operations.</p>
<p><b>Out of Hours Work</b></p>	<p>Due to the nature and scale of the project, it is likely that some degree of ‘out of hours’ and ‘night shift’ work will be required during the construction stage of this project.</p> <p>An Out of Hours Construction Noise and Vibration Management Plan will be provided to the City of Swan prior to these out of hours works occurring. Acceptance of this Construction Noise and Vibration Management Plan will meet the notification / approval requirements as required by the Environmental Noise Regulations.</p> <p>For the purpose of the planning approval process, we request that any condition of approval related to construction hours is worded in a manner that</p>

CONSIDERATION	DETAIL
	does not restrict these out of hours works (subject to acceptance of the Construction Noise and Vibration Management Plan).
<b>Construction Management</b>	MELConnx's Construction Management Plan has been approved by the PTA and issued for use.
<b>Dilapidation survey</b>	A dilapidation survey, prior to demolition and excavation works commencing on site, will be commissioned 100m beyond the works area to document existing conditions of adjoining properties and infrastructure. A re-inspection post project completion will also be commissioned to assess conditions against those reported before works commenced.
<b>Access and approvals</b>	The Project Alliance will obtain permission for site access to all work areas from the relevant stakeholders prior to commencing construction works. All environmental, LGA and rail authority approvals shall be gained prior to construction works commencing onsite.
<b>Traffic Management Plan</b>	<p>The Project Traffic Management Plan will ensure:</p> <ul style="list-style-type: none"> <li>• Existing paths are maintained or alternative sealed pathways are provided.</li> <li>• Temporary paths where required will have secure fencing and appropriate lighting</li> <li>• Height clearances for roads is not reduced to less than 5.3m where possible. Approval to be sort should this not be possible</li> <li>• Ensure security to adjacent properties</li> <li>• Construction personnel will be encouraged to use public transport where possible</li> </ul> <p>Construction personnel's vehicles or construction vehicles are to park only in designated parking bays within the construction site.</p> <p>It is expected that the delivery of a traffic management plan will be a condition of development approval.</p>

Figure23-Malaga to Ellenbrook Approved Development Envelope



## 10. Conclusion

The METRONET Morley Ellenbrook Line from Bayswater to Ellenbrook seeks to implement best practice urban design and transport planning principles to the emerging north-east corridor of Perth. This station is unique in that it is an elevated station with the rail and platform supported on an elevated rail structure giving it a distinctive character and identity. This elevated rail structure provides the unique opportunity to capture views of Whiteman Park, and build elements of this unique parkland into the architectural design and landscape outcomes.

The station is designed as a SP3 (specialised centre station) station, with the aim to provide access to the Whiteman Park tourism destination. The future residential developments of Brabham to the east have also been considered in the station and precinct design.

The station design has been well thought out, with careful consideration to ensure the station building and its supporting facilities interface appropriately with its bushland surroundings and the existing and future urban development located to the east of Drumpellier Drive. This has included careful consideration to matters including desire lines, road hierarchy, potential future land uses, pedestrian movements and their interface with the station building and supporting infrastructure.

This report concludes that the Whiteman Park Station achieves these essential pillars of a contemporary station, as evidenced through the following:

- A pedestrian first approach to the station building design, which provides for logical and direct links to existing and future development to the east and open spaces within Whiteman Park. This is best evidenced through the pedestrian underpass entrance experience, which incorporates high quality landscape outcomes.
- The co-location of the bus interchange and station building to reduce the total journey time for multi-modal trips, making bus-to-train transport a more practical and feasible option for patrons. The inclusion of a continuous canopy, linking the bus interchange to the station building, provides an improved quality of connection for transferring passengers.
- Recognising the need for park-and-ride facilities for a train station in an emerging urban setting, the station design accommodates car parking in a manner which is sleeved by future development sites.
- Development of the Welcome Place, which will create an attractive and usable space within the immediate vicinity of the station. This space functions as a meeting place for patrons, but also acts as the node for the station and informs many wayfinding cues.

Whilst the development application is for 'public works' and has limited statutory assessment controls under the local government framework, this has in no way resulted in a compromised design outcome for the Whiteman Park Station. This is demonstrated both through the exceptional architectural design, and the bespoke landscape response.

As demonstrated via a planning assessment against the qualitative controls of SPP7, the METRONET Station Design Guide and other relevant State and local planning frameworks, the Whiteman Park Station is designed to be fit for purpose, and will be the catalyst for further supporting high quality development within the surrounding areas.



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