



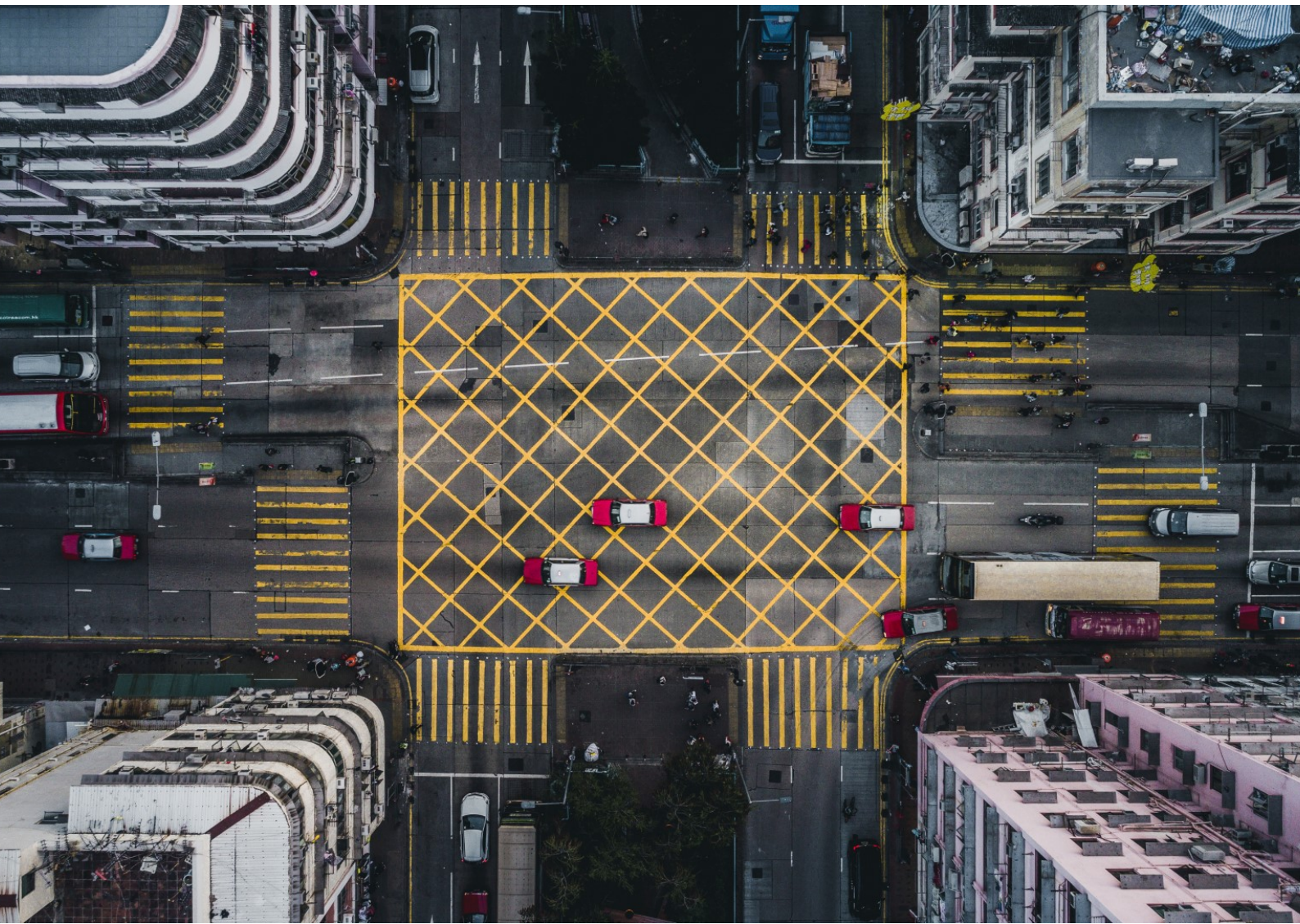
Derrimut Fields Precinct Structure Plan

Situational Analysis Report

DTP

27 August 2026

➔ **The Power of Commitment**



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1. Introduction

1.1 Project Context

The Derrimut Fields Precinct (the Precinct) is located within the City of Melton, to the west of metropolitan Melbourne. The Precinct comprises approximately 518.7 hectares of land, generally bounded by Hopkins Road to the west, Middle Road to the north, Christies Road to the east, and Boundary Road to the south. Skeleton Creek traverses the Precinct from north to south. A locality plan illustrating the location and boundaries of the Precinct is provided in Appendix A.

The Precinct forms part of Melbourne's expanding western growth corridor and is identified for future urban development through the preparation of the Derrimut Fields Precinct Structure Plan (PSP). The Precinct is influenced by several key existing and future infrastructure elements, including an electricity transmission line traversing the site, the proposed Outer Metropolitan Ring (OMR) corridor along the northern boundary, and the Regional Rail Link along the eastern boundary.

1.1.1 Existing Land Use

The Precinct is currently characterised by predominantly rural and semi-rural land uses, with limited existing urban development. Existing uses include agricultural activities, large-lot rural properties, and scattered residential dwellings. There is minimal existing supporting infrastructure to service urban-scale development.

The Precinct is located within an Urban Growth Zone (UGZ), which facilitates the transition of non-urban land to urban uses through the preparation and implementation of a Precinct Structure Plan. The UGZ allows existing land uses to continue until redevelopment occurs in accordance with the approved PSP.

1.1.2 Project Overview

The Department of Transport and Planning (DTP) is leading the preparation of the Derrimut Fields Precinct Structure Plan in consultation with Melton City Council, utility service providers (USPs), and other key stakeholders. The PSP will guide future development within the Precinct, including the provision of residential communities, employment areas, transport networks, open space, and supporting infrastructure.

GHD has been engaged to undertake a Servicing and Utility Infrastructure Assessment for the Precinct. This assessment comprises two key stages:

- A **Situational Analysis Report**, which identifies the existing utility infrastructure, key constraints, and opportunities within and surrounding the Precinct; and
- A **Utility Servicing Assessment**, which identifies infrastructure requirements to support the future development of the Precinct based on anticipated land use and development yields.

Following the completion of the Situational Analysis Report, DTP will further inform the Precinct's Future Urban Structure and indicative development scenarios. GHD will then engage with USPs to determine future servicing requirements and infrastructure upgrades required to support the planned development. The outcomes of these investigations will inform the Utility Servicing Assessment.

1.2 Purpose of this Report

The purpose of this report is to identify and assess the key constraints and opportunities associated with existing utility infrastructure within and servicing the Derrimut Fields Precinct.

In addition, this report identifies relevant local and state policy frameworks relating to low carbon development, as well as leading Ecologically Sustainable Development (ESD) practices. These considerations are intended to support DTP in incorporating sustainable and resilient infrastructure planning principles into the PSP.

Early identification of utility infrastructure constraints is critical to minimising risks associated with cost, delivery, and program delays. Accordingly, this report facilitates early engagement with USPs and provides a coordinated understanding of infrastructure requirements to support future development.

The USPs consulted as part of this assessment are outlined in Table 1 below. This report integrates advice received from these providers regarding existing infrastructure, capacity constraints, and future servicing requirements.

Table 1 *Utility Service Providers in the Precinct*

Utility	Utility Service Provider	Contact Details	Responses
Electricity	Powercor Australia (Sunshine)	Vis Visahan Senior Network Solutions Manager – Forecasting & Insights Electricity Networks P: 03 8363 8212 M: 0429 010 721 E: vvisahan@powercor.com.au	Received
		Tracy P: 1800 771 434 E: cru@powercor.com.au	Received
	AusNet Transmission	Peter Brekalo Senior Survey Mapping Officer – Easement E: petar.brekalo@ausnetservices.com.au	Received
	Wyndham City Council	tech.eng@wyndham.vic.gov.au	
Gas	AusNet Gas Services Pty Ltd	Nicole Brudi Graduate Engineer – Energy and Utilities E: engenquiries@downergroup.com	Received
	APA Group Transmission	Michael Mielczarek Senior Urban Planner P: 03 8533 2141 M: 0472 876 288 E: michael.mielczarek@apa.com.au	Received
Sewer	Greater Western Water	Thisaru Chandrasekara Water Network Master Planning M: 0469 404 248 E: Thisaru.Chandrasekara@gww.com.au	Received
Stormwater Drainage	Melton City Council	P: 03 9747 7200 E: navathak@melton.vic.gov.au	Received
	Melbourne Water Corporation	James Larner DSS Catchment Planning & Engineering Urban Planning & Development Services Service Futures	

		P: 03 8600 0957 E: james.larner@melbournewater.com.au	
Telecommunications	NBN Co	Tuan Le Executive Manager, C&SP Networks M 0405 339 533 E: tuanle@nbnco.com.a	Received
	Optus / Uecomm	Paul Lowe Senior Project Engineer VIC/TAS Operations M: 0411 254 578 E: paul.lowe@optus.com.au	Received
	FibreconX Pty Ltd	M: 1300 064 405 E: contact@fibreconx.com.au	
	Vocus (Primus VIC)	https://www.vocus.com.au/help-and-support/contact-us	
	Nextgen (VIC)	Servicedesk@nextgen.com.au	
	VicTrack Access	customer.service@victrack.com.au	
	Ventia Australia	groupproperty.workplaceexperience@ventia.com contact.us@ventia.com	Received
	Telstra	David A Stanley Fundamental Planning Specialist Access Network Planning M: 0419 291 802 E : david.a.stanley@team.telstra.com	Received
		BYDA P: 1800 653 935 E: Telstra.Plans@team.telstra.com	Received
Water	Greater Western Water	Thisaru Chandrasekara Water Network Master Planning M: 0469 404 248 E: Thisaru.Chandrasekara@gww.com.au	Received
Recycled Water	Greater Western Water	Matthew Snell Group Manager Growth P: 9552 3506 M: 0457 563 220 E: matthew.snell@sew.com.au	Recieved

1.3 Limitations and Assumptions

The location of existing services within the Precinct has been identified based on Dial Before You Dig (DBYD) information and data provided by utility service providers. The location and depth of existing infrastructure is indicative only, and service proving is recommended to confirm the precise location and depth of services. Assessment of the condition and capacity of existing infrastructure has been based on information provided by USPs. This information is preliminary and subject to change and should not be relied upon without independent verification.

This report has been prepared by GHD for the Department of Transport and Planning and may only be used and relied upon by the Department of Transport and Planning for the purpose agreed between GHD and DTP. GHD disclaims responsibility to any third party arising in connection with this report. To the extent permitted by law, GHD excludes all implied warranties and conditions.

The services undertaken by GHD in preparing this report are limited to those described in the agreed scope of work. The opinions, conclusions, and recommendations in this report are based on conditions encountered and information available at the time of preparation.

GHD has relied on information provided by DTP and others who provided information to GHD (including Government and Utility Service Providers), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report, which were caused by errors or omissions in that information.

1.4 Methodology

GHD undertook an initial desktop assessment of utility infrastructure within the Precinct using information obtained through Dial Before You Dig (DBYD) enquiries and documentation provided by DTP.

Following this review, GHD requested and obtained spatial infrastructure data from utility service providers where available. This information has been used to develop Existing Infrastructure Plans presented in Appendix C. Where spatial data was not available, infrastructure has been interpreted and digitised based on DBYD responses. A summary of the infrastructure data type utilised in the Existing Infrastructure Plans is provided below in Table 2.

Table 2 *Infrastructure Data Types by Utility Service Provider*

Utility Service Provider	Infrastructure Data Type
Powercor Australia (Sunshine)	Spatial Data and Digitised DBYD Data
AusNet Transmission	Spatial Data and Digitised DBYD Data
AusNet Gas Services Pty Ltd	Spatial Data and Digitised DBYD Data
APA Group Transmission	Digitised DBYD Data
Greater Western Water	Digitised DBYD Data
Melton City Council	Spatial Data and Digitised DBYD Data
Melbourne Water Corporation	Digitised DBYD Data
NBN Co	Spatial Data and Digitised DBYD Data
Optus / Uecomm	Spatial Data and Digitised DBYD Data
FibreconX Pty Ltd	Digitised DBYD Data
Vocus (Primus VIC)	Digitised DBYD Data
Ventia	Spatial Data and Digitised DBYD Data
Nextgen (VIC)	Digitised DBYD Data
VicTrack Access	Digitised DBYD Data
Ventia Australia	Digitised DBYD Data
Telstra	Digitised DBYD Data

GHD consulted with relevant USPs to obtain both qualitative and quantitative information regarding the existing utility infrastructure. Consultation was undertaken via email, telephone discussions, and stakeholder meetings where required.

A structured questionnaire was issued to USPs to obtain information including:

- The location, condition and capacity of existing infrastructure
- Identification of transmission and trunk assets, including those outside the Precinct
- Associated easements and buffers impacting development
- Key infrastructure constraints and opportunities
- Planned infrastructure upgrades, augmentations and delivery timelines

In addition, GHD undertook a high-level review of local and state planning policy to identify requirements and opportunities relating to low carbon development and Ecologically Sustainable Development (ESD). Relevant findings have been incorporated into this report to support sustainable infrastructure planning outcomes for the Precinct.

2. Stormwater Drainage Infrastructure and Flooding Conditions

The regional drainage network in the Precinct is managed by Melbourne Water Corporation (MWC). Melton City Council (Council) is responsible for the local drainage network.

2.1 Existing Infrastructure

Existing stormwater drainage infrastructure is shown in Appendix C.

2.1.1 Melbourne Water Corporation

Melbourne Water Corporation (MWC) is the regional drainage and floodplain management authority for the project area. Melbourne Water BYDA plans identify a regional drainage asset within the eastern portion of the site adjacent to the Melbourne–Geelong railway corridor. The asset comprises a north-south drainage pipeline connecting to an existing waterway associated with Dohertys Creek, together with a natural waterway corridor forming part of Melbourne Water's regional drainage network.

No Melbourne Water assets were identified across the majority of the central and western portions of the project area. While Melbourne Water was contacted directly to obtain further information regarding drainage infrastructure, floodplain constraints and development requirements, a response had not been received at the time of writing. Accordingly, detailed information regarding asset dimensions, hydraulic capacity, flood mapping, drainage easements and flood-related constraints could not be confirmed as part of this assessment.

2.1.2 Melton City Council

Melton City Council asset plans identify existing stormwater drainage infrastructure within the surrounding road network, primarily along Hopkins Road, Christies Road and Middle Road. Existing Council assets comprise stormwater pipes and pits located within road reserves and developed frontage areas. Stormwater infrastructure is shown adjacent to properties including 619, 622, 624, 655, 687, 690, 833 and 891 Hopkins Road, as well as within the Christies Road / Archer Road corridor in the vicinity of 742, 742A, 744 and 1004 Christies Road. Additional drainage infrastructure is also shown near the Middle Road and Christies Road intersection, including stormwater pipes and pits servicing adjoining properties and road reserves.

Council further advised that there are no Council drainage asset plans available for the Derrimut Fields area itself, as the precinct remains largely undeveloped. This indicates that while local drainage infrastructure exists within the surrounding road network and developed areas, no significant Council-managed drainage assets have been identified throughout the majority of the undeveloped land parcels within the project area. Accordingly, stormwater infrastructure is currently concentrated within existing road reserves, and future development is likely to require the provision of additional drainage infrastructure and outfall connections to service the precinct.

2.2 Key Issues and Opportunities

2.2.1 Melbourne Water Corporation

Melbourne Water asset plans identify a regional drainage pipeline and associated waterway corridor within the eastern portion of the project area adjacent to the Melbourne–Geelong railway corridor and Dohertys Creek. While these assets represent potential constraints to future development, Melbourne Water has not provided any additional information regarding asset dimensions, easement requirements, hydraulic capacity, flood mapping, flood levels or regional drainage servicing requirements. Further information has been requested from Melbourne

Water and a response is still pending. Consequently, the extent of any floodplain constraints, development controls or regional drainage requirements affecting the site cannot currently be confirmed.

2.2.2 Melton City Council

Melton City Council asset records identify existing stormwater infrastructure primarily within the Hopkins Road, Christies Road and Middle Road corridors, including stormwater pipes and pits servicing the surrounding road network and developed frontage areas. Assets are located near properties along Hopkins Road, Christies Road and the Middle Road/Christies Road intersection, which may provide potential connection opportunities for future development. However, Council advised that no drainage asset plans are available for the Derrimut Fields PSP area itself due to the site remaining largely undeveloped. As a result, limited drainage infrastructure has been identified within the precinct and additional drainage infrastructure and suitable downstream outfall arrangements are likely to be required to support future development. The available asset information does not include pipe sizes, hydraulic capacity, invert levels or drainage modelling data, limiting assessment of the existing network's ability to accommodate future runoff.

3. Water Infrastructure

Greater Western Water (GWW) is the water authority responsible for the potable water, recycled water and sewerage network servicing the project area.

3.1 Existing Infrastructure

Existing potable water, recycled water and sewerage infrastructure information is shown in Appendix C.

3.1.1 Potable Water

Greater Western Water (GWW) asset plans identify an existing 280 mm diameter polyethylene (PE) potable water main located within the Boundary Road reserve along the southern boundary of the project area. The water main extends east-west along Boundary Road and represents the primary existing potable water infrastructure servicing the vicinity of the precinct. Multiple water service connections branch from the main to adjoining properties fronting Boundary Road, with recorded cover depths generally ranging between approximately 2.2 m and 4.8 m.

GWW advised that the proposed Derrimut Fields PSP is located within the future Greek Hill High Level Water Supply Zone (TWL 123 m AHD). The precinct is proposed to be supplied via two future supply pathways: the Greek Hill High Level Water Pumping Station through the future Chartwell East PSP and a proposed pressure reducing station connected to Melbourne Water's M483 pipeline at Derrimut Road. GWW also advised that a network of future internal reticulation water mains, generally DN225 and above, is planned throughout the precinct and is expected to be delivered progressively by developers as development proceeds.

The proposed water network has been sized based on the industrial land use assumptions adopted for the PSP, including the proposed Industrial 1 Zone (IN1Z) areas. However, GWW noted that developments with exceptionally high-water demands, such as data centres or major industrial users, may require additional servicing assessments and network augmentation beyond that currently anticipated.

3.1.2 Recycled Water

There are currently no recycled water assets within the Precinct.

No recycled water mains or recycled water service connections are shown within the project area or immediately adjoining road reserves. Based on the available GWW asset information, recycled water infrastructure has not been identified within the study area.

Existing sewer infrastructure is located predominantly along Hopkins Road and within the south-eastern portion of the project area adjacent to Christies Road and Archer Road. The existing sewer network comprises a 450 mm diameter polypropylene (PP) gravity sewer main within the Hopkins Road reserve and 375 mm diameter PP gravity sewer mains within the existing developed area east of Christies Road. Recorded sewer invert levels along the network range from approximately RL 41.25 m to RL 42.99 m.

GWW provided a concept servicing strategy identifying a planned backbone sewer network for the area. The concept includes future sewer infrastructure extending through the precinct and providing connectivity to the broader regional sewer network. GWW advised that developers will be required to extend the backbone sewer network northwards to Middle Road, with a typical terminating sewer depth of approximately 4 metres at Middle Road. GWW further advised that sections of the future sewer network proposed beneath the future Western Freeway extension must be constructed prior to freeway development. Future lots of fronting Hopkins Road will have the ability to connect directly to the existing DN600 sewer located within the Hopkins Road corridor.

3.2 Key Issues and Opportunities

Greater Western Water advised that the precinct is located within the future Greek Hill High Level Water Supply Zone and is proposed to be supplied via the future Greek Hill High Level Water Pumping Station and a future pressure reducing valve connected to Melbourne Water's M483 transfer main. An indicative backbone water network has been identified throughout the precinct and will be progressively delivered as development occurs. Future servicing has been planned based on the proposed industrial land use assumptions; however, high-demand developments may require additional network augmentation and servicing assessments.



3.2.2 Recycled Water

No recycled water mains or recycled water service connections have been identified within the project area based on the available Greater Western Water asset plans. As such, recycled water infrastructure is not currently available within the precinct, and the availability of future recycled water servicing opportunities remains unknown. Greater Western Water was contacted for further information regarding recycled water servicing; however, a response had not been received at the time of writing.

3.2.3 Sewer

Greater Western Water advised that the precinct is located within the Werribee North, Woods Road and Christies Road sewer catchments. A future backbone sewer network has been planned to service the precinct and accommodate future development within the broader catchment. Developers will be required to extend the backbone sewer network to Middle Road, while future lots fronting Hopkins Road may connect directly to the existing DN600 sewer within the Hopkins Road corridor. Future sewer infrastructure requirements, staging and final alignments will be confirmed through detailed design and development planning.

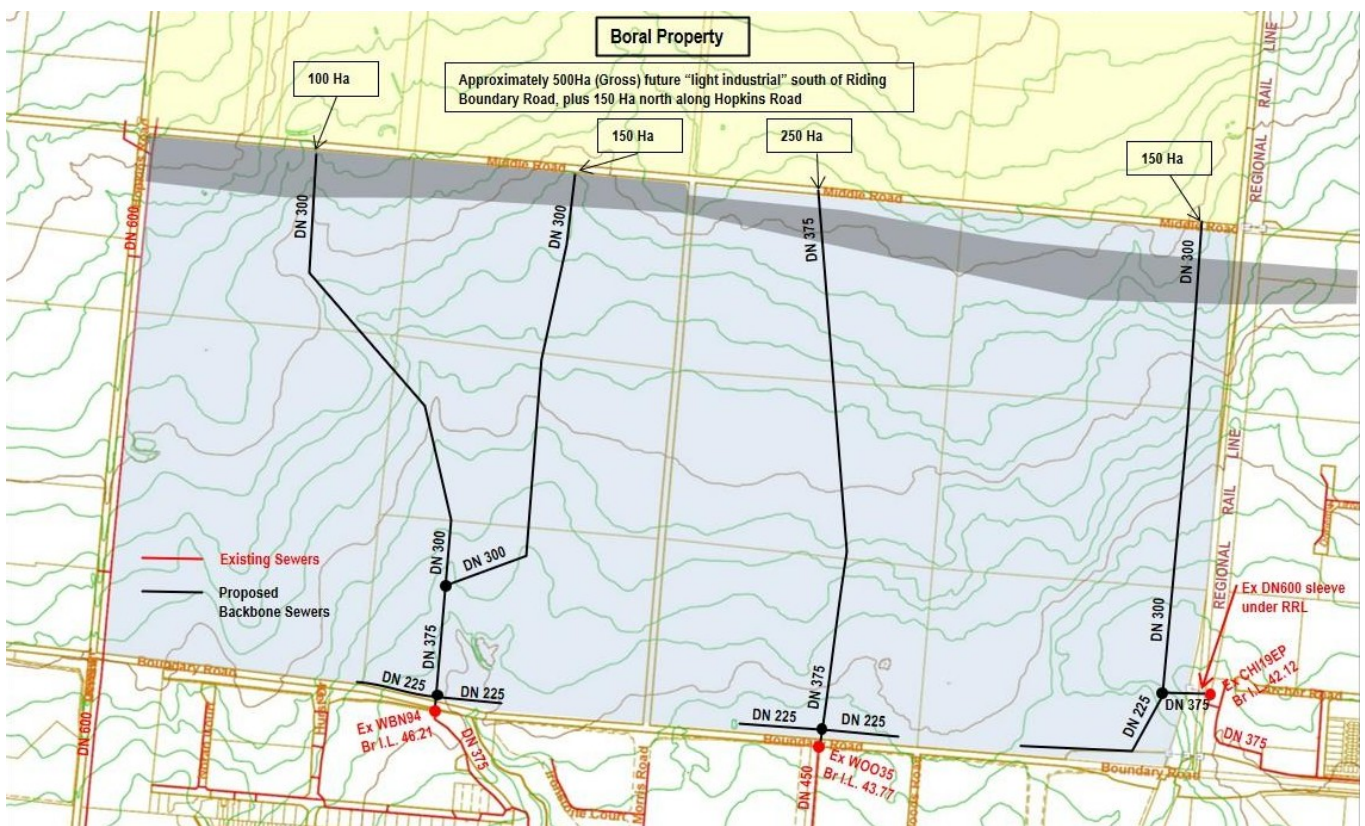


Figure 2 Existing Sewer Infrastructure, Greater Western Water (2026)

4. Gas Infrastructure

APA Group (APA) owns and operates the high-pressure gas transmission network within the project area. APA confirmed that the proposed development may impact existing APA high-pressure gas transmission infrastructure and associated assets.

4.1 Existing Infrastructure

Existing transmission and distribution gas infrastructure is shown in Appendix C.

4.1.1 Transmission Network

APA Group BYDA mapping identifies an existing high-pressure gas transmission pipeline traversing the project area, generally within the Middle Road corridor. The transmission pipeline represents the primary gas asset affecting the precinct.

Following review of the proposed Derrimut Fields PSP, APA confirmed that the project area may impact its high-pressure gas transmission pipeline and associated gas assets. APA advised that future plans and designs will need to be submitted for further assessment as the project progresses to ensure the protection of its infrastructure and to determine any specific development requirements associated with the pipeline corridor.

AusNet Gas also confirmed that the gas infrastructure identified within the project area is owned and operated by APA Group and forms the primary gas transmission asset affecting the precinct. There are four APA natural gas pipelines within or in close proximity to the precinct. Two pipelines (T56 and T112) run east-west near Middle Road and two pipelines (T62 and T118) commence just outside the north-west site boundary of the site near the intersection of Middle Road and run north:

- **Pipeline T56 (Brooklyn to Ballan)**
This 200 millimetre (mm) diameter pipeline travels in a westerly direction from the Brooklyn Compressor Station to the Ballan Bifurcation (pipeline junction). The pipeline was commissioned in 1972.
- **Pipeline T62 (Derrimut to Sunbury)**
This 150mm diameter pipeline travels in a northerly direction from two branch valves at the Hopkins Road and Middle Road intersection to Meter Station M045 at Sunbury City Gate. The pipeline was commissioned in 1979.
- **Pipeline T112 (Brooklyn to Lara)**
This 500mm diameter pipeline travels in a south westerly direction from a valve on the Brooklyn BCP City Gate at Jones Road Brooklyn to the Lara South West Pipeline (SWP) City Gate. This pipeline was commissioned in 2008.
- **Pipeline T118 (Truganina to Plumpton)**
This 500mm diameter pipeline travels in a northerly direction from three branch valves at the Hopkins Road and Middle Road intersection to the Plumpton Pressure Reduction Station (PRS). This pipeline was commissioned in 2012.

The approximate position of these pipelines within the precinct boundary is shown in Figure 3 . Approximate pipeline locations within and in proximity to the Derrimut Fields PSP boundaryFigure .



Figure 3 Approximate pipeline locations within and in proximity to the Derrimut Fields PSP boundary

4.1.2 Distribution Network

No existing gas distribution infrastructure was identified or confirmed within the project area through the available authority information. AusNet Gas advised that the planned gas asset shown on its mapping forms part of a historical backbone network concept that has not been constructed and is not currently proposed for delivery. The authority advised that future construction of this infrastructure would only occur if required to meet future customer demand.

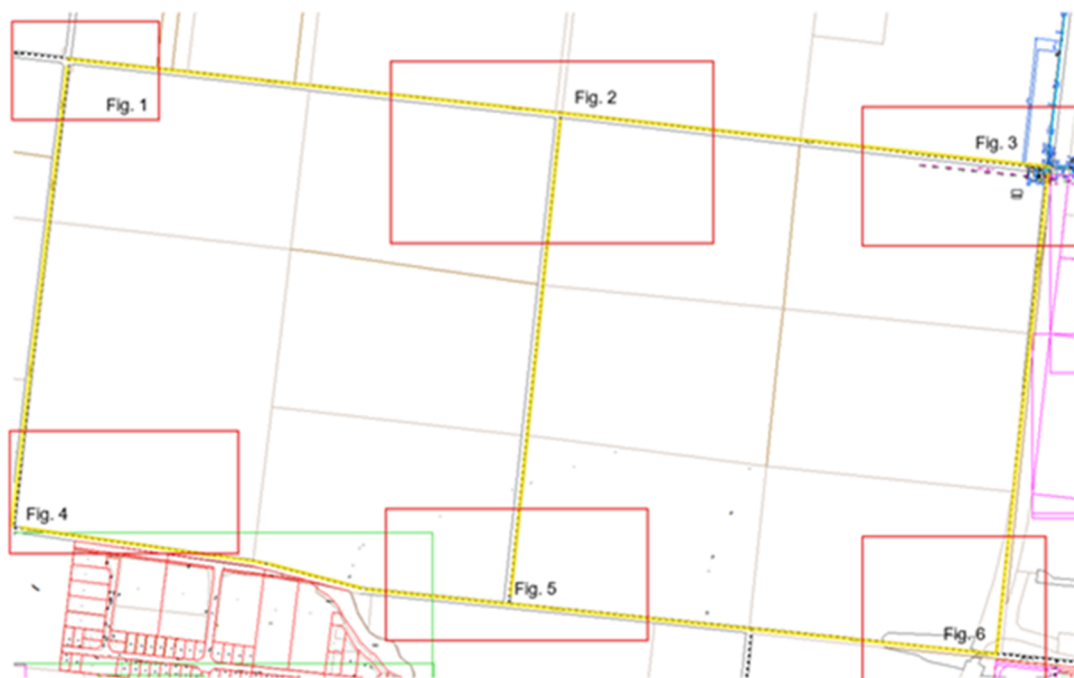


Figure 4 GIS/SDMG Map of Proposed Working Site (all values are indicative only)

4.2 Key Issues and Opportunities

4.2.1 Transmission Network

The existing APA high-pressure gas transmission pipeline represents a key constraint to future development within the precinct. APA has advised that the proposed development may impact the transmission pipeline and associated gas assets and that future plans and designs should be referred to APA for detailed assessment as development progresses.

Future road, drainage and utility infrastructure will need to be designed having regard to the location of the transmission pipeline and any associated asset protection requirements. Early engagement with APA throughout future planning and design stages provides an opportunity to identify constraints, confirm infrastructure protection requirements and incorporate appropriate design measures to minimise impacts on the existing gas transmission network.

4.2.2 Distribution Network

No existing gas distribution network servicing the precinct was identified through the available authority responses. As gas is not considered an essential service, future provision of gas infrastructure will depend on the servicing requirements of individual developments and market demand.

Should gas servicing be required, new reticulation infrastructure and potential network augmentation may be necessary to connect future development to the broader gas network. This presents an opportunity to plan and stage gas infrastructure in accordance with future development needs while minimising upfront servicing costs. Further consultation with the relevant gas distribution authority will be required to confirm network capacity, servicing options and developer obligations.

5. Electrical Infrastructure

Powercor is the electricity distribution network service provider for the project area, while AusNet is responsible for the transmission network and associated transmission easements. Information relating to existing electricity infrastructure was obtained from BYDA responses, asset plans and direct correspondence with both authorities.

5.1 Existing Infrastructure

Existing transmission and distribution electrical infrastructure is shown in Appendix C.

5.1.1 Transmission Network

AusNet Transmission Group confirmed the presence of existing high-voltage transmission infrastructure traversing the precinct. The transmission network comprises overhead transmission lines and associated easements that cross the site and form part of the broader Victorian electricity transmission network. These assets are protected by statutory easements and require ongoing access for operation, maintenance and future upgrades.

5.1.2 Distribution Network

Powercor advised that the precinct is currently supplied by 22 kV feeders from the Truganina Zone Substation (TNA ZSS) and the recently commissioned Mount Cottrell Zone Substation (MTC ZSS). Existing electricity distribution infrastructure is located within surrounding road reserves and established service corridors servicing the surrounding urban area. Powercor advised that both feeder and zone substation capacity within the area are approaching operational limits due to ongoing development across Melbourne's western growth corridor.

5.2 Key Issues and Opportunities

5.2.1 Transmission Network

AusNet advised that the proposed upgrade of Middle Road is expected to cross the transmission line easement near the midpoint between transmission towers, where conductor clearances are lowest. As a result, careful consideration will be required to maintain the minimum clearance requirements for the transmission network. Should Middle Road ultimately be developed as a major arterial road, transmission tower modifications may be required to achieve the required 11.5 metre vertical clearance for 220 kV transmission lines, with any associated upgrade costs to be borne by the development proponent.

AusNet further advised that future internal road crossings will also need to consider transmission line clearances and that ongoing access to transmission towers must be maintained throughout the development. The authority noted that larger industrial lots adjoining the transmission easement are preferred as this reduces the number of property boundaries crossing the easement and minimises constraints on access, maintenance and future network upgrades. Future development within and adjacent to the transmission easement may also be restricted by electrical safety legislation and associated regulatory requirements.

5.2.2 Distribution Network

Powercor advised that existing network capacity within the area is constrained, with both feeder and zone substation capacity approaching operational limits. While the Mount Cottrell Zone Substation may accommodate some initial growth, the scale of future industrial development within the precinct and ongoing growth across Melbourne's western corridor are likely to require future network augmentation.

To support long-term development, Powercor recommended that key road corridors allow for future 66 kV and/or 132 kV electricity infrastructure. The authority also advised that, given the size of the precinct and uncertainty surrounding ultimate electrical demand, consideration should be given to accommodating a future Zone Substation (ZSS) site within the precinct. The timing and need for this infrastructure will depend on development staging, customer demand and future load requirements. Detailed network impact assessments and servicing strategies will be required as future land uses and electrical demand become more clearly defined.

6. Telecommunication Infrastructure

The Precinct is serviced by a range of telecommunications providers including Telstra, NBN, Optus, FibreconX, Vocus Group, Nextgen Networks and VicTrack. As developers are entitled to choose their preferred telecommunications provider, the Infrastructure Provider of Last Resort (IPOLR) is required to provide a commercial offer for telecommunications servicing where requested.

NBN is currently the nominated IPOLR for new developments comprising 100 lots or more, while Telstra remains the IPOLR for developments containing fewer than 100 lots until the NBN fixed-line network rollout commences within the area. Existing telecommunications infrastructure surrounding the precinct includes fibre optic networks, conduits, pits and associated telecommunications assets owned by multiple service providers, primarily located within surrounding road reserves, transport corridors and established service easements. Existing telecommunications infrastructure has been identified along key corridors including Boundary Road, Hopkins Road, Middle Road, Christies Road and the adjacent rail corridor, providing opportunities for future connection and servicing of the precinct.

6.1 Existing Infrastructure

Existing telecommunication infrastructure is shown in Appendix C.

6.1.1 Telstra

Telstra BYDA plans identify existing telecommunications infrastructure within the vicinity of the project area. Existing assets are primarily located within surrounding road reserves and transport corridors, including the Hopkins Road corridor, the Hopkins Road and Middle Road intersection, the Hopkins Road and Boundary Road intersection, and sections of the Boundary Road and Christies Road corridors.

The supplied plans identify a network of underground telecommunications infrastructure comprising P100 and P110 conduits, telecommunications pits, cable routes and direct buried fibre optic infrastructure servicing the surrounding area. Significant concentrations of infrastructure are present along Hopkins Road and Boundary Road, where multiple telecommunications pits and conduit crossings are shown within road reserves and at major road intersections. Additional telecommunications assets are located along sections of Christies Road and Middle Road, connecting into the broader telecommunications network surrounding the precinct.

The available plans indicate that existing Telstra infrastructure is predominantly concentrated within established road corridors, with no significant telecommunications infrastructure identified throughout the undeveloped portions of the precinct itself.

6.1.2 NBN

NBN BYDA records identify existing NBN telecommunications facilities within the vicinity of the project area, including underground telecommunications infrastructure, conduits, pits and associated assets located within surrounding road reserves and established service corridors. Existing NBN infrastructure is generally located along sections of Boundary Road, Hopkins Road, Christies Road, Archer Road and Middle Road, servicing surrounding developed areas adjacent to the precinct.

NBN further advised that the project area is currently located within the Wireless and Satellite footprint of the NBN network and is not currently serviced by Fibre to the Premises (FTTP) or any other fixed-line NBN technology.

6.1.3 Optus

Optus BYDA records and subsequent direct correspondence confirm the presence of existing Optus telecommunications infrastructure within the vicinity of the project area. BYDA information identifies underground Optus fibre optic telecommunications assets primarily within established road reserves surrounding the precinct, including the Hopkins Road corridor between Boundary Road and Middle Road.

Optus subsequently provided asset mapping which identified Optus conduits (red/white linework) and Optus cables located within NBN conduits (black/white linework). The mapping confirms that existing Optus infrastructure is generally concentrated within surrounding road corridors and established urban areas adjacent to the precinct, with no significant Optus infrastructure extending across the undeveloped portions of the PSP area.

6.1.4 FibreconX

FibreconX BYDA records indicate the presence of existing underground telecommunications infrastructure within the vicinity of the precinct, including fibre optic cables, conduits, pits and associated telecommunications assets. Available plans show FibreconX infrastructure primarily within surrounding road reserves and established service corridors, including portions of Middle Road, Boundary Road and the vicinity of Christies Road. A FibreconX P9 pit is also identified near the Middle Road and Christies Road corridor.

6.1.5 Ventia

Ventia was contacted regarding telecommunications infrastructure within the project area. Ventia advised that it does not own the telecommunications infrastructure or associated asset plans and referred enquiries to the relevant infrastructure owners. Accordingly, no telecommunications assets owned or operated by Ventia have been identified within the project area.

6.1.6 Vocus

Vocus BYDA records indicate the presence of existing telecommunications infrastructure within the vicinity of the project area. Vocus supplied overview plans showing existing telecommunications assets generally located adjacent to the precinct boundaries, particularly within the Boundary Road, Hopkins Road and surrounding road corridors. Due to the size of the enquiry area, detailed asset plans were not provided.

6.1.7 Nextgen

Nextgen BYDA records indicate the presence of existing fibre optic telecommunications infrastructure within the vicinity of the project area. Available plans show existing Nextgen assets generally located within surrounding transport and road corridors, including sections of Middle Road, Hopkins Road and adjoining reserves. Existing infrastructure comprises fibre optic telecommunications assets and associated network infrastructure.

6.1.8 Victrack

VicTrack BYDA information identifies existing underground fibre optic telecommunications infrastructure within the rail reserve adjoining the eastern boundary of the precinct. The identified assets generally follow the rail corridor between Boundary Road and Middle Road. No telecommunications assets are shown extending into the developable areas of the precinct outside of the rail reserve.

6.2 Key Issues and Opportunities

6.2.1 Telstra

Telstra BYDA plans identify existing telecommunications infrastructure within the Hopkins Road, Boundary Road, Middle Road and Christies Road corridors surrounding the precinct, including telecommunications conduits, pits and cable infrastructure.

The presence of existing Telstra assets within these road reserves will require consideration during future road upgrades, utility installations and construction works. Asset locations shown on the plans are indicative only and should be verified prior to excavation.

Existing telecommunications infrastructure surrounding the precinct provides an opportunity for future telecommunications servicing and connection to the broader network. Future development will be required to protect existing Telstra assets and maintain appropriate clearances during construction.

6.2.2 NBN

NBN advised that there are currently no planned infrastructure upgrades within the precinct and does not foresee any constraints associated with future telecommunications servicing. NBN indicated that it is unlikely that any major telecommunications infrastructure will be required unless future development is driven by customer demand.

NBN advised that any future extension of the fixed-line network would connect to the existing NBN Fibre Access Node (FAN) at 50 Cameron Drive, Hoppers Crossing, which currently has sufficient capacity to service the precinct. Future servicing would be assessed on a case-by-case basis and is expected to utilise a combination of existing Telstra infrastructure, new NBN infrastructure, developer-delivered assets and shared trenching arrangements. NBN further advised that future fixed-line connections would likely be established via the Boundary Road and Hopkins Road corridors, with new pit and pipe infrastructure required throughout the precinct to service future development.

6.2.3 Optus

Optus advised that underground fibre optic telecommunications assets are present within the vicinity of the project area and that all works undertaken near existing Optus infrastructure must comply with Optus asset protection

requirements. Asset plans provided by Optus are indicative only, with exact asset locations, depths and alignments requiring verification through detailed utility locating prior to construction works.

The presence of existing Optus conduit and fibre infrastructure within the surrounding road network, particularly along Hopkins Road, presents an opportunity for future telecommunications servicing connections to the precinct. Future development will be required to consider the protection of existing Optus assets, maintain appropriate clearances during construction, and coordinate with Optus regarding any asset relocation or servicing requirements that may arise as development progresses.

6.2.4 FibreconX

FibreconX advised that telecommunications assets are present within the vicinity of the project area and that all works near existing infrastructure should comply with FibreconX asset protection requirements. Asset locations shown on plans are indicative only and require onsite verification prior to excavation or construction activities. Existing FibreconX infrastructure within surrounding road corridors may provide future telecommunications servicing opportunities; however, protection of existing assets and coordination with FibreconX will be required during future design and delivery stages.

6.2.5 Ventia

Ventia confirmed that it is not the owner of telecommunications infrastructure within the project area and was therefore unable to provide asset information or servicing advice. No telecommunications constraints or opportunities associated with Ventia-owned infrastructure have been identified as part of this assessment.

6.2.6 Vocus

Vocus advised that the project area may impact existing telecommunications infrastructure and recommends further consultation where works are proposed near its assets. The supplied plans are indicative only and detailed asset locations should be confirmed through utility locating and potholing prior to construction. Existing Vocus infrastructure within the surrounding road network may provide future telecommunications servicing opportunities; however, future development will need to maintain adequate clearances and protect existing assets during construction.

6.2.7 Nextgen

Nextgen advised that its telecommunications infrastructure is present within the project vicinity and that asset locations should be considered indicative only. Detailed utility investigations and potholing will be required before undertaking works near existing assets. Existing fibre optic infrastructure located within surrounding road reserves may provide future opportunities for telecommunications servicing of the precinct. Any works near Nextgen infrastructure will require compliance with asset protection requirements and coordination with Nextgen where protection or relocation works are required.

6.2.8 Victrack

VicTrack advised that the project area is affected by telecommunications infrastructure located within the rail reserve. While the identified assets are generally confined to the rail corridor and are unlikely to directly constrain development within the majority of the precinct, any works proposed adjacent to or within the rail reserve will require further consultation with VicTrack and compliance with VicTrack's Network Protection Plan and Permit to Work requirements. Future planning should consider asset protection requirements and approval processes associated with works near the rail corridor.

No authority responses were received separately from FibreconX, Vocus, Nextgen or VicTrack. The above sections are based entirely on BYDA information.

7. Ecologically Sustainable Development

A key goal of the VPA in planning for the development of the Precinct is to facilitate a low carbon emissions development. GHD undertook a high-level desktop study to understand how local and state policy could facilitate low carbon emissions development, as well as to obtain examples of employment precincts already utilising innovative electricity servicing models.

7.1 Low Carbon Emissions Development Policies

Low-carbon development policies play a critical role in driving reductions in operational and embodied carbon emissions in the built environment. These strategic frameworks support the transition to low-carbon economies and may impact the strategy of utility supply to the precinct.

7.1.1 Renewable Energy Target

The Victorian government has set a Renewable Energy Target of 65% renewable energy by 2030 and 95% by 2035¹ and an Energy Storage Target of at least 2.6 GW by 2030 and 6.3 GW by 2035². These targets will increase renewable energy investment in Victoria, creating thousands of new jobs and moving the state towards a future of sustainable energy. The Victorian government is considering both policy level and financial support to meet its renewable energy target.

7.1.2 Net Zero by 2045 Emissions Reduction Target

The Victorian government has brought forward the net zero greenhouse gas emissions target by 5 years to 2045 from 2050. As part of this target the Victorian government sets interim targets every five years until 2035 to ensure the target is met, with the 2040 target to be set by 2028³.

7.1.3 Victoria's Gas Substitution Roadmap

In recent years, Victoria has put in place policies that enable the gradual move away from gas. For example, a critical shift is the Building Electrification Regulations that will require end-of-life gas hot-water systems to be replaced with electric alternatives. The following reforms to transition away from gas are relevant to new developments:

- From July 2023 all new government buildings are to be built all-electric, including new schools and hospitals
- From 1 January 2024, new homes requiring a planning permit are required to be all-electric
- From 1 January 2025, customers pay the full up-front costs of a new gas connection instead of the cost being shared by all gas-users under the updated the Gas Distribution Code of Practice published by Essential Services Commission. This brings gas in line with the current practice for new electricity and water connections
- beginning 1 January 2027, all new homes and commercial buildings must be built all-electric, including commercial kitchens. This does not apply to industrial or agricultural buildings or existing commercial buildings.

As regulations develop in the future, the requirements for all-electric infrastructure may become more stringent. An all-electric precinct represents a future-ready solution for developments for the next few decades, providing a more resilient pathway to achieving low carbon and net zero outcomes.

¹ <https://www.energy.vic.gov.au/renewable-energy/victorian-renewable-energy-and-storage-targets>

² <https://www.energy.vic.gov.au/renewable-energy/victorian-renewable-energy-and-storage-targets>

³ <https://www.climatechange.vic.gov.au/climate-action-targets>

7.1.4 National Energy Performance Strategy

The National Energy Performance Strategy (NEPS) focuses on the vision that all Australians can enjoy the economic, climate and health benefits of improved energy performance⁴. The strategy prioritises demand-side action and improved energy performance outcomes associated with building the required supply chains and empowering consumers.

7.1.5 Plan Melbourne 2017 - 2050

Plan Melbourne 2017-2050 supports Ecologically Sustainable Design (ESD) that considers geography, planning and design in ways that facilitates connections between people, places and resources⁵. It also supports the inclusion of energy efficiency and renewable energy to assist in the delivery of cost-effective environmental outcomes.

7.1.6 State Planning Policy Framework (SPPF)

The Planning Policy Framework (PPF) aims to further mainstream sustainability as part of the decision making across the entire PPF. Changes through Amendment VC216 mandates all new developments requiring a planning permit must demonstrate how their proposal has considered ESD principles relating to but not limited to building performance, water management, waste, and transportation⁶.

7.1.7 City of Melton Environmental Plan 2017-2027

The council's Environmental Plan 2017-2027 focuses on three key themes that direct the approach to environmental policy:

- Built environment: ESD policies for buildings, roads, and public realm development
- Natural environment: biodiversity strategy to support healthy waterways and ecosystems
- Resource use: greenhouse gas emission reduction targets leading to net zero emissions by 2040

7.2 Ecologically Sustainable Development for Employment Precincts

ESD describes the type of development that does not negatively impact natural ecological processes. ESD practices in employment precincts ensure that the user's needs are met while simultaneously ensuring that the availability of resources required for future generations and development is not compromised.

7.2.1 Sustainability Rating Tools for Precincts and Buildings

Sustainability rating tools support developments to adopt a holistic approach to implementing sustainable strategies early in the project life cycle. Certification of these frameworks can drive best-practice sustainability outcomes and verify the environmental and social outcomes of the project, whether on a building or precinct scale.

The Green Building Council of Australia (GBCA) established the Green Star rating system: an internationally recognised rating system developed for the Australian environment. For precinct-scale developments, the Green Star Communities rating tool prioritises public space amenity, sustainable transport and walkability, integrated water management, and community connection and resilience to create healthier, more liveable and future-ready communities⁷. Similarly, the WELL Community Standard builds upon the WELL Building Standard to incorporate all aspects of community life, and the Living Building Challenge's Place Petal articulates how to nurture both the people and culture of a place.

⁴ <https://www.dcceew.gov.au/sites/default/files/documents/national-energy-performance-strategy.pdf>

⁵ <https://www.planning.vic.gov.au/guides-and-resources/strategies-and-initiatives/plan-melbourne/the-plan>

⁶ <https://www.planning.vic.gov.au/guides-and-resources/strategies-and-initiatives/environmentally-sustainable-development>

⁷ <https://new.gbca.org.au/green-star/rating-system/communities/>

Rating tools can guide decisions relating to energy distribution and generation, building performance, waste management, sustainable transport, and integrated water management.

7.2.2 Distributed and Renewable Energy Generation

Distributed energy generation refers to a variety of different grid-connected energy technologies that generate electricity at, or close to, the location of use. Whilst several different technologies can be utilised, the most accessible technologies for the residential or commercial sectors are solar photovoltaic panels and small wind-turbines. The use of solar photovoltaic panels in an employment precinct is beneficial, particularly when there is provision provided to allow for the installation of solar photovoltaic panels.

Distributed and renewable energy grids provide numerous benefits to residents and businesses within an employment precinct, including energy security and the potential for energy export and income generation. When combined with energy storage technologies, a distributed network can reduce the load on centralised utilities and provide reduced and predictable energy pricing. In addition, distributed energy sources can strengthen a precinct's resilience in supporting increased loads as a result of gas systems transitioning to electric.

7.2.3 Energy Efficient Buildings

The benefits to increased energy efficiency in buildings include improved thermal comfort, lower energy bills and enhanced indoor air quality. It also provides benefit to residents and business owners in the form of increased resale value⁸.

In December 2025, the Energy and Climate Change Ministerial Council (ECMC) approved the Trajectory for Low Energy Buildings Implementation Plan 2026-2027, working towards lowering costs and improving building comfort for households and businesses⁹.

All new homes and buildings in Victoria must comply with the Building Code of Australia. The National Australian Built Environment Rating System (NABERS) can be used to measure a building's operational energy performance and carbon emissions across a range of building types. The National House Energy Rating Scheme (NatHERS) must be used for new residential buildings to assess thermal performance and compliance with the National Construction Code (NCC).

Many new urban developments implement a target building energy efficiency rating, and some precincts may mandate minimum energy efficiency building ratings.

7.2.4 Waste Management, Smart Separation and Disposal

Waste collection in Australia is largely dependent on regional and local requirements, often involving the collection using waste collection vehicles.

An emerging technology in waste industry is the use of an underground pneumatic waste conveyance system. The system transports waste from residential and commercial buildings through a system of underground pipes that appear above ground at collection points. The system is suitable to high-density urban environments and represents a significant reduction in resources in terms of labour, hours and fuel when compared to the traditional waste collection practices.

The system has been implemented around the world, including locations such as the Pearl-Qatar (Doha), Wembley (UK), Singapore and in the Maroochy City Centre (Queensland)¹⁰.

Effective waste management systems also support ESD and some of these practices can include:

- On-site management of food, garden and organic waste. At a commercial scale this can involve composting or organics processing technologies¹¹
- Allowing for the provision of additional collection streams for glass, e-waste, batteries and other recyclable materials in residential and commercial sites

⁸ <https://www.dcceew.gov.au/energy/energy-efficiency/buildings/residential-buildings>

⁹ <https://www.dcceew.gov.au/energy/energy-efficiency/buildings/trajectory-low-energy-buildings>

¹⁰ <https://www.sunshinecoast.qld.gov.au/living-and-community/waste-and-recycling/automated-waste-collection-system>

¹¹ <https://www.dcceew.gov.au/environment/protection/waste/food-waste/recovering-organic-waste>

- Co-locating recycling and general waste bins to encourage recycling
- Considering the use of smart waste technologies, such as sensor-enabled bins and collection monitoring systems, to optimise the frequency in which the bins are emptied.
- Design of waste storage and collection points that support circular economy outcomes and future system requirements.

7.2.5 Encouraging Electric Vehicle Use

The transition to electric vehicles (EVs) is accelerating globally as governments, manufacturers and consumers seek to reduce transport emissions. The international energy agency (IEA) predicts continued growth in EV adoption due to improvements in declining costs and expanding charging infrastructure¹².

One of the key barriers for EV uptake is the availability of public charging station infrastructure. Several jurisdictions are responding through policy measures that encourage and mandate EV infrastructure in new developments. The Victoria State Government released the EV charging regulatory statement in April 2026 that sets out new steps to unlock the rollout of more EV chargers¹³.

Australia's charging network has expanded rapidly in recent years, with more than 1,500 public fast-charging sites located nationwide. The Australian Government has also launched the national EV information portal and Electric Vehicle Charging Infrastructure Mapping Tool to support planning and investment in charging infrastructure.

7.2.6 Integrated Water Management and WSUD

Integrated Water Management (IWM) encourages a sustainable and holistic approach to water servicing by considering the entire water life cycle, including water supply, wastewater, stormwater, groundwater and receiving environments.

To reduce the demand for potable water, several strategies and technology can be used including:

- The installation and use of rainwater tanks
- Water harvesting from rainwater and storm water collection for use in laundries and toilets and using recycled wastewater for gardens
- Wastewater treatment and reuse systems
- Closed loop systems

Water Sensitive Urban Design (WSUD) is an integrated design approach that considers the water cycle into the built environment, with the aim of improving stormwater quality, reducing flood risk, and enhance amenity. Key elements of WSUD include:

- Storage, treatment and beneficial reuse of storm water runoff
- Treatment and reuse of wastewater
- Use of vegetation for water treatment purposes, water efficient landscaping and enhanced biodiversity
- Water conservation measures associated with residential, commercial and industrial developments
- Implementation of 'green' infrastructure and public realm elements (streetscape, waterways, buildings etc.)

¹² <https://www.iea.org/reports/global-ev-outlook-2026/electric-vehicle-charging-chap-6-and-10>

¹³ <https://www.energy.vic.gov.au/renewable-energy/zero-emission-vehicles>

8. Summary

This assessment identified the key issues and opportunities related to existing utility infrastructure that may impact on the preparation of the Officer South Employment Precinct (OSEP) masterplan, as established through consultation with USPs.

8.1 Key Issues and Opportunities

The following Table 3 outlines the key issues and opportunities related to utility infrastructure in the Precinct.

Table 3 *Key Issues and Opportunities*

Utility	Key Issues	Key Opportunities
Stormwater Drainage	Melbourne Water (BYDA): A regional drainage pipeline and associated waterway corridor are located along the eastern portion of the precinct adjacent to the Melbourne-Geelong rail corridor and Dohertys Creek. Melbourne Water (Authority Response): No response was received at the time of writing; therefore, regional drainage requirements, floodplain constraints, flood mapping, hydraulic capacity and easement requirements could not be confirmed. Melton City Council (Authority Response): Limited drainage infrastructure exists within the precinct itself, with assets primarily located within Hopkins Road, Christies Road and Middle Road reserves.	Existing drainage infrastructure along Hopkins Road, Christies Road and Middle Road may provide future connection opportunities. Future development provides an opportunity to establish an integrated precinct-wide drainage network and suitable downstream outfall arrangements.
Potable, Recycled Water and Sewer	Greater Western Water (BYDA): Existing potable water infrastructure is limited to a 280 mm PE water main within the Boundary Road corridor. No recycled water infrastructure was identified within or immediately adjacent to the precinct. Existing sewer infrastructure is generally limited to the Hopkins Road corridor and south-eastern portion of the precinct near Christies Road and Archer Road. Greater Western Water (Authority Response): No response was received regarding network capacity, servicing constraints, future augmentation requirements or recycled water servicing opportunities. Consequently, the ability of the existing networks to accommodate future development could not be confirmed.	Existing potable water and sewer infrastructure within Boundary Road, Hopkins Road and Christies Road may provide future servicing opportunities. Future development can incorporate new potable water, recycled water and sewer infrastructure through staged network extensions and augmentation works. There is also an opportunity to investigate future recycled water servicing and integrated water management initiatives as part of precinct development.
Electrical	AusNet (Authority Response): Existing transmission infrastructure and easements traverse the precinct and represent a significant development constraint. The proposed Middle Road upgrade may require transmission tower modifications to maintain the required 11.5 m clearance to the 220 kV transmission network. Future internal roads, lot configurations and land	Powercor advised future development can be supported through network augmentation. Allowance may be required for future 66 kV and/or 132 kV electricity infrastructure and potentially a future Zone Substation within the precinct. Transmission easements may also accommodate

Utility	Key Issues	Key Opportunities
	uses adjoining easements will also be constrained by electrical safety requirements. Powercor (Authority Response): Existing feeder and zone substation capacity is approaching operational limits due to growth across Melbourne's western corridor.	compatible uses such as access, landscaping and open space.
Gas	APA Group (BYDA): A high-pressure gas transmission pipeline traverses the precinct generally within the Middle Road corridor. The transmission pipeline represents a key development constraint and may influence future road, drainage and utility crossings. APA Authority Response: Additional information relating to pipeline characteristics and easement requirements remained outstanding at the time of writing. AusNet (Authority Response): Confirmed the planned distribution gas infrastructure shown on mapping has not been constructed and is not currently proposed.	Future development can incorporate compatible land uses and infrastructure layouts adjacent to the transmission corridor. As gas is not considered an essential service, future development may minimise reliance on gas infrastructure and adopt alternative energy solutions where appropriate.
Telecommunications	NBN (Authority Response): The precinct is currently within the Wireless and Satellite footprint and is not serviced by fixed-line NBN infrastructure. Optus (Authority Response and BYDA): Existing fibre and conduit infrastructure is located within surrounding road corridors and must be protected during future works. Telstra, FibreconX, Vocus, Nextgen and VicTrack (BYDA): Existing telecommunications infrastructure is located within surrounding road reserves, transport corridors and the adjoining rail corridor. VicTrack (BYDA): Fibre optic infrastructure within the rail reserve may constrain works adjacent to the eastern boundary.	Existing telecommunications infrastructure along Boundary Road, Hopkins Road, Middle Road, Christies Road and the rail corridor provides multiple servicing opportunities. NBN (Authority Response): Future fixed-line servicing may be provided via the existing Fibre Access Node at Hoppers Crossing, with future pit and pipe infrastructure delivered as development proceeds.

Appendices

Appendix A

Locality Plan

Appendix B

Flood Overlays

Appendix C

Existing Infrastructure Plans and Typical Sections

Appendix D

USP Responses

