

ADW JOHNSON PTY LIMITED

ABN 62 129 445 398

Sydney
Level 35 One International Towers
100 Barangaroo Avenue
Sydney NSW 2000
02 8046 7411
sydney@adwjohnson.com.au

Central Coast
5 Pioneer Avenue
Tuggerah NSW 2259
02 4305 4300

coast@adwjohnson.com.au

Hunter Region
7/335 Hillsborough Road,
Warners Bay NSW 2282
02 4978 5100

hunter@adwjohnson.com.au

Services Infrastructure Report

Moore Point Rezoning Application

Property:

Newbridge Road, Moorebank

Applicant:

Coronation Property and Leamac Property Group

Date:

April 2020

Document Control Sheet

Issue No.	Amendment	Date	Prepared By	Checked By
A	Preliminary DRAFT	20 th November 2019	WP	GD
B	First Issue	23 rd March 2020	WP	GD
C	Client Comments	6 th April 2020	GD	GD

Limitations Statement

This report has been prepared in accordance with and for the purposes outlined in the scope of services agreed between ADW Johnson Pty Ltd and the Client. It has been prepared based on the information supplied by the Client, as well as investigation undertaken by ADW Johnson and the sub-consultants engaged by the Client for the project.

Unless otherwise specified in this report, information and advice received from external parties during the course of this project was not independently verified. However, any such information was, in our opinion, deemed to be current and relevant prior to its use. Whilst all reasonable skill, diligence and care have been taken to provide accurate information and appropriate recommendations, it is not warranted or guaranteed and no responsibility or liability for any information, opinion or commentary contained herein or for any consequences of its use will be accepted by ADW Johnson or by any person involved in the preparation of this assessment and report.

This document is solely for the use of the authorised recipient. It is not to be used or copied (either in whole or in part) for any other purpose other than that for which it has been prepared. ADW Johnson accepts no responsibility to any third party who may use or rely on this document or the information contained herein.

The Client should be aware that this report does not guarantee the approval of any application by any Council, Government agency or any other regulatory authority.

Executive Summary

OVERALL PROJECT

This Services Infrastructure report has been prepared by ADW Johnson on behalf of Leamac and Coronation to review the provision of utility services to the proposed development in relation to a Planning Proposal at Moore Point, Liverpool (the site).

The site is located east of Liverpool CBD on the opposite side of the Georges River and north of Newbridge Road. It provides a site area of 38.5 hectares (approx.) and is currently developed with industrial uses.

The site is situated within Liverpool Collaboration Area's Georges River North precinct and is subject to the priorities and actions of the Liverpool Place Strategy (Strategy), which was released by the Greater Sydney Commission (GSC) in December 2018. Refer to the figure below:

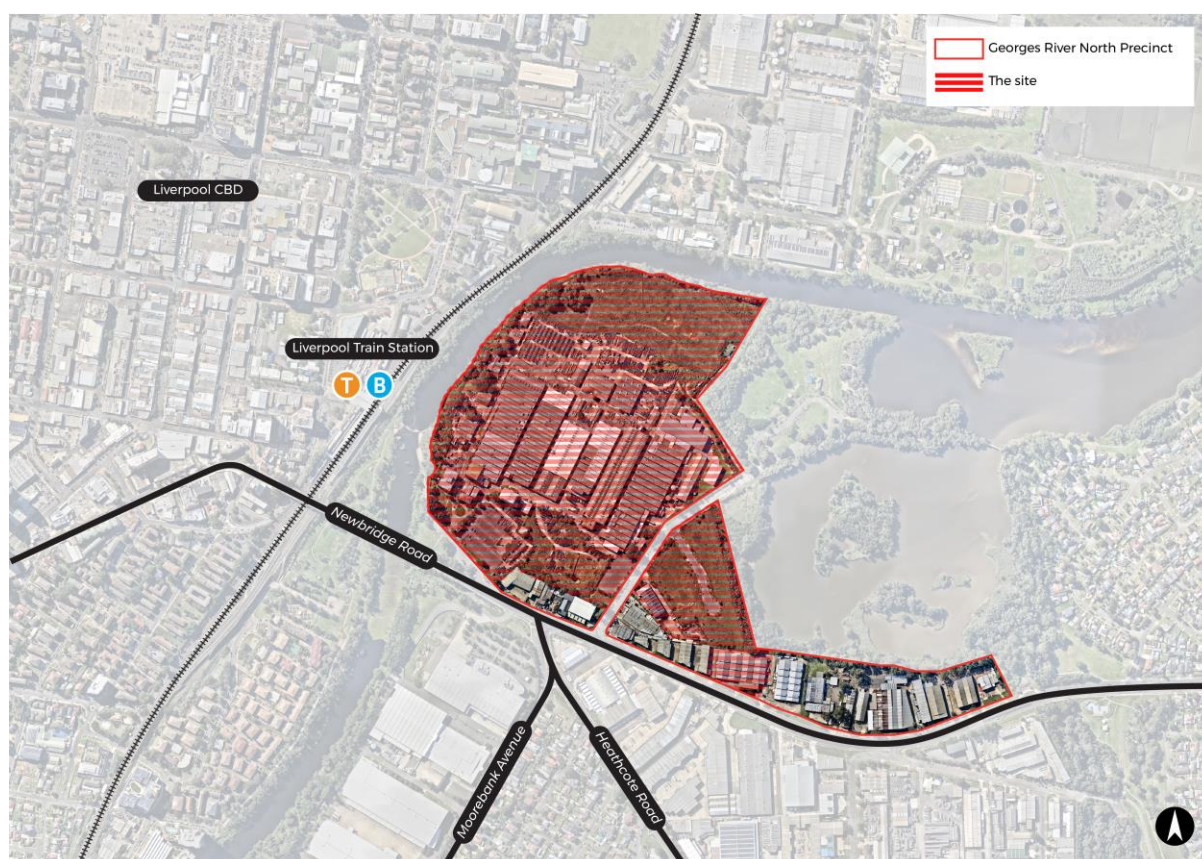


Figure 1 – Site aerial (Source: Nearmap modified by Mecone)

The Strategy states that by 2036 Liverpool will be a rejuvenated river city, offering diverse and growing residential and employment opportunities. Major health, education and retail precincts, and a mixture of open spaces and parklands alongside the Georges River, will create a rich mix of jobs and workplaces, public spaces, shops and entertainment. Under the Strategy the site is identified as 'mixed use', which comprises:

'a mixture of commercial, retail, residential and community uses that provide sustainable employment, that is complementary to, and not in competition with, the commercial core'

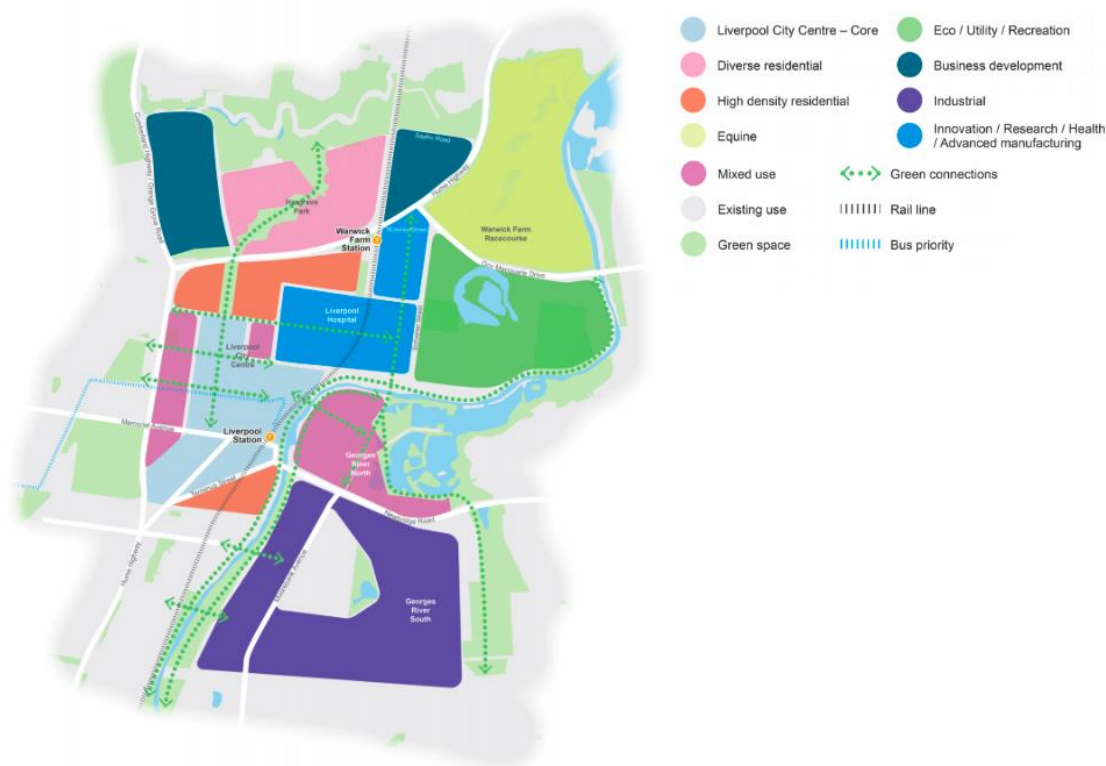


Figure 2 – A Place Strategy for Liverpool (Source: Liverpool Collaboration Area Place Strategy 2018)

The 2019 Annual report summary for Liverpool Collaboration Area highlighted key steps commenced and completed to address the imperatives acknowledged in the Strategy to accelerate the delivery of the Collaboration Area. These included:

- Engagement with TfNSW to prepare the Liverpool Place-based Integrated Transport Strategy and accelerated investment; and
- Flood studies and floodplain risk management plan completed by Liverpool City Council.

The land uses reflected in the Strategy are reinforced in Liverpool City Council's Local Strategic Planning Statement (LSPS), which identifies the site for investigation as residential/mixed use to support the CBD and Innovation Precinct in tandem with linking open space and green corridors.

The LSPS provides the following short to medium term action (12-24 months) specific to the Georges River North precinct:

Action 11.2 – Investigate amendments to LEP to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)

The Planning Proposal involves the creation of a mixed use precinct, providing new homes, jobs and open space adjoining the Georges River and connecting to Liverpool CBD. Key features of the proposal include:

- Adaptive re-use of existing heritage;
- Foreshore embellishments and new open spaces;
- Educational and cultural facilities;
- Connections to Liverpool CBD and Train Station; and
- Transport, intersection and collector road improvements.

The Planning Proposal aligns with the priorities of Government and the implementation phase of the Place Strategy by facilitating the transformation of the Collaboration Area with new jobs, infrastructure, green spaces and housing. The Planning Proposal responds to The Pulse of Greater Sydney's performance indicators, which sit under the following key themes:

Infrastructure and Collaboration

The Planning Proposal will facilitate additional jobs, education and housing in close proximity to Liverpool CBD and Train Station. The proposal will support additional medium and long-term housing supply in Liverpool CBD through diverse and new housing products. The proposal supports the continual expansion and growth of Liverpool Innovation precinct and nearby health infrastructure, with potential to provide complementary uses near Liverpool Hospital and educational and cultural facilities on the site.

Productivity

The Planning Proposal supports the growth of the thirty-minute city, ensuring Liverpool emerges as a premier CBD in the Western City. The proposal provides capacity for new transport infrastructure on the site, road and intersection upgrades and locating density near major transport infrastructure (Liverpool Train Station and Badgery's Creek Aerotropolis). The proposal encourages additional business activity and investment in Liverpool by providing new commercial uses that will complement Liverpool CBD.

Liveability

The Planning Proposal significantly improves upon the existing use of the site by creating walkable places for people to live work and play. This includes foreshore embellishments to the Georges River, improved connections across the Georges River and adaptive re-use of existing heritage items. These measures will contribute to Sydney's Green Grid, improve access to services in Liverpool CBD and establish a community that celebrates identity and place.

Sustainability

The Planning Proposal addresses the urban heat island effect by significantly increasing the quantum of green space on the site for active and passive recreational use. The proposal will provide new parks and green connections to surrounding open spaces including Haigh Park, which will contribute to the urban tree canopy of the area. Overall, the Planning Proposal represents a clear and consistent strategic line of site with the priorities of government. It meets the performance indicators, priorities and objectives expressed in the District Plan, Place Strategy, LSPS and The Pulse of Greater Sydney. Nothing contained in the body of this report/assessment would preclude the Planning Proposal from rezoning and gazettal for residential/mixed use purposes.

KEY FINDINGS

Dial Before You Dig (DBYD) plans were obtained and indicate that trunk infrastructure for each of the utility service providers has been established for the existing site and surrounding area and that the provision of services to the proposed development is available for connection subject to formal development applications.

In order to assess the existing infrastructure, ADW Johnson made applications to the primary utility service providers including:

- Endeavour Energy;
- Sydney Water;
- NBN Co; and
- Jemena.

All authorities have advised that they can service the proposed overall development, albeit in some cases, with upgrades to the existing network required. A summary of the capacity of each utility service to service the proposed overall development is provided in Table 8.1 on page 15 of the conclusion of this report.

The final provision of services to the site are subject to formal application for provisioning of services in conjunction with the respective Development Applications.

Table of Contents

EXECUTIVE SUMMARY	II
KEY FINDINGS.....	
OVERALL PROJECT	
1.0 INTRODUCTION	1
1.1 BACKGROUND.....	1
1.2 LOCALITY	1
2.0 PROPOSED DEVELOPMENT.....	3
3.0 POTABLE WATER SUPPLY	4
3.1 EXISTING INFRASTRUCTURE	4
3.2 FEASIBILITY APPLICATION	4
3.3 LEAD IN WORKS.....	4
3.4 INTERNAL WORKS	5
3.5 POTABLE WATER SUPPLY CONCLUSION	5
4.0 SEWERAGE INFRASTRUCTURE.....	6
4.1 EXISTING INFRASTRUCTURE	6
4.2 FEASIBILITY APPLICATION	6
4.3 LEAD IN WORKS.....	6
4.4 INTERNAL WORKS	6
4.5 SEWERAGE SUPPLY CONCLUSION	7
5.0 ELECTRICITY INFRASTRUCTURE.....	8
5.1 EXISTING INFRASTRUCTURE	8
5.2 FEASIBILITY APPLICATION	8
5.3 LEAD IN WORKS.....	8
5.4 INTERNAL WORKS	9
5.5 ELECTRICITY INFRASTRUCTURE CONCLUSION	9
6.0 TELECOMMUNICATIONS INFRASTRUCTURE.....	10
6.1 EXISTING INFRASTRUCTURE	10
6.2 FEASIBILITY APPLICATION	10
6.3 LEAD IN WORKS.....	10
6.4 INTERNAL WORKS	10
6.5 TELECOMMUNICATIONS CONCLUSION	10
7.0 GAS INFRASTRUCTURE	12
7.1 EXISTING INFRASTRUCTURE	12
7.2 FEASIBILITY APPLICATION	12
7.3 LEAD IN WORKS.....	12
7.4 INTERNAL WORKS	12
7.5 GAS INFRASTRUCTURE CONCLUSION	13
8.0 CONCLUSION.....	14

APPENDIX

- Appendix A** DBYD Service Plans
- Appendix B** Sydney Water Feasibility Application Response
- Appendix C** NBN Co. Feasibility Application Response
- Appendix D** Jemena Feasibility Application Response
- Appendix E** Endeavour Energy Feasibility Application Response
- Appendix F** Liverpool's Local Strategic Planning Statement

1.0 Introduction

1.1 BACKGROUND

ADW Johnson has been commissioned by Coronation Property and Leamac Property Group to prepare a Services Infrastructure Report to support a rezoning application for the proposed development at Moorebank, known as Moore Point (herein referred to as the site).

This report investigates and assesses the availability and capacity of utility services infrastructure necessary to service the proposed development and its impact on the existing infrastructure including:

- Electrical Infrastructure;
- Sewer Infrastructure;
- Water Infrastructure;
- Telecommunications Infrastructure; and
- Gas Infrastructure.

1.2 LOCALITY

The site is located in the Liverpool City Council Local Government Area (LGA) in the suburb of Moorebank in south-western Sydney. It is bound by Georges River to the east, north and west, and the existing Newbridge Road to the south. A locality plan is shown in **Figure 1**.

The site comprises several parcels of land owned by both Coronation Property and Leamac Property Group. Industrial operations make up the majority of the existing site use, with a number of commercial businesses fronting Newbridge Road and Bridges Road. An access road (Anchor Place) and associated services have recently been constructed on the empty land on the eastern side of the site. The rezoning application is made over approximately 40ha of land.

The main access to the site is along Haig Ave, Newbridge Rd and Bridges Rd.



Figure 1 – Moore Point Locality Plan

2.0 Proposed Development

The rezoning application seeks to change the current zoning of the land from industrial to predominantly residential with some commercial and open space areas in order to facilitate development of large-scale high-rise complexes for apartment dwellings and commercial spaces. The proposed development is reflective of current market requirements, with a vision of providing vibrant residential and mixed-use complexes that provide a range of dwelling types and affordability levels.

Overall, development of the site is envisaged to comprise up to thirty (30) separate built-form structures for an estimated 12,500 dwellings and commercial spaces. The proposed gross floor area (GFA) is approximately 1,560,000 m².

Figure 2 below shows the proposed masterplan for the site.

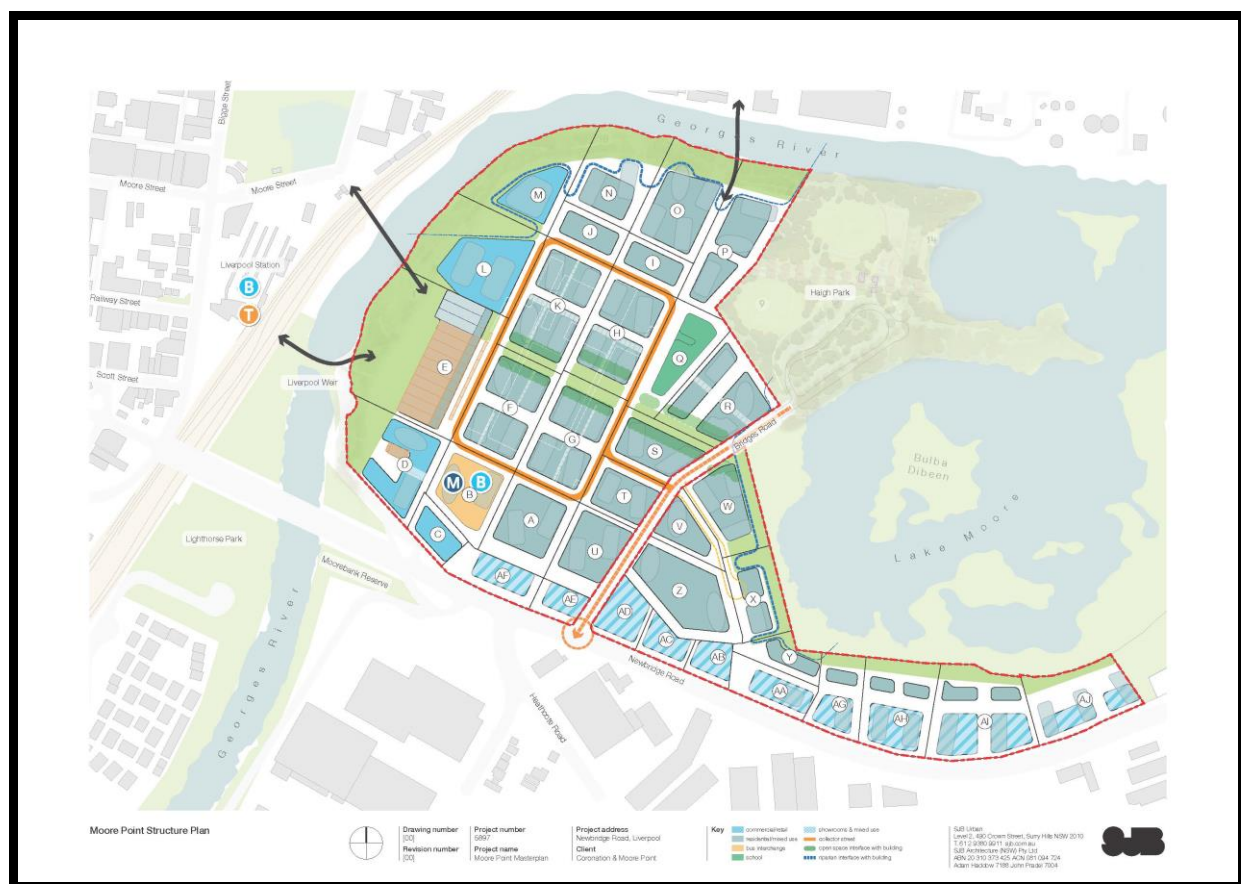


Figure 2 – Proposed Development: Moore Point Masterplan

3.0 Potable Water Supply

3.1 EXISTING INFRASTRUCTURE

A Dial Before You Dig (DBYD) search was undertaken and it was found that there are large volume water mains at the southern and eastern boundary of the site, extending along Haig Ave, Newbridge Rd and Bridges Rd.

A DN750 SCL IBL trunk main crosses Georges River into Haig Ave, and extends along Newbridge Rd and into Heathcote Rd and Moorebank Ave. An additional CICL main ranging from DN200 up to DN375 extends along the property boundary from Haig Ave, along Newbridge Rd and up Bridges Rd to Haigh Park.

A 150 mm PVC reticulation connects into the main on Bridges Rd and extends along Anchor Pl.

DBYD service plans are included in **Appendix A** and show the existing underground water services in the vicinity of the site.

We note that the servicing plans received from Sydney Water do not show any recycled water connections in the area of the proposed rezoning. As such, we do not discuss recycled water further in this report.

3.2 FEASIBILITY APPLICATION

A feasibility application was lodged with Sydney Water Corporation (SWC) on 16th August 2019.

Two (2) face-to-face meetings were undertaken with SWC, ADWJ and Coronation Property on 25 September and 28 November 2019. The first meeting was an initial meeting to discuss the overall project aims and requested information, with the second meeting allowing SWC to provide information on current and future network availability. The minutes from both meetings are included as **Appendix B**.

SWC have advised that there is capacity in the current potable water network for up to 2,000 additional dwellings, with approximately 70% of the network for residential and 30% for non-residential/commercial.

The water network infrastructure is currently being developed in Liverpool, with a water reservoir currently under construction and due for completion in 2022/2023. This piece of infrastructure could increase the capacity for the proposed development.

3.3 LEAD IN WORKS

Future upgrade lead-in works will likely be required to service additional dwellings beyond the initial capacity. However, the likely upgrades have not yet been advised by SWC. Future planning by SWC will determine the required upgrades.

3.4 internal works

SWC have advised that standard internal reticulation works would be required to service future dwellings and commercial spaces and would be constructed by the developer as part of the development works.

3.5 POTABLE WATER SUPPLY Conclusion

SWC have advised that there is capacity within the current potable water network to service up to 2,000 additional dwellings. There is also infrastructure works currently being undertaken that may increase capacity, including completion of a water reservoir in Liverpool.

Future upgrade works required to increase the capacity in the long term have not yet been advised by SWC, and will be identified following future planning by SWC.

4.0 Sewerage Infrastructure

4.1 EXISTING INFRASTRUCTURE

A DBYD search was undertaken and it was found that a DN225 VC and DN900 concrete sewer main extends from Newbridge Rd and Bridges Rd to an existing Waste Water Pump Station (WWPS) in the north-eastern corner of the site. A secondary DN900 concrete main (identified for rehabilitation as per the DBYD plans) connects into the main on Bridges Rd and extends along Newbridge Rd.

The existing businesses fronting Newbridge Rd are serviced via a connection into the sewer main on Bridges Rd.

A DN750 SCL rising main is located adjacent to the sewer main and crosses Georges River north of the WWPS at two locations. The DBYD plan indicates horizontal drilling with a grouted annulus for one of the crossings.

A DN225 PE reticulation located on Anchor Pl connects into the sewer and rising mains on Bridges Rd.

DBYD service plans are included in **Appendix A** and show the existing underground sewer services in the vicinity of the site.

4.2 FEASIBILITY APPLICATION

A feasibility application was lodged with Sydney Water Corporation (SWC) on 16th August 2019.

Two (2) face-to-face meetings were undertaken with SWC, ADWJ and Coronation Property on 25 September and 28 November 2019. The first meeting was an initial meeting to discuss the overall project aims and requested information, with the second meeting allowing SWC to provide information on current and future network availability. The minutes from both meetings are included as **Appendix B**.

SWC have advised that there is currently no additional capacity in the sewer network. The limiting piece of infrastructure is the rising main that extends into the pumping station at the northern boundary of the proposed development site.

The pumping station will be upgraded by SWC with an estimated minimum timeframe of 3 years from the conceptual planning stage to completion. Additional land may be required for the pump station upgrade which may impact the development.

4.3 LEAD IN WORKS

The lead-in works will comprise upgrade of the existing pumping station and will be completed by SWC.

4.4 internal works

Standard internal reticulation works would be required to service future dwellings and commercial spaces and would be constructed by the developer as part of the development works.

4.5 SEWERAGE SUPPLY Conclusion

SWC have advised that there is currently no additional capacity in the existing infrastructure. The limiting piece of infrastructure is the rising main that extends into the pump station at northern boundary of the proposed development site.

The provision of sewer to the proposed development would require an upgrade to the waste water pump station and additional land may be required for the pump station upgrade. An estimated minimum timeframe of 3 years from the conceptual planning to completion.

A letter from Council (as included in **Appendix F**) supporting of the proposed redevelopment has been provided to Sydney Water and the proponents are working with Sydney Water for the provision of the necessary upgrades required to service the proposed development.

5.0 Electricity Infrastructure

5.1 EXISTING INFRASTRUCTURE

A DBYD search was undertaken and it was found that underground and overhead power lines exist within the road reserves around the boundary of the site.

The DBYD plans indicate that the underground cables are restricted to the southern side of Newbridge Rd and approximately half the length of Bridges Rd. Underground power assets are located in Haigh Park at the north-eastern corner of the site and along the full length of Anchor Pl.

During a site inspection overhead power lines were visually observed to extend from Haig Ave around to the existing WWPS at the north-eastern corner, following the boundary of the site along Newbridge Rd and Bridges Rd.

The plans do not show the internal network for the current site occupants, though is assumed to comprise both underground and overhead lines.

Existing electrical kiosks were visually observed along Anchor Pl.

DBYD service plans are included in **Appendix A** and show the existing electricity infrastructure around the boundary of the site.

5.2 FEASIBILITY APPLICATION

A feasibility application was lodged with Endeavour Energy on 15th August 2019. A response was received on 31st October 2019 and is included in **Appendix E**.

Endeavour Energy have estimated the required load for the development to be 50MVA based on the preliminary information supplied by ADWJ and Coronation. They have assessed that 10MVA can be supplied from the 11kV feeders currently used to supply the existing premises assuming that they will be demolished as part of the development.

The remaining 40MVA load will require an additional 8 new 11kV feeders to be reticulated from the Moorebank Zone Substation (MZS).

5.3 LEAD IN WORKS

Endeavour Energy have proposed the following lead-in works be completed to service the development site:

- Circuit breaker termination works of six (6) 11kV cables in the MZS;
- Installation of two (2) new switching stations at the MZS to allow branching out of the remaining two (2) cables; and
- Reticulation of the eight (8) new 11kV feeders along Newbridge Road to the development site. An appropriate route will need to be investigated.

Figure 5.3.1 below shows the proposed alignment of the lead-in works.

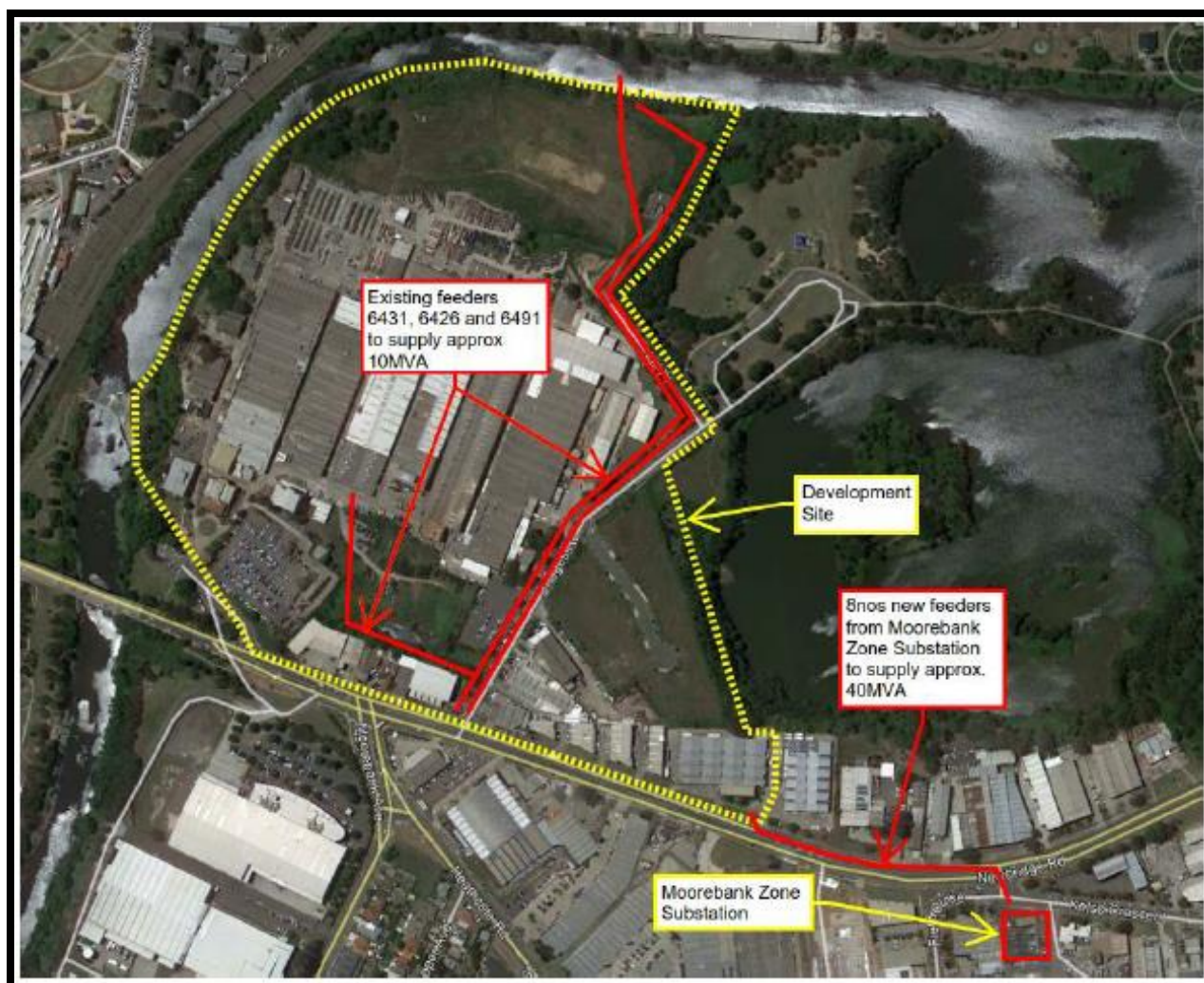


Figure 5.3.1 – Concept Proposed Electrical Design

(image provided by Endeavour Energy)

5.4 internal works

As part of the development, the existing internal infrastructure is to be demolished and replaced with a new high voltage network. The new 11kV distribution network will need to be designed and constructed to Endeavour Energy standards.

5.5 ELECTRICITY INFRASTRUCTURE Conclusion

It is understood that there will not be capacity within the existing electrical network to service the proposed development, based upon correspondence with Endeavour Energy.

Endeavour Energy have advised that eight (8) new feeders will be required to service the proposed overall development. They have proposed that the feeders be connected into the existing Moorebank Zone Substation and extend along Newbridge Road to the site.

The existing electricity network can be upgraded to facilitate the proposed development and is not likely to present a significant constraint to the project.

6.0 Telecommunications Infrastructure

6.1 EXISTING INFRASTRUCTURE

A DBYD search was undertaken and it was found that there are a significant amount of telecommunication lines extending along Haig Ave, Newbridge Rd, Bridges Rd and Anchor Pl, including Optical Fibre and NBN.

The DBYD plans indicate that the existing industrial and commercial businesses currently have internal connections to the NBN.

The telecommunication assets are owned by the following service providers:

- Telstra;
- Optus;
- AARNet;
- NBN Co.; and
- Nextgen

DBYD service plans are included in **Appendix A** and show the existing telecommunications infrastructure in the vicinity of the site.

6.2 FEASIBILITY APPLICATION

A feasibility application was lodged with NBN on 28th August 2019. A response was received on 1st October 2019 and is included in **Appendix C**.

NBN have advised that the proposed development can be serviced from the existing network with no backhaul cost to the developer. NBN would undertake the works necessary to bring the fibre from the existing Liverpool Fibre Access Node (FAN) to the development site. The developer would then be responsible for connecting the Node to Dwelling (NTD) for each resident.

NBN have indicated that the cost for the NTD connections will be \$600 per Single-Dwelling Unit (SDU) and \$400 per Multi-Dwelling Unit (MDU).

6.3 LEAD IN WORKS

The lead-in works will comprise bringing the fibre from the existing FAN in Liverpool to the development site. The cost of these works would be absorbed by NBN.

6.4 internal works

Internal telecommunication infrastructure will be generally located within the road verges or basement car parks with the necessary easements created. The developer will be required to provide NTD connections for each dwelling.

6.5 TELECOMMUNICATIONS Conclusion

The provision of telecommunication services to the site is not envisaged to present a constraint to the project based on the response received from NBN.

NBN has indicated that there will be no backhaul charges to the developer associated with connection of the site to the existing FAN located in Liverpool. However, the developer will be responsible for the cost of connections from the node to each dwelling.

The cost for the NTD connections will be \$600 per Single-Dwelling Unit (SDU) and \$400 per Multi-Dwelling Unit (MDU).

7.0 Gas Infrastructure

7.1 EXISTING INFRASTRUCTURE

A DBYD search was undertaken and it was found that there is a high pressure gas main that traverses the site within the current rezoning footprint. The main crosses the Georges River from the north through to the existing WWPS. The main continues adjacent to Haigh Park and along Bridges Rd to Newbridge Rd. The gas main is rated to 1050 kPa and comprises DN200 steel pipe.

The main splits at the intersection of Bridges Rd and Newbridge Rd and continues down Heathcote Rd/Moorebank Ave (200 mm steel and 50mm Nylon) and Newbridge Rd (100mm steel).

DBYD service plans are included in **Appendix A** and show the existing gas infrastructure in the vicinity of the site.

7.2 FEASIBILITY APPLICATION

A feasibility application was lodged with Jemena on 20th August 2019. A response was received on 28th August 2019 and is included in **Appendix D**.

Jemena have confirmed that the existing 1050 kPa high pressure network located in Bridges Rd currently has capacity to service the proposed residential and commercial yield. Jemena advised that a below-ground regulator station will have to be installed to allow a suitable medium pressure network to extend from the high pressure gas main to each of the proposed buildings along the future internal road network. They have also advised that a minimum separation of 1 m is required between the high pressure gas main and any part of the development.

It is noted that the advice received from Jemena is typical to that received on other projects, in that Jemena will not reserve capacity for any individual project and will make a formal offer once construction works are imminent. Based upon our experience working on similar projects and review of Jemena's preliminary advice, it is our opinion that the provision of gas services is unlikely to present a significant constraint to the development.

We note that a portion of the 1050 kPa gas main conflicts with the proposed development layout. Jemena have advised that the main could be realigned pending confirmation from the external works/relocations team at Jemena and at cost to the developer.

7.3 LEAD IN WORKS

Lead-in works are likely to be limited to connection into the existing 1050 kPa high-pressure main and installation of a below-ground regulator station.

7.4 internal works

It is expected that an internal gas reticulation network would be located within the service allocations within the proposed public road reserves. Infrastructure extending within private land would be covered by suitable easements.

The internal reticulation would comprise a medium pressure (i.e. 210 kPa) plastic network connected to the below-ground regulator station.

7.5 GAS INFRASTRUCTURE Conclusion

Based upon the advice received from Jemena, the provision of gas reticulation to the site is not envisaged to present a constraint to the project, with the existing 1050 kPa high pressure main located within Bridges Road being capable of feeding the overall proposed development.

Lead-in works will require installation of a below-ground regulator station to connect into the high pressure main. The internal reticulation network is likely to be underpinned by a medium pressure network, which will typically be located within the service allocation within the public road reserve.

8.0 Conclusion

An investigation of the provision of primary utility services to the site was carried out by ADW Johnson in order to support the rezoning and to determine any required augmentation that may be required to the existing services infrastructure to facilitate the development as proposed in the rezoning application.

DBYD plans were obtained and indicate that servicing infrastructure is available for the proposed Moore Point development.

ADW Johnson also made applications to the following primary service authorities:

- Endeavour Energy;
- Sydney Water;
- NBN Co.; and
- Jemena

All authorities have advised that they can service the proposed overall development, albeit in some cases, with upgrades to the existing network required. A summary of the capacity of each utility service to service the proposed overall development is provided in **Table 8.1** below.

Table 8.1: Summary of Existing Utility Services Infrastructure and Upgrades Required

UTILITY SERVICE	UTILITY AUTHORITY CONTACTED	CAN PROPOSED OVERALL DEVELOPMENT BE SERVICED BY EXISTING TRUNK NETWORK? *	DESCRIPTION OF TRUNK UPGRADE WORKS REQUIRED TO SERVICE WHOLE DEVELOPMENT	ARE THE WORKS DEVELOPER FUNDED?
Potable Water Supply	Sydney Water Corporation	Yes	Future upgrade works likely, though not yet advised SWC to undertake future planning.	TBC**
Recycled Water Supply	Sydney Water Corporation	N/A	N/A	N/A
Sewerage Infrastructure	Sydney Water Corporation	No	Major upgrade of the existing pumping station to be completed to service proposed development. The upgrade works will be completed by SWC, and take an estimated 3 years from concept to completion.	No
Electricity Infrastructure	Endeavour Energy	No	<ul style="list-style-type: none"> Eight (8) new 11KV feeders from Moorebank Zone Substation. Six (6) new circuit breaker terminations at Moorebank Zone Substation. Two (2) new switching stations at Moorebank Zone Substation, 	TBC
Tele-communications Infrastructure	NBN Co	No	Fibre connecting the site to the existing Liverpool Fibre Access Node (FAN) to be constructed by NBN.	No
Gas Infrastructure	Jemena	Yes	Installation of below-ground regulator station.	TBC**

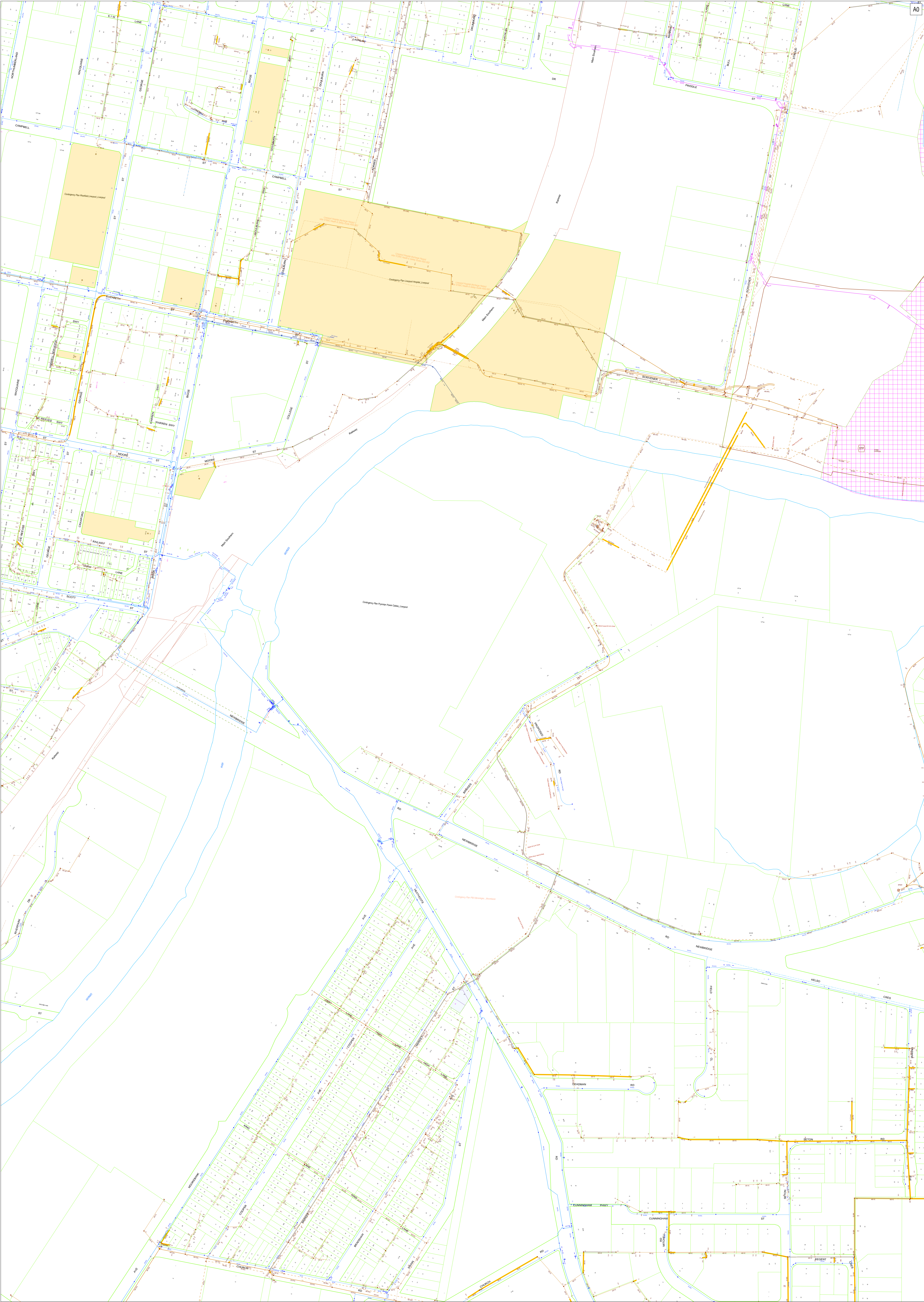
* Existing capacity and servicing requirements to be re-confirmed with each utility authority as project progresses and in conjunction with detailed design work.

** To be confirmed post obtainment of development consent

The final provision of services to the site are subject to formal application for provisioning of services in conjunction with the respective Development Applications.


Appendix A

DBYD SERVICE PLANS





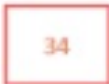




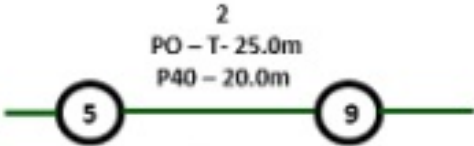
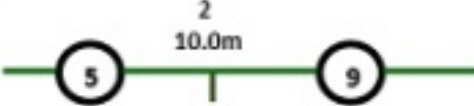





Indicative Plans

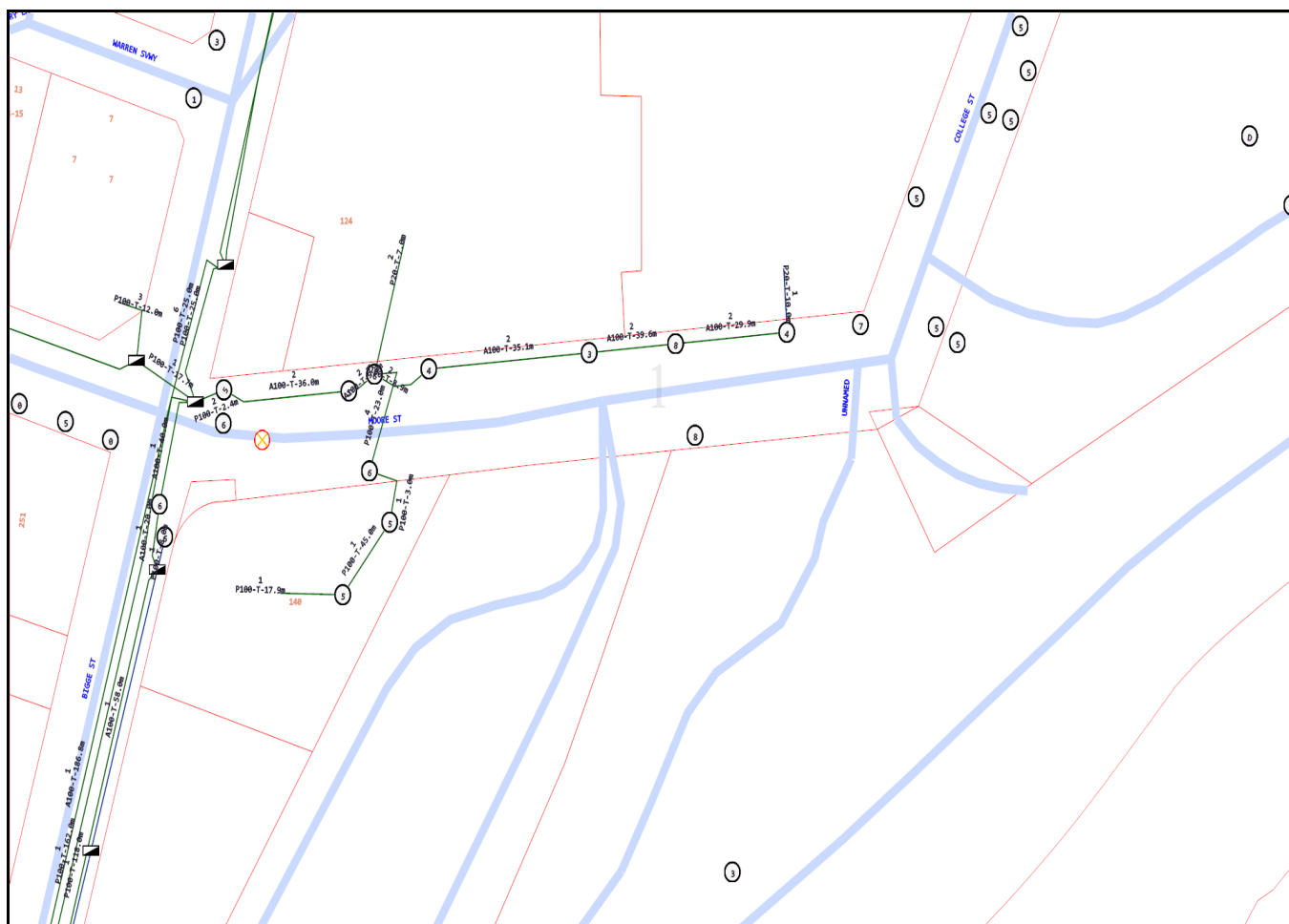
Issue Date:	14/08/2019	 DIAL BEFORE YOU DIG www.1100.com.au
Location:	Newbridge Road , Liverpool , NSW , 2170	

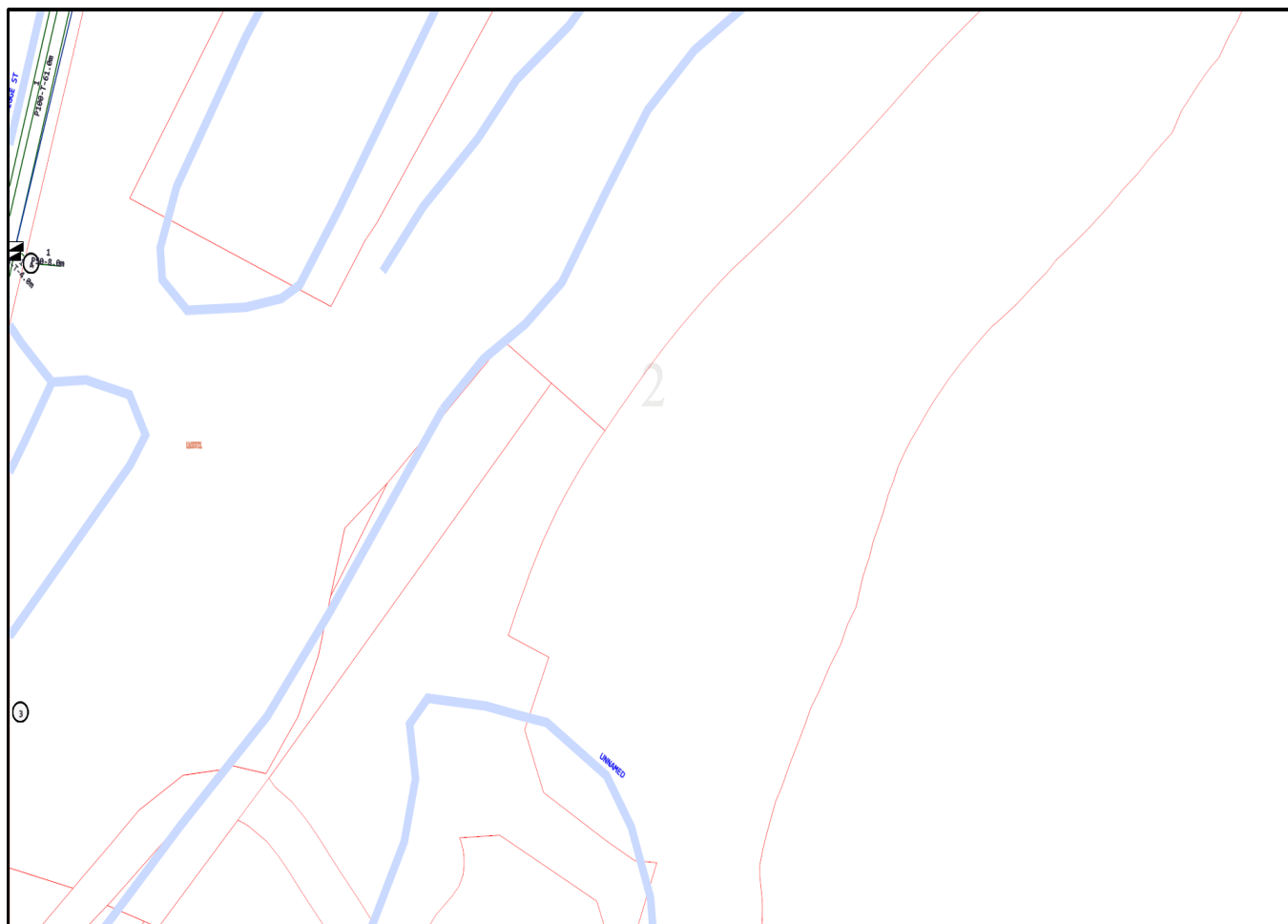
1	7	13
2	8	14
3	9	15
4	10	16
5	11	17
6	12	18

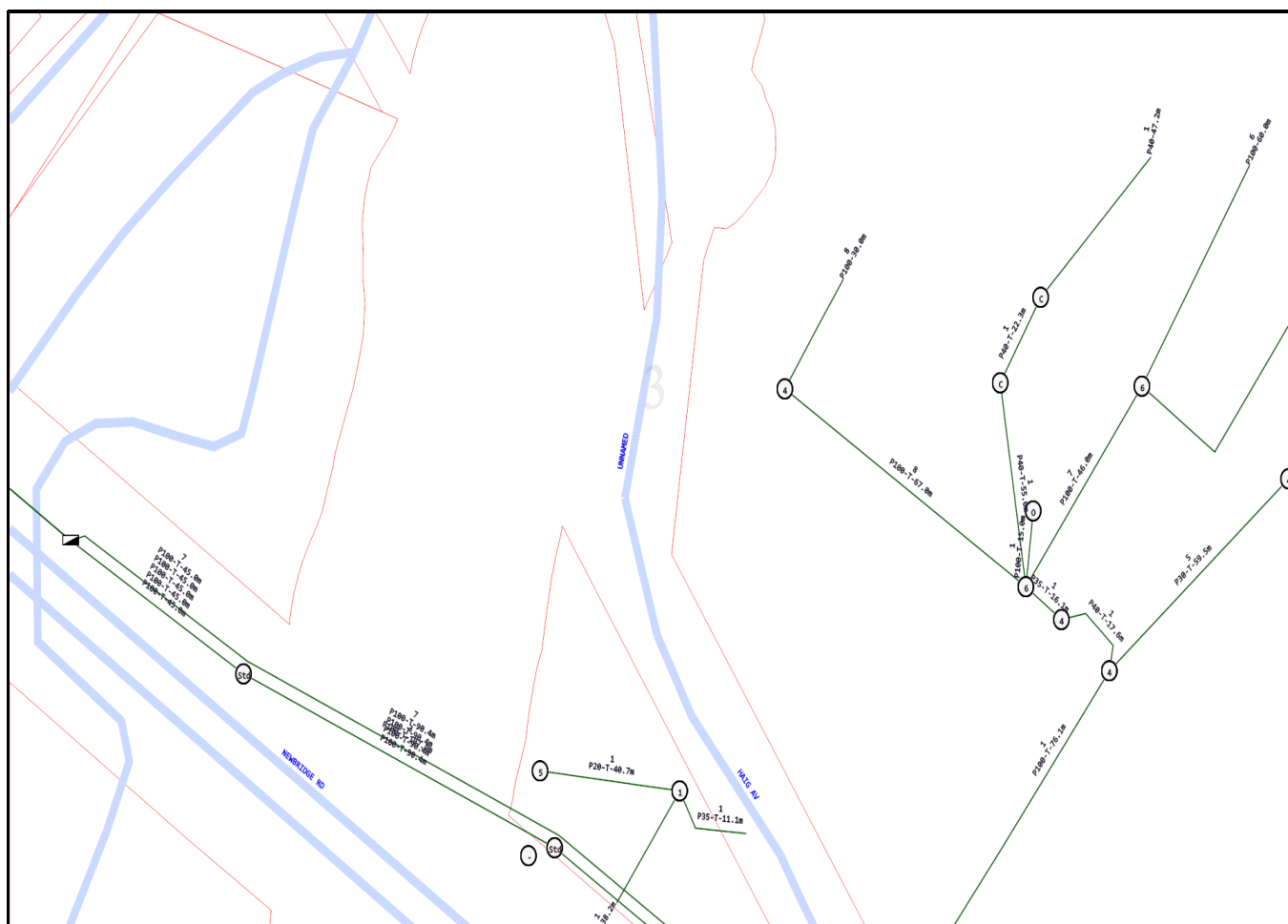


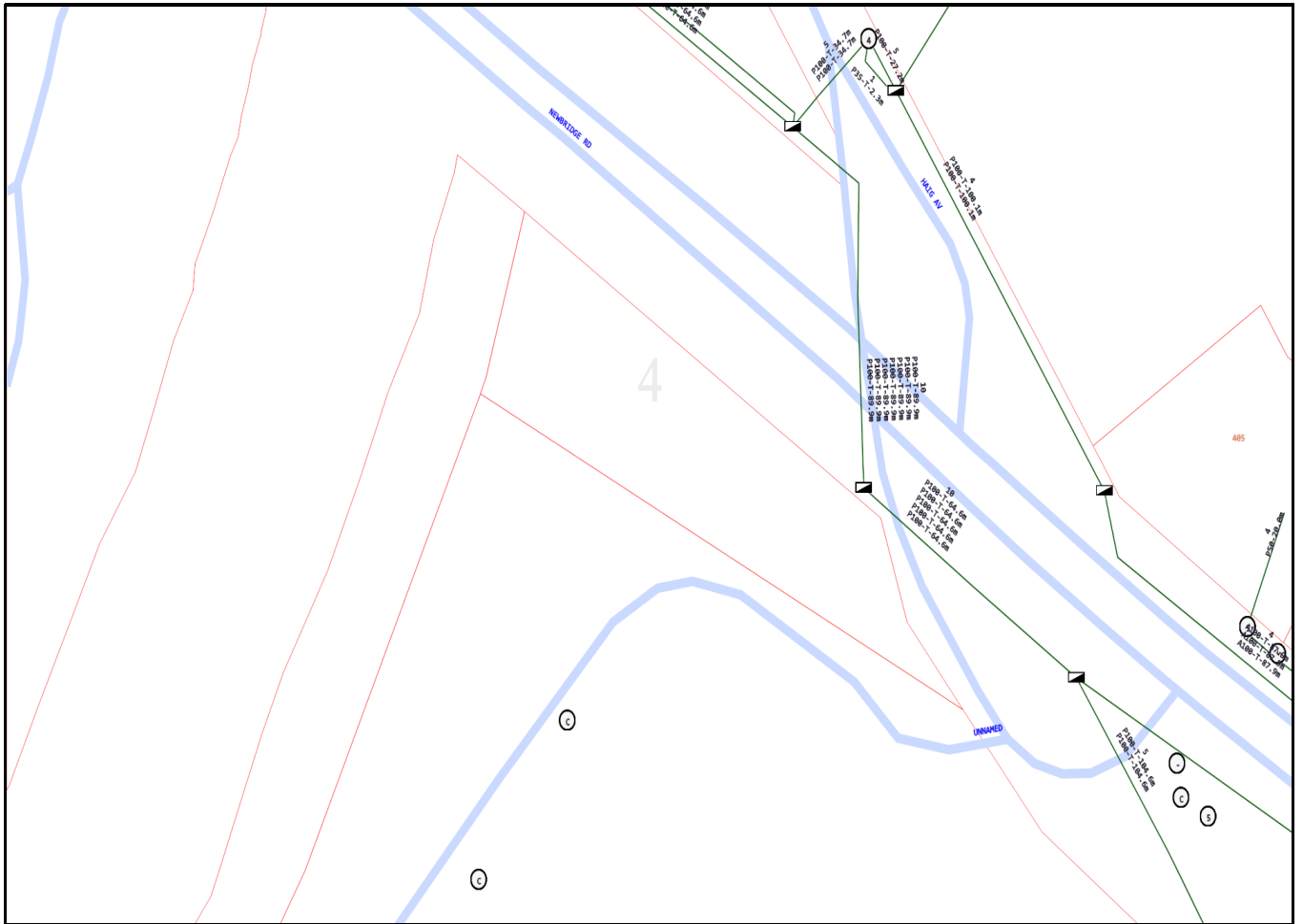
LEGEND

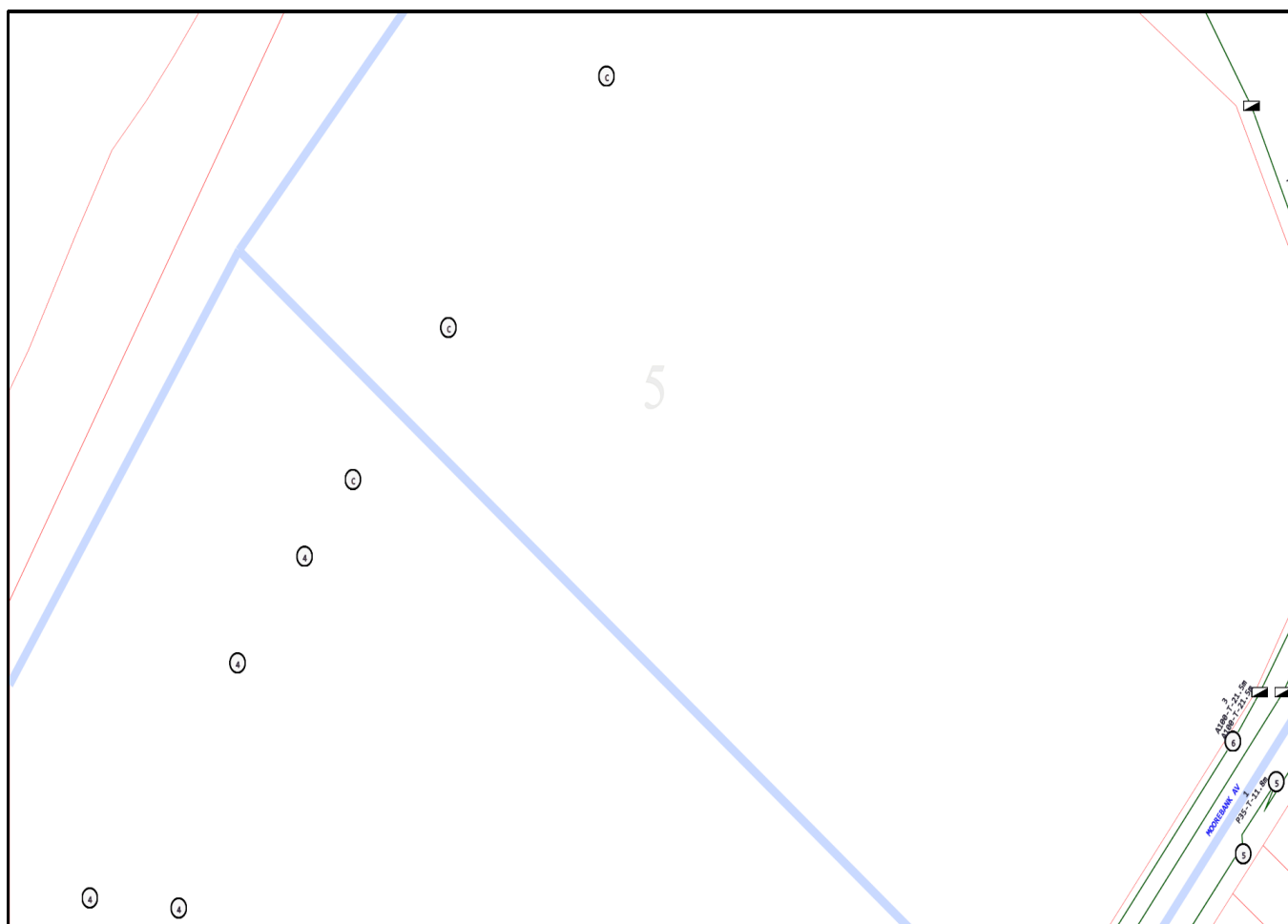
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
	2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m 

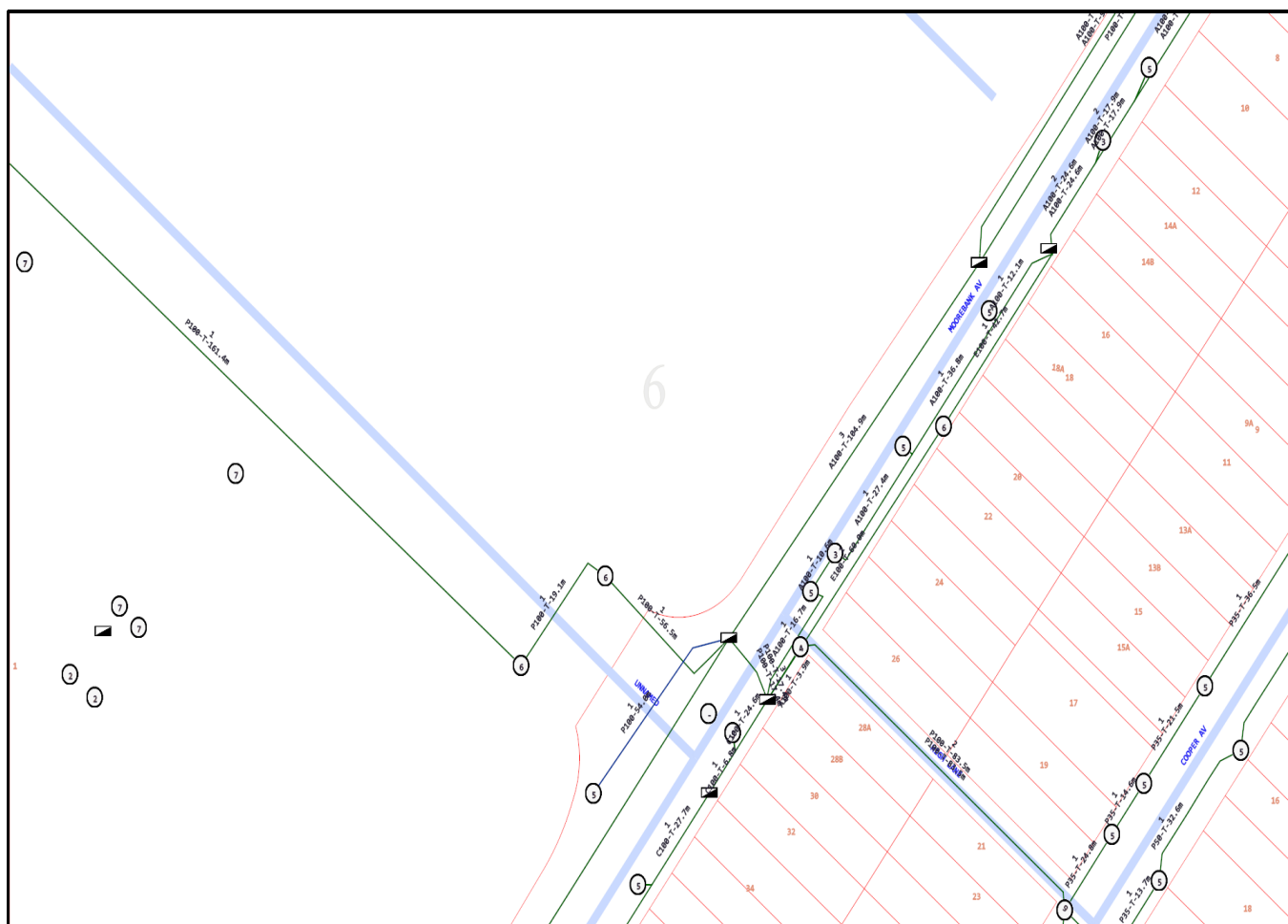


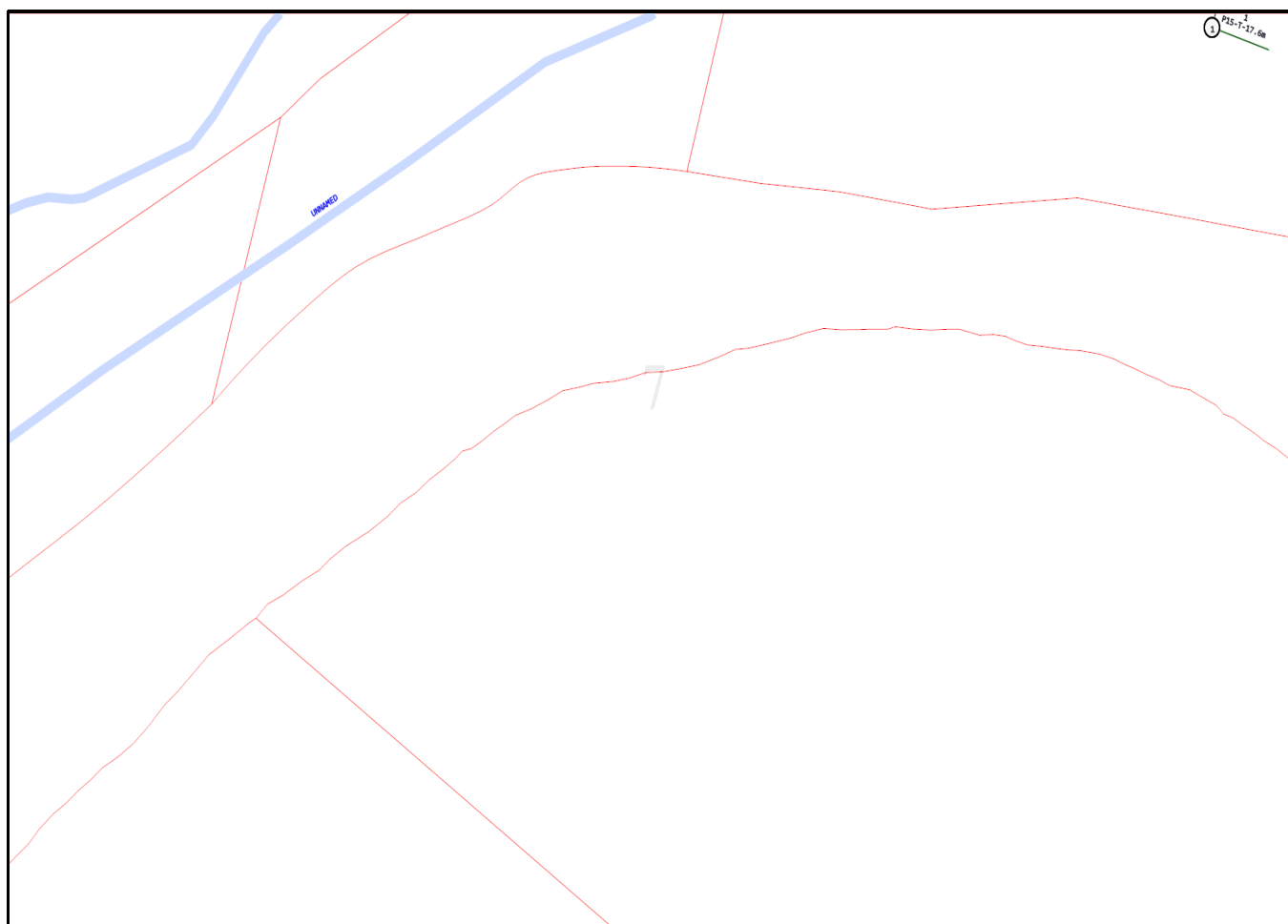






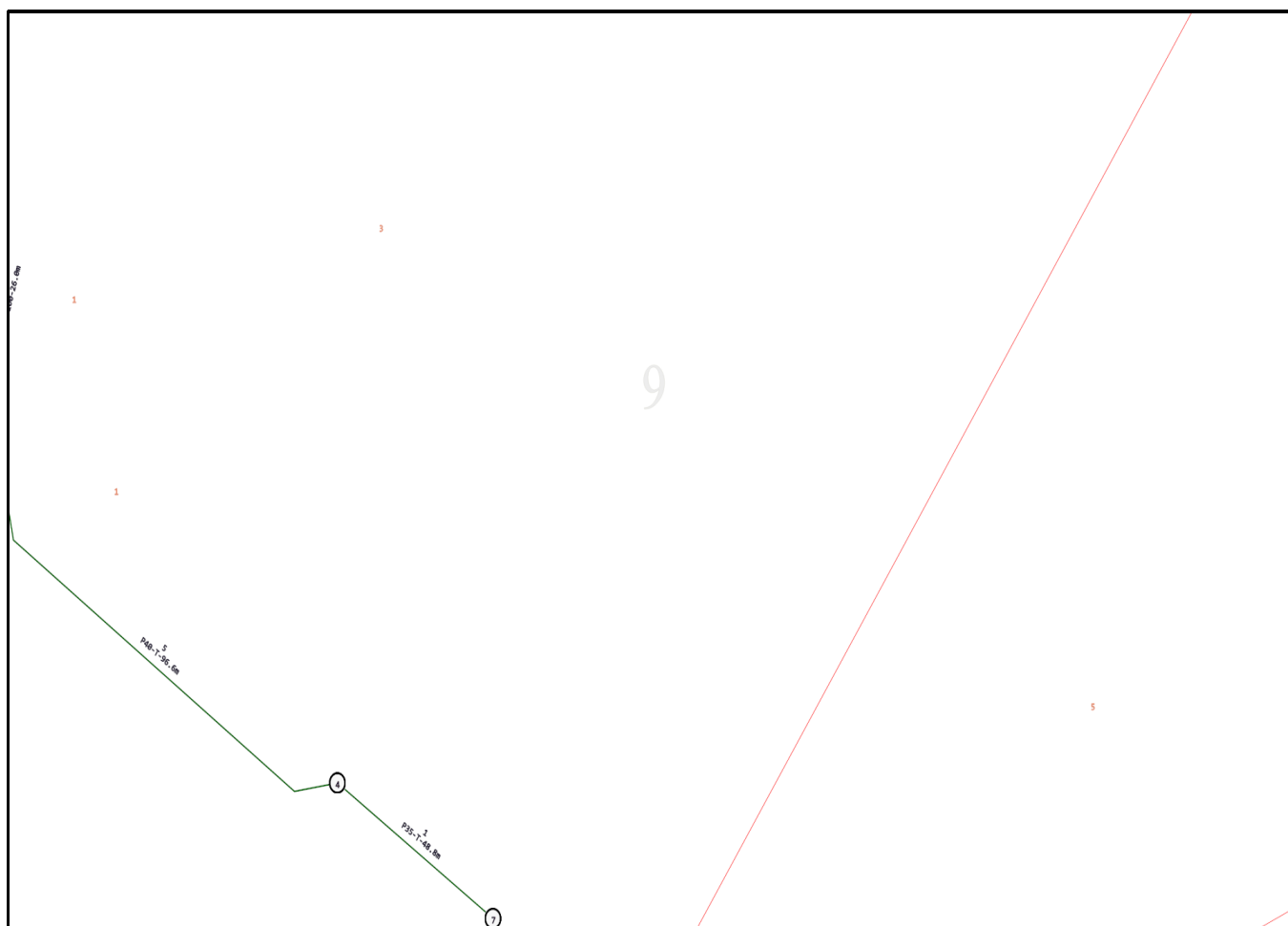


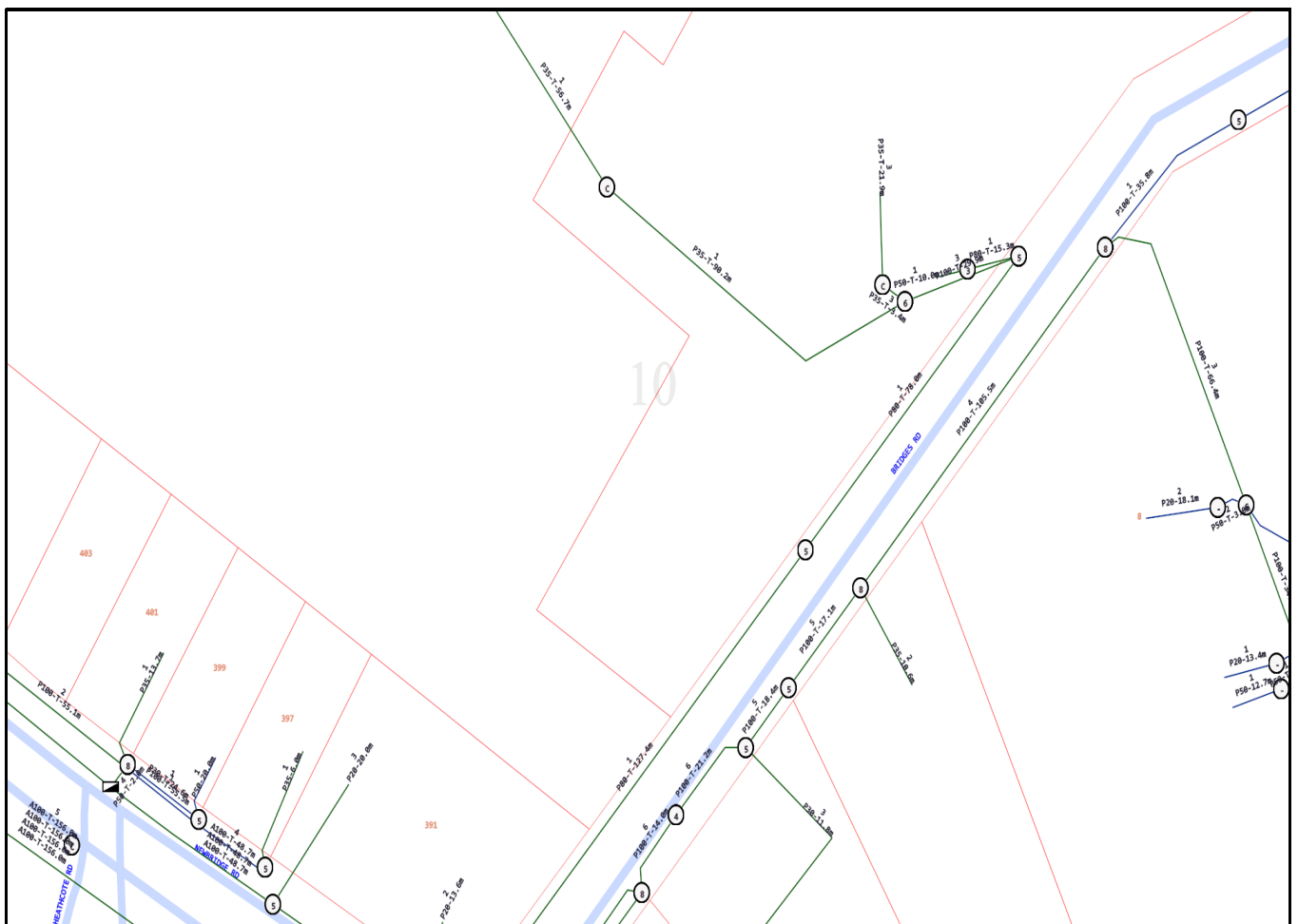


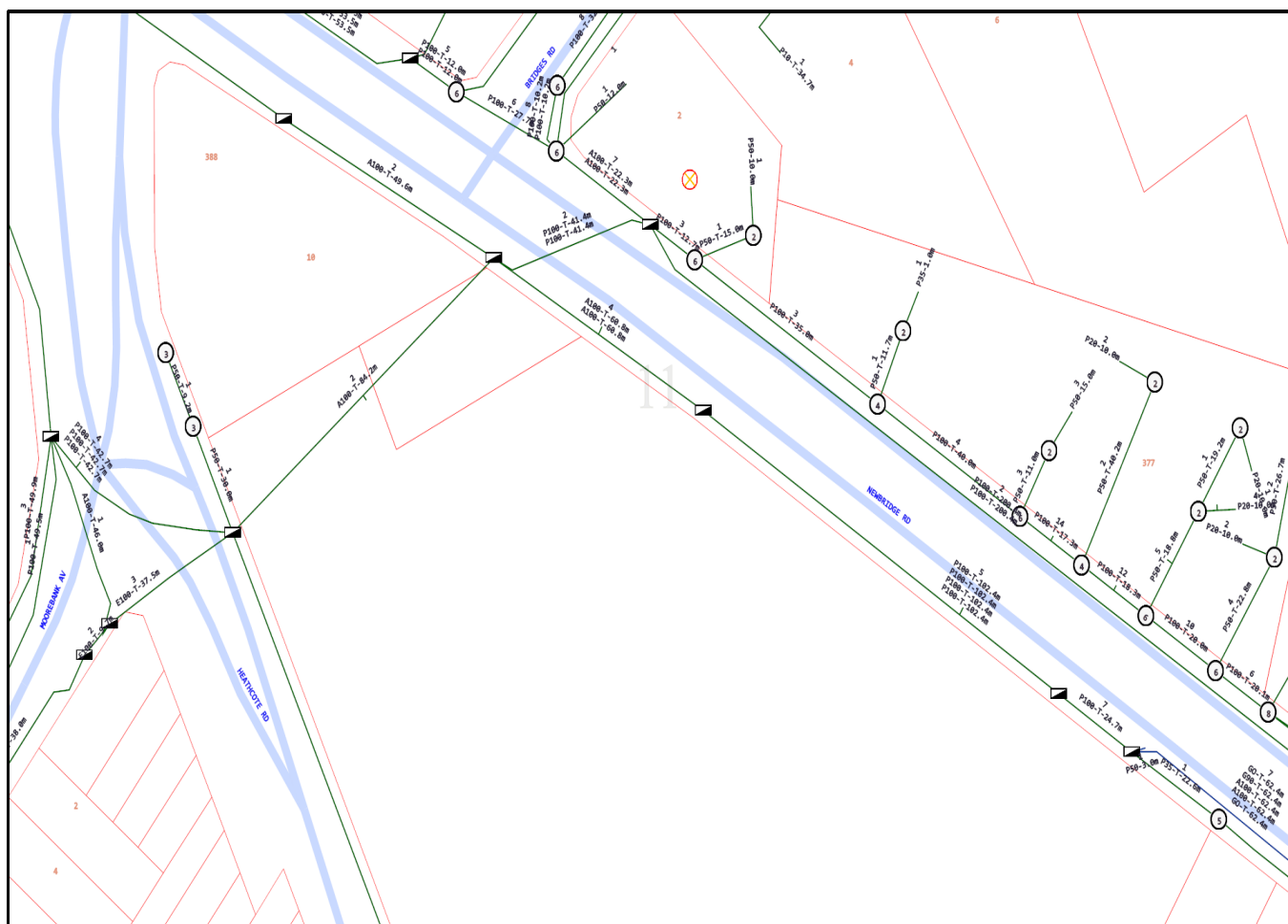


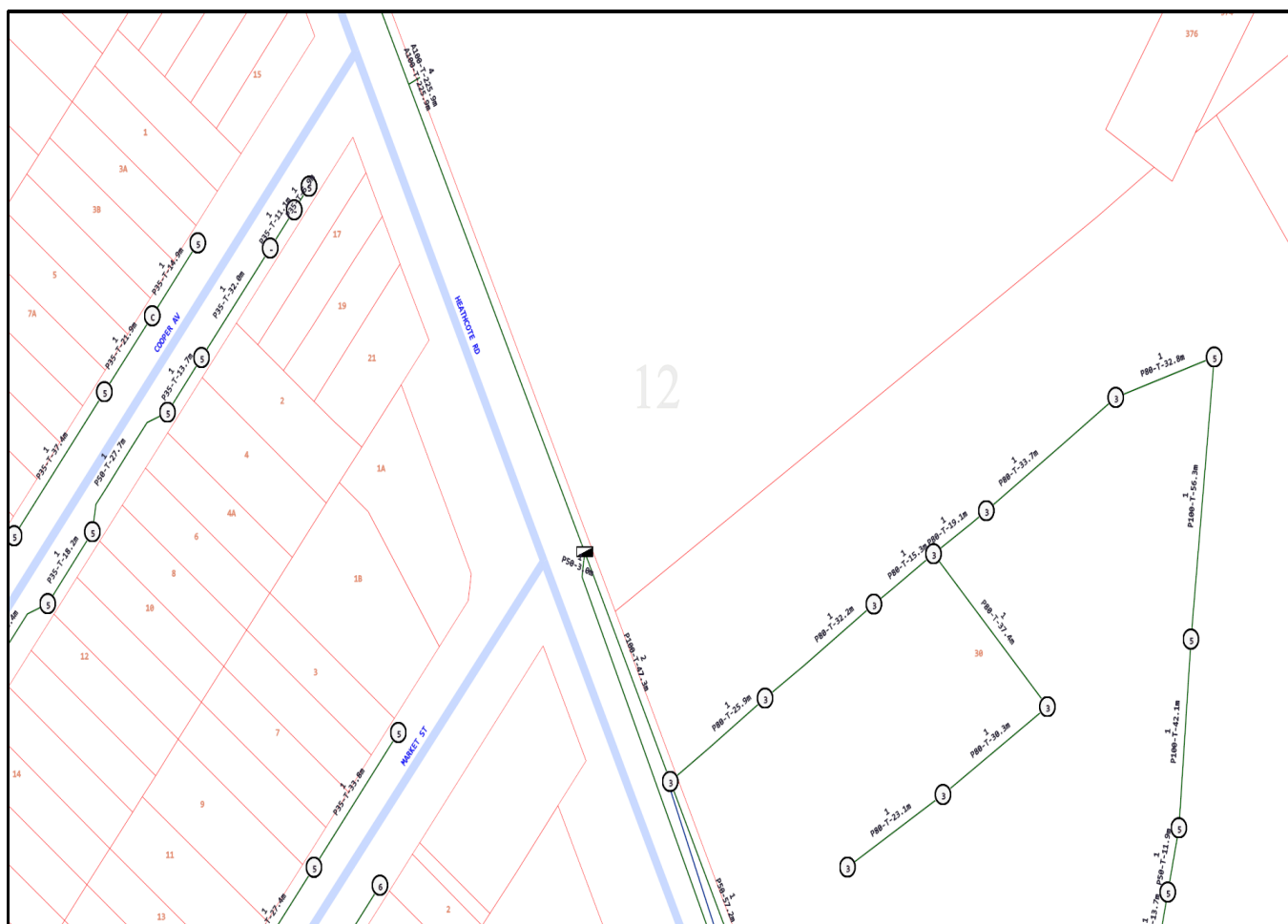


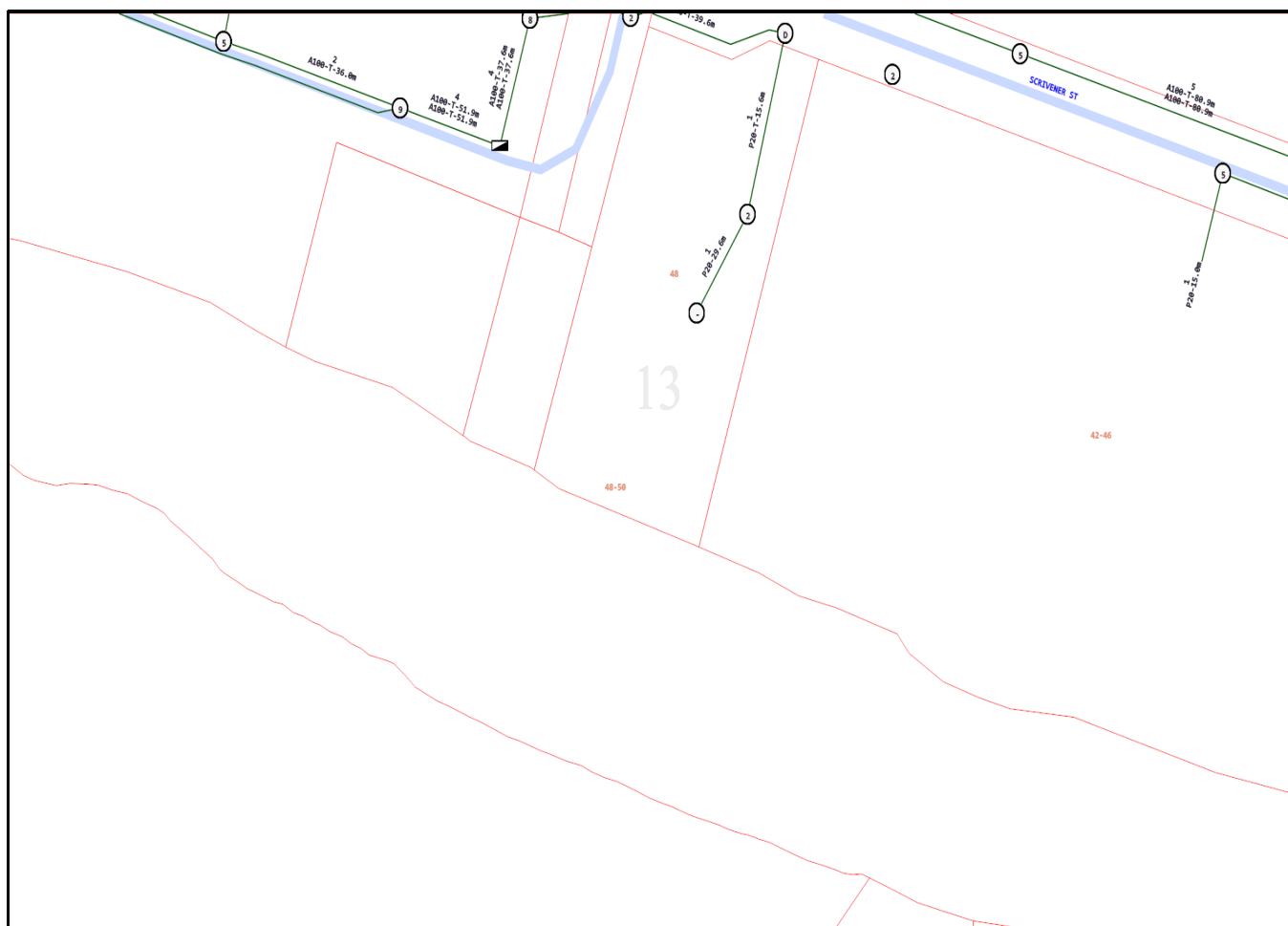
8

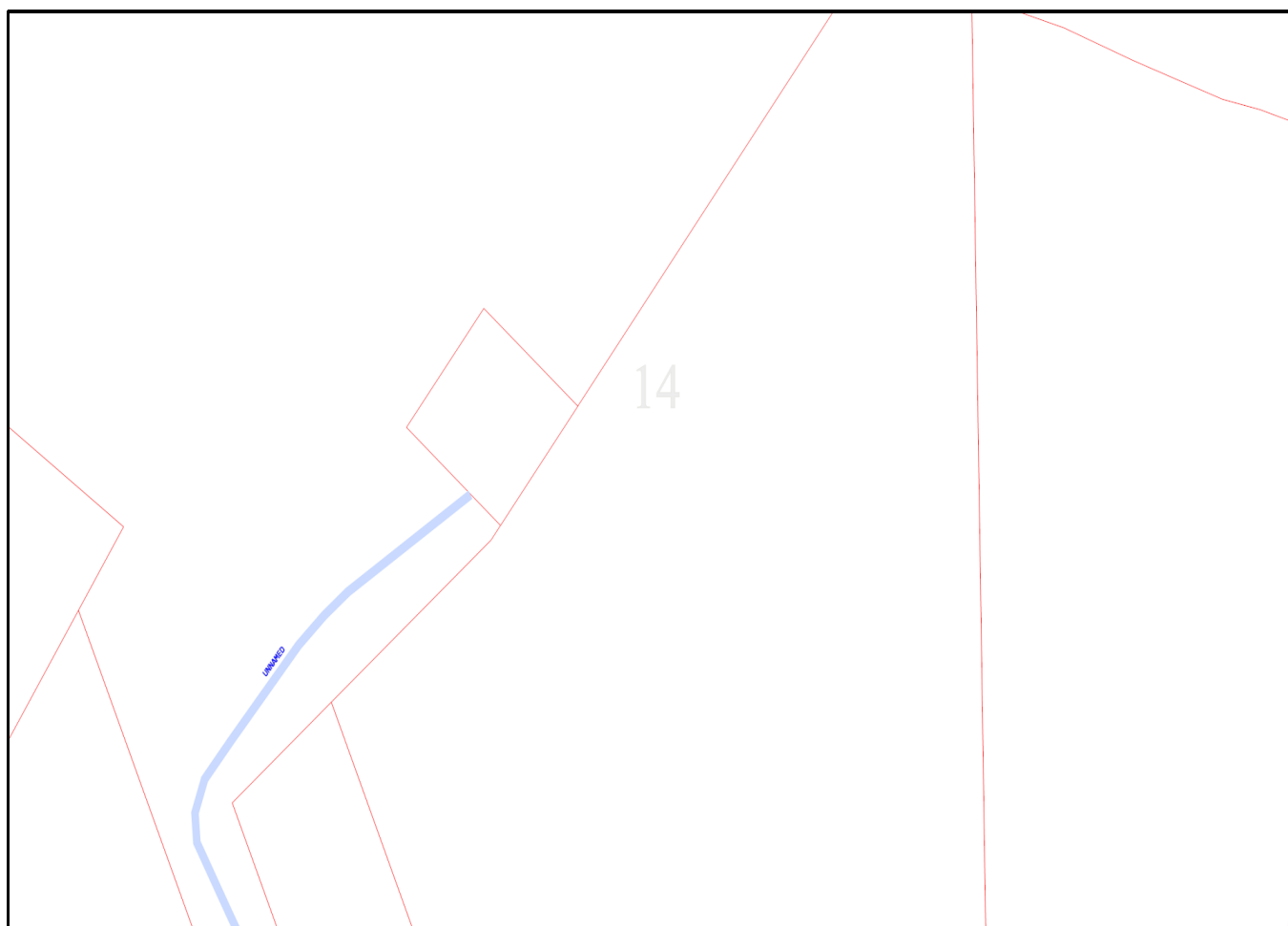


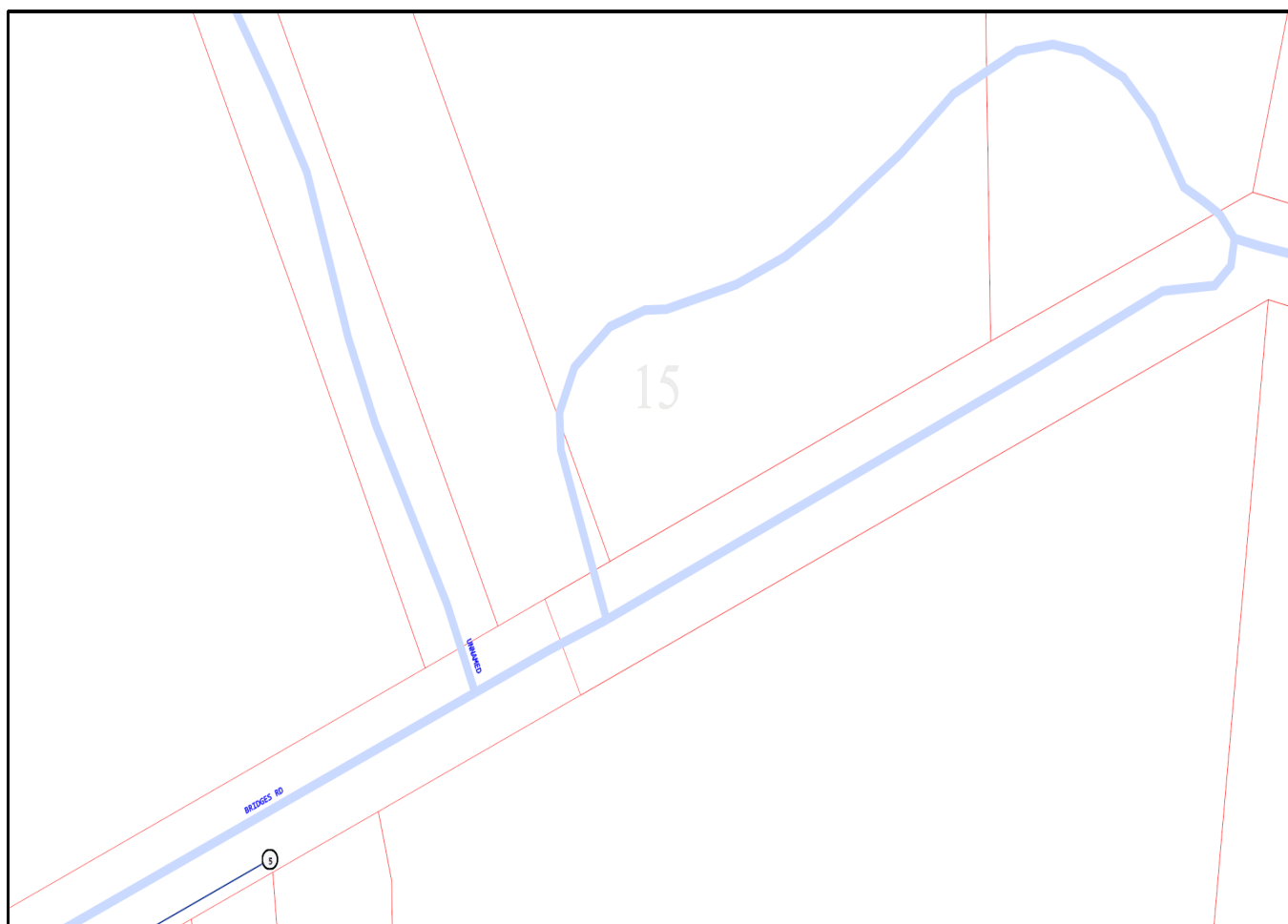


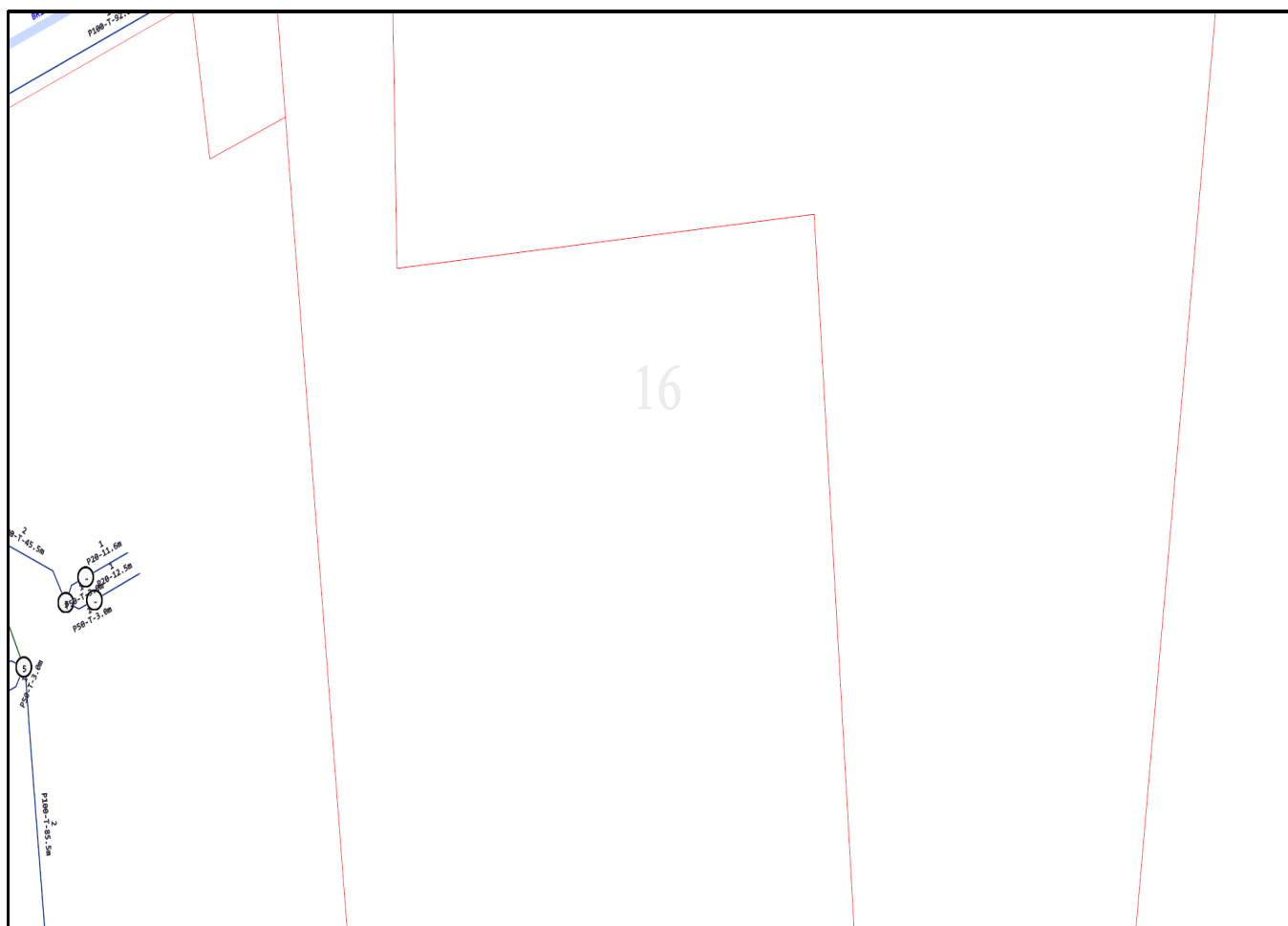


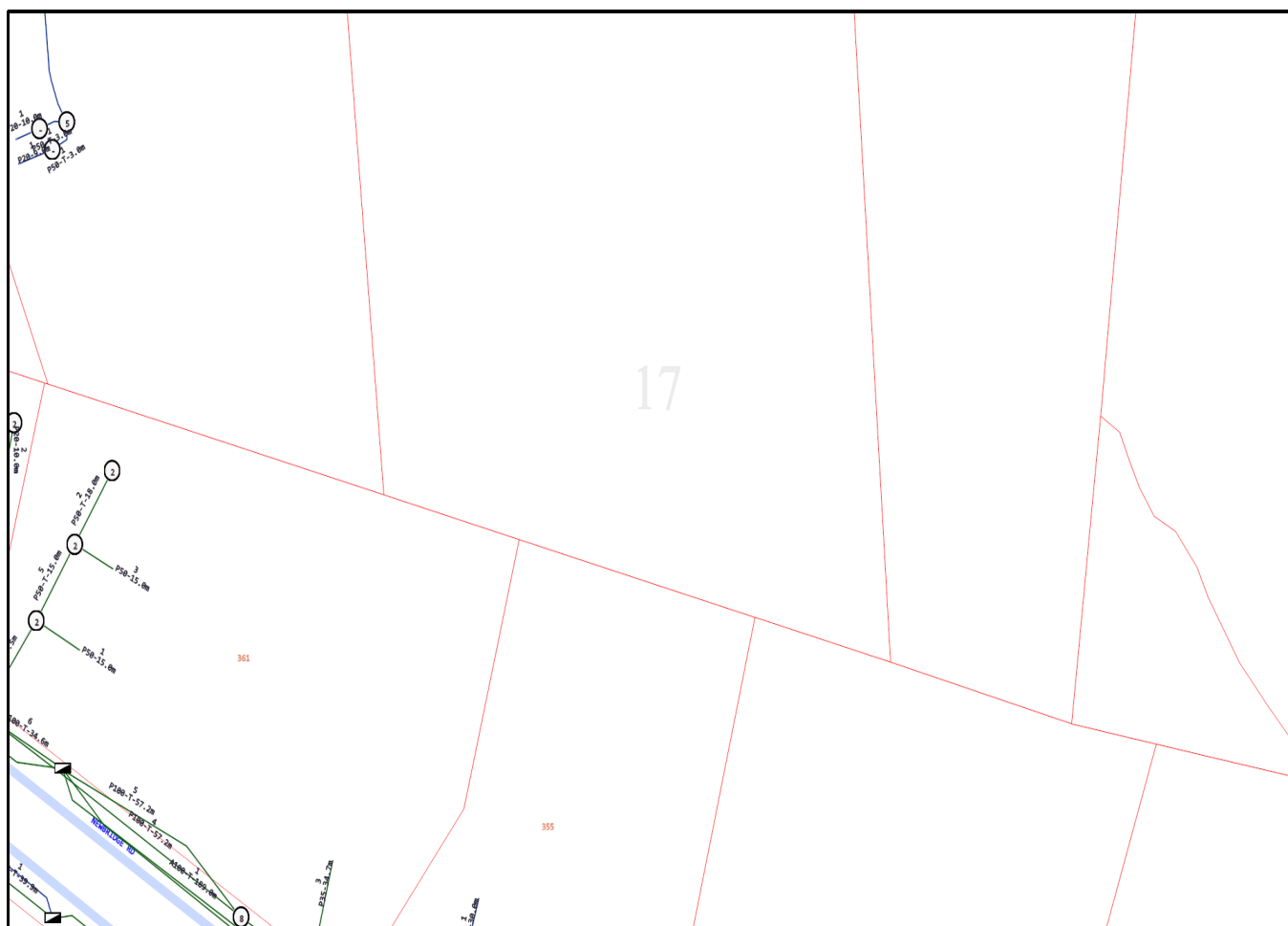


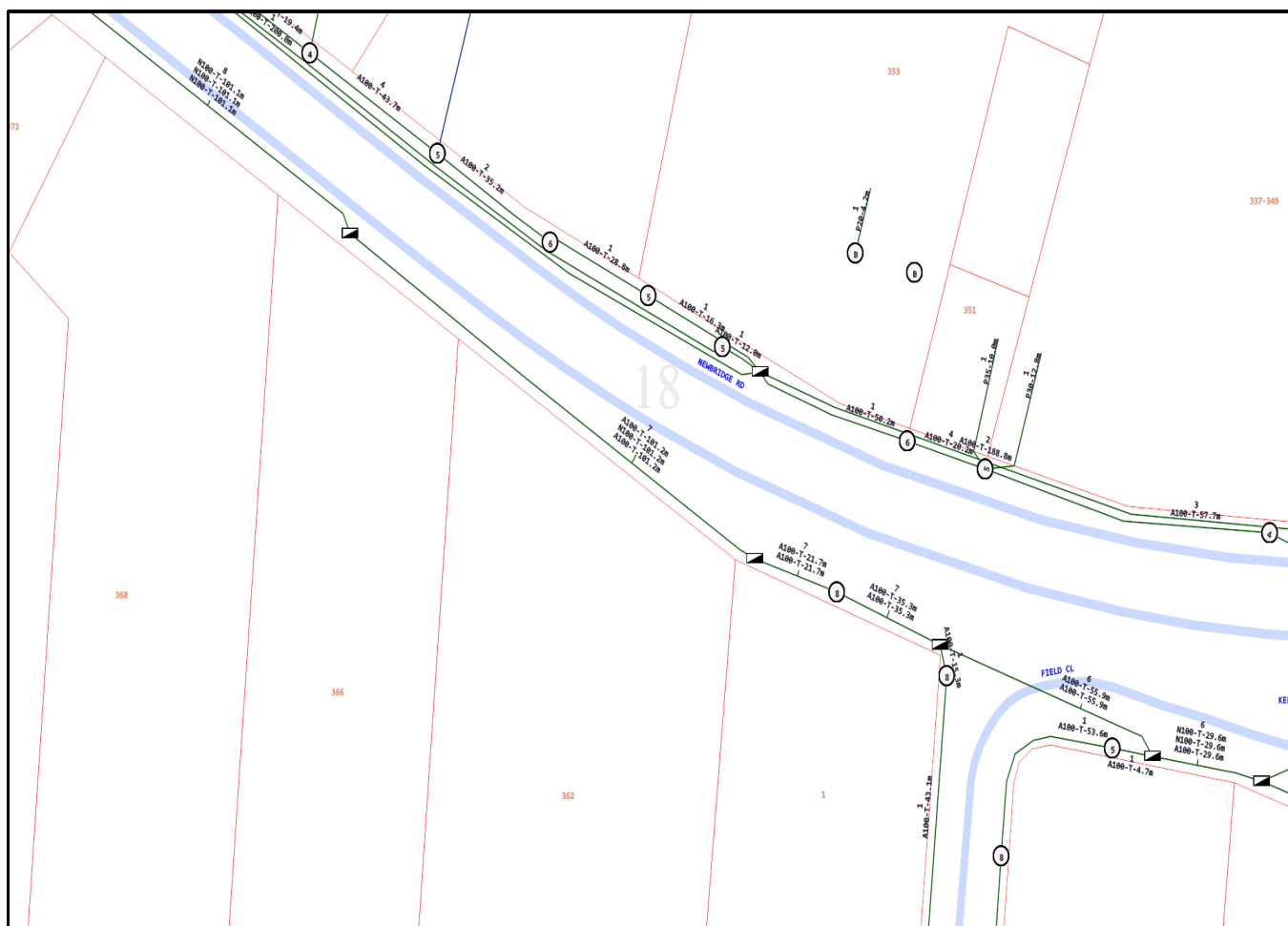




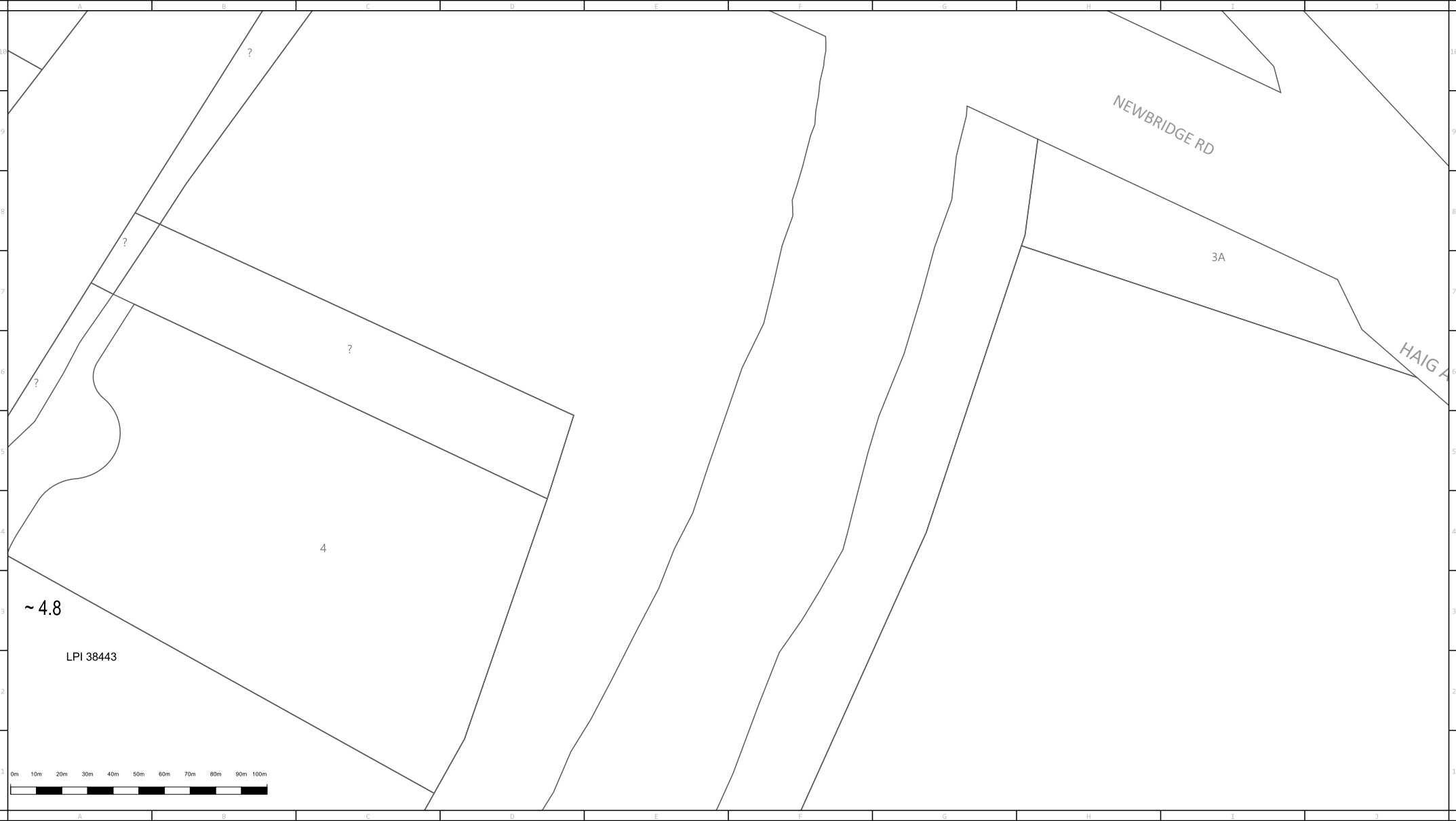










You must immediately report any damage to **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators		
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon	●	
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve	⋈	
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	- - - -	Distance in metres of Main from Boundary Line ~ 1.5	Regulator Set	⬮
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	- - - -	Secondary Service	—	- - - -		Regulator Station	⬮
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	- - - -	Primary - 3500 kPa	—	- - - -		Automatic Line Break Valve	⬮
Distribution - 210 kPa	—	- - - -	100 PVC	—	- - - -	JGN Trunk - 7000 kPa Transmission	—	- - - -			



Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators			
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon	●	Regulator Set	■
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve	⋈	Regulator Station	■
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	- - - -	Distance in metres of Main from Boundary Line ~ 1.5			
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	- - - -	Secondary Service	—	- - - -	MBK = Metres Back of Kerb			
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	- - - -	Primary - 3500 kPa	—	- - - -	MFL = Metres from Fence Line			
Distribution - 210 kPa	—	- - - -	100 PVC	—	- - - -	JGN Trunk - 7000 kPa	—	- - - -				
						Transmission	—	- - - -				



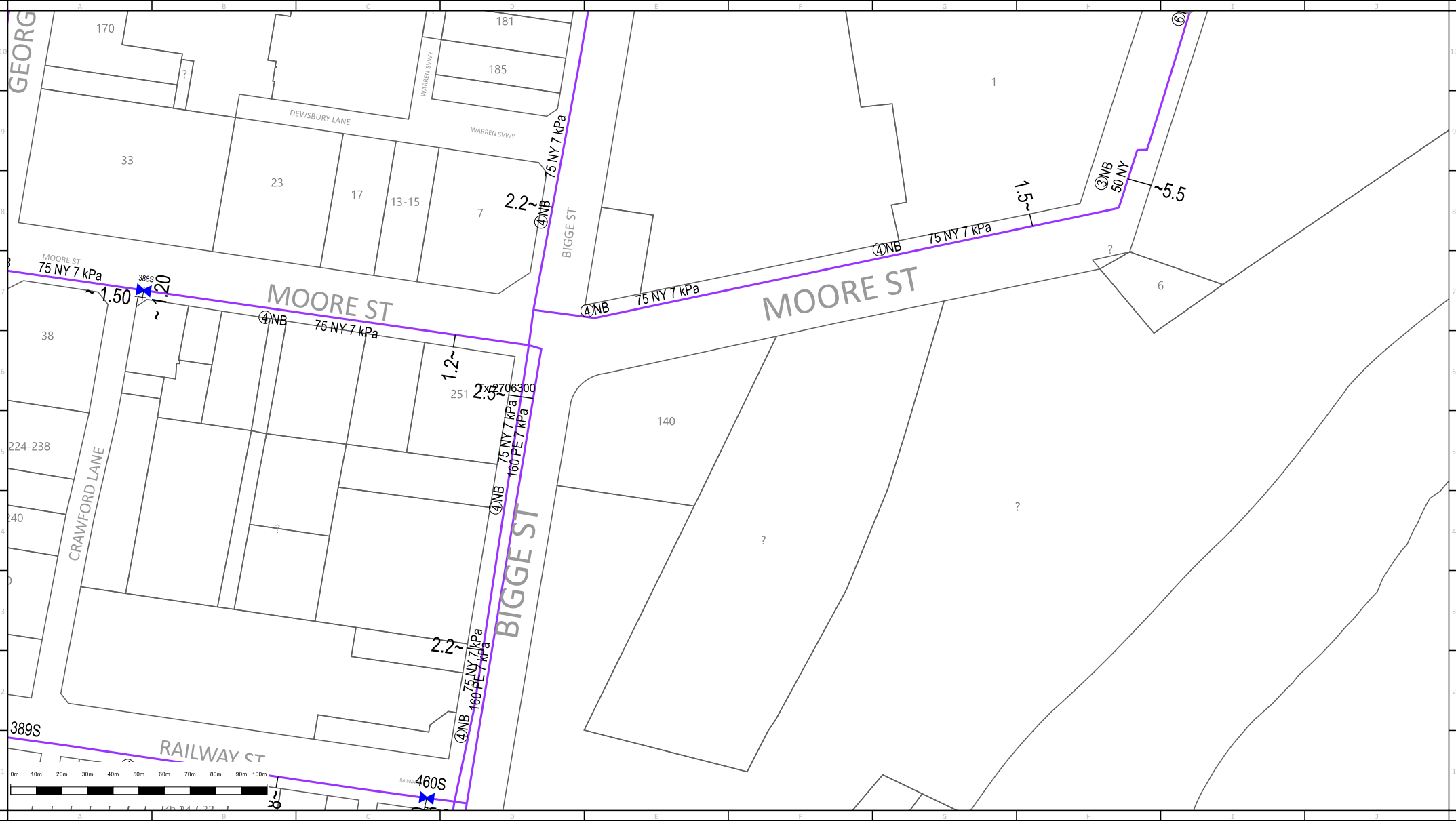
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators
Unknown Pressure	---	---	Distribution - 300 kPa	---	---	Critical Main	---	---	Siphon
Distribution - 2 kPa	---	---	Distribution - 400 kPa	---	---	Treat as High Pressure Main	---	---	Valve
Distribution - 7 kPa	---	---				Secondary - 1050 kPa	---	---	Distance in metres of Main from Boundary Line ~ 1.5
Distribution - 30 kPa	---	---	Proposed Isolate (coloured according to kPa)	---	---	Secondary Service	---	---	Regulator Set
Distribution - 100 kPa	---	---	Conduit or Casing (Size & Material)	---	---	Primary - 3500 kPa	---	---	Regulator Station
Distribution - 210 kPa	---	---	100 PVC	---	---	JGN Trunk - 7000 kPa	---	---	Automatic Line Break Valve
						Transmission	---	---	



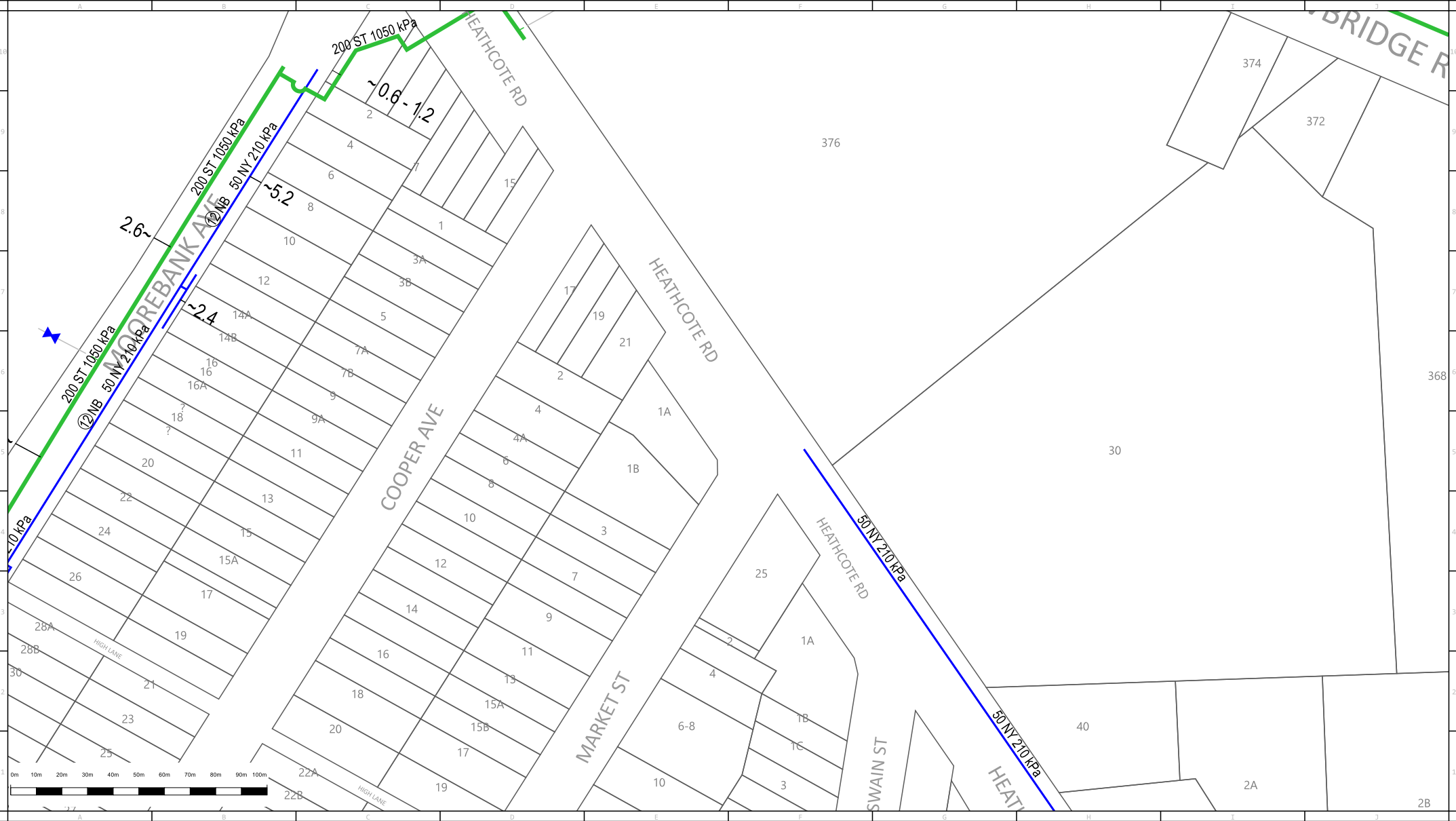
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators			
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon	●	Regulator Set	■
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve	⋈	Regulator Station	■
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	- - - -	Distance in metres of Main from Boundary Line ~ 1.5		Automatic Line Break Valve	■
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	- - - -	Secondary Service	—	- - - -	MBK = Metres Back of Kerb			
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	- - - -	Primary - 3500 kPa	—	- - - -	MFL = Metres from Fence Line			
Distribution - 210 kPa	—	- - - -	100 PVC	—	- - - -	JGN Trunk - 7000 kPa	—	- - - -				
						Transmission	—	- - - -				



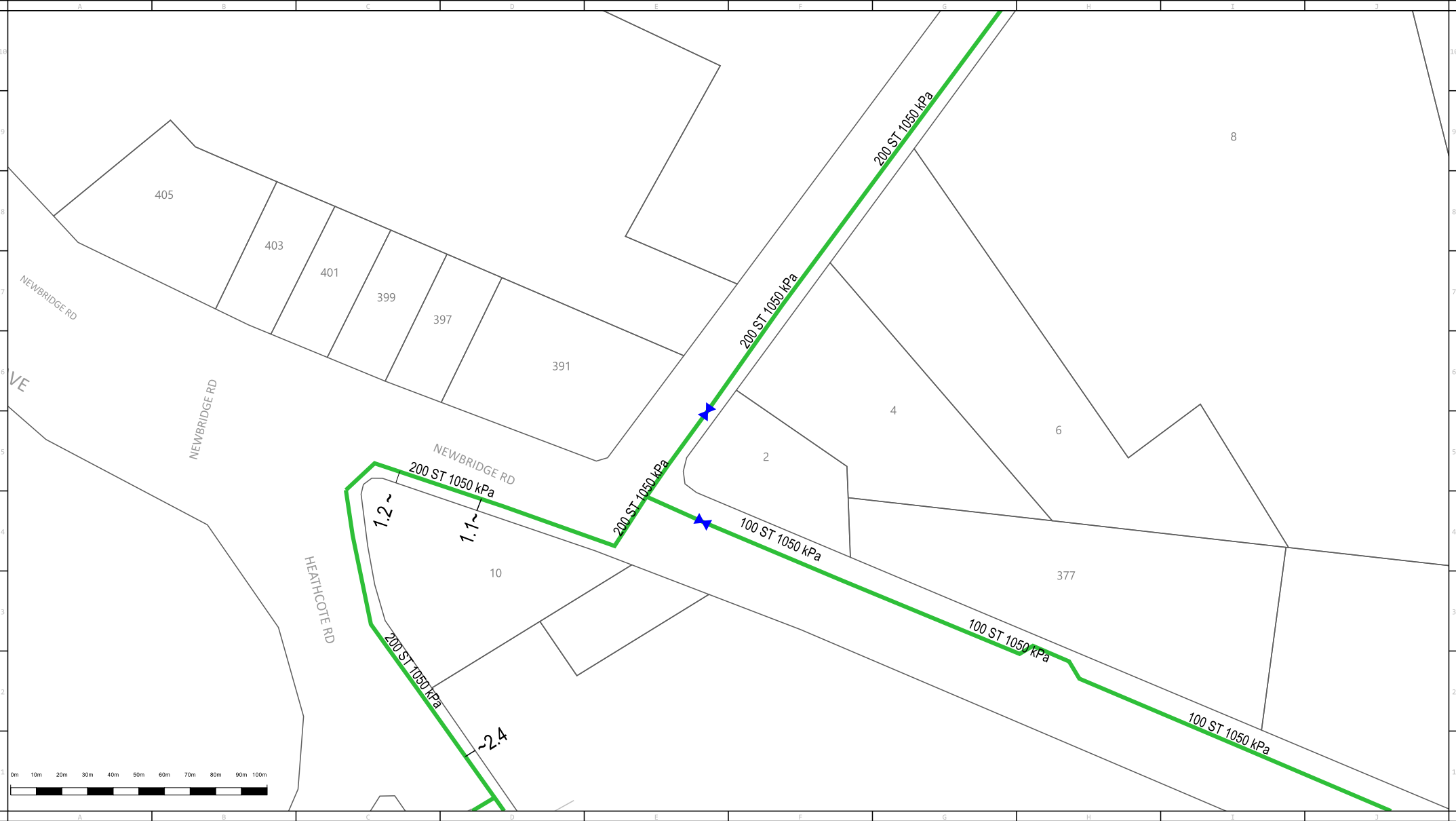
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main			Main			High Pressure Main & Pipeline			Fittings, Valves & Regulators		
Unknown Pressure	In Service	Proposed	Distribution - 300 kPa	In Service	Proposed	Critical Main	In Service	Proposed	Siphon	In Service	Proposed
Distribution - 2 kPa			Distribution - 400 kPa			Treat as High Pressure Main			Valve		
Distribution - 7 kPa						Secondary - 1050 kPa			Distance in metres of Main from Boundary Line ~ 1.5		
Distribution - 30 kPa			Proposed Isolate (coloured according to kPa)			Secondary Service			MBK = Metres Back of Kerb		
Distribution - 100 kPa			Conduit or Casing (Size & Material)			Primary - 3500 kPa			MFL = Metres from Fence Line		
Distribution - 210 kPa			100 PVC			JGN Trunk - 7000 kPa			Regulator Set		
						Transmission			Regulator Station		
									Automatic Line Break Valve		



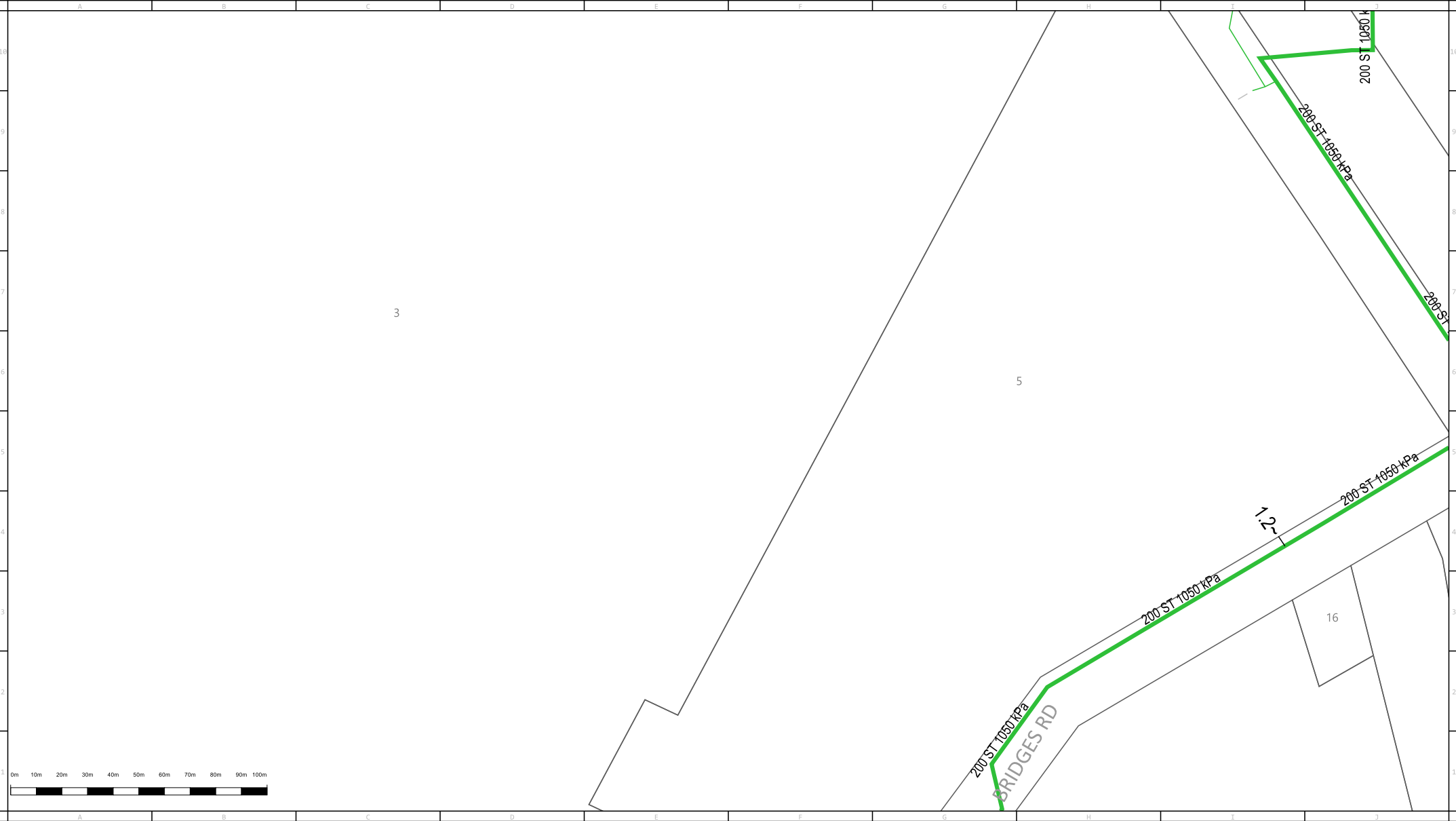
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226

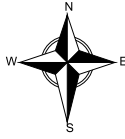
WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	—	Distance in metres of Main from Boundary Line ~ 1.5
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	—	Secondary Service	—	—	Regulator Set
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	—	Primary - 3500 kPa	—	—	Regulator Station
Distribution - 210 kPa	—	- - - -	100 PVC	—	—	JGN Trunk - 7000 kPa Transmission	—	—	Automatic Line Break Valve



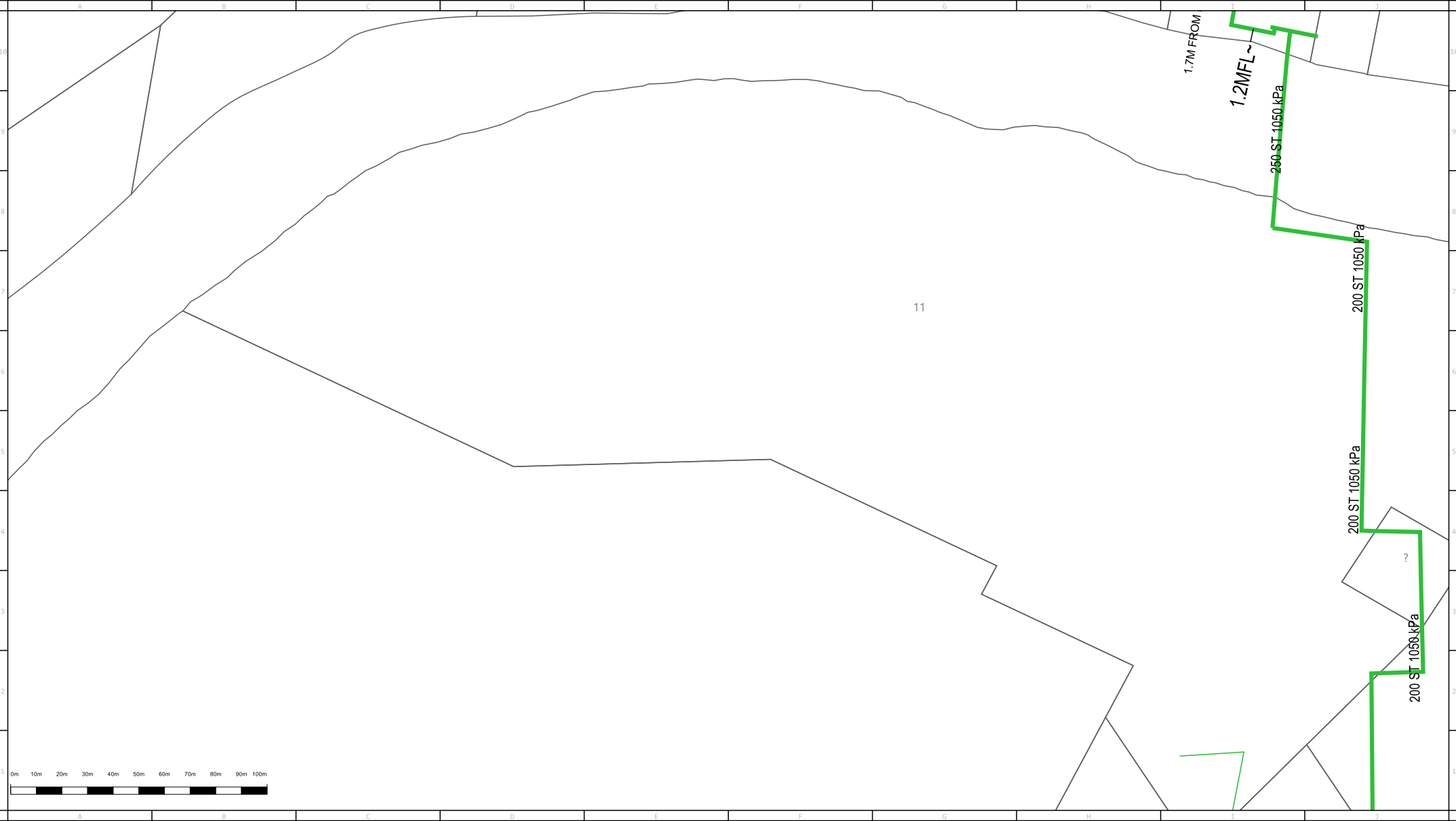
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	—	Distance in metres of Main from Boundary Line ~ 1.5
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	—	Secondary Service	—	—	Regulator Set
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	—	Primary - 3500 kPa	—	—	Regulator Station
Distribution - 210 kPa	—	- - - -	100 PVC	—	—	JGN Trunk - 7000 kPa	—	—	Automatic Line Break Valve
						Transmission	—	—	



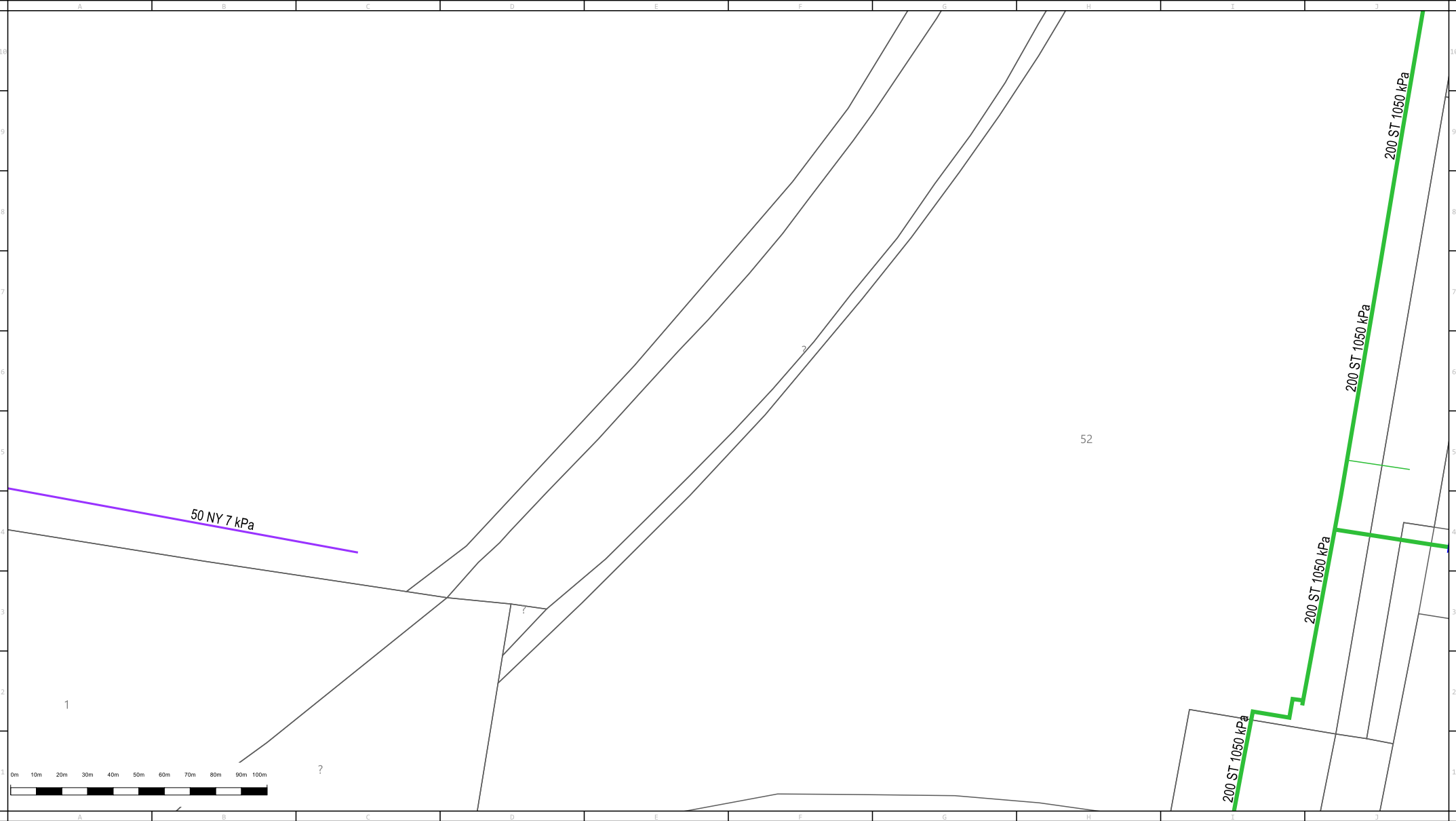
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	—	Regulator Set
Distribution - 30 kPa	—	- - - -	Proposed Isolate	—	- - - -	Secondary Service	—	—	Regulator Station
Distribution - 100 kPa	—	- - - -	(coloured according to kPa)			Primary - 3500 kPa	—	—	Automatic Line Break Valve
Distribution - 210 kPa	—	- - - -	Conduit or Casing	—	- - - -	JGN Trunk - 7000 kPa	—	—	
			(Size & Material)			Transmission	—	—	
			100 PVC						

Distance in metres of Main from Boundary Line ~ 1.5

MBK = Metres Back of Kerb

MFL = Metres from Fence Line



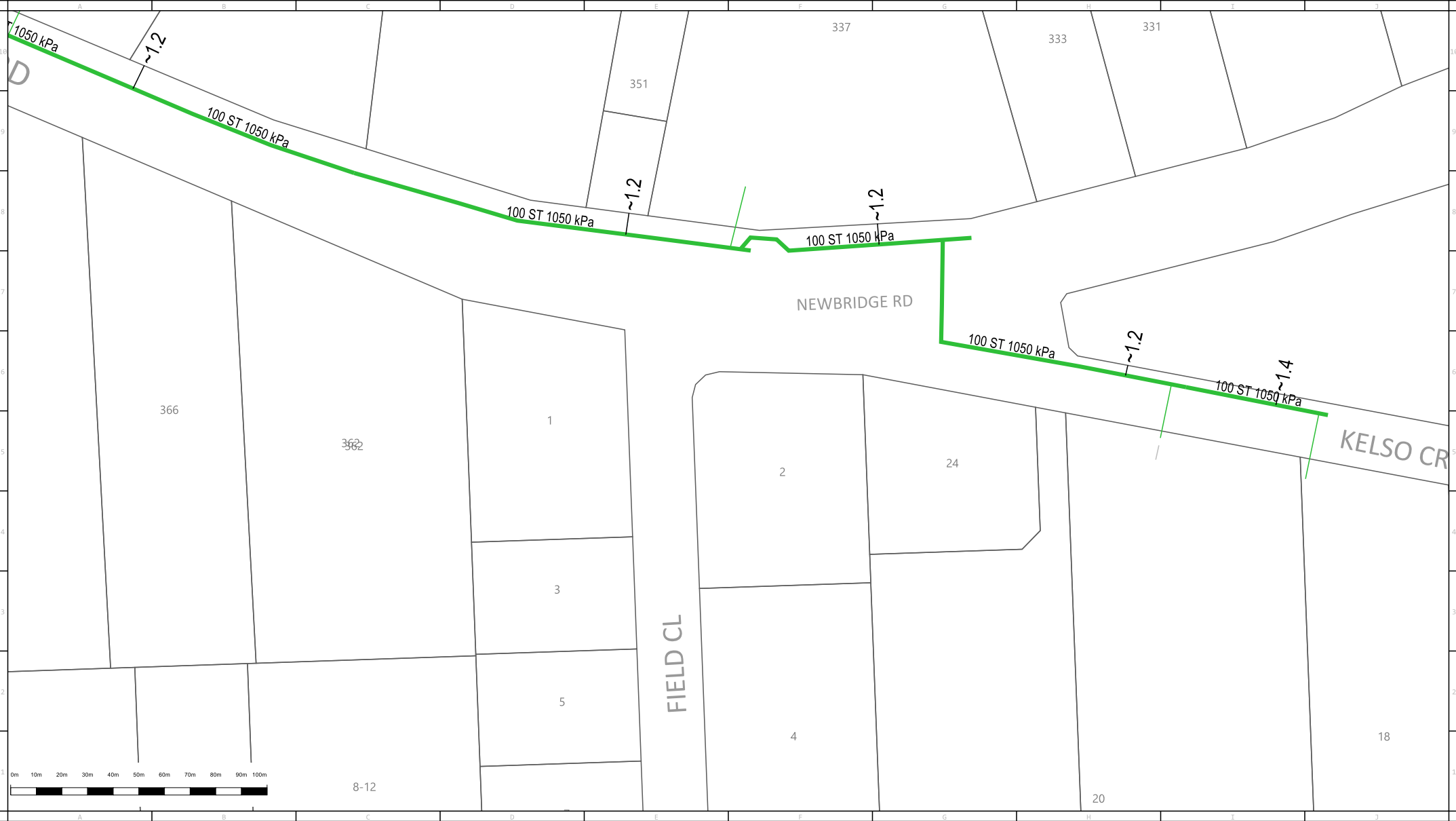
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—	—	Siphon
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—	—	Valve
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	—	Distance in metres of Main from Boundary Line ~ 1.5
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	—	—	Secondary Service	—	—	Regulator Set
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	—	—	Primary - 3500 kPa	—	—	Regulator Station
Distribution - 210 kPa	—	- - - -	100 PVC	—	—	JGN Trunk - 7000 kPa	—	—	Automatic Line Break Valve
						Transmission	—	—	



Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators			
Unknown Pressure	—	- - - - -	Distribution - 300 kPa	—	- - - - -	Critical Main	—●—●—●—		Siphon	●	Regulator Set	■
Distribution - 2 kPa	—	- - - - -	Distribution - 400 kPa	—	- - - - -	Treat as High Pressure Main	—		Valve	⋈	Regulator Station	■
Distribution - 7 kPa	—	- - - - -				Secondary - 1050 kPa	—	- - - - -	Distance in metres of Main from Boundary Line	~ 1.5		
Distribution - 30 kPa	—	- - - - -	Proposed Isolate (coloured according to kPa)	—	- - - - -	Secondary Service	—	- - - - -	MBK = Metres Back of Kerb			
Distribution - 100 kPa	—	- - - - -	Conduit or Casing (Size & Material)	—	- - - - -	Primary - 3500 kPa	—	- - - - -	MFL = Metres from Fence Line			
Distribution - 210 kPa	—	- - - - -	100 PVC	—	- - - - -	JGN Trunk - 7000 kPa	—	- - - - -				
						Transmission	—	- - - - -				



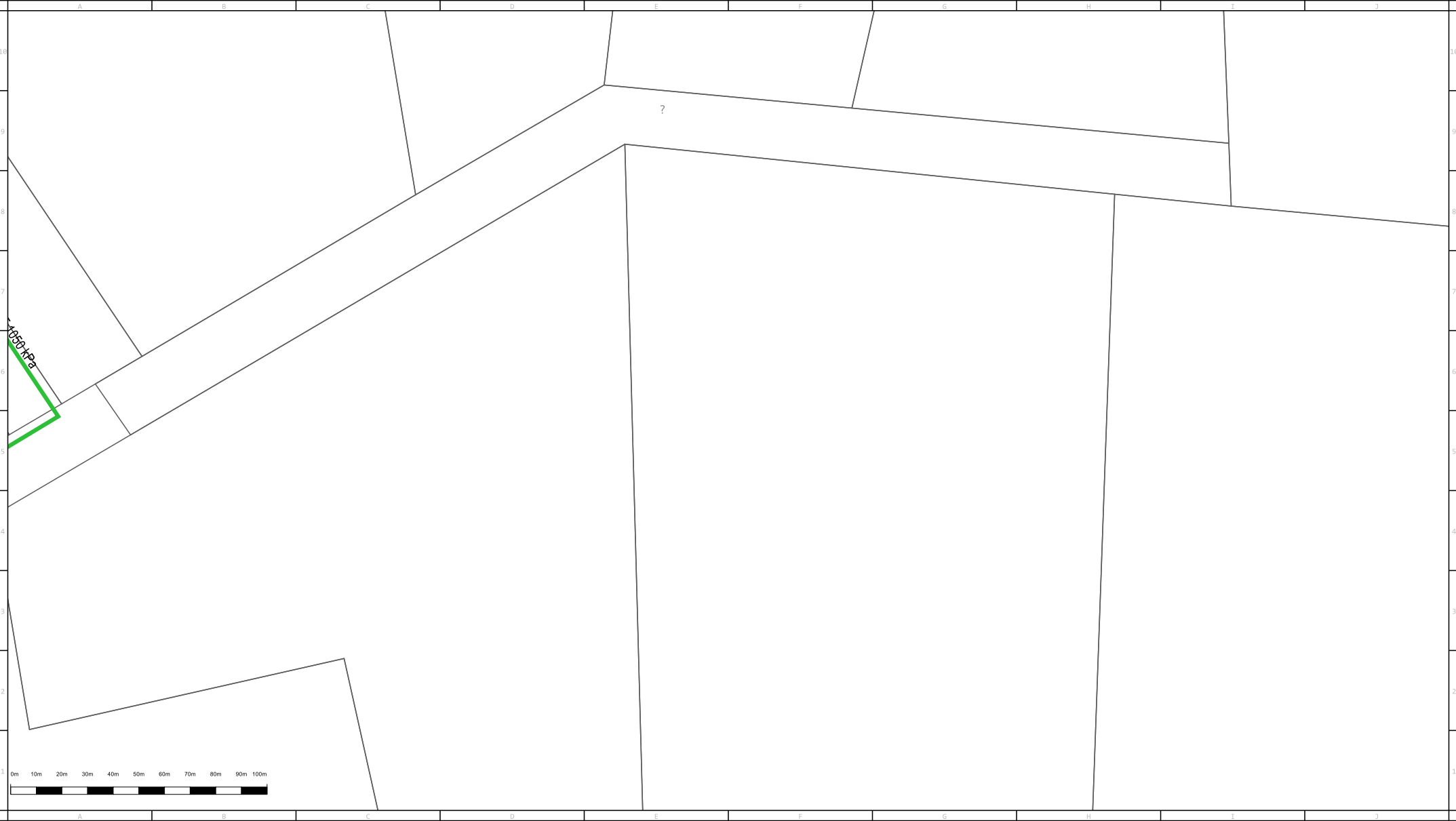
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226

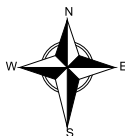
WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators			
Unknown Pressure	—	- - - - -	Distribution - 300 kPa	—	- - - - -	Critical Main	—●—●—●—		Siphon	●	Regulator Set	▶
Distribution - 2 kPa	—	- - - - -	Distribution - 400 kPa	—	- - - - -	Treat as High Pressure Main	—		Valve	⋈	Regulator Station	▶
Distribution - 7 kPa	—	- - - - -				Secondary - 1050 kPa	—	- - - - -	Distance in metres of Main from Boundary Line	~ 1.5		
Distribution - 30 kPa	—	- - - - -	Proposed Isolate (coloured according to kPa)	●●●●●●		Secondary Service	—	- - - - -	MBK = Metres Back of Kerb			
Distribution - 100 kPa	—	- - - - -	Conduit or Casing (Size & Material)	100 PVC		Primary - 3500 kPa	—	- - - - -	MFL = Metres from Fence Line			
Distribution - 210 kPa	—	- - - - -				JGN Trunk - 7000 kPa	—	- - - - -	Automatic Line Break Valve	▶		
						Transmission	—	- - - - -				



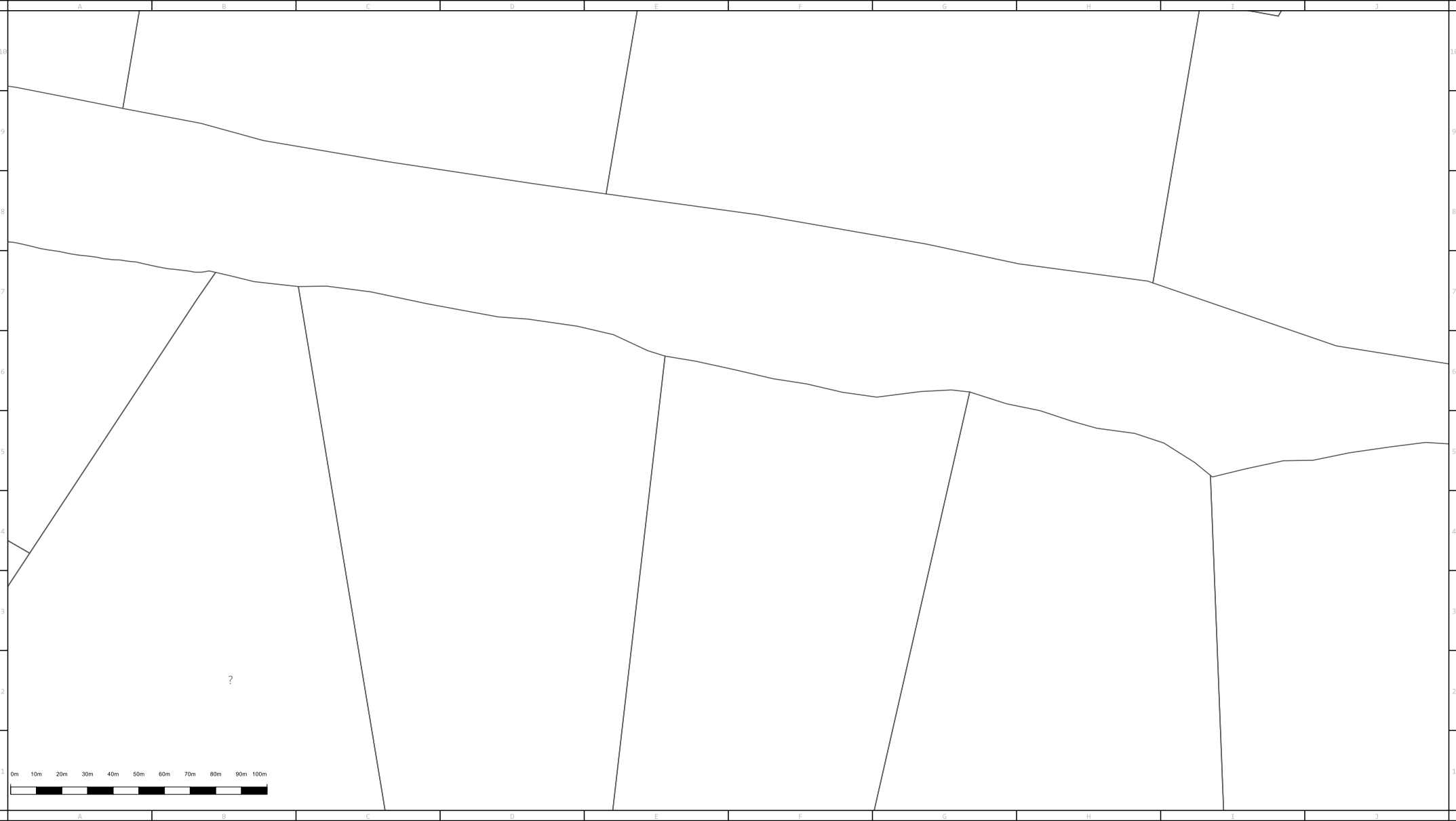
Scale: 1:2000


Issue Date: 14/08/2019

DBYD Seq No: 86692598

DBYD Job No: 16835226

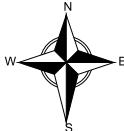
WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.





ABN 87 003 004 322

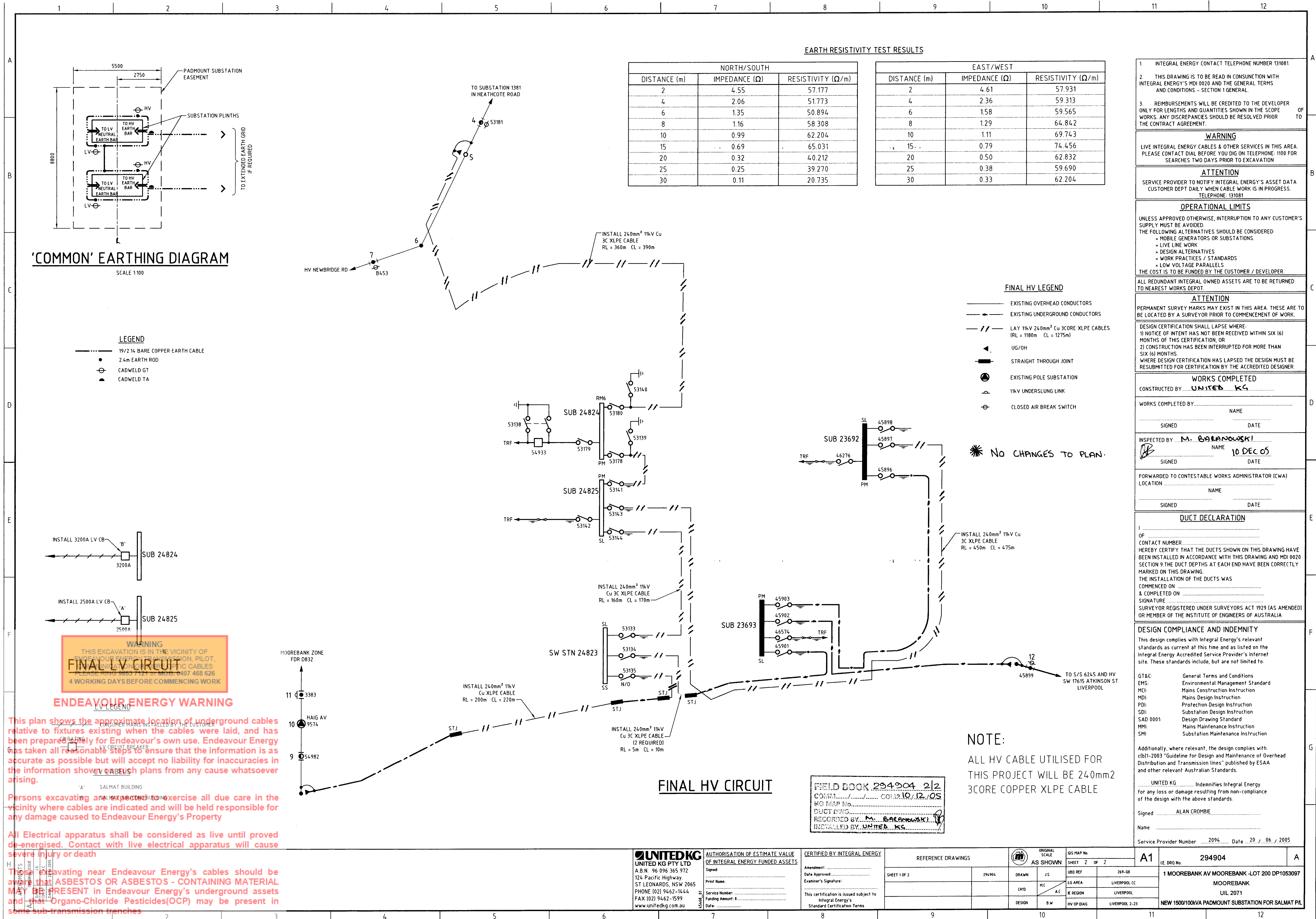
Main	In Service	Proposed	Main	In Service	Proposed	High Pressure Main & Pipeline	In Service	Proposed	Fittings, Valves & Regulators			
Unknown Pressure	—	- - - -	Distribution - 300 kPa	—	- - - -	Critical Main	—●—●—●—		Siphon	●	Regulator Set	▢
Distribution - 2 kPa	—	- - - -	Distribution - 400 kPa	—	- - - -	Treat as High Pressure Main	—		Valve	⋈	Regulator Station	▢
Distribution - 7 kPa	—	- - - -				Secondary - 1050 kPa	—	- - - -	Distance in metres of Main from Boundary Line ~ 1.5			
Distribution - 30 kPa	—	- - - -	Proposed Isolate (coloured according to kPa)	●●●●●●		Secondary Service	—	- - - -	MBK = Metres Back of Kerb			
Distribution - 100 kPa	—	- - - -	Conduit or Casing (Size & Material)	▢		Primary - 3500 kPa	—	- - - -	MFL = Metres from Fence Line			
Distribution - 210 kPa	—	- - - -	100 PVC	▢		JGN Trunk - 7000 kPa	—	- - - -	Automatic Line Break Valve	▢		
						Transmission	—	- - - -				



Issue Date: 14/08/2019
DBYD Seq No: 86692598
DBYD Job No: 16835226

Scale:1:2000

WARNING:This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.



EARTH RESISTIVITY TEST RESULTS

NORTH/SOUTH		
DISTANCE (m)	IMPEDANCE (Ω)	RESISTIVITY (Ω/m)
2	4.55	57.177
4	2.06	51.773
6	1.35	50.894
8	1.16	58.308
10	0.99	62.204
15	0.69	65.031
20	0.32	40.212
25	0.25	39.270
30	0.11	20.735

EAST/WEST		
DISTANCE (m)	IMPEDANCE (Ω)	RESISTIVITY (Ω/m)
2	4.61	57.931
4	2.36	59.313
6	1.58	59.565
8	1.29	64.842
10	1.11	69.743
15	0.79	74.456
20	0.50	62.832
25	0.38	59.690
30	0.33	62.204

1. INTEGRAL ENERGY CONTACT TELEPHONE NUMBER 131081
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH INTEGRAL ENERGY'S MDI 0020 AND THE GENERAL TERMS AND CONDITIONS - SECTION 1 GENERAL.
3. REIMBURSEMENTS WILL BE CREDITED TO THE DEVELOPER ONLY FOR LENGTHS AND QUANTITIES SHOWN IN THE SCOPE OF WORKS. ANY DISCREPANCIES SHOULD BE RESOLVED PRIOR TO THE CONTRACT AGREEMENT.

WARNING
LIVE INTEGRAL ENERGY CABLES & OTHER SERVICES IN THIS AREA. PLEASE CONTACT DIAL BEFORE YOU DIG ON TELEPHONE: 1100 FOR SEARCHES TWO DAYS PRIOR TO EXCAVATION

ATTENTION
SERVICE PROVIDER TO NOTIFY INTEGRAL ENERGY'S ASSET DATA CUSTOMER DEPT DAILY WHEN CABLE WORK IS IN PROGRESS. TELEPHONE: 131081

OPERATIONAL LIMITS
UNLESS APPROVED OTHERWISE, INTERRUPTION TO ANY CUSTOMER'S SUPPLY MUST BE AVOIDED. THE FOLLOWING ALTERNATIVES SHOULD BE CONSIDERED:
• MOBILE GENERATORS OR SUBSTATIONS
• LIVE LINE WORK
• DESIGN ALTERNATIVES
• WORK PRACTICES / STANDARDS
• LOW VOLTAGE PARALLELS
THE COST IS TO BE FUNDED BY THE CUSTOMER / DEVELOPER.

ALL REDUNDANT INTEGRAL OWNED ASSETS ARE TO BE RETURNED TO NEAREST WORKS DEPOT.

ATTENTION
PERMANENT SURVEY MARKS MAY EXIST IN THIS AREA. THESE ARE TO BE LOCATED BY A SURVEYOR PRIOR TO COMMENCEMENT OF WORK.

DESIGN CERTIFICATION SHALL LAPSE WHERE:
1) NOTICE OF INTENT HAS NOT BEEN RECEIVED WITHIN SIX (6) MONTHS OF THIS CERTIFICATION, OR
2) CONSTRUCTION HAS BEEN INTERRUPTED FOR MORE THAN SIX (6) MONTHS.
WHERE DESIGN CERTIFICATION HAS LAPSED THE DESIGN MUST BE RESUBMITTED FOR CERTIFICATION BY THE ACCREDITED DESIGNER.

WORKS COMPLETED

CONSTRUCTED BY: UNITED KG
WORKS COMPLETED BY: _____
NAME: _____
SIGNED: _____ DATE: _____

INSPECTED BY: M. BALANOWSKI
NAME: _____
SIGNED: _____ DATE: 10 DEC 05

FORWARDED TO CONTESTABLE WORKS ADMINISTRATOR (CWA)
LOCATION: _____
NAME: _____
SIGNED: _____ DATE: _____

DUCT DECLARATION

I, _____ OF _____ CONTACT NUMBER: _____ HEREBY CERTIFY THAT THE DUCTS SHOWN ON THIS DRAWING HAVE BEEN INSTALLED IN ACCORDANCE WITH THIS DRAWING AND MDI 0020 SECTION 9 THE DUCT DEPTHS AT EACH END HAVE BEEN CORRECTLY MARKED ON THIS DRAWING. THE INSTALLATION OF THE DUCTS WAS COMMENCED ON _____ & COMPLETED ON _____ SIGNATURE: _____ SURVEYOR REGISTERED UNDER SURVEYORS ACT 1929 (AS AMENDED) OR MEMBER OF THE INSTITUTE OF ENGINEERS OF AUSTRALIA

DESIGN COMPLIANCE AND INDEMNITY

This design complies with Integral Energy's relevant standards as current at this time and as listed on the Integral Energy Accredited Service Provider's Internet site. These standards include, but are not limited to:

GT&C:	General Terms and Conditions
EMS:	Environmental Management Standard
MCI:	Mains Construction Instruction
MDI:	Mains Design Instruction
PDI:	Protection Design Instruction
SDI:	Substation Design Instruction
SAD 0001:	Design Drawing Standard
MMI:	Mains Maintenance Instruction
SMI:	Substation Maintenance Instruction

Additionally, where relevant, the design complies with cbl1-2003 "Guideline for Design and Maintenance of Overhead Distribution and Transmission Lines" published by ESAA and other relevant Australian Standards.

UNITED KG indemnifies Integral Energy for any loss or damage resulting from non-compliance of the design with the above standards.

Signed: ALAN CROMBIE
Name: _____

Service Provider Number: 2094 Date: 20 / 06 / 2005

✱ NO CHANGES TO PLAN.

NOTE:
ALL HV CABLE UTILISED FOR THIS PROJECT WILL BE 240mm² 3CORE COPPER XLPE CABLE

FIELD BOOK 294904 2/2
COMED: _____
LG MAP NO: _____
DUCT DIA: _____
RECORDED BY: M. BALANOWSKI
INSTALLED BY: UNITED KG

ENDEAVOUR ENERGY WARNING
This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on these plans from any cause whatsoever arising.
Persons excavating are to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property
All Electrical apparatus shall be considered as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death
The excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches

UNITED KG
UNITED KG PTY LTD
A.B.N. 96 096 365 972
124 Pacific Highway,
ST LEONARDS, NSW 2065
PHONE (02) 9462-1444
FAX (02) 9462-1599
www.unitedkg.com.au

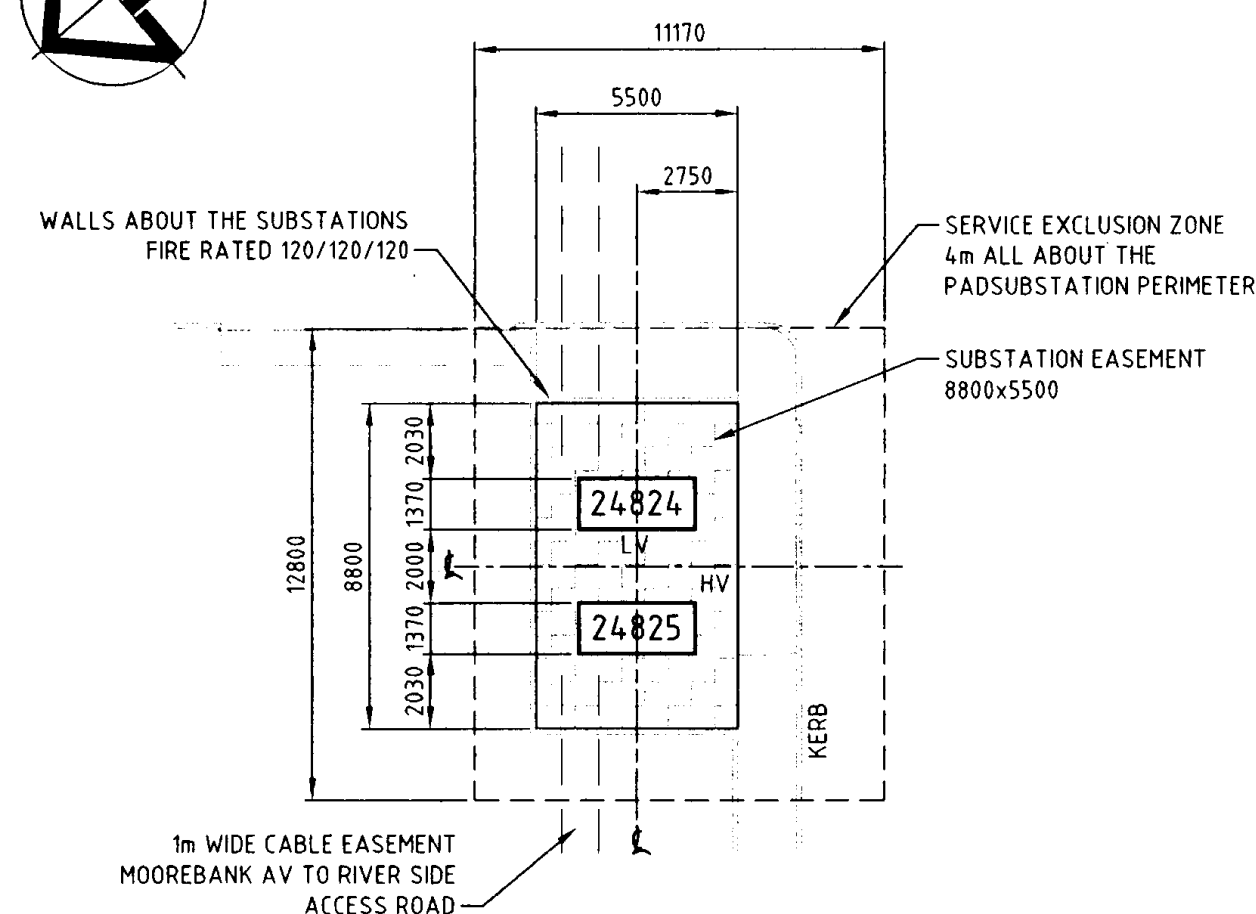
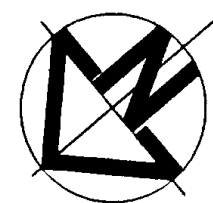
AUTHORISATION OF ESTIMATE VALUE OF INTEGRAL ENERGY FUNDED ASSETS
Signed: _____
Print Name: _____
Service Number: _____
Funding Amount: \$ _____
Date: _____

CERTIFIED BY INTEGRAL ENERGY
Amendment: _____
Date Approved: _____
Examiner's Signature: _____
This certification is issued subject to Integral Energy's Standard Certification Terms

REFERENCE DRAWINGS
SHEET 1 OF 2
294904
DRAWN: JS
CHECKED: MC
DESIGN: BW

ORIGINAL SCALE: AS SHOWN
SHEET 2 OF 2
URD REF: 269-08
LG AREA: LIVERPOOL CC
IE REGION: LIVERPOOL
HV OP DIAG: LIVERPOOL 2-23

A1
IE DRG No: **294904**
1 MOOREBANK AV MOOREBANK - LOT 200 DP1053097
MOOREBANK
UIL 2071
NEW 1500/100kV PADMOUNT SUBSTATION FOR SALMAT PL



EASEMENT PLAN

SCALE 1:200

ESTABLISH 1500kVA 11kV PADMOUNT SUBSTATION No. 24824	
SUBSTATION No.	24824
TRANSFORMER SIZE	1500kVA
HV SWITCHGEAR	11kV RM6
LV SWITCHGEAR	3200A CB
SUBSTATION CUBICLE	FIBREGLASS SIZE 14

REFER NOTES 2, 4, 5 & 6

ESTABLISH 1000kVA 11kV PADMOUNT SUBSTATION No. 24825	
SUBSTATION No.	24825
TRANSFORMER SIZE	1000kVA
HV SWITCHGEAR	11kV ABB CFCC
LV SWITCHGEAR	2500A CB
SUBSTATION CUBICLE	FIBREGLASS SIZE 14

REFER NOTES 2, 4, 5 & 6

NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH INTEGRAL ENERGY'S SPJ4004 NETWORK CONNECTION CONTESTABLE WORKS GENERAL TERMS AND CONDITIONS.
- A 5.5m x 5.0m COMBINED EASEMENT IS REQUIRED FOR THE PADMOUNT SUBSTATION.
- A 1m EASEMENT IS REQUIRED FOR THE HV/LV CABLES TO STREET.
- PADMOUNT SUBSTATIONS ARE TO BE EARTHED IN ACCORDANCE WITH INTEGRAL ENERGY'S SD1100. PREDICTED EARTHING IS COMMON TO BE CONFIRMED ON SITE DURING CONSTRUCTION.
- SUBSTATION TO BE INSTALLED IN ACCORDANCE WITH SD1104.
- PROPOSED PADMOUNT SUBSTATION LOCATION DEPENDENT ON BUILDING HAVING FIRE RESISTANCE LEVEL OF 60/60/60.
- CABLE TRENCHES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH MD10020.

SITE PLAN LEGEND

- NEW POLE
- EXISTING POLE
- REMOVE POLE
- REPLACE POLE
- EXISTING 0/H CONDUCTOR
- REMOVE EXISTING OVERHEAD CONDUCTOR
- EXISTING UNDERGROUND HV CABLE
- NEW HV TRENCHING
- EXISTING UNDERGROUND HV CABLE
- NEW HV SWITCHING STATION
- EXISTING POLE SUBSTATION
- CLOSED HV UNDERGROUND LINK
- UNDERGROUND / OVERHEAD POLE

WARNING

CAUTION IS IN THE VICINITY OF EXISTING 0/H TRANSMISSION, PILOT, COMMUNICATION OR FIBRE OPTIC CABLES. REMOVE EXISTING OVERHEAD CONDUCTOR 0407 468 826

ENDAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on such plans from any cause whatsoever arising.

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property

All Electrical apparatus shall be considered as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death

Persons excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS-CONTAINING MATERIAL MAY BE PRESENT IN Endeavour Energy's underground assets and that Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches

STEEL LINED UNDER ROAD BORE Ø600mm WITH 6xØ125mm & 2xØ50mm HD PVC DUCTS

MOOREBANK ZONE FOR D832
3383 11
HAIG AV 9574
54982 9
8

FIELD BOOK 294904 1/2
COMPLD BY 12/05
RECORDED BY M. BARANOWSKI
INSTALLED BY UNITED KG

REMOVE POLES 1, 2 & 3 WITH 0/H MAINS AND FITTINGS. ARRANGE TO ST/ EXISTING 11kV CABLES TO NEW CABLE AT THE BASE OF POLES 1 AND 3. REMOVE ABS 1509

ESTABLISH 11kV SW CUBICLE No. 24823	
SW STN No.	24823
HV SWITCHGEAR	11kV ABB CCC

SITE PLAN

SCALE 1:1000

NOTE:
The customer is to ensure that no LV Parallel is possible between these two substations as they could be supplied from two different Zone Substations.

SCOPE OF WORKS	
WORKS BY LEVEL 1 SERVICE PROVIDER	
INTEGRAL ENERGY FUNDED OR SUPPLIED COMPONENT	CUSTOMER FUNDED COMPONENT
SUPPLIED FREE	NON-CONTESTABLE
1000kVA, 1500kVA TRANSFORMERS 500mmx125mm HD PVC DUCT 250mmx50mm HD PVC DUCT 4-PART CSST UNDERROAD BORE 125/125	NIL
LIVE CONSTRUCTED	CONTESTABLE
ABS HEATHCOTE RD & USL HAIG AV	ALL WORKS INCLUDING BUT NOT LIMITED TO THE ESTABLISHMENT OF CABLE TRENCHING, DUCT INSTALLATION, CABLE LAYING JOINTING AND SUBSTATION INSTALLATION.

- INTEGRAL ENERGY CONTACT TELEPHONE NUMBER 131081.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH INTEGRAL ENERGY'S MDI 0020 AND THE GENERAL TERMS AND CONDITIONS - SECTION 1 GENERAL.
- REIMBURSEMENTS WILL BE CREDITED TO THE DEVELOPER ONLY FOR LENGTHS AND QUANTITIES SHOWN IN THE SCOPE WORKS. ANY DISCREPANCIES SHOULD BE RESOLVED PRIOR TO THE CONTRACT AGREEMENT.

WARNING

LIVE INTEGRAL ENERGY CABLES & OTHER SERVICES IN THIS AREA. PLEASE CONTACT DIAL BEFORE YOU DIG ON TELEPHONE: 1100 FOR SEARCHES TWO DAYS PRIOR TO EXCAVATION

ATTENTION

SERVICE PROVIDER TO NOTIFY INTEGRAL ENERGY'S ASSET DATA CUSTOMER DEPT DAILY WHEN CABLE WORK IS IN PROGRESS. TELEPHONE: 131081

OPERATIONAL LIMITS

UNLESS APPROVED OTHERWISE, INTERRUPTION TO ANY CUSTOMER'S SUPPLY MUST BE AVOIDED. THE FOLLOWING ALTERNATIVES SHOULD BE CONSIDERED:
• MOBILE GENERATORS OR SUBSTATIONS
• LIVE LINE WORK
• DESIGN ALTERNATIVES
• WORK PRACTICES / STANDARDS
• LOW VOLTAGE PARALLELS
THE COST IS TO BE FUNDED BY THE CUSTOMER / DEVELOPER

ALL REDUNDANT INTEGRAL OWNED ASSETS ARE TO BE RETURNED TO NEAREST WORKS DEPOT.

ATTENTION

PERMANENT SURVEY MARKS MAY EXIST IN THIS AREA. THESE ARE TO BE LOCATED BY A SURVEYOR PRIOR TO COMMENCEMENT OF WORK.

DESIGN CERTIFICATION SHALL LAPSE WHERE:
1) NOTICE OF INTENT HAS NOT BEEN RECEIVED WITHIN SIX (6) MONTHS OF THIS CERTIFICATION, OR
2) CONSTRUCTION HAS BEEN INTERRUPTED FOR MORE THAN SIX (6) MONTHS
WHERE DESIGN CERTIFICATION HAS LAPSED THE DESIGN MUST BE RESUBMITTED FOR CERTIFICATION BY THE ACCREDITED DESIGNER

WORKS COMPLETED

CONSTRUCTED BY: UNITED KG

WORKS COMPLETED BY: GRANT DENT
NAME: GRANT DENT
DATE: 6-11-05

INSPECTED BY: M. BARANOWSKI
NAME: M. BARANOWSKI
DATE: 10/DEC/05

FORWARDED TO CONTESTABLE WORKS ADMINISTRATOR (CWA)
LOCATION: _____
NAME: _____
SIGNED: _____ DATE: _____

DUCT DECLARATION

I, _____ OF _____ CONTACT NUMBER: _____ HEREBY CERTIFY THAT THE DUCTS SHOWN ON THIS DRAWING HAVE BEEN INSTALLED IN ACCORDANCE WITH THIS DRAWING AND MDI 0020 SECTION 9 THE DUCT DEPTHS AT EACH END HAVE BEEN CORRECTLY MARKED ON THIS DRAWING. THE INSTALLATION OF THE DUCTS WAS COMMENCED ON _____ & COMPLETED ON _____ SIGNATURE: _____ SURVEYOR REGISTERED UNDER SURVEYORS ACT 1929 (AS AMENDED) OR MEMBER OF THE INSTITUTE OF ENGINEERS OF AUSTRALIA

DESIGN COMPLIANCE AND INDEMNITY

This design complies with Integral Energy's relevant standards as current at this time and as listed on the Integral Energy Accredited Service Provider's Internet site. These standards include, but are not limited to:

GTSC:	General Terms and Conditions
EMS:	Environmental Management Standard
MCI:	Mains Construction Instruction
MDI:	Mains Design Instruction
PDI:	Protection Design Instruction
SDI:	Substation Design Instruction
SAD 0001:	Design Drawing Standard
MMI:	Mains Maintenance Instruction
SMI:	Substation Maintenance Instruction

Additionally, where relevant, the design complies with (b)1-2003 "Guideline for Design and Maintenance of Overhead Distribution and Transmission lines" published by ESAA and other relevant Australian Standards.

UNITED KG indemnifies Integral Energy for any loss or damage resulting from non-compliance of the design with the above standards.

Signed: ALAN CROMBIE

Name: _____

Service Provider Number: 2094 Date: 20 / 06 / 2005

UNITED KG
UNITED KG PTY LTD
A.B.N. 96 096 365 972
124 Pacific Highway,
ST LEONARDS, NSW 2065
PHONE (02) 9462-1444
FAX (02) 9462-1599
www.unitedkg.com.au

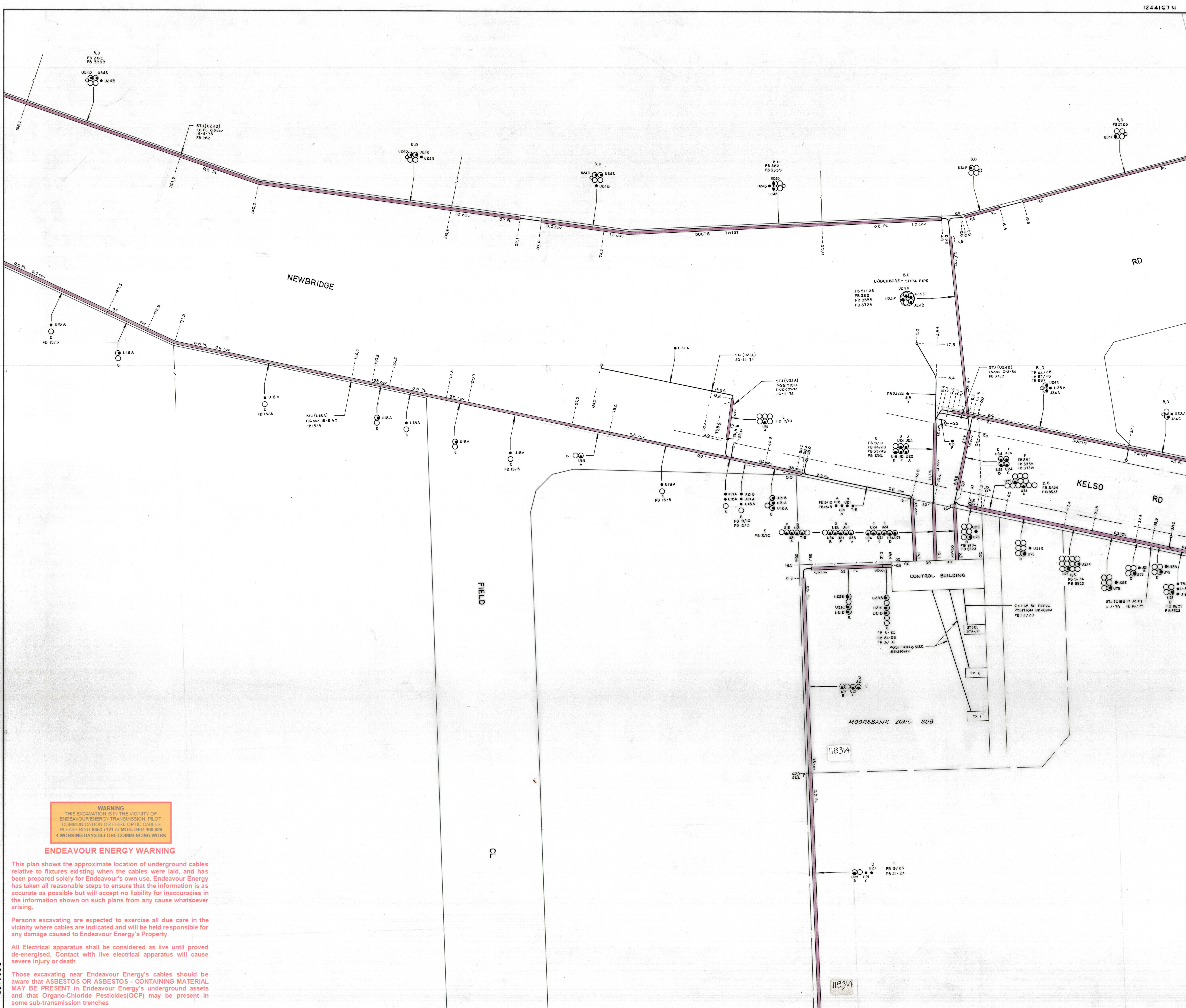
AUTHORISATION OF ESTIMATE VALUE OF INTEGRAL ENERGY FUNDED ASSETS
Funding Approved
J. Wallace
Service Number: 14028
Funding Amount: \$108,500
Date: 14-7-05

CERTIFIED BY INTEGRAL ENERGY
Amendment: 15-7-05
Date Approved: 15-7-05
This certification is issued subject to Integral Energy's Standard Certification Terms

FIELD POLE NUMBER	SPAN LENGTH (m)	LINE DEVIATION (°)	TRANSMISSION	HIGH VOLTAGE	LOW VOLTAGE	DIAMETER (mm)	DEPTH (m)	TYPE	STAY	FOOTING	RELOCATE	NEW	EXISTING	REMOVE	NUMBER
531															11
532															9
533															4
444															3
445															1

REFERENCE DRAWINGS		ORIGINAL SCALE	G/S MAP No.
AS SHOWN	AS SHOWN		
294904	294904	1 OF 2	269-08
MDI	MDI	LG AREA	LIVERPOOL CC
CHD	CHD	IE REGION	LIVERPOOL
DESIGN	DESIGN	HV DP DIAG	LIVERPOOL 2-23

A1	294904	A
I.E. DRG No.		
	1 MOOREBANK AV MOOREBANK -LOT 200 DP1053097	
	MOOREBANK	
	UUL 2071	
	NEW 1500/1000KVA PADMOUNT SUBSTATIONS FOR SALMAT P/L	



NOTES

1. CABLES 0.6 FROM PROPERTY LINE, 0.6 COVER UNLESS OTHERWISE SHOWN.

2. LENGTHS IN METRES

CODE	TYPE
B	50 PVC CONDUIT
C	100 PVC CONDUIT
D	125 PVC CONDUIT
E	100 FIBRE CONDUIT
F	140 FIBRE CONDUIT

CODE	TYPE	CODE	TYPE
U12	150mm 11kV AL PLYSWS	U18	450 IN 11kV AL PLYSWS
U17	240mm 11kV AL PLYSWS	U21	750 IN 11kV CU PLYSWS
U24	300mm 11kV AL PLYSWS	U23	750 IN 11kV AL PLYSWS
U25	300mm 11kV AL PLYSWS PVC	U75	300mm 11kV AL PLYD
T38	150mm LV AL XLPE		
T43	185mm LV AL XLPE		
T52	240mm LV AL XLPE		
T57	240mm LV AL PLYSWS		
T18	4x19/0.4 LV CU PVC/PVC		
T53	250mm LV AL PLYSWS		

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES.
PLEASE RING 9853 7121 or MOB. 0407 488 626
4 WORKING DAYS BEFORE COMMENCING WORK

ENDEAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on such plans from any cause whatsoever arising.

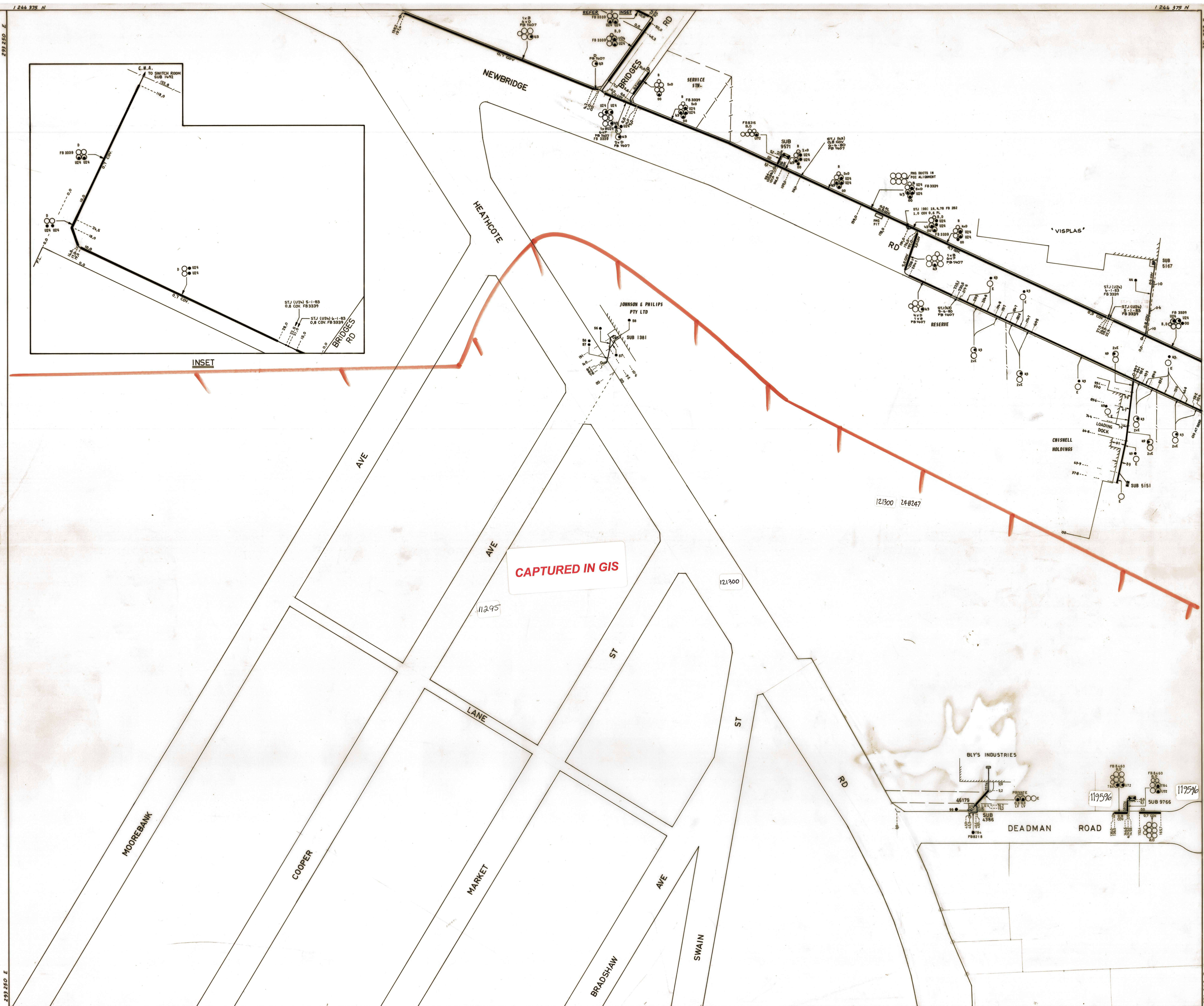
Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property

All Electrical apparatus shall be considered as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT IN Endeavour Energy's underground assets and that Organo-Chloride Pesticides(OCP) may be present in some sub-transmission trenches

19-4-96

8523	KELSO RD.	P.A.P.	15-2-21
FB. No.	LOCATION	CH'D	DATE
AMENDMENT			
THE PROSPECT COUNTY COUNCIL			
U.G. RETICULATION			
MOOREBANK			
DRAWN	LC	SCALE	DATE
CHECKED	SD	1:250	9-7-84
CO-ORD.	Hand	9137-2-1-3-4	L
D'SERV.			



ISSUED 17-8-95

~~4/7/96~~
10.9.98

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

ENDEAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on such plans from any cause whatsoever arising.

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property

All Electrical apparatus shall be considered as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides(OCP) may be present in some sub-transmission trenches

Issue Date: 14/08/2019, DBYD Sequence No: 86972595

SCANNED

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

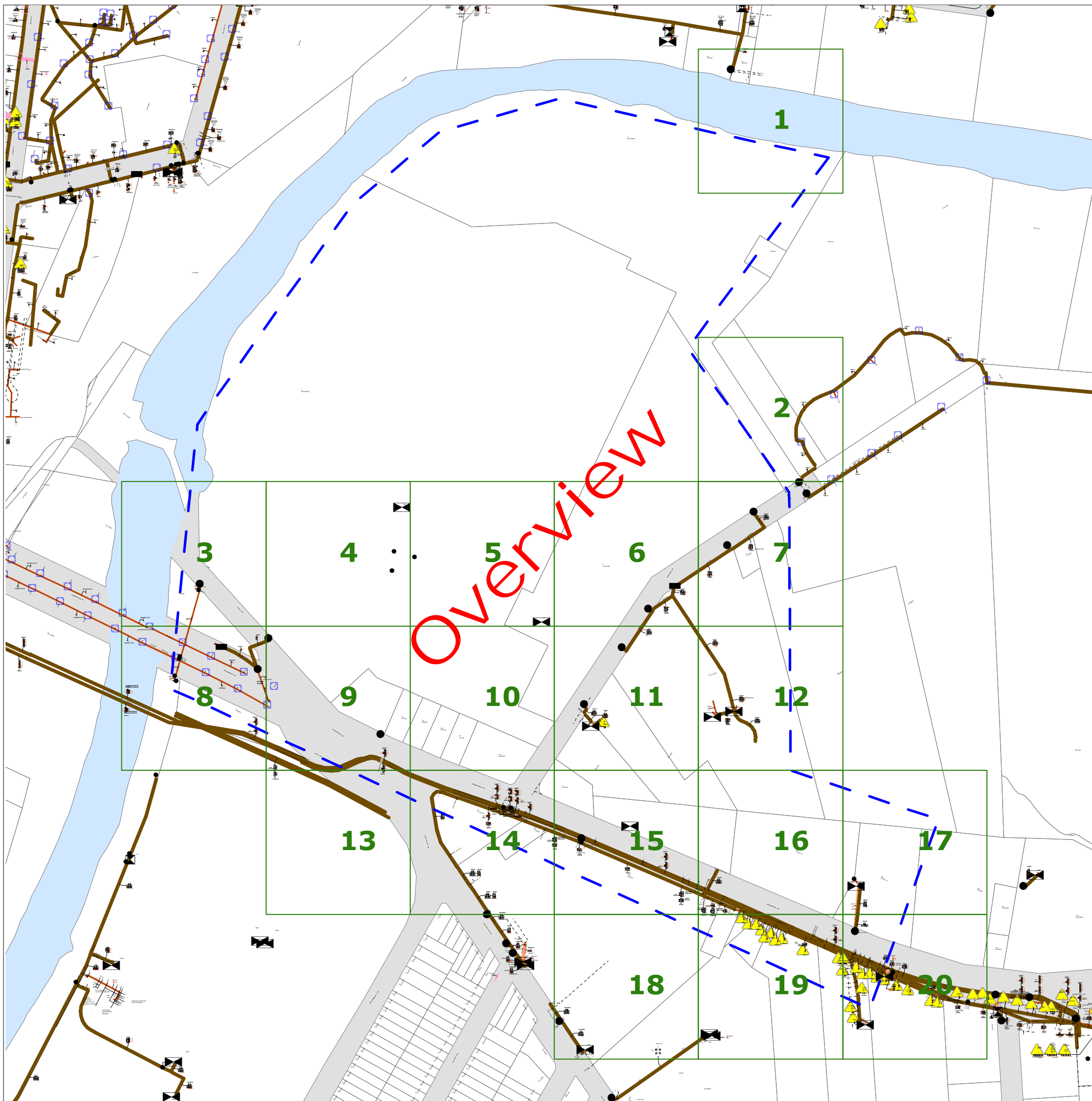
- or ■ Street light column
- ▤ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ▤ Underground pit
- Duct run
- Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning

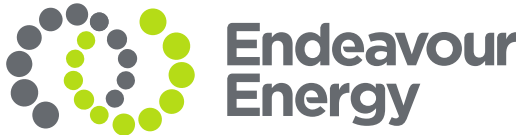
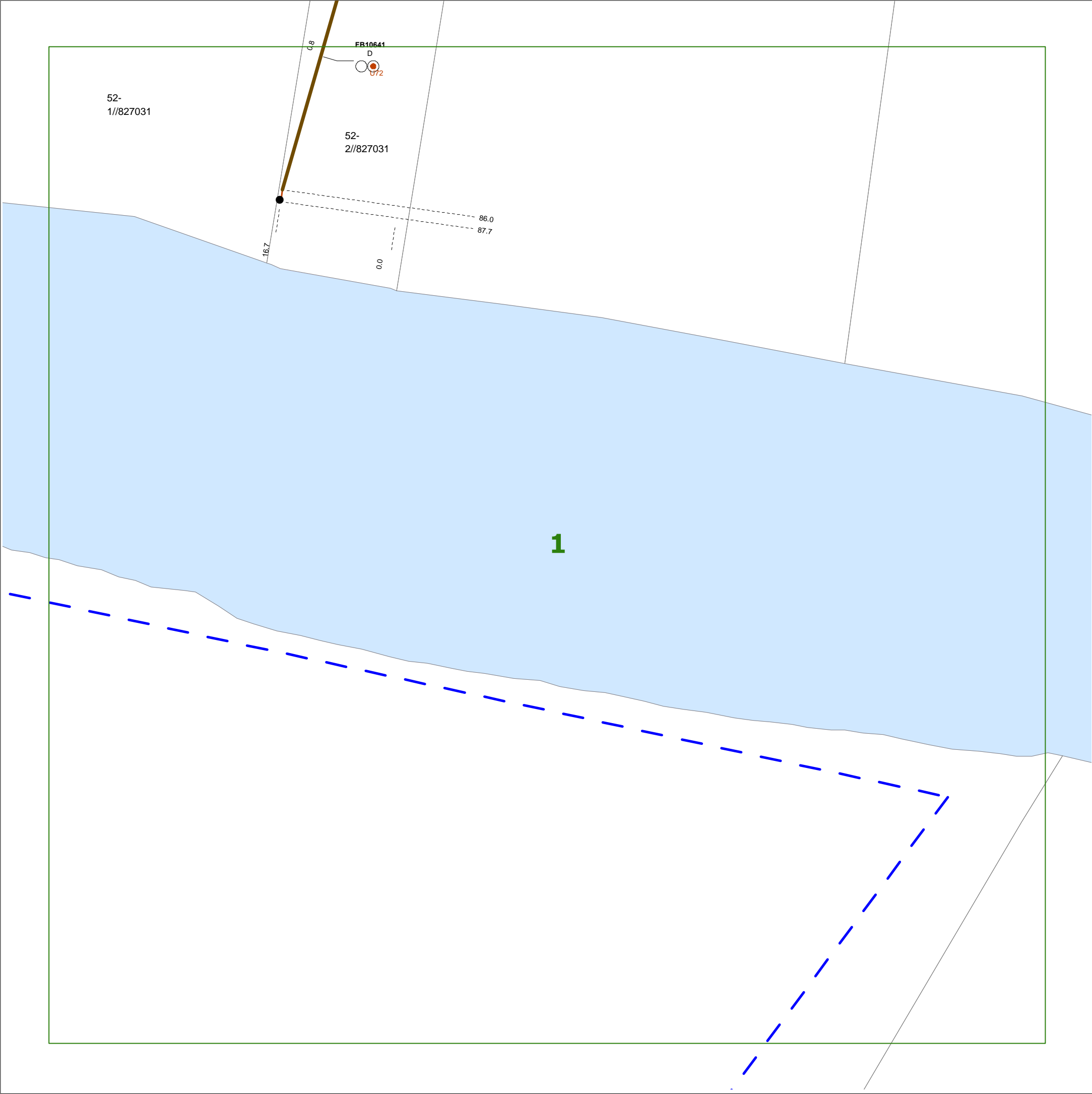


NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016





WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

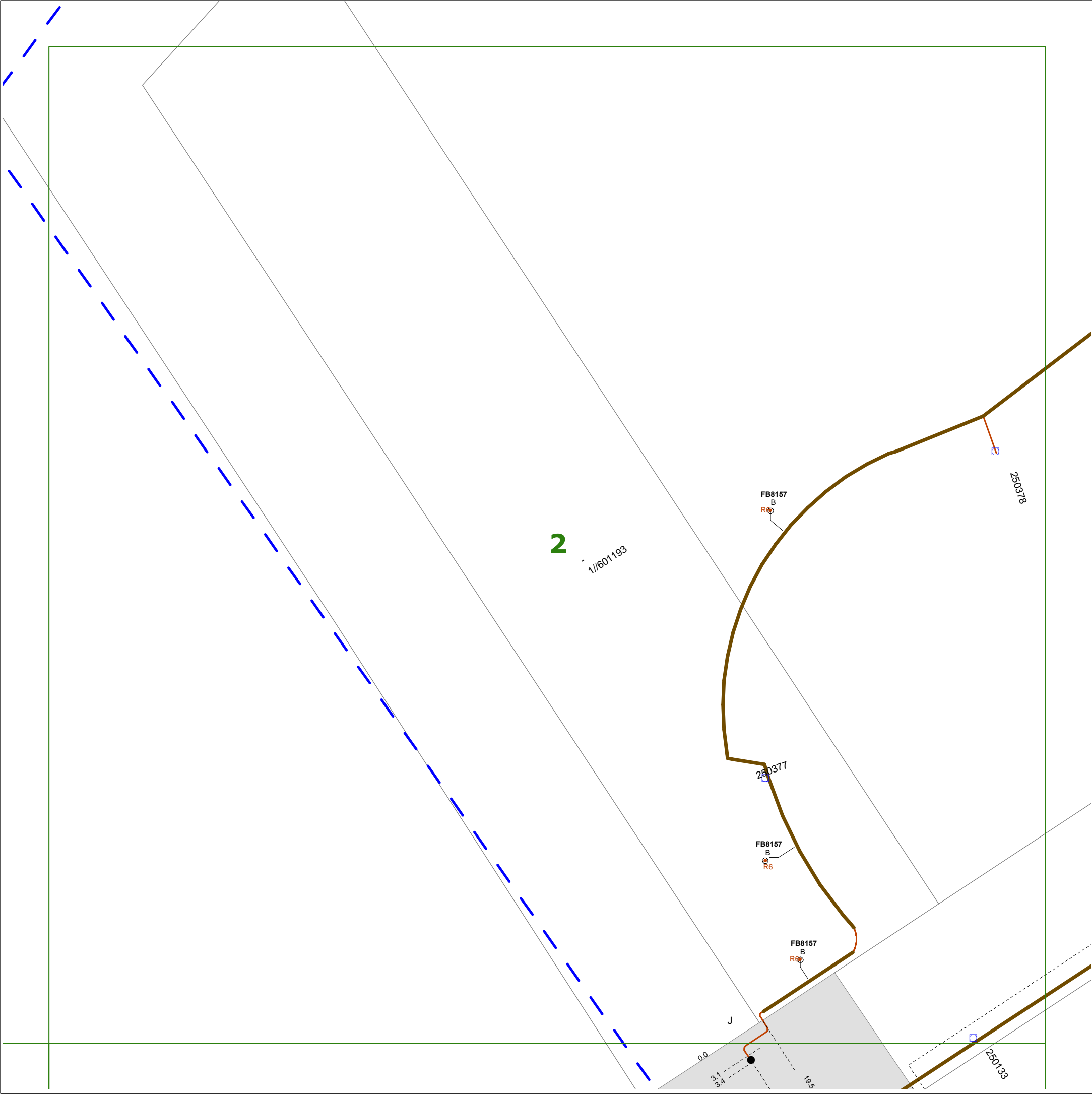
LEGEND

- or ■ Street light column
- ▤ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ▤ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY











- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

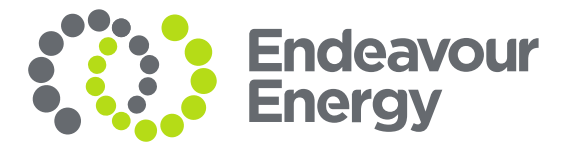
LEGEND

-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY











- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

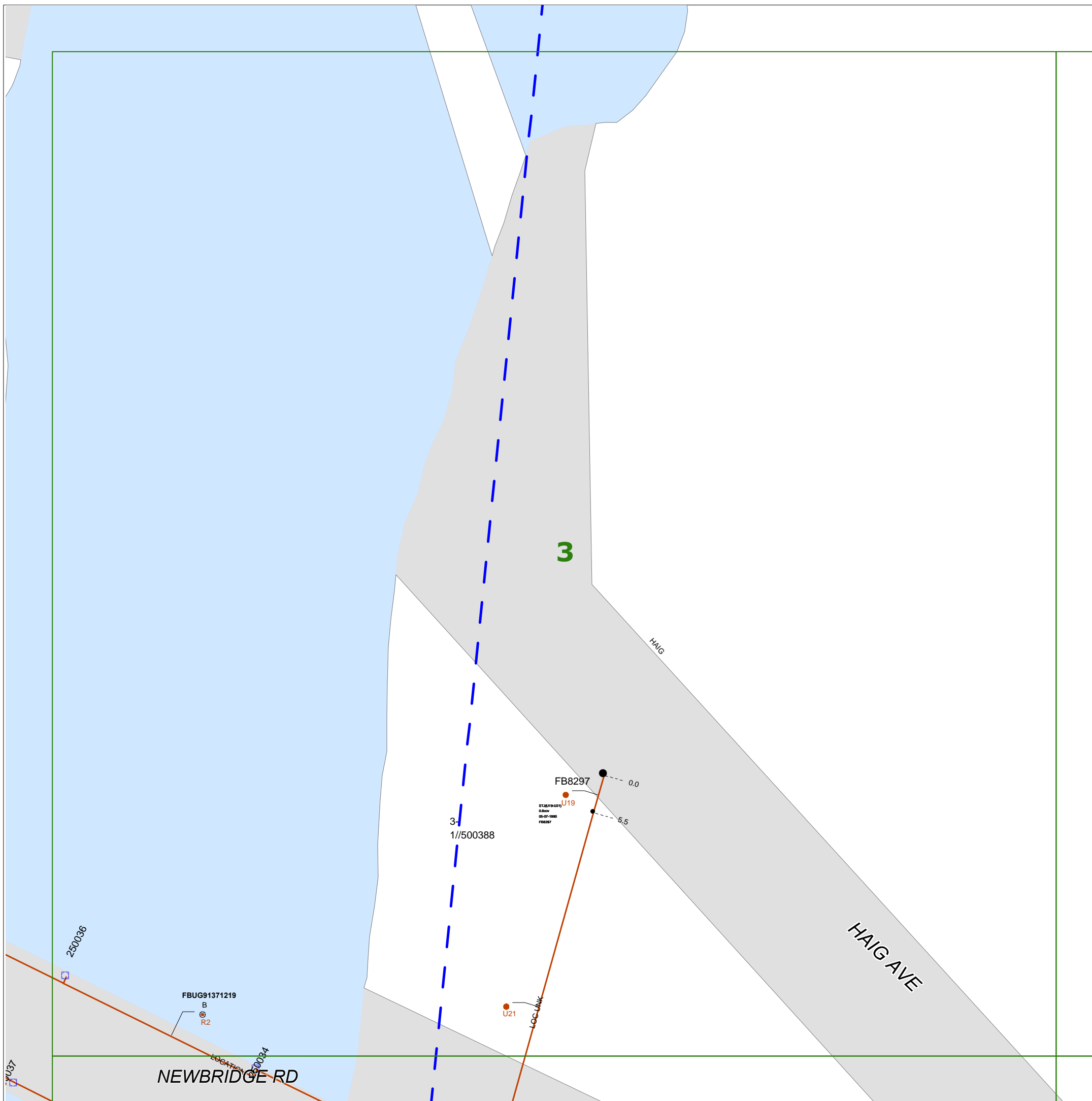
- | | | | |
|---|----|---|-----------------------------|
|  | or |  | Street light column |
|  | | | Padmount substation |
|  | or |  | Overground pillar (O.G.Box) |
|  | | | Underground pit |
|  | | | Duct run |
|  | | | Cable run |
|  | | | Typical duct section |
|  | | | Asbestos warning |

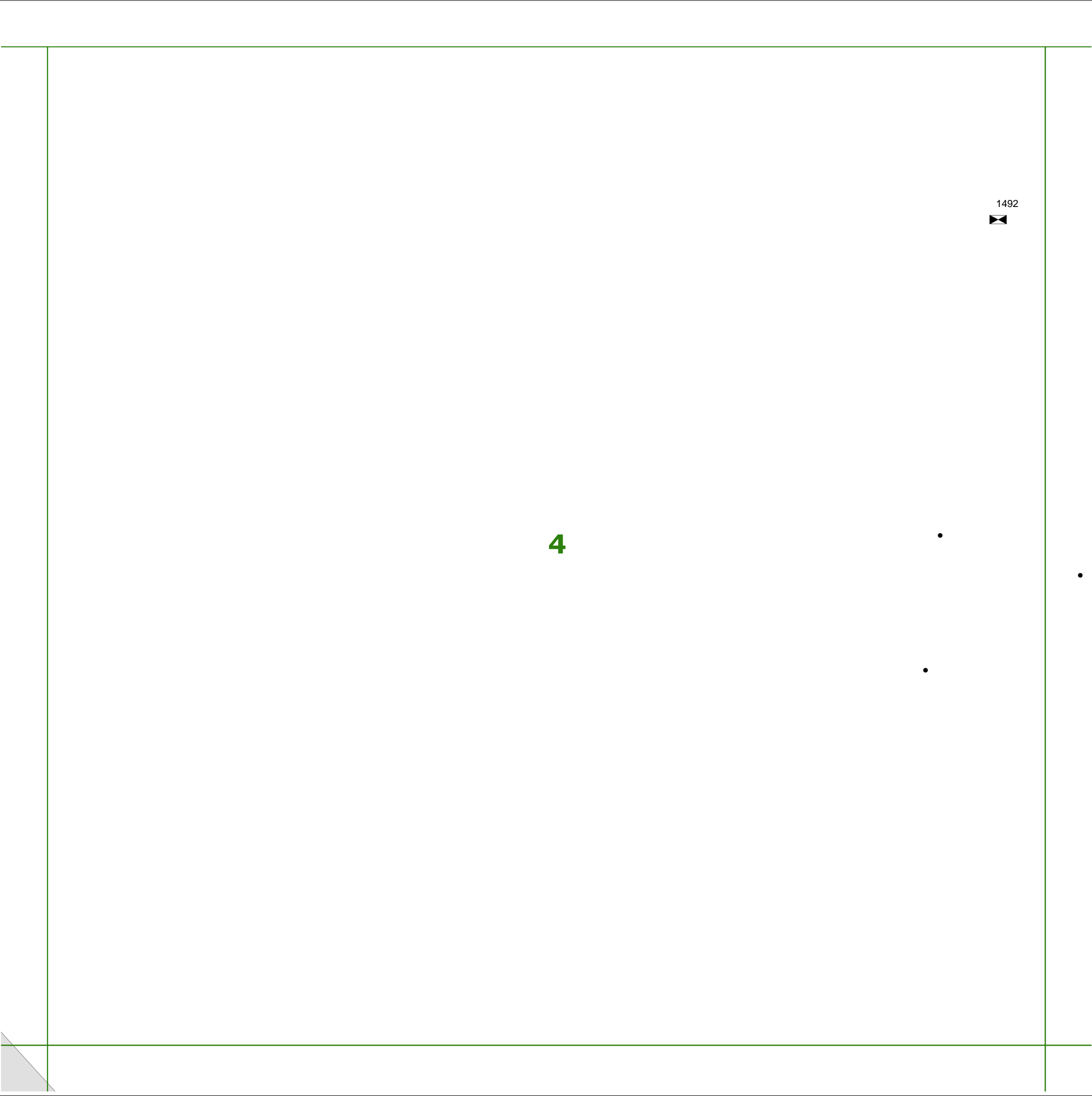


NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016





WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY











- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

I492
◀

5

564
◀

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY



- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.


DISCLAIMER



Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.


WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK


LEGEND


-  or 


Street light column
- 


Padmount substation
-  or 

Overground pillar (O.G.Box)
- 

Underground pit
- 

Duct run
- 

Cable run
- 

Typical duct section
- 

Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

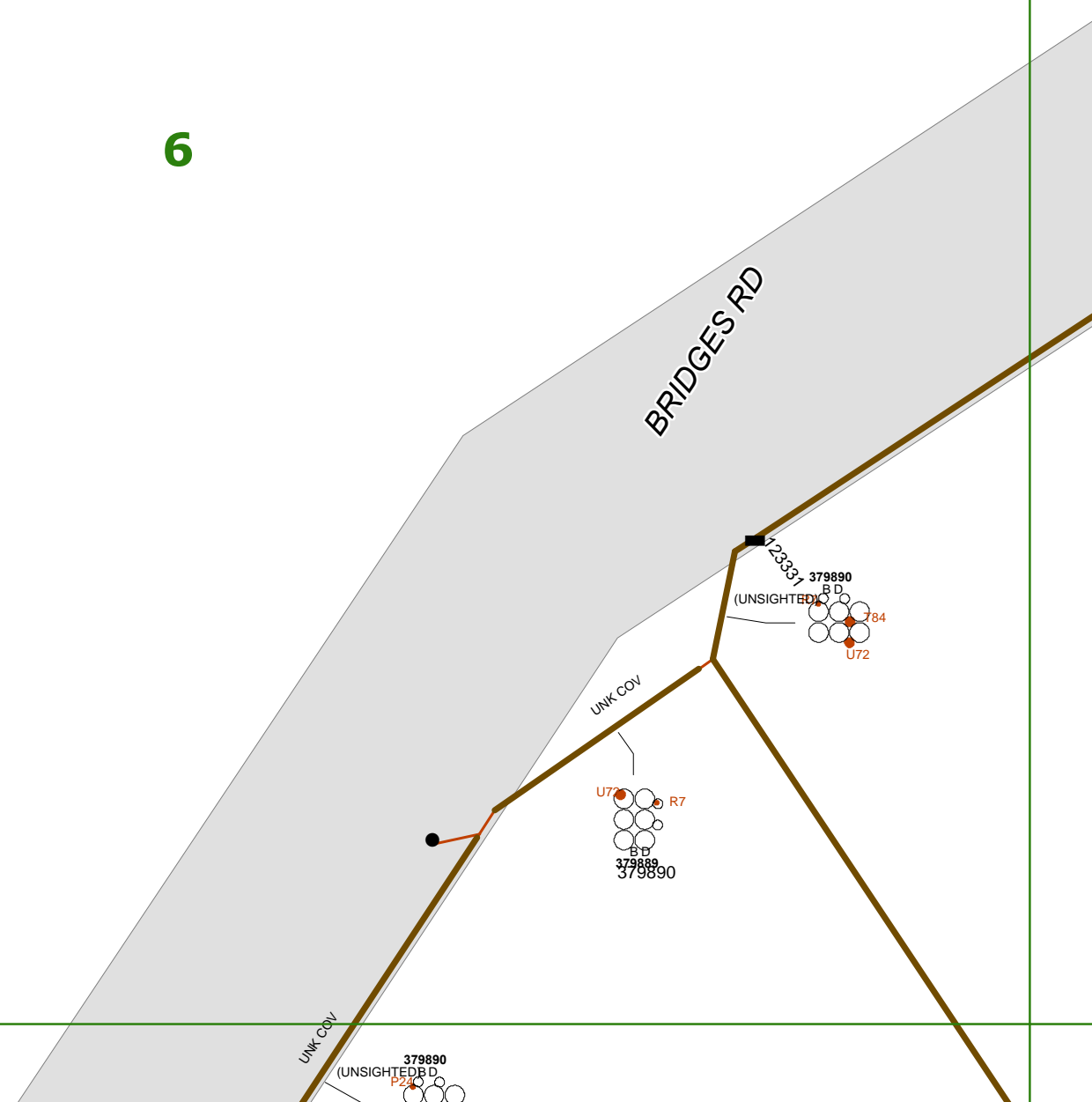
LEGEND

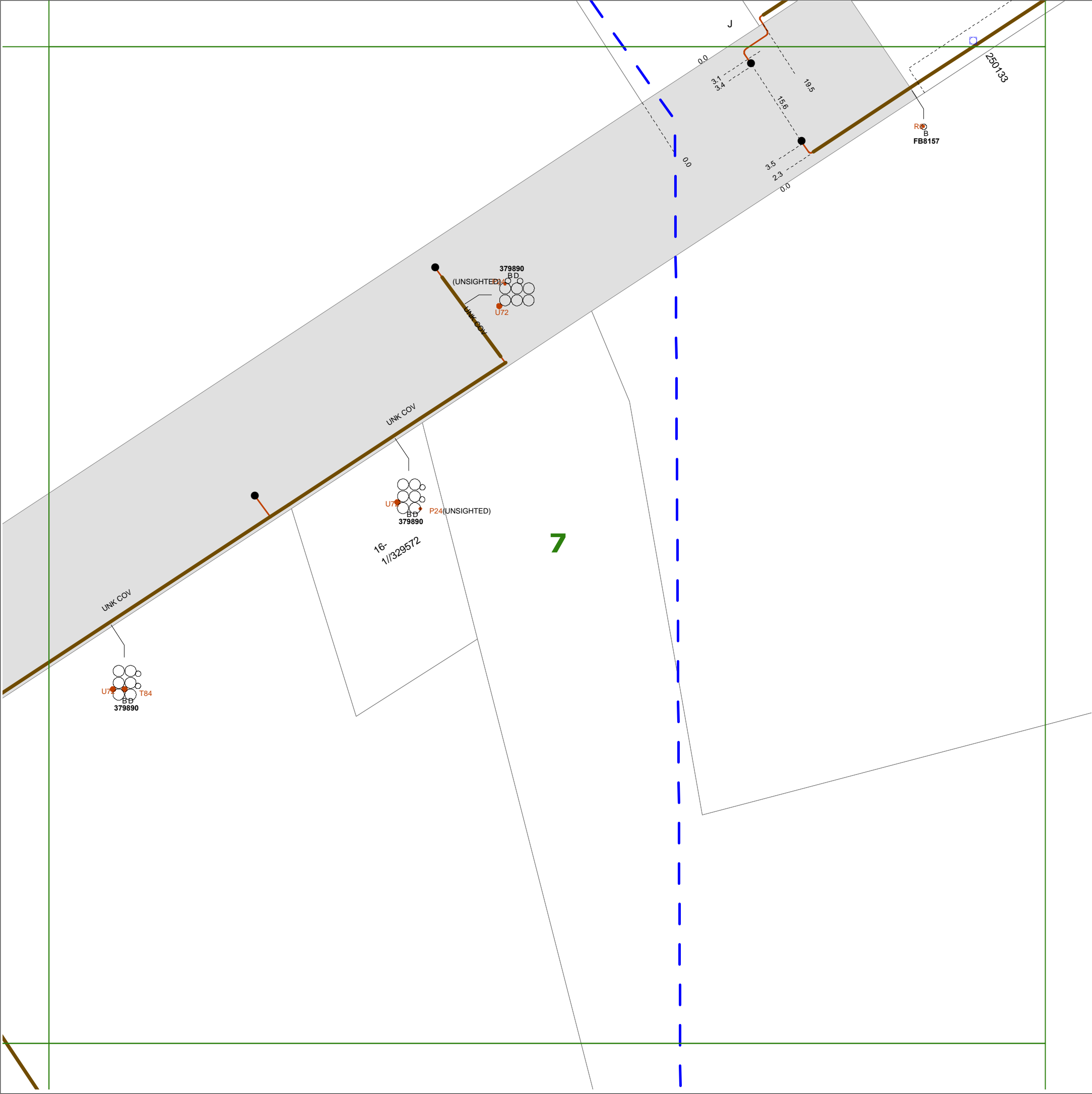
- or ■ Street light column
- ▭ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ⊠ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning

**NOT TO SCALE**

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016

65-
100//775780



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF ENDEAVOUR ENERGY TRANSMISSION, PILOT, COMMUNICATION OR FIBRE OPTIC CABLES. PLEASE RING 9853 7121 or MOB. 0407 468 626 4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

- or ■ Street light column
- ▭ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ▭ Underground pit
- ▬ Duct run
- ▬ Cable run
- Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY











- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

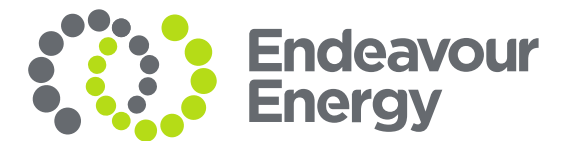
-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.











DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

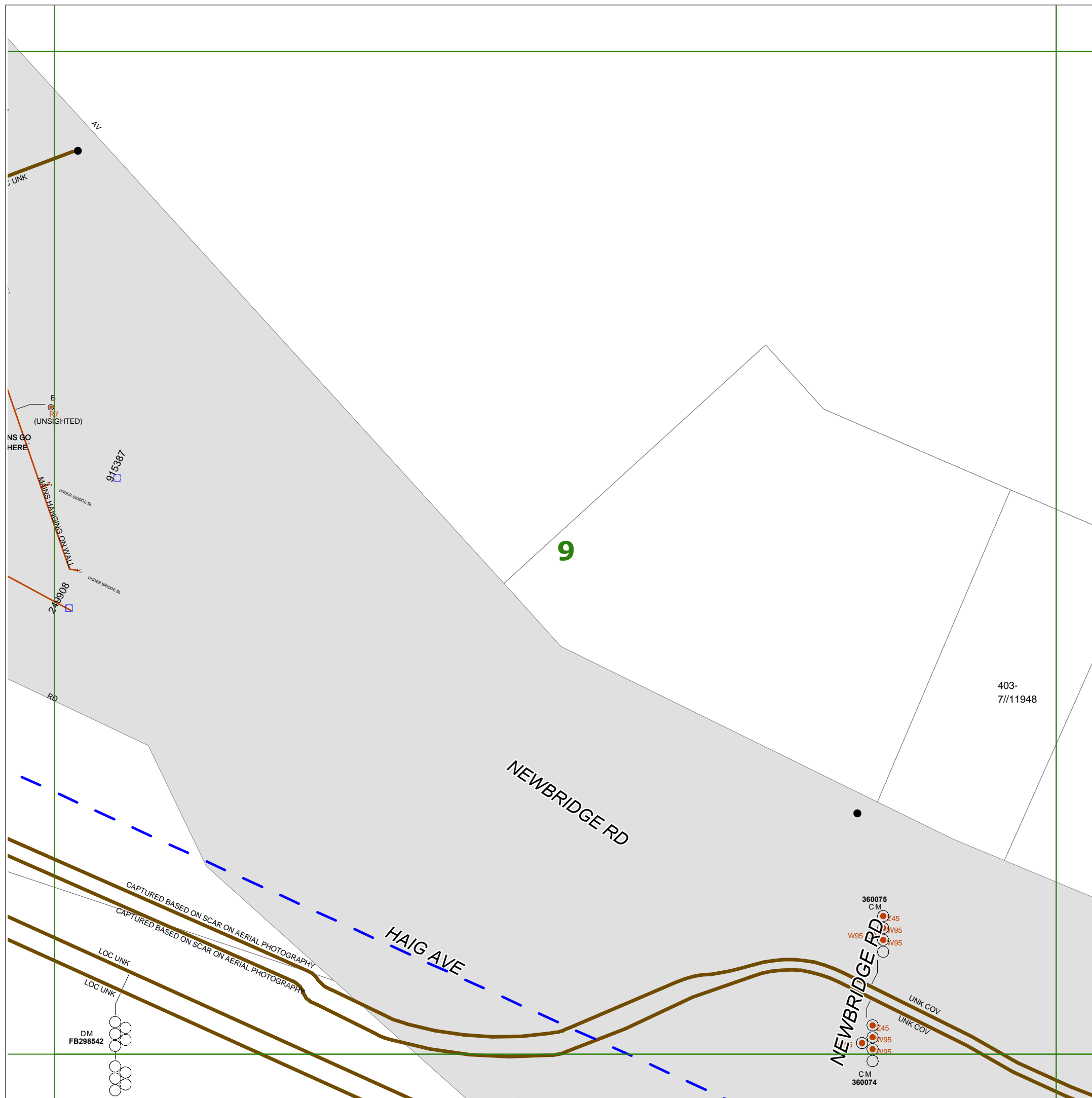
- | | | | |
|---|----|---|-----------------------------|
|  | or |  | Street light column |
|  | | | Padmount substation |
|  | or |  | Overground pillar (O.G.Box) |
|  | | | Underground pit |
|  | | | Duct run |
|  | | | Cable run |
|  | | | Typical duct section |
|  | | | Asbestos warning |

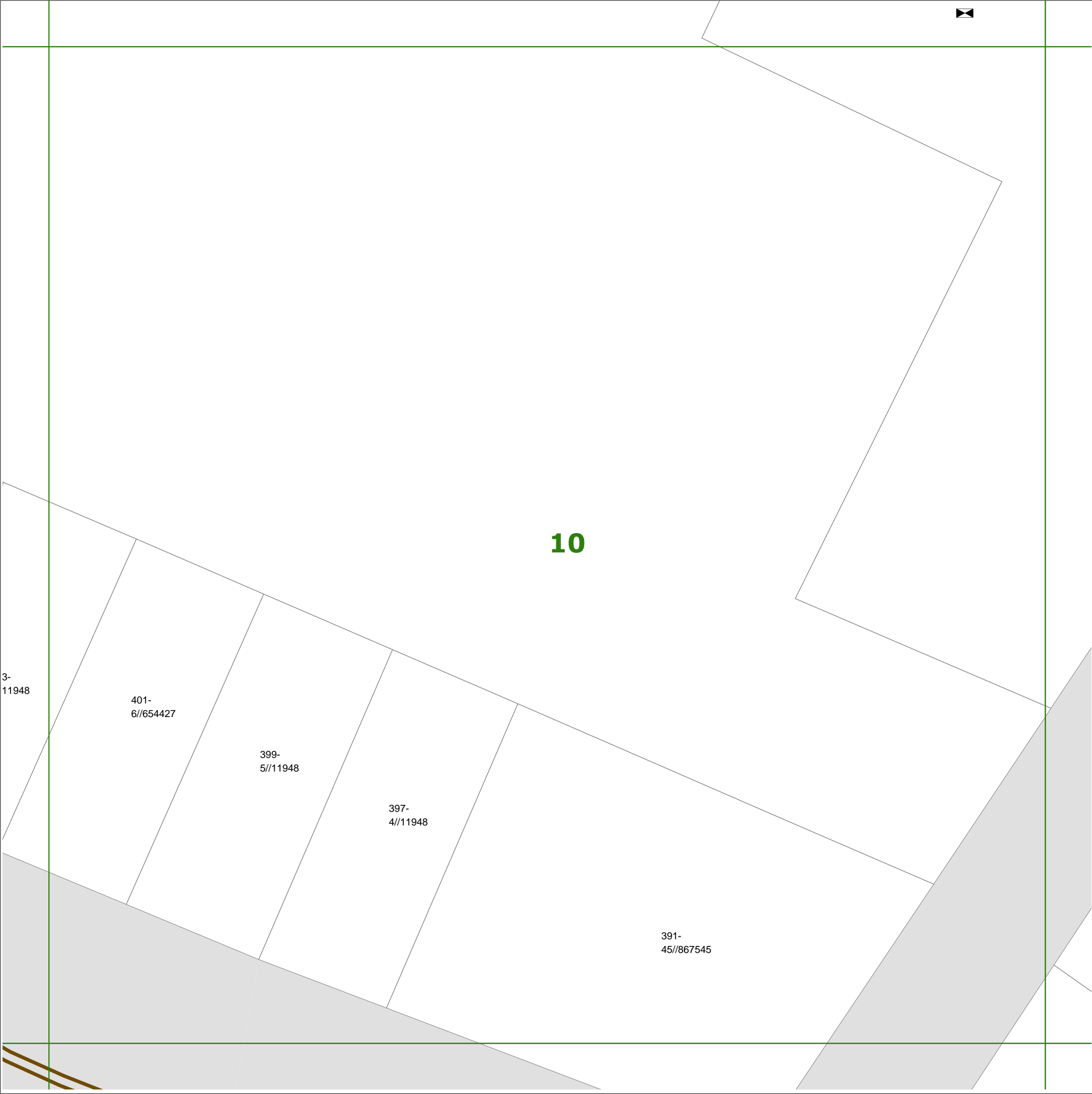


NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016





WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

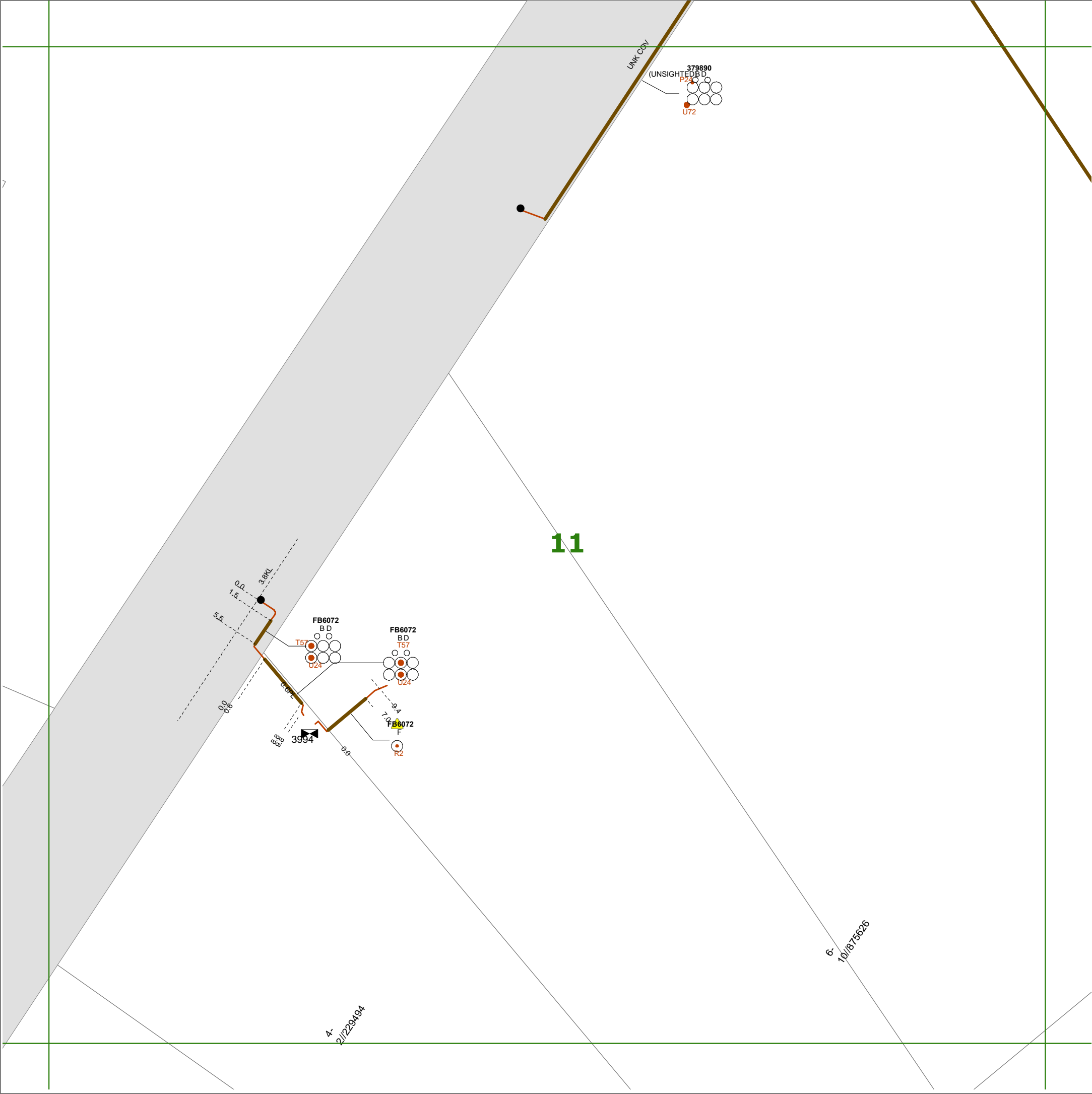
LEGEND

- ◻ or ◼ Street light column
- ▭ or ▩ Padmount substation
- ▭ or ▩ Overground pillar (O.G.Box)
- ◻ or ◼ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

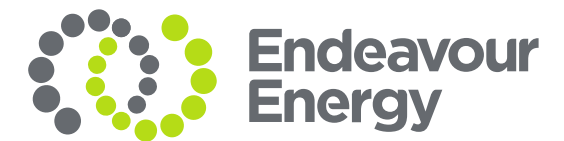
LEGEND

- or ■ Street light column
- ▤ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ▤ Underground pit
- Duct run
- Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- All electrical apparatus shall be regarded as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

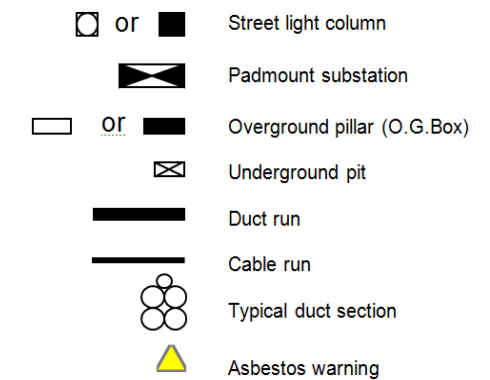
DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

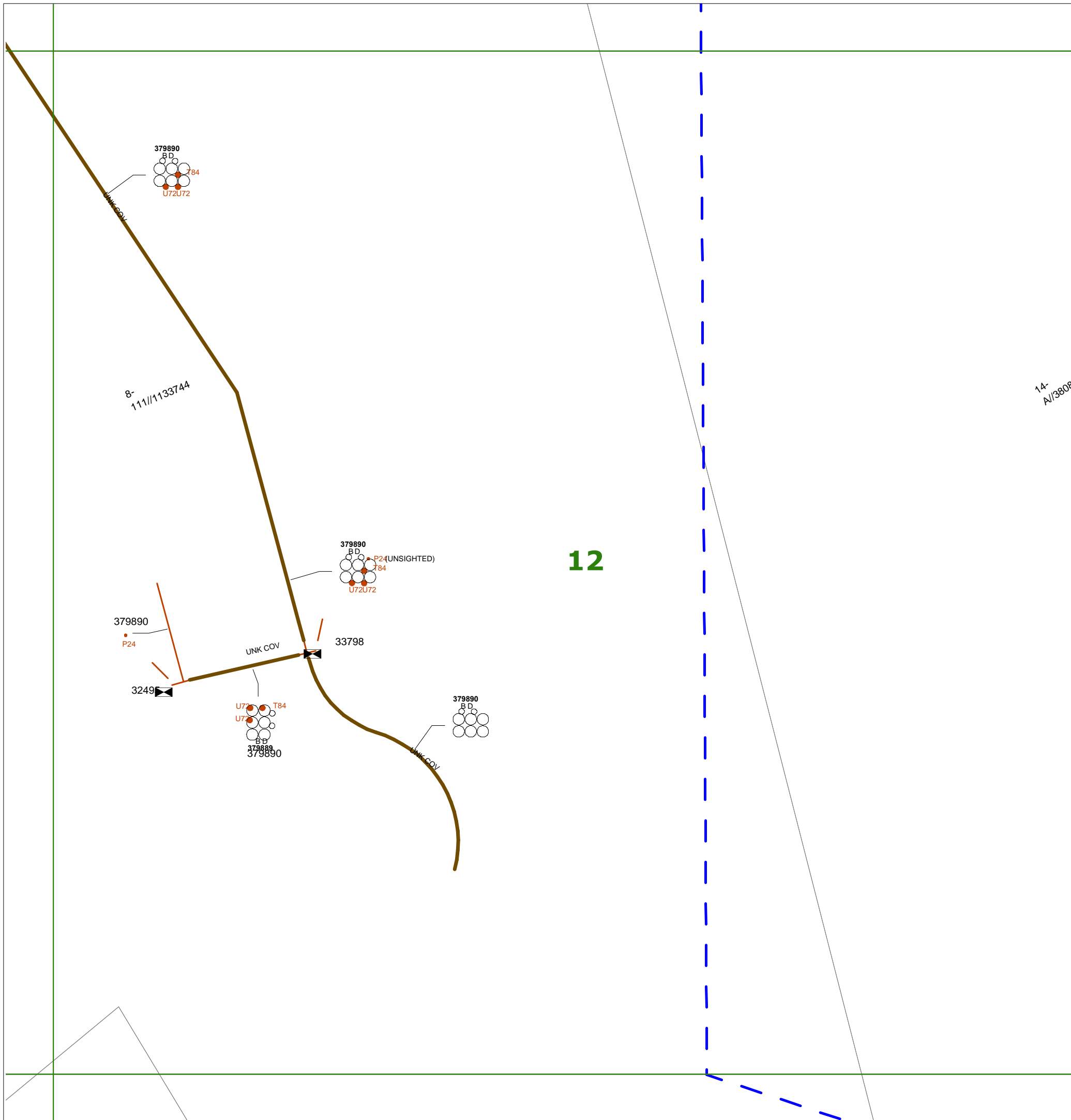


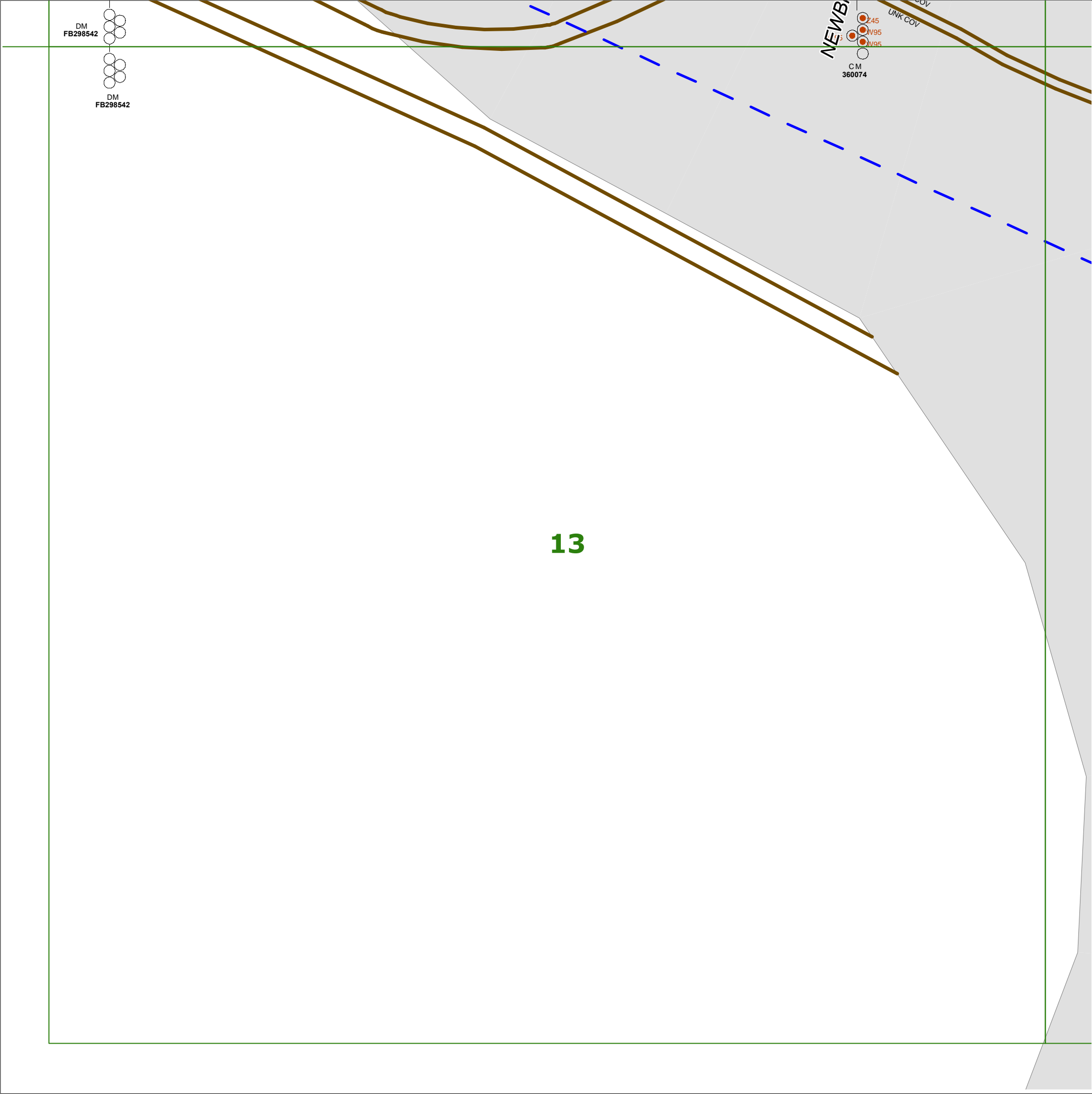
N
↑

NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016





WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY











- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

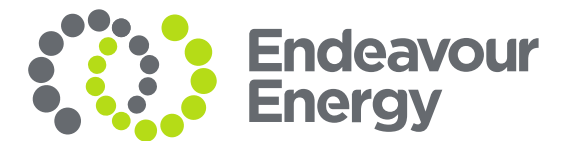
LEGEND

-  or  Street light column
-  Padmount substation
-  or  Overground pillar (O.G.Box)
-  Underground pit
-  Duct run
-  Cable run
-  Typical duct section
-  Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- All electrical apparatus shall be regarded as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.











DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

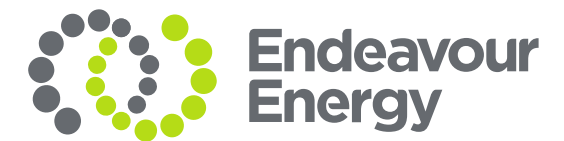
- | | | | |
|---|----|---|-----------------------------|
|  | or |  | Street light column |
|  | | | Padmount substation |
|  | or |  | Overground pillar (O.G.Box) |
|  | | | Underground pit |
|  | | | Duct run |
|  | | | Cable run |
|  | | | Typical duct section |
|  | | | Asbestos warning |



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016



WARNING

- **All electrical apparatus shall be regarded as live unless proved de-energised.**
Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.











DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

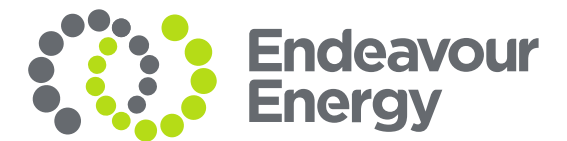
- | | |
|--|-----------------------------|
|  or  | Street light column |
|  | Padmount substation |
|  or  | Overground pillar (O.G.Box) |
|  | Underground pit |
|  | Duct run |
|  | Cable run |
|  | Typical duct section |
|  | Asbestos warning |

N
↑

NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.**
Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (**20**) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.











DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

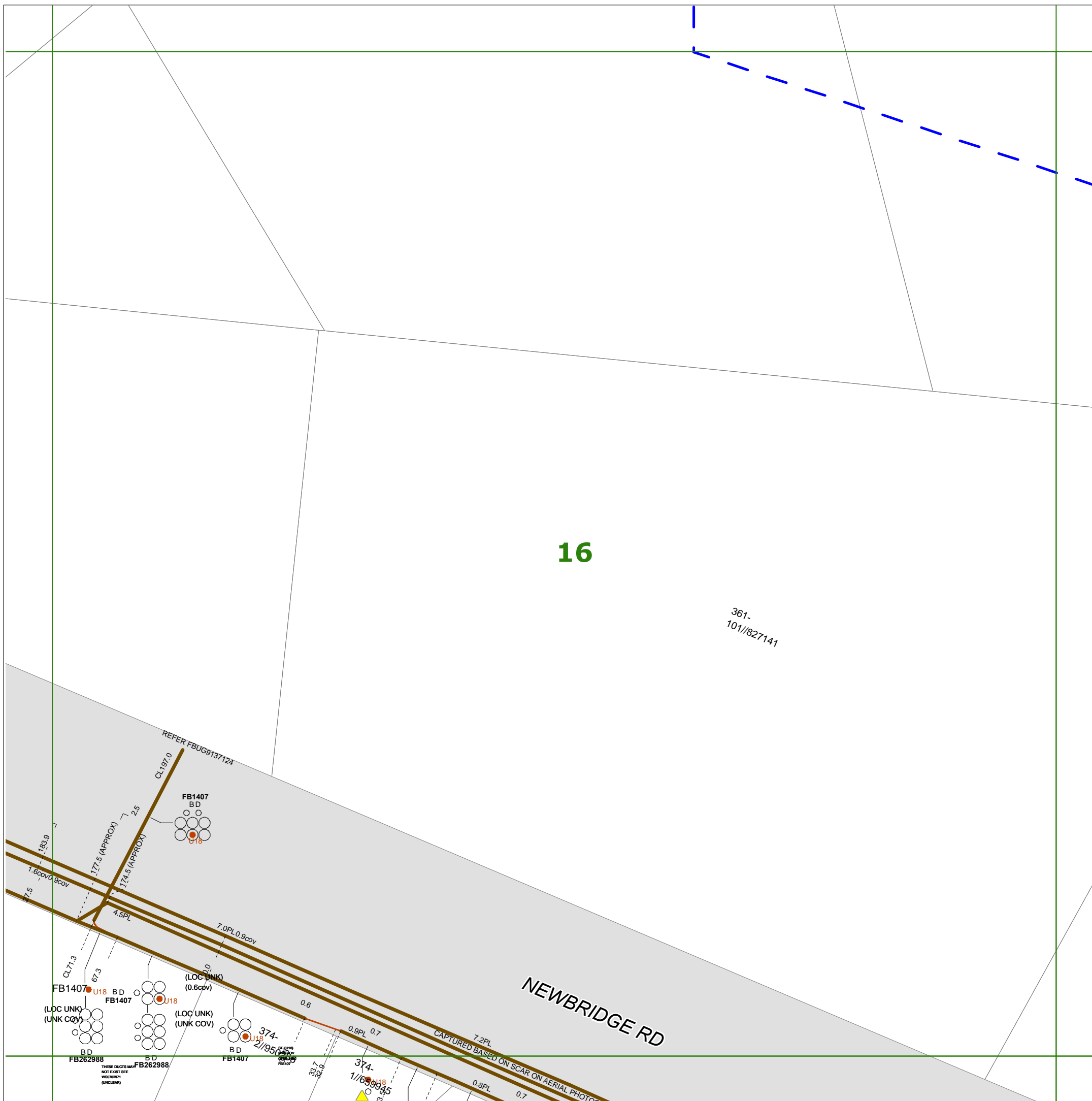
- | | | | |
|---|----|---|-----------------------------|
|  | or |  | Street light column |
|  | | | Padmount substation |
|  | or |  | Overground pillar (O.G.Box) |
|  | | | Underground pit |
|  | | | Duct run |
|  | | | Cable run |
|  | | | Typical duct section |
|  | | | Asbestos warning |

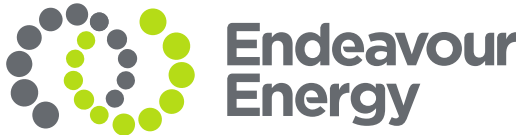
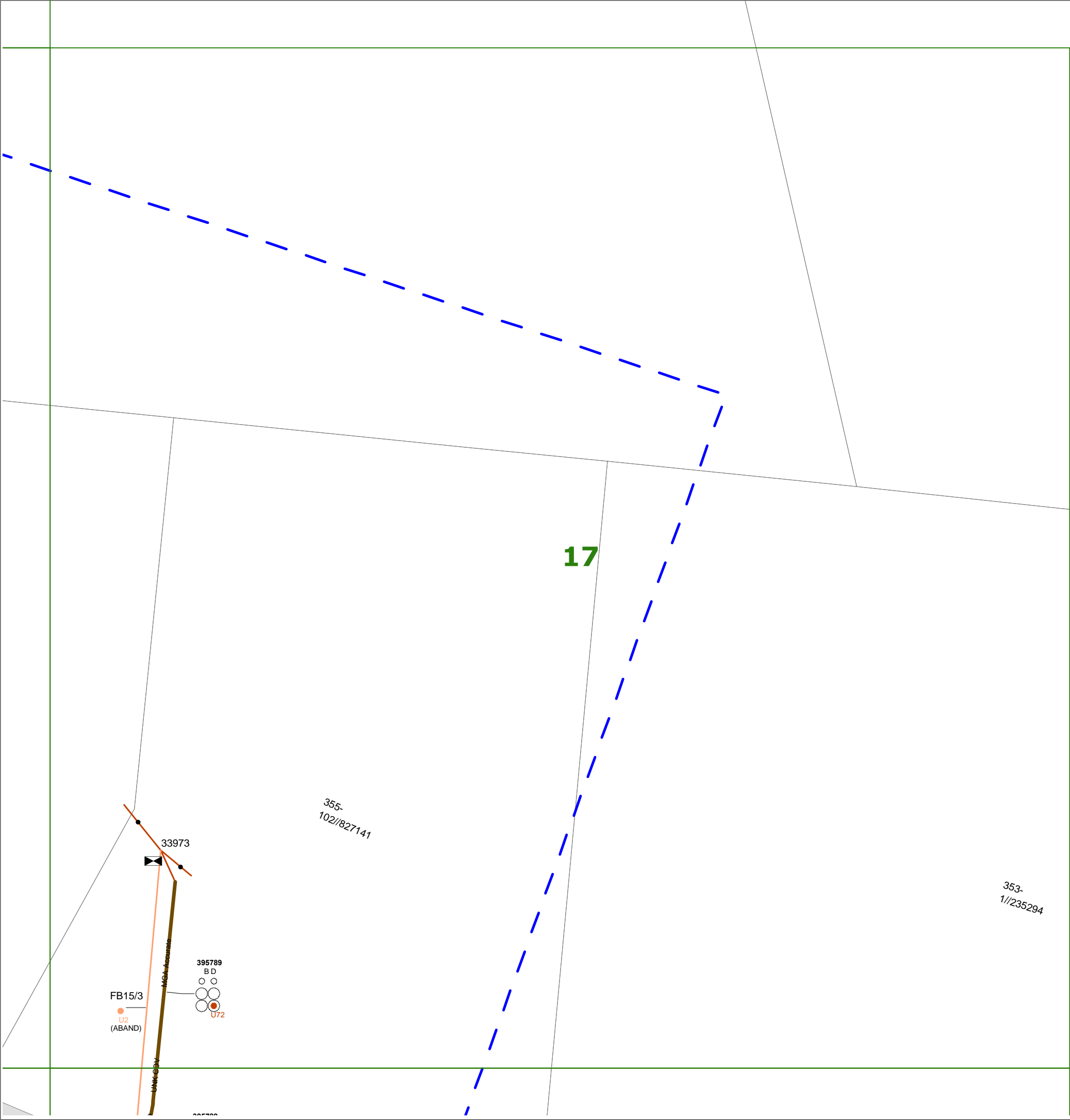


NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Cadastre: © Land and Property Information 2015, 2016





WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING
THIS EXCAVATION IS IN THE VICINITY OF
ENDEAVOUR ENERGY TRANSMISSION, PILOT,
COMMUNICATION OR FIBRE OPTIC CABLES
PLEASE RING 9853 7121 or MOB. 0407 468 626
4 WORKING DAYS BEFORE COMMENCING WORK

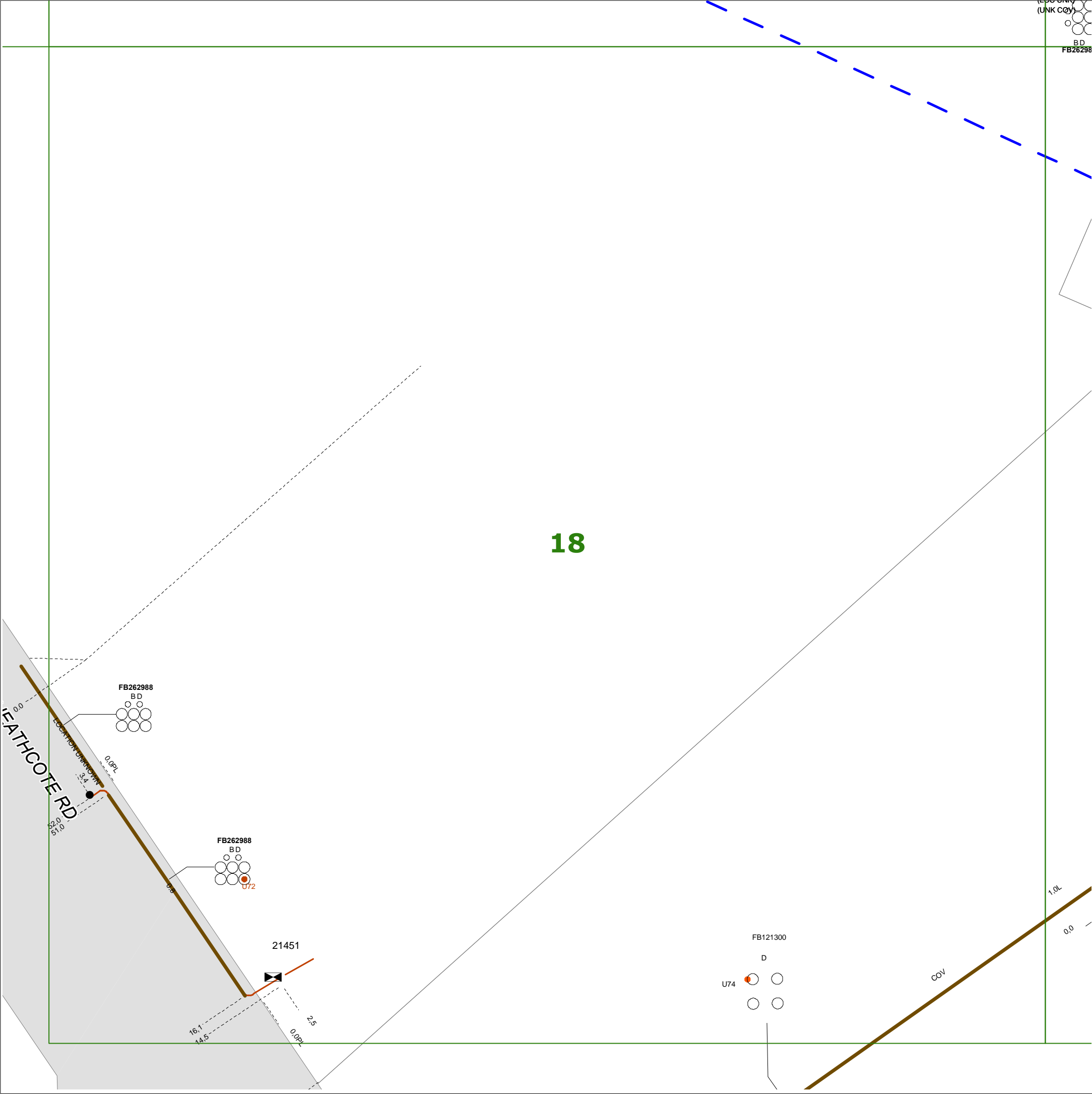
LEGEND

- or ■ Street light column
- ▭ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ⊠ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF ENDEAVOUR ENERGY TRANSMISSION, PILOT, COMMUNICATION OR FIBRE OPTIC CABLES. PLEASE RING 9853 7121 or MOB. 0407 468 626 4 WORKING DAYS BEFORE COMMENCING WORK

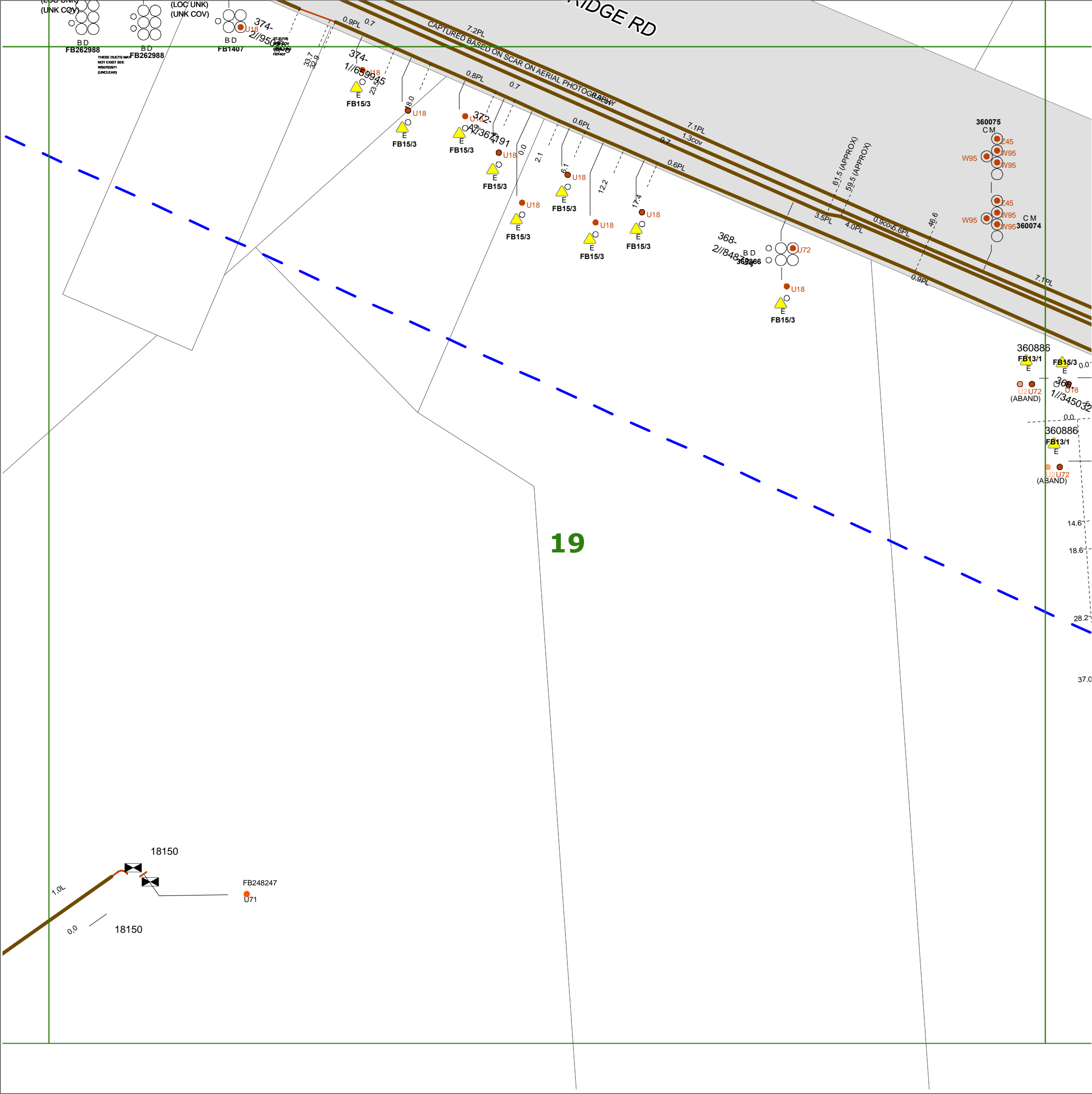
LEGEND

- or Street light column
- Padmount substation
- or Overground pillar (O.G.Box)
- Underground pit
- Duct run
- Cable run
- Typical duct section
- Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019



WARNING

- All electrical apparatus shall be regarded as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF ENDEAVOUR ENERGY TRANSMISSION, PILOT, COMMUNICATION OR FIBRE OPTIC CABLES. PLEASE RING 9853 7121 or MOB. 0407 468 626 4 WORKING DAYS BEFORE COMMENCING WORK

LEGEND

- or ■ Street light column
- ▤ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ▨ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

WARNING

THIS EXCAVATION IS IN THE VICINITY OF ENDEAVOUR ENERGY TRANSMISSION, PILOT, COMMUNICATION OR FIBRE OPTIC CABLES. PLEASE RING 9853 7121 or MOB. 0407 468 626 **4 WORKING DAYS BEFORE COMMENCING WORK**

LEGEND

- or ■ Street light column
- ▭ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ⊠ Underground pit
- Duct run
- Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning

**NOT TO SCALE**

DBYD Sequence No.:	86692595
Issued Date:	14/08/2019

Appendix B

SYDNEY WATER FEASIBILITY APPLICATION RESPONSE

RECORD OF MEETING

DATE: 25 th September 2019		TIME: 13:00 – 14:00	Meeting #1
LOCATION:	Sydney Water Office – 1 Smith St, Parramatta		
REFERENCE:	300115 – Moore Point		
ATTENDEES:	Joan Burchell	Sydney Water	
	Suhanti Thirunavukarasu	Sydney Water	
	Pradip Saha	Sydney Water	
	Richard Wajzer	Sydney Water	
	Kathy Hansen	Sydney Water	
	Faith Tid-Ang	Sydney Water	
	Aras Labutis	Coronation	
	Hilmand Dehsabzi	Coronation	
	Max Clinton	Leamac	
	Gavin Drennan	ADW Johnson	
	Will Piper	ADW Johnson	
APOLOGIES:			

ITEM	DESCRIPTION	ACTION BY	DUE DATE
1.0	GENERAL		
1.1	<ul style="list-style-type: none"> Meeting undertaken to introduce relevant parties and outline current expectations. 	-	-
1.2	<ul style="list-style-type: none"> ADWJ have requested information from Sydney Water regarding current water and sewer network capacity and possible system augmentations. Information will be used to prepare a service infrastructure report to support a rezoning application. 	-	-
1.3	<ul style="list-style-type: none"> Sydney Water have advised that they will be able to provide current capacity and preliminary upgrade requirements. Sydney Water have requested additional information regarding timing, yearly Lot yields, etc. to better inform their preliminary assessment. ADWJ to provide. Sydney Water have also requested any information from GSC/Council study into Georges River Precinct that Coronation may be able to provide. 	ADWJ	26/09/19
1.4	<ul style="list-style-type: none"> Sydney Water have also given indicative advice on the following: <ul style="list-style-type: none"> Waste water pumping station in Haigh Park will need upgrading at some point, but most likely cannot be moved. Layout may have to be altered. The rising main associated with the pumping station most likely won't need upgrading Water trunk main will most likely require upgrading, potentially to be completed by Sydney Water?? The development will need to provide separate reticulation main as the land is developed. 		

1.5	<ul style="list-style-type: none"> Sydney Water advised that a servicing strategy for both Sewer and Water will need to be completed. <ul style="list-style-type: none"> Sydney Water may have planning resources to complete this work and will outline timeframes for such work or alternatively the client may choose to engage a suitable consultant to complete the options report (servicing strategy). ADWJ outlined that their first priority was to obtain a letter from Sydney Water advising if the proposed development can be serviced with augmentations if required. ADWJ then advised they would work with Sydney Water to ascertain the existing capacity in the network in terms of: <ol style="list-style-type: none"> Dwellings that can be serviced. Identification of augmentation works required and the number of Lots that can be serviced with these works and potential timing. All parties agreed to another meeting in approximately 4 weeks time to keep the project moving forward. Sydney Water to advise of specific timing. 	ADWJ/Sydney Water	
-----	--	-------------------	--

LEAVE/SHUTDOWN: -	
NEXT MEETING DATE: TBC	TIME: TBC
LOCATION:	Sydney Water offices

RECORD OF MEETING

DATE: 28th November 2019		TIME: 10:30 – 12:00	Meeting #2
LOCATION:	Sydney Water Office – 1 Smith St, Parramatta		
REFERENCE:	300115 – Moore Point		
ATTENDEES:	Joan Burchell Pradip Saha Kathy Hansen Aras Labutis Hilmand Dehsabzi Max Clinton Will Piper	Sydney Water Sydney Water Sydney Water Coronation Coronation Leamac ADW Johnson	
APOLOGIES:	Gavin Drennan Angus McInnes Steven Penellum	ADW Johnson Leamac RMA Infrastructure	

ITEM	DESCRIPTION	ACTION BY	DUE DATE
1.0	GENERAL		
1.1	<ul style="list-style-type: none"> Meeting undertaken to progress project and discuss preliminary advice for the sewer and water network. 	-	-
1.2	<ul style="list-style-type: none"> Sydney Water provided preliminary network capacity advice for the proposed development. Water network: <ul style="list-style-type: none"> There is capacity in the existing network for up to 2,000 additional dwellings. This may be broken down to approximately 70% residential and 30% non-residential/commercial. Internal reticulation would be required to be constructed by the developer as part of the development works. Standard assumptions should be made for trunk reticulation subject to detailed assessment of the trunk mains. Upgrades required to service additional dwellings beyond initial capacity have not yet been advised. Future planning by Sydney Water will determine required upgrades. Water network infrastructure is currently being developed in Liverpool. A Water Reservoir is under construction in Liverpool and could increase capacity for the precinct. Due for completion in 2022/2023. Sewer Network: <ul style="list-style-type: none"> No additional capacity in the current network. Rising main is the limiting infrastructure. Pumping station requires staged upgrades to increase capacity. The upgrade works would be completed by Sydney Water. 	-	-

	<ul style="list-style-type: none"> o A minimum timeframe of 3 years would be required from conceptual planning stage to completion of upgrades. 		
1.3	<ul style="list-style-type: none"> • Sydney Water have to initiate the planning stage for the pumping station upgrades. • Proponents will seek a letter from Liverpool Council stating that they support the proposed development to give confidence to Sydney Water that the development will proceed. This will assist in commencing the planning stage for the upgrade works. 	Proponents	-
1.4	<ul style="list-style-type: none"> • Sydney Water advised that additional land will be required for upgrade of the pump station. Footprint of upgraded pump station is approximately 100 m x 100 m. • Proponents asked if pump station can be moved during upgrade works. Sydney Water unable to advise until detailed planning commences. 		
1.5	<ul style="list-style-type: none"> • Buffer/exclusion zones may apply to structures constructed adjacent to water and sewer assets. Sydney Water to advise. • Sydney Water to provide formal summary of advice discussed during meeting in written format i.e. email. 	Sydney Water	

LEAVE/SHUTDOWN: -	
NEXT MEETING DATE: January 2020	TIME: TBC
LOCATION:	Sydney Water offices

Appendix C

NBN Co. FEASIBILITY APPLICATION RESPONSE

Hannah Williams

From: Kareena Prado <kareenaprado@nbnco.com.au>
Sent: Tuesday, 1 October 2019 2:03 PM
To: Will Piper
Cc: Gavin Drennan
Subject: nbn Ref # DEV-00085417 NBN Feasibility Assessment Request - Newbridge Rd, Moorebank

Hello Will,

Thank you for speaking with me today.

I can confirm there is no backhaul cost to bring capacity to this development for 12500 connections at Cnr Newbridge Road and Bridges Road, Moorebank, NSW.

You mentioned there as an estimate the first stage of 1000 may start in 3 years.

nbn will bring the fibre from the Liverpool FAN (2LIV) and the only cost to the developer will be the cost to connect the NTD to each resident dependant on the building type (SDU - \$600 inc / MDU \$400 inc)

Please do not hesitate to contact me

Kind regards,
Kareena Prado

Business Development Manager, NSW/ACT | New Developments, Business Enterprise & Government
| M +61 4 2853 7208 | E kareenaprado@nbnco.com.au

Visit our New Developments site: www.nbn.com.au/newdevelopments

Remember to submit all Pre-Construct and As-Built designs for review via the [new upload tools](#).

For all existing application updates please use the [tracker](#)

business nbn™



From: Will Piper <willp@adwjohnson.com.au>
Sent: Wednesday, 11 September 2019 2:19 PM
To: Kareena Prado <kareenaprado@nbnco.com.au>
Cc: Gavin Drennan <gavind@adwjohnson.com.au>
Subject: [External] NBN Feasibility Assessment Request - Newbridge Rd, Moorebank

This message is from an external sender - be cautious, particularly with links and attachments.

Hi Kareena,

Just following up on the progress of our feasibility assessment request for Moorebank, as per our phone discussion and below email trail.

Thanks.

Regards,



Will Piper
PROJECT MANAGER

Central Coast Office
0427 017 312

Email : willp@adwjohnson.com.au
Website: www.adwjohnson.com.au



ADW Johnson Pty Limited

SYDNEY

Level 35 One International Towers, 100 Barangaroo Avenue, Sydney NSW 2000

Ph. 02 8046 7412

CENTRAL COAST

5 Pioneer Avenue, Tuggerah NSW 2259

Ph. 02 4305 4300

HUNTER

7/335 Hillsborough Road, Warners Bay NSW 2282

Ph. 02 4978 5100

THIS MESSAGE AND ANY FILES TRANSMITTED WITH IT ARE INTENDED FOR THE ADDRESSEE ONLY AND ARE TO BE USED ONLY FOR THE PURPOSES OF OUR CLIENTS INSTRUCTIONS. ANY FILES HEREWITH ARE COPYRIGHT OF ADW Johnson Pty Ltd. AND ARE NOT TO BE COPIED FOR ANY OTHER PURPOSE OR STORED ON A RETRIEVAL SYSTEM WITHOUT THE EXPRESS WRITTEN PERMISSION OF ADW Johnson Pty Ltd.

please don't print this e-mail unless you really need to.

From: Will Piper

Sent: Wednesday, 28 August 2019 10:36 AM

To: 'Matthew Pittas' <MatthewPittas@nbnco.com.au>

Cc: Kareena Prado <kareenaprado@nbnco.com.au>

Subject: RE: Feasibility Assessment Request - Newbridge Rd, Moorebank

Thanks Matthew, much appreciated.

Regards,



Will Piper
PROJECT MANAGER

Central Coast Office
0427 017 312

Email : willp@adwjohnson.com.au
Website: www.adwjohnson.com.au



ADW Johnson Pty Limited

SYDNEY

Level 35 One International Towers, 100 Barangaroo Avenue, Sydney NSW 2000

Ph. 02 8046 7412

CENTRAL COAST

5 Pioneer Avenue, Tuggerah NSW 2259

Ph. 02 4305 4300

HUNTER

7/335 Hillsborough Road, Warners Bay NSW 2282

Ph. 02 4978 5100

THIS MESSAGE AND ANY FILES TRANSMITTED WITH IT ARE INTENDED FOR THE ADDRESSEE ONLY AND ARE TO BE USED ONLY FOR THE PURPOSES OF OUR CLIENTS INSTRUCTIONS. ANY FILES HEREWITH ARE COPYRIGHT OF ADW Johnson Pty Ltd. AND ARE NOT TO BE COPIED FOR ANY OTHER PURPOSE OR STORED ON A RETRIEVAL SYSTEM WITHOUT THE EXPRESS WRITTEN PERMISSION OF ADW Johnson Pty Ltd.

please don't print this e-mail unless you really need to.

From: Matthew Pittas <MatthewPittas@nbnco.com.au>

Sent: Wednesday, 28 August 2019 10:36 AM

To: Will Piper <willp@adwjohnson.com.au>

Cc: Kareena Prado <kareenaprado@nbnco.com.au>

Subject: RE: Feasibility Assessment Request - Newbridge Rd, Moorebank

Thanks Will.

I have emailed Kareena to contact you and get the application started.

Kareena Prado

Business Development Manager, NSW/ACT | New Developments, Business Enterprise & Government

| M +61 4 2853 7208 | E kareenaprado@nbnco.com.au

Regards,
Matthew Pittas

Relationship Manager | nbn New Developments | Demand Programs | NPD

M 0429 834 846 | E matthewpittas@nbnco.com.au

Level 18, 100 Arthur St, North Sydney NSW 2060



Notice to recipient: This e-mail is intended only to be read or used by the addressee. It is confidential and may contain information that is subject to legal professional privilege or protected by copyright. If you are not the addressee indicated in this message (or responsible for delivery of the message to that person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply e-mail. Copyright, confidentiality and legal professional privilege are not waived or lost by reason of mistaken delivery to you. Emails to/from nbn co limited ABN 86 136 533 741 may undergo email filtering and virus scanning, including by third party contractors, however, nbn co limited does not guarantee that any email or any attachment is secure, error-free or free of viruses or other unwanted or unexpected inclusions. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of nbn co limited.

PLEASE CONSIDER OUR ENVIRONMENT BEFORE PRINTING

From: Will Piper <willp@adwjohnson.com.au>

Sent: Wednesday, 28 August 2019 9:44 AM

To: Matthew Pittas <MatthewPittas@nbnco.com.au>

Subject: [External] Feasibility Assessment Request - Newbridge Rd, Moorebank

This message is from an external sender - be cautious, particularly with links and attachments.

Hi Matthew,

We are engaged to prepare a service infrastructure report as part of a rezoning application for a large site at Moorebank (intersection of Newbridge Rd and Bridges Rd). The rezoning application is proposing to change the zoning from its current industrial zoning to residential and it is proposed to be developed into approx. 12,500 apartments and commercial usage as per the attached plan.

We would like to request a feasibility assessment from NBN in order to provide advice in relation to availability of NBN to the site, capacity requirements and likely back haul costs. Are you able to help organise this?

I note that the online feasibility assessment request no longer appears to be available from the NBN website.

I believe our senior project manager Gavin Drennan may have recently sent an email to someone at NBN regarding this site, but as he is away on leave at the moment I am not sure who he contacted.

Thank you for your help.

Regards,



Will Piper

PROJECT MANAGER

Central Coast Office

0427 017 312

Email : willp@adwjohnson.com.au

Website: www.adwjohnson.com.au



ADW Johnson Pty Limited

SYDNEY	Level 35 One International Towers, 100 Barangaroo Avenue, Sydney NSW 2000	Ph. 02 8046 7412
CENTRAL COAST	5 Pioneer Avenue, Tuggerah NSW 2259	Ph. 02 4305 4300
HUNTER	7/335 Hillsborough Road, Warners Bay NSW 2282	Ph. 02 4978 5100

THIS MESSAGE AND ANY FILES TRANSMITTED WITH IT ARE INTENDED FOR THE ADDRESSEE ONLY AND ARE TO BE USED ONLY FOR THE PURPOSES OF OUR CLIENTS INSTRUCTIONS. ANY FILES HERewith ARE COPYRIGHT OF ADW Johnson Pty Ltd. AND ARE NOT TO BE COPIED FOR ANY OTHER PURPOSE OR STORED ON A RETRIEVAL SYSTEM WITHOUT THE EXPRESS WRITTEN PERMISSION OF ADW Johnson Pty Ltd.

 please don't print this e-mail unless you really need to.

Appendix D

JEMENA FEASIBILITY APPLICATION RESPONSE

Hannah Williams

From: Neale Hilton <Neale.Hilton@jemena.com.au>
Sent: Wednesday, 28 August 2019 11:31 AM
To: Gavin Drennan
Subject: FW: 300115 - Moore Point Servicing Infrastructure - Gas - response
Attachments: Moore Point Structure Plan 08072019.pdf; Masterplan land use yield schedule.xlsx; Cocon 26.pdf; Cocon in-situ 1.jpg

Gavin

Thank you for providing this initial information regarding the proposed development of Moore Point. Jemena appreciates being involved in the early planning of these sites and can confirm that the existing 1050kPa High Pressure network located in Bridges Rd currently has capacity to supply the nominated residential and Retail yield in this estate.

From this High Pressure gas main, a below ground Regulator Station will have to be installed to allow a suitable medium pressure plastic network extend to each building through the future road network. Attached is a typical below ground regulator station that will need to be accommodated.

Please note Jemena does not reserve capacity for any individual project and will make a formal offer once construction is imminent. Regards.

Neale Hilton

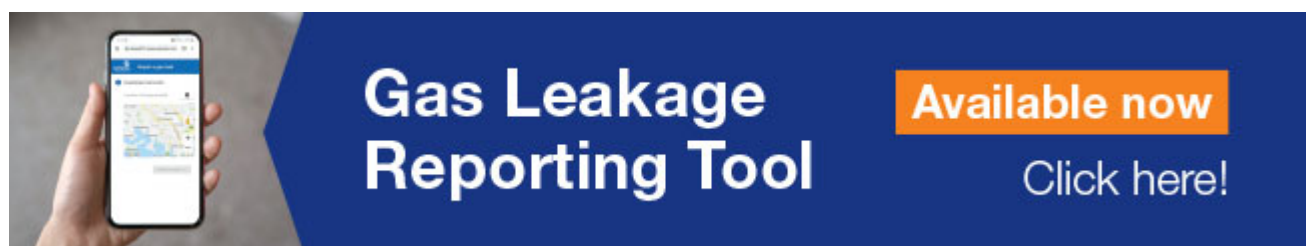
Network Development Manager

Jemena

Level 14, 99 Walker Street, North Sydney, NSW 2060

M 0402 060 151

neale.hilton@jemena.com.au | www.jemena.com.au



From: Gavin Drennan <gavind@adwjohnson.com.au>
Sent: Tuesday, 20 August 2019 11:17 AM
To: Gregory Knight <Gregory.Knight@jemena.com.au>
Cc: Will Piper <willp@adwjohnson.com.au>; Ben Myles <benm@adwjohnson.com.au>
Subject: 300115 - Moore Point Servicing Infrastructure - Gas

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and are expecting the content or attachment from the sender.

Hi Greg,

We are engaged to prepare a service infrastructure report as part of a rezoning application for a large site at Moorebank.

The rezoning application is proposing to change the zoning from its current industrial zoning to residential and it is proposed to be developed into approx. 12,500 apartments and commercial usage as per the attached spreadsheet and plan

Can you please provide advice on the following:

- confirm existing infrastructure
- any augmentation requirements to the network for the proposed development yield
- Timing for augmentation requirements
- Advice on existing capacity to quantify what yield can utilise the existing infrastructure prior to any augmentation requirements

Please give me a call if you have any queries

Regards,



Gavin Drennan

Sydney Office

0413 804 000

Email : gavind@adwjohnson.com.au

Website: www.adwjohnson.com.au



ADW Johnson Pty Limited

SYDNEY

Level 35 One International Towers, 100 Barangaroo Avenue, Sydney NSW 2000

Ph. 02 8046 7411

CENTRAL COAST

5 Pioneer Avenue, Tuggerah NSW 2259

Ph. 02 4305 4300

HUNTER

7/335 Hillsborough Road, Warners Bay NSW 2282

Ph. 02 4978 5100

THIS MESSAGE AND ANY FILES TRANSMITTED WITH IT ARE INTENDED FOR THE ADDRESSEE ONLY AND ARE TO BE USED ONLY FOR THE PURPOSES OF OUR CLIENTS INSTRUCTIONS. ANY FILES HEREWITH ARE COPYRIGHT OF ADW Johnson Pty Ltd. AND ARE NOT TO BE COPIED FOR ANY OTHER PURPOSE OR STORED ON A RETRIEVAL SYSTEM WITHOUT THE EXPRESS WRITTEN PERMISSION OF ADW Johnson Pty Ltd.

please don't print this e-mail unless you really need to.

[Report this message as spam](#)

Appendix E

ENDEAVOUR ENERGY FEASIBILITY APPLICATION RESPONSE

31 October 2019

Endeavour Energy Ref: ENL3510

ADW Johnson
5 Pioneer Avenue
TUGGERAH NSW 2259

Attention: Gavin Drennan

ENL3510 – Newbridge road, MOOREBANK NSW 2170

Thank you for your application providing information of the proposed re-zoning and redevelopment of the above-mentioned site. Endeavour Energy has carried out a desktop assessment of providing power supply via existing and new feeders to support the ultimate load of the development.

Since no maximum demand breakdown was received with the application, we have determined the total proposed load based on AS3000 and the GFA breakdown of land uses (received from ADW Johnson) and estimated the load to be **50MVA (diversified)**.

Available Capacity from Existing Network

Assuming all the existing premises will be demolished, the surrounding 11kV feeders can be freed up and utilised as follows (please also refer to the plan below);

- Feeder 6431 currently being double cabled can be split into two feeders and each would be able to accommodate about 3.9MVA (with total being 7.8MVA). This will involve some minor works at Moorebank Zone Substation and some cable reticulation work near/around the site.
- Feeders 6419 and 6426 that run past the site (east side) can each provide 1.5MVA capacity with some minor upgrade works of the existing assets.

The above, constituting to approximately 10MVA, can support about 2500 dwellings.



Proposed Network

The remaining 40MVA load will require 8nos new 11kV feeders to be reticulated from Moorebank Zone Substation. Works may involve,

- circuit breaker termination works of 6nos 11kV cables in Moorebank Zone Substation,
- installation of two new switching stations at Moorebank Zone Substation to allow branching out of the remaining 2nos cables.
- reticulation of all the 8nos new 11kV feeders along Newbridge road to reach the development site (appropriate route to be investigated).

Please refer to the plan below.



In addition to the above, the site will require a 11kV distribution network designed and constructed to Endeavour Energy standards to supply each lot/establishment.

Note: The above is a preliminary advice only and does not reserve capacity unless firm applications are received with staging plans. The above described methodologies are conceptual only and are based on the current conditions of the network and is subject to change depending on load applications received and actual loads observed.

Regards,

Ayman

Ayman Shahalam

Contestable Works Project Manager

Network Connections

T : 02 9853 7803

M: 0439 351 215

490 Hoxton Park Rd, Hoxton Park

<http://www.endeavourenergy.com.au>

Appendix F

LIVERPOOL'S LOCAL STRATEGIC PLANNING STATEMENT

Elizabeth Foster

To: Gavin Drennan
Subject: RE: Sydney Water - Sewer Pump Station upgrade works - Georges River North

From: David Smith <SmithD@liverpool.nsw.gov.au>
Sent: Wednesday, 29 January 2020 11:54 AM
To: joan.burchell@sydneywater.com.au
Subject: Sydney Water - Sewer Pump Station upgrade works - Georges River North

Hi Joan,

Liverpool City Council is progressing a structure plan in a collaborative manner with the key landowners in the Georges River North Precinct in the Liverpool Collaboration Area consistent with the District Plan, Place Strategy and the Draft LSPS exhibited by Council in 2019.

Action 11.2 of the draft LSPS states that Council will *investigate amendments to the LEP to rezone the river precinct north of Newbridge Road (Moore Point) as a mixed use zone to support the Liverpool CBD and Innovation Precinct with an extensive open space system and cross river linkages in the short to medium term*. The LSPS defines short term as between 2019/20-2020/2021 and medium term as 2021/22 to 24/25. The proposal is to change the current industrial zoning to mixed use including commercial and residential.

Council understands that Coronation and Leamac (that are in a joint landowner group and are the majority owners of the precinct) requested Sydney Water provide capacity and future upgrade information regarding their water and sewer networks in the vicinity of the site as part of a services feasibility assessment. Council also understands that in order to commence the preliminary planning phase of the upgrade works, Sydney Water is seeking confirmation that the proposed urban regeneration project is intended to progress. Council requests that Sydney Water commence the planning phase of the sewer pump station upgrade works for the Georges River North Precinct now in order to service the proposed renewal of the area within a reasonable timeframe, consistent with the draft LSPS and the Liverpool Collaboration Area Place Strategy.

If you have further queries, please let me know. Attached for your information is a copy of the draft LSPS that has been endorsed by the Council and is currently awaiting assurance review from the GSC.

Regards,

David Smith
Manager Planning & Transport Strategy



02 8711 7610 | 0447 162 283 | SmithD@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



www.liverpool.nsw.gov.au



This email (including any attachments) may contain confidential and/or legally privileged information. If you are not the intended recipient please delete this email and notify us by telephone. Any privilege is not waived and the storage, use or reproduction is prohibited.

CONNECTED LIVERPOOL 2040

**LIVERPOOL'S LOCAL STRATEGIC
PLANNING STATEMENT**
A LAND USE VISION TO 2040

**LIVERPOOL
CITY
COUNCIL**

CONTENTS

MAYOR'S MESSAGE	4
CEO'S MESSAGE	5
OUR PEOPLE	6
ABOUT THE PLAN	7
IMPLEMENTATION TIMEFRAMES	8
WHAT WE'VE HEARD	9
LIVERPOOL TODAY	12
KEY CHALLENGES AND OPPORTUNITIES	15
VISION	18
LIVERPOOL CITY COUNCIL STRUCTURE PLAN	20
LIVERPOOL CITY CENTRE AND SURROUNDING AREA	22
PLANNING PRIORITIES	23
PLAN ON A PAGE	24
Connectivity – Our Connections	27

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport /Aerotropolis

PLANNING PRIORITY 3

Accessible and connected suburbs

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

Liveability – Our Home

37

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community



Productivity – Our Jobs

51

PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

Sustainability – Our Environment

61

PLANNING PRIORITY 14

Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

PLANNING PRIORITY 16

Rural lands are protected and enhanced

IMPLEMENTATION, MONITORING AND REPORTING

71

ABBREVIATIONS

CAV	Connected and Autonomous Vehicles
CHP	Community Housing Provider
CSP	Community Strategic Plan
DCP	Development Control Plan
DPIE	Department of Planning, Industry and Environment
EP&A	Environmental Planning and Assessment Act 1979
FAST	Fifteenth Avenue Smart Transit
IP&R	Integrated Planning and Reporting
LALC	Local Aboriginal Land Council

LEP	Local Environmental Plan
LGA	Local Government Area
LIP	Liverpool Innovation Precinct
LSPS	Local Strategic Planning Statement
NARClIM	NSW and ACT Regional Climate Modelling
TfNSW	Transport for NSW
WSA	Western Sydney Airport (Company)
WSI	Western Sydney International (Nancy-Bird Walton) Airport
WSPP	Western Sydney Planning Partnership

Front cover image:

The mural featured on the front cover of *Connected Liverpool 2040* is by artist Claire Foxton, and portrays University of Wollongong student and social justice advocate Adi Holmes.

MAYOR'S MESSAGE



The next 20 years promise to be an exciting time for Liverpool. Connected Liverpool 2040, our Local Strategic Planning Statement (LSPS), represents the shared vision of Council and the community and will inform future land use planning for Liverpool, one of the fastest growing areas in Sydney.

Thank you to everyone who contributed to the development of Connected Liverpool 2040. We heard from a large number of residents, ratepayers and businesses during our extensive consultation on this document.

I'm looking forward to seeing Liverpool grow over the next 20 years. The new Western Sydney International (Nancy-Bird Walton) Airport will open, providing local employment, education and business opportunities for our community. Council's flagship Fifteenth Avenue Smart Transit (FAST) Corridor project will make sure our residents can take advantage of these opportunities with a short and comfortable trip to work.

Liverpool's CBD will transform into a vibrant destination with a strong 24-hour economy. The city will be more walkable, cooler and greener, with the Georges River at its heart.

The Liverpool Innovation Precinct, anchored by Liverpool Hospital, will grow, providing high-value health, education, research and advanced manufacturing jobs for the local community.

The population will also grow, but as it does we will make sure we channel that growth into the right places, and that there are the modern, high-quality facilities, services and amenities that our residents and visitors need and deserve.

While many aspects of Liverpool are changing and opportunities abound, I am also mindful of the things about Liverpool we love and want to remain – the local character of our suburbs, our significant heritage, our fantastic bushland, our civic pride and our commitment to diversity.

The 16 priorities of Connected Liverpool 2040 capture our goals for Liverpool over the next 20 years and provide a clear plan of how we're going to achieve them. The future is looking bright.

MAYOR WENDY WALLER



CEO'S MESSAGE



A clear vision for Liverpool's future and a robust plan for getting there are vital if we are to harness the rapid change and growth the city is experiencing.

The nation's largest infrastructure project – Western Sydney International (Nancy-Bird Walton) Airport – is located entirely within our Local Government Area (LGA). The Western Sydney Aerotropolis is already attracting global corporations as our city centre continues its transformation into a vibrant, productive, mixed-use CBD.

We will attract more businesses, more people and more jobs. We need to make sure that the opportunities these changes create are maximised to benefit the whole community. To do this we must plan ahead, implement city-shaping projects and work to safeguard the elements that make Liverpool a great place in which to live, work and play.

The Local Strategic Planning Statement (LSPS), Connected Liverpool 2040, details our priorities over the next 20 years of development, and provides a list of actions that make sure we can meet our goals.

These actions include the completion of some of Council's most ambitious strategic projects ever attempted – realigning our CBD around the Georges River including a river-edge promenade and new river crossings; developing Woodward Park into our own 'Central Park' – an iconic lifestyle precinct that will be a thriving hub of community activity known as Woodward Place; creating a rapid transit link between the Liverpool City Centre and the new Western Sydney International Airport; and transforming our ageing stock of community facilities into a world-class network of modern, attractive facilities that address community needs.

The LSPS is our strategic roadmap for the future. It is based on and expands upon the priorities of our Community Strategic Plan, *Our Home, Liverpool 2027*, and provides a one-stop resource for the major planning work we're doing to make Liverpool a vibrant, diverse and attractive place.

I thank the community for its contribution to developing the LSPS. We had thousands of survey responses, close to 150 formal submissions, and countless conversations that all shaped the final document making it stronger and more reflective of our shared vision for Liverpool's continued success.

A handwritten signature in black ink, appearing to read 'Kiersten Fishburn'.

CEO, KIERSTEN FISHBURN



OUR PEOPLE

Liverpool City Council acknowledges the original inhabitants of the Liverpool Local Government area being the Darug and Dharawal Aboriginal People. We acknowledge that Aboriginal culture continues to strengthen and enrich our community.

We commit ourselves to preserve past, present and future identified Aboriginal sites and cultural landscapes, and to recognise and accept the significance of the Georges River as a 'Meeting Place' for the Darug, and Dharawal Aboriginal people.

Liverpool City Council supports and encourages Aboriginal and non Aboriginal people working together towards reconciliation.

Liverpool is one of the first official settlements in Australia, built by convicts and free settlers, and has become home to people from more than 150 nations.

We recognise the diversity of many cultures who share the values of tolerance and respect for one another. This diversity of our community is a great strength and we commit to working together to advance the interests of all residents.



ABOUT THE PLAN

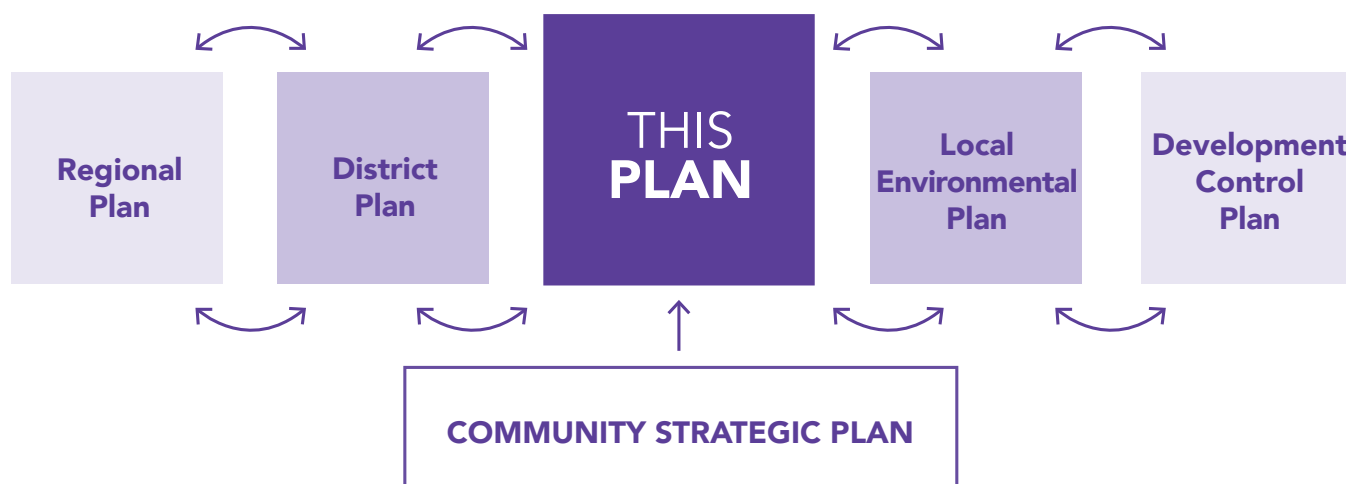
The Local Strategic Planning Statement (LSPS) has been created to set Liverpool City Council's strategic planning vision for the next 20 years.

It lists our planning priorities across four areas: **Connectivity, Productivity, Liveability, and Sustainability**. The LSPS will inform what type of growth occurs in our local government area (LGA), where it occurs and when it occurs. It sets out actions to deliver on our planning priorities in order to meet the community's future vision for Liverpool.

The LSPS has been prepared in accordance with the *Environmental Planning and Assessment Act 1979* (the EP&A Act). It identifies:

- The **basis for strategic planning** in Liverpool, having regard to economic, social and environmental matters;
- The **planning priorities** for Liverpool that are consistent with the *Western City District Plan* and the *Community Strategic Plan*;
- The **actions** required for achieving the planning priorities; and
- How Council will monitor and report on the **implementation of those actions**.

The LSPS gives effect to the *Greater Sydney Region Plan* and *Western City District Plan*. It also takes into consideration State Environmental Planning Policies (SEPPs) and Ministerial Directions issued under Section 9.1 of the EP&A Act.



It has also been informed by Council's Community Strategic Plan (CSP) – *Our Home, Liverpool 2027* – and aligns with the CSP's directions.

DIRECTION 1
Creating Connection

DIRECTION 2
Strengthening and Protecting our Environment

DIRECTION 3
Generating Opportunity

DIRECTION 4
Leading through Collaboration

IMPLEMENTATION TIMEFRAMES

SHORT TERM

Now-2020/2021

MEDIUM TERM

2021/2022-2024/2025

LONG TERM

2025/2026-2028/2029

VISIONARY

2029/2030+

WHAT WE'VE HEARD

The LSPS has been informed by extensive community consultation including:

Preliminary consultation (Feb – May 2019):

- A flyer to residents in the Liverpool LGA;
- An online survey on Council's 'Liverpool Listens' webpage (approximately 500 responses);
- Feedback provided at District Forums;
- Feedback provided at the Moorebank Community Forum
- Planner for a Day preschool excursion; and
- A Youth Workshop held in May 2019.

Public Exhibition (28 June 2019 – 9 August 2019):

- An online survey on Council's 'Liverpool Listens' webpage (approximately 500 responses);
- Ideas wall / interactive online map;
- Pop Ups at Shopping Centres across the Liverpool LGA;
- Drop-in sessions at libraries and community centres;
- Business and Developer Breakfast; and
- Feedback provided at District Forums.

Council has also built upon the extensive consultation undertaken when developing our Community Strategic Plan – *Our Home, Liverpool 2027*. It has also been developed in consultation with Councillors, staff, state agencies and neighbouring councils.

During the exhibition period, Council received a positive response from the community including through 147 formal submissions; 542 survey responses; and over 680 big ideas.



What makes my suburb a great place to live?

The culture –
everyone is
welcome

**Close
proximity
to shops
and schools**



The rich history of Liverpool, recent education opportunities, an Airport in the future, and a very diverse population.



**Great community, sports
facilities nearby**

**Location, hospital, shopping
malls, university, restaurants,
access to main roads**

**The diversity of the
people, the upcoming
vibrant culture**



**The Georges River and
Chipping Norton Lakes**

Location, not too far from
the Sydney CBD and
close to the outer west



**Proximity to major
transport routes**

What would make your suburb better?



A **clean** and **safer** community

More jobs, less traffic and cheaper housing

Express train to the city



Greater employment opportunities

Increase commuter parking spaces at Edmondson Park Station



LIVERPOOL TODAY

OUR HOME

A growing city with a diverse community and rich heritage.

Liverpool is a growing city with a bright future. Spanning the Georges River in the east to the Nepean River in the west, it is a diverse local government area (LGA) featuring city, suburban and rural living.

Liverpool is the modern face of multicultural Australia. We are proudly one of the most culturally diverse cities in NSW with around 40% of people born overseas and half the population speaking a language other than English at home. We have high levels of refugee and migrant settlement, which Council has been vocal in supporting, so our diversity is growing. We also have a significant Aboriginal community, and celebrate the original inhabitants – the Darug and Dharawal people.

Liverpool is experiencing substantial growth, with the population expected to increase by around 60% between 2019 and 2036. This growth is due to increased residential development in our city centre and near train stations, and through new release development in our growth areas.

The city is working to solidify its position as a strategic centre. The Liverpool City Centre is being revitalised to support increased commercial and residential uses and will develop into a walkable, active river city with attractive open spaces and increased transport connections. A burgeoning health and education-focused innovation precinct could see additional health and knowledge workers attracted to the area, beyond the 30,000 health and knowledge workers already expected by 2036.

We are also proudly home to the Western Sydney International (Nancy-Bird Walton) Airport, set to open in 2026. The airport and associated Aerotropolis are expected to generate significant employment and economic opportunities for Liverpool, including knowledge-intensive jobs. The Liverpool City Centre is equidistant from Western Sydney International Airport and Sydney Airport, making it a natural location for development supporting the new airport.

Liverpool has substantial environmental assets, with a wide variety of plants, animals and ecosystems, including a significant number of threatened species. As Liverpool grows and the effects of climate change become more pronounced, protecting our trees, waterways and open space is critical to our success as an attractive, welcoming city.

Liverpool has a rich heritage with a major cultural and arts focus. A number of significant heritage buildings and places are protected at the local and state levels, including Rosebank Cottage, Pioneers' Memorial Park, the Casula Powerhouse Arts Centre, the TAFE college building, which is formerly Liverpool Hospital (1820-1958), and St Luke's Church (1819-present). There are also significant Aboriginal sites and cultural landscapes, which we are committed to preserving.

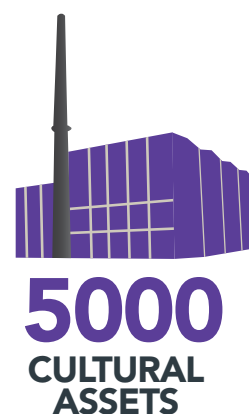
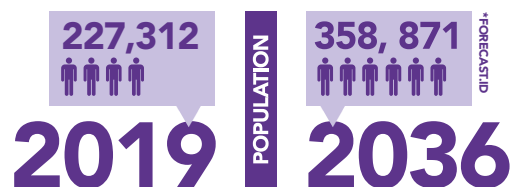
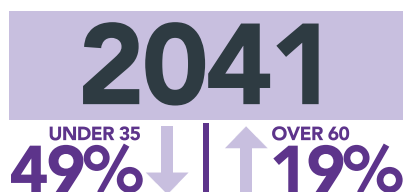
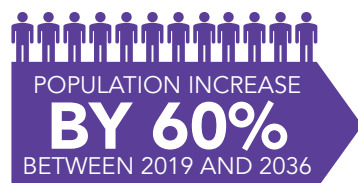
THE ORIGINAL INHABITANTS OF LIVERPOOL ARE THE DARUG AND DHARAWAL ABORIGINAL PEOPLE



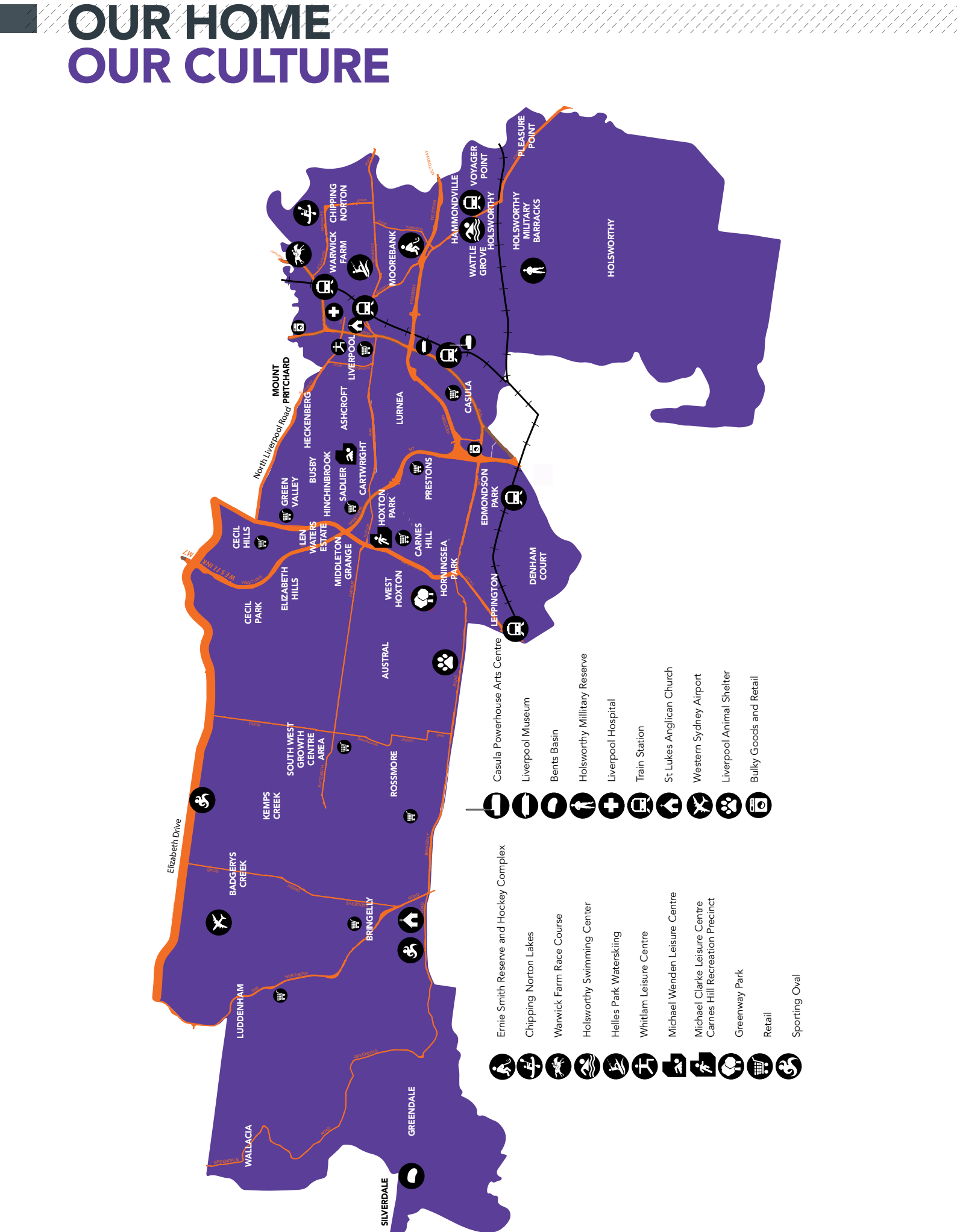
DID YOU KNOW?



CLIMATE CHANGE
PROJECTIONS INDICATE
THAT THE LIVERPOOL
CITY AREA WILL BECOME



OUR HOME



KEY CHALLENGES AND OPPORTUNITIES

Transport Accessibility

Liverpool has good access to Sydney's major motorways, including the M5 and M7, providing direct routes to the wider Western City District and beyond. However, congestion during peak periods is a major challenge. Many residents use cars as opposed to public transport, and the growing population is placing demands on existing infrastructure.

Roads are being enhanced through key projects including The Northern Road Upgrade, the Bringelly Road Upgrade, the M9 and M12 motorways, and the Outer Sydney Orbital. Council also is working with external stakeholders to improve access in and around the CBD and investigate options for public parking to support growth.

Council advocates a modal shift to public transport, however new or additional, better and faster services are required to make public transport a more attractive option. Council will continue to push for new and improved public transport services that match Liverpool's status as a metropolitan cluster, as identified in the Greater Sydney Region Plan. We will also work to improve active transport options, such as cycling, that can reduce congestion while improving health.

Council's flagship project – the Fifteenth Avenue Smart Transit Corridor – will provide our residents with a rapid public transit connection from Liverpool city centre to the many opportunities provided by Western Sydney Airport, including new high-value jobs. It will also link existing suburbs such as Miller and Middleton Grange, redressing past public transport disadvantage.

City Economy

While Liverpool's rapid population growth creates momentum for new business opportunities, significant challenges exist in ensuring that local employment growth keeps pace with population growth. Currently close to 70% of Liverpool's population works outside the LGA, reflecting a long-standing structural imbalance of jobs between Western and Eastern Sydney. A key Council priority is providing local jobs for local people. As part of the Western Sydney City Deal, we are committed

to supporting an increase in jobs in the Western City District by 200,000 over the next 20 years. Focus will be placed on supporting Liverpool's competitive advantages – health, education, distribution and logistics, professional services and advanced manufacturing. While we will be investing in opportunities to grow and transition industries, we will also support and nurture the significant number of skilled trade jobs operating in the LGA.

Liverpool continues to experience growth in commercial and industrial development. Its status as the key regional centre of South West Sydney, and its strong transport links to other areas of Sydney, place it in prime position to attract a range of industries. This is heightened by the new Western Sydney International Airport and Aerotropolis – which promises growth in industries such as agriculture, agribusiness, aerospace and tourism – as well as the Moorebank Intermodal Terminal.

The revitalisation of the city centre is a key Council priority to support economic growth. Council has implemented several strategies aimed at revitalising the city centre, developing key economic, cultural, recreation and entertainment activities, and creating a place in which people want to live and business wants to invest.

The Natural Environment & Sustainability

Liverpool's growth, while increasing opportunities for the community, also places pressure on our environment – a challenge Council is working to address.

Maintaining and enhancing natural values in the Liverpool LGA has the potential to increase the area's attractiveness as a place to live, work and play. Council is actively pursuing opportunities to increase connections to the Georges River and Chipping Norton Lakes, which involves improving community access to riverfront land and increasing opportunities for recreation while also protecting and enhancing environmental values such as water quality.

The Western District is noted for having significantly lower tree canopy cover, which along with geography and continued increases in impermeable surfaces associated with urban development,

KEY CHALLENGES AND OPPORTUNITIES

contributes to an urban heat island effect that makes temperatures significantly higher than in eastern Sydney areas. Climate change projections from the NSW and ACT Regional Climate Modelling (NARCLiM) Project indicate that the Liverpool City area will become warmer, with more hot days and fewer cold nights. Extreme temperatures will become more severe and droughts will be more frequent and last longer. There will be slightly more rainfall overall, and storm rainfall intensity will increase, adding to flood risk. The risk of bushfire will grow. Extreme weather events are projected to become more severe. This can place human life, property and natural ecosystems at increased risk.

Council will work to both mitigate and adapt to climate change, in partnership with the State and Federal governments. Because Council has limited ability to influence sustainability outcomes for the vast majority of development, we will advocate strongly for improvements to building codes and other associated State planning instruments in order to help us to address issues of urban heat and climate change. We will also pursue opportunities to address energy, waste and water efficiency, such as the creation of solar farms, better design of precinct-wide systems; increased tree canopy; and water-sensitive urban design.

Approximately one-third of Liverpool's land is covered by native vegetation and the LGA contains a number of significant biodiversity values, including vegetation communities, threatened ecological communities, and threatened and migratory species and populations. This includes the critically endangered Cumberland Plain Woodlands, which are at threat from increasing suburban development. We will protect, enhance and connect areas of high conservation value bushland and corridors to offer the best chance of long-term survival of flora and fauna. It should be noted, however, that the State Government's biocertification process has a dominant influence over ecological outcomes, particularly given that the extent of biocertified land is likely to be expanded within Western Sydney. Council continues to advocate for the protection of its important high conservation value land.

Significant amounts of Liverpool's rural lands are earmarked for urban development, making it important that we protect remaining rural and scenic lands from urban development into the future, and that there are clear boundaries between urban, non-urban and scenic lands.

Social connection

Liverpool is one of the most culturally diverse cities in NSW with around 40% of people born overseas and almost half the population speaking a language other than English at home.

Liverpool is also a young LGA, with a median age of 33 and 37% of the population under the age of 25. While there is currently a lower number of people in older age groups (60+ years), demographic trends point to a rapid increase in older people over the next 30 years.

Liverpool also has a slightly higher level of disadvantage than the rest of Greater Sydney, and has a high number of households in rental and mortgage stress. This disadvantage is not evenly distributed across the LGA, with some areas featuring much higher levels of hardship, particularly in areas with high proportions of social housing, such as the 2168 District. Census 2016 data indicates 6.2% of the Liverpool population identify as living with disability and requiring some form of assistance. This is higher than the Greater Sydney average of 4.9%, suggesting that people with disability represent a significant portion of the Liverpool community.

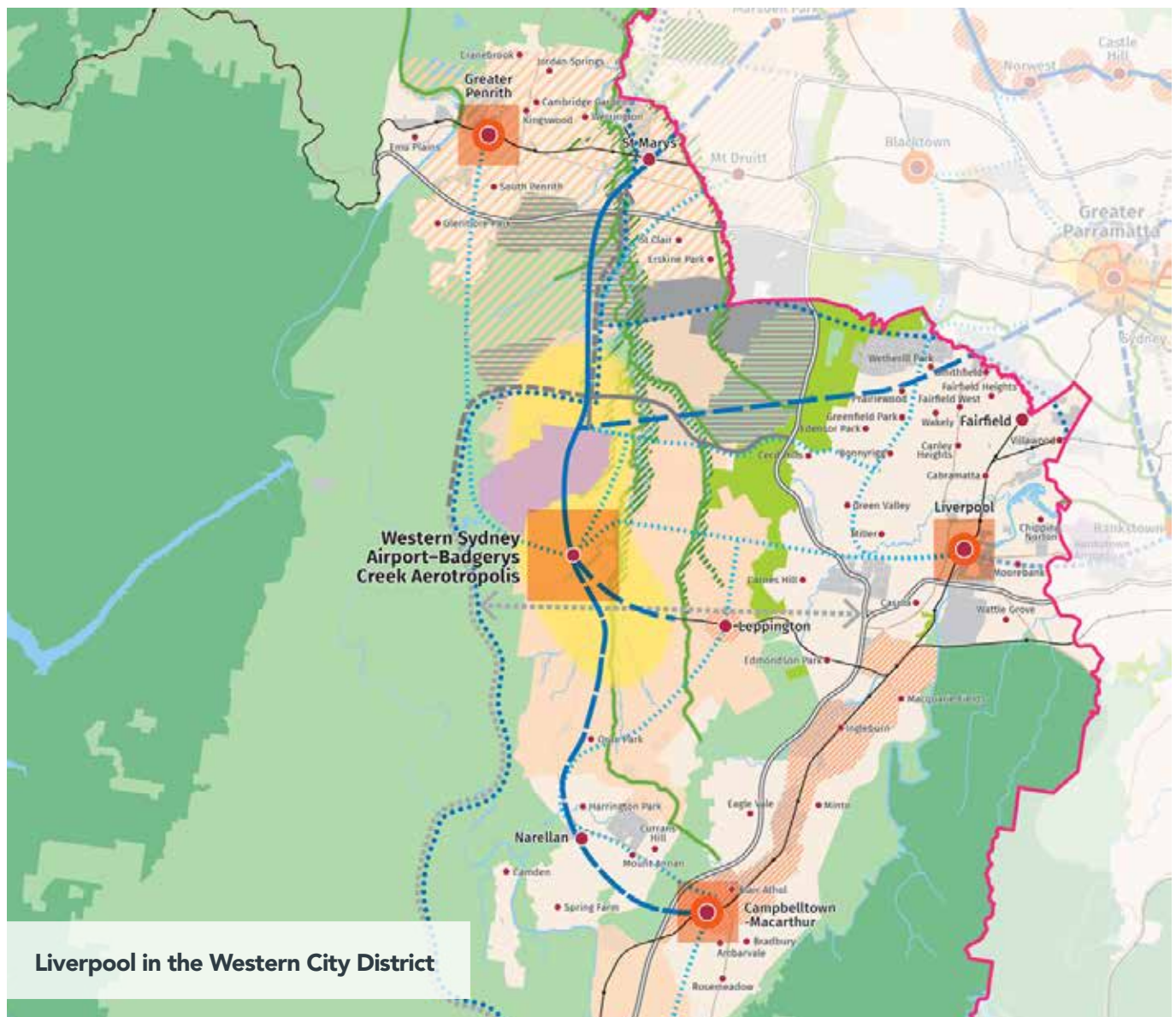
Council acknowledges that planning plays an integral role in determining the health and wellbeing outcomes of people. It also acknowledges that socially diverse communities are inclusive, healthy and creative. Liverpool needs to continue efforts to create a harmonious society where differences are appreciated and celebrated, while working to address inequality. There is also a challenge for the Council to ensure its services reach a broad range of citizens in an equitable way while still accommodating those most in need. Council will continue to work with government, non-government organisations and community groups to create social connections among our broad and diverse population, including residents living with a disability, young people, Aboriginal communities, migrants and refugees. This is achieved through various channels and strategic community engagement mechanisms such as committees, Liverpool District Forums, community events, libraries, arts and cultural programs, and utilisation of community centres and precincts.

Local character

Liverpool is growing rapidly, putting pressure on both growth areas, which are seeing major increases in greenfield development, and established areas, where we are seeing more infill development. Council is working hard to accommodate this significant growth and the opportunities it brings while ensuring that local character and heritage are preserved and Liverpool's renowned community pride remains intact.

Key issues for Council include ensuring development is of an appropriate scale, that congestion is properly managed and that service delivery is improved – both for new suburbs where services are being rolled out and in our established areas where services need to be upgraded to ensure great liveability outcomes.

Metropolitan Cluster	Major Urban Parkland including National Parks and Reserves
Health and Education Precinct	Waterways
Strategic Centre	South Creek Parkland Investigation
Local Centre	Green Grid Priority Corridor
Economic Corridor	Train Station
Trade Gateway	Committed Train Link
Western Sydney Employment Area	Train Link/Mass Transit Investigation 0-10 years
Industrial Land	Train Link/Mass Transit Visionary
Land Release Area	Freight Rail Investigation
Transit Oriented Development	City Serving Transport Corridor
Urban Renewal Area	Motorway
Greater Penrith to Eastern Creek Growth Area	Committed Motorway
Urban Investigation Area	Road Investigation 10-20 years
Urban Area	Road Visionary
Protected Natural Area	District Boundary
Metropolitan Rural Area	



VISION

CONNECTED LIVERPOOL 2040

A vibrant place for people that is community focused, walkable, public transport-oriented, sustainable, resilient and connected to its landscape. A place that celebrates local diversity and history, and is connected to other Sydney centres. A jobs-rich city that harnesses health, research, education, innovation and growth opportunities to establish an inclusive and fair place for all.

Liverpool in 2040 is a connected, cosmopolitan city. Anchored by a vibrant CBD in the east and a successful 24-hour Western Sydney International Airport to the west, the area is rich in opportunity.

Changes to planning controls in Liverpool City Centre have spurred significant high-quality development, with a balanced mix of housing, employment, community and retail space. Improvements to the urban domain and a focus on active and innovative transport have led to a thriving, safe, inclusive and green city centre with a strong 24-hour economy. Access to the Georges River has been improved, providing residents and visitors with cool, clean, green spaces in which to connect, play, swim and relax. A boom in local education opportunities has changed the city, with an influx of university students bringing greater life and vibrancy to the CBD, feeding into Liverpool's activated streets and enhanced night-time economy. While much has changed in the last 30 years, Liverpool still values and protects its rich heritage, be it Aboriginal, Colonial or migrant, and is renowned for its celebration of diversity and its residents' civic pride.

Liverpool has solidified its position as an innovation leader and an attractive, successful CBD. The Liverpool Innovation Precinct provides high-value health, education and research jobs for local residents and skilled workers from across Sydney. Transport infrastructure has evolved to reflect Liverpool's strategic importance, with fast, frequent connections to other key destinations in Sydney and between our suburbs, enabling people to live, work and play within a 30-minute city. Liverpool is the destination of choice for business and study, and opportunities abound for local residents.

Council's flagship project, the Fifteenth Avenue Smart Transit (FAST) Corridor, uses electric, autonomous technology to seamlessly connect residents to the vast commercial and industrial employment opportunities provided by Western Sydney International Airport, while spurring sustainable transit- and landscape-oriented development along its route. The airport and

the FAST corridor showcases the unique natural identity of South West Sydney to the world. As the gateway city to the airport, Liverpool enjoys a robust commercial and visitor economy, providing office space, hotel and key worker accommodation, and lively recreation options day and night.

Liverpool's suburbs are distinct environments with a focus on local character and quality built form. Housing growth has been planned with supporting infrastructure to maximise amenity. Density has been concentrated in the CBD and centres close to public transport, while ensuring established local character is respected. In growth areas, housing development has been supported by crucial transport and servicing infrastructure. Land has only been rezoned for housing when required, and Liverpool's important contribution as a food bowl for Sydney and the export market has been protected and enhanced.

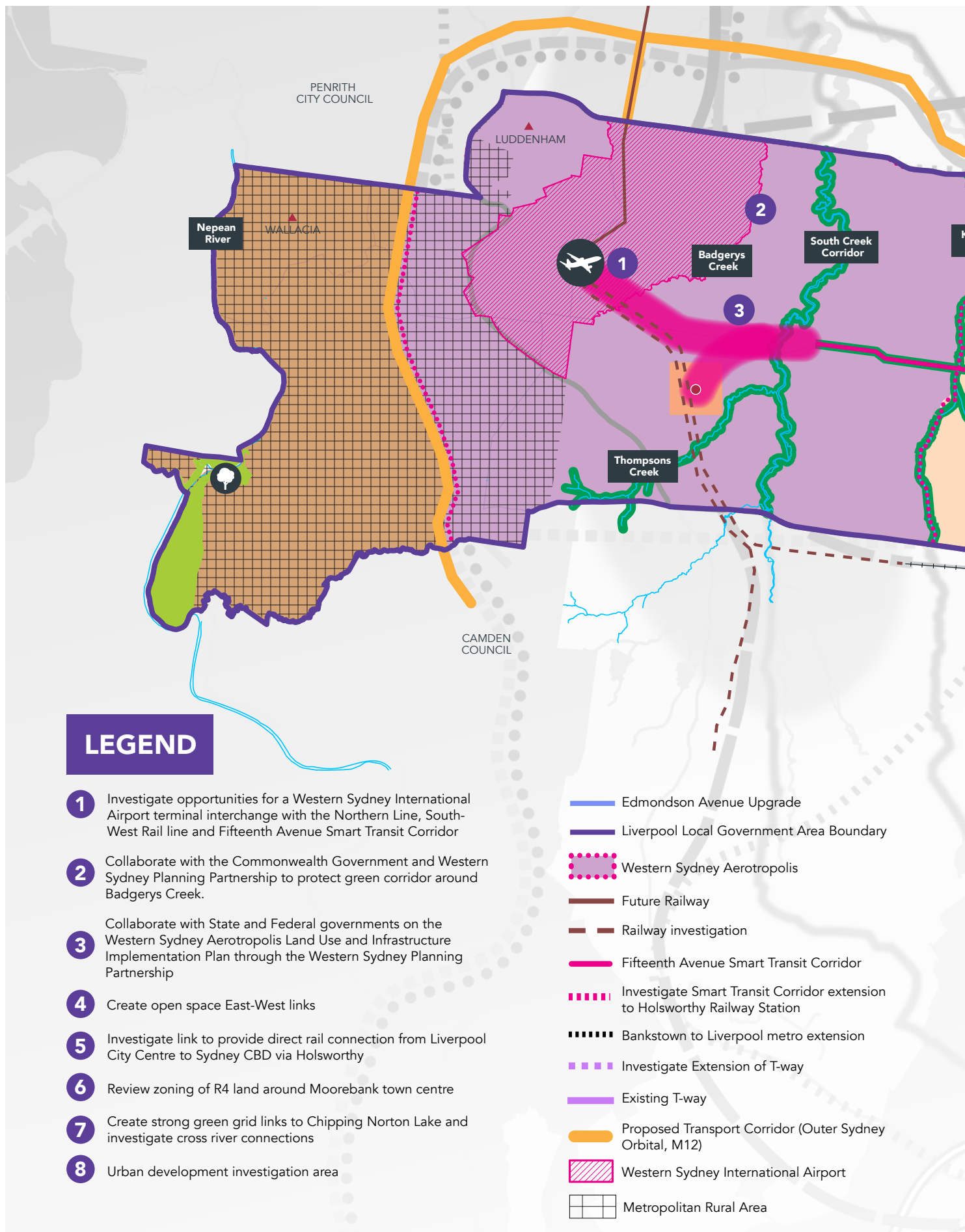
Areas of high ecological value have been protected and enhanced while high tree canopy cover exists across both established and new release areas, and active transport links have been strengthened, creating a high-quality, cooler, high-amenity environment. New housing is supported by plentiful open space, high-quality community facilities, reliable transport infrastructure and water-sensitive urban design. Liverpool has taken a strong role in meeting the State Government's net zero 2050 aspirations, and is an exemplar of sustainability and climate resilience.

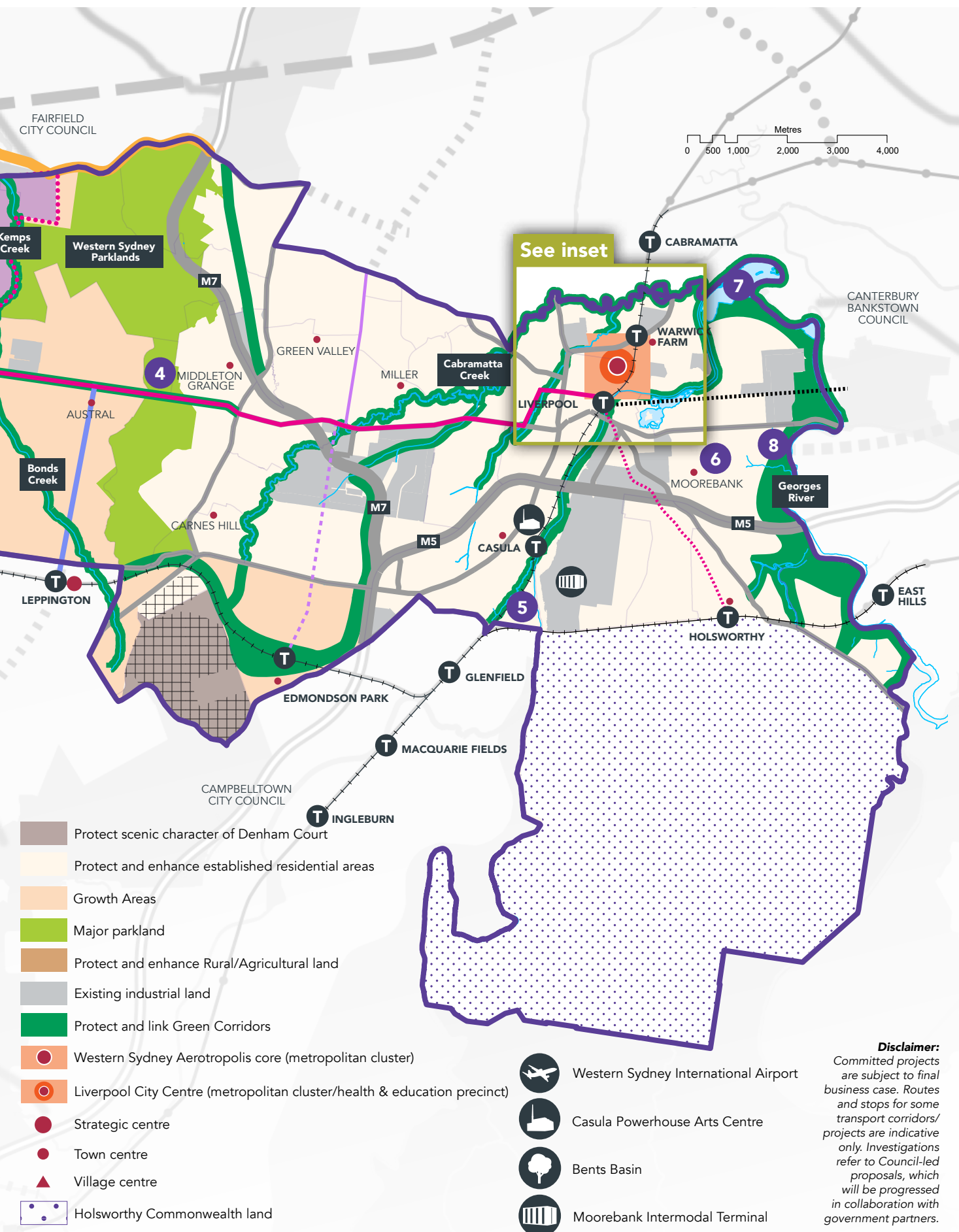
While the airport has led to major changes to the western part of the LGA, Council has protected its rural lands and ensured that biodiversity, nature and sustainability are central considerations of all new development.



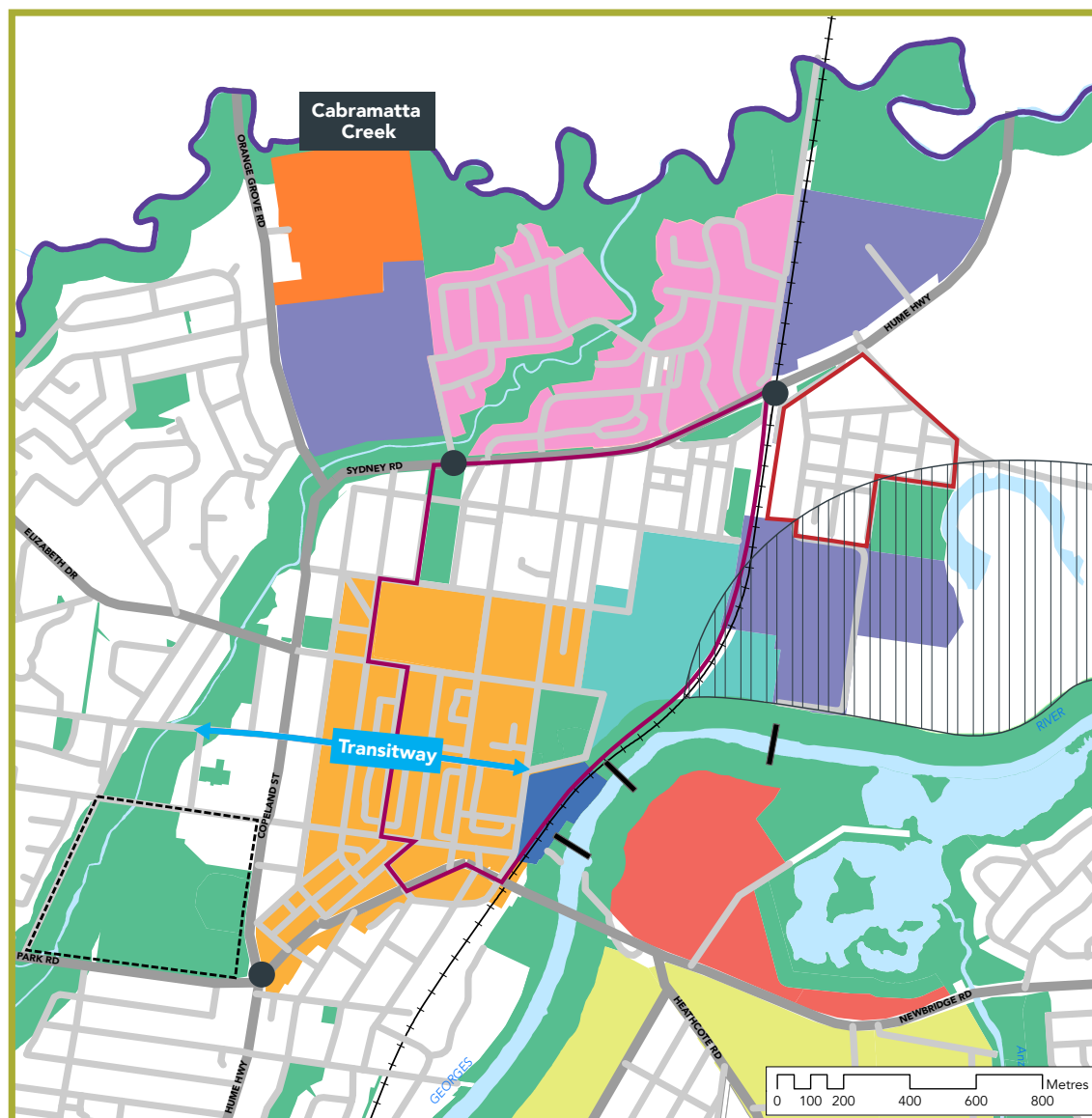
Artist's impression of Liverpool Civic Place

LIVERPOOL CITY COUNCIL STRUCTURE PLAN



















LIVERPOOL CITY CENTRE AND SURROUNDING AREA (Inset)



LEGEND

-  Investigate grade separated pedestrian crossing
-  Investigate linking open space & green corridor
-  Retain Industrial Zonings
-  Bulky Goods and Retail
-  Investigate flexible employment
-  Investigate cross river links
-  Investigate railway station redevelopment
-  Masterplan Woodward Place (including RE2 zone)

-  Liverpool Innovation Precinct
-  Work with State Government to investigate residential development at Hargrave Park precinct
-  Investigate residential/mixed use at Moore Point to support CBD and Innovation precinct (River Precinct)
-  Health and Education
-  Commercial Core/Mixed Use
-  Prepare structure plan and planning proposal to rezone the Warwick Farm racing precinct to B4
-  Review residential development in odour buffer to Water Recycling Plant

PLANNING PRIORITIES.



PLAN ON A PAGE

OUR THEMES AND PLANNING PRIORITIES



CONNECTIVITY

Our Connections

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

PLANNING PRIORITY 3

Accessible and connected suburbs

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration



LIVEABILITY

Our Home

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

Priorities are not listed in order of importance.
Each priority is of equal importance.



PRODUCTIVITY

Our Jobs

PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential



SUSTAINABILITY

Our Environment

PLANNING PRIORITY 14

Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

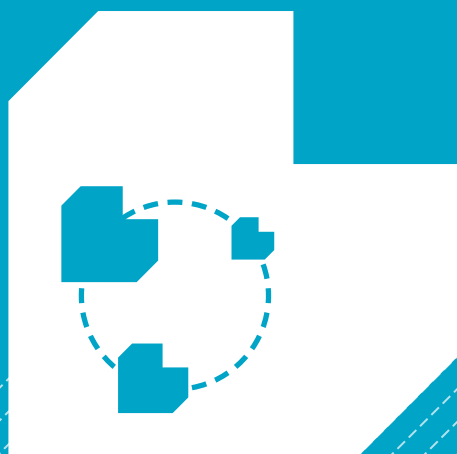
PLANNING PRIORITY 16

Rural lands are protected and enhanced



Artist's impression of the Fifteenth Avenue
Smart Transit (FAST) Corridor project





CONNECTIVITY

Our Connections

The Liverpool of 2040 is a fast, efficient and productive city connected by rapid frequent transport, high speed digital networks and strong collaboration between community, business and government, all supporting abundant opportunity.

Liverpool will grow its position as the pre-eminent capital of South West Sydney, reflecting its history, amenity, strategic location, and large concentration of jobs and services.

Today Liverpool is growing rapidly and is predicted to welcome more than 130,000 additional residents between 2019 and 2036 – close to a 60% increase on the current population. Council is committed to supporting this growth while providing the best outcomes for the local community. This means ensuring the necessary infrastructure is in place to support growth and manage congestion.

Transport connectivity is a critical element of Council's vision for a connected Liverpool. In our LSPS survey, the community told us its top transport priority is 'faster public transport services to Liverpool and other major centres'. While Liverpool is known for its strong road transport links, including proximity to the M5 and M7 motorways, Council continues to advocate for better public transport connectivity. This will be particularly important for the success of Liverpool's burgeoning Innovation Precinct, Western Sydney International Airport and Western Sydney Aerotropolis, and to help in the management of road congestion.

The development of the airport, located entirely within the local government area (LGA), provides one of our biggest opportunities. Liverpool has a unique opportunity to become the hub for the transport of goods, services and information between Sydney and the world, but we need the supporting infrastructure to deliver this vision.

We will ensure that infrastructure projects being planned for and delivered – including the South-West rail line extension, the Moorebank Intermodal Terminal, the M12 motorway, the

Outer Sydney Orbital and freight line, the Sydney Metro City and Southwest extension from Bankstown to Liverpool and the North-South rail line – benefit Liverpool's residents, and will advocate for their timely delivery. We will also progress city-shaping infrastructure such as the Fifteenth Avenue Smart Transit (FAST) Corridor project, and advocate for Liverpool to be connected to future fast rail projects.

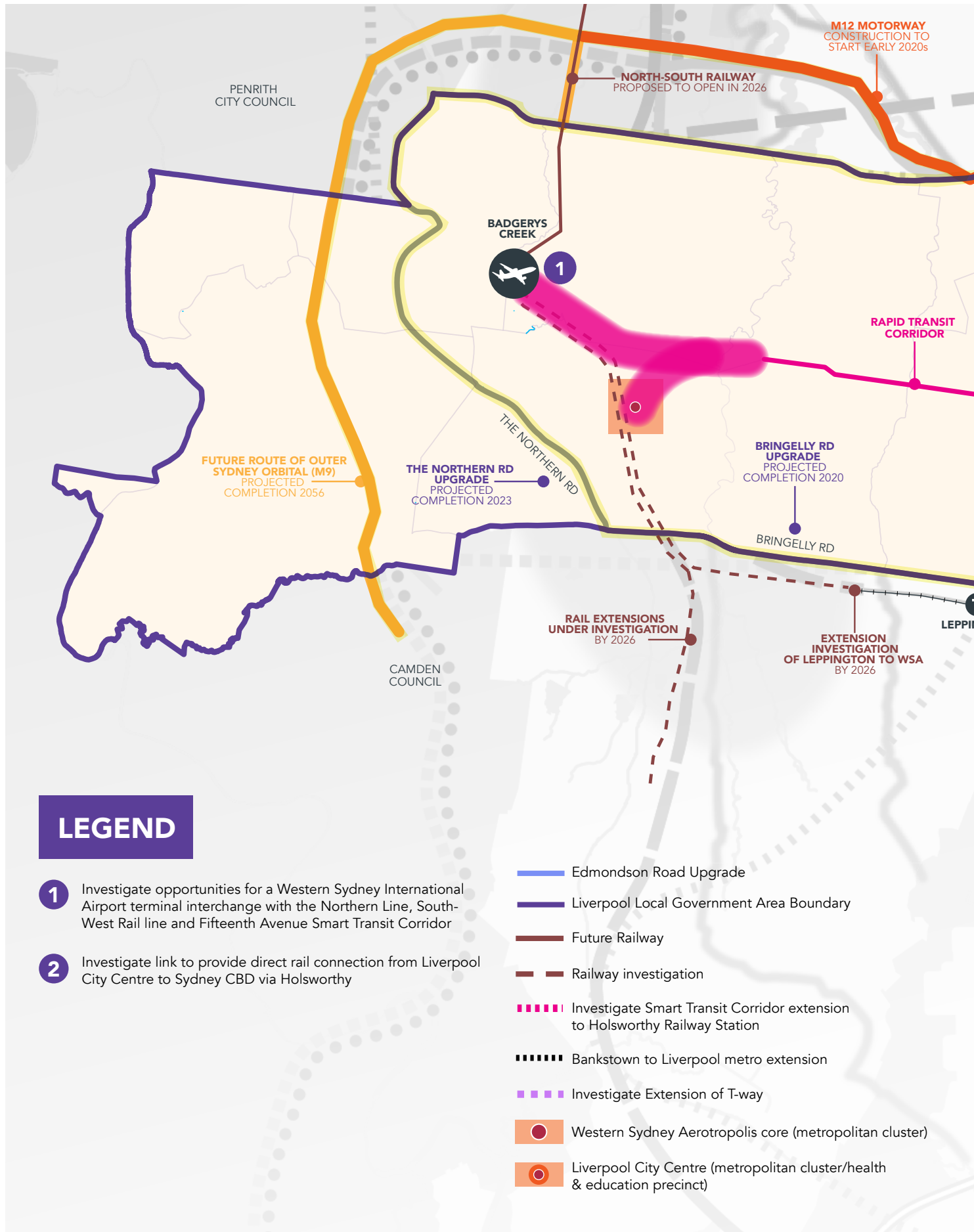
We will also prioritise transit-oriented development opportunities. Transit-oriented development should be designed so that communities have access to a diversity of transport options and are not reliant on private car use to move around the local government area. For development to qualify as transit-oriented, Council expect that in the long term a majority (50%+) of work-related travel movements will be able to be achieved by sustainable modes due to the availability of high-quality walking and cycling paths, and micro-mobility and public transit options.

Council is committed to strengthening social connectivity as a way to improve health and wellbeing. Improving walkability of neighbourhoods can encourage greater social engagement. Council also delivers place-based initiatives, engaging residents in disadvantaged areas or areas of geographical isolation to improve social outcomes.

Connectivity also refers to digital connectivity. As part of the Western Sydney City Deal, Liverpool will be at the forefront of digital technology, developing a Digital Action Plan and fast 5G Strategy to ensure our residents and local industries have the tools to take advantage of new economy opportunities, and for Liverpool to meet its goal of becoming a connected, smart Innovation City.

Finally, connectivity means collaboration. We have a strong relationship with residents, community groups, local businesses, Councils, state agencies, and State and Federal governments. We will continue to put collaboration and consultation at the heart of our activities to get the best outcomes for everyone.

TRANSPORT IMPROVEMENT INITIATIVES





CONNECTIVITY

LOCAL PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

As a Metropolitan Cluster in the Greater Sydney Region Plan – *A Metropolis of Three Cities* and one of the fastest growing LGAs in Australia, Liverpool's transport systems must cater to existing and future development, and provide connectivity to other metropolitan centres and clusters.

While Liverpool is well connected to other major centres, it currently takes a long time to travel via public transport, thus 30-minute city outcomes are not available to many of our residents.

Our community survey indicated that 'fast public transport to Liverpool and other centres' was the most important transport desire for residents and workers in Liverpool. With the strengthening of its health, education and innovation sectors, fast public transport connectivity will be a key ingredient to success.

Our vision is to have fast and frequent connections within Liverpool LGA and to other centres, and Council is committed to advocating for the transport we need and deserve. Council will continue to make representations to the State Government on critical transport improvements in and around the Liverpool LGA, including:

- Express train services between Liverpool and Sydney CBD and beyond;
- The fast-tracked extension of the City & Southwest Metro from Bankstown to Liverpool;
- A fast-tracked Leppington to WSA-Aerotropolis train link with an interchange at the airport;
- Western Sydney Aerotropolis/Airport as a stop on any future fast rail project;
- Improvements to the road network surrounding Liverpool City Centre to support additional developments in the Liverpool Collaboration Area;
- Improved local bus services

- Road network upgrades to minimise traffic impacts from Moorebank Intermodal Terminals; and
- Heathcote Road upgrade between Infantry Parade and Pleasure Point

Future transport investigations include an extension to Council's proposed FAST corridor and an extension of the Parramatta-Liverpool Rapid Bus T-Way to Edmondson Park. An extension of the currently proposed FAST corridor from the city centre south to Holsworthy would allow direct interchange with the Airport & South Line (T8), providing a relatively rapid connection between Western Sydney International Airport, Liverpool City Centre, Sydney Airport and the Sydney CBD. This would provide better access to jobs and reduce road congestion. Liverpool's bus T-way priority corridor could also be extended to provide public transit connectivity from new population centres such as Edmondson Park to the FAST Corridor and airport, north to Parramatta and south into Ingleburn, which also has access to the T8 line.

We will work with Transport for NSW to support and implement travel behaviour change programs to help manage demand on the transport network, including by requiring new developments and businesses operating in key precincts to develop and implement travel plans to encourage the use of sustainable transport choices.

Council is also working to address active transport, acknowledging the health and amenity benefits of walking and cycling, by implementing the Liverpool Bike Plan 2018-2023. By 2040 there will be a complete connected network of cycle paths in new and established areas. We will also support emerging forms of micro-mobility in the LGA, including e-bikes and e-scooters.



**Our vision is to have fast
and frequent connections
within Liverpool and to
other centres.**



COUNCIL WILL

- Collaborate with State Government to improve public transport connections and timetabling, providing Liverpool residents with fast access to other major centres and key infrastructure such as Western Sydney International Airport and the Sydney CBD.
- Work to ensure all Liverpool's residents and workers can access the benefits of the 30-minute city.
- Improve cycling and walking tracks, and prioritise pedestrian movement.
- Investigate measures required to support micro-mobility.
- Investigate locations of active transport bridge connections into adjoining LGAs.
- Continue to collaborate with State government to deliver more commuter car parking around train stations.
- Investigate setting mode shift targets.

HOW WE GET AROUND

WALKING
11%



PUBLIC
TRANSPORT
9%



PRIVATE
VEHICLE
79%



CYCLING 1%

*BUREAU OF TRANSPORT STATISTICS

ACTIONS

- 1.1 Update CBD Parking Strategy. **(short term)**
- 1.2 Develop a Transport and Mobility Plan and review Local Environmental Plan (LEP) to ensure alignment **(short term)**
- 1.3 Advocate the prompt delivery of the South-West rail line extension from Leppington to Western Sydney International Airport, with a terminal interchange at Western Sydney International Airport **(short term)**
- 1.4 Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links **(short term)**
- 1.5 Advocate a Western Sydney Aerotropolis/Airport stop on any future high speed rail network **(short term)**
- 1.6 Work with Transport for NSW (TfNSW) to bring forward extension of the Sydney Metro City and Southwest and investigate a preferred alignment **(short term planning, with delivery in the long term)**
- 1.7 Upgrade Edmondson Avenue from Fifteenth Avenue to Bringelly Road **(medium term)**
- 1.8 Work with TfNSW on an extension of the T-way from Hoxton Park Road south to Edmondson Park Station **(medium to long term)**

CONNECTIVITY

LOCAL PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

RATIONALE

To assist in achieving Liverpool's goal of becoming the regional city for South West Sydney, and support its role as a Metropolitan Cluster in the Greater Sydney Region Plan, fast and regular connections to other strategic centres and key facilities is of critical importance.

Council's flagship project, the Fifteenth Avenue Smart Transit (FAST) Corridor, is a visionary city-shaping project intended to deliver a high-speed end-to-end link between the Liverpool CBD and the Western Sydney International Airport by the airport's opening in 2026. Liverpool City Council considers that rapid transit along Fifteenth Avenue needs to be high-quality, fast (a maximum 30-minute connection to the airport in order to support aspirations for a 30-minute city), supportive of compact transit- and landscape-oriented development, suitable for both workers and airline passengers (directly connecting to Western Sydney International Airport), and cost-effective. Council is designing the corridor to support a rapid transit mode that meets these criteria.

Council sees the FAST Corridor as a key gateway for visitors to Australia, and as such envisages a parkland corridor that provides multiple roles, including landscaping, city cooling and water sensitive urban design. The location of this corridor, as the gateway to Australia for international travellers, is an opportunity to showcase high-quality affordable design and the unique natural environment of South West Sydney. International travellers want to experience Australian nature, and Fifteenth Avenue – as a parkway – can be their first introduction to this (similar to the experience of arriving at Changi Airport and entering Singapore via the Eastern Parkway).

These segments will be designed to be uniquely South West Sydney. The corridor will be high-quality, inviting and vegetated, with buildings and transport

infrastructure naturally forming part of the landscape. This parkway will reinforce the city's commitment to effective public transport and active transport, such as cycling.

Council will also encourage compact medium/ high-density development in appropriate locations along the corridor, which, while not common yet in Western Sydney, will be designed in a way that is familiar and approachable.

Design decisions will prioritise affordability and achievability while ensuring quality of place. Design will also integrate the circular economy – an economic system aimed at minimising waste and optimising resource use – as a fundamental design principle, along with a connection to existing natural assets (including the Western Sydney Parklands). The corridor will create places for people with a high level of amenity for current and future populations and users.

Liverpool City Council's approach to development in the area is intended to reduce sprawl, improve availability and patronage of public transport, increase walking and healthy lifestyles, and preserve the amenity and productivity of the area and rural land uses. We will investigate first and last mile active and public transport connections between new centres and established suburbs that lie adjacent. When complete, the FAST Corridor will be a catalyst for increased public transport growth in the LGA and wider region, and a shift away from car dependence.

COUNCIL WILL

- Progress the FAST Corridor to deliver a high-quality rapid transit connection to Western Sydney International Airport.
- Increase connectivity to the airport to support jobs growth and airport viability.
- Create transit- and landscape-oriented development along the route at appropriate locations and at an appropriate scale.



The Fifteenth Avenue Smart Transit (FAST) Corridor is a visionary, city-shaping project



ACTIONS

- 2.1** Finalise investigations into the FAST corridor in collaboration with State and Federal government agencies **(short term)**
- 2.2** Amend the LEP and relevant environmental planning instruments to preserve the FAST corridor **(short term)**
- 2.3** Investigate location of transit- and landscape-oriented development hubs along the FAST Corridor route **(short term)**
- 2.4** Investigate extension of FAST corridor to Holsworthy station with consideration of appropriate station locations, including Moore Point **(medium to long term)**
- 2.5** Deliver the FAST Corridor **(long term)**



LOCAL PLANNING PRIORITY 3

Accessible and connected suburbs

RATIONALE

Communities in Liverpool have strong networks that extend to other suburbs and centres, and importantly to the Liverpool City Centre, which serves as the regional centre for South West Sydney. These networks include community ties as well as access to jobs and services. Sometimes the development of new areas, major roads and other infrastructure put barriers in the way of these connections.

Council is committed to ensuring these connections are retained and improved, and that new suburbs will be linked to the broader Liverpool community and region.

Neighbourhood centres are the heart of Liverpool's suburbs. Council will use placemaking principles to link these centres with other centres and the Liverpool City Centre by a network of pathways and cycleways integrated into system of parks and open space. This will include ensuring through-site links are provided on larger blocks to improve connectivity and permeability.

An efficient public transport and road network is important to provide access to jobs and services for our community. Council will ensure that barriers are minimised by improving local infrastructure and working with State agencies to ensure that our suburbs are accessible and connected by high-quality roads and public transport services.

Council will collaborate with neighbouring councils to ensure a coordinated approach to open space and transport planning to improve access to local jobs, services and recreation opportunities.



Neighbourhood centres are the heart of Liverpool's suburbs



CONNECTIVITY

COUNCIL WILL

- Link suburbs and centres with each other and Liverpool City Centre by a network of high-quality pathways and cycleways integrated into system of parks and open space
- Advocate for improvements to public transport connections and timetabling for suburban areas and centres
- Use placemaking principles to ensure that public transport infrastructure and accessibility to suburban centres is optimised
- Improve local road access to suburbs and centres
- Collaborate with neighbouring councils to ensure a coordinated approach to open space and transport planning

ACTIONS

- 3.1** Collaborate with neighbouring councils to improve open space and transport connections, including active transport routes, around Chipping Norton Lakes **(short term)**
- 3.2** Optimise public transport infrastructure and accessibility as well as connectivity to pathways and cycleways as part of place-making for neighbourhood centres **(short to medium term)**

LOCAL PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

RATIONALE

Liverpool City Council is committed to supporting and leading innovation in our organisation and our community as we develop into a connected smart city. By creating an innovation ecosystem, testing new approaches and working with partners in government, industry and the community, we will secure Liverpool's place as the premier edge city for the Western Sydney Aerotropolis.

Liverpool City Centre will become a rejuvenated river city offering new and diverse housing and employment spaces, anchored by a world-leading Innovation Precinct providing high-value local job opportunities. This area is covered by the Liverpool Collaboration Area Place Strategy, developed by the Greater Sydney Commission in collaboration with Council and other stakeholders. We will maintain our position as an active leader in the strategy's delivery, ensuring the best outcomes are reached for our community.

Key to the success of all our plans is to collaborate and work effectively with stakeholders from the private, public and community sectors. Consultation with the community will be guided by Council's Community Participation Plan and an engagement framework that builds community capacity and social capital, allowing people to feel connected and proud of our City, and able to participate in processes and decisions that affect their lives.

Council will always collaborate with neighbouring councils, Aboriginal Land Councils, State and Federal governments, state agencies, private sector interests and the Western Sydney Planning Partnership to deliver the best outcomes.

COUNCIL WILL

- Be recognised as an innovation leader locally, nationally and globally.
- Work with other councils and the NSW and Federal Government to implement the Western Sydney City Deal.
- Improve digital connectivity.
- Ensure planning controls respond to connected and autonomous vehicles (CAV) without compromising pedestrian amenity.
- Be a leading voice in the Western Sydney Planning Partnership to deliver good planning outcomes in the development of the Western Sydney Aerotropolis.
- Work with adjoining councils to address cross-border issues.
- Involve the community in strategic planning matters.
- Involve Aboriginal Land Councils in strategic planning matters.
- Collaborate with government agencies to coordinate delivery of local and regional infrastructure.
- Support innovative approaches to the operation of business, educational and institutional establishments to improve the performance of the transport network.

ACTIONS

- 4.1** Collaborate with government agencies to prepare a local and regional level infrastructure schedule **(short term)**
- 4.2** Collaborate with Greater Sydney Commission and relevant stakeholders to address the Liverpool Collaboration Area Place Strategy through amendments to the LEP **(short to medium term)**
- 4.3** Investigate planning control changes to support CAVs and adaptive reuse of parking infrastructure **(short to medium term)**



Liverpool is committed to supporting and leading innovation







LIVEABILITY

Our Home

Liverpool in 2040 will become one of Australia's most liveable cities, capitalising on its youth, culturally diverse and harmonious population, proximity to Western Sydney International Airport, and a City Centre close to transport and the amenity of the Georges River.

Council is working to make the entire LGA an attractive, vibrant and healthy place to live, work and play for our diverse community. Council is committed to ensuring that the LGA is accessible and inclusive to all people, including older people and people with a disability. The Liverpool community, through the Community Strategic Plan (CSP), has told Council that having a clean, attractive city with ample facilities and community activities is essential. The LSPS survey also revealed the top two liveability priorities for the community are 'access to parks and recreation options' and 'walkable neighbourhoods'.

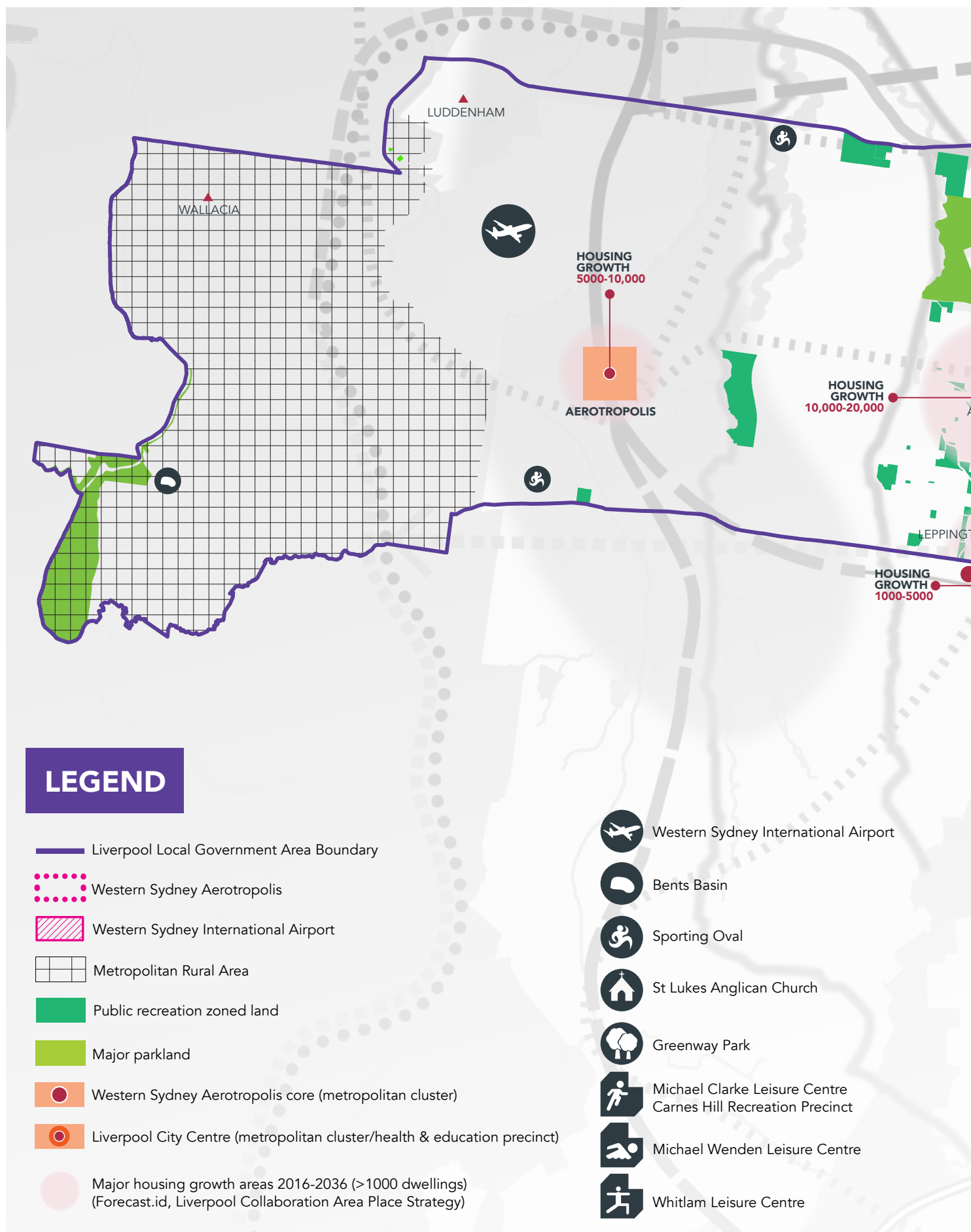
Council is committed to ensuring the parks, facilities and amenities the community requires are of high quality and provided close to homes to create walkable suburbs. Liverpool is working to transform community hubs in new and existing suburbs to create vibrant and multipurpose facilities in which the community can connect. The activation of these hubs with sporting facilities, outdoor fitness gyms, improved pathways and lighting and children's playgrounds will provide the community with spaces to lead healthy lifestyles and spend time with friends and family to improve social connections and harmony.

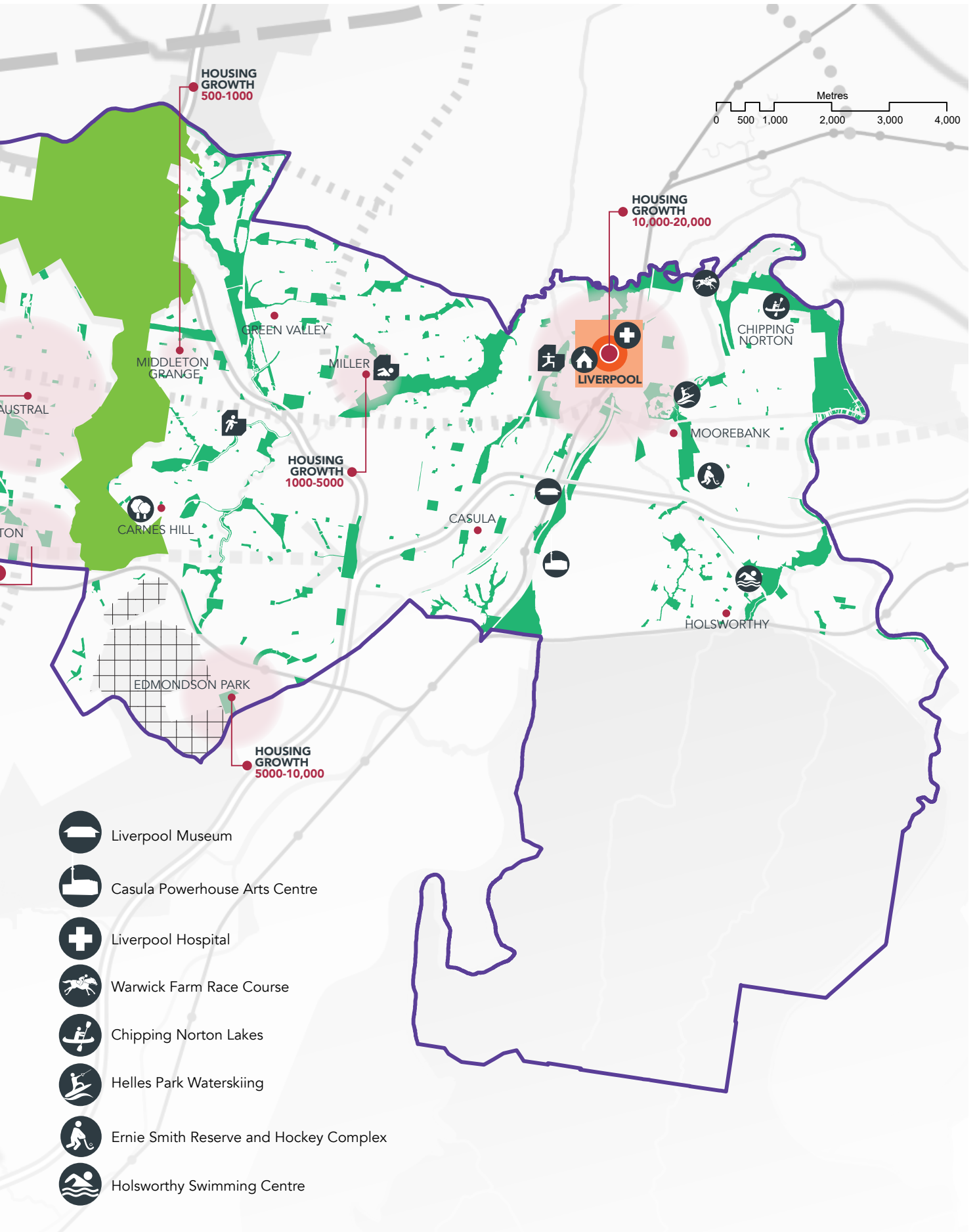
Through development of the Liverpool Housing Strategy, Council is also making sure the right housing is being built in the right places to cater to the many needs of the community, while ensuring local character is respected. This includes increasing affordable housing options, as Liverpool has one of the highest needs for social and affordable housing in the country.

In the City Centre, Council has already implemented Amendment 52 to the LEP, allowing mixed-use development and, along with a new City Centre Public Domain Master Plan, seeks to create a functional, high-amenity city centre with a strong 18-hour economy and better opportunities for healthy active transport, such as walking and cycling. We will activate sites across the city for art, events and festivals, improve night-time activities and provide a lively environment for locals that also becomes an internationally renowned destination. By 2040 we will expand our 18-hour economy to become a dynamic 24-hour city.

While Liverpool is experiencing significant change, it is also committed to honouring its local character and rich heritage, with a number of significant buildings and sites protected at the local and state levels, and a commitment to retain the low-scale nature of existing suburbs.

OUR HOME





LIVEABILITY

LOCAL PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

RATIONALE

Liverpool is working to create a vibrant 18-hour economy in the City Centre over the next decade, and then transform into a lively river city by 2040 with a strong 24-hour economy, providing ample space for jobs, homes, entertainment, recreation and education.

Council is working on an ambitious suite of plans and projects to deliver this vision. The City Centre Public Domain Master Plan will guide the development of a city centre that meets the needs of the community now and into the future. This will involve major public domain improvements, including increased urban canopy, active transport integration, wayfinding and walkability enhancements, safety improvements and better design standards. This will be complemented by City Activation and Heritage Interpretation strategies to improve the experience of Liverpool residents and visitors.

We will also be embarking on ambitious transformational projects like Woodward Place, which will see the current Woodward Park become Liverpool's own 'Central Park' – an iconic lifestyle precinct providing world-class facilities to support a healthy, connected and diverse population.

The City Centre will refocus around the amenity of a healthy Georges River, connected to parkland and open space with development that is of appropriate scale and which respects the natural character of the river environment.

With a 24-hour economy and a focus on vibrancy, we will need to ensure that extended trading hours in the CBD can occur without being affected by increased residential development and the potential for amenity impacts.

COUNCIL WILL

- Ensure Liverpool City Centre is a vibrant, mixed-use, pleasant and walkable city by providing a high-quality public realm and open spaces; fine grain and diverse urban form; a diverse land use and housing mix, high amenity and walkability; and recognising and celebrating the character of the place and its people.
- Foster a 24-hour economy with a lively and well-integrated mix of activities.
- Investigate and establish destinations (interactive public places) within the City Centre to facilitate walkability and ensure sustainability.
- Refocus the City around the amenity and assets of the Georges River, while ensuring the natural character of the river is protected through development of an appropriate scale.
- Develop a high-quality Georges River and Chipping Norton Lakes open space system addressing integration with the Liverpool City Centre and the local and regional open space network.
- Reduce congestion in the CBD.
- Ensure appropriate levels of parking are available.



**The City Centre will
refocus around the
amenity of a healthy
Georges River**



ACTIONS

- 5.1** Review Development Control Plan (DCP) to ensure the 18-hour economy can be suitably protected from reverse amenity issues **(short term)**
- 5.2** Review LEP and DCP to give effect to City Centre Public Domain Master Plan **(short term)**
- 5.3** Incorporate community and cultural facilities in Liverpool Civic Place **(short to medium term)**
- 5.4** Review LEP to support development, community facilities and linkages at key Council-owned sites in the City Centre **(short to medium term)**
- 5.5** Review LEP to ensure alignment and give effect to Woodward Place Masterplan **(medium to long term)**



Artist's impression of a pedestrian bridge over the Georges River

LIVEABILITY

LOCAL PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

RATIONALE

Liverpool City Council is committed to the delivery of high-quality facilities and services that are attractive, flexible and address the needs of the general community. Council supports the central concept that an efficient and effective network of quality and appropriate community facilities is essential to the health, social and economic wellbeing of Liverpool. Council's vision is to create best practice recreation spaces for people that inspire and connect residents, and act as a catalyst for community life.

However, current restrictions around what types of social infrastructure Council is able to raise funds for through development contributions makes it difficult for us to provide the services the community expects in a timely fashion. Council will continue to advocate expansion of the types of facilities we can levy for, including community centres and high-quality embellished parks, and also investigate alternative sources of funding to deliver the amenity the community expects and deserves in new and existing areas.

Council is also committed to improving its open space network. While our latest Social Infrastructure Study found there is sufficient open space to meet our growing needs through to 2041 overall, there are some areas where open space access needs to be improved, including in the City Centre and New Release areas.

One of Council's most ambitious projects will be the River Connections plan, which will create a continuous network of accessible, high-quality paths along the Georges River from Casula through the City Centre to Pleasure Point. Collaboration with adjoining councils will allow extended green links to be established beyond Liverpool's LGA boundaries. The Liverpool LGA also contains part of the Western Sydney Parklands, a key open space and recreational

asset for the region. Council will improve active transport connections to the Parklands and, in collaboration with the Western Sydney Parklands Trust, investigate potential improvements to the recreation, sports, tourism and community value of the area.

COUNCIL WILL

- Deliver a world-class network of community facilities.
- Deliver timely construction of community facilities in new release areas.
- Ensure community facilities, open space and recreation facilities meet the needs of a growing population across the entire LGA.
- Ensure place-based integrated services by co-locating social services within neighbourhoods.
- Undertake community needs assessment and community engagement prior to constructing new facilities.
- Encourage integrated planning with community facilities for all major new and redeveloped recreation precincts.
- Prioritise a collaborative approach towards community and social infrastructure planning.
- Increase public open space and work with key stakeholders to revitalise and develop parks and open space across the Liverpool LGA.
- Strengthen and promote active transport links between centres and open space.
- Strengthen connections to Western Sydney Parklands.
- Develop the regional riverside parkland as part of a wider plan to reengage communities with the Georges River.
- Engage communities who use the Georges River on relevant projects.
- Collaborate with neighbouring councils to identify outdoor sports and recreation facilities that have a regional focus.

ACTIONS

- 6.1** Advocate changes to contributions planning and seek alternative funding mechanisms to deliver high-quality facilities and infrastructure, including the FAST corridor within accelerated timeframes **(short term)**
- 6.2** Investigate DCP changes to encourage green open space in high-rise development **(short term)**
- 6.3** Collaborate with the NSW Department of Education to identify opportunities for sharing local school infrastructure with the wider community **(short term)**
- 6.4** Develop community and recreation hub at Phillips Park, Lurnea **(short term)**
- 6.5** Redevelop Lighthorse Park into a district recreation and open space destination park, including a community centre, and active and passive open spaces **(medium term)**
- 6.6** Review LEP to give effect to River Connections Program linking green space networks from Casula to Pleasure Point, improving accessibility and visual amenity **(short, medium and long term)**
- 6.7** Establish a metropolitan-scale cultural/entertainment facility in the City Centre **(visionary)**



Our vision is to create recreation spaces for people that inspire and connect residents, and act as a catalyst for community life



Casula Parklands Adventure Playground



LIVEABILITY

LOCAL PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

RATIONALE

Forecast.id population projections predict that Liverpool's population will grow to 358,871 by 2036, compared with our 2019 population of 227,312 – an increase of almost 60%.

Council delivered on average 1684 new dwellings a year between 2013/14-2017/18. In the year to May 2019 completions hit a record of 2314 new dwellings. Council expects strong demand for housing to continue.

The Liverpool Local Housing Study 2019 predicts demand for an additional 43,452 dwellings between 2016 and 2036. Liverpool will need to ensure that the households built are suitable to support the growing population, and located in the right areas, which will be explored further through the development of a Local Housing Strategy.

Population and dwelling forecast

Year	2016	2021	2026	2031	2036
Population	212,232	242,817	276,970	319,304	358,871
Total dwelling demand	67,738	77,279	87,261	99,632	111,190
Additional dwellings required over five years		9,541	9,982	12,371	11,558

Sources: Population – Forecast population projections (Forecast.id); Dwellings and additional dwellings – Liverpool Local Housing Study 2019 (SGS Economics and Planning).

Taking into account existing growth areas and our recent changes to City Centre planning controls to allow for more housing, our Local Housing Study indicates that there's enough zoned land to provide for 89,652 additional dwellings, more than enough to cater for projected demand well into the

future. As such, there is no pressure to zone more land for residential development over the next 20 years. Council's preference is for any increases in the density of current controls to be focused in the City Centre and close to centres with good public transport accessibility, including potential transit- and landscape-oriented development hubs along the Fifteenth Avenue Smart Transit (FAST) Corridor.

Findings from the Local Housing Study indicate there is a mismatch between the types of housing being delivered, and what is needed by the community. For example, the majority of housing in the city centre is two-bedroom apartments, however there is demand from larger family homes in the city centre with more bedrooms. In growth areas, there is a large number of 4-5 bedroom houses being delivered, however, there is demand for smaller housing, including semi-detached housing such as townhouses.

Council acknowledges that a variety of homes will be needed to cater for a diverse population with different needs and incomes. In 2017/2018, less than 2% of new developments were diverse housing options. Liverpool needs housing that is suitable for young families, larger culturally appropriate housing for multi-generational families, more affordable dwellings, and housing for downsizers, seniors and those who want to age in place. Council supports increasing the diversity of housing – including 'missing middle' style developments such as terraces, townhouses and manor houses – to assist in providing more affordable dwellings, but this must respect local character and be in areas close to services and transport. For affordable housing in particular, it is critical that support services are close by.

Council also supports an increase in affordable rental housing for the community as a priority, with the LGA suffering from one of the highest rates of rental stress in the country. There are currently over 7,000 households in rental stress (meaning more than 30% of income is spent on rent) with more than 4,000 experiencing severe rental stress (more than 50% of income spent on rent). Council acknowledges the economic and social benefits created through the provision of affordable housing, including supporting job growth, encouraging greater financial prosperity for low income households, increasing social cohesion through mixed tenure developments, and reducing social isolation.

Demand for social and affordable housing is increasing at much faster rates than Sydney more broadly. By 2036 our LGA will have the highest

demand for social and affordable housing in the entire Western City District. Increasing the provision of affordable rental housing will mean that Liverpool's key workers will be able to better support themselves, their families and the local economy. Council will develop an Affordable Housing Contributions Scheme, identifying new areas for higher density housing in which contributions for affordable housing can be levied. Council will also continue to deliver affordable housing through mechanisms such as voluntary planning agreements, and the provision of Council-owned land for affordable housing developments.



HOUSEHOLDS IN RENTAL STRESS

LIVERPOOL 43%

SYDNEY 37.5%

2016 CENSUS

HOUSEHOLDS IN MORTGAGE STRESS

LIVERPOOL 27.9%

SYDNEY 17.5%

2016 CENSUS

DEMAND FOR SOCIAL AND AFFORDABLE HOUSING

2016 7646 DWELLINGS

2036 16,465 DWELLINGS

What is social and affordable housing?

SOCIAL HOUSING is affordable rental housing provided by not-for-profit, nongovernment or government organisations to assist people who are unable to access suitable accommodation in the private rental market and may be at risk of homelessness. Social housing includes public, Aboriginal and community housing, as well as other services and products. It acts as a safety net for the most vulnerable in the community.

AFFORDABLE HOUSING is not the same as social housing. It is also open to moderate income earners that may be struggling to make ends meet, and is around 20-25 per cent below market rental prices. It allows key workers whose household income is not high enough to cover market rent to live and work locally. Affordable housing can be owned by private developers or investors, local governments, charitable organisations or community housing providers (CHPs), but is managed by CHPs.



Council supports increasing the diversity of housing while respecting local character



HOW WE LIVE

SEPARATE HOUSE 73.7%



APARTMENTS 11.7%



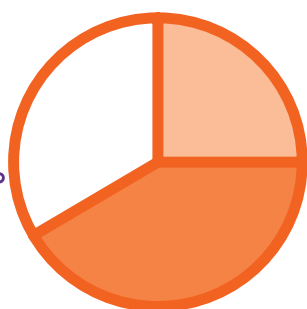
MEDIUM DENSITY 13.8%



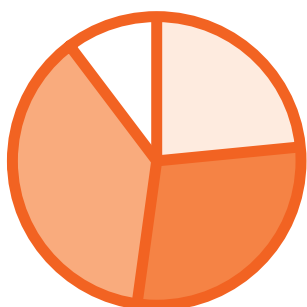
COUNCIL WILL

- Concentrate residential development in the Liverpool City Centre, in growth areas, in transit- and landscape-oriented development hubs along the Fifteenth Avenue corridor route, and in existing centres with high amenity that are well serviced by public transport.
- Ensure housing typologies are diverse and appropriately located to cater for the entire community.
- Ensure housing supports aging in place and accessibility principles.
- Ensure a greater proportion of affordable housing is delivered.
- Work with residents, government and other relevant stakeholders to renew social housing that is near end of life and build more diverse and inclusive communities.
- Deliver ongoing renewal and beautification projects in Miller, Cartwright and Ashcroft.
- Work with DPIE to deliver housing in growth areas with supporting infrastructure.

HOUSING TENURE



NUMBER OF CARS



ACTIONS

- 7.1** Develop and implement a Local Housing Strategy through amendments to the LEP and DCP **(short term)**
- 7.2** Consider an Affordable Housing Contributions Scheme in line with Greater Sydney Commission's requirement for 5-10% affordable housing, and amend LEP to give effect **(short term)**
- 7.3** Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and Green Valley) to improve and increase social and affordable housing **(medium term)**
- 7.4** Partner with State Government and stakeholders including TAFE to review the Masterplan for Miller Town Centre **(short term)**
- 7.5** Advocate to State and Federal Governments for more investment in social and affordable housing **(short term)**
- 7.6** Partner with State Government to investigate planning controls to address land fragmentation challenges in growth areas **(short term)**
- 7.7** Progress planning for sustainable, high-density transit- and landscape-oriented development along the Fifteenth Avenue Smart Transit Corridor **(short to medium term)**.
- 7.8** Monitor, review and update the Local Housing Strategy to ensure sufficient, appropriate and diverse housing is delivered to meet community needs **(ongoing)**

LOCAL PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

RATIONALE

Our established areas feature suburbs with strong communities, low scale development and relatively affordable development, and good access to services. Consultation for the LSPS shows that residents of Liverpool's established suburbs have a strong desire for their areas to maintain their low-scale local character into the future.

Council will work to ensure development remains largely low scale and sympathetic to local character. This approach is supported by findings from the Local Housing Study that indicate further rezoning is not required to meet housing growth targets, and that housing targets can be easily accommodated without apartment developments outside of the City Centre and town centres.

In existing centres, Council will undertake design-led planning using placemaking principles to ensure growth is sympathetic to local character and heritage. We're also working to improve the amenity of our suburbs. We've updated contributions plans to better enable local infrastructure that can meet needs, and we will continue to advocate changes to contributions planning to provide funds for improvements such as open space embellishment and new facilities.



Suburbs will largely remain low scale



COUNCIL WILL

- Ensure residential development is maintained at a low scale around local centres not well-served by public transport.
- Preserve local character of existing suburbs.
- Improve the amenity of local centres and recognise the role of retail in establishing vibrant local centres.
- Ensure heritage, including Aboriginal heritage, is valued and protected.
- Support heritage asset revitalisation and adaptive reuse where appropriate
- Advocate for and provide social and cultural infrastructure in established and new release areas.

ACTIONS

- 8.1** Amend LEP to implement findings of review of dwelling typologies and density around Moorebank Shopping Centre **(short term)**
- 8.2** Review R4 zoned land around local centres to address interface issues **(short to medium term)**
- 8.3** Investigate Local Character Statements and Local Character overlays for areas identified as requiring more fine-grain planning responses **(short term)**
- 8.4** Review and update heritage provisions in LEP, and address anomalies **(short term)**
- 8.5** Undertake design-led planning using placemaking principles for local and district centres **(medium term)**

LIVEABILITY

LOCAL PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

RATIONALE

The future of Liverpool is vibrant, active and healthy. While Western Sydney residents should enjoy the same health outcomes as those in other parts of Sydney, currently this is not the case, with significantly higher rates of obesity and diabetes. This is due to a number of reasons, including high car dependence, relatively lower levels of spare time due to commuting and traffic, poor access to public and active transport, and fewer recreation opportunities.

A healthy built environment is a key motivator for the future. We are working to build more walking and cycling trails, opening access to our natural assets, focusing development near public transport to encourage mode shift, and ensuring there is enough open space and recreational facilities to meet growing demand. New urban centres will be compact and transit-oriented, to maximise opportunities for walking and active transport.

Council is also committed to creating inclusive and harmonious environments. Liverpool is one NSW's most culturally diverse cities with around 40% of people born overseas. Liverpool will continue efforts to create a harmonious society where differences are appreciated and celebrated, as socially diverse communities are inclusive, healthy and creative. We will also continue to develop programs, in partnership with government and non-government organisations, to improve mental wellbeing, which is a key aspect of health and safety.

In Council's LSPS consultation, safety was indicated as a major community concern. In 2019 Liverpool was recognised as a Pan Pacific Safe Community – a strong, cohesive, vibrant community, where citizens actively participate in public life. We have identified domestic violence, road accident trauma, drugs and alcohol, and fall-and-trip-related injuries as key issues, and will work to continuously improve safety.

Council is committed to embedding Crime Prevention through Environmental Design (CPTED) principles across the LGA. This crime prevention strategy focuses on the planning, design and structure of cities and neighbourhoods in order to reduce opportunities for criminal behaviour. The DCP has been developed to encourage safe design, and Council will continue to provide high-quality environments in which our residents feel safe and secure, including through building design, maintenance works, landscaping, lighting, and open and public space design.

Council will also be improving the safety of our residents during natural disasters by ensuring hazard data is up to date, not locating development in high hazard areas, and addressing environmental issues that place the community at risk, such as the urban heat island effect.



**The future of Liverpool
is vibrant, active and
healthy**



COUNCIL WILL

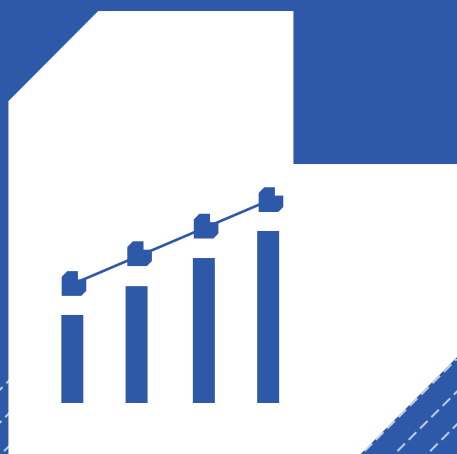
- Support the health and wellbeing of the community through healthy urban design and placemaking.
- Consider child-friendly planning strategies and aging in place principles in LEP and DCP reviews.
- Advocate better public transport outcomes.
- Focus development close to public transport.
- Ensure new centres are compact and transit-oriented.
- Ensure community and social support services are located near areas of need.
- Work with stakeholders to reduce road trauma.
- Work with partners to reduce crime.
- Ensure the built environment incorporates CPTED principles.
- Facilitate the development and promotion of integrated walking and cycling networks within and between centres.
- Prioritise pedestrian movement in the CBD and beyond.
- Investigate locations of active transport connections into adjoining LGAs.
- Continue to update hazard mapping to ensure safety, including flood and bushfire mapping.
- Address the urban heat island effect.

ACTIONS

- 9.1** Amend DCP to better respond to urban heat **(short term)**
- 9.2** Liaise with Fairfield and Canterbury Bankstown councils to implement active transport routes around Chipping Norton Lakes, including bridge and road connections **(medium term)**







PRODUCTIVITY

Our Jobs

Liverpool in 2040 will be the premier edge city to Western Sydney International Airport – a jobs-rich, attractive destination drawing in jobs, business, study, tourism and investment, supporting the operation of a successful 24-hour international airport.

Liverpool has a long-standing role as the regional centre for the South West, reflecting its history and strategic location near major transport infrastructure, such as the M5 and M7 motorways, and T2, T8 and freight lines.

The City boasts a major health and education precinct including Liverpool Hospital – the largest standalone hospital in NSW – three major universities and two TAFE campuses. It also supports a significant manufacturing and logistics sector.

Recent infrastructure announcements mean that Liverpool has significant potential to strengthen its productivity and capitalise on its status as an attractive, jobs-dense centre. The opening of the Western Sydney International Airport will catalyse investment in a wide range of knowledge-intensive industries. The Western Sydney Aerotropolis will also generate significant employment and economic opportunities for Liverpool and the broader South West region.

Changes to Liverpool's City Centre planning controls means that Liverpool is well-placed to accommodate additional jobs and housing growth. With its position on the Georges River, and following additional rail and rapid transit connections set out in the State Government's Future Transport 2056 Strategy are complete, there is opportunity to create a high amenity Centre that will be the natural location

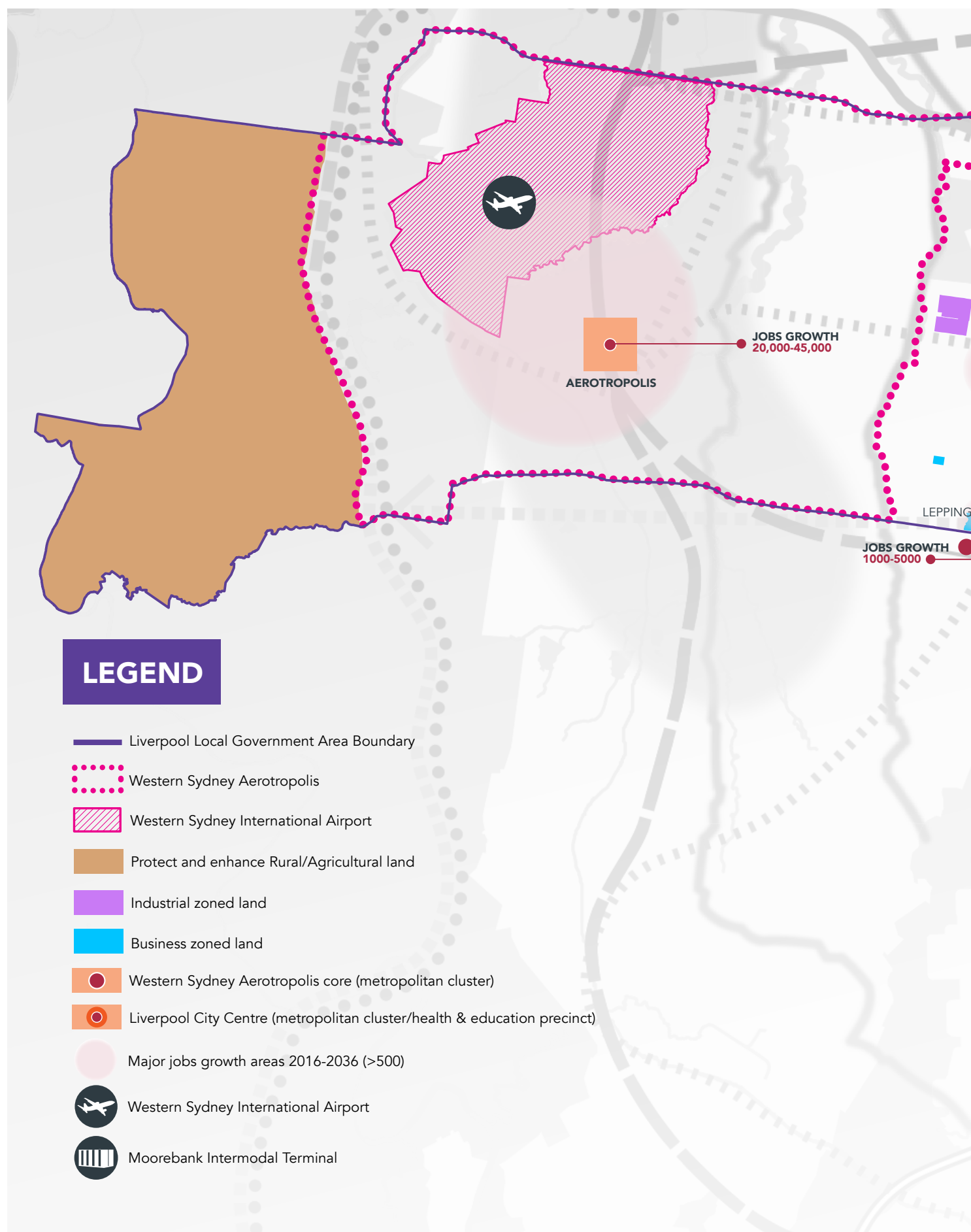
for businesses related to the airport. Liverpool will become the premier edge city to Western Sydney International Airport.

A key challenge for Liverpool's productivity is managing the infrastructure and employment land needed to sustain projected population growth and economic opportunities. A key action will be investigating ways to increase or better manage existing industrial and employment lands to cater for the jobs of the future.

Another challenge is poor access to knowledge jobs due to long journey times to other centres and significant road congestion. While Liverpool has a goal of increasing opportunities to work in the LGA – and our LSPS survey indicated that the community's number one Productivity priority is 'creating more jobs in the local area' – the reality is that many residents need to leave the LGA for employment. Currently close to 70% of Liverpool's residents leave the LGA for work. Liverpool will work to ensure that these residents can reach their jobs in a satisfactory time, and that workers outside the LGA can reach the abundant opportunities provided by Liverpool with ease. With a significant migrant and refugee intake, Liverpool will also work to increase opportunities for our new residents.

We will advocate for delivery of transport commitments and attract new business investment to support an increase in jobs of 200,000 in Western Sydney over the next 20 years, as part of our commitment to the Western Sydney City Deal. Council will also work to meet its stated jobs target of 2500 per year, as part of our Economic Development Strategy 2019-2029.

OUR JOBS





PRODUCTIVITY

LOCAL PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

Liverpool will capitalise on these advantages, and grow its Innovation Precinct to cater for the significant growth in health and knowledge workers expected in the next 20 years, and become a global leader in collaboration for health, education and research.

RATIONALE

Health and education play a significant role in Liverpool, with Liverpool Hospital, Ingham Institute of Applied Medical Research, the University of NSW (UNSW), Western Sydney University (WSU), University of Wollongong (UOW), South West Private Hospital and TAFE NSW in the local area. There are more than 15,000 health and knowledge workers in the LGA, accounting for about 20% of all workers. This could increase to 30,000 by 2036 and even higher if the right actions are taken.

Liverpool City Centre has significant advantages that could reinforce its position as a health leader and help it to develop a world-class health, education, research and innovation precinct based around Liverpool Hospital. This includes close access to a train line, a river providing significant amenity potential, availability of commercial land and a diverse population.

Liverpool also has potential to improve its standing as an education destination, building upon its network of outstanding government and non-government schools, a nationally recognised trade training centre, and multiple university campuses. Student numbers are growing rapidly. In the next 5-7 years, it is expected Liverpool will be home to more than 5000 university students and 8000 TAFE students. The number of university students is expected to grow to more than 10,000 over the next 10 years.

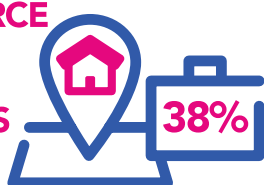
COUNCIL WILL

- Lead development of the Liverpool Innovation Precinct.
- Ensure land use planning supports the operation and growth of the precinct for all in the health, education and innovation ecosystem.
- Support tertiary institutions, including vocational and technical training opportunities.
- Collaborate with tertiary institutions to encourage appropriate student housing.

ACTIONS

- 10.1** Investigate LEP changes necessary to support the operations and growth of the Liverpool Innovation Precinct **(short to medium term)**
- 10.2** Prepare structure plan and planning proposal to rezone the Warwick Farm racing precinct to B4 **(short term)**
- 10.3** Collaborate with universities, TAFE, the Department of Education and other education providers to support growth **(short term)**

**LIVERPOOL
WORKFORCE
THAT ARE
LOCAL
RESIDENTS**



**NUMBER OF
UNIVERSITIES**

3



**HOLDS A
BACHELOR
DEGREE
OR HIGHER**

2011 2016
12.5% 15.7%



LOCAL PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

RATIONALE

Liverpool is quickly becoming a business and commercial destination of choice. Due to its proximity to the Western Sydney International Airport, Liverpool's attractiveness as a location for commercial and industrial enterprise will grow significantly over the next 30 years, including in aerospace, agribusiness, education, health, and logistics and transport sectors. Liverpool's goal is to create a domestically thriving, globally known business landscape that prioritises the expansion and innovation of industry to promote its identity to the world.

Liverpool's Community Strategic Plan (CSP) directs Council to generate opportunity across Liverpool, while our LSPS survey indicated a demand for local, high-paying jobs. The Liverpool City Centre is an attractive destination for knowledge intensive industries and has a large capacity for commercial office floor space. Council is committed to attracting business for economic growth and employment opportunities, and have set an ambitious growth target of 2500 new jobs a year to 2029.

We have already changed planning controls in the city centre to facilitate new jobs and housing. Council has completed an Economic Development Strategy to create new job opportunities, develop local capacity, market Liverpool as a business destination, and activate and develop vibrant places to attract new residents, visitors and workers. We have also created a Destination Management Plan and International Trade Engagement Strategy to leverage opportunities from the Western Sydney International Airport and market the potential of Liverpool to the world.

With about 70% of residents currently leaving Liverpool to get to work, a focus for Council will be to increase the number of job opportunities closer to home. We will continue to advocate the fast

and frequent public transport services needed to boost Liverpool's attractiveness as a place for jobs, business, tourism and investment.

The LGA has a number of centres differing in size and function. The concentration of retail within centres plays an important role, yet the function of centres extends beyond providing for the day-to-day and specialised retail needs. Centres act as important focal points for the local community, especially when co-located and well integrated with gathering places such as cafes, restaurants and social infrastructure. In turn, the increase in foot traffic from these other uses contributes to the vibrancy of the centre and supports retail uses. Centres also provide opportunities for local employment and are an important part of establishing the 30-minute city when co-located with high quality public transport.

The Liverpool LGA also has 'stand-alone centres' that contain either a supermarket or another large retail role, such as bulky goods retailing. Whilst these stand-alone centres meet the retail needs of the community, they do not provide multi-function community gathering places. As there is limited demand for new centres within the LGA, Council will prioritise the future expansion of retail within local or town centres rather than stand-alone centres.



**Liverpool has significant
advantages that could reinforce
its position as a health leader**



PRODUCTIVITY

COUNCIL WILL

- Create an environment to attract, train and retain a skilled workforce to support contemporary business needs.
- Reduce the proportion of people leaving the LGA for work and study.
- Investigate updates to procurement policy to preference local workers.
- Grow jobs in the health and education sectors.
- Support small businesses including start-ups.
- Provide opportunities for refugee and migrant populations to enter the workforce.
- Continue advocacy for city shaping transport infrastructure to boost jobs growth.
- Provide infrastructure, facilities and services needed to support and facilitate visitor economy and tourism growth in light of the opportunities provided by Western Sydney International Airport.
- Enhance tourist attractions, including beautification of Georges River and developing Chipping Norton Lakes.
- Improve connections from the City Centre to the Georges River, and open and active space networks.
- Strengthen Casula Powerhouse's position as the leading Arts Centre in South West Sydney.
- Establish a hierarchy of centres and determine anticipated retail supply and demand to guide future planning.
- Investigate planning controls to allow retail centres in Liverpool to keep up to date with technology and retail trends such as online shopping and electric trucks.
- Investigate a review of trading hours to establish late night trading to support the city centre as a dining destination.

EMPLOYMENT RATE



RESIDENTS THAT WORK OUTSIDE LIVERPOOL



ACTIONS

- 11.1** | Develop a Centres and Corridor Strategy, and review LEP and DCP to ensure alignment (**short term**)
- 11.2** | Investigate amendments to LEP to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (**short to medium term**)
- 11.3** | Amend LEP to increase land-use flexibility for festival uses (**short term**)
- 11.4** | Work with Transport for NSW and RMS to create links from Liverpool Train Station to the Georges River and investigate opportunities for transport interchanges at Moore Point (CBD extension east of the Georges River) (**short to medium term**)



Liverpool is quickly becoming a business destination of choice



LOCAL PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

RATIONALE

Prospects for industrial and employment projects in Liverpool are strong, given proximity to transport links such as the M5 and M7, and large projects including Western Sydney International Airport and the Moorebank Intermodal Terminal. Council is committed to safeguarding existing industrial and urban services land from competing pressures, aside from land marked for investigation on the Inset map to support the CBD and Innovation Precinct.

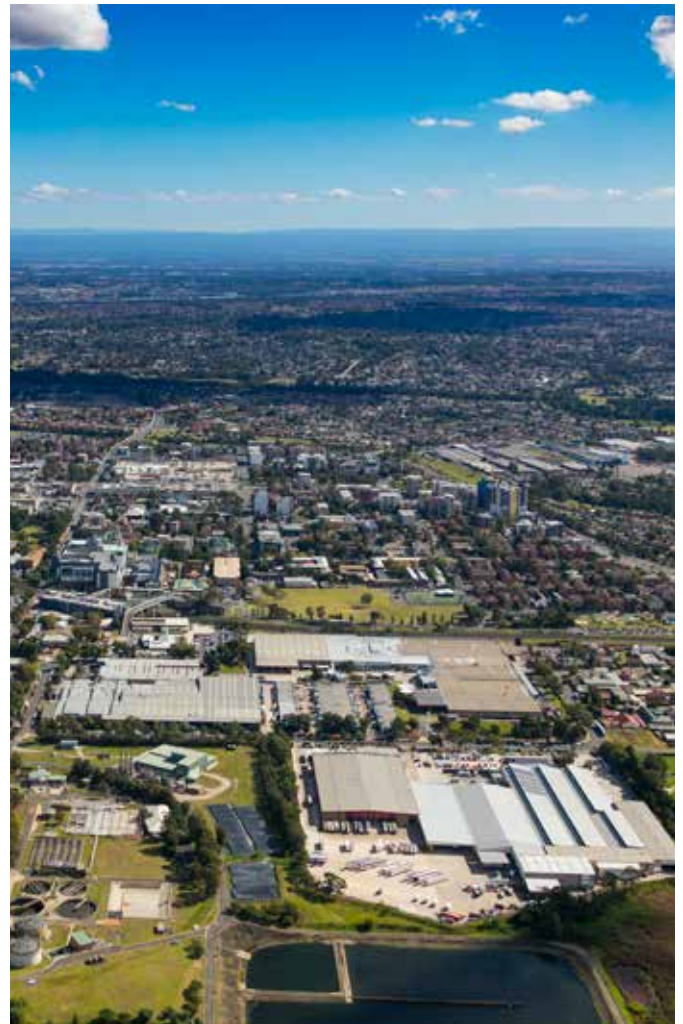
Council has conducted a number of industrial land studies, which indicate that there will be a future lack of zoned and serviced industrial land, requiring Council to investigate suitable areas in the LGA. New industrial land around the Western Sydney International Airport will contribute to meeting demand in the medium to long term for larger industrial uses. However there is a projected shortage of land zoned for local service related industrial uses after 2026. We will develop an Industrial and Employment Lands Strategy to ensure there is enough serviced employment land to sustain projected population growth. This strategy will also be flexible enough to support the needs of future businesses including knowledge-based activities, creative industries and advanced manufacturing.

We will focus on opportunities provided by the establishment of the airport, as well as strengthening our health, education and innovation precinct. Council will also look to facilitate the strengthening of established industrial precincts, guided by the new Industrial and Employment Lands Strategy.

With the development of the Western Sydney Airport, Aerotropolis and Moorebank Intermodal Terminal, as well as increased population growth, managing freight movement through the LGA will become of increased importance. Council is committed to collaborating with State Government and private industry to manage the freight task, protect important freight routes and reduce impacts on the local community.

Land for **LARGER INDUSTRIAL USES** refers to **IN1 (General Industrial)** and **IN3 (Heavy Industrial)** zones, and include uses such as manufacturing, freight, logistics, warehousing and distribution.

Land for **LOCAL SERVICE RELATED INDUSTRY** refers to the **IN2 (Light Industrial)** zone, and includes uses such as maintenance and repair uses and services supporting building and construction.





We will focus on opportunities provided by the airport, and strengthen our Innovation Precinct



COUNCIL WILL

- Monitor land development to ensure there is enough serviced employment and industrial land to meet future need for a number of price points from start-ups to multinationals.
- Prepare flexible planning controls to ensure businesses of the future are not unduly restricted.
- Leverage opportunities created by Western Sydney International Airport to promote agribusiness, food export and tourism.
- Strengthen connectivity between Liverpool City Centre and neighbourhood and district centres.
- Collaborate with TfNSW to address the growing freight task and support actions the State Government and industry need to take for the efficient, safe and sustainable movement of freight, in line with the NSW Freight and Ports Plan 2018-2023.
- Manage the interfaces of industrial, trade and intermodal facilities to reduce adverse impacts.
- Collaborate with TfNSW, DPIE and private industry to support the urban consolidation of freight.

ACTIONS

- 12.1** | Develop Industrial and Employment Lands Strategy and review LEP and DCP to ensure alignment (**short term**)
- 12.2** | Review the LEP and DCP to ensure statutory planning controls protect key freight routes and employment lands from sensitive land uses (**short to medium term**)
- 12.3** | Investigate provision of new industrial land, including light industrial (IN2), between the airport and the CBD, including extension of industrial zoned land in Austral, to ensure ongoing supply (**short to medium term**)



LOCAL PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

RATIONALE

Liverpool supports the delivery of Sydney's first 24-hour international airport, and is dedicated to ensuring the comparative advantage of a curfew-free airport is protected.

Inappropriate development around Western Sydney International Airport could constrain airport operations over the long term, affecting the region's productivity, while also having negative impacts on local communities due to aircraft noise. For these reasons, Liverpool City Council advocates a precautionary approach to the consideration of all land around the airport, recognising that extensive international experience has shown that development, particularly residential development, in proximity to airport operations acts as a constraint to and limitation on the success and opportunities of an airport.

Council will continue to collaborate to ensure that a precautionary approach and best-practice measures are put in place to protect any new residential communities and the viability of the airport.

COUNCIL WILL

- Collaborate through the Planning Partnership to protect the airport's competitive advantages as a curfew-free airport.
- Identify employment lands in line with industrial and commercial demand and development needs.
- Collaborate through the Planning Partnership to ensure a precautionary approach is taken to noise-sensitive development in the Aerotropolis.

ACTIONS

- 13.1** Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport **(short term)**
- 13.2** Work collaboratively with the Western Sydney Planning Partnership to implement the Western Sydney City Deal and ensure the best planning outcomes for the Aerotropolis **(short to medium term)**



**Liverpool supports the
delivery of Sydney's first
24-hour international airport**







SUSTAINABILITY

Our Environment

The Liverpool of 2040 is green, clean, safe, sustainable and vibrant. Tree cover and greenery have been greatly expanded, native habitat has been strengthened and protected, waterways are healthy, and climate change and urban heat are well managed.

Liverpool is rich in nature and this will be protected into the future. Bordered by the Georges and Nepean Rivers, it has significant and unique bushland, biodiversity, and green and blue networks. However, Liverpool is currently one of the fastest growing cities in NSW, and therefore the natural environment is exposed to pressures from development and urban sprawl.

Liverpool City Council recognises the importance of protecting our natural environment and using our resources wisely. Indeed, \$27 of every \$100 in operational expenditure goes towards the environment.

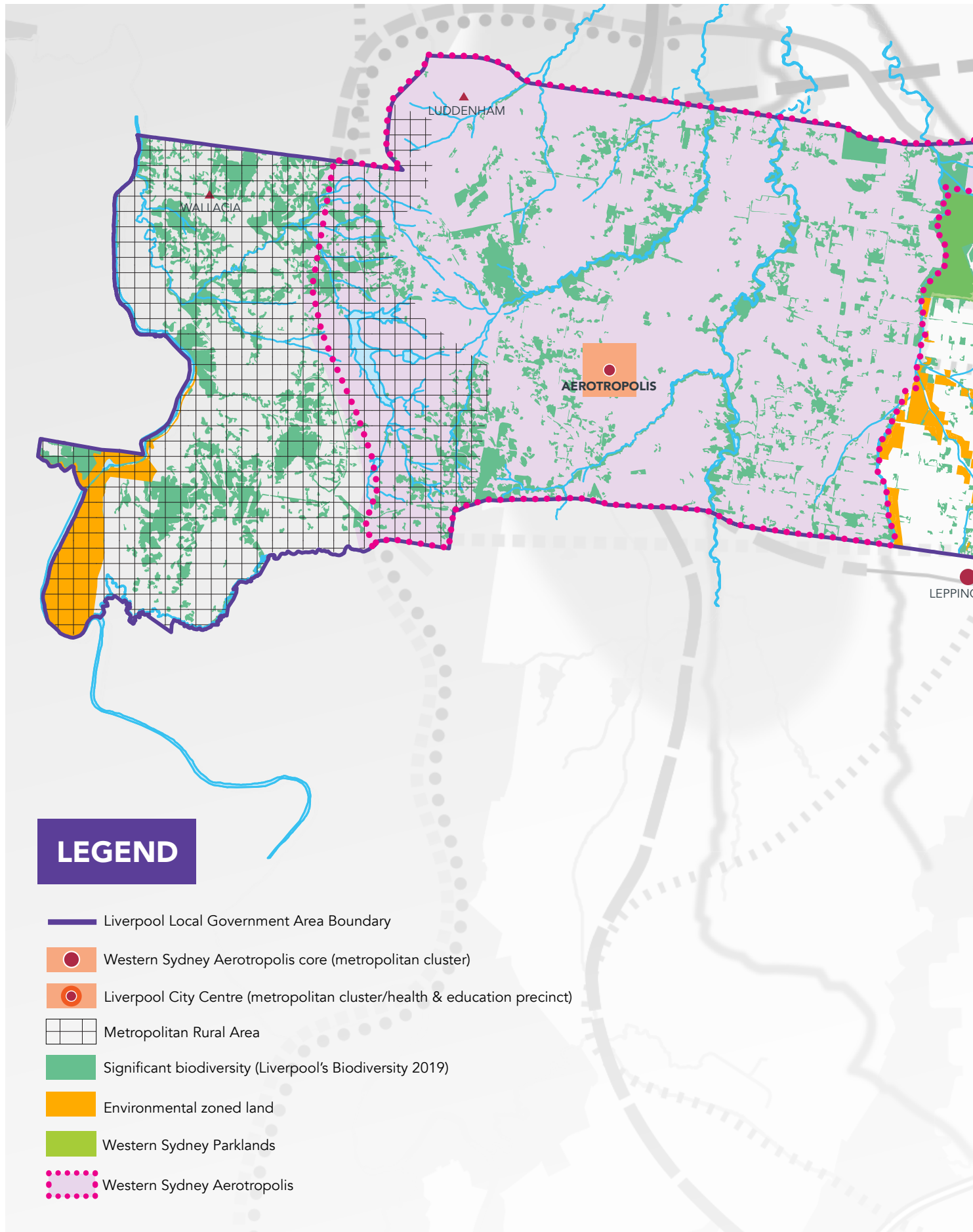
We are working towards fostering a partnership with our community to better protect, support and conserve our natural resources and environment. A key direction in Council's CSP – *Our Home, Liverpool 2027* – is 'Strengthening and Protecting our Environment', with the following goals:

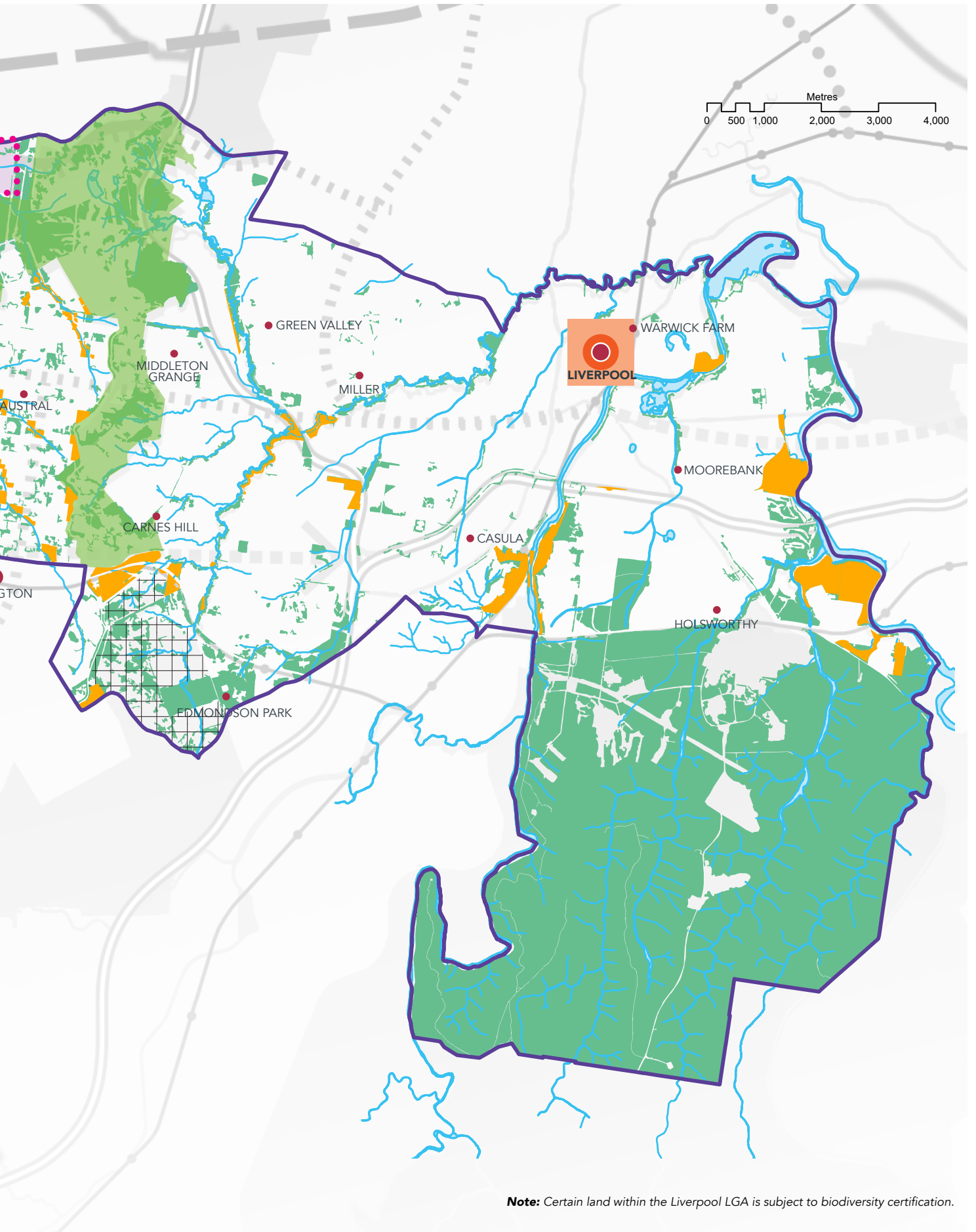
- Manage the community's disposal of rubbish;
- Protect and enhance bushland, rivers and the visual landscape;
- Encourage sustainability, energy efficiency and the use of renewable energy;
- Exercise planning controls to create high-quality, inclusive urban environments; and
- Develop, and advocate for, plans that support safe and friendly communities.

Through the LSPS survey, the community has said the top priorities are 'having plentiful trees and canopy cover' and 'improved access to nature and waterways'. Council is working on plans to protect and increase tree canopy cover in order to improve amenity, reduce air pollution and tackle the urban heat island effect.

Council also acknowledges the risks posed by climate change and is committed to playing its part in mitigating climate change and adapting to the threats posed by climate change, particularly implementing measures to reduce the urban heat island effect.

OUR ENVIRONMENT





SUSTAINABILITY

LOCAL PLANNING PRIORITY 14

Bushland and waterways are celebrated, connected, protected and enhanced

RATIONALE

Extensive green and blue corridors traverse the Liverpool LGA. Liverpool sits within the Cumberland Plain, home to a rich array of wildlife and plants. Approximately one-third of our land is covered by native vegetation, supporting extensive biodiversity, including 10 threatened ecological communities, 12 threatened flora species and 57 threatened fauna species. Council will work to protect and restore naturally occurring ecosystems and habitat based on best-practice biodiversity conservation principles. The Liverpool LGA covers substantial portions of the Georges River catchment and the Hawkesbury-Nepean River catchment. It also covers significant tributaries of the Hawkesbury-Nepean River system, including South Creek, Kemps Creek and Badgerys Creek. The health of our waterways is under pressure from development, catchment disturbance, land use transformation and land clearing. With rapidly expanding development, it is vital that waterways, open space and bushland are better protected.

There are significant opportunities to protect, restore and connect areas of high-value bushland, particularly around waterways, that can increase the sustainability and resilience of communities in the LGA. As part of implementing the State Government's Green Grid, Liverpool will work to increase green space, canopy cover, connectivity and recreation opportunities, particularly along the Georges River/Chipping Norton Lakes system, Cabramatta Creek and South Creek. Increasing urban tree cover and Green Grid connections will provide for healthier communities and more resilient, liveable cities.

South Creek has been identified in the Western City District Plan as a key structural element of the Western Parkland City. Council will work with State Government through the Western Sydney Planning Principle to ensure a landscape-led approach to development in the Aerotropolis is undertaken. It will

also work with the State Government to implement the Cumberland Plain Conservation Plan, when finalised. This plan is being designed to protect the region's threatened plants and animals and support the needs of the community through the creation of conservation lands and green spaces.

Council is also committed to incorporating Water Sensitive Urban Design (WSUD) principles that consider and preserve the natural water cycle, and reduce stormwater impacts on waterways. Council's WSUD Guideline is used by both Council and developers in implementing WSUD in the LGA. As part of a review of WSUD principles in Austral and Leppington North, Council is now proposing an alternative approach that uses on-street rain gardens to treat pollutants closer to the source. Council will collaborate with State Government agencies to review the application of these principles more broadly across the LGA, which should lead to an improvement in waterway health. In 2017/2018 the Mid Georges River was given an average ecological health rating of B+, and Council will work to continually improve river health and implement WSUD, with a view to making the Georges River swimmable in the future.

COUNCIL WILL

- Protect and restore naturally occurring ecosystems and habitat based on best practice biodiversity conservation principles.
- Minimise threats to listed species, populations and communities.
- Establish and enhance a Green and Blue Grid corridor network.
- Improve gateway entry experience into LGA, including through landscaping.
- Substantially increase tree canopy cover.
- Implement water-sensitive urban design.
- Improve catchment management and ensure policies and planning instruments work to improve river and waterway health.
- Work towards reinstating more natural conditions in highly modified urban waterways.

- Enhance the ecological health of the Georges River to make it swimmable.
- Create visible, safe and accessible points of entry to the Georges River.
- Collaborate with Western Sydney Planning Partnership to ensure a landscape-led approach to development is taken within the Aerotropolis.
- Collaborate with DPIE to implement the Cumberland Plain Conservation Plan.
- Manage flood risk by limiting development in the 1 in 100 year flood level and collaborating with key stakeholders to implement the Hawkesbury-Nepean Valley Flood Risk Management Strategy for the western edge of the LGA.



There are significant opportunities to protect, restore and connect areas of high-value bushland



ACTIONS

- | | |
|-------------|--|
| 14.1 | Review Environmentally Significant Land overlay in LEP to ensure protection of areas of high ecological conservation value (short term) |
| 14.2 | Review LEP and DCP to ensure protection of biodiversity and waterway quality, and implement the Green Grid (short to medium term) |
| 14.3 | Develop a strategy to increase tree canopy cover in the LGA (short term) |
| 14.4 | Collaborate with Department of Defence and neighbouring councils to investigate a koala habitat protection corridor (short term) |
| 14.5 | Develop a Strategic Urban Biodiversity Framework, dependent on finalisation of State Government's Greener Places policy (short term) |
| 14.6 | Create green entryways to LGA along major road entry points (medium to long term) |

SUSTAINABILITY

LOCAL PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

RATIONALE

Council's Community Strategic Plan (CSP) has a directive to strengthen and protect the environment, and we are working hard to create a city that has sustainability and resilience at its core. In our survey to develop this LSPS, the most repeated words when asked to describe Liverpool in the future were: clean, green, safe, sustainable and vibrant.

Liverpool faces a number of challenges on its journey to meet this vision. Western Sydney faces more extreme heat events than in the east, due to both geography and the urban heat island (UHI) effect. The UHI effect is expected to increase in Sydney as urban development continues and temperatures increase with climate change. Areas along the Georges and Nepean rivers, and many creeks, face significant flood risk. There is also significant amounts of land subject to bushfire hazard.

The community has expectations and aspirations for environments that are comfortable and pleasant, visually appealing and that contribute to health, safety and wellbeing. Through consultation, the community has said sustainable urban design is an important priority. To achieve this, the effects of urban heat need to be considered and addressed, including mitigation responses to urban heat such as design and construction techniques, material selection, and green and blue infrastructure.

Council is also working to address climate change. The highest proportion of the LGA's carbon emissions comes from residential housing. Council is committed to ensuring all development occurs sustainably, however with most residential development occurring through exempt and complying development pathways, and with restricted ability to require residential building standards to exceed that set by the State Government's BASIX controls, there is limited control in this space. However, in areas where Council does have influence, we will work to ensure sustainability and urban heat issues are addressed appropriately.

Council will also work to investigate opportunities for low-carbon, high-efficiency precincts, particularly within the Liverpool Collaboration Area and Leppington Town Centre precinct.

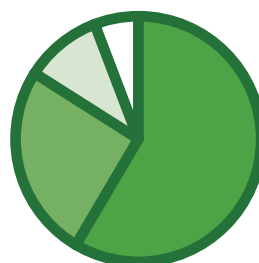
Where there are inconsistencies between State policy instruments and broader strategic goals – such as a commitment to reach net zero carbon emissions by 2050 – Council will advocate better alignment in order to protect amenity and sustainability. For example, Council wants to ensure low-density housing has backyards capable of supporting mature vegetation, with adequate space for recreation, stormwater filtration and attenuation of the urban heat island effect. We want our community's housing to be safe, efficient and comfortable.

Council will work to reduce emissions, considering feedback from its emissions reduction and resource efficiency study, and update relevant environmental sustainability strategies. We will seek to address air pollution issues in the LGA, noting that most air pollution issues arise from activities outside of Council's control.

We will also work to create a water-sensitive city. With changing climate and urban heat, we need to maximise water resources, increase water security and improve water management to respond to increasing temperatures, heatwaves and floods. This involves improving irrigation, water re-use and capture measures within open space areas, and implementing and integrating WSUD into all developments to better manage stormwater.



The community's vision for Liverpool is clean, green, safe, sustainable and vibrant



CARBON EMISSIONS BY SOURCE

- ELECTRICITY 60.1%
- TRANSPORT 26.6%
- WASTE 9.7%
- GAS 3.6%

COUNCIL WILL

- Ensure development is located appropriately and that natural hazards such as flood and bushfire are avoided or mitigated.
- Encourage sustainability, energy efficiency and renewable energy across the LGA.
- Continue to provide education around sustainability and waste issues to the community.
- Advocate improvements to residential building codes and State planning policies to better align with State net zero carbon emission aspirations.
- Encourage water-sensitive urban design on new development, including through encouraging permeability of the public and private domain.
- Encourage transport demand initiatives that help to reduce greenhouse gas emissions.
- Support the take-up of electric vehicles and associated charging infrastructure.
- Support water efficiency and alternative sources of water for resilient whole-of-water-cycle management.
- Review landscape and street tree planting strategies and guidelines.
- Substantially increase overall tree canopy across the LGA, including the City Centre.
- Pursue opportunities with utilities to deliver integrated energy water and waste infrastructure where community benefits are delivered.
- Pursue waste outcomes that are safe, efficient, cost-effective, maximise recycling and that contribute to the built form and liveability of the community.

ACTIONS

- 15.1** Review LEP and DCP to suitably address sustainability in line with recommendations from emissions reduction and resource efficiency study (**short term**)
- 15.2** Review LEP and DCP to address sustainable waste outcomes (**short term**)
- 15.3** Review LEP and DCP to ensure Water Sensitive Urban Design is adequately addressed (**short term**)
- 15.4** Review LEP and DCP to address the Urban Heat Island Effect (**short term**)
- 15.5** Review DCP to encourage new commercial and industrial buildings to be rooftop solar ready (**short term**)
- 15.6** Review DCP to prioritise low-carbon initiatives in future developments such as adaptive building designs, precinct-level car parking strategies and energy-efficient, water-efficient, waste-efficient and energy generating precinct design (**short term**)
- 15.7** Advocate for changes to Exempt and Complying Development Code to ensure tree canopy cover can be increased in line with State directives (**short term**)
- 15.8** Advocate for increases to BASIX and Section J of the National Construction Code in line with the State Government's net zero by 2050 aspirations (**short term**)



CARBON EMISSIONS BY BUILDING TYPE

RESIDENTIAL 48%	HEALTH 15.1%
RETAIL 18.2%	COMMERCIAL 6.2%
INDUSTRIAL 9.3%	EDUCATION 3.2%

SUSTAINABILITY

LOCAL PLANNING PRIORITY 16

Rural lands are protected and enhanced

RATIONALE

Sydney's peri-urban food bowl and its city fringe farmers play a vital role in feeding the city's residents. Each year, the Greater Sydney region generates around \$660 million in agricultural produce. Liverpool's peri-urban area alone is responsible for about 12.5% of this value, with significant industries supplying poultry, fresh vegetables, mushrooms, milk and more to the local population.

The value of agricultural activity will be greatly increased due to the development of Western Sydney International Airport, particularly in the proposed Agribusiness precinct identified in the Western Sydney Aerotropolis Stage 1 Land Use and Infrastructure Implementation Plan (LUIIP). Liverpool is in a unique position to feed a growing international hunger for high-quality fruit, vegetables, meat and dairy.

Council is committed to supporting the development of new agricultural industry in the agribusiness precinct. We are also part of the new Future Food Systems Cooperative Research Centre (CRC), which will investigate ways to transform Liverpool into a regional food hub featuring high-tech agriculture and easy access to the international export market.

Liverpool's existing productive lands, however, are increasingly threatened by conflicting uses, particularly encroachment of residential. We want to ensure that this land and the jobs it provides are protected and enhanced, both to the West of the Aerotropolis, where Council's LEP shall apply, and within the LUIIP, where Council continues to advocate for the sensible protection of rural lands.

Rural land should be protected until there is a strong justification for urban development that cannot be met by existing zoned land. Solutions should be developed so that existing industries, including those rural activities east of the airport, can be

maintained and their value increased as a result of the Western Sydney Aerotropolis, until needed for other urban uses. Some existing uses will not be able to transition into high-intensity production close to the airport, as envisaged by the LUIIP, for example poultry, as a 24-hour airport may have adverse effects on production, and impact viability.

Our rural, productive lands not only support local jobs, they play a role in boosting city resilience. Having produce close to their intended market reduces supply chain waste, reduces food miles and helps protect against potential fuel price shocks. It also works to support biodiversity and lessen the urban heat island effect.

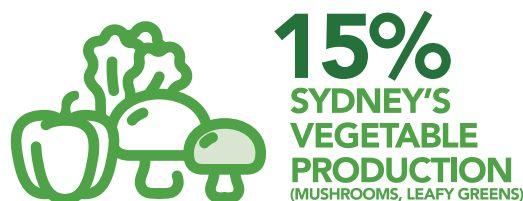
Liverpool recognises the contribution of peri-urban agriculture to city resilience, sustainability, liveability and the economy, and will work to ensure that this valuable agricultural land is protected.

COUNCIL WILL

- Ensure agricultural land is protected and enhanced to support the rural economy, ecosystem services and natural scenic landscapes.
- Manage land use conflict by supporting pre-existing agricultural land uses in the case of nuisance complaints and in a manner consistent with the Right to Farm Policy.
- Advocate the sensible, staged rezoning of land in growth areas.
- Protect land from future urban expansion west of the future Outer Sydney Orbital.
- Protect and promote sustainable rural employment opportunities, including rural tourism.
- Take a lead role in the Future Food Systems CRC to support local agricultural industries.

ACTIONS

- 16.1** Develop Rural Lands Strategy and review LEP to ensure alignment **(short term)**
- 16.2** Investigate placemaking opportunities in Wallacia and Luddenham, including addressing transition of development controls from Liverpool LGA to Penrith LGA and Camden LGA **(short to medium term)**
- 16.3** Review the Rural Lands Strategy every four years to ensure land use standards reflect trends in agriculture and can support the sensible growth of an agriculture industry to support opportunities provided by Western Sydney International Airport and to protect natural landforms and rural lifestyles **(ongoing)**



Liverpool is in a unique position to feed a growing international hunger for high-quality fruit, vegetables, meat and dairy



IMPLEMENTATION, MONITORING AND REPORTING.



IMPLEMENTATION, MONITORING AND REPORTING

Implementation

The LSPS communicates Liverpool City Council's strategic land use planning vision for the next 20 years. It informs what type of growth will occur in the LGA, where it will occur and when. To realise this vision, amendments will be required to Council's LEP and DCPs, which provide the delivery framework for Council's strategic planning. Additional strategies will be prepared and existing strategies will be implemented and Council will advocate for new State and Federal programs and infrastructure to be delivered.

The LSPS sets out actions to deliver on the planning priorities in order to meet the community's future vision for Liverpool.

LOCAL ENVIRONMENTAL PLAN (LEP)

LEPs are the principal statutory document that establishes the land use planning controls for an LGA. Through zoning, development standards and other local provisions the LEP provides the legal framework to ensure development is appropriate and reflects the community's vision for land use in the LGA.

DEVELOPMENT CONTROL PLANS (DCPS)

DCPs are non-statutory plans that provide detailed planning and design guidelines, and development controls to support the LEP.

Monitoring and review

Council will monitor, review and report on its LSPS to ensure that its planning priorities are being achieved. Council will use the existing Integrated Planning and Reporting framework under the Local Government Act 1993 for the purpose of monitoring implementation of the LSPS.

The LSPS will play an important role in Council's resourcing strategy, with preparation of strategies and studies required by this plan funded in the four-year delivery program and annual operational plans. Council will conduct a review of the LSPS in 2021

and again every four years to align the review period with Council's overarching community strategic planning and existing Integrated Planning and Reporting framework under the *Local Government Act*. Regular reviews will ensure that the LSPS continues to reflect the community's vision.

TEN-YEAR COMMUNITY STRATEGIC PLAN, OUR HOME, LIVERPOOL 2027

Our Home, Liverpool 2027 is Council's 10-year Community Strategic Plan (CSP). It is the highest level plan that shows where the community wants to be in 10 years' time, what needs to be done to achieve this, and how Council and the community will know when this has been achieved.

Our Home, Liverpool 2027 was created in consultation with the community of Liverpool and sets four key directions that address the quadruple bottom line. It is used by Council and other agencies and stakeholders to guide future direction, policy and service delivery.

FOUR-YEAR DELIVERY PROGRAM - 2017-2021

The Delivery Program translates the directions of the Community Strategic Plan into strategies that will guide Council for the next four years. It is the statement of commitment to the community for each newly elected term of office. The Delivery Program cascades down from the Community Strategic Plan to guide Council's for each newly elected term of office.

ONE-YEAR OPERATIONAL PLAN 2019/20

The Operational Plan is reviewed annually and details the actions that Council will undertake within that financial year. It is directly influenced by the Community Strategic Plan and Delivery Program to realise the community's prospects for the future. It also includes a detailed budget and Capital Works Program for the year.

Council will deliver actions that will work towards accomplishing the directions in the Community Strategic Plan. Council will keep track of progress in the Delivery Program and Operational Plan through:

- Six-monthly reports to Council and the community which detail program and budget progress;
- An Annual Report at the end of each financial year which includes a thorough financial report and overview of all Council's spending and operations. This will be published in a full report format as well as a short community snapshot; and
- A cumulative report at the end of Council's four-year term which details Council's financial position and progress against all the activities outlined in the Delivery Program.

Measuring Progress: Performance Measures

Council plans to use two types of indicators. These are:

COMMUNITY INDICATORS AND TARGETS

To track trends in quality of life for people in Liverpool. These are included in the Community Strategic Plan and will be reported in the Annual Report and the End of Term Report. Community indicators and targets are not intended to measure Council's performance as Council does not control all of the elements which may contribute towards it.

KEY PERFORMANCE INDICATORS

Measures which indicate whether a service is working well or is improving. Collectively, these indicators assist Council, all levels of government, business, community organisations and other stakeholders to have an understanding of conditions, experiences and priorities in Liverpool.

In addition to Council metrics, the GSC has established 'Pulse' indicators that can be used at a local government area scale.

SHORT TERM

Now-2020/2021

MEDIUM TERM

2021/2022-2024/2025

LONG TERM

2025/2026-2028/2029

VISIONARY

2029/2030+

IMPLEMENTATION FOR CONNECTIVITY

Measures:

- Delay from congestion
- Use of public transport
- Use of active transport
- Public transport travel times
- Infrastructure projects
- Number of partnerships developed

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport

PLANNING PRIORITY 3

Accessible and connected suburbs

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
1. A city supported by infrastructure 6. A well connected city	1. Planning for a city supported by infrastructure 7. Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres	Generating opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
1.1 Update CBD Parking Strategy. (short term)	✓			
1.2 Develop a Transport and Mobility Plan and review Local Environmental Plan (LEP) to ensure alignment (short term)	✓			
1.3 Advocate the prompt delivery of the South-West rail line extension from Leppington to Western Sydney International Airport, with a terminal interchange at Western Sydney International Airport (short term)	✓			
1.4 Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links (short term)	✓			
1.5 Advocate a Western Sydney Aerotropolis/Airport stop on any future high speed rail network (short term)	✓			
1.6 Work with Transport for NSW (TfNSW) to bring forward extension of the Sydney Metro City and Southwest and investigate a preferred alignment (short term planning, with delivery in the long term)	✓		✓	
1.7 Upgrade Edmondson Avenue from Fifteenth Avenue to Bringelly Road (medium term)		✓		
1.8 Work with TfNSW on an extension of the T-way from Hoxton Park Road south to Edmondson Park Station (medium to long term)		✓	✓	

IMPLEMENTATION FOR CONNECTIVITY

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
1. A city supported by infrastructure 6. A well connected city 7. Jobs and skills for the city	1. Planning for a city supported by infrastructure 7. Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City 8. Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres	Generating opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
2.1 Finalise investigations into the FAST corridor in collaboration with State and Federal government agencies (short term)	✓			
2.2 Amend the LEP and relevant environmental planning instruments to preserve the FAST corridor (short term)	✓			
2.3 Investigate location of transit- and landscape-oriented development hubs along the FAST Corridor route (short term)	✓			
2.4 Investigate extension of FAST corridor to Holsworthy station with consideration of appropriate station locations, including Moore Point (medium to long term)		✓	✓	
2.5 Deliver the FAST Corridor (long term)			✓	

PLANNING PRIORITY 3

Accessible and connected suburbs

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
1. A city supported by infrastructure 6. A well connected city	1. Planning for a city supported by infrastructure 7. Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City	Generating Opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
3.1 Collaborate with neighbouring councils to improve open space and transport connections, including active transport routes, around Chipping Norton Lakes (short term)	✓			
3.2 Optimise public transport infrastructure and accessibility as well as connectivity to pathways and cycleways as part of place-making for neighbourhood centres (short to medium term)	✓	✓		

IMPLEMENTATION FOR CONNECTIVITY

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
2. A collaborative city	2. Working through collaboration	Leading through collaboration

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
4.1 Collaborate with government agencies to prepare a local and regional level infrastructure schedule (short term)	✓			
4.2 Work with Greater Sydney Commission and relevant stakeholders to address the Liverpool Collaboration Area Place Strategy through amendments to the LEP (short to medium term)	✓	✓		
4.3 Investigate planning control changes to support CAVs and adaptive reuse of parking infrastructure (short to medium term)	✓	✓		



IMPLEMENTATION FOR LIVEABILITY

Measures:

- Dwelling approvals by location and type
- Net new dwellings approved and completed
- Housing costs as a percentage of household
- Percentage of affordable dwellings
- Percentage of new housing as diverse dwellings
- Number of new or upgraded community facilities
- Accessibility to open space

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
3. A city for people 4. Housing the city 5. A city of great places 7. Jobs and skills for the city	3. Providing services and social infrastructure to meet people's changing needs 4. Fostering healthy, creative, culturally rich and socially connected communities 5. Providing housing supply, choice and affordability with access to jobs, services and public transport 6. Creating and renewing great places and local centres, and respecting the District's heritage 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres	Generating opportunity Creating connection

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
5.1 Review Development Control Plan (DCP) to ensure the 18-hour economy can be suitably protected from reverse amenity issues (short term)	✓			
5.2 Review LEP and DCP to give effect to City Centre Public Domain Master Plan (short term)	✓			
5.3 Incorporate community and cultural facilities in Liverpool Civic Place (short to medium term)	✓	✓		
5.4 Review LEP to support development, community facilities and linkages at key Council-owned sites in the City Centre (short to medium term)	✓	✓		
5.5 Review LEP to ensure alignment and give effect to Woodward Place Masterplan (medium to long term)		✓	✓	

IMPLEMENTATION FOR LIVEABILITY

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
3. A city for people 8. A city in its landscape	3. Providing services and social infrastructure to meet people's changing needs 4. Fostering healthy, creative, culturally rich and socially connected communities 18. Delivering high quality open space	Creating connection

Action	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
6.1 Advocate changes to contributions planning and seek alternative funding mechanisms to deliver high-quality facilities and infrastructure, including the FAST corridor within accelerated timeframes (short term)	✓			
6.2 Investigate DCP changes to encourage green open space in high-rise development (short term)	✓			
6.3 Collaborate with the NSW Department of Education to identify opportunities for sharing local school infrastructure with the wider community (short term)	✓			
6.4 Develop community and recreation hub at Phillips Park, Lurnea (short term)	✓			
6.5 Redevelop Lighthorse Park into a district recreation and open space destination park, including a community centre, and active and passive open spaces (medium term)		✓		
6.6 Review LEP to give effect to River Connections Program linking green space networks from Casula to Pleasure Point, improving accessibility and visual amenity (short, medium and long term)	✓	✓	✓	
6.7 Establish a metropolitan-scale cultural/entertainment facility in the City Centre (visionary)				✓

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
4. Housing the city	5. Providing housing supply, choice and affordability with access to jobs, services and public transport	Generating opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
7.1 Develop and implement a Local Housing Strategy through amendments to the LEP and DCP (short term)	✓			
7.2 Consider an Affordable Housing Contributions Scheme in line with Greater Sydney Commission's requirement for 5-10% affordable housing, and amend LEP to give effect (short term)	✓			
7.3 Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and Green Valley) to improve and increase social and affordable housing (medium term)		✓		
7.4 Partner with State Government and stakeholders including TAFE to review the Masterplan for Miller Town Centre (short term) .	✓			
7.5 Advocate to State and Federal Governments for more investment in social and affordable housing (short term)	✓			
7.6 Partner with State Government to investigate planning controls to address land fragmentation challenges in growth areas (short term)	✓			
7.7 Progress planning for sustainable, high-density transit- and landscape-oriented development along the Fifteenth Avenue Smart Transit Corridor (short to medium term)	✓	✓		
7.8 Monitor, review and update the Local Housing Strategy to ensure sufficient, appropriate and diverse housing is delivered to meet community needs (ongoing)	✓	✓	✓	✓

IMPLEMENTATION FOR LIVEABILITY

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
5. A city of great places	6. Creating and renewing great places and local centres, and respecting the District's heritage	Strengthening and protecting our environment

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
8.1 Amend LEP to implement findings of review of dwelling typologies and density around Moorebank Shopping Centre (short term)	✓			
8.2 Review R4 zoned land around local centres to address interface issues (short to medium term)	✓	✓		
8.3 Investigate Local Character Statements and Local Character overlays for areas identified as requiring more fine-grain planning responses (short term)	✓			
8.4 Review and update heritage provisions in LEP, and address anomalies (short term)	✓			
8.5 Undertake design-led planning using placemaking principles for local and district centres (medium term)		✓		

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
3. A city for people	4. Fostering healthy, creative, culturally rich and socially connected communities	Creating connection

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
9.1 Amend DCP to better respond to urban heat (short term)	✓			
9.2 Liaise with Fairfield and Canterbury Bankstown councils to implement active transport routes around Chipping Norton Lakes, including bridge and road connections (medium term)		✓		

IMPLEMENTATION FOR PRODUCTIVITY

Measures:

- Jobs by industry
- Level of employment
- Gross Regional Product
- Vacancy rates
- Land zoned for employment purposes across various industry sectors
- Visitor numbers
- Number of new businesses opened/registered

PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres	Generating opportunity Leading through collaboration

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
10.1 Investigate LEP changes necessary to support the operations and growth of the Liverpool Innovation Precinct (short to medium term)	✓	✓		
10.2 Prepare structure plan and planning proposal to rezone the Warwick Farm racing precinct to B4 (short term)	✓			
10.3 Collaborate with universities, TAFE, the Department of Education and other education providers to support growth (short term)	✓			

IMPLEMENTATION FOR PRODUCTIVITY

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	8. Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres	Generating opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
11.1 Develop a Centres and Corridor Strategy, and review LEP and DCP to ensure alignment (short term)	✓			
11.2 Investigate amendments to LEP to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)	✓	✓		
11.3 Amend LEP to increase land-use flexibility for festival uses (short term)	✓			
11.4 Work with Transport for NSW and RMS to create links from Liverpool Train Station to the Georges River and investigate opportunities for transport interchanges at Moore Point (CBD extension east of the Georges River) (short to medium term)	✓	✓		

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	10. Maximising freight and logistics opportunities and planning and managing industrial and urban services land	Generating opportunity

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
12.1 Develop Industrial and Employment Lands Strategy and review LEP and DCP to ensure alignment (short term)	✓			
12.2 Review the LEP and DCP to ensure statutory planning controls protect key freight routes and employment lands from sensitive land uses (short to medium term)	✓	✓		
12.3 Investigate provision of new industrial land, including light industrial (IN2), between the airport and the CBD, including extension of industrial zoned land in Austral, to ensure ongoing supply (short to medium term)	✓	✓		

IMPLEMENTATION FOR PRODUCTIVITY

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
5. A city of great places 6. A well connected city 7. Jobs and skills for the city	6. Creating and renewing great places and local centres, and respecting the District's heritage 7. Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City 8. Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis	Generating opportunity Leading through collaboration

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
13.1 Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport (short term)	✓			
13.2 Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport (short term)	✓			



IMPLEMENTATION FOR SUSTAINABILITY

Measures:

- Tree canopy coverage
- Temperature in urban areas
- Environmental indicators
- Rural productivity and employment

PLANNING PRIORITY 14

Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

PLANNING PRIORITY 16

Rural lands are protected and enhanced

PLANNING PRIORITY 14

Bushland and waterways are celebrated, connected, protected and enhanced

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape	12. Protecting and improving the health and enjoyment of the District's waterways 14. Protecting and enhancing bushland and biodiversity 15. Increasing urban tree canopy cover and delivering Green Grid connections	Strengthening and protecting our environment

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
14.1 Review Environmentally Significant Land overlay in LEP to ensure protection of areas of high ecological conservation value (short term)	✓			
14.2 Review LEP and DCP to ensure protection of biodiversity and waterway quality, and implement the Green Grid (short to medium term)	✓	✓		
14.3 Develop a strategy to increase tree canopy cover in the LGA (short term)	✓			
14.4 Collaborate with Department of Defence and neighbouring councils to investigate a koala habitat protection corridor (short term)	✓			
14.5 Develop a Strategic Urban Biodiversity Framework, dependent on finalisation of State Government's Greener Places policy (short term)	✓			
14.6 Create green entryways to LGA along major road entry points (medium to long term)		✓	✓	

IMPLEMENTATION FOR SUSTAINABILITY

PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape 9. An efficient city 10. A resilient city	15. Increasing urban tree canopy cover and delivering Green Grid connections 19. Reducing carbon emissions and managing energy, water and waste efficiently 20. Adapting to the impacts of urban and natural hazards and climate change	Strengthening and protecting our environment

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
15.1 Review LEP and DCP to suitably address sustainability in line with recommendations from emissions reduction and resource efficiency study (short term)	✓			
15.2 Review LEP and DCP to address sustainable waste outcomes (short term)	✓			
15.3 Review LEP and DCP to ensure Water Sensitive Urban Design is adequately addressed (short term)	✓			
15.4 Review LEP and DCP to address the Urban Heat Island Effect (short term)	✓			
15.5 Review DCP to encourage new commercial and industrial buildings to be rooftop solar ready (short term)	✓			
15.6 Review DCP to prioritise low-carbon initiatives in future developments such as adaptive building designs, precinct-level car parking strategies and energy-efficient, water-efficient, waste-efficient and energy generating precinct design (short term)	✓			
15.7 Advocate for changes to Exempt and Complying Development Code to ensure tree canopy cover can be increased in line with State directives (short term)	✓			
15.8 Advocate for increases to BASIX and Section J of the National Construction Code in line with the State Government's net zero by 2050 aspirations (short term)	✓			

PLANNING PRIORITY 16

Rural lands are protected and enhanced

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape	16. Protecting and enhancing scenic and cultural landscapes 17. Better managing rural areas	Strengthening and protecting our environment

Action	2019/20-20/21	2021/22-24/25	2025/26-28/29	2029/30+
16.1 Develop Rural Lands Strategy and review LEP to ensure alignment (short term)	✓			
16.2 Investigate placemaking opportunities in Wallacia and Luddenham, including addressing transition of development controls from Liverpool LGA to Penrith LGA and Camden LGA (short to medium term)	✓	✓		
16.3 Review the Rural Lands Strategy every four years to ensure land use standards reflect trends in agriculture and can support the sensible growth of an agriculture industry to support opportunities provided by Western Sydney International Airport and to protect natural landforms and rural lifestyles (ongoing)	✓	✓	✓	✓

**LIVERPOOL
CITY
COUNCIL**



If you do not understand this document, please ring the Telephone Interpreter Service (131 450) and ask them to contact Council (1300 362 170). Office hours are 8.30am to 5.00pm, Monday to Friday.

ARABIC

إذا لم تستطع فهم هذا الطلب ، الرجاء الاتصال بخدمة الترجمة الهاتفية على رقم 131 450 واسألهم أن يتصلوا بالبلدية على رقم 1300 362 170 . دوام ساعات العمل هي من الساعة 8.30 صباحًا إلى 5.00 بعد الظهر من الاثنين إلى الجمعة.

CHINESE

如您看不懂此信 / 申請書，請打電話給「電話翻譯服務台」(131 450)，請他們聯絡市政廳(市政廳電話 1300 362 170)。市政廳辦公時間，星期一至星期五，上午八時三十分至下午五時。

CROATIAN

Ako ne razumijete ovo pismo/aplikaciju, molimo nazovite Službu prevodilaca i tumača (Translating and Interpreting Service - na broj 131 450) i zamolite ih da nazovu Općinu (na 1300 362 170). Radno vrijeme je od 8.30 ujutro do 5.00 popodne, od ponedjeljka do petka.

GERMAN

Wenn Sie diesen Brief/Antrag nicht verstehen können, rufen Sie bitte den Telefon Dolmetscher Dienst (Telephone Interpreter Service) (131 450) an und lassen Sie sich vom Personal mit dem Gemeinderat (Council) in Verbindung setzen (1300 362 170). Geschäftsstunden sind von 8:30 bis 17:00 Uhr, montags bis freitags.

GREEK

Αν δεν καταλαβαίνετε αυτή την επιστολή/αίτηση, σας παρακαλούμε να τηλεφωνήσετε στην Τηλεφωνική Υπηρεσία Διερμηνέων (131 450) και να τους ζητήσετε να επικοινωνήσουν με το Δημοτικό Συμβούλιο (1300 362 170). Τα γραφεία του είναι ανοιχτά από τις 8.30π.μ. μέχρι τις 5.00μ.μ. από Δευτέρα μέχρι και Παρασκευή.

HINDI

अगर आप इस पत्र/आवेदन को पढ़कर समझ नहीं पा रहे हैं तो कृपया टेलीफोन संवाद-सहायक सेवा (131 450) को फोन करें और उनसे काउंसिल (1300 362 170) से संपर्क करने को कहें। कार्यालय का समय सोमवार से शुक्रवार तक प्रातः ८:३० बजे से सायं ५:०० तक है।

ITALIAN

Se non comprendi questa lettera/questo modulo di domanda, telefona al Servizio traduzioni e interpreti al numero 131 450 chiedendo di essere messo in contatto con il Comune (telefono 1300 362 170). Orario d'ufficio: ore 8.30 -17.00, dal lunedì al venerdì.

KHMER

បើលោកអ្នកមិនយល់ពីអត្ថន័យឬការប្រតិបត្តិនេះទេ សូមទូរស័ព្ទទៅសេវាបកប្រែភាសាភាសាខ្មែរ (លេខ 131 450) ហើយស្នើសុំឲ្យគេទាក់ទងសាលាក្រុង (លេខ 1300 362 170)។ ពេលម៉ោងធ្វើការគឺម៉ោង 8 កន្លះព្រឹកដល់ម៉ោង 5 ល្ងាច ពីថ្ងៃច័ន្ទដល់ថ្ងៃសុក្រ

MACEDONIAN

Ako ne go razbirate ova pismo/aplikacija, ve molime da se javite vo Telefonската преведувачка служба на 131 450 и замолете ги да стапат во контакт со Општината на 1300 362 170. Работното време е од 8.30 часот наутро до 5.00 часот попладне од понеделник до петок.

MALTESE

Jekk ma tifhimx din l-ittra/applikazzjoni, jekk joghgbok ċempel lis-Servizz ta' l-Interpretu bit-Telefon (131 450) u itlobhom jikkuntattjaw il-Kunsill (1300 362 170). Il-hinijiet ta' l-Uffiċċju huma mit-8.30a.m. sal-5.00p.m., mit-Tnejn sal-Ġimgħa.

POLISH

Jeśli nie rozumiesz treści niniejszego pisma/podania, zadzwoń do Telefonicznego Biura Tłumaczy (Telephone Interpreter Service) pod numer 131 450 I poproś o telefoniczne skontaktowanie się z Radą Miejską pod numerem 1300 362 170. Godziny urzędowania: 08.30-17.00 od poniedziałku do piątku.

SERBIAN

Ako ne razumete ovo pismo/aplikaciju, molimo vas da nazovete Telefonsku prevodilačku službu (131 450) i zamolite ih da kontaktiraju Opštinu (1300 362 170). Radno vreme je od 8.30 ujutro do 5.00 popodne, od ponedeljka do petka.

SPANISH

Si Ud. no entiende esta carta/solicitud, por favor llame al Servicio Telefónico de Intérpretes (131 450) y pídale que llamen a la Municipalidad (Council) al 1300 362 170. Las horas de oficina son de 8:30 am a 5:00 pm, de lunes a viernes.

TURKISH

Bu mektubu veya müracaatı anlayamazsanız, lütfen Telefon Tercüme Servisi'ne (131 450) telefon ederek Belediye ile (1300 362 170) ilişkiye geçmelerini isteyiniz. Çalışma saatleri Pazartesi - Cuma günleri arasında sabah saat 8:30 ile akşam 5:00 arasındır.

VIETNAMESE

Nếu không hiểu thư/đơn này, xin Quý Vị gọi cho Telephone Interpreter Service (Dịch Vụ Thông Dịch Qua Điện Thoại), số 131 450, và nhờ họ liên lạc với Council (Hội Đồng), số 1300 362 170. Giờ làm việc là 8 giờ 30 sáng đến 5 giờ 00 chiều, Thứ Hai đến Thứ Sáu.



For further information



Visit Us

Customer Service Centre
Ground Floor, 33 Moore Street, Liverpool, NSW 2170
Open Monday - Friday, 8.30am - 5pm



Phone

1300 36 2170
Calling from interstate: (02) 8711 7000
National Relay Service (NRS): 133 677
(for hearing and speech impaired customers)



Email

lcc@liverpool.nsw.gov.au



Post

Locked Bag 7064, Liverpool BC, NSW 1871



Website

www.liverpool.nsw.gov.au



Subscribe

www.liverpool.nsw.gov.au/subscribe