

# Alexandria Health Centre

Building Services – SSSA Infrastructure Report

Prepared for: Centuria Healthcare

Revision no: C



## Disclaimer

This Report has been prepared in accordance with the scope of services described in the agreement between ACOR Consultants and the Client. The Report relies upon data, surveys, measurements and results based on instructions from, and in consultation with, the Client. Except as otherwise stated, ACOR Consultants has not attempted to verify the accuracy or completeness of any information provided by the Client. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that changes may be required to the Report. Changes in circumstances or facts, the passage of time, manifestation of latent conditions or impacts of future events may also impact on the accuracy, completeness or currency of the information or material set out in this Report. This Report has been prepared solely for use by the Client, ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for its use by any third parties without the specific authorisation of ACOR Consultants. ACOR Consultants reserves the right to alter, amend, discontinue, vary or otherwise change any information, material or service at any time without subsequent notification. All access to, or use of, the information or material is at the user's risk and ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for the results of any actions taken on the basis of information or material provided, nor for its accuracy, completeness or currency. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this Report, to the extent permitted by law.

## Revisions

Revision	Description	Date	Prepared by	Approved by
A	For Information	29/09/23	TH	RM
B	For Information	10/10/23	TH	RM
C	For Information	24/11/23	TH	RM

### COPYRIGHT

This document, including the concepts and information contained within it, are the property of ACOR Consultants Pty Ltd or any of its related or associated entities. Use or copying of this document in whole or in part without the written permission of ACOR Consultants Pty Ltd constitutes an infringement of copyright. No part of this document may be copied, reproduced, adapted, transmitted or stored in a retrieval system in any form or by any means without written permission or unless otherwise permitted under the Copyright Act 1968. Removal or modification of any copyright or other proprietary protection from this document will be a breach of copyright.

© ACOR Consultants Pty Limited

All intellectual property and copyright reserved.

## Table of Contents

1	Executive Summary.....	4
2	Introduction .....	4
3	The Site .....	5
4	Methodology .....	6
5	Assessment and Findings .....	6
	5.1 Existing Services .....	6
	5.1.1 Dial Before YouDig .....	6
	5.1.2 Sewer and Water Services .....	9
	5.1.3 Electrical Services .....	10
	5.1.4 Communication Services .....	11
	5.2 Infrastructure Requirements.....	16
	5.2.1 Sewer and Water Services .....	16
	5.2.2 Electrical Services .....	16
	5.2.3 Communication Services .....	17
	5.3 Consultation History .....	18
6	Cumulative impacts .....	19
7	Mitigation measures .....	19
8	Conclusion .....	19

## 1 Executive Summary

This report has been prepared by ACOR Consulting to accompany a detailed State Significant Development Application (SSDA) for the proposed mental health hospital and medical centre at 28-32 Bourke Road, Alexandria, NSW 2015 in the City of Sydney Local Government Area (LGA). The site is legally described as Lot 1-3 of DP324707.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-59006709) dated 8 June 2023.

This report concludes that the proposed mental health hospital and medical centre is suitable and warrants approval.

## 2 Introduction

This report has been prepared to accompany a SSDA for the mental health hospital and medical centre at 28-32 Bourke Road, Alexandria, NSW 2015 (SSD-59006709).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-59006709) dated 8 June 2023.

Specifically, this report has been prepared to respond to the SEARs requirements issued below.

Item	Description of Requirement	Section reference (this report)
Infrastructure Requirements and Utilities	<p><i>In consultation with relevant service providers:</i></p> <ul style="list-style-type: none"> <li>▪ <i>assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.</i></li> <li>▪ <i>identify any infrastructure required on-site and off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained.</i></li> <li>▪ <i>provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.</i></li> </ul>	Section 5

This report has also been prepared to respond to Condition of Consent B38 under SSD-38600121

B38. Future development application(s) must include a Utility Services Infrastructure Assessment (USIA), prepared by a suitably qualified professional, which must:

- a) be prepared in consultation with relevant agencies and service providers;
- b) address the existing capacity and any augmentation requirements of the development for the provision of utilities; and
- c) consider any impacts on existing and proposed trees and landscaping.

### 3 The Site

The site is known as 28-32 Bourke Road, Alexandria and is located within the City of Sydney Local Government Area (LGA). The site is legally described as Lot 1-3 within Deposited Plan 324707. The site is rectangular in shape and has an approximate area of 2,972m<sup>2</sup>.

The site has a primary frontage along the northern boundary to Bourke Road of 40m. The site currently accommodates a single storey warehouse building used for the purposes of vehicle repairs as shown in Figure 1 below.

Figure 1 Site Context



Source: Urbis

The surrounding land uses include:

- **North:** Various light industrial and retail uses, including an NSW Fire and Rescue facility.
- **East:** Directly adjoining the site is 26 Bourke Road which comprises a single storey warehouse building. Further east of the site is the Green Square Town Centre. The Town Centre contains critical infrastructure such as the Green Square Railway Station and various other commercial/retail uses.
- **South:** Industrial and commercial uses as well as small lot residential properties. To the southeast of the site is the new Gungahama Park and Aquatic and Recreation Centre.
- **West:** 34-42 Bourke Road comprises a two-storey warehouse building that is owned and operated by the City of Sydney Council. West of the site is a mix of industrial and warehouse development with Sydney Park located further to the west adjacent to St Peters Station.

## 4 Methodology

ACOR utilised survey detailed from available information sources, Dial Before You Dig (DBYD) and WebGIS (Ausgrid Asset Information) as an bases for our review of the infrastructure amendments and upgrades required to support this proposed development. This assessment informed ACOR as to which stakeholders would need to be consulted with as well as the available infrastructure in the immediate area of the proposed site. The below section of this report details the findings of this assessment.

## 5 Assessment and Findings

### 5.1 Existing Services

#### 5.1.1 Dial Before You Dig

The existing utility services assessment for the site was established through information provided by Dial Before you Dig (DBYD). A DBYD enquiry was lodged on the 11th of August 2023 and identified the following services adjacent the development:

Authority	Associated Service	Assessment of Impact
AARNet	Communications	No Assets near site – no impact
Ausgrid	Electricity	<p>HV feeders, distributors, service conductors, substations, supply points, poles and switch stations are identified along Bourke Rd and in the vicinity of the site.</p> <p>It is proposed to connect into this existing HV network to supply the development.</p>
Jemena Gas	Gas & Petroleum	<p>Gas distribution and valves located alongside Bourke Rd.</p> <p>Gas not encroaching into site, and no gas proposed for development - no impact.</p>

<b>NBN Co</b>	Communications	<p>Manholes, trenches, pillar containing in service copper/RF/fibre along Bourke Rd.</p> <p>It is proposed to connect into this existing network for the development.</p>
<b>Airport Rail Link</b>	Transport	<p>HV cables between Bourke Rd and O'Riordan St.</p> <p>Cables not encroaching into site - no impact.</p>
<b>Sydney Water</b>	Water	<p>Sydney water asset found along Bourke Rd.</p> <p>It is proposed to connect into this existing network for the development.</p>
<b>Telstra</b>	Communications	<p>Underground Telstra asset found along Bourke Rd and within the area of development.</p> <p>Existing cables within site boundary serve existing asset to be demolished. As such this cable will be able to be removed as part of the demolition without impacting adjacent sites.</p>
<b>Verizon Business</b>	Communications	<p>Ducts and pits along Bourke Rd past Huntley St and on the corner of Bourke Rd and O'Riordan St</p> <p>Cables not encroaching into site - no impact.</p>
<b>Vocus Communications 2</b>	Communications	<p>Vocus group pit and conduit along Bourke Rd</p> <p>Cables not encroaching into site - no impact.</p>

<p><b>FibreconX</b></p>	<p>Communications</p>	<p>Conduit and pit along Bourke Rd</p> <p>Cables not encroaching into site - no impact.</p>
-------------------------	-----------------------	---

In summary, major electrical, communications, water and other services reticulate along Bourke Rd adjacent to the development boundary and are available for connection to support the development. ACOR note that any works that are outside of the site boundary, including incoming services reticulation, will require coordination with the affected supply authorities impacted by the pathway.

### 5.1.2 Sewer and Water Services

ACOR note that there is existing Sydney Water infrastructure to service the proposed development.

The existing Sydney Water Infrastructure are as follows and provided in figure 2:

- There is an existing DN225 CI Sewer Main in Bourke Road outside the property boundary
- There is an existing DN200 CICL Water Main in Bourke Road

The existing internal private sewer connection is extended from a property connection point from the DN225 CI Sewer Main in Bourke Road as provided in figure 12.

Figure 2: Sydney Water Hydra Plot

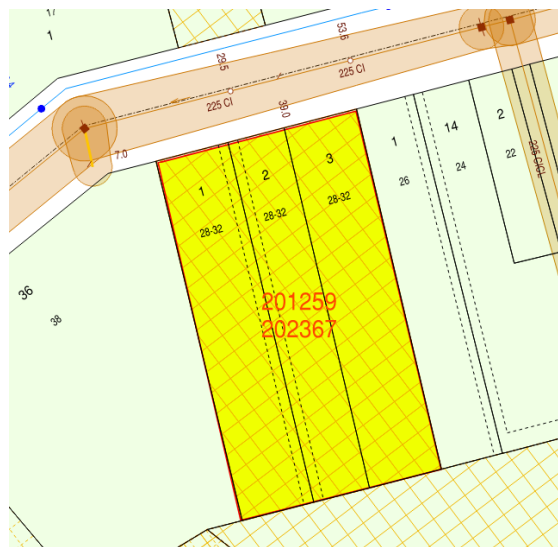
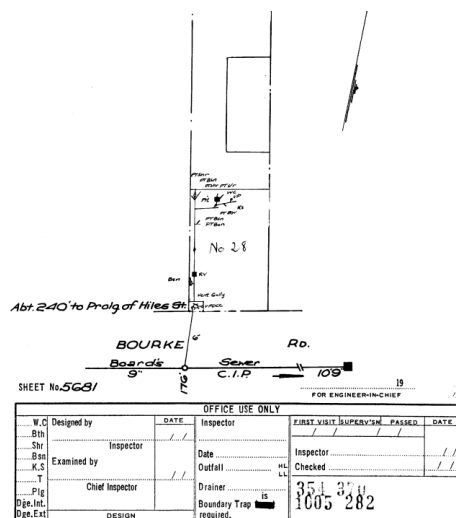


Figure 3: Sydney Water Sewer Service Diagram



### 5.1.3 Electrical Services

ACOR note that there are no existing Ausgrid Substation within the boundary of the proposed development. The existing building is currently supplied via an LV connection to an external Ausgrid Asset.

There are existing Ausgrid services in the vicinity of the site, located along the development frontage on Bourke Rd, namely underground HV Cabling and communications cables. The locations of these services are indicated in Figure 4 below.

It is proposed that the existing HV network cabling that runs along the development frontage is to be utilised to provide a new HV supply into the site for supply via dedicated substations. Proposed substations will be located on the perimeter of the building footprint to shorten cable lengths and allow for required ventilation as per Ausgrid Standards.

The Managing Contractor for the proposed works will need to develop Safe Work Methods for moving equipment and materials onto the site without impacting or making contact with the existing overhead cabling during construction works.

No existing street lighting will be affected under the proposed works, as all existing luminaires and cabling are outside of the property boundary.

Figure 4: Ausgrid Assets as per DBYD



### 5.1.4 Communication Services

As noted above, ACOR note that there are existing communications services in the vicinity of the site along Bourke Rd. These services include NBN as well as Telecommunications providers such as Telstra. Refer to Figures below for the DBYD samples of the relevant telecommunication services in the vicinity of the site.

NBN has been rolled out into this area of Sydney and existing NBN fibre is available along Bourke Rd. ACOR note that current NBN offering is noted as Fibre To The Node (FTTN), however, if agreeable with NBN, a Fibre To The Premises (FTTP) connection may be able to be established for this development.

As above with protecting the existing electrical assets, the Managing contractor will need to ensure that any works outside of the property boundary takes into consideration the existing communications pits and underground cabling, ensuring that no works disrupt or damage these assets.

Figure 5: NBN Co Rollout

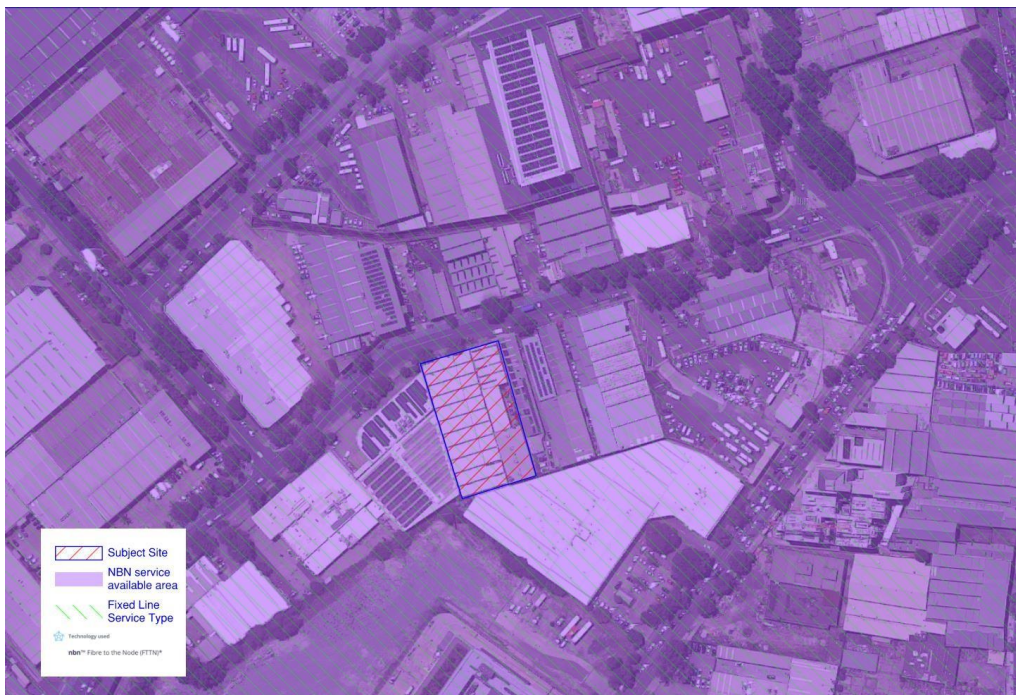


Figure 6: NBN Co Assets as per DBYD Pt 1/2



Figure 7: NBN Co Assets as per DBYD Pt 2/2



Figure 8: Telstra Assets as per DBYD

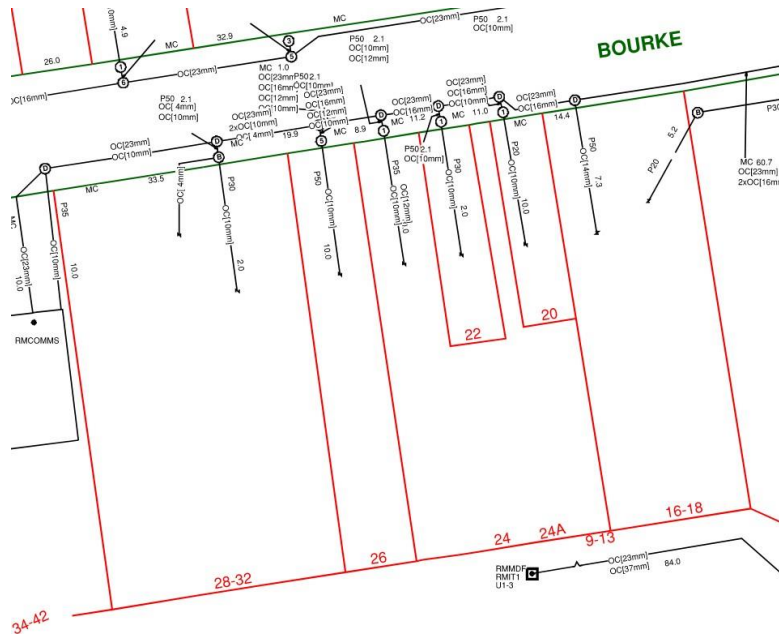


Figure 9: AARNET Assets as per DBYD

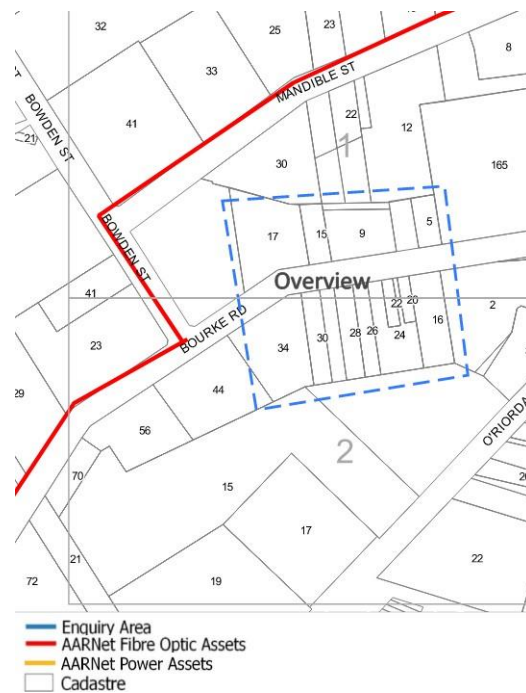


Figure 10: Verizon Business Assets as per DBYD

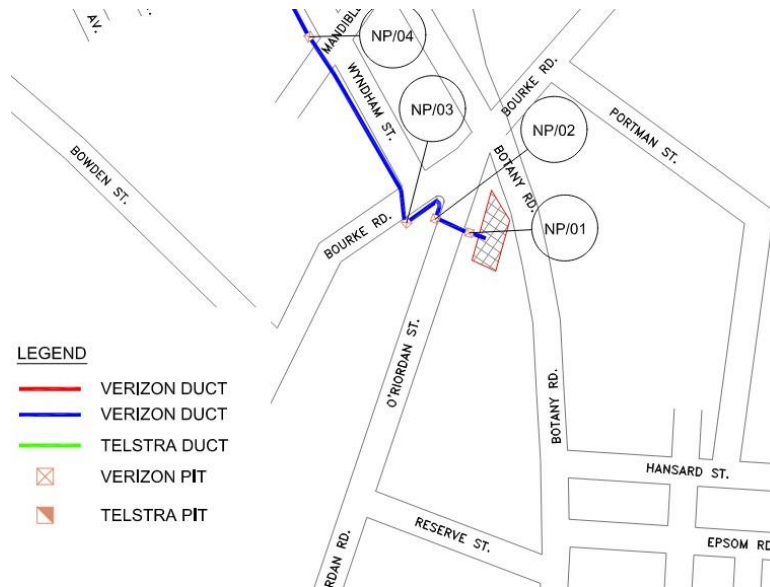
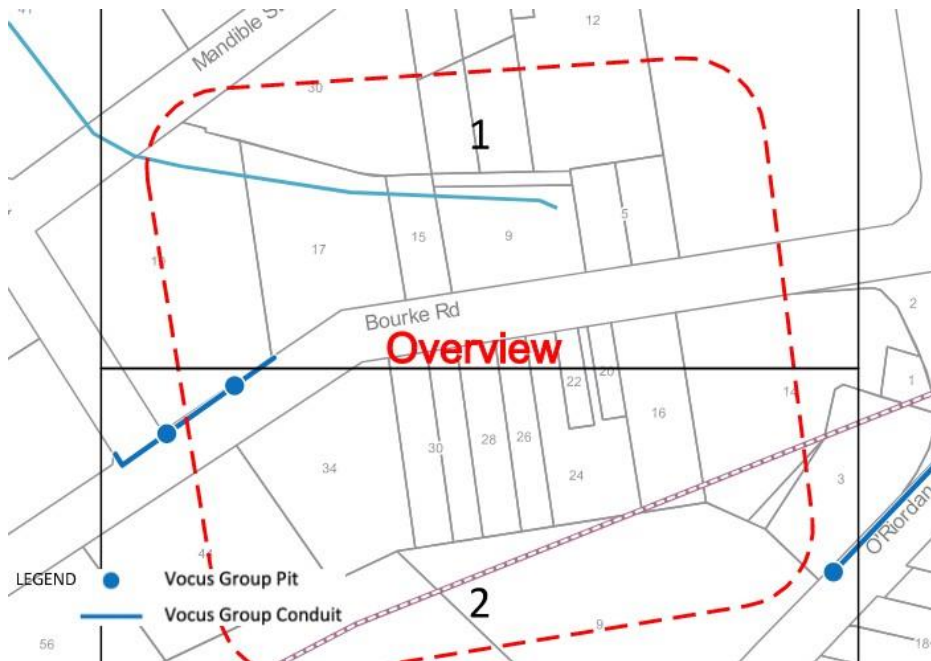


Figure 11: FibreconX Assets as per DBYD



Figure 12: Vocus Communications Assets as per DBYD



## 5.2 Infrastructure Requirements

### 5.2.1 Sewer and Water Services

The proposed development will need a sewer main extension from the existing DN225 in Bourke Rd within the property boundary to meet Sydney Water servicing guidelines. ACOR Consultants will propose the works to Sydney Water who will confirm whether this can be done under the Minor or Major Works scope.

ACOR Consultants will design the proposed sewer extension if possible to avoid an Out of Scope Building Plan Approval by adhering to the required clearances from the proposed basement excavation works.

The existing DN200 Potable Water main can be utilised for the proposed development under a Multi-Level Individual Metering requirement through the Section 73 process.

### 5.2.2 Electrical Services

The Maximum Demand for the proposed development has been calculated to be 1,700 kVA or 2,460 A. This calculation has been based off of the following information:

- Latest Architectural Drawings
- AS3000 Appendix C
- PCA A Grade
- NSW Health Infrastructure Engineering Guidelines

Based on the calculated Maximum Demand it has been proposed to supply the development via two (2) Standard Chamber Substations, each rated at 1,000 kVA. These substations will be located on grade on the Ground Floor of the building along the perimeter. Vehicular access shall be provided to the front of the substations in line with Ausgrid requirements.

An Application For Connection (AFC) has been submitted to Ausgrid for consideration on 29<sup>th</sup> September 2023. A response is forthcoming at the time of writing this report.

An Accredited Service Provider (ASP) Level 3 Designer has been engaged to complete the contestable design works associated with the proposed Standard Chamber Substations. A Level 1 ASP contractor will be required to be engaged to complete the installation of the new substations at the time of construction.

### 5.2.3 Communication Services

It is proposed that the 28-32 Bourke Rd development will be connected into the NBN infrastructure noted in section 5.1.4 of this report. Currently the area is primed for a FTTN connection, but during detailed design as the project liaises with NBN a FTTP connection will be explored. Final connection details will be subject to approval by NBN. NBN shall be consulted during the next phase of the project once the building layouts and spatial design is finalised so the Building Distributor Rooms (BDRs) locatable on plan and will not move.

Two (2) physically diverse pathways shall be provided from the NBN infrastructure into the BDR for the site, to provide a level of redundancy within the communications infrastructure. To facilitate incoming NBN fibre as well as any future telcom lead-in cabling these pathways will likely consist of 6 x 100mm communications conduits.

As noted in section 5.1.4 of this report there are existing Telstra cabling, conduits and pits located in the site. As these currently only support the existing building to be demolished, these can be removed back the closest pit off the site boundary without impacting any adjacent properties.

### 5.3 Consultation History

The following is a summary of the consultation with utilities to date:

#### Dial Before You Dig (DBYD)

- DBYD application was lodged on 11<sup>th</sup> August 2023
- DBYD application responses received and reviewed on 11<sup>th</sup> August 2023
- ACOR shall renew DBYD application during detailed design

#### Ausgrid

- DEP (on behalf of Centuria) submitted an Application For Connection (AFC) to Ausgrid on 10 October 2023 to the Contestability Group within Ausgrid for consideration for the proposed development.
- The project team are awaiting a response from Ausgrid at time of writing this report

#### NBN

- NBN assets have been reviewed on 11<sup>th</sup> August 2023 in line with the received DBYD information noted above
- Application for Connection for NBN services to be lodged once building spatial planning is finalised and the Building Distribution Room (BDR) location is finalised.

#### Sydney Water

- Existing Sydney Water infrastructure has been reviewed on 28<sup>th</sup> September 2023 in line with the Sydney Water Hydra plot as provided above.
- ACOR Consultants (on behalf of Centuria) has informed Riccardo Facci within Sydney Water on the 5 October 2023 of an impending Section 73 Form which is prepared and ready for submission once the SSDA submission has been completed, as the SSDA submission is a prerequisite.
- Application for Section 73 to be applied under CN210058 once relevant information has been obtained under an Anticipated Requirements application. Resubmission of the approved SSDA to be provided to Sydney Water to receive formalised Notice of Requirements
- Sydney Water Tap in Application to be lodged once proposed plans are "For Construction" in accordance with any sewer servicing scope.

## **6 Cumulative impacts**

No cumulative impacts have been identified in relation to the Electrical Services Infrastructure.

No cumulative impacts have been identified in relation to the Communications Services Infrastructure.

---

## **7 Mitigation measures**

No mitigation measures have been identified as required to support this development.

## **8 Conclusion**

Based on ACOR's preliminary assessment of the electrical and communication infrastructure available in the vicinity of the site, there is sufficient abundance to support the proposed development. ACOR note that further coordination and consultation will be required with the relevant Supply Authorities during the next stage(s) of the development's design will be required to ensure that all relevant requirements are adhered to and the assets in question are established or amended as part of an informed staged construction process.