

Donnelley Simpson Cleary Consulting Engineers

# GLEBE MID RISE PROJECT (GMRP)

# 31 COWPER STREET (SOUTH SITE) AND 2A-2D WENTWORTH PARK ROAD (NORTH SITE) GLEBE, NSW 2037

Infrastructure Assessment

for

**Electrical, Communication and Hydraulic Services** 

Project No : 8080

Revision : C – Updated Final Planning Proposal Issue

# **REVISION SCHEDULE**

NO	DATE	DESCRIPTION
1	21 <sup>st</sup> April, 2020	Preliminary Issue
A	8 <sup>th</sup> May, 2020	Planning Proposal Issue
В	11 <sup>th</sup> May, 2020	Final Planning Proposal Issue
С	20 <sup>th</sup> May, 2020	Updated Final Planning Proposal Issue

# INTRODUCTION

# PURPOSE STATEMENT

The purpose of this report is to support the Planning Proposal for the subject apartment buildings to be developed by the Land and Housing Corporation (LAHC) at 31 Cowper Street (South Site) and 2A-2D Wentworth Park Road (North Site), Glebe, NSW 2037

The infrastructure services assessed under this report are nominated below: -

- Electrical and Communications.
- Hydraulic (Gas, Water and Sewer).

# **EXECUTIVE SUMMARY**

#### Existing Infrastructure

Existing infrastructure is summarised as follows: -

- Ausgrid assets other than disconnections Clear. Area well serviced with adjacent HV/Substations.
- NBN Co. Clear. Adjacent roads serviced, area is "NBN Ready".
- Jemena assets other than disconnections Clear. Area well serviced by natural gas mains with 210kpa high pressure line.
- Sydney Water:
  - > Water mains Clear. Are well serviced.
  - Stormwater assets other than disconnections Clear. Area well serviced.
  - Sewer Vent pipe in north corner of 2A-2D Wentworth Park Road (North Site) will need redirection through building with an easement over it. Otherwise Clear.

#### Proposed Infrastructure

- Ausgrid An Application for Connection has been submitted to Ausgrid, with the response pending. In the interim and in anticipation of the Ausgrid requiring a substation, spatial planning has accommodated a surface mini-chamber substation within the proposed building design for the North Site. The application has request the North Site substation support the South Site via a direct distributor.
- NBN Co. NBN Co. web site notes the area is "NBN ready" with a Hybrid Fibre Co-axial Service (HFC). Application for a service will be made in the detailed design stage of the project.
- Jemena As part of Green Star commitments for zero fossil fuels on site gas will not be provided.
- Sydney Water:
  - Water mains Water mains are located in Cowper St, Wentworth St and Wentworth Park Rd. A Section 73 application to Sydney water will be required in the detailed design phase to confirm the availability of water supply to the development.
  - Stormwater It is intended that existing stormwater box culvert located in Mitchell Lane will serve the development. Stormwater management will be prepared by the civil engineer.
  - Sewer The development has a number of existing sewer junctions available in Mitchel Lane and Park Lane suitable for connection. A Section 73 application to Sydney water will be required in the detailed design phase to confirm the availability of sewage capacity to service the development.

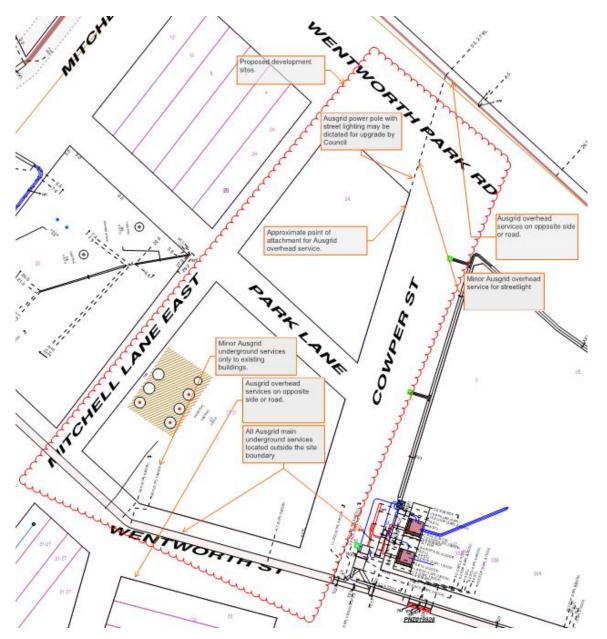
# **ELECTRICAL SERVICES**

# ELECTRICAL INFRASTRUCTURE

#### Ausgrid Existing Infrastructure

Dial Before You Dig information sourced from Ausgrid shows no major services cross either of the subject sites. Therefore only minor services disconnections/relocations will be required to make way for the proposed developments.

Ausgrid Newtwork Plan (NTS)



#### **Ausgrid Proposed Infrastructure**

Application has been submitted to Ausgrid for both proposed developments. The submission has requested consideration of both sites concurrently to rationalise infrastructure requirements. Details follow: -

• 31 Cowper Street (South Site) – Ausgrid Reference No. 0096446

A response is awaited from Ausgrid however, in the interim allowance has been made for a direct distributor from the North Site where spatial planning has accommodated a surface mini-chamber substation within the proposed building design.

2A-2D Wentworth Park Road (North Site) – Ausgrid Reference No. 0096390

In anticipation of the Ausgrid response requiring a substation, spatial planning has accommodated a surface mini-chamber substation within the proposed building design.

It is anticipated that:

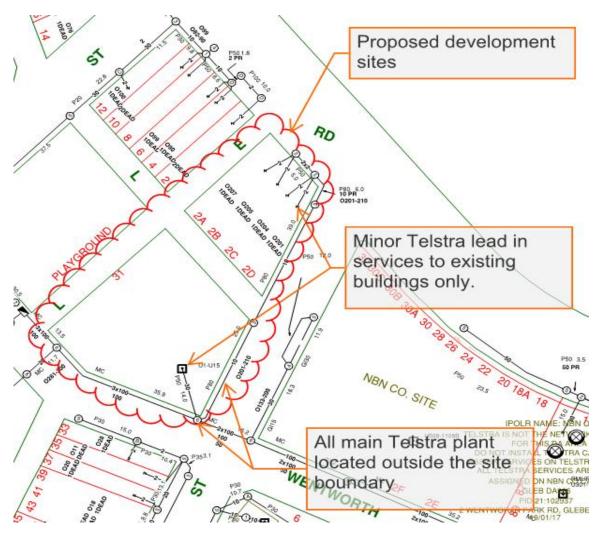
- Any street lighting upgrades would be conditioned by Council as part of the Development consent.
- As overhead services are on the opposite sides of Wentworth Park Road and Wentworth Street, undergrounding of same would not be conditioned by Council.

# COMMUNICATIONS INFASTRUCTURE

#### Telstra Existing Infrastructure

Dial Before You Dig information sourced from Telstra shows no major services cross either of the subject sites. Therefore only minor services disconnections will be required with some local realignment possible at new driveway entries to make way for the proposed development.

Telstra Network Plan (NTS)



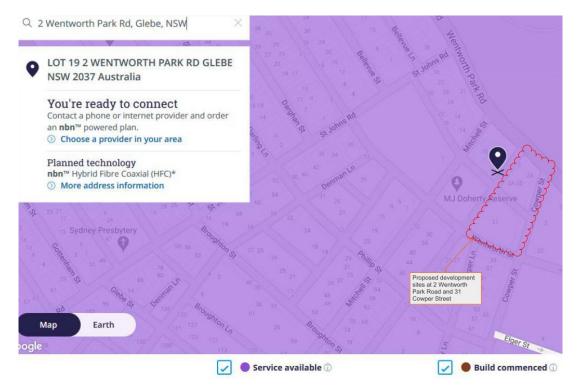
### NBN Co. Existing Infrastructure

The NBN has only recently deployed in the area. Given the nature of the NBN roll out, other than removal of minor connections to existing properties there would be no major services impacting on the proposed development.

#### NBN Co. Proposed Infrastructure

NBN Co. web site notes the area is "NBN Ready" with a Hybrid Fibre Co-axial Service (HFC). An application for service will be submitted in the detail design stage of the project.

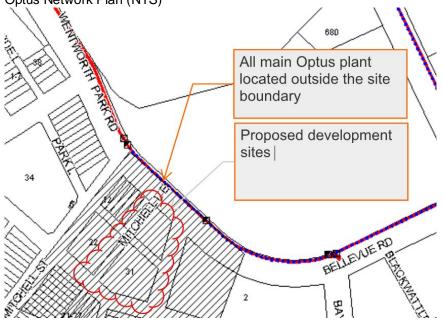
#### NBN Co. Roll Out Map

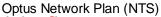


#### **Other Telecommunications Providers**

The Dial Before You Dig process received response from the following: -

- AAPT Services in the area but not adjacent the subject development.
- Pipenetworks Services in the area but not adjacent the subject development.
- Optus Services adjacent but not affected.





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# HYDRAULIC SERVICES

### SYDNEY WATER

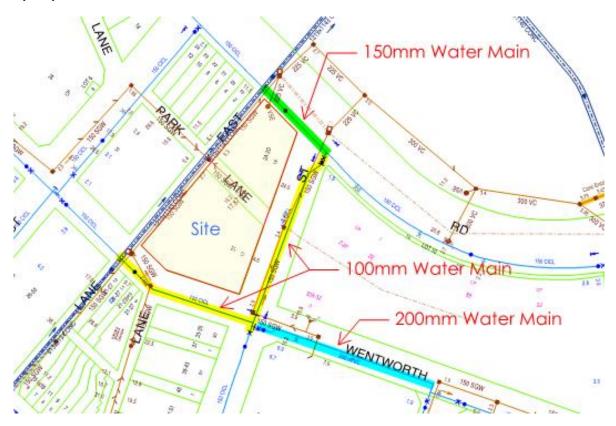
#### **Existing Water Mains**

Dial Before You Dig information sourced from Sydney Water shows no major services cross either of the proposed development sites. Therefore only minor services disconnections will be required with some local realignment possible at new driveway entries.

#### **Proposed Water Mains**

The development is served by a 100mm water main located in the East to Cowper St and to the South in Wentworth St. A 150mm water main located to the North in Wentworth Park Rd. A Section 73 application to Sydney water will be required in the detailed design phase to confirm the availability of water supply to the development.

Sydney Water – Water Plan



#### **Existing Stormwater**

Dial before you dig information shown an existing stormwater culvert reticulating down Mitchell Lane East. It is anticipated that this main has sufficient capacity to serve the development.



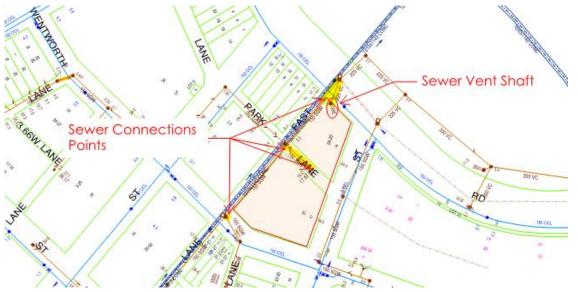
#### **Existing Sewer**

Dial Before You Dig information sourced from Sydney Water shows a number of connection locations serving the existing site. Disused sewer connections will require capping off to Sydney Water requirements. The vent pipe in north corner of 2A-2D Wentworth Park Road (North Site) will need redirection through building with an easement over it.

#### **Proposed Sewer**

The development has a number of sewer connection points available. A Section 73 application to Sydney water will be required to confirm the availability of sewage capacity to service the development.

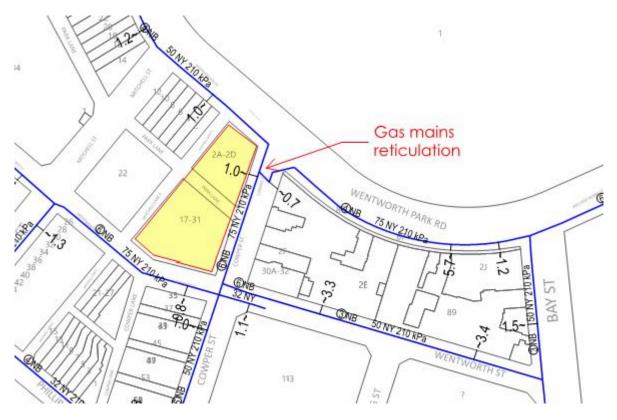
Sydney Water Plan - Sewer Mains and Vent Shaft



# JEMENA

#### **Existing Gas Services**

Dial Before You Dig information sourced from Jemena shows the site is services by a 210kPa gas main. The main is capable of serving the development should there be a requirement for supply.



#### **Proposed Gas Services**

As part of Green Star commitments for zero fossil fuels on site gas will not be provided.