



# INFRASTRUCTURE DELIVERY, MANAGEMENT AND STAGING PLAN

SSD-79658964 - 270 Pacific Highway, Crows Nest

POWERED BY  
neuron

Date 2025.03.26- Revision 01.

# INTRODUCTION

The application seeks development consent for the development of a 16 storey mixed use development at 270 Pacific Highway Crows Nest, comprising 168 build to rent units and non-residential uses in the podium. Specifically, the SSDA seeks development consent for:

- demolition of two existing 5 storey commercial buildings
- construction of a maximum 16 storey building, including:
  - 2 basement parking levels (with 81 carparks, 8 motorbike spaces and 230 bicycle spaces)
  - 3 podium levels comprising non-residential uses such as medical centre, retail, and residential uses (build to rent units and residential amenity facilities such as a gym and sauna, steam room, outdoor pool, class space, cinema room, co- working space)
  - 13 storeys of residential uses in the tower, comprising build-to-rent units
  - communal open space
  - landscaping on ground, level 2 – level 15
  - rooftop solar panels
  - internal and external residential amenities space on roof top
- streetscape upgrades
- office and substation along the northwestern boundary

# INTRODUCTION

This report has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 31 January 2025 and issued for the SSDA (SSD-79658964). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

**Table 1 - SEARs Requirements**

SEARs Item	Issue and Assessment Requirement	Document	Section of this report which responds to the SEARs requirement
<b>Infrastructure Requirements and Utilities</b>	<b>In consultation with relevant service providers:</b> <ul style="list-style-type: none"> <li>Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.</li> </ul>	Infrastructure Delivery, Management and Staging Plan	Building Connections - All
	<ul style="list-style-type: none"> <li>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</li> </ul>	Infrastructure Delivery, Management and Staging Plan	Building Connections - All
	<ul style="list-style-type: none"> <li>Provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be coordinated, funded and delivered to facilitate the development.</li> </ul>	Infrastructure Delivery, Management and Staging Plan	Staging Implications

# STAGING IMPLICATIONS

The site will be built in a single stage. From a utilities connection perspective, the building power, water, communications, sewer & gas connections will be constructed as part of stage one. This will include all relevant infrastructure, such as substation, meters, fire pumps and the like.

The proposed development has three stages to consider for the infrastructure utility works and the programme for applications, design and construction need to be carefully developed in order to meet the overall development programme.

## Decommissioning Utilities

Decommission of existing services to buildings and then buildings demolished. Clean site for excavation.

- Power: Application to Ausgrid as part of the overall substation application process in conjunction with a Level 3 ASP. Decommission of existing substation to be completed once temporary/permanent substation built
- Communications: Existing NBN, Telstra & Optus connections to be decommissioned. Telstra, Vodafone & Optus Base Stations to be decommissioned
- Gas: Existing connection to be capped and decommissioned.
- Water: Sydney Water Tapin application to disconnect water (or modify for construction purposes)
- Sewer: Sydney Water Tapin application to disconnect sewer (or modify for construction purposes)

## Early Works Utility Modifications

To allow the early works of shoring and excavation the following scope is to be considered;

- Power: HV Feeder extended to the site in consultation with Ausgrid and a Level 2 ASP. Substation to be designed by an Level 3 ASP
- Communications : Chosen fibre to be extended to the site.
- Gas: No work required.
- Water: Supply - New Water main/amplification extended to the site.
- Sewer: Review detailed sewer analysis with Sydney Water to confirm final connection location.

## Utility works for the Proposed development

Refer to the subsequent sections of this report for details.

- Power: Builders supply to be further coordinated with Ausgrid. If existing substation does not clash with site's excavation, this can be used. Otherwise, a temporary power source from a nearby substation, or a temporary substation to be provided during the development phase. New substation arrangement to be built once the site has been developed to the ground floor.
- Communications: Telstra, NBN, Optus or Uecomm adjacent to the site.
- Gas: All electrical development, gas not required.
- Water supply: Finalised Section 73 application with proposed connection to the adjacent water main.
- Sewer: Finalised Section 73 Application with confirmation of sewer connection as per early works statement.

# ELECTRICAL INFRASTRUCTURE

## AUTHORITY INTERFACE

## INTRODUCTION

## SITE OVERVIEW

## STAGING IMPLICATIONS

## BUILDING CONNECTIONS

- > POWER
- > COMMS
- > GAS
- > WATER
- > SEWER

### EXISTING POWER INFRASTRUCTURE

The Ausgrid network maps indicate that the nearest High Voltage available for substation connection is adjacent to the site with connection opportunities along Bruce Street and Pacific Highway.

There is an existing substation S.5986 on the current site. This will likely need to be removed as well as associated HV & LV cables. The kiosk currently supplies the local street network. This load will need to be relocated onto a nearby substation S.2811, or retained on this development's new substation arrangement before the existing substation can be decommissioned. The existing substation S.5986 may be used for temporary builders supply, if the location does not clash with the excavation.

Additionally, the surface chamber substation S.2811 at 250 Pacific Highway is fed from the rear entrance to the proposed site, with the incoming HV Feeder being within your site boundary. This will need to be retained and Ausgrid will need to be consulted to ensure demolition and excavation works do not impact and Ausgrid Access/Clearance Requirements can be met.



**Power Infrastructure Map**

- Below Ground High Voltage Power
- - - Overhead High Voltage Power
- Below Ground Low Voltage Power
- - - Overhead Low Voltage Power
- ⚡ Substation
- 🏠 Development Location
- Underground Transmission Cable

# ELECTRICAL INFRASTRUCTURE

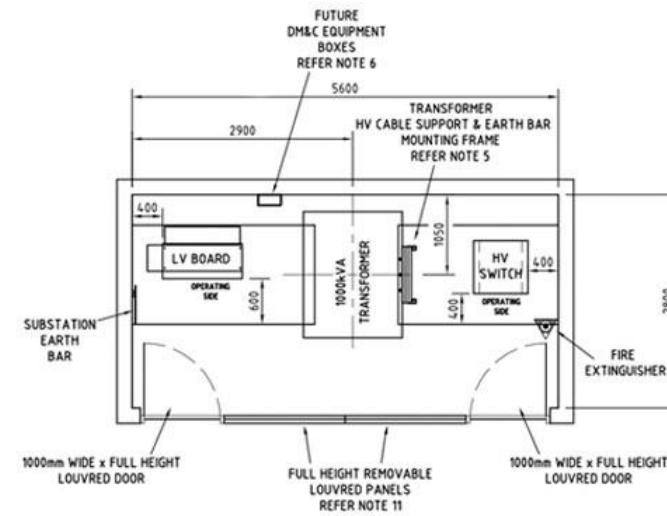
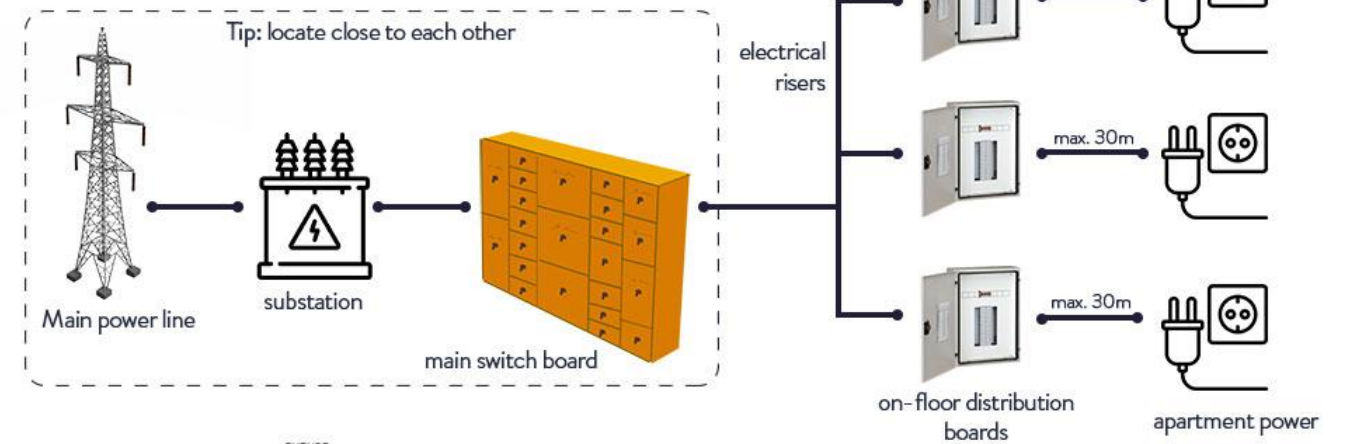
- > POWER
- > COMMS
- > GAS
- > WATER
- > SEWER

## PROPOSED ELECTRICAL SERVICES

The preliminary maximum demand for this site is 2,025 amps (1,403 kVA diversified). The site will likely require two new 1,000 kVA mini chamber substations.

As part of the next phase of works, an ASP level 03 will be engaged to begin the detailed design of this substation including consultation with Ausgrid.

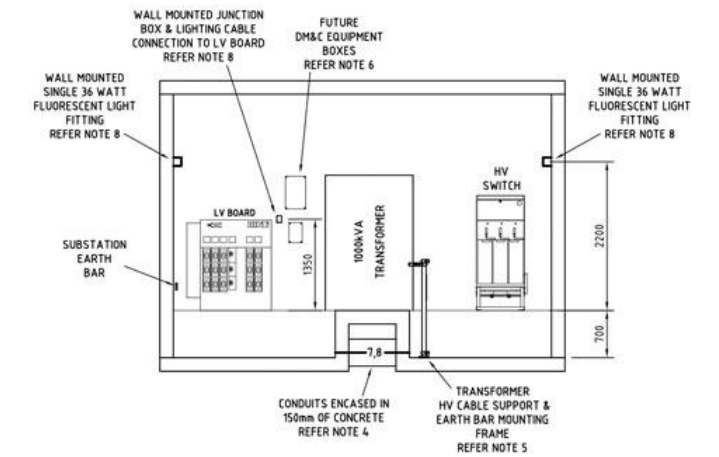
Electrical infrastructure overview



Chamber substation plan



Ventilation louvres on the front of a chamber substation



Chamber substation section



Inside a chamber substation

# COMMUNICATIONS INFRASTRUCTURE

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CONNECTIONS**

- > POWER
- > **COMMS**
- > GAS
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## Mobile base stations

There is a Telstra, Optus, and Vodafone mobile base station located on the existing development. These base stations will not be retained as part of the new development.



**Mobile Base Station Map**



Existing Mobile Base Station



Development Location

# COMMUNICATIONS INFRASTRUCTURE

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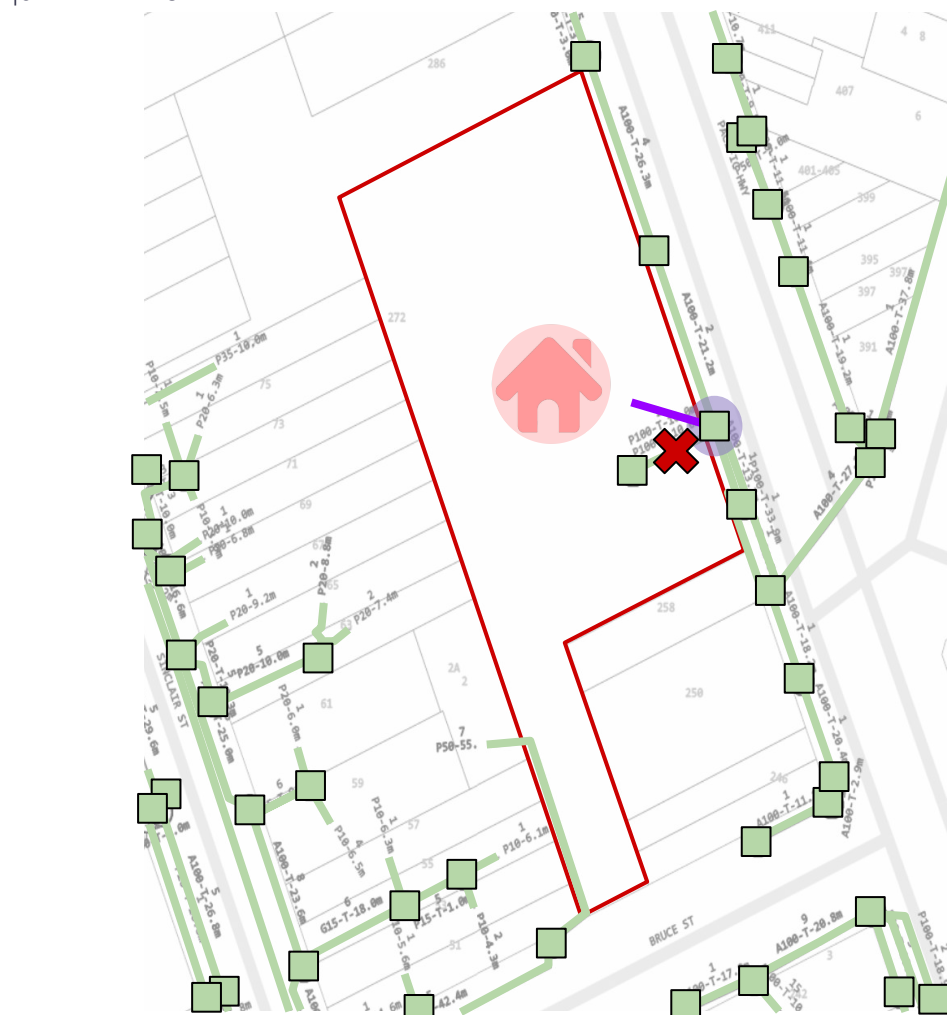
STAGING  
IMPLICATIONS

BUILDING  
CONNECTIONS

- > POWER
- > COMMS
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- > WATER
- > SEWER

## NBN

The existing NBN carrier service infrastructure is illustrated below. As shown, there is a connection opportunity available for this site. The existing NBN infrastructure running into the site will need to be removed prior to excavation. We note 2 Bruce Street is currently connected via a fibre that runs through your site. Consultation with NBN will be undertaken during the next stage of the project to coordinate the required works.

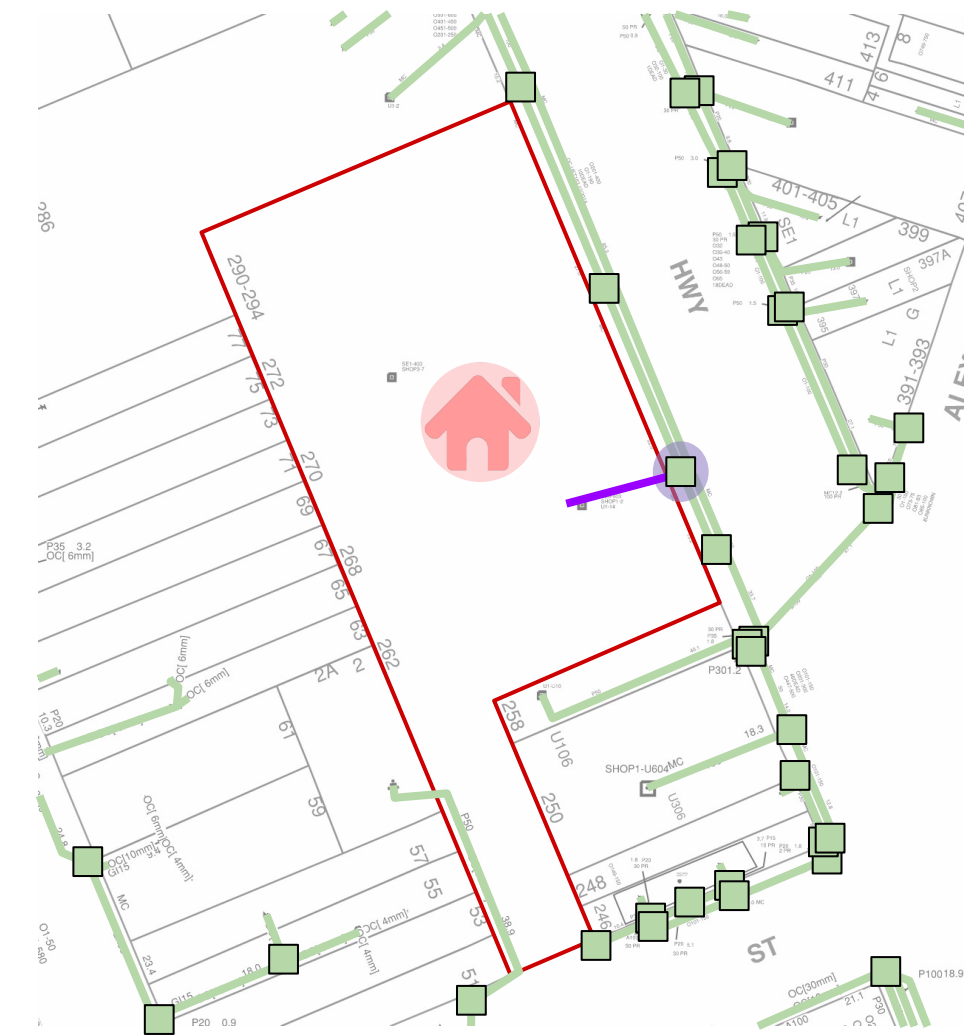


**Fibre Infrastructure Map**



## Telstra

The existing Telstra carrier service infrastructure is illustrated below. As shown, there are connection opportunities available for this site. We note 2 Bruce Street is currently connected via a fibre that runs through your site. This will need to remain. Consultation with Telstra will be undertaken during the next stage of the project to coordinate the required works.



**Fibre Infrastructure Map**



# COMMUNICATIONS INFRASTRUCTURE

## AUTHORITY INTERFACE

### INTRODUCTION

### SITE OVERVIEW

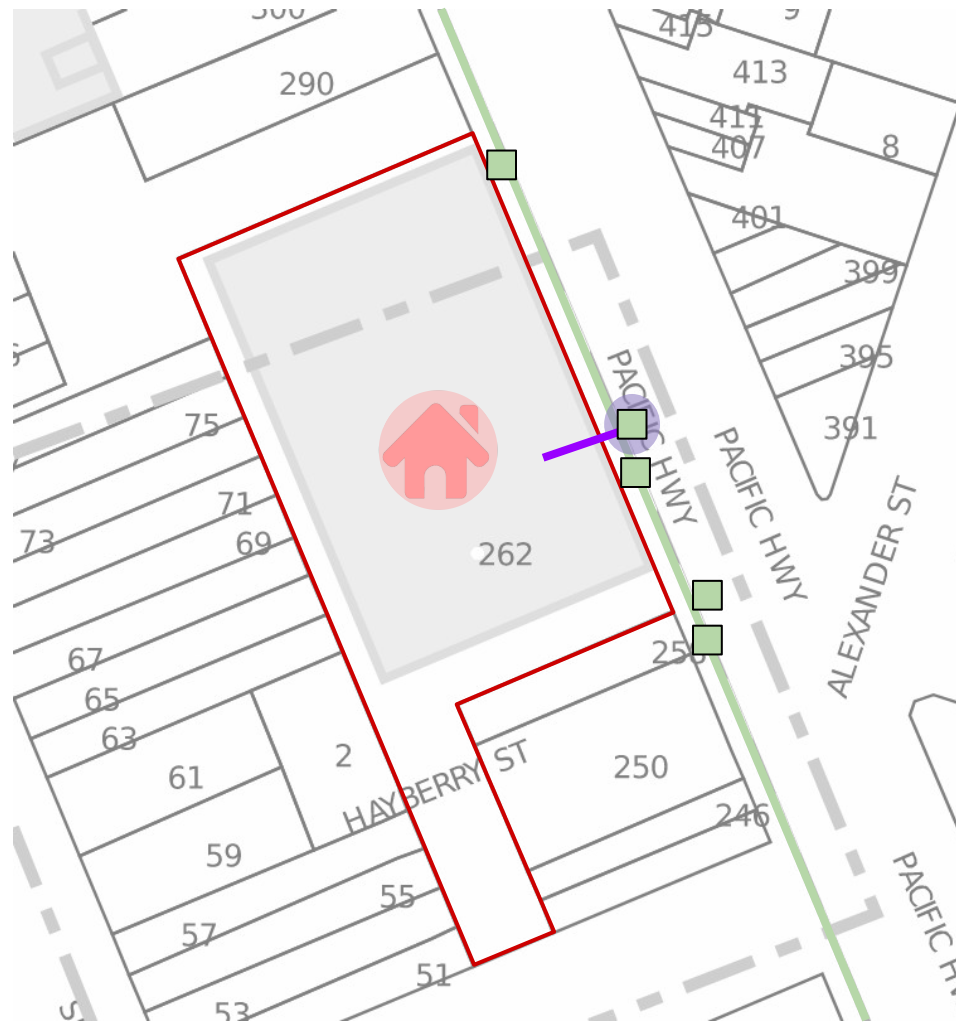
### STAGING IMPLICATIONS

### BUILDING CONNECTIONS

- > POWER
- > **COMMS**
- > GAS
- > WATER
- > SEWER

#### Ucomm

The existing Ucomm carrier service infrastructure is illustrated below. As shown, there are connection opportunities available for this site. Consultation with Ucomm will be undertaken during the next stage of the project to coordinate the required works.

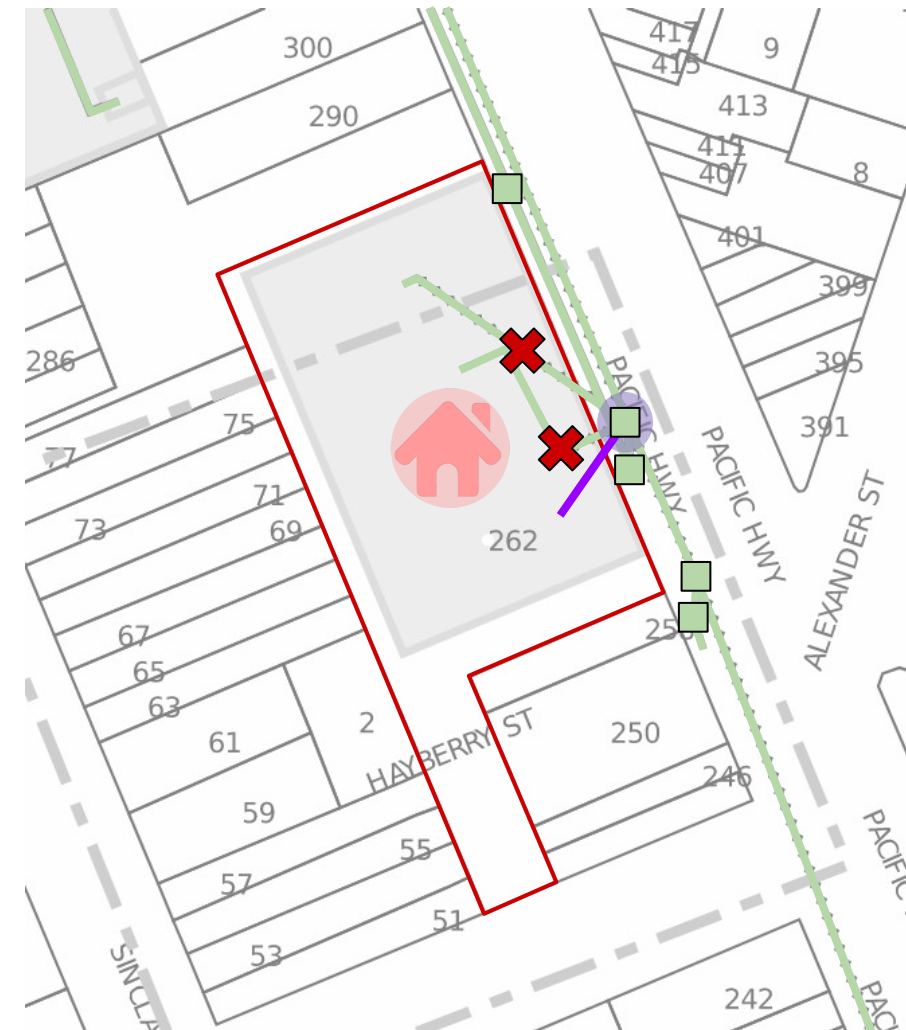


**Fibre Infrastructure Map**



#### Optus

The existing Optus carrier service infrastructure is illustrated below. As shown, there is a connection opportunity available for this site. The existing Optus infrastructure running into the site will need to be removed prior to excavation. Consultation with Optus will be undertaken during the next stage of the project to coordinate the required works.



**Fibre Infrastructure Map**



# GAS INFRASTRUCTURE

## AUTHORITY INTERFACE

There is a medium pressure 210 kPa gas main running adjacent to the proposed site with as illustrated in the adjacent image.

## INTRODUCTION

We understand that gas will not be utilised in this development, meaning a gas connection and gas regulator set will not be required.

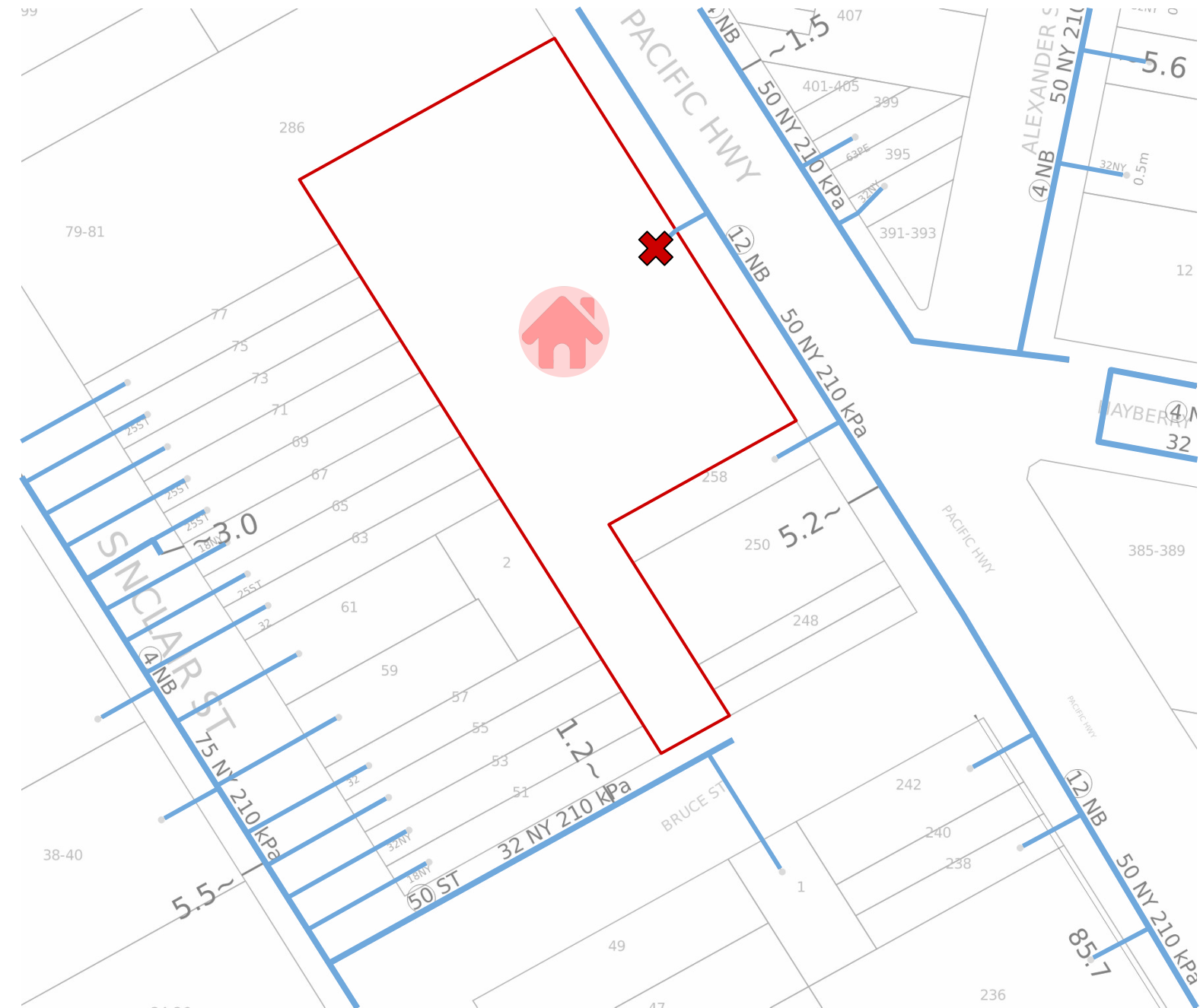
## SITE OVERVIEW

The existing service connections to the site will need to be removed.

## STAGING IMPLICATIONS

## BUILDING CONNECTIONS

- > POWER
- > COMMS
- > **GAS**
- > WATER
- > SEWER



**Gas Infrastructure Map**

- Low/Medium Pressure Gas Main
- High Pressure Gas Main
- Development Location

# WATER INFRASTRUCTURE

## AUTHORITY INTERFACE

## INTRODUCTION

## SITE OVERVIEW

## STAGING IMPLICATIONS

## BUILDING CONNECTIONS

- > POWER
- > COMMS
- > GAS
- > **WATER**
- > SEWER

As illustrated below, the dial before you dig investigation reveals there are multiple existing water mains running close to the proposed development. There is a 200mm water main running along Sinclair Street and a 250mm water main running along the opposite side of Pacific Highway. There is additionally a 100mm main running along the near side of the Pacific Highway & Bruce Street.

Based on the preliminary calculations, the proposed development is likely to require one new 200mm mains water connection. The existing 100mm water supply on Bruce Street will not be appropriate for our site, but there may be an opportunity to amplify this main back up to 200mm back to Sinclair Street, illustrated in the adjacent image. This option will be the preferred connection option over connecting to the main on the far side of the Pacific Highway. Careful coordination with Sydney Water will be required.

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water and ascertain their preferred connection strategy.



**Water Infrastructure Map**

- Water Main
- Recycled Water Main
- Development Location
- Proposed Water Connection Strategy

# SEWER INFRASTRUCTURE

## AUTHORITY INTERFACE

## INTRODUCTION

## SITE OVERVIEW

## STAGING IMPLICATIONS

## BUILDING CONNECTIONS

- > POWER
- > COMMS
- > GAS
- > WATER
- > SEWER

The dial before you dig investigation reveals there are multiple existing 225mm sewer mains running close to the proposed development along Pacific Highway and Bruce Street. Adjacent sites 51-75 Sinclair Street have another 225mm main running through the backside of the sites in proximity to the proposed sites boundary. The existing site appears to have multiple connections to this main.

Based on the preliminary calculations, the proposed development is likely to require a new 225mm sewer main connection. The existing 225mm sewer supply on Pacific Highway may be sufficient to support this development, as illustrated in the adjacent image. Careful coordination with Sydney Water will be required.

The existing connections to the rear of the site will need to be capped and decommissioned.

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water to agree on their preferred connection strategy.



**Sewer Infrastructure Map**

— Sewer Main

■ Sewer Manhole



Development Location



Proposed Sewer Connection Strategy