INFRASTRUCTURE DELIVERY, MANAGEMENT AND STAGING PLAN

SSD-73277714 - 37 Archer St, Chatswood

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neuron

Date: 29/04/2025 - Revision 04

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Executive Summary

This Infrastructure Delivery, Management and Staging plan has been prepared by Neuron to accompany a detailed State Significant Development Application (SSDA) for the development of a mixed use residential tower with infill affordable housing at 37 Archer Street, Chatswood NSW 2067. The site consists of attached townhouses within a large rectangular lot. The legal description of the site is outlined in Table 1 below.

Table 1 Legal Description

Property Address	Title Description
37 Archer Street, Chatswood NSW 2067	SP 38065
Project Site Area	2,201m^2

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-73277714).

This report concludes that the proposed development is suitable and warrants approval subject to the implementation of the following mitigation measures:

- Application to Ausgrid for connection
- Section 73 application to Sydney Water to confirm supply of potable water
- Section 73 application to Sydney Water to confirm adequate sewer capacity of local network.

Following the implementation of the above mitigation measures, the proposed mixed-use development at 37 Archer Street, Chatswood will be acceptable with regards to Infrastructure Requirements and Utilities.

Introduction

The application seeks consent for the demolition of existing structures on the site and the development of a residential apartments (including affordable housing), commercial office space, food and beverage uses and retail tenancies with servicing areas and parking contained within the building's basement. A publicly accessible through site-link is also proposed providing a direct connection between Archer and Bertram Streets and allowing opportunities for outdoor dining and passive recreation.

Specifically, the SSDA seeks development consent for:

- Demolition of existing buildings, structures and trees.
- Excavation of the site to a basement depth of RL RL71.85mm.
- Construction of a mixed-use building to 28 storeys (RL184.25m) comprising residential and commercial uses.
- The development of 125 apartments (including 28 affordable housing units) with residential amenities and services, commercial office space, food and beverage tenancies and retail uses.

Description

The proposal is for a 28-storey building with 6-levels of basement below. The development contains the following uses:

Detailed Description

- Residential apartments: A total of 125 apartments (including 28 affordable housing units) comprising 29 x 1 bed apartments, 55 x 2 bed apartments, 30 x 3 bed apartments and 11 x 4 bed apartments with recreational facilities at Level 8.
- Office tenancies: occupying levels 2 and 3.
- Retail tenancies: double storey retail units fronting Bertram Street.
- Food and beverage tenancies: ground level.
- Basement parking: 154 car spaces, 9 motorbike spaces, 28 bicycle spaces and end of trip facilities.
- Servicing and plant equipment.
- Publicly accessible landscaped through site link.
- The gross floor area (GFA) for the proposed development is described below:
- Total GFA: 14,230sqm
    - Residential GFA: 12,318sqm
    - Non-residential GFA: 1,912sqm

Affordable housing will be provided in the form of a monetary contribution and floorspace within the proposed development.

The purpose of the project is to provide a high-quality mixed-use development in an accessible location within the Chatswood CBD, providing new market and affordable housing opportunities complemented by commercial and retail uses within this well serviced location.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 12 July 2024 and issued for the SSDA (SSD-73277714). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Table 2 – SEARs Requirements

Item	Description of Requirement	Response & Report Reference

21	Infrastructure Requirements and Utilities
	• In consultation with relevant service providers:
	  ○ Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.
	  ○ 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.
	  ○ 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.
		• The development will have minimal impact on the existing utility infrastructure surrounding the site
		• Existing electrical, communications, water & sewer infrastructure adjacent to the site is expected to be sufficient to serve the site.
		• Infrastructure requirements will be subject to the preferred staging arrangements decided upon for the site, however it is anticipated this development is to be built as a single stage.

The Site

The site is located at 37 Archer Street, Chatswood within the Willoughby Local Government Area (LGA). The site is legally described as SP 38065 and has an area of 2,201m^2. The existing development includes two buildings (multi-unit housing) of up to three storeys in height which accommodate a total of 14 dwellings. The existing development includes an inground swimming pool fronting Archer Street and single level of basement parking which is accessed from Bertram Street. Pedestrian entries are available from Bertram and Archer Street. Vegetation within the site includes planter boxes through the central circulation spaces and established trees around the site's perimeter. Street trees, comprising native species, along the site's western frontage form part of an attractive and distinctive avenue of trees.

The site is situated on the southern edge of the Chatswood CBD. The immediately surrounding area has been zoned for more intensive development and is intended to support mixed use development including high density residential uses. The existing character of the area is evolving.

The urban context surrounding the site is characterised by a mix of residential, commercial, and retail uses. The surrounding locality is described below:

North: The site is bounded to the north by low scale residential development including townhouses and single dwelling properties. This land is zoned to support high-rise mixed use development including buildings with heights up to RL246.8m. Along Archer Street proposals for mixed use towers have been lodged for properties at 51-55 Archer Street and 57-61 Archer Street.

East: The site is bound to the east by Bertram Street which comprises a two-way local road and borders the western edge of the South Chatswood Heritage Conservation Area. A locally listed heritage item at 34 Neridah Street is situated directly opposite.

South: A development application for a 14-storey mixed use development has been lodged for 31-44 Archer Street which is situated immediately to the south of the site. This area provides a transition to low scale residential uses contained within the South Willoughby Conservation Area located on the southern side of Johnson Street. There is a locally significant heritage item at 27 Archer Street.

West: To the west the site is bound by Archer Street which comprises a four-lane classified road. Existing development on Archer Street comprises medium density residential towers of 7 storeys and higher. The area has been zoned for taller buildings of up to 90m. Further to the west is the Chatswood transport interchange and Pacific Highway, linking to the CBD and wider Greater Sydney region.

The site benefits from excellent access to public and active transport and is within walking distance of the Chatswood Interchange, which provides rail and metro connections to North Sydney, Macquarie Park, and the Sydney CBD. Bus services run along Archer Street and provide connections to Chatswood and Crows Nest.

Figure 1 Site Aerial

Source: Urbis, 2024

Figure 2 Local Context Map

Source: Urbis, 2024

Early Authority Consultation

Authority	Early Involvement
Ausgrid	The client engaged DEP who is an Ausgrid Level 3 Accredited Service Provider. They have access to the Ausgrid network and have completed a study to define the electrical utility connection requirements for the project. The next phase of the project will include a formal application process to Ausgrid to confirm the final building load and connection strategy.
Communication Provider	We have investigated the existing communications assets within the surrounding area of the project and identified the service connection availability to be further developed in the next phase of the project. This include NBN & Telstra. They have provided drawings for review and consideration in the concept design phase of the project.
Jemena	We have investigated the existing gas infrastructure in the area and have identified through drawings provided by Jemena that there is an available network to connect to, that requires final load confirmation and a formal application to Jemena in the next phase of the project.
Sydney Water	Notification of the project has been sent to Sydney Water via Email to provide context and request feedback. In the absence of a response, we have investigated the existing sewer and water infrastructure to assess the demands of the proposed development and impact on the existing services. We have provided guidance on this connection methodology, to be further communicated with Sydney Water in the next phase of the project.

STAGING IMPLICATIONS

The site will be built in a single stage. From a utilities connection perspective, the building power, water, communications & sewer will all be constructed in this stage. 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 the existing utilities

Decommission of existing services on the site in preparation for excavation.

- Power:Application to Ausgrid as part of the overall substation application process in conjunction with a Level 3 ASP.
- Communications: Existing Telstra & NBN connections 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 being considered;

- Power: HV Feeder extended to the site in consultation with Ausgrid and an Level 2 ASP. Substation arrangements to be designed by an Level 3 ASP.
- Communications : Chosen fibre/s to be extended to the site.
- Gas: Application to Jemena. Gas main extended to the site.
- Water Supply: New Water main/amplification extended to the site.
- Sewer: Review detailed sewer analysis with Sydney Water to confirm final connection location/s

Utility works for the Proposed development

Refer to the subsequent sections of this report for details.

- Power: Builders supply likely to be partially fed from temporary substation arrangement or a 400A temporary supply. New substation arrangement to be built
- Communications: Telstra or NBN adjacent to the site.
- Gas: New Gas connection to adjacent gas main
- 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

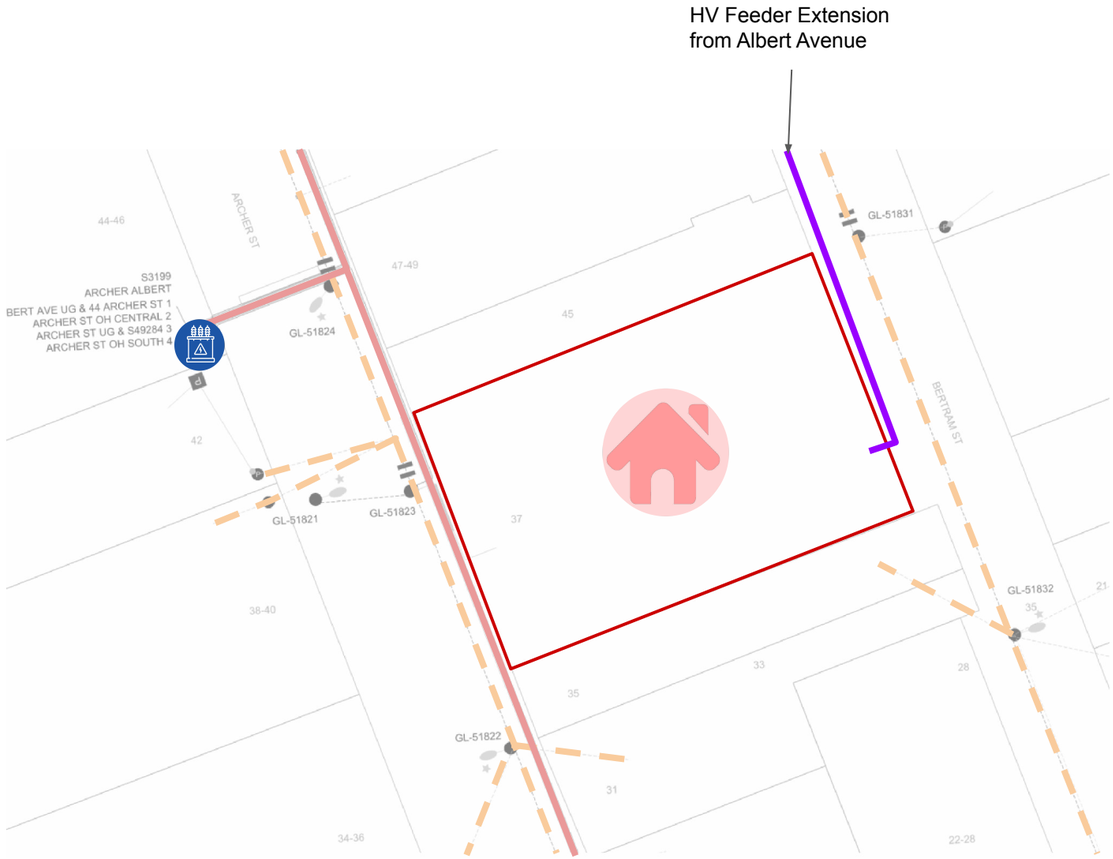
EXISTING POWER INFRASTRUCTURE

High voltage specialist DEP, carried out an initial investigation to understand the existing electrical infrastructure for this site. The intent of this investigation is to determine the preliminary risks, opportunities and implications to provide power to the proposed development. Note a formal application to Ausgrid will be required to confirm the power connection strategy and requirements for this development.

There are 2 x existing 11kV High Voltage (HV) underground mains that run along the eastern side of Archer Street, directly adjacent to the development site. Connection onto the existing HV network will require excavation in the footway to install new cables between the new substation and joint bay.

It is probable that one of the existing HV cables in Archer Street will be suitable however Ausgrid will confirm this in their Design Information Pack (DIP) once the application has commenced.

We note that the development site has a dual frontage with Bertam Street. There is no existing HV network in Bertam Street. We understand that the architectural preference is to locate the substation on Bertam Street. This will require an extension of the HV Feeder from Albert Street along Bertram Street to the site.



Power Infrastructure Map

- Below Ground High Voltage Power
- Overhead High Voltage Power
- Below Ground Low Voltage Power
- Overhead Low Voltage Power
- Existing Substation
- Development Location
- Proposed Power Connection Strategy

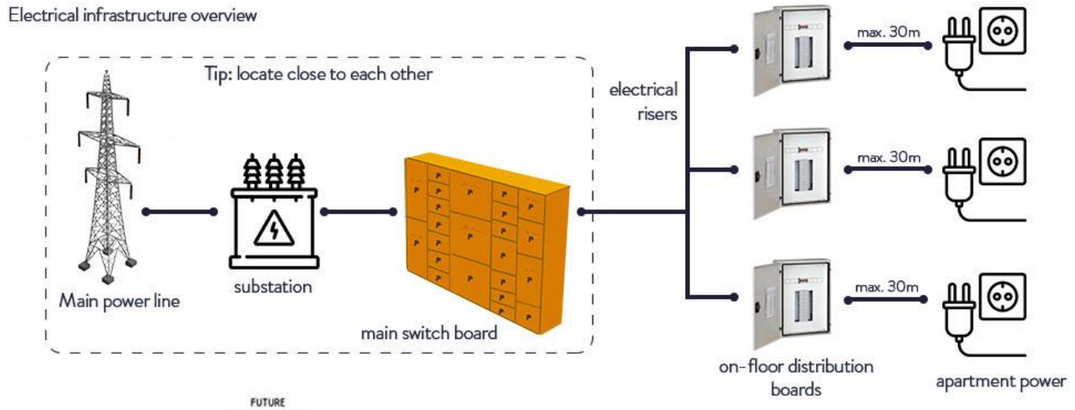
ELECTRICAL INFRASTRUCTURE

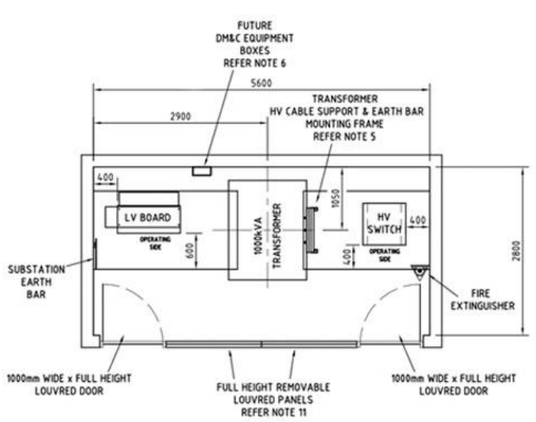
PROPOSED ELECTRICAL SERVICES

A proposed load of 1350amps/phase has been estimated.

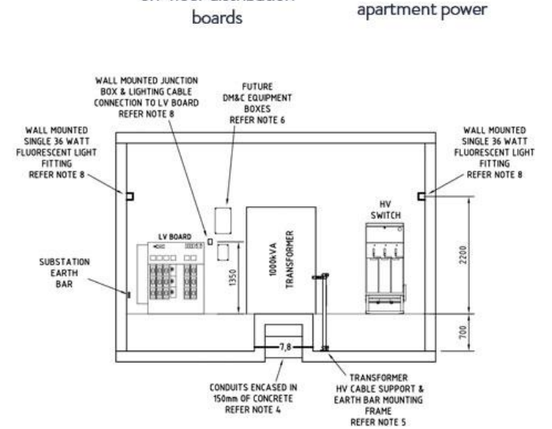
A single 1000kVA substation (kiosk/padmount or chamber) is sufficient for the proposed load.

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.





Chamber substation plan



Chamber substation section

Ventilation louvres on the front of a chamber substation

Inside a chamber substation

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COMMUNICATIONS INFRASTRUCTURE

Mobile base stations

There are no carrier mobile base stations located on this site.

Mobile Base Station Map

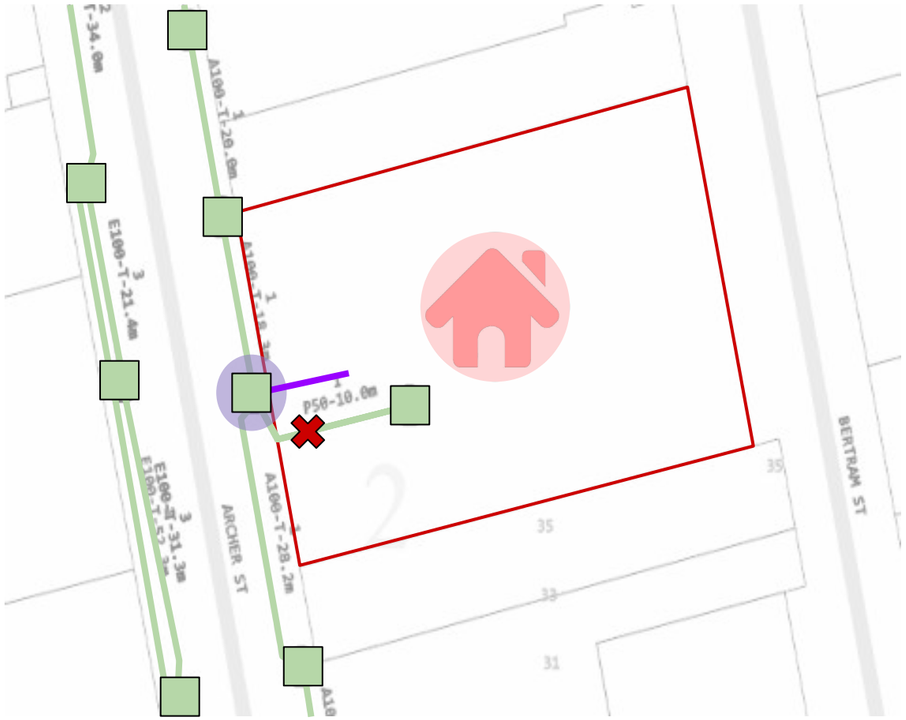
Existing Mobile Base Station

Development Location

COMMUNICATIONS INFRASTRUCTURE

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. Consultation with NBN will be undertaken during the next stage of the project to coordinate the required works.

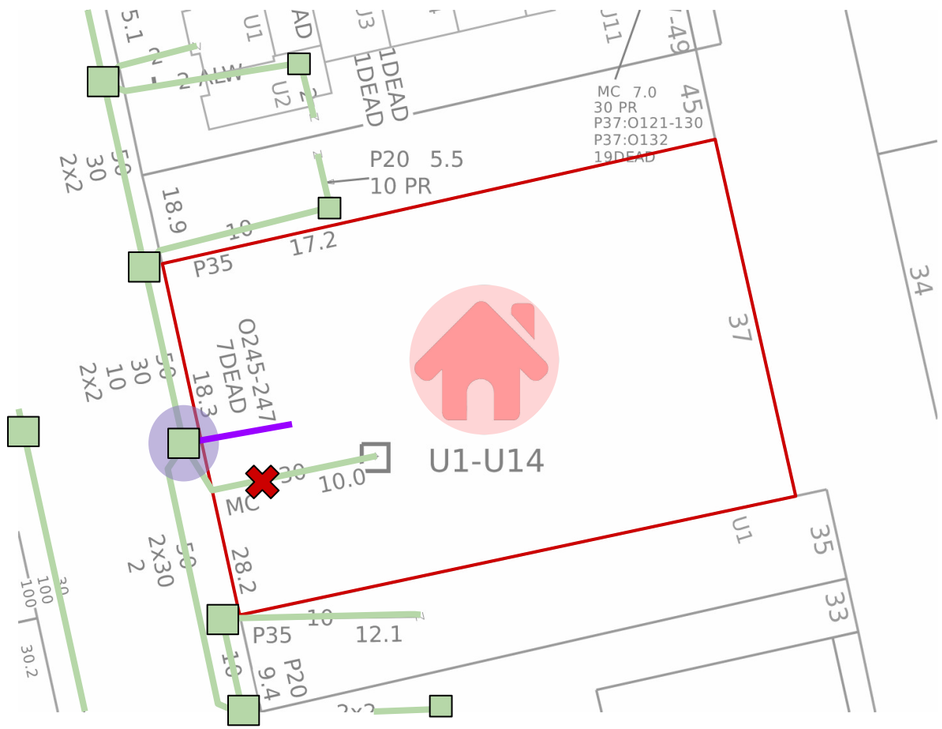


Fibre Infrastructure Map

Fibre
Development Location
Proposed Fibre Connection Strategy
Existing Pit

Telstra

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



Fibre Infrastructure Map

Fibre
Development Location
Proposed Fibre Connection Strategy
Existing Pit

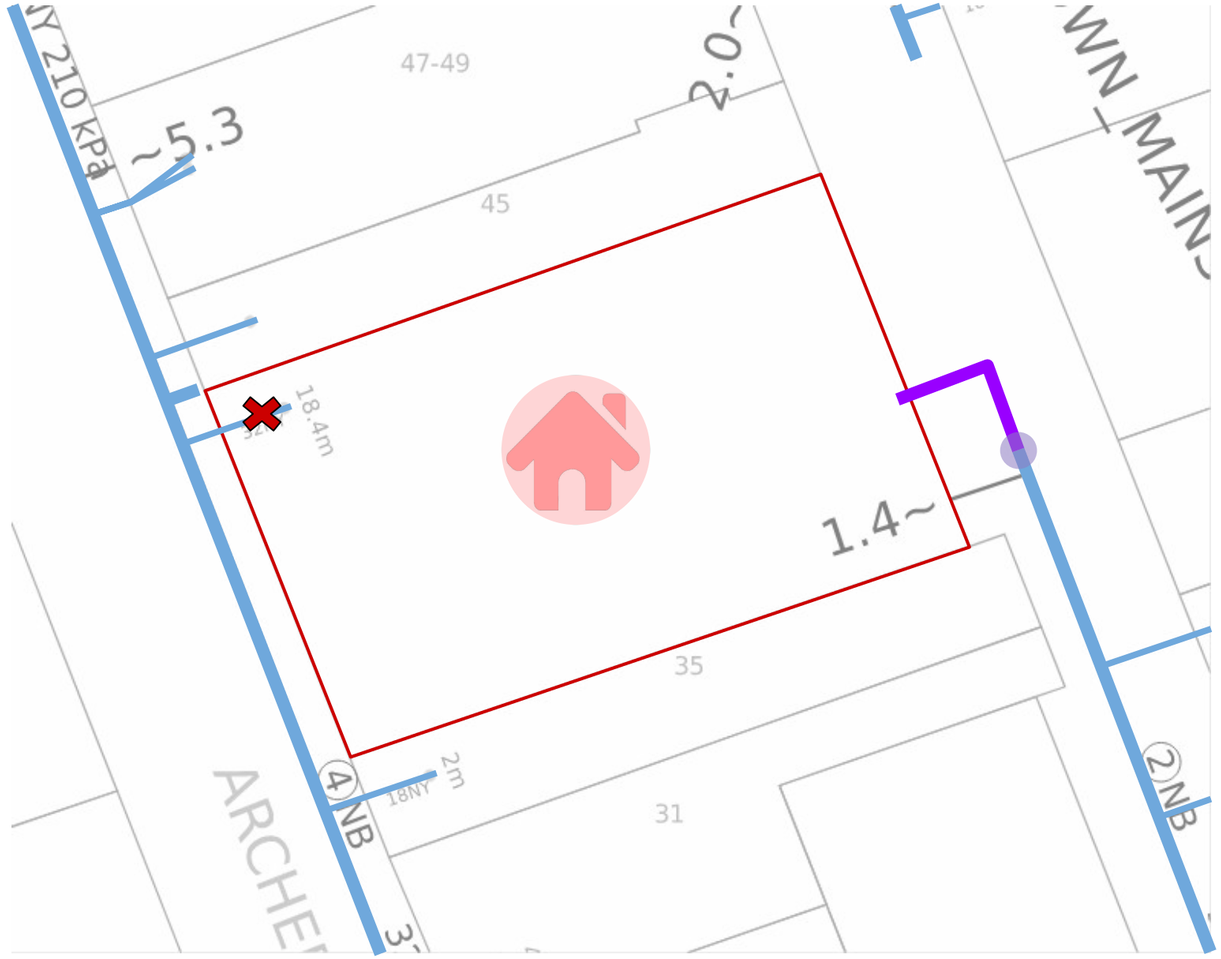
GAS INFRASTRUCTURE

As illustrated below, the dial before you dig investigation reveals there are multiple existing gas mains running close to the proposed development. There are Medium Pressure (210kPA) gas mains running along Archer Street and Bertram Street.

An extension of the main on Bertram Street will be required, coordinated to align with the proposed gas meter & regulator.

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

Consultation with Jemena will be undertaken during the next stage of the project to confirm the capacity of the adjacent main, and coordinate the required connection works.



Gas Infrastructure Map

Low/Medium Pressure Gas Main

High Pressure Gas Main

Development Location

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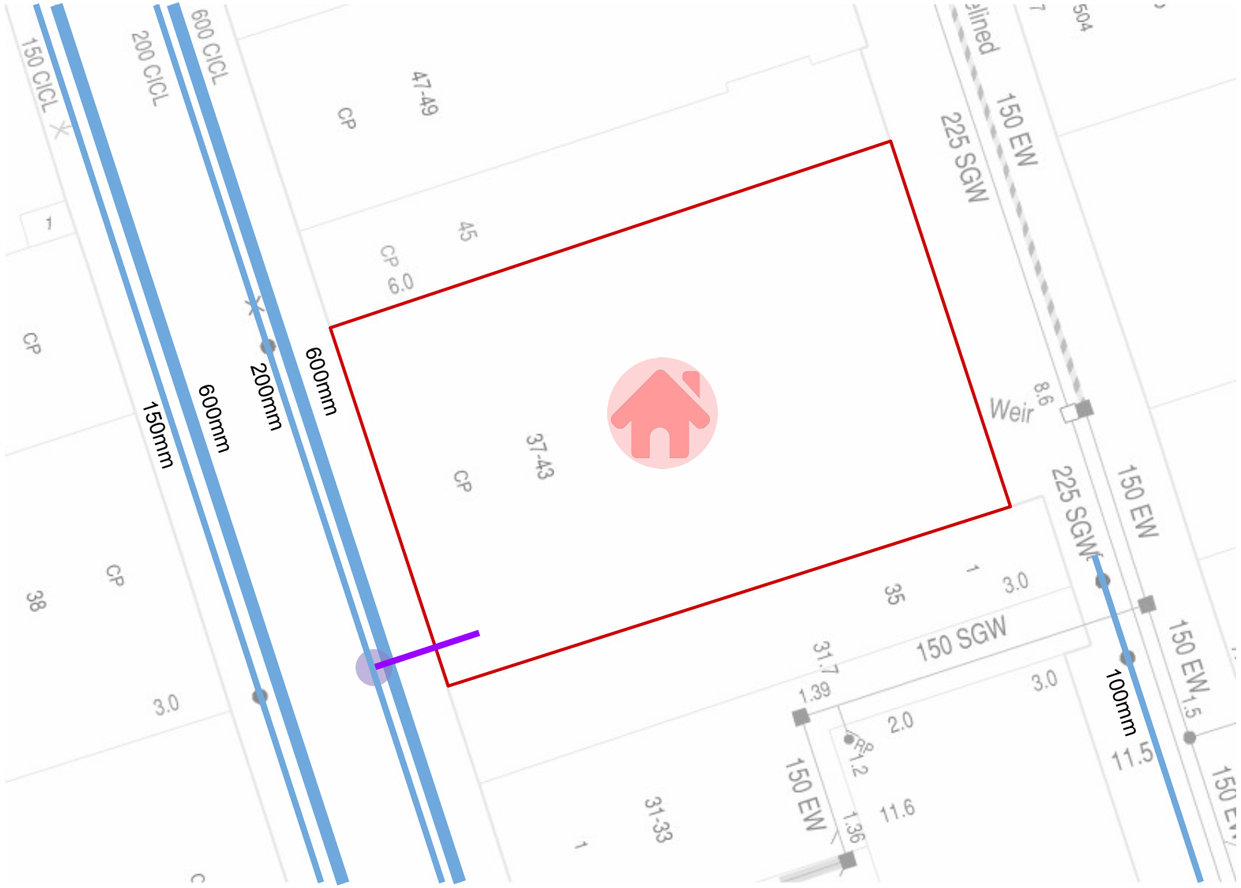
WATER INFRASTRUCTURE

There are multiple existing water mains running close to the proposed development. There is a 200mm and 150mm water main running along Archer St, and a 100mm water main running along Bertram Street. There is also two 600mm trunk mains running down Archer Street.

Based on the preliminary calculations, the development is likely to require a new 150mm mains water connection to the 200mm main on Archer Street.

A section 73 application will be required to confirm the capacity of the adjacent main.

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water.



Water Infrastructure Map

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

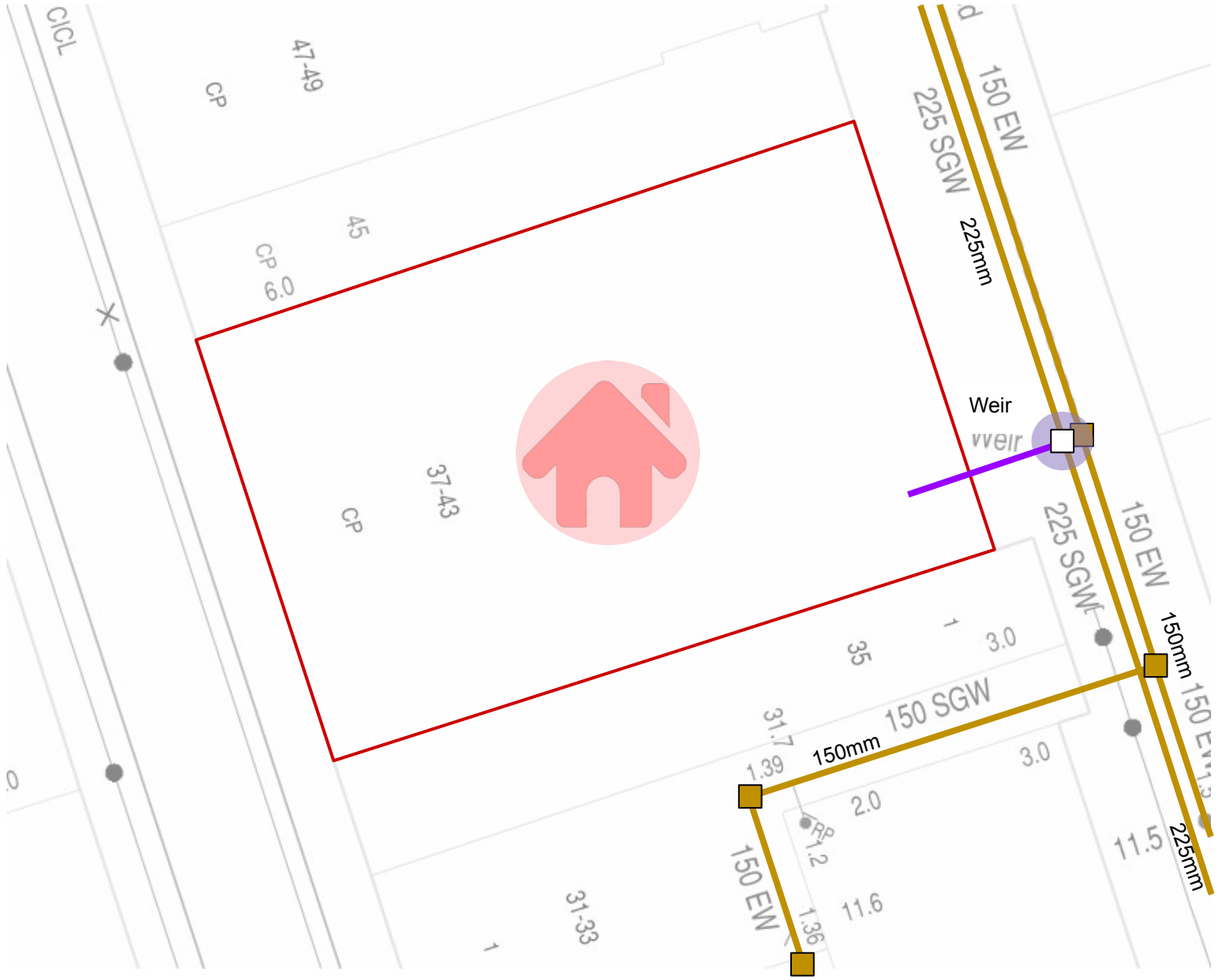
SEWER INFRASTRUCTURE

The dial before you dig investigation reveals there are multiple existing sewer mains running close to the proposed development. There is a 225mm and a 150mm sewer main running along Bertram Street.

Based on the preliminary calculations, this site is likely to require a new 225mm sewer connection. The existing sewer main adjacent to the site are 225mm sewer main and may have capacity to serve this development with a single connection. The connections are illustrated on the adjacent diagram.

A section 73 application will be required to confirm the capacity of the adjacent main.

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

Development Location

Sewer Manhole

Proposed Sewer Connection Strategy