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**Arne Jacobsen**

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Electrical Engineering

Copenhagen  
London  
Sydney  
Canberra  
Hong Kong  
New York

Level 8, 9 Castlereagh Street  
Sydney, NSW, 2000, Australia  
ABN 50 001 189 037  
t : +61 / 02 9967 2200  
e : [info@steensenvarming.com](mailto:info@steensenvarming.com)

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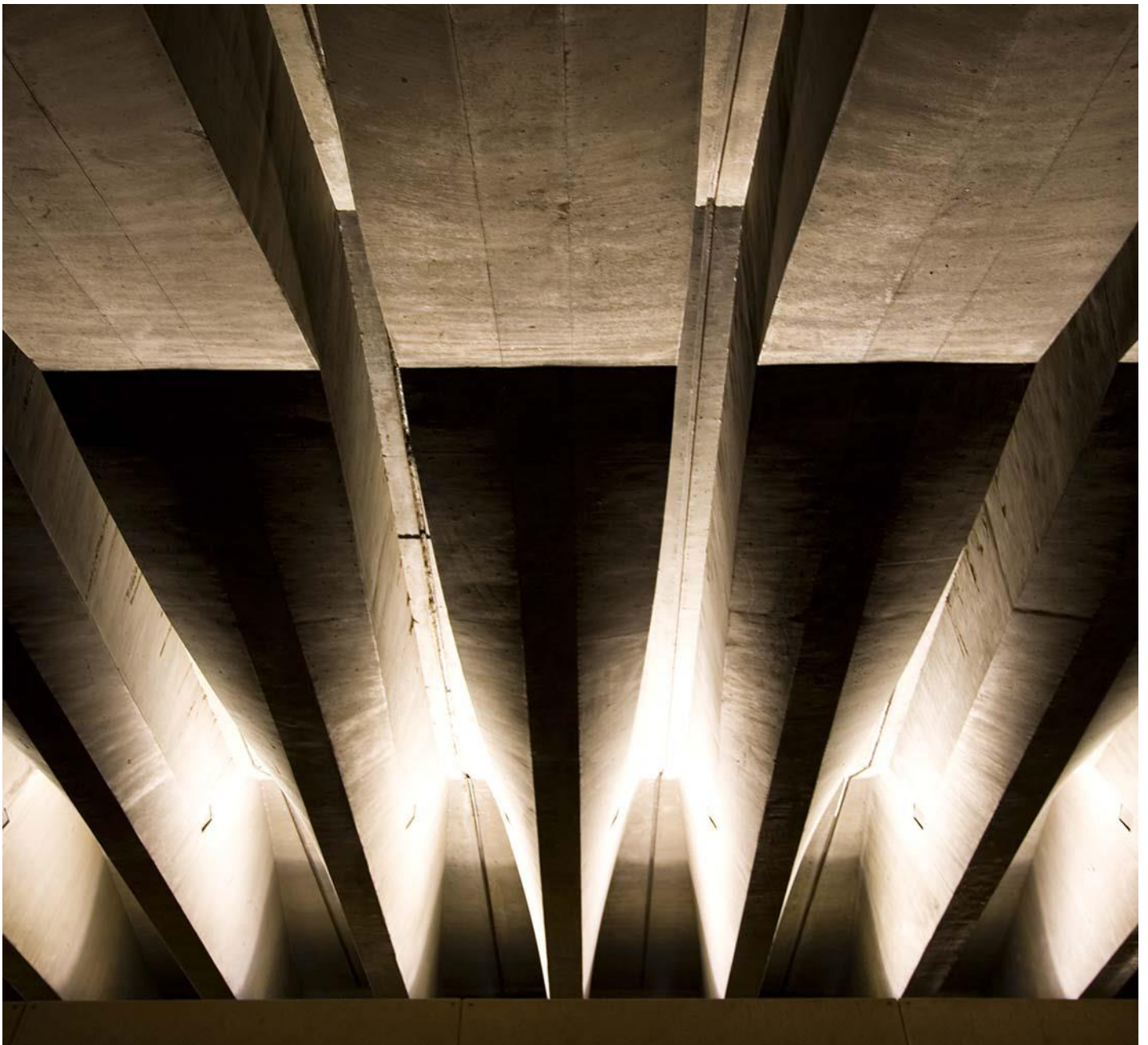
BUILDING SERVICES

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# HammondCare Wahroonga Aged Care Infrastructure Requirements and Utility Assessment



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e : info@steensenvarming.com

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**Ivan Mira**  
Associate

ivan.mira@steensenvarming.com  
9967 2200

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e : info@steensenvarming.com

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# 1.0 Introduction

This Infrastructure Requirements and Utilities Assessment Report is submitted to the Department of Planning and Environment (DPE) in support of a State Significant Development Application (SSD-45121248) for the redevelopment of part of the site at 4-12 Neringah Avenue South, Wahroonga for the purposes of delivering additional community health services, seniors housing, as well as upgraded palliative care facilities that will contribute to the broader operation of 'Neringah Hospital.' The extent of the site is shown below.



Outline of the site, with the portion of the site subject to the SCC shaded dark red (R4 zone)

Specifically, this SSDA seeks approval for the following:

- Site preparation works comprising:
  - Demolition of the Neringah Hospital building, kiosk, and existing at-grade carparks;
  - Clearing of nominated vegetation on the proposed development areas;
  - Bulk earthworks including basement excavation; and
  - Remediation works where necessary across the site.
- Construction and use of an integrated seniors housing and health services facility across two buildings ranging from 4-5 storeys above ground, comprising:
  - 2 basement levels containing minimum of 130 car parking spaces and service dock;
  - 12 residential aged care facility beds (extension to existing Stage 1 provision);
  - 18 palliative care hospice beds (Schedule 3 health services facility);

- Community healthcare services, including outpatient palliative care, centre for positive aging and Hammond at Home;
- 57 seniors housing dwellings;
- On-site administration, amenities, and ancillary operations spaces.
- Ground level and on-building landscaping works, including the provision of a through site pedestrian link connecting Archdale Park and Balcombe Park;
- Public domain works, specifically, regrading of part of the pedestrian walkway known as 'Archdale Walk' to provide accessible connection; and
- Extension and augmentation of infrastructure and services as required including new site signage

This report has been prepared to respond to the Secretary's Environmental Assessment Requirements (SEARs) for SSD-45121248 that were issued on 24 June 2022. A table referencing responses has been provided overleaf.

SEARs	Relevant report section
Item 22 – Infrastructure Requirements and Utilities – In consultation with relevant services providers, assess the impacts of the development on existing utility infrastructure and services provider assets surrounding the site	Section 2.1 and 2.2
Item 22 – Infrastructure Requirements and Utilities – In consultation with relevant services providers, identify any infrastructure upgrades 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	Section 2.1 and 2.2
Item 22 – Infrastructure Requirements and Utilities – In consultation with relevant services providers, provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be coordinated, funded and delivered to facilitate the development	Section 2.1 and 2.2

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## 2.0 Infrastructure Assessment

### 2.1 Electricity

#### 2.1.1 Maximum Demand

A preliminary maximum demand calculation has been completed for the proposed building to determine the electrical power requirements. The calculation provided below indicates the anticipated maximum demand for the new building.

Project Name: Wahroonga Aged Care			
Preliminary Electrical Maximum Demand		Job Number	227066
		Date	6/09/2022
		Revision	2
		Author	MM/IM
		Checked	IM
Room Name	VA/m <sup>2</sup>	Area (m <sup>2</sup> )	Total kVA
<b>Basement 1 &amp; 2</b>			
- Car Park	40	5223	209
- Storage	50	355	18
- Loading Dock	100	425	43
- Commercial kitchen provision	1500	174	261
- Office	100	878	88
<b>Lower Ground</b>			
- Car Park	40	2025	81
- Front of house / Accommodation	80	1536	123
<b>Ground</b>			
- Accommodation	60	2953	177
<b>Level 1</b>			
- Accommodation	60	2490	149
<b>Level 2</b>			
- Accommodation	60	2511	151
<b>Level 3</b>			
- Accommodation	60	2068	124
<b>Level 4</b>			
- Accommodation	60	1100	66
<b>Misc Loads and Allowances</b>			
- Lifts (10kVA / lift)			50
- Landscape power allowance			20
<b>TOTALS</b>		<b>21738</b>	<b>1559.2</b>

## 2.1.2 Scope of Work

Given the anticipated loads, the existing kiosk transformer is insufficient for the proposed building and will need to be replaced. The rating of the new transformer/s is pending feedback on the application for connection to submitted to Ausgrid.

Our initial review of the site suggests that the new works will need 2 new 750kVA transformers to be established on site along the existing service road to the south. The existing transformer supplying the hospital is to be decommissioned and removed. The new substations will require a 6000mm x 5300mm easement and will need to be constructed prior to the decommissioning of the existing transformer to pick up existing loads of other customers that are also connected to the existing transformer, namely street loads and the adjacent apartment complex.

## 2.1.3 Review of Infrastructure

Steensen Varming has completed a Dial Before You Dig as well as a review Ausgrid services maps to getting an understanding of the services in the area of the works. High voltage infrastructure along Neringah Avenue which connects into both existing transformers currently on the HammondCare site. The image below is an extract from the Ausgrid maps which shows the two kiosk transformers.

There are no existing Ausgrid assets with the site apart from the existing incoming power supplies thus there is no impact on existing infrastructure in the area by the works. Based on the existing infrastructure it would suggest there is sufficient capacity in the area however this is pending submission of a formal application. An application for connection for the project has been submitted to Ausgrid to obtain a design information package to confirm the exact scope of works required and confirm that there is sufficient capacity in the area.



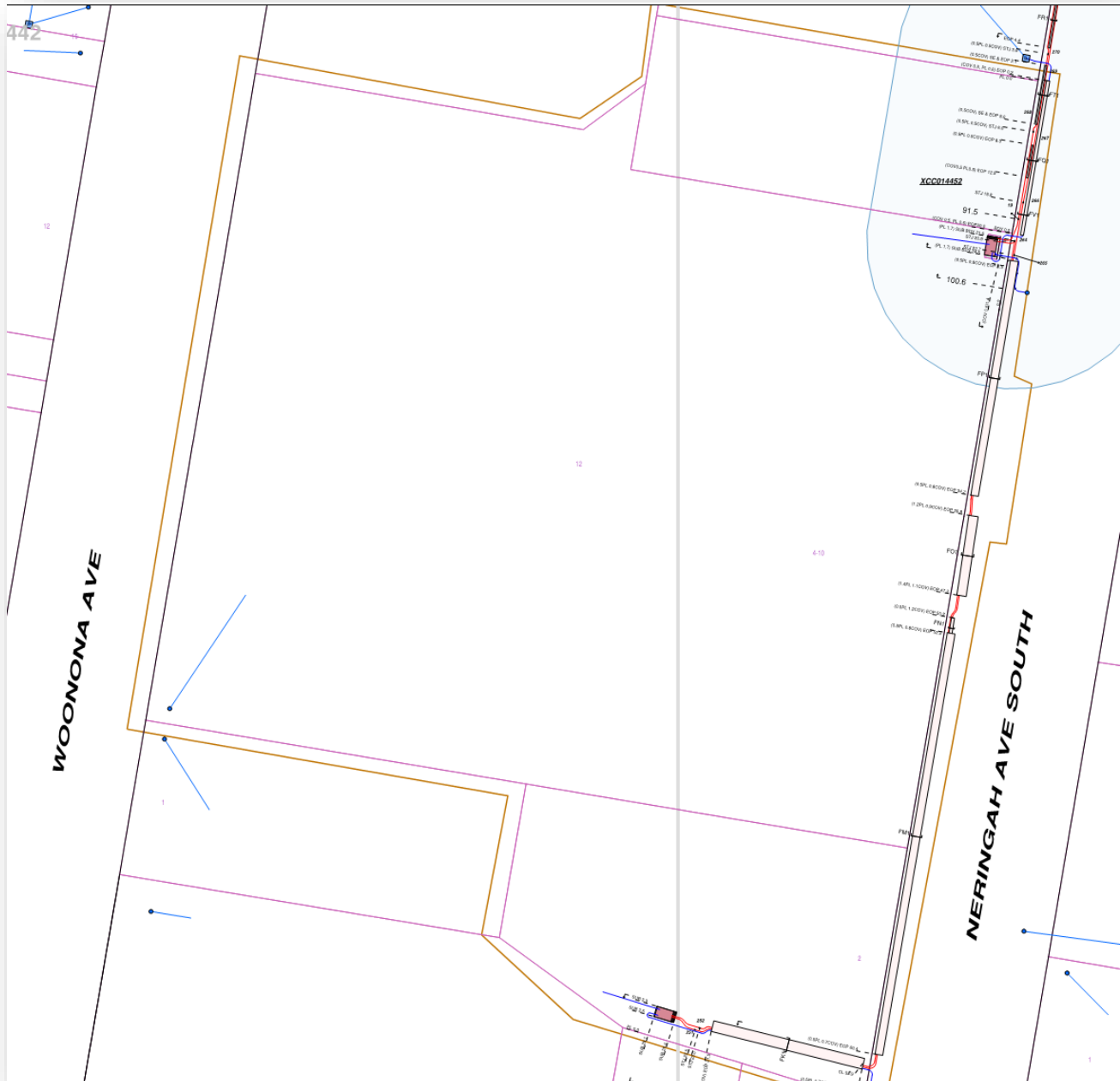
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## **2.2 Telecommunications**

### **2.2.1 Scope of Work**

The telecommunications requirements of the new works can be served in one of two methods:

1. Connected directly to the authority network as a new service
2. Linked back to the IT network in the existing Wahroonga Residential Aged Care building which has its own incoming telecommunications service

### **2.2.2 Review of Infrastructure**

Steensen Varming has completed a Dial Before You Dig and reviewed the provided services maps. There are five telecommunications authorities in the vicinity of the works, namely NBNCo, Nextgen NCC, Optus and Uecomm, Telstra and TPG. Refer to the following sections of this report for our review and assessment of each service provider noted here.

If option 1 noted in section 2.2.1 is progressed with an application will need to be made to NBNCo to obtain an incoming connection however based on our review, we see no issues in obtaining a new connection to either building. If option 2 is progressed with, no new connection to an authority will be required.

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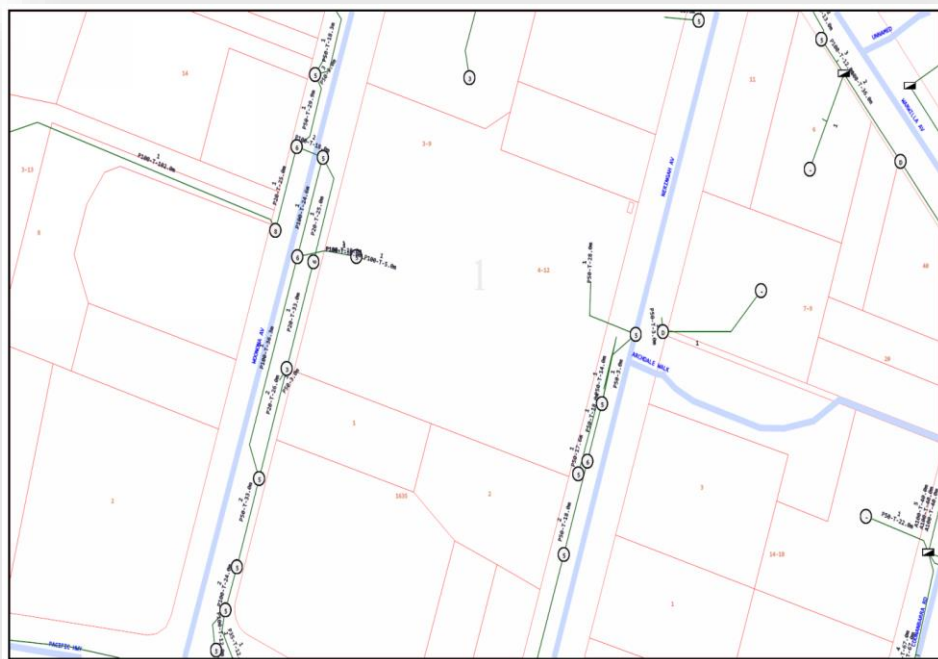
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### 2.2.2.1 NBN Co

Based on the Dial Before You Dig plans received in response to our enquiry, NBN has existing services within Woonona Avenue and Neringah Avenue. There are no services within the proposed site of the project apart from the existing incoming connections to the Wahroonga Residential Aged Care building and the Neringah Hospital being demolished, therefore the existing authority services outside the site should not be impacted upon.



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## 2.2.2.2 Nextgen NCC

Based on the Dial Before You Dig plans received in response to our enquiry, Nextgen NCC have no existing services alongside or within the site.



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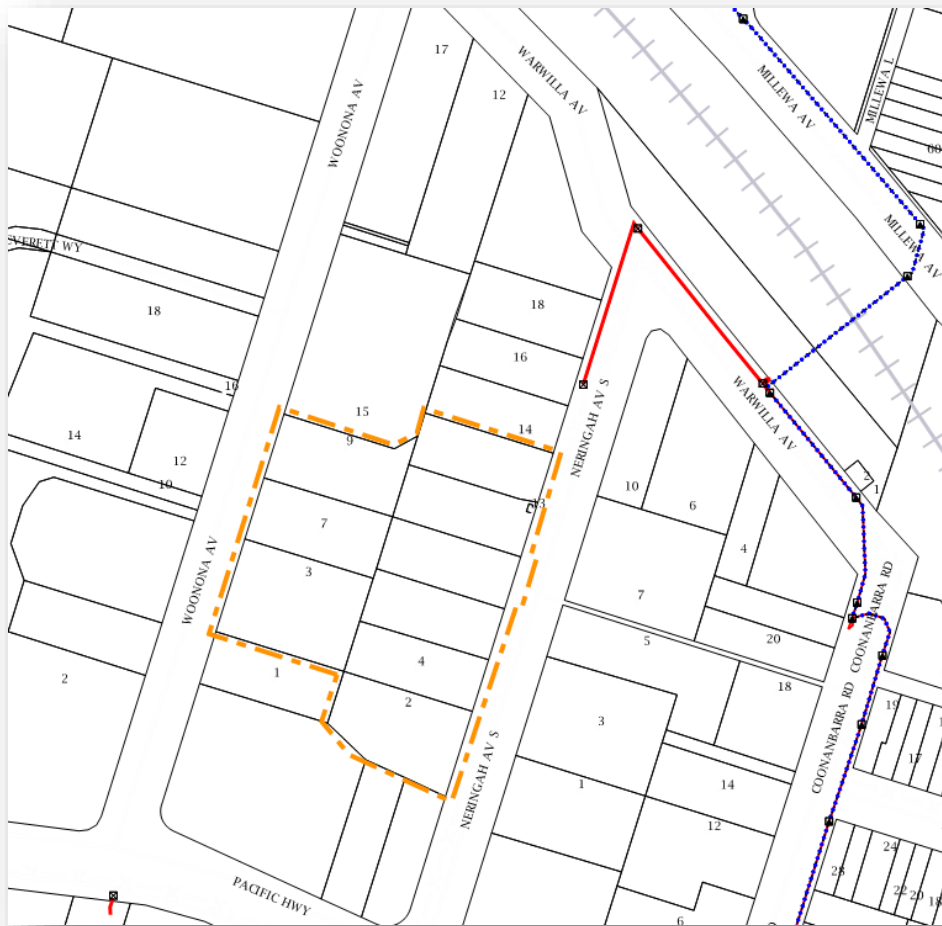
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### 2.2.2.3 Optus and Uecomm

Based on the Dial Before You Dig plans received in response to our enquiry, Optus and Uecomm have no existing services alongside or within the site. Their services are located to the north of Neringah Avenue as shown below.



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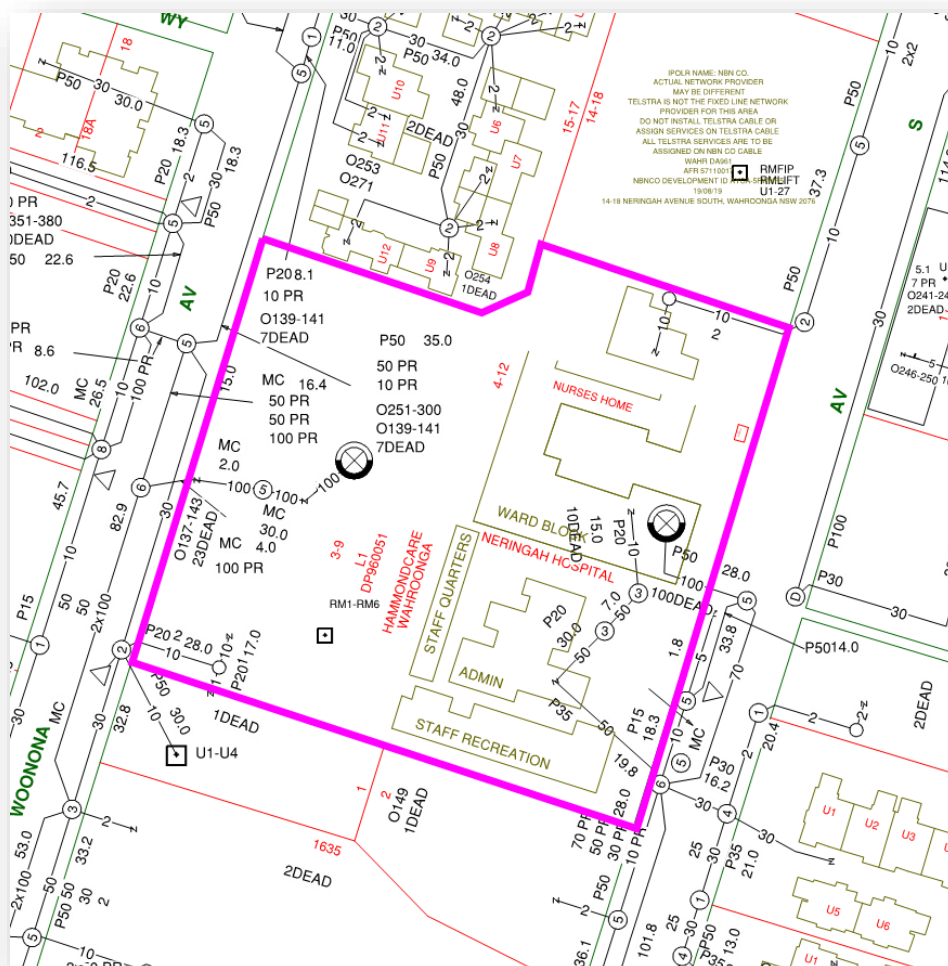
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## 2.2.2.4 Telstra

Based on the Dial Before You Dig plans received in response to our enquiry, Telstra has existing services within Woonona Avenue and Neringah Avenue. There are no services within the proposed site of the project apart from the existing incoming connection to the Wahrenonga Residential Aged Care building and the Neringah Hospital being demolished therefore the existing authority services outside the site should not be impacted upon.



Cable Plan

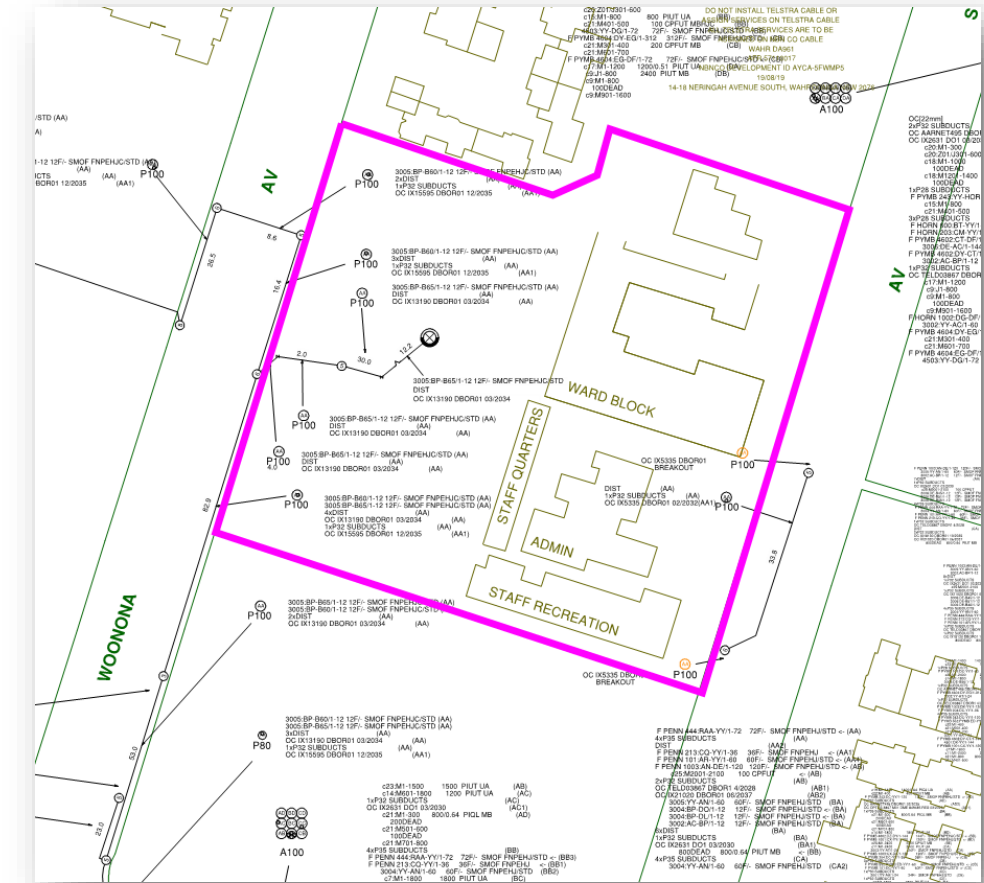
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e : info@steensenvarming.com

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Mains cable Plan

**Arne Jacobsen**

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Hong Kong

e : [info@steensenvarming.com](mailto:info@steensenvarming.com)

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### 2.2.2.5 TPG

Based on the Dial Before You Dig plans received in response to our enquiry, TPG has no existing services within the site. There are existing in ground ducts along the side to the southern end of Neringah Avenue.

