

Services Report

Arup

DPT Operator Pty Ltd & DPPT
Operator Pty Ltd
Cockle Bay Wharf Redevelopment
Preliminary Utility Services
Infrastructure Assessment

238566-00

Issue | 25 October 2016

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 238566-00

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Contents

	Page
1 Introduction	1
2 Utility Services Infrastructure	1
3 Protection and relocation strategies for infrastructure assets	2

Appendices

Appendix A

Ground Floor Plan Sketch

1 Introduction

This report supports a State Significant Development Application (SSDA) submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Arup were commissioned by DPT Operator Pty Ltd and DPPT Operator Pty Ltd (the Proponent) to provide preliminary advice in response to the Secretary's environmental assessment requirements (SEARs) section 11, addressing utility infrastructure assets associated with the proposed redevelopment of Cockle Bay Wharf, focusing on two areas:

- Availability, capacity and location of utility services infrastructure in the vicinity;
- Protection and relocation strategies for infrastructure assets of each utility stack holders

This report provides a record of that advice.

2 Utility Services Infrastructure

A 'dial before you dig' (DBYD) enquiry was sought and the information collated into the sketch presented at Appendix A. Initial verbal discussions were also undertaken with key utility providers. The following provides a summary by service.

In general terms much of the exiting building footprint sits over the edge of the harbour and as such the in ground services infrastructure runs to the east of the site.

Water

From the services plan provided in the DBYD plans, the existing town main available is described below:

- Wheat Road - 150mm water main
- Sussex Street – 300mm water main

The water main size is expected to be sufficient for the proposed development.

The water main infrastructure is located within the property boundary and will need to be accommodated and/or diverted to suit the new development, along the new Wheat Road and Sussex Street, and be subject to Sydney Water's approval.

A Sydney Water accredited Water Servicing Coordinator (WSC) is required to be engaged to undertake the application to Sydney Water for the Notice of

Requirements for any potential works required for the existing water infrastructure. The budget for any potential works for the existing water infrastructure will be advised by Sydney Water via the Notice of Requirements.

Gas

From the services plan provided in the DBYD plans, the existing natural gas main available is described below:

- Wheat Road – 110mm medium pressure gas main 210kPa

In terms of the existing natural gas main capacity, it appears that it is sufficient for the proposed development subject to Jemena's approval.

The gas main infrastructure is located within the property boundary, along the Wheat Road, and be subject to Jemena's approval. It will need to be relocated to suit the new development, if the Wheat Road is diverted, and be subject to Jemena's approval.

Electrical

Estimated maximum demand will be in the order of 8 to 12 MVA.

This will require 3 to 4 substations (arranged as 3-4 × 1500kVA Triplex units to Ausgrid CBD standards)

Potential supplies may come from the Sydney North zone substation (132kV/11kV), or from other infrastructure identified by Ausgrid. Based on available information and preliminary verbal advice from Ausgrid is that the relatively new Sydney North Zone Substation on Sussex Street is the most likely source of supply for a major new development at the site and this substation has sufficient spare capacity.

The existing in ground conduits would be required to be augmented to provide new HV supplies to the site.

The electrical conduits south to Harbour Street is located within the property boundary, and be subject to Ausgrid's approval. It will need to be relocated to suit the new development, if the Wheat Road is diverted, and be subject to Ausgrid's approval. The electrical conduits north to Harbour Street will need to be accommodated and/or diverted upon new development, and be subject to Ausgrid's approval.

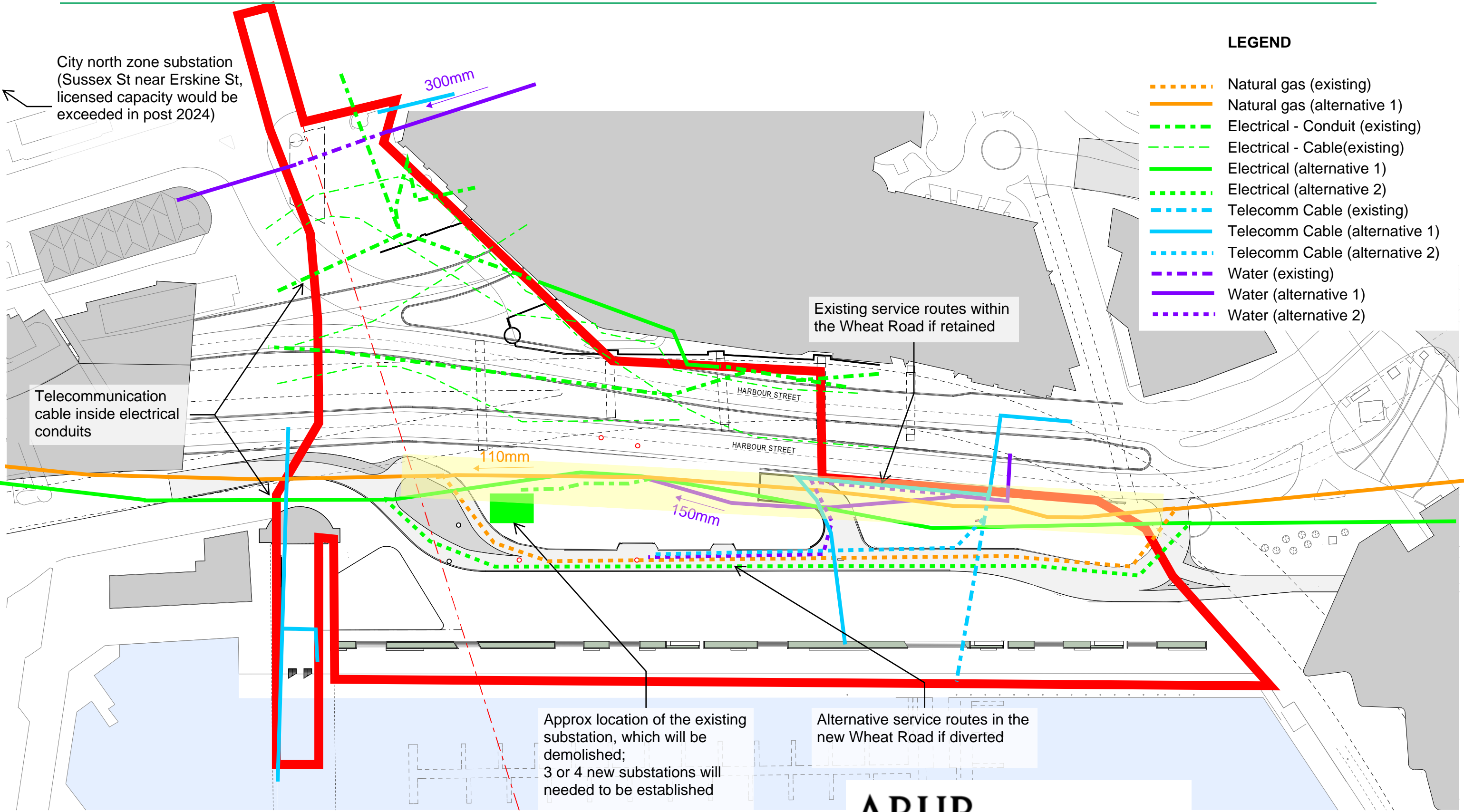
3 Protection and relocation strategies for infrastructure assets

A 'dial before you dig' (DBYD) enquiry was sought and the information collated for proposing preliminary plan of protection and relocation strategies to allow for minimal impact and appropriate protection of infrastructure assets. The following lists strategies.

- Being aware of affected utility stakeholders: Ausgrid, City of Sydney, Jemena, Optus, Roads and Maritime Services, Sydney Water, and Telstra.
- Locating assets: Assets' and permanent survey marks' exact location and assistance will be requested from each utility stakeholders at a reasonable time before work begins. A thorough site examination will be conducted for visible structures through field survey including the use of appropriately qualified personnel and equipment.
- Acquiring approvals: Relevant approvals will be obtained prior to commencement of works on or near infrastructure assets of various utility stakeholders. And all works are undertaken in accordance with the requirements of any approval.
- Reporting damage: Damage of assets will be reported immediately to utility stake holders any time, any day.

Appendix A

Ground Floor Plan Sketch



LEGEND

- Natural gas (existing)
- Natural gas (alternative 1)
- Electrical - Conduit (existing)
- Electrical - Cable(existing)
- Electrical (alternative 1)
- Electrical (alternative 2)
- Telecomm Cable (existing)
- Telecomm Cable (alternative 1)
- Telecomm Cable (alternative 2)
- Water (existing)
- Water (alternative 1)
- Water (alternative 2)

Notes:
The locations of all service routes are approximate and are subject to a detailed site survey. Relocation of all service lines are diagrammatic only and all works will be subject to each utility stakeholder's approval

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