

Macquarie Capital

**Sydney Metro
Martin Place Station**

**Utility Services Infrastructure
Assessment**

SMMPS_ARUP_GRP_XX_RP_C_35002

01 | 24th May 2017

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

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Job number 247838

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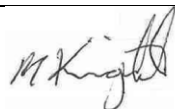


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This report takes into account our client's particular instructions and requirements and addresses their priorities at the time. This report is relied upon by third parties at their own risk, third parties must make their own assessment of it and it should not be relied on by any third party without first obtaining independent specific professional advice. No responsibility is undertaken to any third party by Arup in relation to this report.

1 Introduction

1.1 Introduction

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

Macquarie Corporate Holdings Pty Limited (Macquarie) is seeking to create a World Class Transport and Employment Precinct at Martin Place, Sydney.

The application seeks Stage 1 approval for the establishment of building envelopes, maximum Gross Floor Areas and design parameters for two predominantly commercial office Over Station Development (OSD) towers, located above the site of the future Martin Place Metro Station (part of the NSW Government's Sydney Metro project).

In particular this report has been prepared to support the Stage 1 SSDA application, providing preliminary advice on the availability, capacity, and location of utility services infrastructure in the vicinity of the site and the protection and relocation strategies for infrastructure assets of each utility (subject to authority and stakeholder approval).

Currently due to the design being at an early stage of development, the proposals put forward in this report are subject to change due to further development and refinement of design, contractor input into construction methodology and staging and further in ground investigation from both destructive and non-destructive survey methods. Utility Services Infrastructure

A 'Dial Before You Dig' (DBYD) enquiry was sought for all utility providers and the information collated throughout the report. To date no initial discussions have been undertaken with key utility providers due to the confidentiality of the unsolicited bid. It is anticipated by Stage 2 DA initial conversations will have taken place with affected authorities to gain confirmation of proposed alterations/ protections.

1.2 Background

The New South Wales (NSW) Government is implementing Sydney's Rail Future (Transport for NSW, 2012), a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers in the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest (Stage 1) and Sydney Metro City & Southwest (Stage 2).

Stage 2 of the Metro entails the construction and operation of a new Metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to

Sydenham and eventually onto to Bankstown through the conversion of the existing line to Metro standards. The project also involves the delivery of seven (7) new Metro stations, including Martin Place.

This step-change piece of public transport infrastructure once complete will have the capacity for 30 trains an hour (one every two minutes) through the CBD in each direction catering for an extra 100,000 customers per hour across the Sydney CBD rail lines.

On 9 January 2017 the Minister for Planning approved the Stage 2 (Chatswood to Sydenham) Metro application lodged by Transport for NSW (TfNSW) as a Critical State Significant Infrastructure (CSSI) project (reference SSI 15_7400). TfNSW is also making provision for future Over Station Development (OSD) on the land it has acquired for the Stage 2 Sydney Metro project, including land acquired for the purposes of delivering Martin Place Station. The OSD development is subject to separate applications to be lodged under the relevant provisions of the EP&A Act.

An Unsolicited Proposal submission has been lodged by Macquarie to the NSW Government for the delivery of a single fully integrated station/OSD solution for the new Sydney Metro Martin Place Station.

1.3 Site Description

The Sydney Metro Martin Place Station Precinct (the Precinct) project relates to the following properties (refer to Figure 1):

- 50 Martin Place, 9 – 19 Elizabeth Street, 8 – 12 Castlereagh Street, 5 Elizabeth Street, 7 Elizabeth Street, and 55 Hunter Street (North Site);
- 39 – 49 Martin Place (South Site); and
- Martin Place (that part bound by Elizabeth Street and Castlereagh Street).

The land the subject of this application relates only to the North and South Site (refer to Figure 2). Each site will accommodate one OSD tower above the future Sydney Metro Martin Place Station (representing the northern and southern entries/gateways to the Sydney Metro station). The land acquired for the Sydney Metro Martin Place Station is the same as for the Macquarie proposal, except that the Macquarie proposal includes the two properties north of Martin Place owned by Macquarie, namely 50 Martin Place and 9-19 Elizabeth Street.

Both the North and South Sites are regular in shape and have area of approximately 6,022m² and 1,897m² respectively, totalling 7,919m².

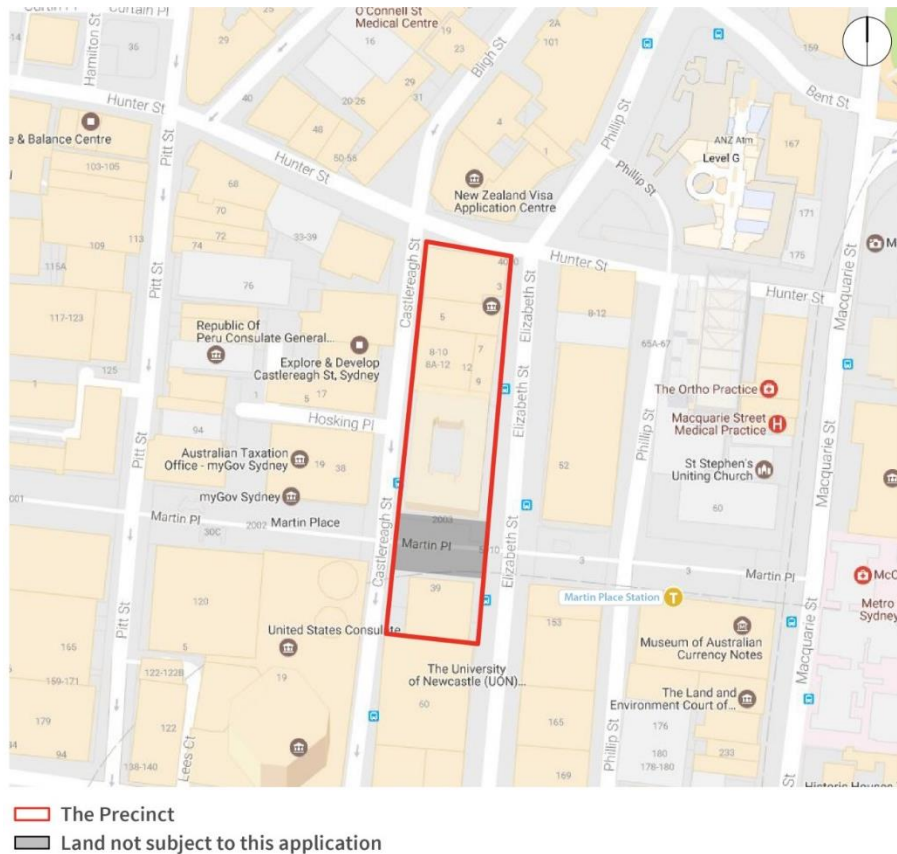


Figure 1: Location map of the Precinct

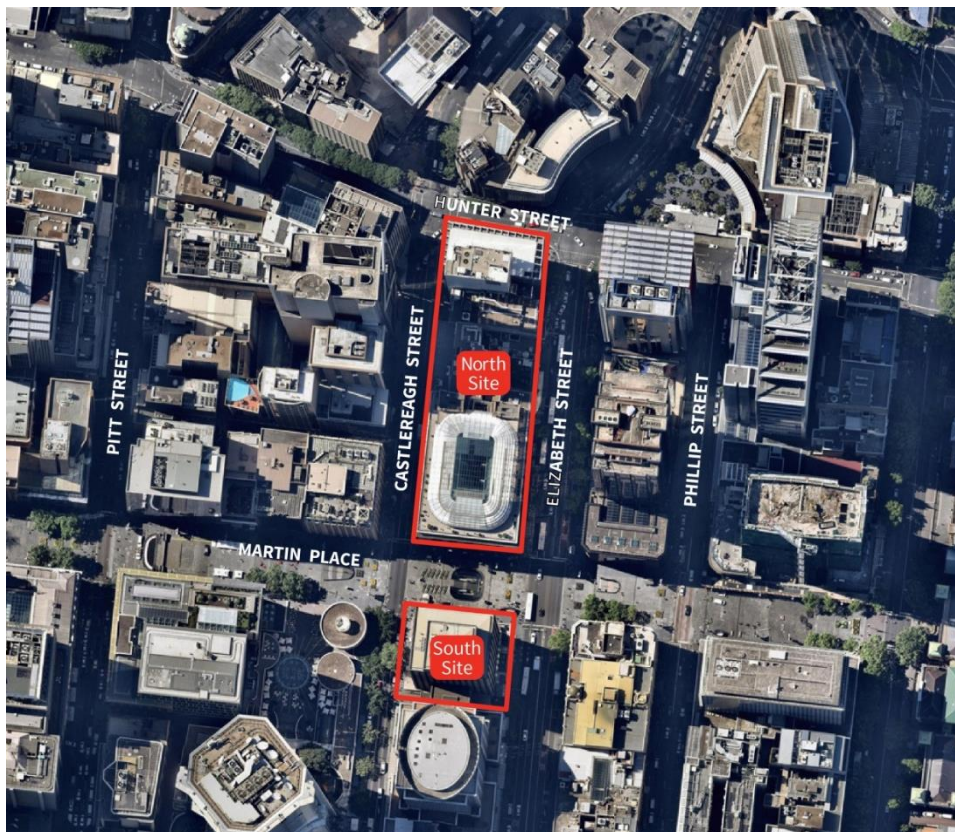


Figure 2: Aerial photo of the North and South Site

Located close to the centre of the Sydney CBD, the Precinct comprises of the entire City block bounded by Hunter Street, Elizabeth Street, Martin Place and Castlereagh Street; that portion of Martin Place located between Elizabeth Street and Castlereagh Street and the northern most property in the block bounded by Martin Place, Elizabeth Street, Castlereagh Street, and King Street. Together it constitutes an above ground site area of approximately 9,400 square metres, with a dimension from north to south of approximately 210 metres and from east to west of approximately 45 metres. It incorporates a significant portion of one of Sydney's most revered public spaces – Martin Place.

Martin Place is recognised as one of Central Sydney's great public, civic and commemorative spaces, as well as being a historically valued commercial and finance location of Sydney's CBD. Martin Place and a large number of buildings on, or in close proximity to, Martin Place are identified as heritage items, either as items of National, State or Local significance. Number 50 Martin Place, which forms part of the Macquarie North Site, is one of these major heritage items. There has been a number of redevelopment and refurbishment proposals in recent years along Martin Place to improve existing assets and recapture their premium commercial status (e.g. 5 Martin Place, 50 Martin Place, 20 Martin Place, upgrades of the MLC Centre, and 60 Martin Place). The City of Sydney Council has also identified a need to reinvigorate Martin Place and upgrade the public spaces.

The surrounding locality is characterised by a variety of built forms and architectural styles, with many of the buildings, including those of relatively recent years, not complying with the current planning controls with respect to building heights, setbacks and street wall heights.

In terms of land use the area is characterised by a predominance of office uses, with some ground floor retailing, cafés, or restaurants and hotels (most notably the Westin and the Wentworth) to support its primary business centre function.

1.4 Overview of Proposed Development

The proposal by Macquarie is unique and innovative in aligning the aspirations for public transport, civic amenity and the long-term sustainability of Sydney as a financial centre. This will be achieved through a development designed to maximise the opportunities for an improved Metro Station, integration of the existing and new public transport infrastructure, integration of that infrastructure with modern commercial office towers and world class retailing, along with rejuvenating and complimenting some of Sydney's most revered public spaces, and substantially improving station access and connectivity.

More specifically the development will comprise a concept proposal (under section 83B of the EP&A Act) for the OSD for the North and South Sites. It will be designed as a fully integrated Station and OSD project that, subject to approval, will be built and delivered as one integrated project for opening at the same time as the Sydney Metro is commissioned.

The concept proposal establishes the vision and planning and development framework which will be the basis for the consent authority to assess future detailed development proposals (Stage 2 DAs).

The North Site

The Concept Proposal for the North Site is for a new 40+ storey, predominately commercial office building. The proposal seeks to integrate with the existing 50 Martin Place building, supporting large commercial floor plates. No connections to 50 Martin Place are proposed for the basement levels of that building, including the level of the significant heritage Safe Deposit Vault.

The South Site

The Concept Proposal for the South Site is for a new 28+ storey predominately commercial office building.

The detailed design of the OSD is still in its preliminary stages. Critically it requires an integrated design approach to be adopted between the commercial OSD components classified as SSD, and the Station components, which are classified as CSSI and have already been approved. This is to ensure:

- all the operational needs of the Metro Station are accommodated in accordance with TfNSW requirements and the structural and other requirements of the OSD are accommodated within the Station building beneath, in what is essentially one building; and
- a cohesive public domain and built form outcome is achieved for Sydney.

In this regard, OSD uses and structural elements are located within the below ground and lower podium levels, as conceptually approved under the CSSI consent for the Martin Place Station.

The Staged DA will seek consent for, amongst other things, land uses, gross floor area, building envelopes, and vehicle access arrangements.

A more detailed and comprehensive description of the proposal is contained in the Environmental Impact Statement (EIS) prepared by JBA.

1.5 Planning Approvals Strategy

The *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD) identifies development which is declared to be State Significant. Under Schedule 1 and Clause 19(2) of SEPP SRD, development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than \$30 million and involves commercial premises is declared to be State Significant Development (SSD) for the purposes of the EP&A Act. The proposed development (involving commercial development that is both located within a rail corridor and associated with rail infrastructure) is therefore SSD.

Pursuant to Section 83B of the EP&A Act a Staged DA may be made setting out concept proposals for the development of a site (including setting out detailed proposals for the first stage of development), and for which detailed proposals for separate parts of the site are to be the subject of subsequent DAs. This SSD DA is a staged development application made under Section 83B of the EP&A Act.

A detailed development application(s) (Stage 2 DAs) will accordingly follow, seeking approval for the detailed design and construction of all or specific aspects of the proposal in accordance with the approved staged development application. Submitted separately to this SSD DA are applications to modify the CSSI approval together with a Planning Proposal relating to the North Site (FSR only) and South Site (height and FSR).

For clarity, Figure 3 below is a diagrammatic representation of the suite of applications proposed by Macquarie, to show the relationship of the SSD DA (the subject of this report) to the Planning Proposal and the Martin Place Metro CSSI.

The Department of Planning and Environment have provided Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared having regard to the SEARs as relevant.

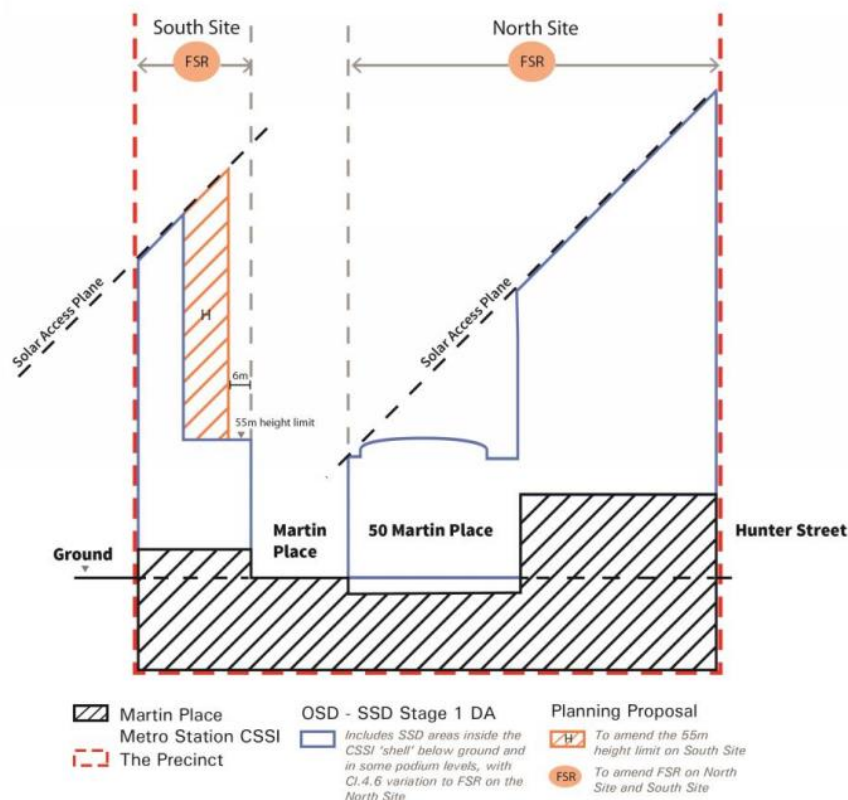


Figure 3: Relationship of planning applications **Desk Top Investigation**

This report details the investigation of existing utilities in the vicinity of the development, the likely points of future connection to the utilities; and associated potential upgrades or augmentation that may be required.

The basis for the investigation of the existing utilities in the vicinity of the site was a 'Dial Before You Dig' enquiry that was undertaken on 17th January 2017. This report does not consider any utility infrastructure outside the enquiry boundary and its' potential relationship to, or impact on the supply of utility services to the site.

While preliminary development staging and sequencing information has formed the basis of consultation with utility providers to date, the final staging of utility works and the protection of assets is dependent on detailed construction staging and shall be developed in detail at a later stage of the planning and design process.

The utility assessment completed relates to the works required for the station development and North and South Towers. All works associated with other elements of the Metro line are part of the separate project and therefore not included in this report.

Table 1: Asset Owners identified in DBYD

Authority Name	Utility Type	Currently Impacted by Current Design (Yes/ No)
AAPT/ PowerTel	Telecommunications	Yes (Cables affected owned by 3 rd party)
AARNet Pty Ltd	Telecommunications	No
AusGrid	Electrical	Yes
City of Sydney Council	Stormwater & Electrical & Lighting Pole	Yes
Jemena Gas South	Gas	Yes (Building connections only)
NBN Co.	Telecommunications	No
Nextgen	Telecommunications	Yes (Cables affected owned by 3 rd party 'Telstra')
Optus and/or Uecom	Telecommunications	Yes (Cables affected owned by 3 rd party 'Telstra' and building connections)
Pipe Network	Telecommunications	No
Primus Telecom	Telecommunications	(Cables affected owned by 3 rd party 'Telstra' and building connections)
RailCorp	Electrical	No
Roads and Maritime Services	Telecommunications and Electrical	Yes (Comms connection between Elizabeth Street and Castlereagh Street)
Soul Australia Communication	Telecommunications	Yes (Building connections only)
Sydney Water Corporation	Sewerage, Potable Water, Stormwater	Yes
Telstra	Telecommunications	Yes
Verizon	Telecommunications	Yes (Comms connection between Elizabeth Street and Castlereagh Street)
Vocus Communications	Telecommunications	No

3 Stormwater Infrastructure

3.1 Existing Stormwater Infrastructure

3.1.1 Sydney Water/ City of Sydney Council

The proposed development has both Sydney Water and City of Sydney Council stormwater infrastructure within the extent of proposed works.

The DBYD search indicates that the infrastructure surrounding the site is as follows as shown in Figure 4;

- Castlereagh Street – 710 x 1070 brick oviform drain (heritage listed as part of the Bennelong stormwater channel network in the middle of the street)
- Elizabeth Street – 710 x 1070 brick oviform drain (heritage listed as part of the Bennelong stormwater channel network in the middle of the street)
- Hunter Street – Ø400 vitrified clay pipe
- Bligh Street near Richard Johnson Square – Ø250 cast iron cement lined (CICL) pipe

3.2 Proposed Alterations/ Diversions

As part of the development alterations/ diversions completed under the CSSI approval are as follows;

- There are currently two existing stormwater lines Ø375 through Martin Place Plaza on northern side between Elizabeth Street and Castlereagh Street will be affected by proposed temporary partial occupation of this section of Martin Place Plaza. Stormwater within Martin Place will be redesigned to collect minor events within this area to meet the proposed design in this area.



Figure 4: City of Sydney Council/ Sydney Water existing stormwater infrastructure

4 Sewerage Infrastructure

4.1 Existing Sewerage Infrastructure

The proposed development has Sydney Water sewerage infrastructure within the extent of proposed works.

The DBYD search indicates that the infrastructure surrounding the site is as follows as shown in Figure 5;

- Castlereagh Street – 711 x 1066 and 914 x 1371 concrete main
- Elizabeth Street – Ø300 vitrified clay (Concrete Encased) main
- Hunter Street – Ø225 vitrified clay (Concrete Encased) main
- Bligh Street near Richard Johnson Square – 711 x 1066 concrete main



Figure 5: Sydney Water existing sewer infrastructure

4.2 Proposed Alterations/ Diversions

Under the CSSI approval a Ø300 vitrified clay sewer main adjacent to the Macquarie Bank building may be affected by proposed works in Martin Place Plaza. This mains existing invert level ranges from 15.93 – 12.43 Australian Height Datum (AHD) through Martin Place Plaza based on Sydney Water Work As Executed (WAE) documents.

5 Potable Water Infrastructure

5.1 Existing Potable Water Infrastructure

The proposed development has Sydney Water potable water infrastructure within the extent of proposed works.

The DBYD search indicates that the infrastructure surrounding the site is as follows as shown in Figure 6;

- Castlereagh Street – Ø250 cast iron cement lined (CICL) main
- Elizabeth Street – Ø450 CICL main
- Hunter Street – Ø250 CICL main
- Bligh Street near Richard Johnson Square – Ø250 CICL main

5.2 Proposed Alterations/ Diversions

The water mains should not be affected by the proposed development as the water mains are located under streets (noting the early stage of development and limited discussions with asset owners and stakeholders). However subject to further investigation certain sections of the water utilities may need to be lowered or protected from reference designs analysis shown in Figure 6 due to lowering of footpath levels for max 2.5% cross fall footpath compliance with City of Sydney Council standards/ proximity to proposed basement excavation and/ or proposed driveways.

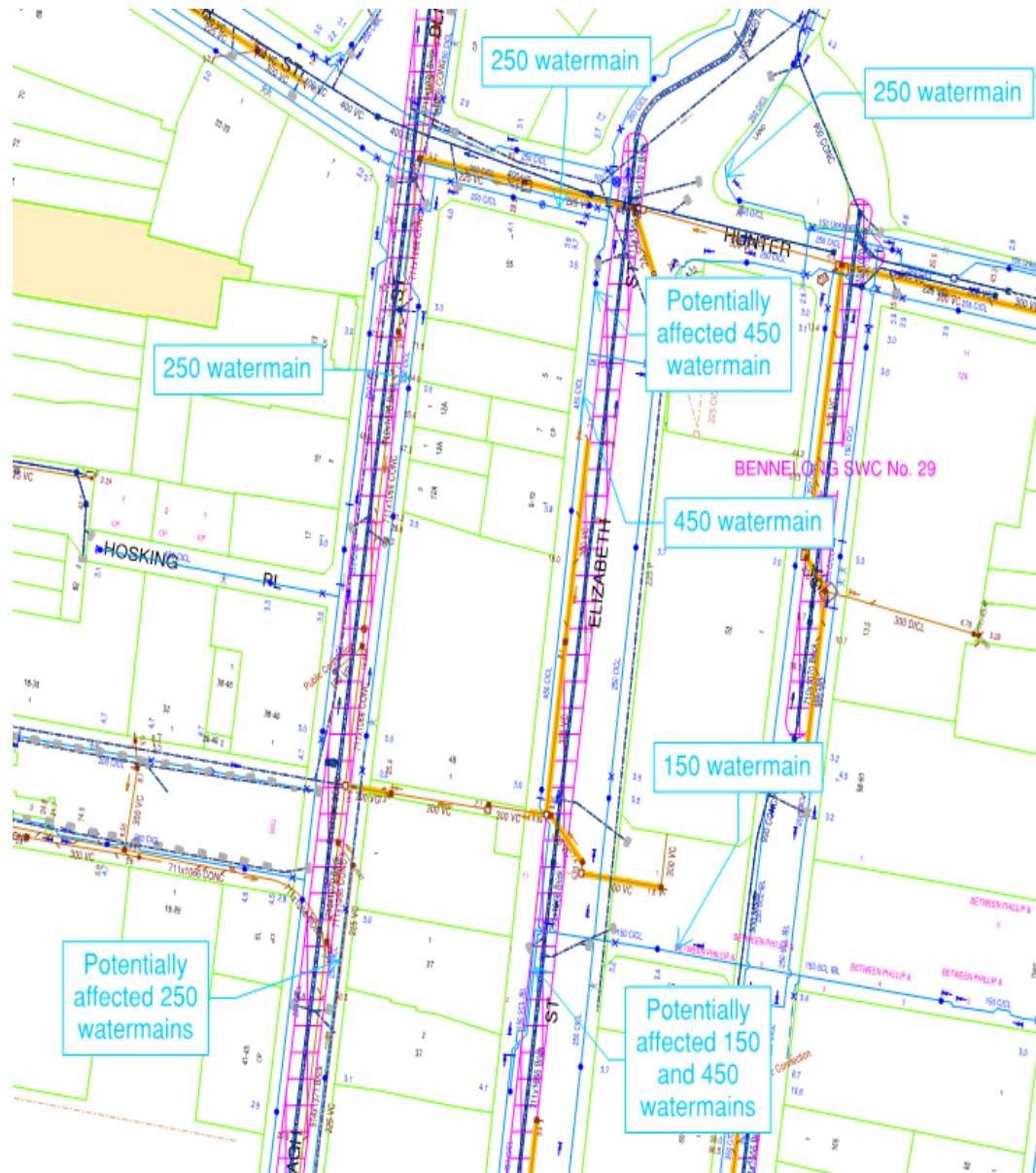


Figure 6: Sydney Water existing potable water infrastructure

6 Telecommunications Infrastructure

6.1 Existing Telecommunications Infrastructure & Proposed Alterations/ Diversions

Telecommunications services infrastructure in the vicinity of the development are either owned by or share conduits with AAPT/ PowerTel, AARNet, NBN Co., Nextgen, Optus, PipeNetworks, Primus Telecom, Soul Communications, Telstra, Uecomm, Vocus Communications and Verizon. The following sections show the review of each of the DBYD results for each communications service provider. Largely from current design information most providers will need to be contacted for alteration/ diversion or the lowering of existing finished levels reducing cover levels of existing conduits.

6.1.1 AAPT/ PowerTel

From DBYD records (shown on Figure 7) AAPT/ PowerTel telecommunication lines run around the entire site. Various connections along Castlereagh Street and Elizabeth Street will need to be disconnected and removed due to the proposed demolition to their connecting buildings. As part of the CSSI approval lines that run across Martin Place Plaza from Castlereagh Street to Elizabeth Street will be required to be adjusted/ relocated due to the proposed excavation at this location.

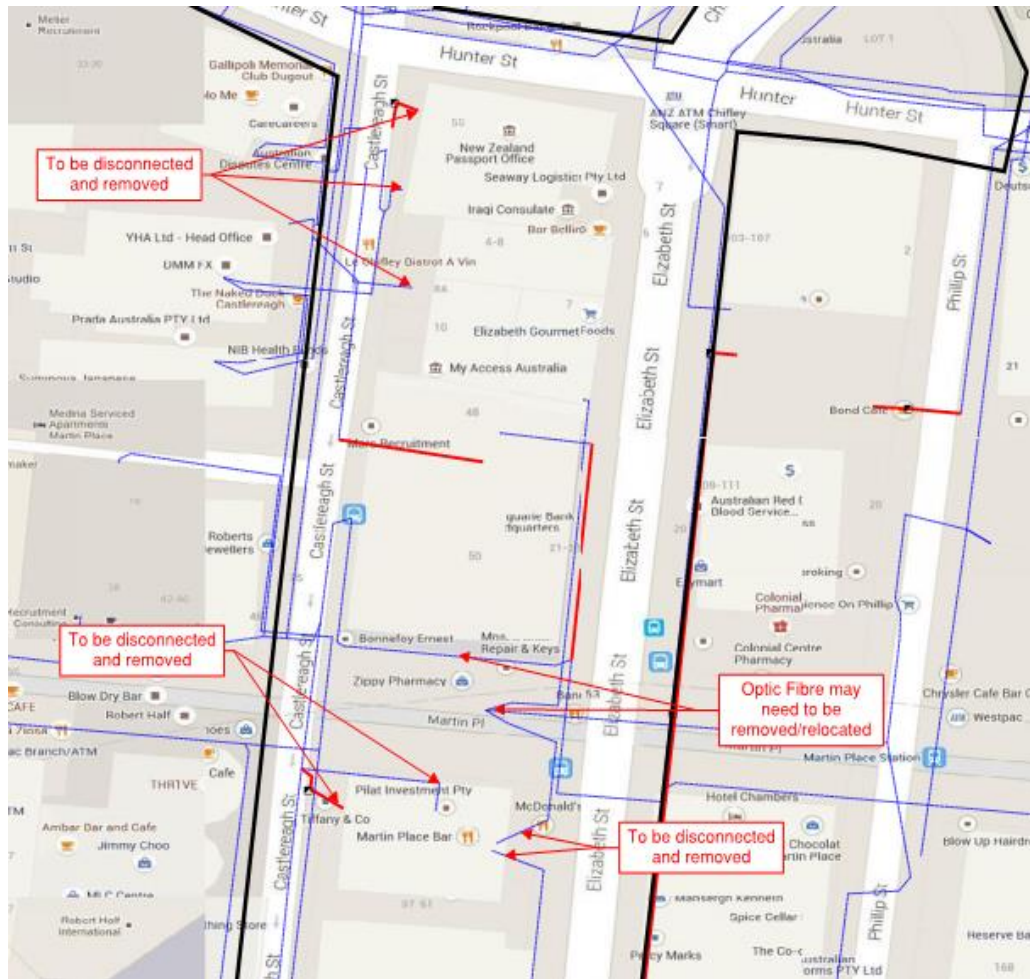


Figure 7: AAPT/ PowerTel existing telecommunications infrastructure

6.1.2 AARNet

From DBYD records (shown on Figure 8) AARNet telecommunication lines run along Elizabeth Street, Hunter Street and Bligh Street. No existing connections are shown. This providers lines should largely be unaffected by the proposed development

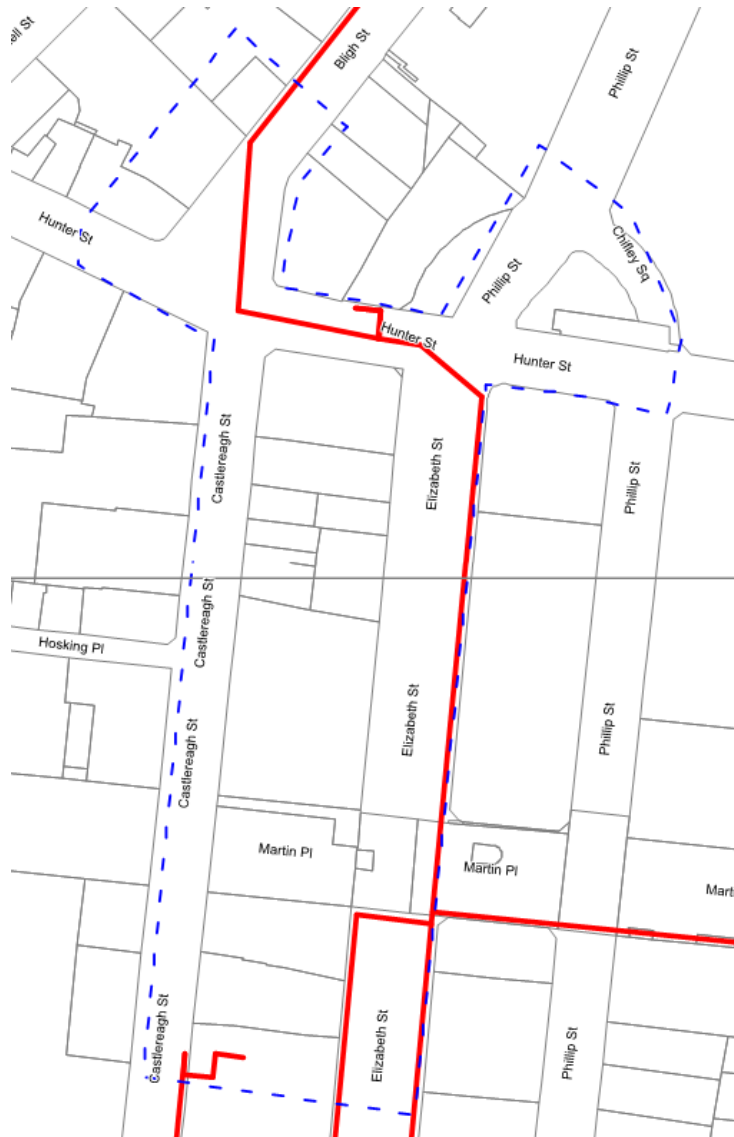


Figure 8: AARNet existing telecommunications infrastructure

6.1.3 NBN Co.

From DBYD records (shown on Figure 9) NBN Co. telecommunication lines run along Elizabeth Street and Hunter Street. No existing connections are shown. This providers lines should largely be unaffected by the proposed development.



Figure 9: NBN Co. existing telecommunications infrastructure

6.1.4 Nextgen Network

From DBYD records (shown on Figure 10) Nextgen telecommunication lines run along Castlereagh Street, Elizabeth Street, Hunter Street, Bligh Street and through Martin Place Plaza. There appears to be no existing connections to buildings that are to be demolished. Optic fibre running across Martin Place Plaza from Castlereagh Street to Elizabeth Street will need to be redirected/ altered due to the proposed works. The rest of this provider's cabling will be unaffected by the proposed development.

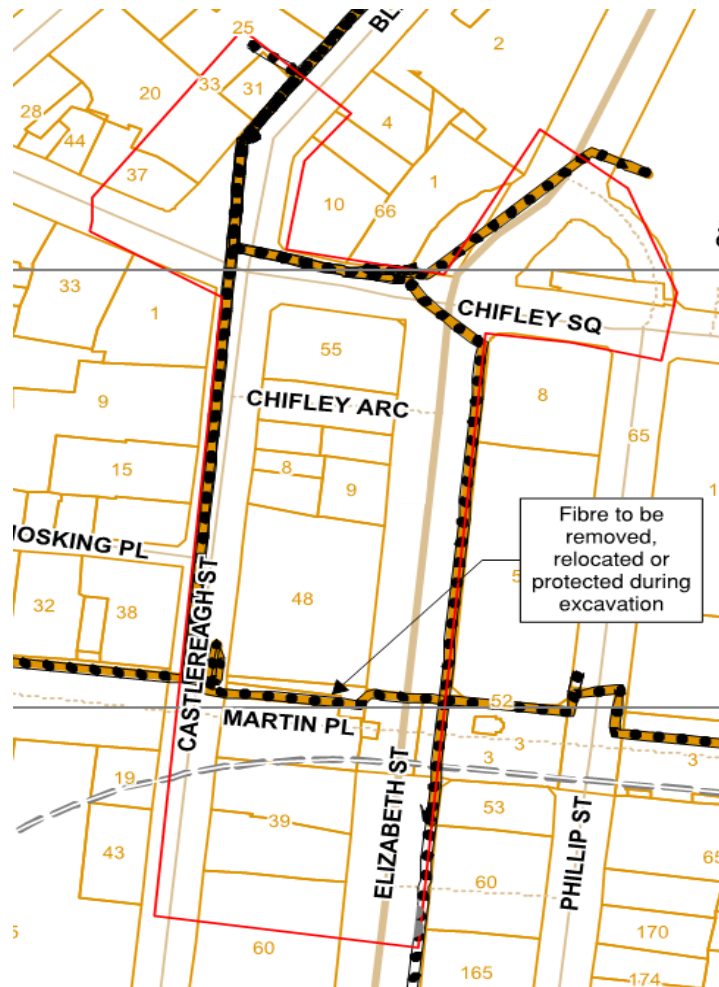


Figure 10: Nextgen existing telecommunications infrastructure

6.1.5 Optus

From DBYD records (shown on Figure 11) Optus has extensive amount of cabling running along Castlereagh Street, Elizabeth Street, Hunter Street, Bligh Street and through Martin Place Plaza with connections to existing lines that will need to be made redundant. Telecommunications running across Martin Place Plaza from Castlereagh Street to Elizabeth Street will need to be redirected/ altered for the proposed works. This work will be completed as part of the CSSI approval.



Figure 11: Optus existing telecommunications infrastructure

6.1.6 PipeNetworks

From DBYD records (shown on Figure 12) PipeNetworks telecommunication lines are limited. Subject to the design proposed these lines should be largely unaffected by the proposed development.

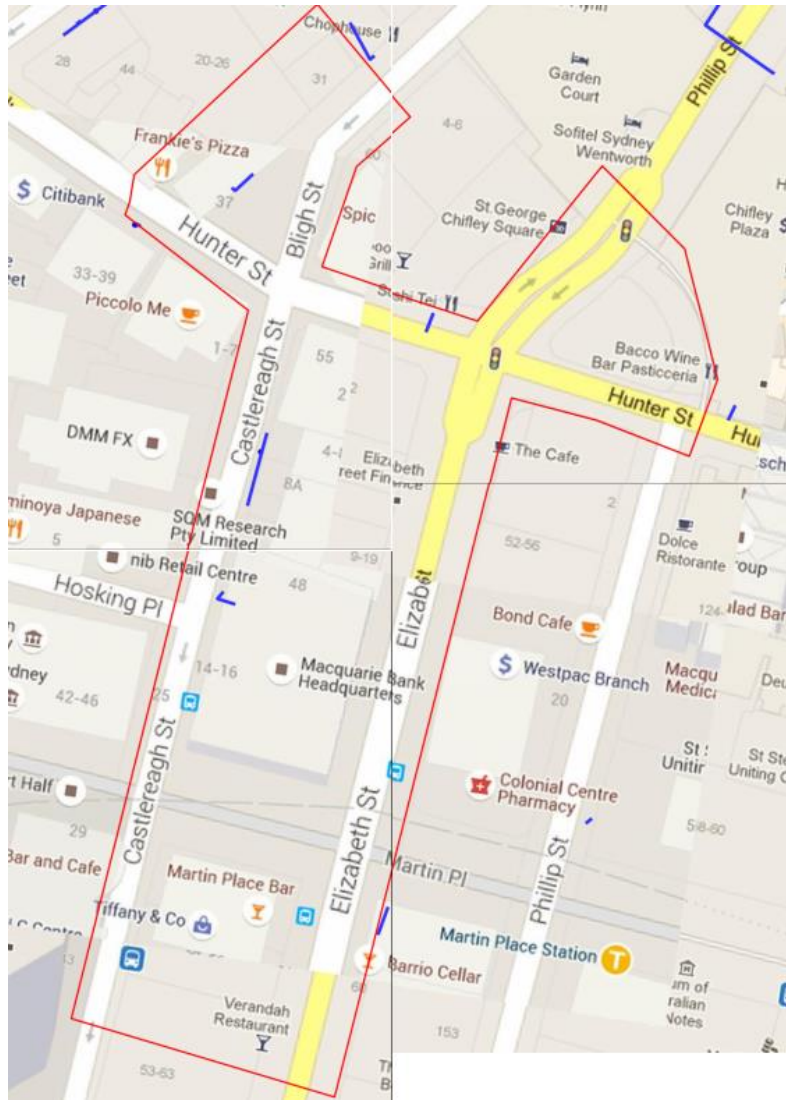


Figure 12: PipeNetworks existing telecommunications infrastructure

6.1.7 Primus Telecom

From DBYD records (shown on Figure 13) Primus telecommunication lines are located on Castlereagh Street, Hunter Street and Bligh Street. No existing connections are shown, except for the existing Macquarie Bank building that will not be redeveloped. This provider's lines should be largely unaffected by the proposed development.

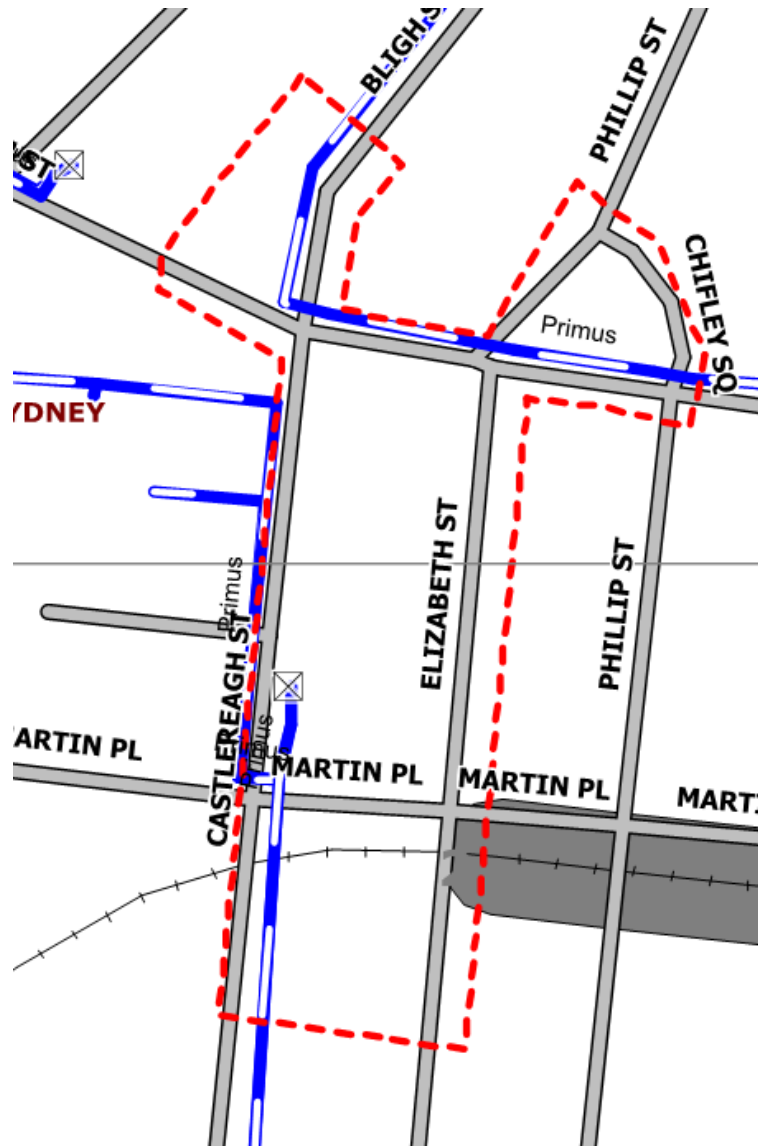


Figure 13: Primus existing telecommunications infrastructure

6.1.8 Soul Communications

From DBYD records (shown on Figure 14) Soul telecommunication lines are located in a section of Hunter Street and Bligh Street. The existing connection on Hunter Street will be disconnected and removed. This provider's lines should be largely unaffected by the proposed development

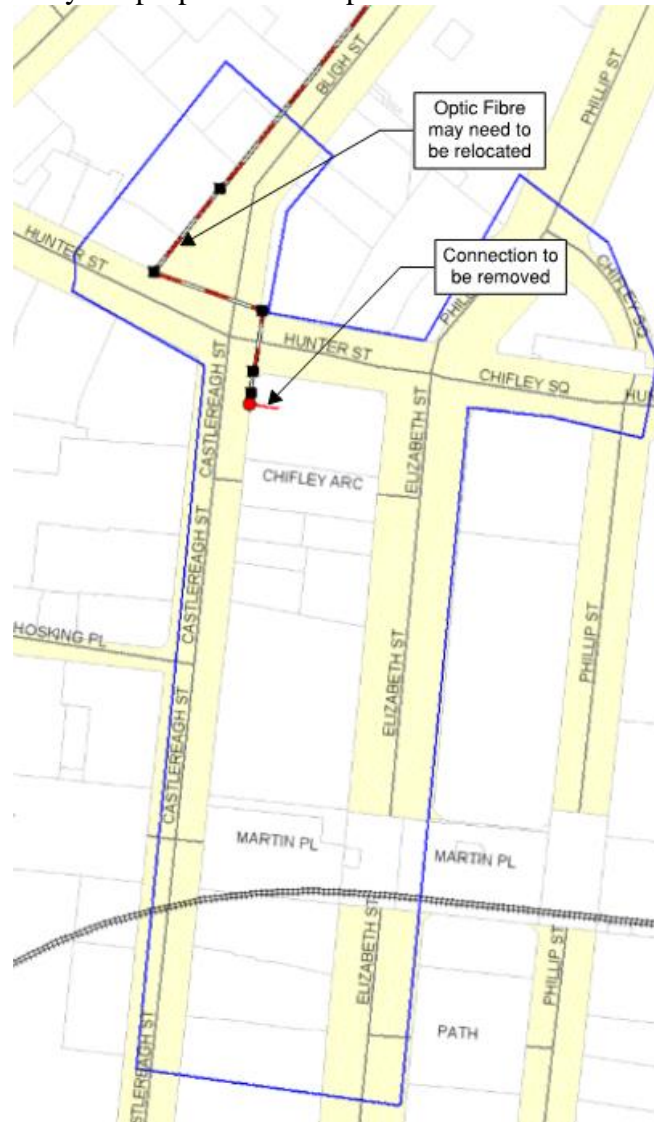


Figure 14: Soul Communications existing telecommunications infrastructure

6.1.9 Telstra

From DBYD records (shown on Figure 15 and Figure 16) Telstra has extensive cabling running along Castlereagh Street, Elizabeth Street, Hunter Street, Bligh Street and through Martin Place Plaza with connections to existing lines that will need to be made redundant. In addition, within the existing building in the Northern Tower development area there is both a communications tower and an exchange that will need to be relocated. Relocations and street works related to the relocation of the communications tower and exchange will be done by Telstra. Telecommunications running across Martin Place Plaza from Castlereagh Street to Elizabeth Street will need to be redirected/ altered during excavation in this area. In addition, proposed driveways may lead to existing cabling to be protected or lowered. All this work will be completed under the CSSI approval. Lowering of footpath levels for max 2.5% cross fall footpath compliance with City of Sydney Council standards/ proximity may be required.

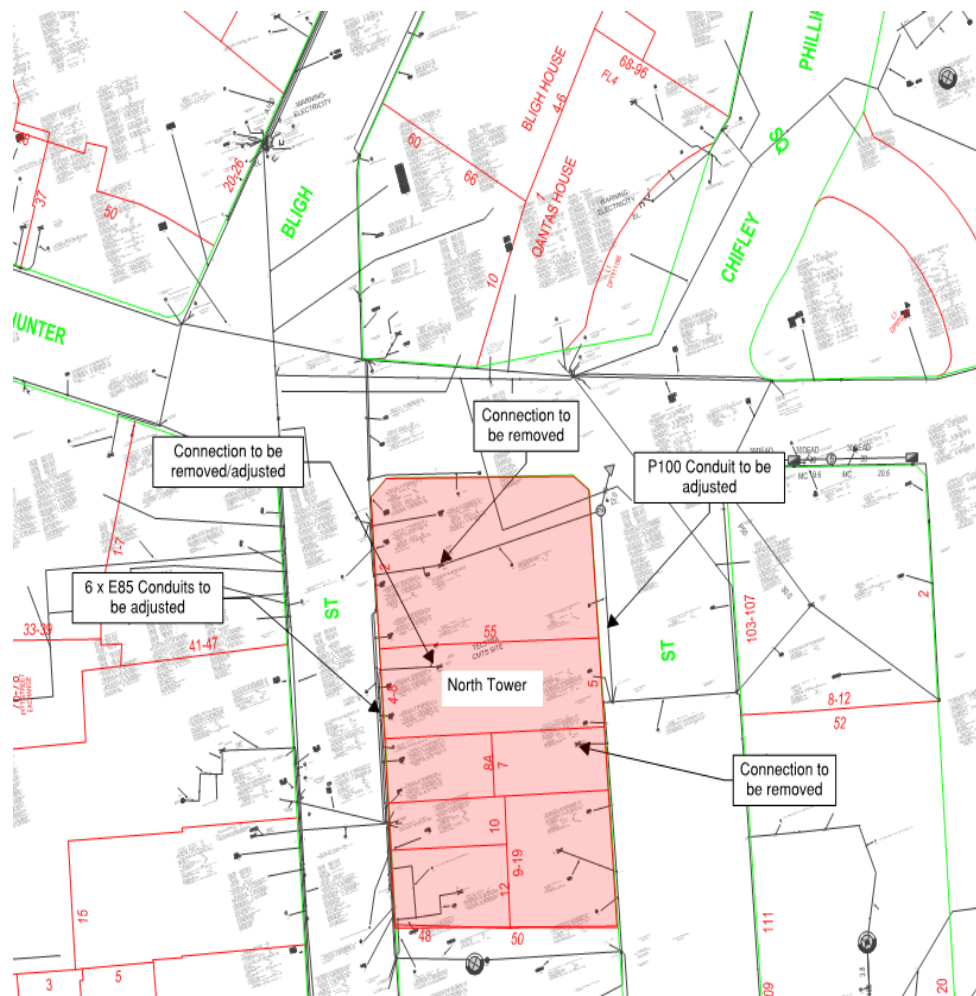
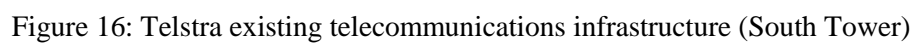


Figure 15: Telstra existing telecommunications infrastructure (North Tower)



6.1.10 Ucomm

From DBYD records (shown on Figure 17) Ucomm telecommunication lines run along Bligh Street and sections of Castlereagh Street. The existing connection on Hunter Street will be disconnected and removed. This provider's lines should be largely unaffected by the development.

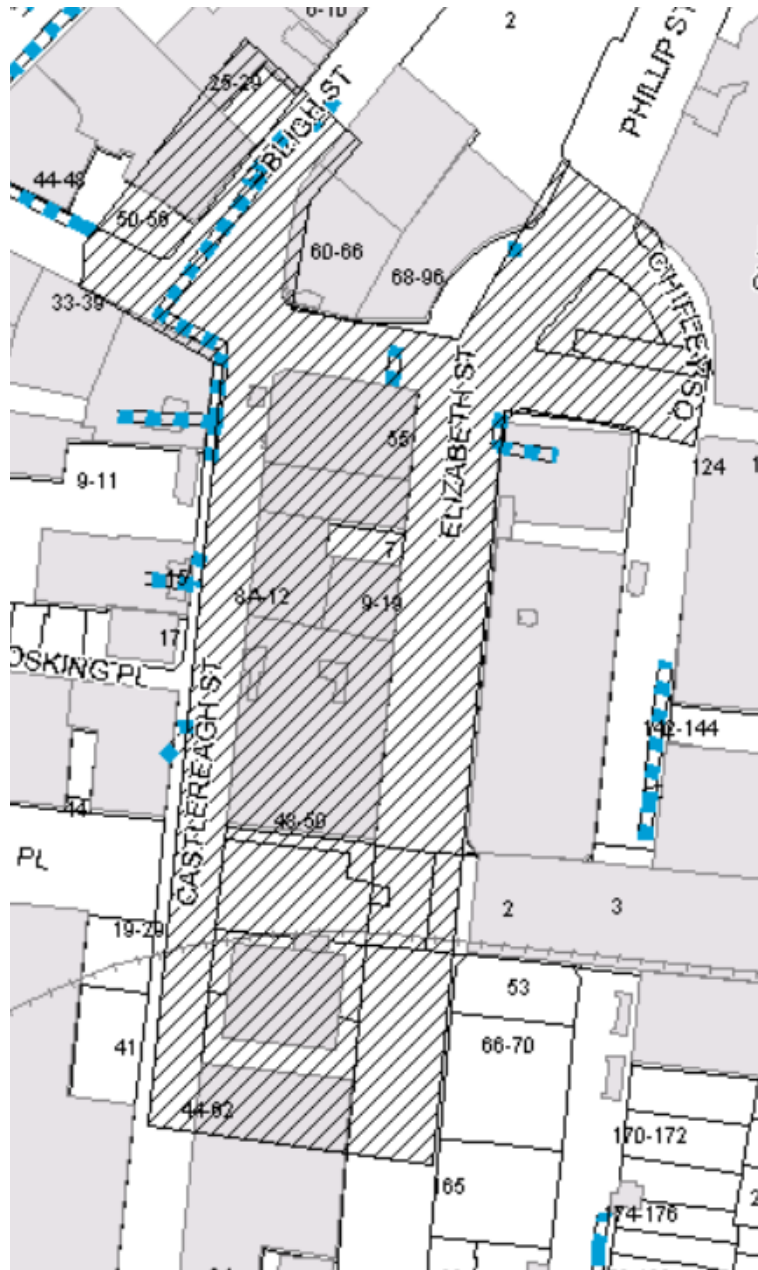


Figure 17: Ucomm existing telecommunications infrastructure

6.1.11 Verizon

From DBYD records (shown on Figure 18) Verizon lines are located on Castlereagh Street, Elizabeth Street, Hunter Street and Bligh Street. There appears to be no existing connections to buildings located in the development. Lines will need to be relocated/ altered during excavation in Martin Place Plaza between Castlereagh Street and Elizabeth Street. This work will be completed as part of CSSI approval. Additionally, lines located at the intersection between Hunter Street and Elizabeth Street may need to be lowered/ protected/ altered due to the cable's proximity to the demolition of the adjacent building basement.

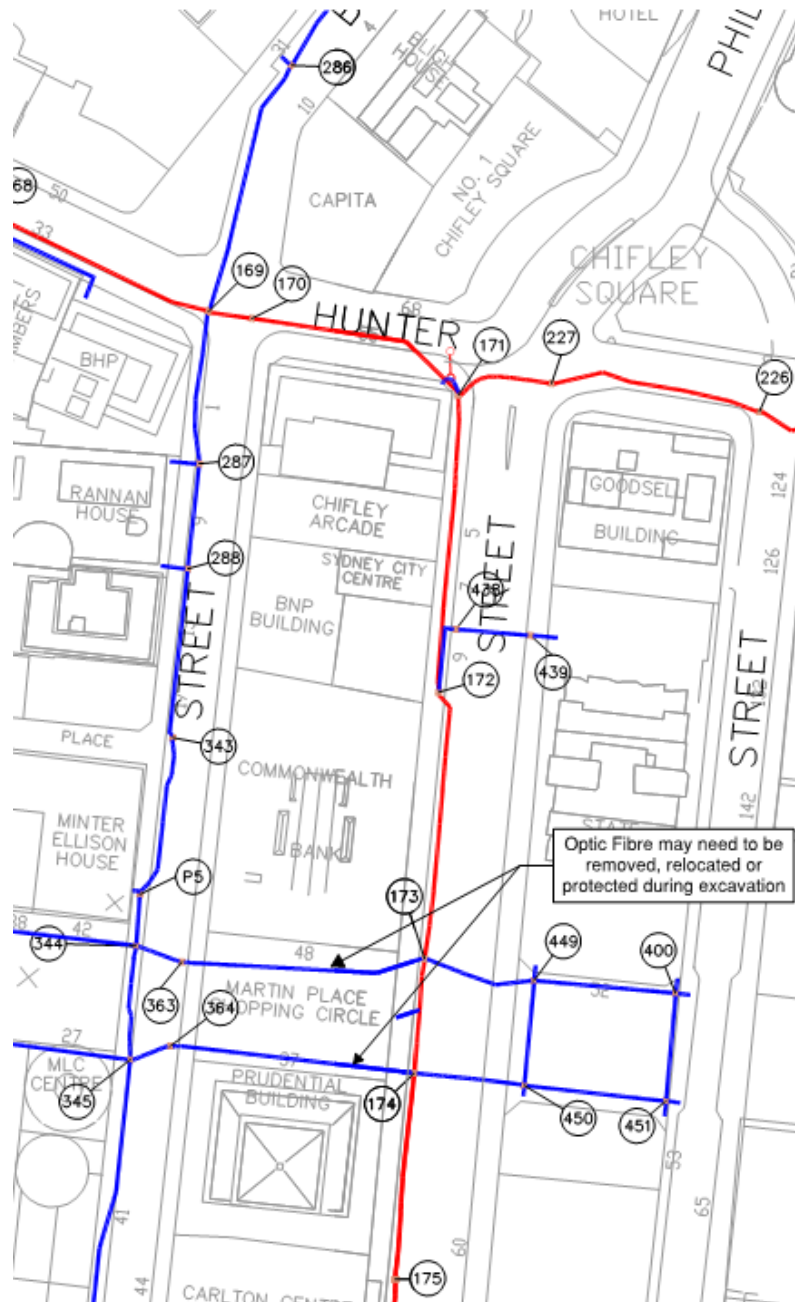


Figure 18: Verizon existing telecommunications infrastructure

6.1.12 Vocus Communications

From DBYD records (shown on Figure 19) Vocus telecommunication lines are located on Castlereagh Street and Bligh Street. These lines should be largely unaffected by the proposed development.



Figure 19: Vocus existing telecommunications infrastructure

7 Gas Infrastructure

7.1 Existing Gas Infrastructure

The proposed development has Jemena gas infrastructure within the vicinity of the proposed works.

The DBYD search indicates that the infrastructure surrounding the site is as follows;

- Castlereagh Street – Ø150 1050kPa Main and Ø110 7kPa Main
- Elizabeth Street – Ø75 / Ø200mm 7kPa Main
- Hunter Street – Ø100 1050kPa Main and Ø75 7kPa Main
- Bligh Street near Richard Johnson Square – Ø110 7kPa Main

7.2 Proposed Alterations/ Diversions

As part of the development the alterations largely relate to disconnections as shown on Figure 20. Proposed driveways may lead to existing cabling to be protected or lowered. This work will be completed under the CSSI approval. Lowering of footpath levels for max 2.5% cross fall footpath compliance with City of Sydney Council standards/ proximity may be required.

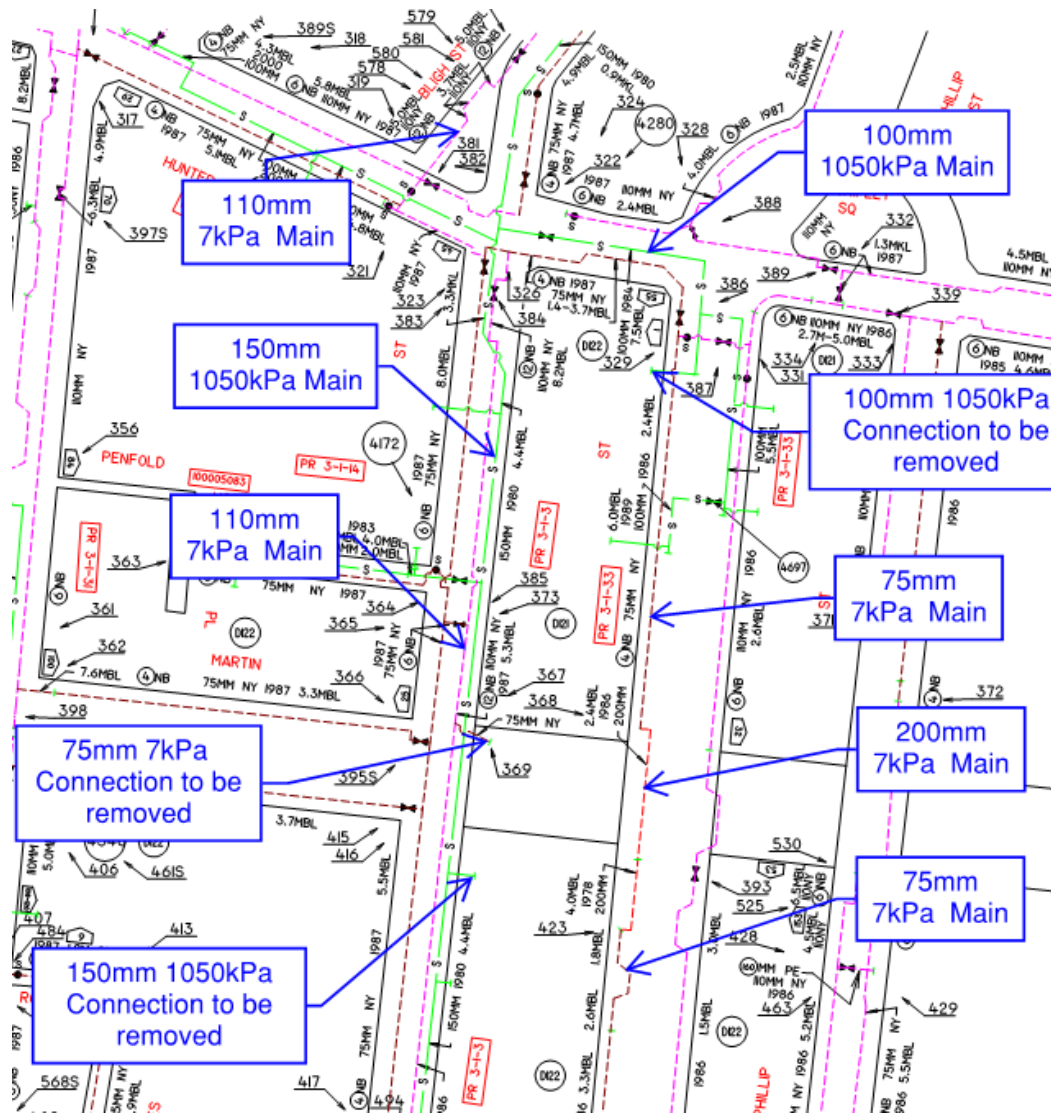


Figure 20: Jemena existing gas infrastructure & proposed alterations/ diversions

8 Electrical Infrastructure

8.1 Existing Electrical Infrastructure

From DBYD records (shown on Figure 21 and Figure 22) Ausgrid has extensive electrical infrastructure running along Castlereagh Street, Elizabeth Street, Hunter Street, Bligh Street and through Martin Place Plaza with connections to existing lines that will need to be made redundant. Power running across Martin Place Plaza from Castlereagh Street to Elizabeth Street will need to be redirected/ altered during excavation in this area. In addition, proposed driveways may lead to existing cabling to be protected or lowered. All this work will be completed under the CSSI approval. Lowering of footpath levels for max 2.5% cross fall footpath compliance with City of Sydney Council standards/ proximity may be required.

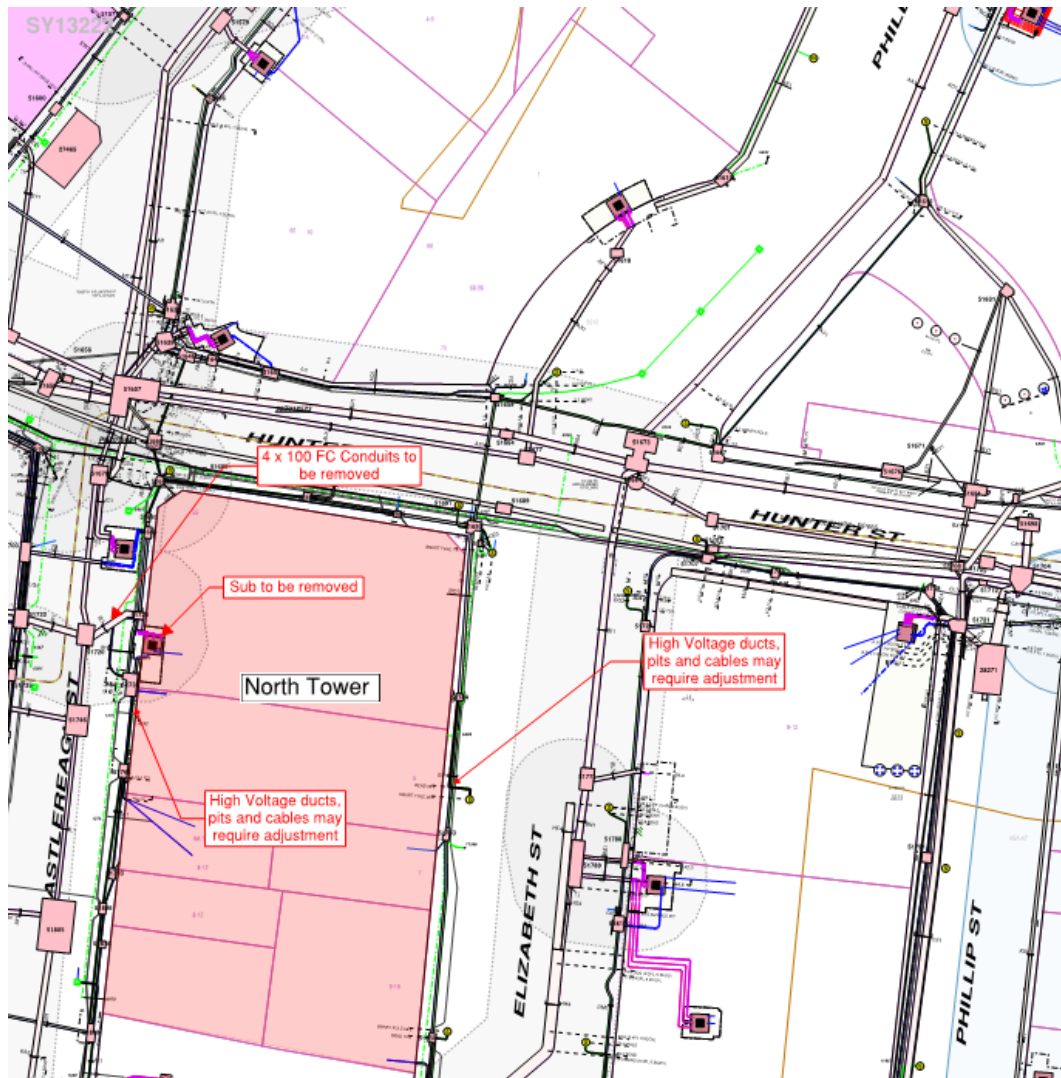


Figure 21: Electrical existing infrastructure & proposed alterations/ diversions (North Tower)



The 'North' tower (shown on Figure 21) and 'South' tower (shown on Figure 22) are proposed to be supplied from the Ausgrid network individually. Within the North Tower, there will be one basement chamber triplex substation and one upper level chamber triplex substation with its control point chamber on LG/F. Within the 'South' tower, there will be one basement chamber triplex substation. Each triplex substation will consist of 3 x 1.5MVA transformers. All substations are proposed to be located on the Elizabeth Street side of the buildings. New high voltage (HV) incoming cables from Ausgrid to the proposed towers will be expected as the overall size of the buildings will be larger than the existing buildings that results in larger power demand. Detailed HV cables routing and cable entry requirements to the towers will be further coordinated with the Level 3 substation designer and Ausgrid.

8.3 Incoming Power Supply to Station

For the Metro station, power supply will be taken from Sydney Metro's own substation and distribution network. Incoming HV cables will be laid through the rail tunnel and thus underground incoming cables at grade are not expected.

RMS Infrastructure

8.4 Existing RMS Infrastructure & Proposed Alterations/ Diversions

The proposed development is surrounded by roads with signalised intersections leading to RMS electrical and telecommunications within the extent of the proposed works. The degree of alteration largely depends on the urban design of existing public domain areas and works at Martin Place Plaza, although currently no change will be required. In addition, there is a communication line that runs through Martin Place Plaza connecting traffic signals that will need to be diverted/ altered during works in this area, which will be completed under the CSSI approval.

9 Protection of Existing Utility Infrastructure

The following process will be followed to ensure existing utilities infrastructure is protected:

- Desktop investigation and review of existing services using Dial Before You Dig information and site observations;
- Non-destructive in-ground services mapping will be undertaken to accurately locate existing infrastructure assets where practical;
- Destructive investigations will be undertaken where considered necessary to more accurately locate existing critical infrastructure assets and investigate unknown services or potentially redundant services;
- Utility providers will be consulted to obtain and necessary consents to perform construction work in their vicinity and discuss necessary diversions and connections for the proposed works;
- Utility technical and hazard requirements will be incorporated into the design and construction documentation;
- Safe work methods statements and inspection and test plans will be prepared by accredited contractors;
- Pre-start work checklists will be implemented and recorded;
- Field safety inspectors will be present during critical works as determined by each utility provider.

As the design progresses or as new information becomes available, the above process will be adjusted or supplemented as required to ensure existing infrastructure assets are adequately protected.