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OSD Detailed SSD DA - SERVICES & INFRASTRUCTURE REPORT

Victoria Cross Over Station Development



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Revision - C

Prepared For Lendlease Building Pty Limited | ABN 97 000 098 162

OSD Detailed SSD DA - SERVICES & INFRASTRUCTURE REPORT

Victoria Cross Over Station Development

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Approved by	*OSD Design Manager*	*Stephen Canty*	*23/08/2019*

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Changes made to this document since its last revision, which affect its scope or sense, are marked in the right margin by a vertical bar (|).

Date	Rev	Amendment Description	By
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23/08/2019	C	Sydney Metro comments incorporated	*M.Kurtz*

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Acronyms

Abbreviation	Description
SSD	State Significant Development
DA	Development Application
OSD	Over Station Development
SEARs	Secretary's Environmental Assessment Requirements
DBYD	Dial Before You Dig
TSE	Tunnels and station excavation
TfNSW	Transport for New South Wales

1. Introduction

1.1 Overview

This report has been prepared to accompany a detailed State Significant Development (SSD) development application (DA) for a commercial mixed-use Over Station Development (OSD) above the new Sydney Metro Victoria Cross Station. The detailed SSD DA is consistent with the Concept Approval (SSD 17_8874) granted for the maximum building envelope on the site, as proposed to be modified.

The Minister for Planning, or their delegate, is the consent authority for the SSD DA and this application is lodged with the NSW Department of Planning, Industry and Environment (NSW DPIE) for assessment.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 6 May 2019. Specifically, this report has been prepared to respond to the following SEARs:

12. Utilities

The EIS shall identify the existing capacity of the site to service the proposal and any augmentation required for utilities.

Plans and Documents

- *services and infrastructure report*

Consultation

During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. You must consult with North Sydney Council, Sydney Coordination Office within Transport for NSW and the Office of the NSW Government Architect. The EIS must describe the consultation process and the issues raised and identify where the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

References

The assessment of the key issues listed above must consider relevant guidelines, policies, and plans as identified.

This report has also been prepared in response to the following condition of consent for the State Significant Development Concept (SSD 8874) for the OSD:

Utilities

B13. Future detailed development application(s) shall address the existing capacity and any augmentation requirements of the development for the provision of utilities, including staging of infrastructure through the preparation of an infrastructure/utility management plan in consultation with relevant agencies and service providers.

The detailed SSD DA seeks development consent for:

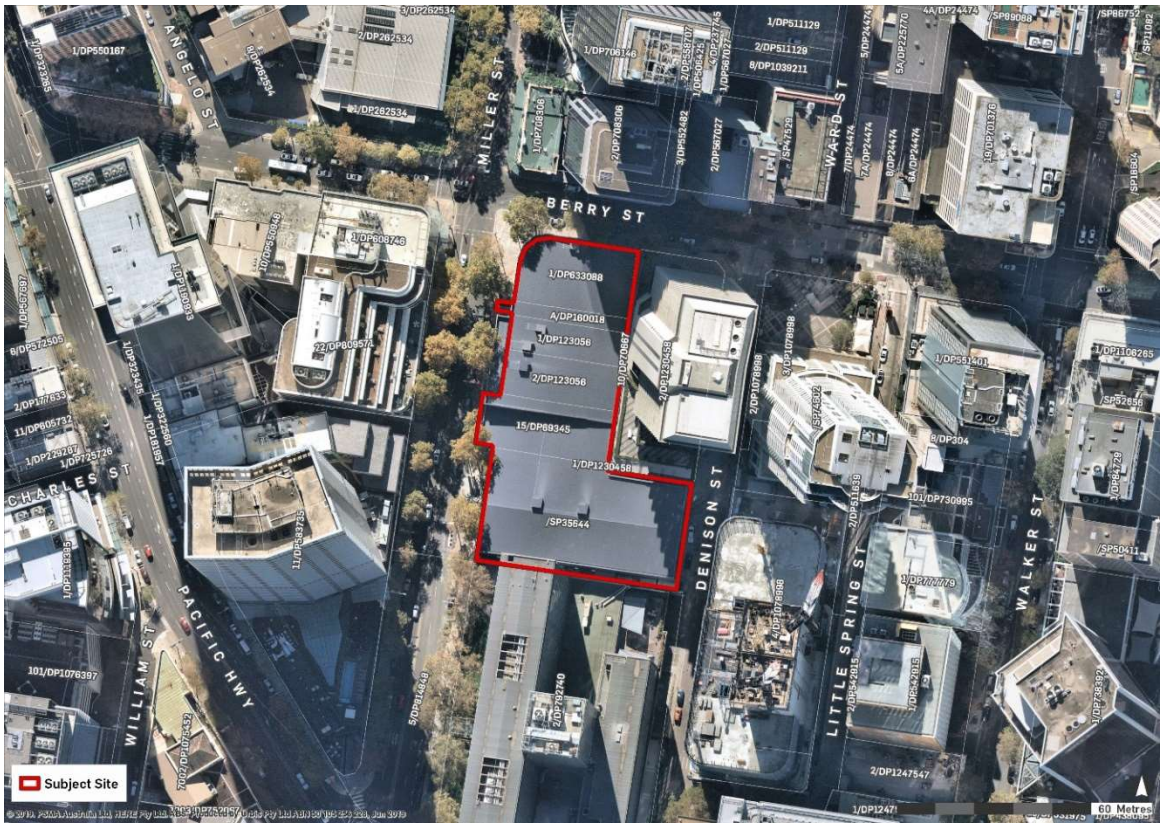
- Construction of a new commercial office tower with a maximum building height of RL 230 or 168 metres (approximately 42 storeys).
- The commercial tower includes a maximum GFA of approximately 61,500sqm, excluding floor space approved in the CSSI
- Integration with the approved CSSI proposal including though not limited to:
  - Structures, mechanical and electronic systems, and services; and
  - Vertical transfers;
- Use of spaces within the CSSI 'metro box' building envelope for the purposes of:
  - Retail tenancies;
  - Commercial office lobbies and space;
  - 161 car parking spaces within the basement for the purposes of the commercial office and retail use;
  - End of trip facilities; and
  - Loading and services access.
- Utilities and services provision.
- Signage locations (building identification signs).
- Stratum subdivision (staged).

The Site

The site is generally described as 155-167 Miller Street, 181 Miller Street, 187-189 Miller Street, and part of 65 Berry Street, North Sydney (the site). The site occupies various addresses/allotments and is legally described as follows:

- 155-167 Miller Street (SP 35644) (which incorporates lots 40 and 41 of Strata Plan 81092 and lots 37, 38 and 39 of Strata Plan 79612)
- 181 Miller Street (Lot 15/DP 69345, Lot 1 & 2/DP 123056, Lot 10/DP 70667)
- 187 Miller Street (Lot A/DP 160018)
- 189 Miller Street (Lot 1/DP 633088)
- Formerly part 65 Berry Street (Lot 1/DP 1230458)

Figure 01 – Site Aerial



Sydney Metro Description

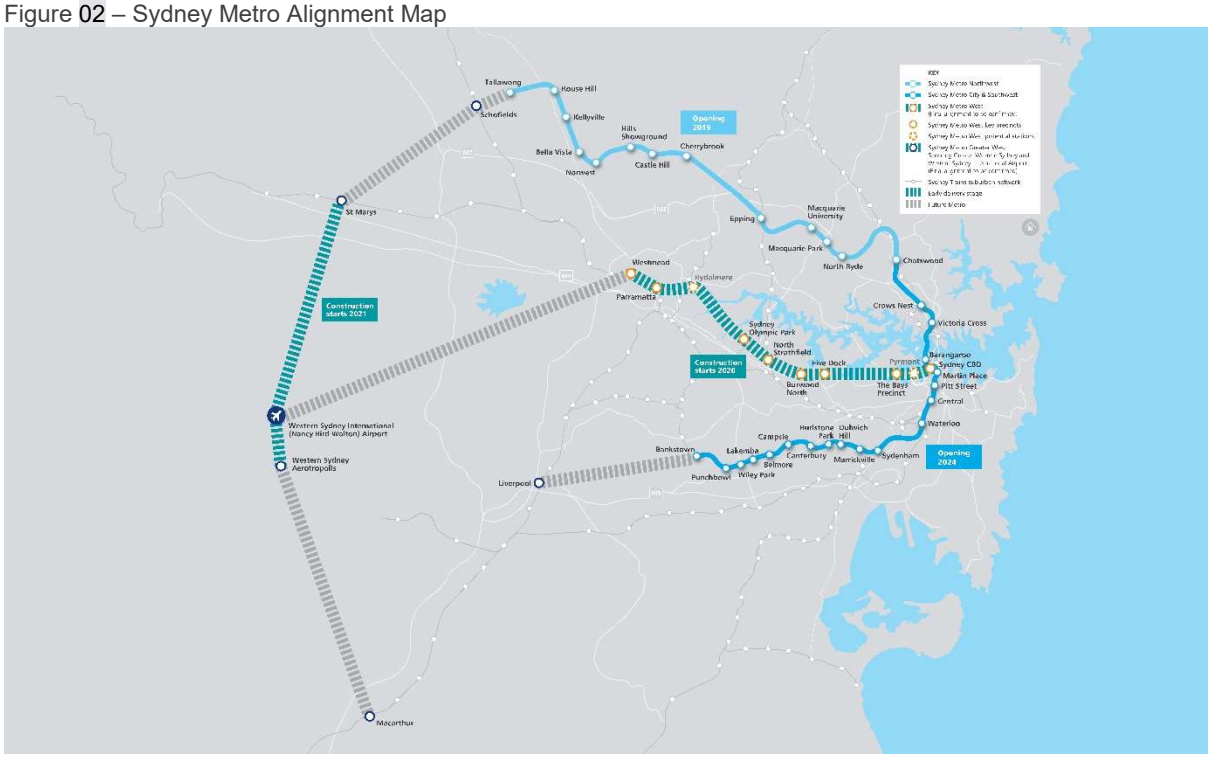
Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The Sydney Metro project is illustrated in the Figure below.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (CSSI Approval). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Victoria Cross Station, including the demolition of existing buildings and structures on both sites. The CSSI Approval also includes construction of below and above ground improvements with the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the "metro box envelope" and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the detailed SSD DA for the OSD.

Figure 02 – Sydney Metro Alignment Map



Source: Sydney Metro

2. Services and Infrastructure

The Design Stage 2 (Detailed SSDA Design) develops the original Stage 1 Design (Approved Concept design) to coordinate with modifications to the station and over station designs as they have been developed.

The modelling of existing utilites have been refined from the original design files provided to reflect a thorough review of the Dial Before You Dig (DBYD) information. However, further detailed survey and potholing at the next stage of design is required to confirm horizontal geometry and vertical depths of utilities to ensure sufficient clearances and cover for all services.

Any utility services that are affected during construction will be temporarily supported and / or relocated and reinstated as “like for like” where possible or upgraded as reasonably required by the relevant utility service provider.

Existing utilities diversion has been undertaken as part of TSE works. **Figure 3** shows the stormwater temporary diversion, electrical kiosk, temporary driveway locations and other interim works undertaken by the TSE team.

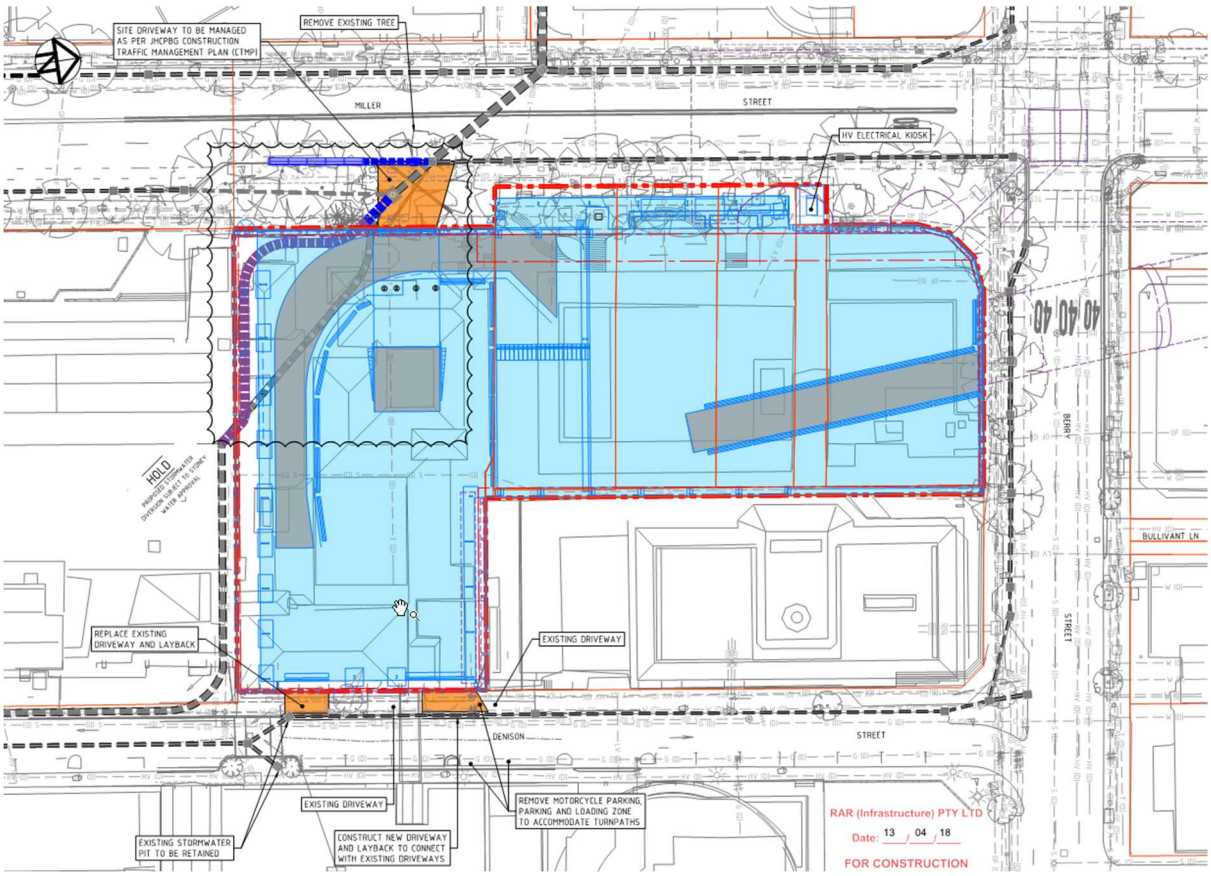


Figure 3: TSE team works including stormwater temporary diversion

3. Impact on existing utility assets

A comprehensive desktop review was undertaken of the following available information:

1. DBYD plans from 06/04/2018
2. Detailed Survey, Revision B
3. Reference Design Station Contractor – Victoria Cross Utilities Status Document

From a review of above items, it was verified that there are no additional existing major utility assets that are impacted beyond those already identified in the Sydney Metro Reference Design.

The general design approach is to identify existing utility infrastructure impacted by construction, and develop treatment measures to avoid, divert, protect, upgrade, or reinstate these utility assets to the satisfaction of utility authorities. Disruption to existing customers is prevented or minimised wherever possible.

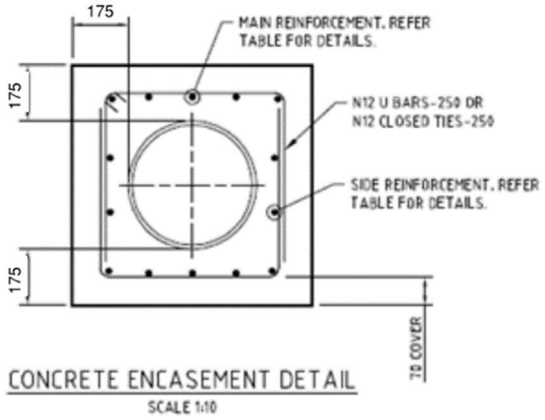
The following treatment strategies have generally been considered, as provided in the table below:

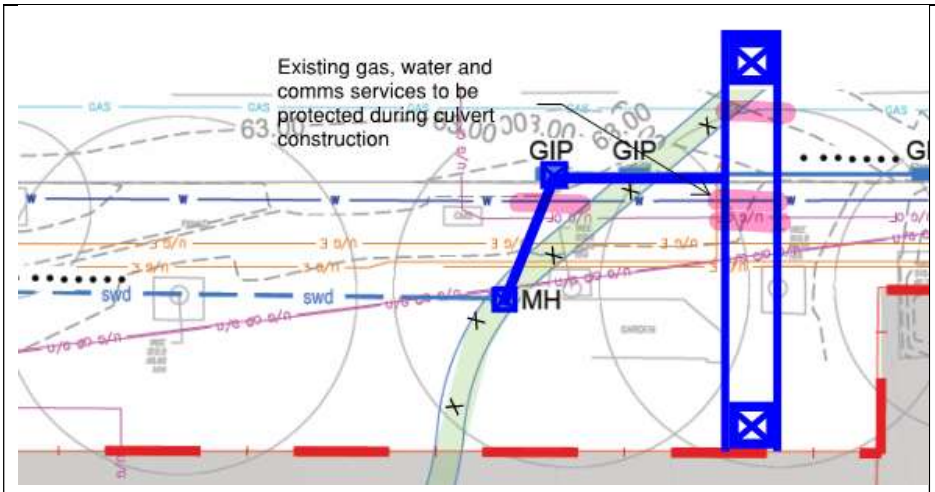
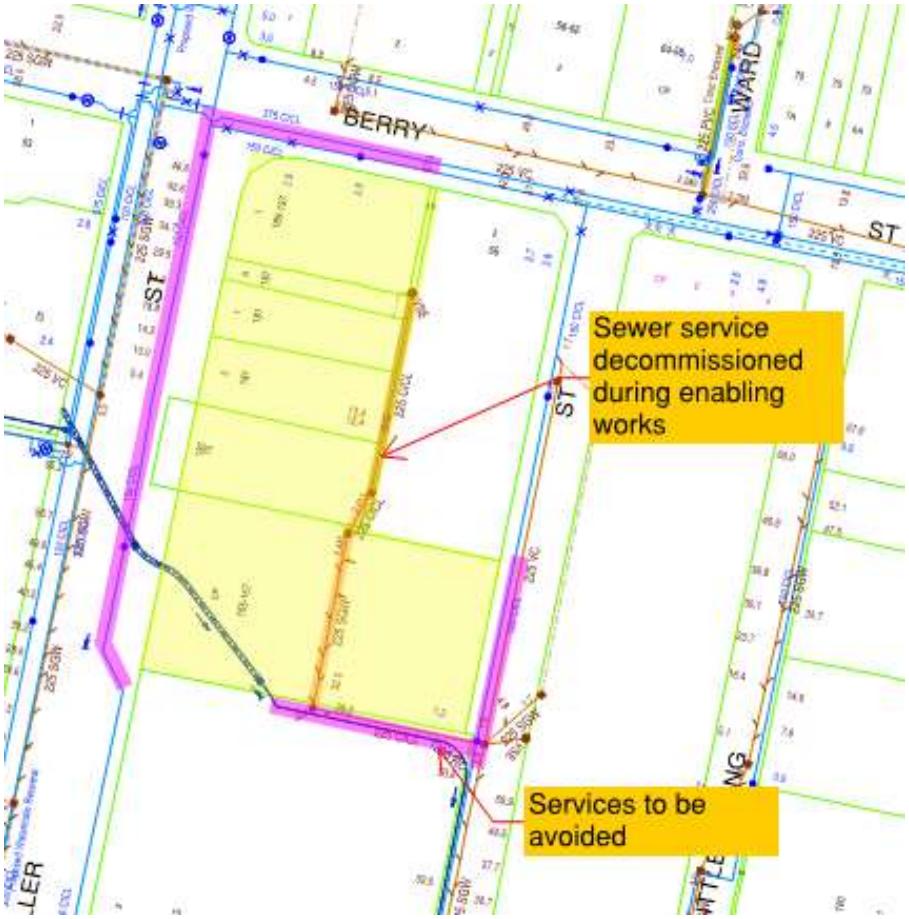
- Avoid – e.g. refining the construction footprint to maintain separation from the existing asset, to avoid it completely or incorporate it within the proposed design.
- Protect – e.g. through engineering temporary or permanent protection measures.
- Relocate/Remove – e.g. diverting the utility to an alternative route, or disconnecting/removing abandoned or redundant infrastructure.

Only assets within the construction footprint of the proposed works and adjacent footpaths are considered here.

The major existing utility assets of relevance to the Victoria Cross Station works are summarised as follows:

Description	Service	Treatment strategy
Based on Sydney Water Notice of Requirement CN 168996 Sydney Water potable water mains are affected by the construction of the driveways. It is proposed to protect the services with concrete encasement to provide maintenance free service. It is assumed that minimum 600mm cover for the service will be maintained. Typical Sydney Water concrete encasement detail is provided below.	Water mains in proposed driveways	Protect

		
Based on Sydney Water Notice of Requirement CN 165891 and DBYD plans, the following assets will be impacted due to the stormwater main adjustment in Denison Street: • 1 x 150mm SS Jemena gas secondary mains; • 100mm CICL Sydney Water water main; • 225mm VC Sydney Water sewer main • 2 x 125mm Ausgrid cables and conduits; • 300mm North Sydney Council Stormwater. 	Gas Water Sewer Electrical Stormwater	Relocate Avoid Protect Avoid Removed
Based on Sydney Water Notice of Requirement CN 165891 and DBYD plans, the following assets will be impacted due to the stormwater main adjustment in Miller Street: • 75mm NY Jemena gas mains; • 150mm CICL Sydney Water water main; • Various authorities communication cables and conduits	Gas Water Comms	Protect Protect Protect

		
Sydney Water sewer service at the back of 181-187 Miller Street to be decommissioned up to the manhole south from 155 Miller Street by the enabling work Contractor. Location of the manhole and the sewer main should be investigated to determine appropriate access and protection of the remained sewer connected to Denison Street. 	Sewer south from 155 Miller Street	Avoid

Formal discussions were undertaken with utility authorities regarding impacts on the existing infrastructure during the reference design. Lendlease and ArcMac have continued these discussions over the past months with each utility authority as we refine the utilities designs for the proposed Victoria cross station and over station development.

Any redundant service is assumed to have been removed from site and disconnected / capped from trunk mains in accordance with authority requirements by the enabling works contractor.

4. Existing capacity assessment

A capacity check was undertaken to assess the existing utilities supply to Victoria Cross Station against any anticipated demand from the proposed Station and OSD works. This exercise involved cross-disciplinary input from the Internal Utilities engineering team.

The key outcomes of this assessment are summarised as follows:

- **Electrical:** Existing Ausgrid infrastructure has been confirmed to be sufficient to accommodate supply to the new substations for the OSD. New 11kV Ausgrid feed is required and will be provided from North Sydney Zone substation to OSD (reference number 1900078088/SC12459 subject to certified design) and southern Metro entry (Ausgrid certification number 1018444/20170511). The new incoming consumer main will be supplied utilizing existing Ausgrid infrastructure/conduits where possible.
- **Communications:** no new external connections, or upgrades to existing feeds, are required.
- **Gas:** based on Jemena Sydney Metro Station Servicing Assessment and recent meetings with Jemena, connection to 150mm existing secondary network service in Denison Street is proposed to be utilised to satisfy development gas requirements.
- **Potable water:** new connections for potable water and fire services are required. Based on Sydney Water Feasibility Letter for the station CN 165891 from 25 August 2017 and OSD CN 165999 from 6 November 2017, existing 150mm Sydney Water water network in Miller St for Southern Metro entry and OSD have sufficient capacity to service the Victoria Cross Integrated Station development. The proposed connections above are subject to Section 73 application to Sydney Water.
- **Sewer:** new connections to provide sewer service are required. Based on Sydney Water Feasibility Letter for the station CN 165891 from 25 August 2017 and OSD CN 165999 from 6 November 2017, existing 225mm Sydney Water sewer in Denison St for Southern Metro entry and OSD have sufficient capacity to service the Victoria Cross Integrated Station development. The proposed connections above are subject to Section 73 application to Sydney Water.

In summary, capacity exists or can be feasibly provided in order to service the proposed development in the utilities as listed above.

Existing services information has been obtained from the relevant service authority through a Dial Before You Dig search and has been attached as Appendix B.

5. Proposed connection to existing utility assets

New connections will be provided to the development as follows:-

Services	OSD	Southern Entrance
Potable water	To 150mm CICL Sydney Water main in Miller St	To 150mm CICL Sydney Water main in Miller St
Fire services	To 150mm CICL Sydney Water main in Miller St	To 150mm CICL Sydney Water main in Miller St
Sewer	To 225mm SGW Sydney Water main in Denison St	To 225mm SGW Sydney Water main in Denison St
Gas	Extend existing connection to 150mm SS Jemena Secondary Main in Denison St	N/A
Electrical	New Ausgrid Chamber Substations (north west corner of development site). Connection to be provided from Berry Street.	New Ausgrid Chamber Substations (north west corner of development site). Connection to be provided from Berry Street.
Communications	4 x 100uPVC conduits from Miller Street to an OSD comms room within the building.	4 x 100uPVC conduits from Miller Street to a station comms room within the building.

Services connection location sketch plans have been prepared and are attached in **Appendix A**. These sketch plans indicate the proposed locations of services connections to the building from the authority trunk mains in the street. These connection locations have been coordinated with building services designs however may move to better coordinate with building structure, room locations and services routes through the building in detailed design stages.

5.1 Stormwater Drainage and Flooding,

A separate stormwater drainage and flooding report has been prepared however in summary:-

- The proposed diversion of the Sydney Water trunk stormwater drainage culvert through the proposed development remains consistant with the Sydney Metro reference design,
- Stormwater detention storage, which was previously provided within the stormwater culvert system in Denison Street, is proposed to be located in the Miller Street verge. Ongoing discussions and negotiation with North Sydney Council, Sydney Water and Sydney Metro are required to resolve this.
- Building stormwater drainage connections will be connected to the proposed drainage system in Denison Street for the south and OSD site.

6. Risks, Safety in Design, and outstanding information

Safety is a fundamental consideration to all elements of the Victoria Cross Station delivery. Designers have a responsibility under the WHS Act & Regulations 2011 to consider safety in all aspects of their work. For example, any decision made about a particular construction method or material needs to be considered in the context of safety. These factors and any hazards identified with them are Safety in Design considerations, and are to be documented throughout the design process along with the controls proposed to eliminate or mitigate the risk.

The current design takes into account risks and hazards applicable to the scope of works. At this stage the currently assumed location of most external utilities is Quality Level “D”, i.e. based on digitised DBYD. Further survey (such as potholing, slit trenching and CCTV) of services in impacted areas is to be undertaken to allow detailed design of proposed treatment measures, and to minimise the risk of discovering any previously unknown underground services during construction.

7. Design Criteria

The Services and Infrastructure will comply with:

- All current relevant Australian Standards;
- Building Code of Australia NCC 2019;
- Sydney Metro/TfNSW standards and requirements where applicable;
- Sydney Metro Victoria Cross Scope of Works and Technical Criteria;
- Service Authority requirements

8. Agency Consultations

Lendlease and ArcMac have engaged with numerous authorities during recent design development works including Sydney Metro, Sydney Water, Jemena and North Sydney Council. Significant discussions and negotiations remain with these authorities along with all other authorities which will be ongoing through the next phase of works.

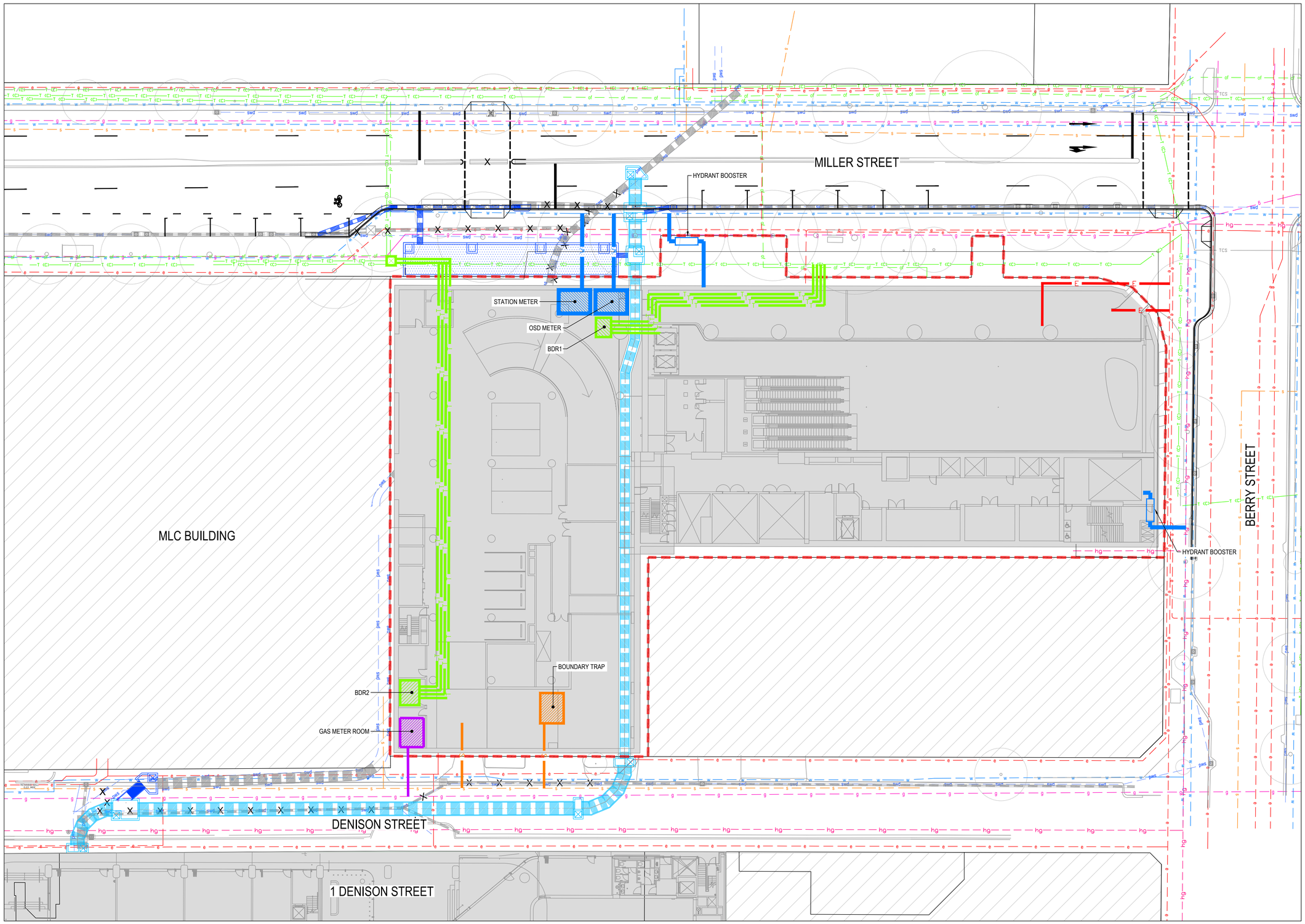
Relevant applications to authorities are being progressed and will be submitted upon resolution of ongoing design development and in alignment authority discussions.

9. Conclusion

This report outlines the existing utilities in the vicinity of the Victoria Cross Integrated Station Development and proposals to augment these as required to service the development.

In conclusion, there is capacity in the excisting service infrastructure to supply the proposed OSD development with the augmentations as described in this report. This has been determined through searches of publically available information such as DBYD as well as extensive and ongoing consulation with service providers and authorities.

Appendix A: Services Connection Locations Sketch Plans



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- PROPERTY BOUNDARY
- SYDNEY WATER STORMWATER PIPE
- NORTH SYDNEY COUNCIL STORMWATER PIPE
- EXISTING STORMWATER PIPE
- PROPOSED KERB INLET
- PROPOSED STORMWATER PIT
- PROPOSED LARGE STORMWATER PIT
- EXISTING KERB INLET
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING GAS
- EXISTING HIGH PRESSURE GAS
- EXISTING COMMUNICATIONS
- EXISTING COMMUNICATIONS
- PROPOSED AREA OF WORKS BY OTHERS
- PROPOSED OSD TANK
- X TO BE REMOVED

PROPOSED SERVICES

- HV PROPOSED HIGH VOLTAGE UNDERGROUND ELECTRICAL CONDUITS
- T PROPOSED TELSTRA OPTIC FIBRE
- W PROPOSED POTABLE WATER SERVICE
- S PROPOSED SEWER
- G PROPOSED GAS

NOTES

1. REFER TO DRAWING SMCSWSVO-LLC-SVC-CE-DWG-001003 FOR GENERAL NOTES.

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A1 Original | Co-ordinate System: MGA Zone 56 | Height Datum: A.H.D.

KEY PLAN

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DRG CHECK	M.KURTZ	30/05/2019
DESIGN CHECK	N.MCKEE	30/05/2019
APPROVED	J.HENDRIQUES	30/05/2019

VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

COMBINED SERVICES PLAN

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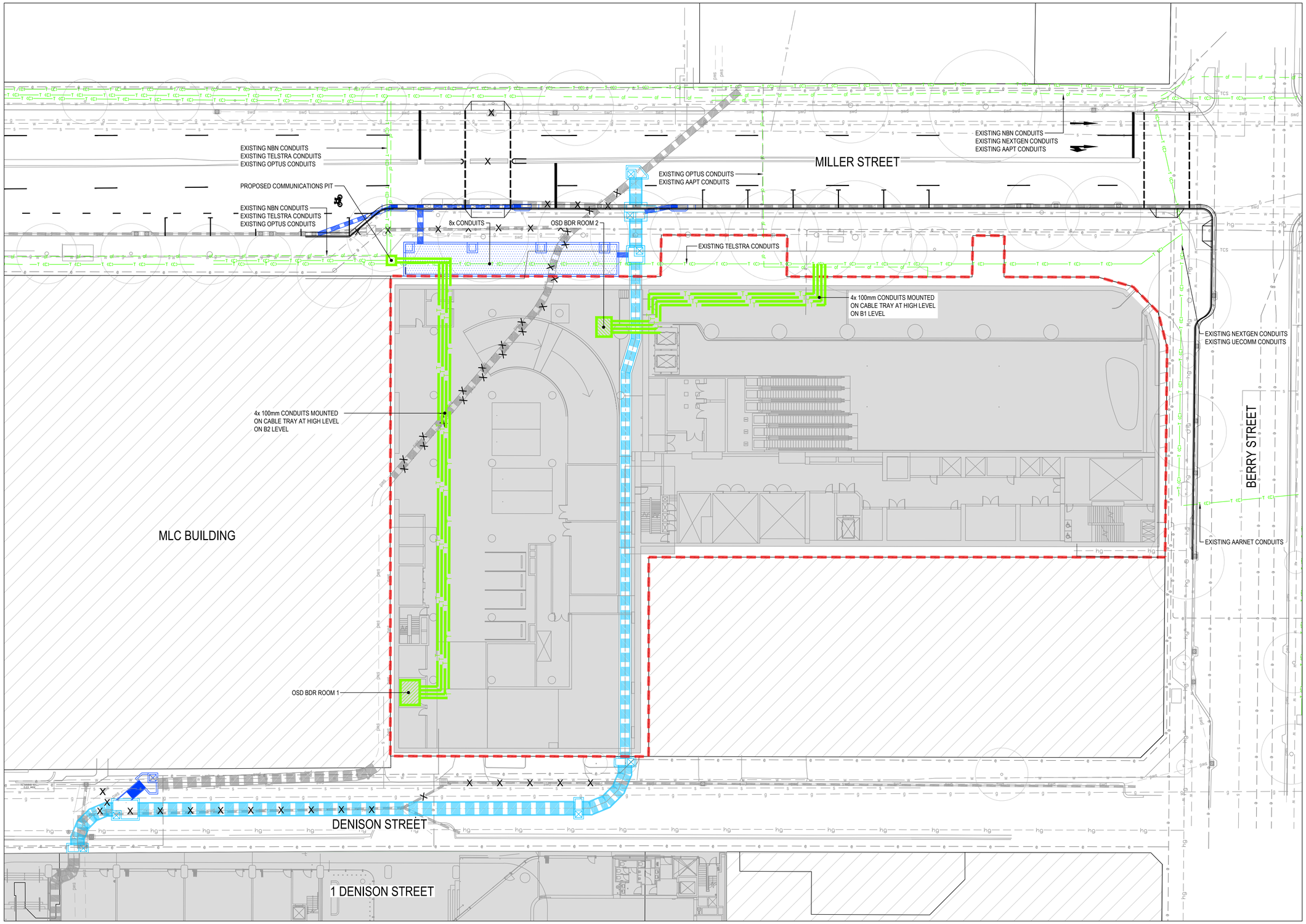

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PROPOSED SERVICE

- PROPOSED COMMUNICATIONS CONDUIT

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VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

COMMUNICATIONS SERVICES PLAN

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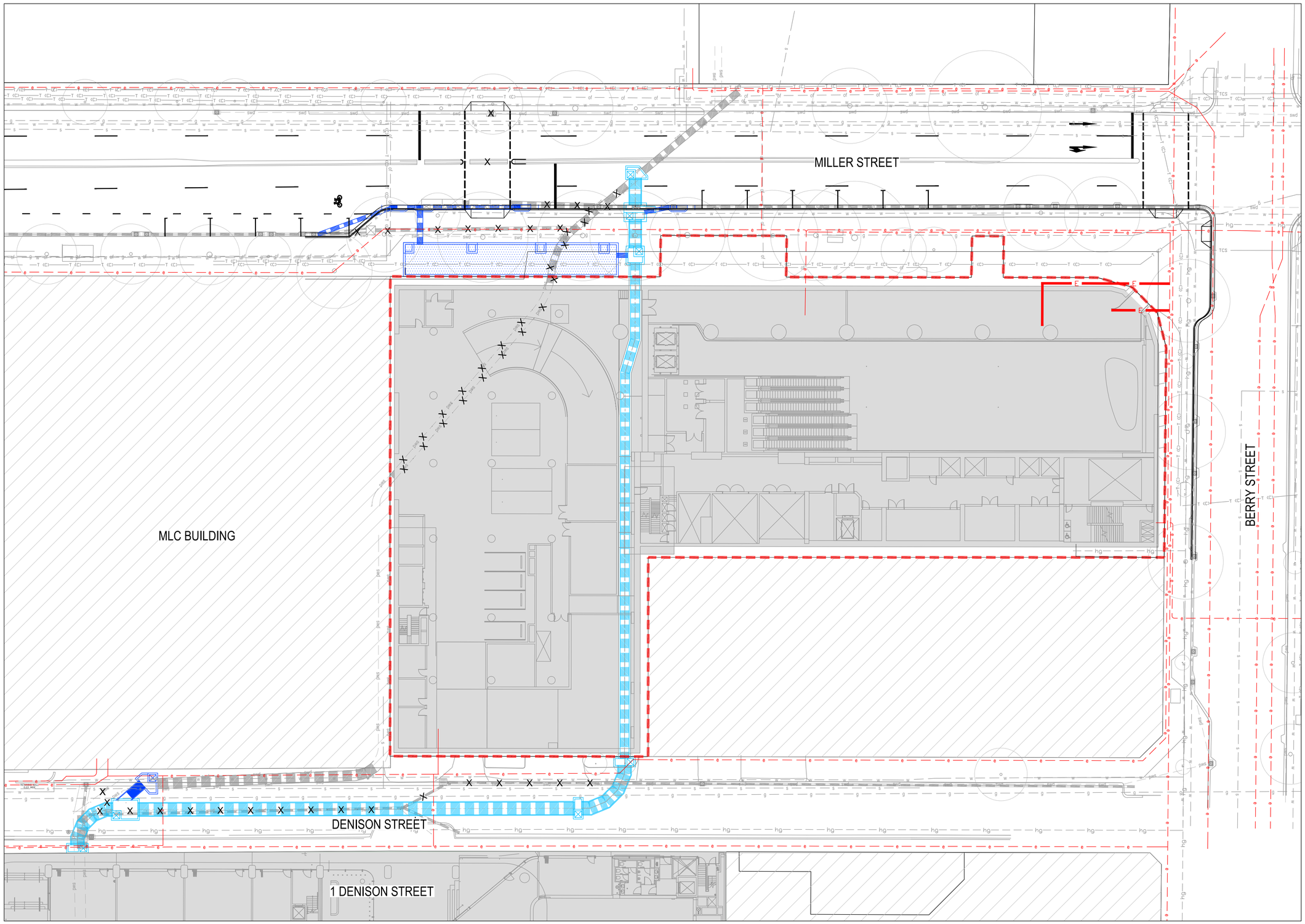

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PROPOSED SERVICES

- HV — PROPOSED HIGH VOLTAGE UNDERGROUND ELECTRICAL CONDUITS

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VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

ELECTRICAL SERVICES PLAN

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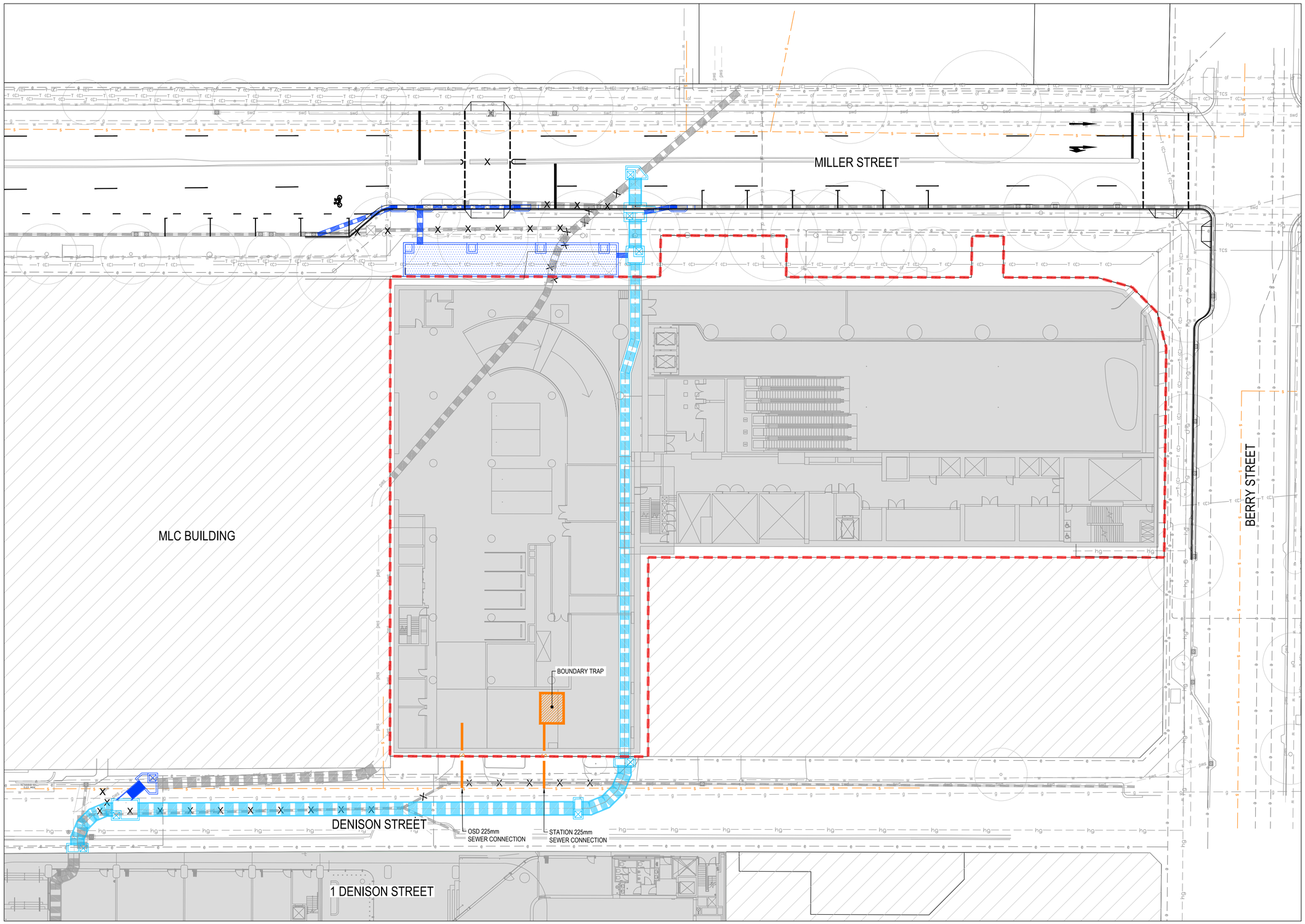

LEGEND

- PROPERTY BOUNDARY
- SYDNEY WATER STORMWATER PIPE
- NORTH SYDNEY COUNCIL STORMWATER PIPE
- EXISTING STORMWATER PIPE
- PROPOSED KERB INLET
- PROPOSED STORMWATER PIT
- PROPOSED LARGE STORMWATER PIT
- EXISTING KERB INLET
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING GAS
- EXISTING HIGH PRESSURE GAS
- EXISTING COMMUNICATIONS
- EXISTING COMMUNICATIONS
- PROPOSED AREA OF WORKS BY OTHERS
- PROPOSED OSD TANK
- X TO BE REMOVED

PROPOSED SERVICES

- PROPOSED SEWER

REV	BY	DATE	DESCRIPTION	APPD.
B	DW	31/07/2019	INTERNAL ISSUE (IDR2)	J.H
A	DW	29/05/2019	REVISION IN PROGRESS	J.H

A1 Original | Co-ordinate System: MGA Zone 56 | Height Datum: A.H.D.

KEY PLAN

SCALE 2.5 0 2.5 5 7.5m
1 : 250 FULL SIZE A1

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

DESIGN MODEL FILE(S) USED FOR DOCUMENTATION OF THIS DRAWING

CLIENT: NSW GOVERNMENT | sydney METRO
ISDP: lendlease
SERVICE PROVIDERS: COX | ASPECT Studios™ | ARCADIS | MOTT MACDONALD | BATESSMART™

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NOTE: Do not scale from this drawing.

INDEPENDENT CERTIFIER CERTIFICATE

DRAWN	D.WALL	30/05/2019
DESIGNED	R.MAHONY	30/05/2019
DRG CHECK	M.KURTZ	30/05/2019
DESIGN CHECK	N.MCKEE	30/05/2019
APPROVED	J.HENDRIQUES	30/05/2019

VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

SEWER SERVICES PLAN

FILE No. 1 1

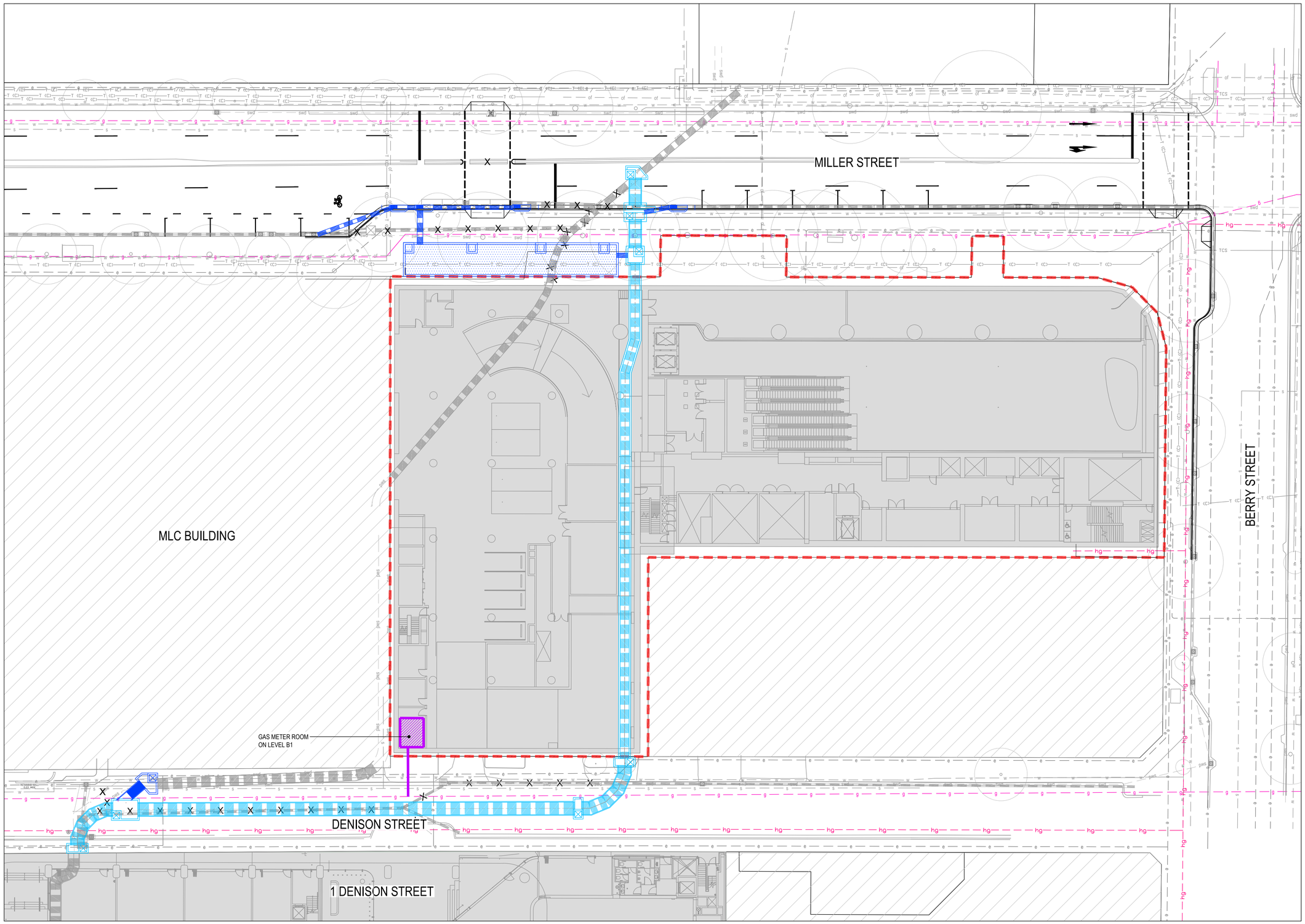
STATUS: FOR INFORMATION ©

DRG No. SMCSWSVI-LLC-SVC-CE-DWG-120063

EDMS No.

B

Plot Date & Time:



LEGEND

- PROPERTY BOUNDARY
- SYDNEY WATER STORMWATER PIPE
- NORTH SYDNEY COUNCIL STORMWATER PIPE
- EXISTING STORMWATER PIPE
- PROPOSED KERB INLET
- PROPOSED STORMWATER PIT
- PROPOSED LARGE STORMWATER PIT
- EXISTING KERB INLET
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING GAS
- EXISTING HIGH PRESSURE GAS
- EXISTING COMMUNICATIONS
- EXISTING COMMUNICATIONS
- PROPOSED AREA OF WORKS BY OTHERS
- PROPOSED OSD TANK
- X TO BE REMOVED

PROPOSED SERVICES

- PROPOSED GAS

REV	BY	DATE	DESCRIPTION	APPD.
B	DW	31/07/2019	INTERNAL ISSUE (IDR2)	J.H
A	DW	29/05/2019	REVISION IN PROGRESS	J.H

A1 Original | Co-ordinate System: MGA Zone 56 | Height Datum: A.H.D.

KEY PLAN

SCALE 2.5 0 2.5 5 7.5m
1 : 250 FULL SIZE A1

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ISDP: lendlease
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INDEPENDENT CERTIFIER CERTIFICATE

DRAWN	D.WALL	31/07/2019
DESIGNED	R.MAHONY	31/07/2019
DRG CHECK	D.LANCASHIRE	31/07/2019
DESIGN CHECK	M.KURTZ	31/07/2019
APPROVED	J.HENDRIQUES	31/07/2019

VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

GAS SERVICES PLAN

FILE No. 1 1

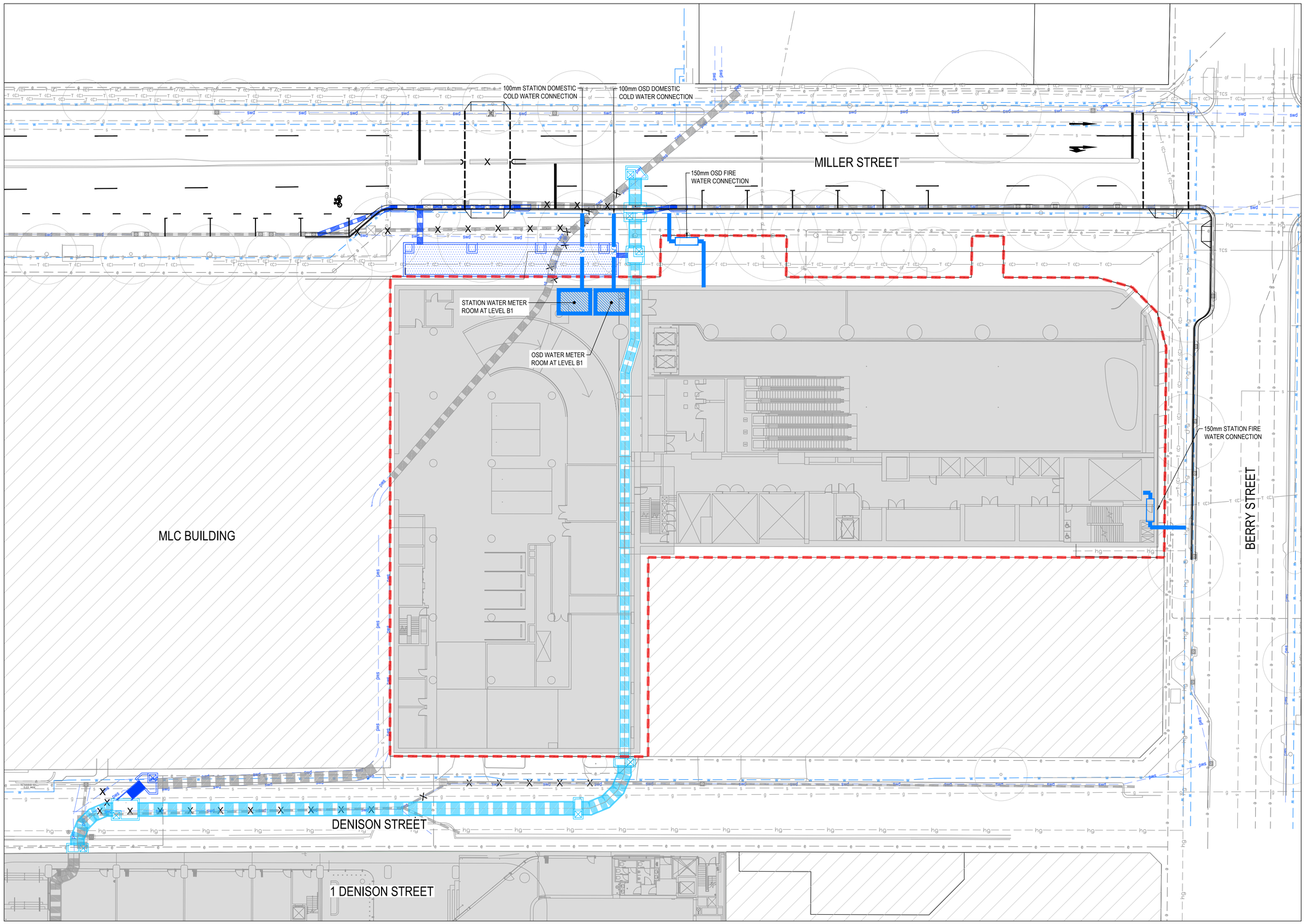
STATUS: FOR INFORMATION ©

DRG No. SMCSWSVI-LLC-SVC-CE-DWG-120064

EDMS No.

B

Plot Date & Time:



LEGEND

- PROPERTY BOUNDARY
- SYDNEY WATER STORMWATER PIPE
- NORTH SYDNEY COUNCIL STORMWATER PIPE
- EXISTING STORMWATER PIPE
- PROPOSED KERB INLET
- PROPOSED STORMWATER PIT
- PROPOSED LARGE STORMWATER PIT
- EXISTING KERB INLET
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING GAS
- EXISTING HIGH PRESSURE GAS
- EXISTING COMMUNICATIONS
- EXISTING COMMUNICATIONS
- PROPOSED AREA OF WORKS BY OTHERS
- PROPOSED OSD TANK
- X TO BE REMOVED

PROPOSED SERVICES

- PROPOSED WATER

REV	BY	DATE	DESCRIPTION	APPD.
B	DW	31/07/2019	INTERNAL ISSUE (IDR2)	J.H
A	DW	29/05/2019	REVISION IN PROGRESS	J.H

A1 Original | Co-ordinate System: MGA Zone 56 | Height Datum: A.H.D.

KEY PLAN

SCALE 2.5 0 2.5 5 7.5m
1 : 250 FULL SIZE A1

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

DESIGN MODEL FILE(S) USED FOR DOCUMENTATION OF THIS DRAWING

CLIENT: NSW GOVERNMENT | sydney METRO

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DESIGNED	R.MAHONY	31/07/2019
DRG CHECK	D.LANCASHIRE	31/07/2019
DESIGN CHECK	M.KURTZ	31/07/2019
APPROVED	J.HENDRIQUES	31/07/2019

VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - SOUTH

WATER SERVICES PLAN

FILE No. 1 1

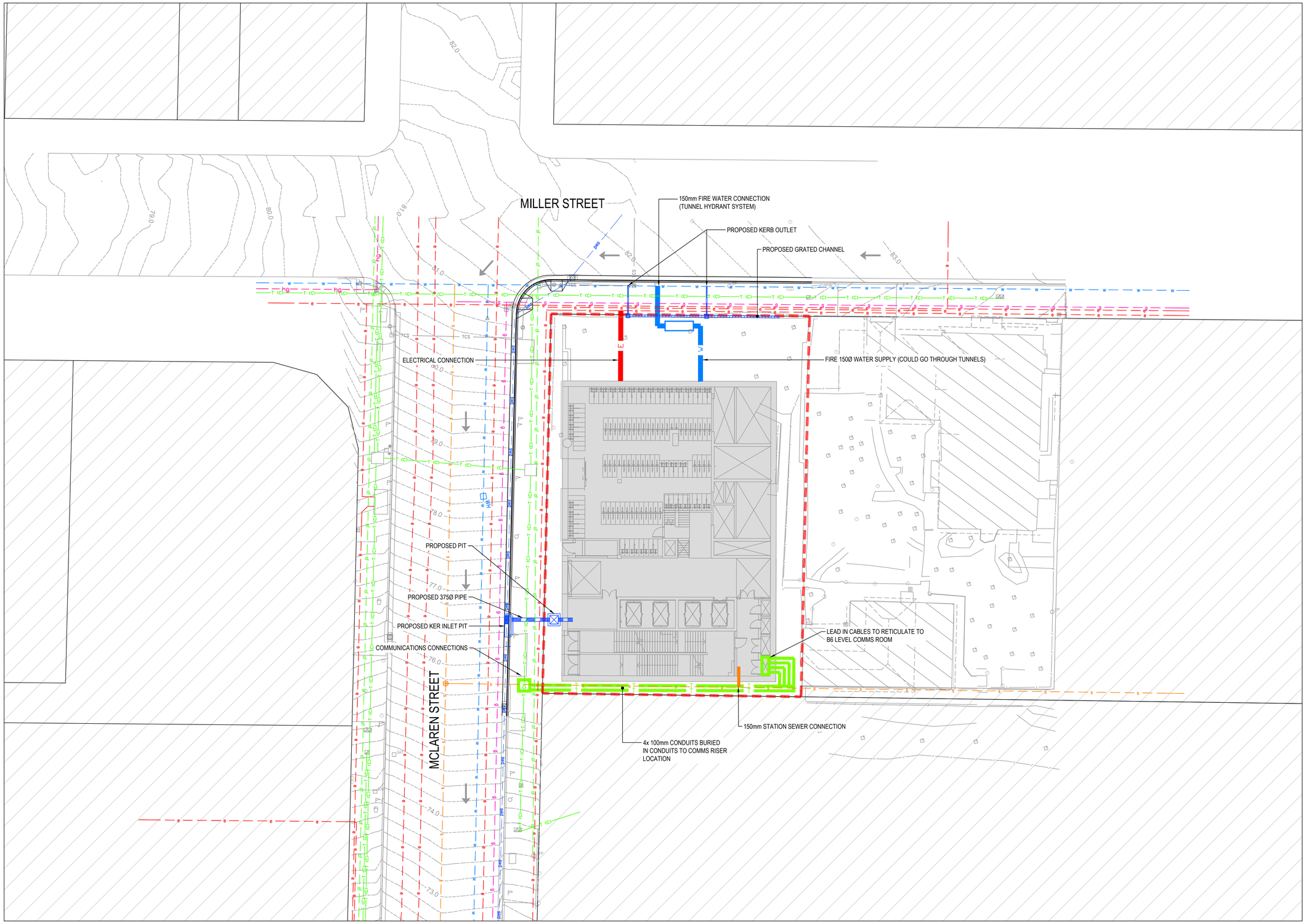
STATUS: FOR INFORMATION ©

DRG No. SMCSWSVI-LLC-SVC-CE-DWG-120065

EDMS No.

B

Plot Date & Time:



LEGEND

- PROPERTY BOUNDARY
- EXISTING CONTOURS
- PROPOSED CONTOURS
- SYDNEY WATER STORMWATER PIPE
- NORTH SYDNEY COUNCIL STORMWATER PIPE
- PROPOSED GRATED DRAIN
- EXISTING STORMWATER PIPE
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- PROPOSED KERB INLET
- PROPOSED STORMWATER PIT
- EXISTING KERB INLET
- PROPOSED AREA OF WORKS BY OTHERS
- PROPOSED PEDESTRIAN RAMP
- FLOW ARROW
- EXISTING STORMWATER PIPE
- EXISTING WATER PIPE
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING GAS
- EXISTING HIGH PRESSURE GAS
- EXISTING COMMUNICATIONS
- EXISTING COMMUNICATIONS

PROPOSED SERVICES

- PROPOSED HIGH VOLTAGE UNDERGROUND ELECTRICAL CONDUITS
- PROPOSED TELSTRA OPTIC FIBRE
- PROPOSED POTABLE WATER SERVICE
- PROPOSED SEWER
- PROPOSED GAS

NOTES

1. FOR COMBINED SERVICES INFORMATION REFER TO DRAWINGS: SMCSWSVO-LLC-SVC-CE-DWG-120060 & 120065
2. REFER TO DRAWING SMCSWSVO-LLC-SVC-CE-DWG-001003 FOR GENERAL NOTES.
3. REFER TO DRAWING SMCSWSVO-LLC-SVC-CE-DWG-120035 FOR CIVIL WORKS DETAILS.

REV	BY	DATE	DESCRIPTION	APPD.
C	DW	31/07/2019	INTERNAL ISSUE (IDR2)	J.H
B	DW	03/07/2019	REVISION IN PROGRESS	-
A	DW	29/05/2019	REVISION IN PROGRESS	J.H

A1 Original | Co-ordinate System: MGA Zone 56 | Height Datum: A.H.D.

KEY PLAN

SCALE 1 : 200 (2 0 2 4 6 8m) FULL SIZE A1

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

DESIGN MODEL FILE(S) USED FOR DOCUMENTATION OF THIS DRAWING

CLIENT: NSW GOVERNMENT | sydney METRO

ISDP: lendlease

SERVICE PROVIDERS: COX | ASPECT Studios™ | ARCADIS | MOTT MACDONALD | BATESSMART™

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INDEPENDENT CERTIFIER CERTIFICATE

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DESIGNED	R.MAHONY	31/07/2019
DRG CHECK	D.LANCASHIRE	31/07/2019
DESIGN CHECK	M.KURTZ	31/07/2019
APPROVED	J.HENDRIQUES	31/07/2019

VICTORIA CROSS STATION

SYDNEY METRO CITY AND SOUTH WEST

CIVIL ENGINEERING

STATION - NORTH

GENERAL ARRANGEMENT PLAN

FILE No. 1 1

STATUS: FOR INFORMATION Ⓒ

DRG No. SMCSWSVI-LLC-SVC-CE-DWG-320010

EDMS No.

C

Plot Date & Time:

Appendix B: Dial Before You Dig – Authority plans

Job No 16094143

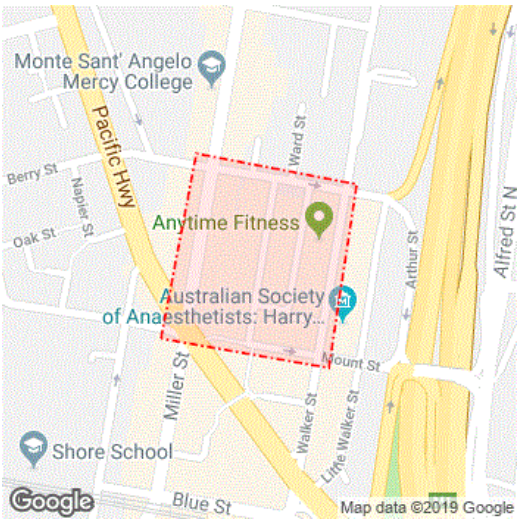
Phone: 1100
www.1100.com.au

Caller Details

Contact:	Mr David Wall	**Caller Id:**	1960272	**Phone:**	02 89079000
Company:	Arcadis	**Mobile:**	0416742110	**Fax:**	Not Supplied
Address:	levell16 - 580 George Street Sydney NSW 2000	**Email:**	david.wall@arcadis.com		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.



User Reference: Review
Working on Behalf of: Private

Enquiry Date:	**Start Date:**	**End Date:**
10/04/2019	30/04/2019	31/05/2019

Address:
Denison Street
North Sydney NSW 2060

Job Purpose:	**Onsite Activity:**
Excavation	Manual Excavation
Location of Workplace:	**Location in Road:**
Private Property	Not Supplied

- Check the location of the dig site is correct. If not submit a new enquiry.
- If the scope of works change, or plan validity dates expire, resubmit your enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Not Supplied

Your Responsibilities and Duty of Care

- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days.
Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
82196079	AAPT / PowerTel, NSW	1800786306	NOTIFIED
82196086	AARNet Pty Ltd, Nsw	1300275662	NOTIFIED
82196081	Ausgrid	0249510899	NOTIFIED
82196084	Jemena Gas North	1300880906	NOTIFIED
82196088	NBN Co, NswAct	1800626762	NOTIFIED
82196078	Nextgen, NCC - NSW	1800032532	NOTIFIED
82196075	North Sydney Council	0299368100	NOTIFIED
82196083	Optus and/or Uecomm, Nsw	1800505777	NOTIFIED
82196080	PIPE Networks, Nsw	1800201100	NOTIFIED
82196076	Roads and Maritime Services	0288370285	NOTIFIED
82196090	Sydney Metro	0410509577	NOTIFIED
82196085	Sydney Water	132092	NOTIFIED
82196082	Telstra NSW, Central	1800653935	NOTIFIED
82196077	Verizon Business (Nsw)	0294345000	NOTIFIED
82196087	Vocus Communications	0283169853	NOTIFIED

Lodge Your Free Enquiry Online – 24 Hours a Day, Seven Days a Week

82196089	Vocus Communications	0892446114	NOTIFIED

END OF UTILITIES LIST

NORTH WEST
22 Giffnock Ave
Macquarie Park
NSW 2113 Australia

smnwdbyd@transport.nsw.gov.au

Emergency (24hrs) 1800 019 989

Date: 10/04/2019

To:
Mr David Wall
Arcadis
level16 - 580 George Street
Sydney NSW 2000

Response to Dial Before You Dig enquiry

Sydney Metro has been notified of your enquiry as detailed below. Ensure that you review all other documents included with this response for additional details.

Sequence No: 82196090

Job No: 16094143

Location: Denison Street
North Sydney NSW 2060

If you require further information, please contact Sydney Metro by email: smnwdbyd@transport.nsw.gov.au

---

Important Notice: This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the DBYD enquiry outlined above. Please ensure that the DBYD enquiry details and this response accurately reflect your proposed works.

This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited.

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Sydney Metro or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

SYDNEY METRO
22 Giffnock Ave
Macquarie Park
NSW 2113 Australia

smnwdbyd@transport.nsw.gov.au

Emergency (24hrs) 1800 019 989

Dear Sir / Madam,

Dial Before You Dig – Potential impact on tunnel assets

Thank you for your Dial Before You Dig enquiry. Sydney Metro has identified underground tunnel assets in the vicinity of the enquiry location. These assets may include, but are not limited to running tunnels, cross passages, cross over caverns and associated services.

Please be aware that damage to these assets could cause serious injury or death as well as major disruption to Sydney Metro rail infrastructure.

A subsurface property stratum has been registered with the Land and Property Information office which describes the space in both plan and reduced level within which the tunnel assets are located. A copy of the relevant stratum plan is attached. The plan is provided subject to the provisions set out below.

- The actual depth of existing tunnel assets may vary significantly from the location shown on the attached plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Any reliance placed on these plans by you is entirely at your risk. You must undertake your own investigations and enquiries to confirm the exact locations of underground assets.
- Sydney Metro is not responsible for any loss suffered by you or any other party (including indirect or consequential loss) in connection with the provision of the plan, however that loss may arise (including losses arising as a result of negligence by Sydney Metro and/or its employees, officers, consultants and contractors).
- Whilst Sydney Metro has taken all reasonable steps to ensure that the information contained in the plan is as accurate as possible, Sydney Metro gives no guarantee, warranty or undertaking as to the accuracy, currency, adequacy, suitability or completeness of the plan and does not assume any duty of care to you or any third party nor accept any liability for inaccuracies in the information shown on these plans.
- Sydney Metro's plans are frequently updated. The attached plans are valid for 6 months from date of issue.

You must review the attached plan(s) to ensure that any proposed works by you are not in conflict with Sydney Metro's assets.

The potential to impact the tunnels will depend upon the nature of works proposed. You must contact Sydney Metro prior to carrying out any works if any of the following apply:

1. your proposed excavation is greater than 2 metres below existing ground level (this includes trenching, bore holes, piles and similar ground penetrations) and is located above or within the property stratum; **or**
2. significant additional loads are to be placed over the stratum area whether temporarily or permanently; **or**
3. significant vibration (i.e. driving piles) is to occur over or in the vicinity of the stratum.

In the event that the proposed works trigger any one of the above conditions:

- do not commence works;
- contact Sydney Metro via email smnwdbyd@transport.nsw.gov.au;
- provide sufficient information to Sydney Metro to enable accurate review of the proposed work; and
- await positive confirmation from Sydney Metro that the works are allowed to proceed.

Any further information you may require can be requested during this contact.

You must:

- provide Sydney Metro with information about the proposed works with sufficient time to allow for adjustments to meet Sydney Metro's requirements;
- not modify the extent of work in the vicinity of the tunnels without prior notification to Sydney Metro;
- exercise due care and take all reasonable precautions in the vicinity where underground assets are indicated to avoid destroying, damaging or interfering with Sydney Metro assets and infrastructure;
- not relocate or alter any Sydney Metro tunnel assets or infrastructure under any circumstance;
- immediately notify Sydney Metro of any damage or threat of damage to its infrastructure that occurs as a result of your work, by telephoning the emergency contact number 1800 019 989; and
- ensure information provided in this response is printed and remains available on-site at all times throughout your construction phase.

Due to the inherent dangers associated with excavation in the vicinity of underground tunnel assets, precautions should be taken in the undertaking of any excavation or underground works, including, but not limited to the following:

- all personnel must be properly briefed, particularly those associated with the use of earthmoving equipment, trenching, boring and pneumatic equipment; and
- all excavations by you must be undertaken in accordance with all relevant laws and regulations including, in accordance with but not limited to, Work Cover NSW "Work near underground assets: Guide" and "Work Cover NSW "Excavation work: Code of practice".

You will be held responsible for any damage to any of Sydney Metro's assets or infrastructure or other loss caused (including consequential loss) as a result of excavation or earthworks by you or on your behalf.

The provision of the attached drawing/s does not provide approval for your proposed works or diminish your obligations under NSW legislation. This includes the requirement to contact Sydney Metro prior to any work commencing which could affect our assets to discuss necessary safety and design aspects as detailed above.

Yours sincerely,

Sydney Metro

If further information is required, please contact:
Ausgrid DBYD
Phone: (02) 4951 0899
Fax: (02) 4951 0729

Emergency Phone Number 131388

Underground Cable Location Search Advice

-- Ausgrid Assets Affected including TRANSMISSION --

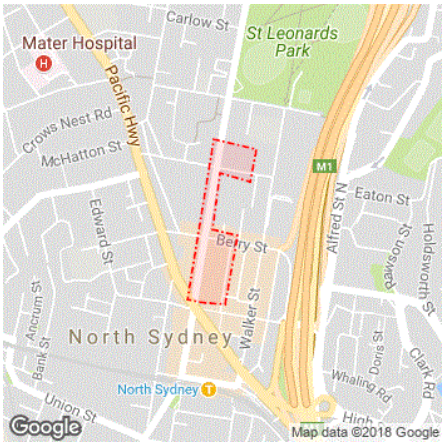
If you are working within 2 metres of **TRANSMISSION** cables you are required to have an Ausgrid Supervisor on site. The number to call to organise this is **49519200** and can also be found at the top of the supplied Transmission plan(s) in **RED**. *Note:* The Transmission Team requires **2 weeks notice** if required on site.

To:	Mr Bob Lenferna Arcadis 580 George Street Sydney NSW 2000		
		Phone No:	0437824655
		Issue Date:	9/04/2018

In response to your enquiry, Sequence No: 70228101 the records of Ausgrid disclose that there **are** Ausgrid underground cables in the defined search location and relevant Ausgrid plans have been provided.

This search is based on the geographical position of the dig site as denoted in the Dial Before You Dig caller confirmation sheet and an overview is provided:

Address:	Berry Street North Sydney NSW 2060
Job #:	13995859



Important

- All information provided to you is **ONLY VALID FOR 30 DAYS** from the date of issue
- You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret plans.
- If you require a full size print of A0 plans and don't have the resources to do so please contact our office on 49510899 to request a hard copy to be posted. **Please allow 3 working days for delivery.**
- Please note you will ONLY receive portions of your search area that contain Ausgrid Underground Assets

YOU MUST READ AND UNDERSTAND THE *SUPPLEMENTARY MATERIAL* CONTAINED IN THIS ADVICE BEFORE PROCEEDING WITH ANY WORKS.

Summary of Supplementary Information:

Material	Purpose	Location
URGENT SAFETY ALERT	Safety precautions when working on or near low voltage stranded aluminium cable	Web Link [Click Here]
Important Information.pdf	Details important information	Attached
Working near Ausgrid Cables.pdf	Summary of NS156	Attached
COMN0119 How To Read Ausgrid Plans.pdf	Details how to read Ausgrid plans	Attached
WorkCover NSW "*Work near underground assets: Guide*"	To assist you in deciding appropriate measures to eliminate or control risks when working near underground assets.	Web Link [Click Here]
Ausgrid's Network Standard NS156	For important information for work near or around underground cables	Web Link [Click Here]

Working near
Ausgrid cables

Finding out what's below the surface can save your life.

Call Dial Before You Dig on **1100** or visit **1100.com.au**



Ausgrid

Changes in the Law.

NSW legislation now requires people who are planning to do excavation work to obtain copies of underground electricity cable plans through Dial Before you Dig (Phone 1100) and to make sure that the plans are no more than 30 days old when excavation commences.

The aim of the legislation is to ensure that when workers dig near electricity cables, they will establish the exact location of the cables and thus avoid coming into contact with them or damaging them. This will ensure worker safety and also prevent disruption to Ausgrid's electricity network.

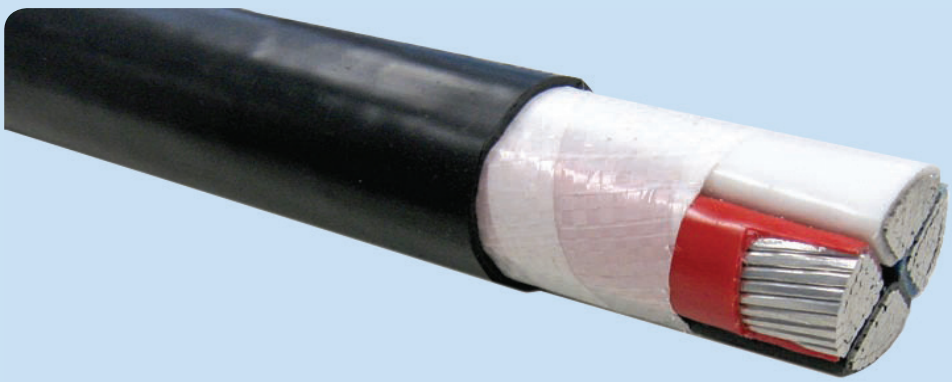
This brochure gives you a brief overview of how to prepare for excavation works near or around electricity cables. It is important that you also consult our guide How to Read Ausgrid Plans and make sure that workers engaged in excavation works fully understand how to read the plan. If the people actually doing the digging can't read the plans, it is essential that the work is directed by a person who has been trained to read Ausgrid's plans.

You must also consult Ausgrid's Network Standard NS156, which contains comprehensive information concerning all the issues that arise when excavating near underground cables (such as safety hazards from asbestos conduits and organochlorine pesticides).

Excavating near transmission cables.

If any cable plan you receive says "You are working near transmission cables" it is compulsory to notify Ausgrid two weeks before work is scheduled to begin. Ausgrid will then arrange for an Ausgrid representative to attend the site during excavation work.

Phone the Ausgrid Transmission enquiries line on (02) 4951 9200 to arrange for an Ausgrid representative in your region.



Be prepared. Wise words for safety at work.

Here are some simple precautions you and your workers need to follow in order to be as safe as possible.

- Make sure that your Dial Before You Dig (DBYD) plan is less than 30 days old
- Keep a copy of the cable plan on site at all times
- Make sure the excavation work is conducted or directed by staff who are trained to read the plan
- Hand dig until the exact location of the cable has been established
- Have on site at all times a first aid kit and a person trained in resuscitation
- Wear protective clothing, including safety footwear and safety helmet
- Have emergency contact numbers on site
- Set up safety barriers, witches hats and warning lights to reduce the risk of injury to the general public
- Comply with all WorkCover requirements and codes.

See also:

- **WorkCover Guidelines: Work Near Underground Assets**
- **WorkCover Code of Practice: Excavation Work**
- **WorkCover Code of Practice: Work Near Overhead Powerlines (if applicable).**

Before you start. Complete the checklist. Stop and look around.

Before you start excavating, consult the flow chart and fill in the checklist at the end of this brochure.

Then, be sure to look for clues where cables might be located on the site: for example pits, distribution pillars (green and other colours), cables attached to the side of poles, street lights without overhead wires.







Do all power cables look the same?

No. Power cables come in different sizes, colours and coverings. They may be covered in black plastic sheath, steel wires in a sticky bitument like material, or even a simple lead or steel wire/tape sheath.

What else should I look for below ground level?

Cables may also be buried in orange PVC or PE conduits or even in earthenware or steel pipes. A bank of cables may be covered with electrical bricks, plastic warning markers or protective covers, or they may not be covered at all. If they have been buried close to the surface, they may be covered by concrete slabs or steel plates.

When in doubt, ask Ausgrid.

If you have any questions about excavating near Ausgrid cables, read **NS156** (available at ausgrid.com.au).
For further information call 13 13 65.

You've taken every precaution but accidents still happen. What now?

If you damage an electricity cable, it is compulsory to notify Ausgrid on **13 13 88**.

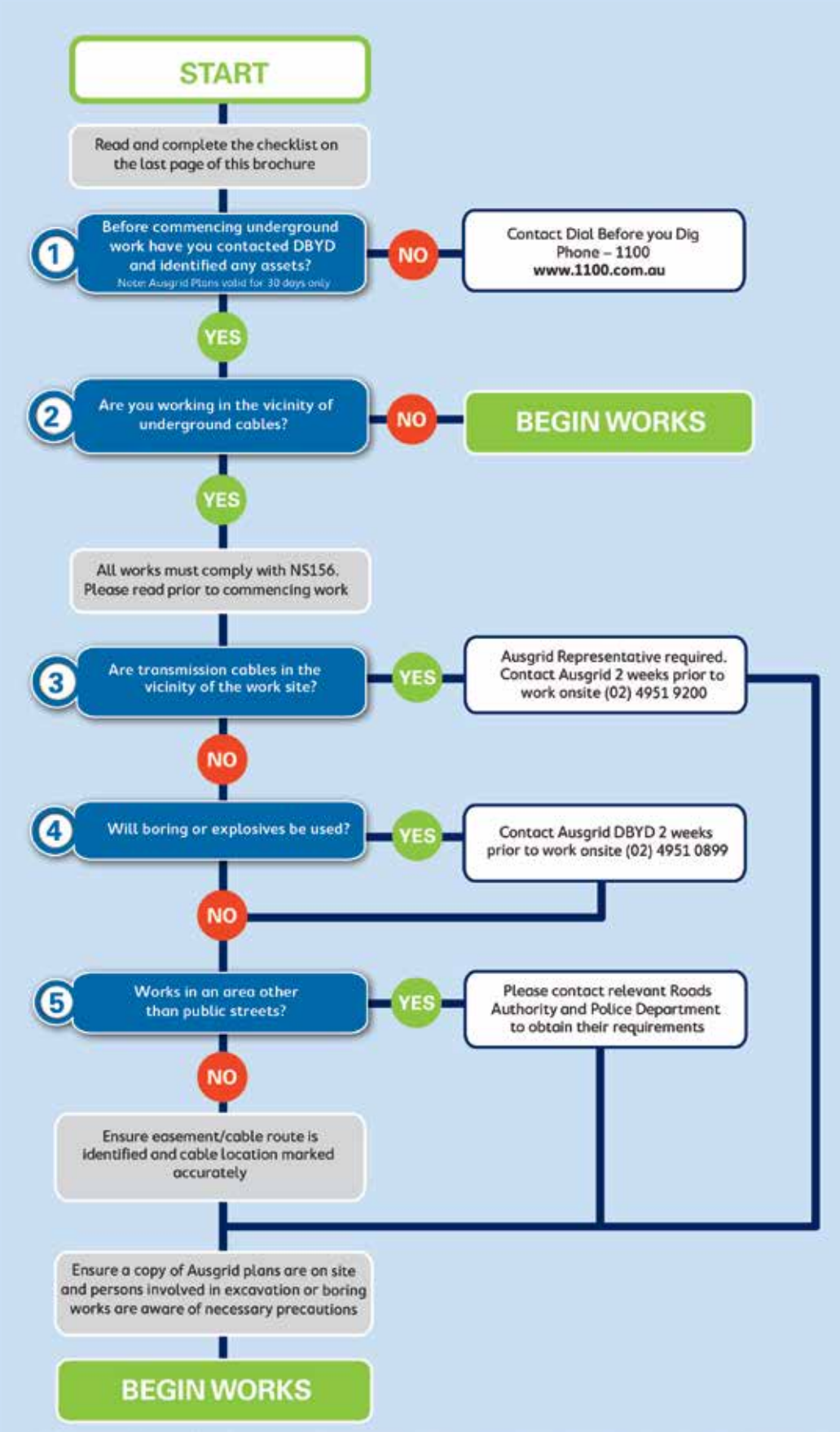
Striking power cables can cause serious damage to the cables and endanger the lives of anyone who comes in contact with them. Machinery and hand operated plant such as jack hammers can become alive if it is in contact with electrical cables or equipment. Keep people well away from machinery and the work site if contact is made with a cable.







Flow Chart for work near Ausgrid Cables



Ausgrid Checklist for work near or around underground cables

It is the responsibility of the Constructor to ensure that underground pits, ducts and cables are not damaged as a result of construction work. It is also your duty to protect your workers from harm or injury. This Checklist is intended to be used as a guide to what Constructors should do to make sure they have satisfied the minimum requirements to minimise damage to underground networks.

PLANS, LOCATION and NOTIFICATIONS	Completed
All relevant utilities plans obtained from Dial Before You Dig? (call 1100 – allow at least 5 working days for plans).	
Checked issue date on all the above plans to ensure issue was within the last 30 days?	
Examined plans and assessed all possible impacts on Ausgrid's network?	
Do you have both Underground Distribution and Transmission Plans (if applicable), on site at all times?	
All cables and conduits shown on the Ausgrid plans been located and marked on the ground?	
If you are planning to use a bore, have you ensured that the equipment is calibrated?	
Have you read and understood the requirements of NS 156? (for copies of NS 156 visit Ausgrid's Website or phone Ausgrid DBYD Office (02) 4951 0899) **www.ausgrid.com.au**	
Have you notified Ausgrid as specified by NS 0156 and complied with requirements? Where an Ausgrid representative is required, two weeks notice is required before work commencing on site. Contact phone number for Transmission cable enquiries is (02) 4951 9200. For all other cases contact Ausgrid DBYD Office: (02) 4951 0899.	
INSPECTION OF WORK BY Ausgrid's REPRESENTATIVE	
Is the Ausgrid representative on site for any work near or around* any transmission cable before you start? (*Refer to NS 156.)	
For proposed work near or around* cables other than transmission and/or conduits, are any requirements specified by Ausgrid's representative clearly understood and ready to be applied before you start the work? (*Refer to NS 156.)	
PROTECTION	
Check that all people on-site have been made aware of the presence and location of ALL Ausgrid underground cables and/or conduits; especially boring, drilling and trenching machine operators?	
Is there any asbestos or asbestos containing material in Ausgrid's underground network assets?	
Have you checked for the presence of any Organo-Chloride Pesticides (OCP) in transmission trenches?	
Is the site supervisor monitoring all machine operators working near or around Ausgrid's underground cables and/or conduits?	
Are the requirements specified by Ausgrid's representative being followed?	
Are Ausgrid's requirements in place for any exposed cables and/or conduits to be supported and protected?	
Have you marked all exposed underground cables and/or conduits with flags that are clearly visible from within all machinery used on-site?	
Have safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/or conduits in areas that are at risk?	
Have safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/ conduits in areas that are at risk?	

In the event of DAMAGE to Ausgrid's cable or conduits, call 13 13 88 immediately.
PROCEED with CAUTION

It is your responsibility to protect Ausgrid's cables and conduits from damage and your Duty of Care to protect your workers from harm or injury.

Signed: _____ **Date:** _____ / _____ / _____

Responsible person on site

For more information call 13 13 65 or visit www.ausgrid.com.au

If further information is required, please contact:
Ausgrid DBYD
Phone: (02) 4951 0899
Fax: (02) 4951 0729

Emergency Phone Number 131388

Dear Customer,

You may have received a plan with Prpsl in their file name. These plans contain proposal coverages that may require further information. This information will be sourced and emailed to you if necessary.

Proposal coverages are areas where underground work may have been issued for construction by Ausgrid, but details are not yet completely displayed on Ausgrid plans. In such cases a shaded “proposal area” is displayed on the Ausgrid plan. Please refer to the attached document “How to Read Ausgrid Plans” page 2, Ref 7 for further information.

Should you have any enquiries please contact us by email at dbyd.ops@ausgrid.com.au or by phone on (02) 49510899

Regards,
Ausgrid
Dial Before You Dig
Data Maintenance

Reading Ausgrid Plans
COMN0119

1 Property Lines

"property line" (PL), sometimes referred to as **"building line" (BL),** is the standard dimensioning reference point on all Ausgrid plans and represents property boundaries.

Typically the PL is the boundary between private property and local council's footpath area or nature reserve. Most residential fences and office blocks are erected along the PL.

"kerb line" (KL) is less frequently referred to on Ausgrid plans, and where used will be identified clearly as KL.

Numbers listed within property boundaries should correspond to recognised "street numbers". (refer to figure 1)



Figure 1

2 Datum References

"datum references" identify distances (in metres) from significant features (such as corners of property boundaries) to reference points such as Ausgrid assets **(eg: "conduits", "cables", "joints").** (refer to figure 2)

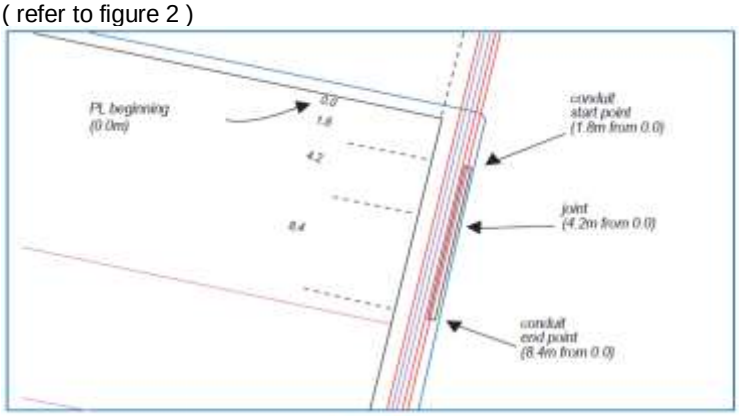


Figure 2

3 Cross Sections

"cross sections" displayed on Ausgrid plans detail information relating to the relative position (ie: distance from the **"property line",** and the depth of **"cover")** of Ausgrid assets.

"cover" is a term used to refer to the depth of cables underground.

A "cross section" leader line will be drawn indicating the location of the displayed **"cable"** or **"conduit"** information on Ausgrid plans.

The distance from **"property line"** (in metres) and depth of **"cover"** (in metres) references are displayed as; ie: 0.6 metres from PL and 0.5 metres underground).

Where distance and cover are not recorded, they will be clearly marked as **"NR".**

NOTE: Distance and cover where indicated may be different to the actual position of the cables (eg: fill may have been placed at site that has changed the ground level).

"PL" distance shown in cross sections is an indicative measure to the centre of the trench allocation from the adjacent property line.

On some plans the "cross sections" may also be shown with a specific number (eg: HR1). This number will match with a cross-section detail found in the border of the plot or on a separate plot page. (refer to figures 3 and 4)

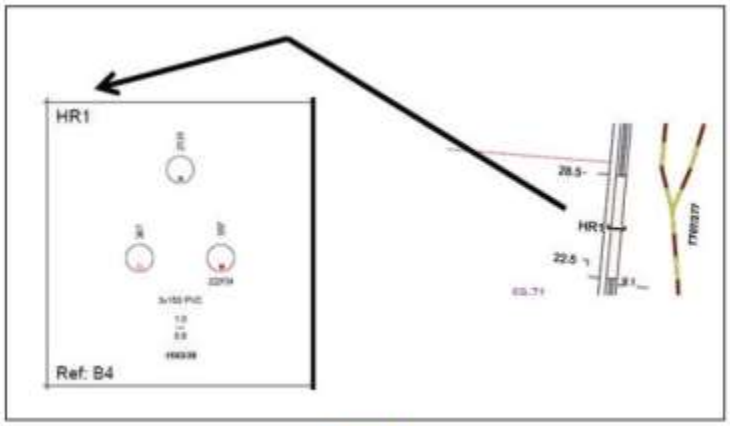


Figure 3

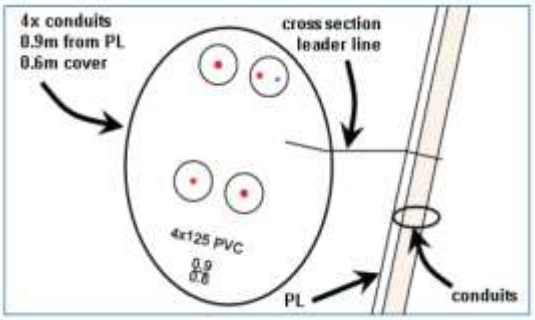


Figure 4

Ausgrid

www.ausgrid.com.au

4 Cable Joints and Joint Reports

"cable joints" (numbered individually) and **"joint reports"** (attached to Ausgrid plans) can provide information relating to the relative position of Ausgrid assets, distance from the "property line" (in metres), and the depth of "cover" (in metres). (refer to figures 5 and 6)

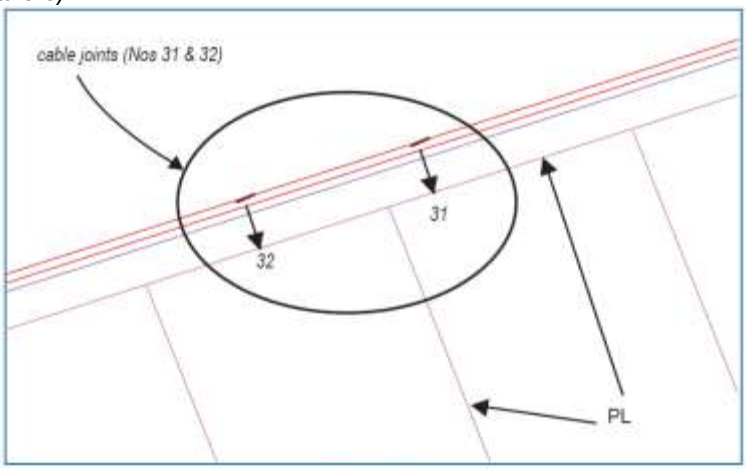


Figure 5

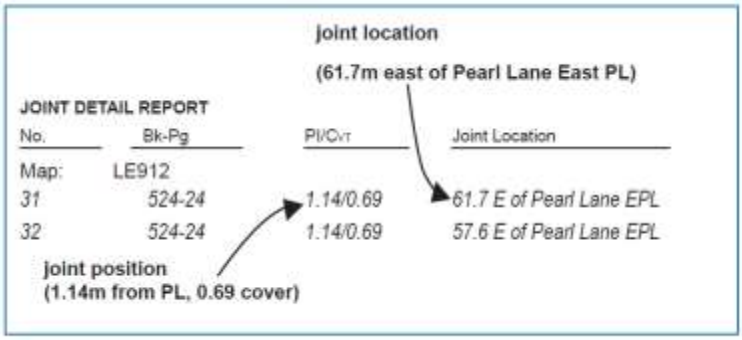


Figure 6

5 Cross Section Detail Boxes

"cross section" detail boxes on the sides of an Ausgrid plan are used when there is insufficient room to display **"cable"** and/or "conduit" information on the Ausgrid plan.
Ausgrid plans (refer to figure 7) are bordered by numeric identifiers along the top and bottom borders and alpha identifiers along the side borders.

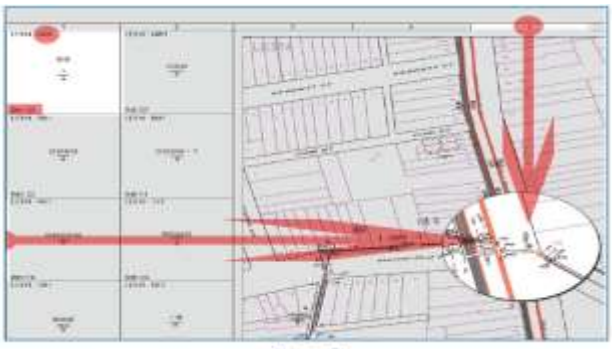


Figure 7

A **"cross section"** leader line and annotation is drawn on the Ausgrid plan for a reference to **"cable"** and/or **"conduit"** information in the **"cross section"** detail boxes.

6 Pits

Underground **"pits"** are numbered on Ausgrid plans, positioned relative to the **"property line" (PL)**, and can be found on either the footpath (nature strip) or the road (see figure 8).

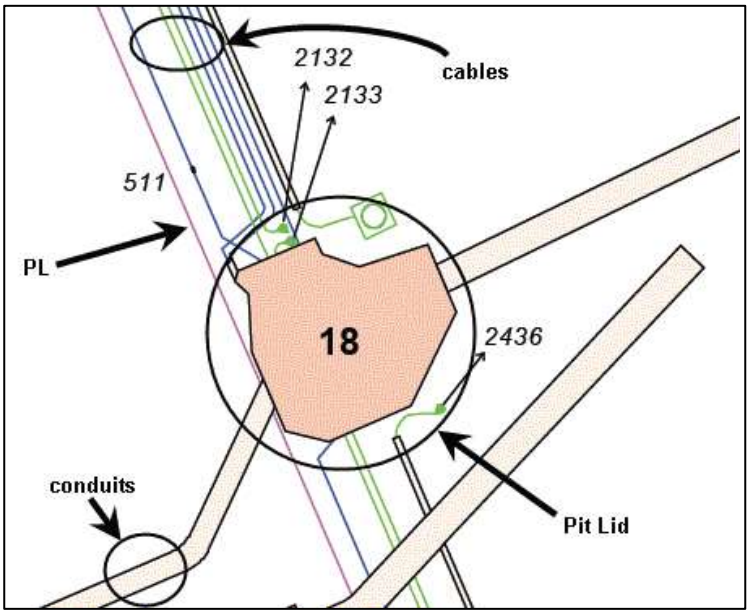


Figure 8

7 Proposal Areas

There are areas where underground work may have been issued for construction by Ausgrid, but details are not yet completely displayed on Ausgrid plans. In such cases a shaded **"proposal area"** is displayed on the Ausgrid plan, indicating underground work may have commenced in the vicinity but is not yet complete.

In some instances cables and other assets within the shaded **"proposal area"** will be shown in a **bright magenta** colour, indicating that the proposed new work displayed within the shaded area is based on initial planning documentation. (refer to figure 9)

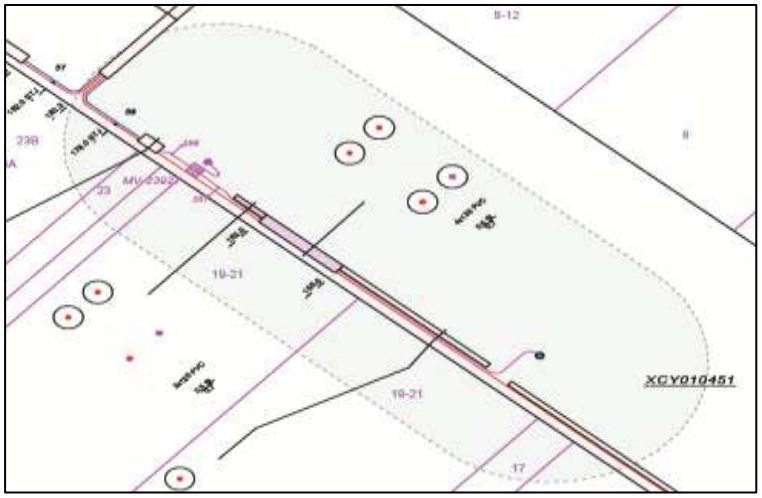


Figure 9

In other instances the shaded **"proposal area"** itself may be shown as a blue colour, indicating that the new work displayed within the shaded area on the Ausgrid plan is yet to include details regarding final depths and dimensioning. (refer to figure 10)

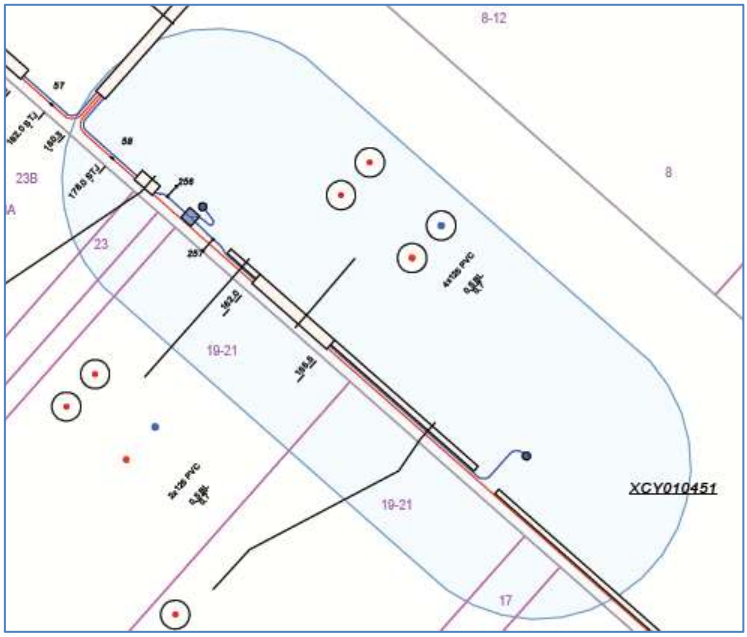


Figure 10

NOTE: In cases where these shaded **"proposal areas"** are displayed on Ausgrid plans.

"Ausgrid's design plans showing the proposed position of its underground cables, overhead lines and structures have been prepared solely for Ausgrid's own planning use. They show the proposed position of such underground cables, overhead lines and structures as proposed at the time of planning and have not necessarily been corrected to take into account any changes to road widths, road levels, fences and buildings subsequent to proposed installation.

Actual installations may vary from proposed installations as it may be necessary to take account of unforeseen above ground or subterranean constructions. Therefore, Ausgrid does not hold out that the design plans show more than the proposed presence or absence of its underground cables, overhead lines and structures in the street and will accept no liability for inaccuracies in the information shown on such design plans from any cause whatsoever."

Any further information regarding information displayed for "proposal areas" can be obtained by contacting the Ausgrid DBYD office at the number indicated on the response to your DBYD enquiry for further information.

8 Ausgrid (ISG) Map Grid

The pale grey line indicates the **1:1000 Ausgrid (ISG) map grid** border.
The pale grey annotation located in the corners of the Ausgrid plan window, indicates the 1:1000 Ausgrid (ISG) map grid reference.

The **1:1000 Ausgrid (ISG) map grid** border and reference on Ausgrid plans should be used when reading the **"joint report"** (see part 4 of this document for more detail) to accurately locate underground cables.

The buffer area shown on the plan should relate to the area requested on the original Dial Before you Dig request.

The **grid index box** can be used for reference where necessary (located in the bottom right corner of the Ausgrid plans), and will also indicate the buffer area shown on the plan.

9 Ausgrid "Distribution" and "Transmission" Plans

The Ausgrid plans supplied may identify both **"distribution"** and **"transmission"** voltage assets for the area defined in the DBYD request. (refer to figure 11)

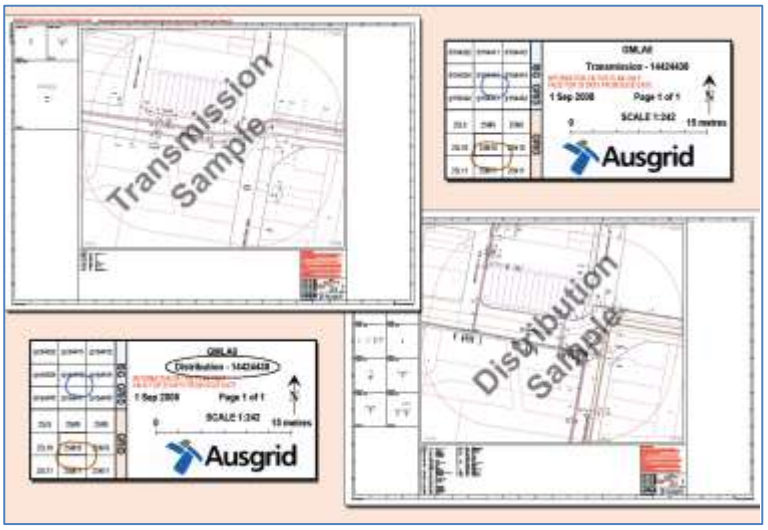


Figure 11

In the Sydney region, the Ausgrid plans are separately labelled as "**Distribution – nnnnnnn"** and **"Transmission – nnnnnnn"**, where **"nnnnnnn"** refers to the DBYD sequence number quoted.

In the Hunter region, the Ausgrid plans show combined **"distribution"** and **"transmission"** voltage assets, and are clearly labelled as **"Distr + Trans – nnnnnnn"** where **"nnnnnnn"** refers to the DBYD sequence number.

In the Hunter region, some DBYD requests are covered by PENGUIN grid references. In such cases, the Ausgrid Plans show the grid quoted with a cross-reference to a corresponding Ausgrid (ISG) map grid (eg: PENGUIN 136B3 – DP711, where DP711 is the Ausgrid (ISG) grid) to optimise the legibility of plans due to PENGUIN grid scale.

Some Hunter plans may have transmission cables in the area, when these cables are present there will be a warning printed at the top of the plan supplied:

WARNING: If there is work in the vicinity of transmission cables, Ausgrid must be contacted at least two weeks before the work is due to commence.

10 "Shifting Land Base" on Ausgrid Distribution and Transmission Plans

In some instances, the plans supplied may indicate road or property outlines that appear to have shifted in relation to the Ausgrid assets displayed. (refer to figure 12)

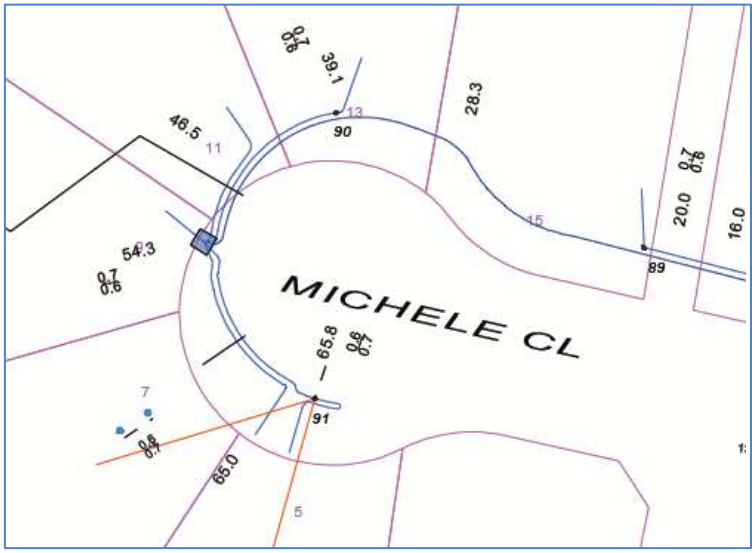


Figure 12

In such instances, always refer to the **"property line"** (in metres) and depth of **"cover"** (in metres) references displayed on the nearest relevant **"cross sections"** to obtain Ausgrid asset location information (see Reading Ausgrid Plans, clause 3, Cross Sections for more detail).

11 "Underground Earthing Infrastructure"

In some instances, the plans supplied may also indicate the presence of underground earthing infrastructure associated with underground and/or overhead Ausgrid assets.

The "Earth Point" symbol (refer to figure 13) will be shown on plans to minimize risk of disturbance or damage to any Ausgrid underground earthing infrastructure in the vicinity.

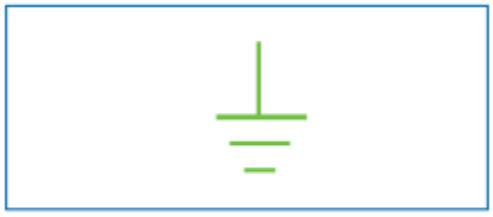


Figure 13

12 Aluminium Single Core Cables – Specific Excavation Hazard

Certain cables specifically illustrated in figures 14 & 15 below are susceptible to deterioration that may pose a risk of electric shock when working near them, particularly in damp ground.

For all work on or near Ausgrid's network (where workers have been trained in Ausgrid's "Work Near Underground Power Lines" course) the work practices outlined in NUS199 "Safe Electrical Working on Low Voltage Assets" section 8 for work near low voltage aluminium single core cable must be adhered to. Further information is also available to Accredited Service Providers in Safety Alert SA06_15 issued May 2015.

All other persons must contact Ausgrid before excavating near these cables to arrange for appropriate precautions to be applied.

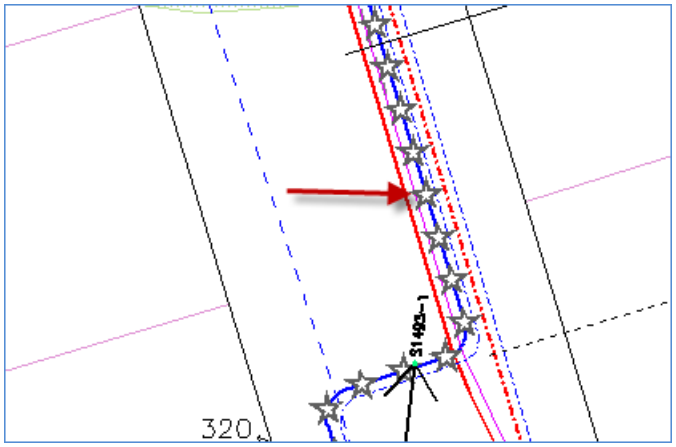


Figure 14

The "star" symbols over the cable indicate that it is susceptible to this deterioration.

Cables that are in duct lines have this symbology covered so an at-risk cable is indicated only within a cross section by a "#" appended to its cable code as illustrated below.

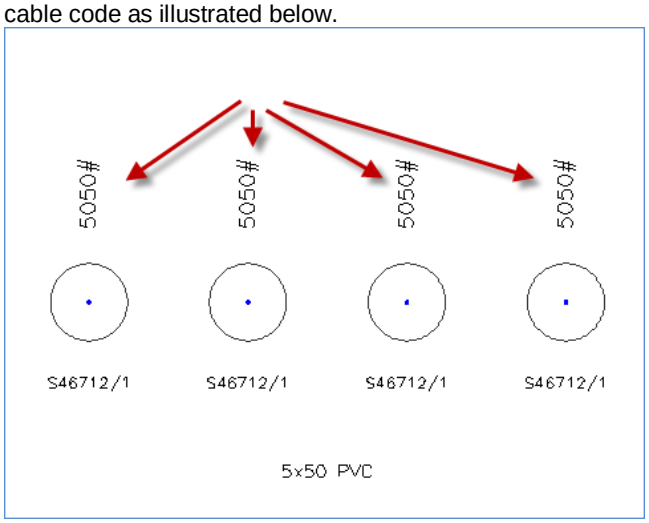


Figure 15

Ausgrid

Emergency Phone Number 131388

IMPORTANT INFORMATION

YOU MUST BE AWARE THAT:

1. There may be underground cables owned by other utilities, in the vicinity of your work, about which Ausgrid has no information.

2. Ausgrid does not usually keep plans of privately owned underground cables or its underground service cables on private property. (Refer NS 156 for further information.)

YOU MUST MAKE YOUR OWN ENQUIRIES IN RESPECT OF THESE CABLES.

YOU MUST UNDERSTAND THAT:

1. Ausgrid takes all reasonable care in providing details of its underground cables. However, owing to changes in road and footway alignments and levels, and the age and incompleteness of some records, it is not possible to conclusively specify the location of all of Ausgrid's underground cables. The accuracy and completeness of the information provided to you cannot be guaranteed. It is intended to be indicative only. It must not be **solely** relied upon when undertaking underground works.

2. Except to the extent that liability may not be capable of lawful exclusion, Ausgrid, its servants and agents will be under no liability whatsoever to any person for loss or damage (including indirect or consequential loss or damage) however caused (including without limitation, for breach of contract, negligence and breach of statute) which may be suffered or incurred from or in connection with the advice provided.

3. Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions must always be taken when undertaking any underground works. Ausgrid's Network Standard NS 156 specifies standards for working in the vicinity of underground cables. It is deemed to be part of this Advice, and it must be read by you.

YOU MUST READ NETWORK STANDARD NS 156, *WORKING NEAR OR AROUND UNDERGROUND CABLES.* IT IS PART OF THIS ADVICE.

MO712 - GX1

8x125 PVC

NA

1.0

Ref: E10

MO71214

MO71214

MO71214

MO71214

MCLAREN ST

KELROSE LANE

ROUTE OF 33KV CABLES SEE RP165

78.2

82.4

85.7

15.3

7.9

0.0

0.0

1.3.7

3.7

0.0

32.3

113.0

110.2

56.5

52.8

27.7

20.0

45.9

44.0

41.5

0.0

3.8

7.9

4.8

0.0

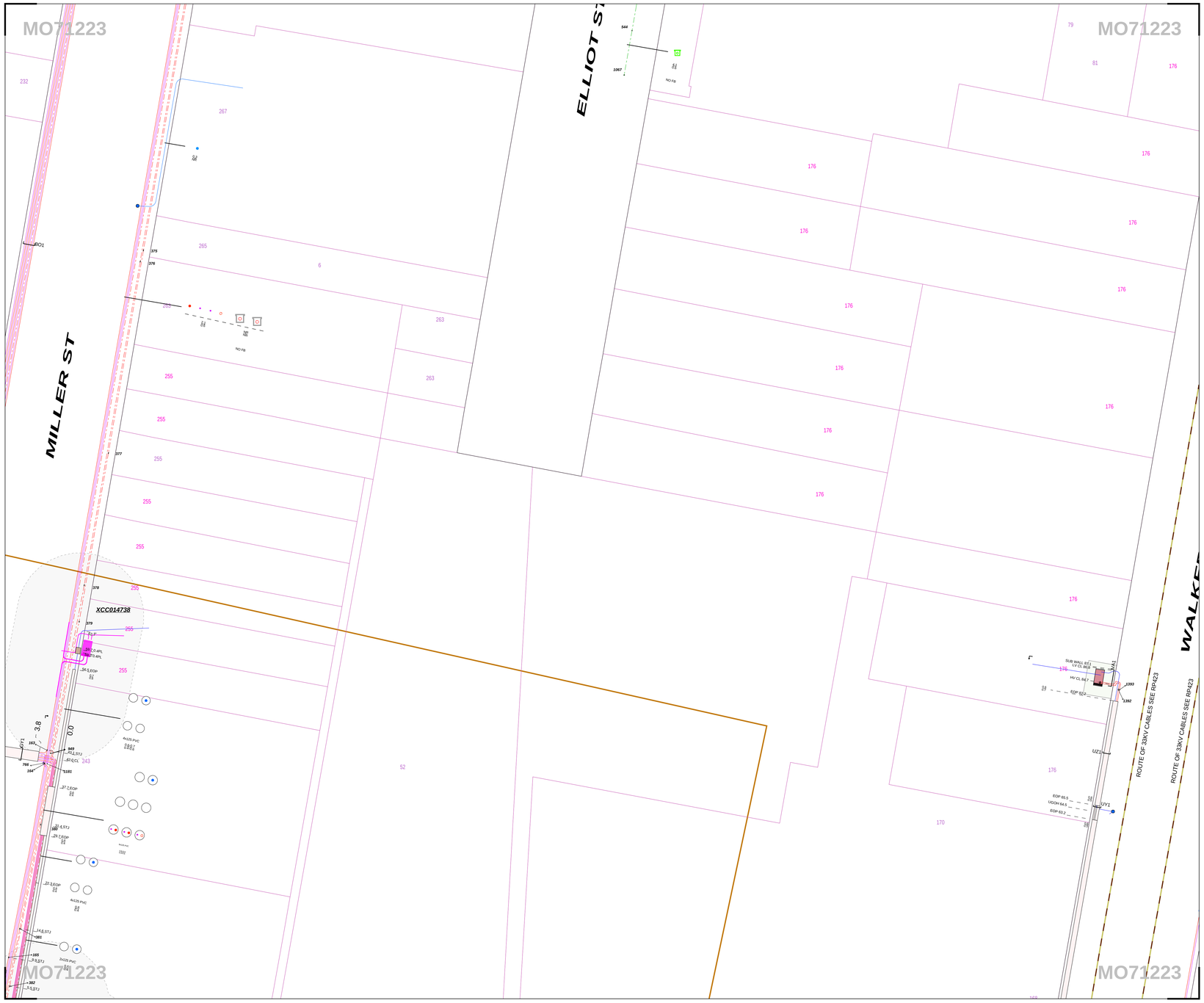
0.0

0.0

MO712 - GY1

8x125 PVC
NA
1.0

Ref: E3



JOINT DETAIL REPORT

No.	Blk Pg	PSCnt	Joint Location
Map: MO712			
163	2239-49	1,800.40	
164	2239-50	1,500.40	40.1 N OF MCLAREN ST
165	2237-6	1,291.00	
378			69.8 N OF MCLAREN ST
379			64 N OF MCLAREN ST
380			
381			
382			
766	2239-50	1,500.40	40.1 N OF MCLAREN ST
949	2239-49	1,700.60	42.3 N OF MCLAREN ST
1181	2239-50	1,500.40	40.7 N OF MCLAREN ST NPL

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the street.

Persons working near electricity networks must exercise care and will be held responsible for any damage caused.

You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.

Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets

as well as recommendations of Ausgrid's Network Standard NS156.

Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.

Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.

NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0

MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422
3F3	7G3	7H3
3F4	7G4	7H4
3F5	7G5	7H5

ISG GRID

GRID

MO71223GMLA0

Distribution - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

Page 1 of 1

N

1:251

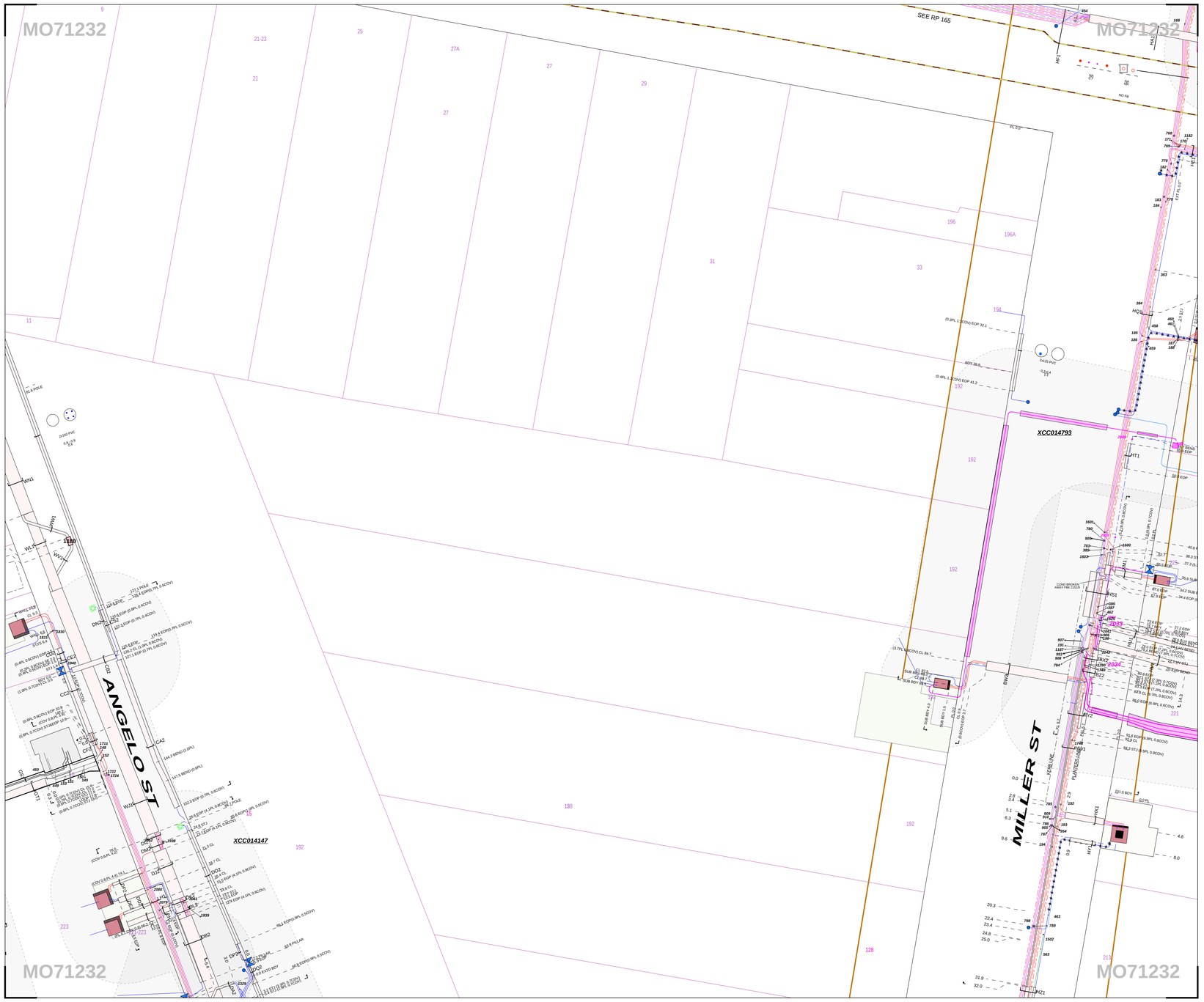
0 15 metres

Ausgrid

A0 MOCS_std_plot

1	2
MO712 - BW2 TSB 6x150 PVC 1x50 PVC NA 0.8 Ref: E9	MO712 - BX2 3x150 PVC 1x90 PVC 7.2 0.6 Ref: E10
MO712 - BZ2 3x150 PVC 1x90 PVC 7.2 0.6 Ref: E10	MO712 - HA1 6x140 FC NA 0.6 Ref: A10
MO712 - HE1 0.5 0.6 / 2.3 0.6 / NR NR / NR NR / 2.3 0.6 Ref: B10	MO712 - HF1 0.6 Ref: A10
MO712 - HQ1 1.7 0.7 / NR NR / 2x125 PVC 0.5 0.5 NO FB Ref: C10	MO712 - HS1 4x150 PVC 1x90 PVC 6.1 0.6 / 1.7 0.7 / NR NR NO FB / 2x140 PVC 0.5 0.5 Ref: D10
MO712 - HT1 1x140 PVC 0.5 --- 0.4 Ref: D10	MO712 - HU1 4x150 FC NA --- 0.8-1.3 Ref: E10
MO712 - HW1 1.7 0.7 / 1x150 PVC 1.2 0.4 / NR NR NO FB Ref: E9	MO712 - HX1 3x125 PVC NA 0.4 Ref: F10
MO712 - HY1 4x225 PVC Top 2 ducts are broken NA 0.5 Ref: F10	MO712 - HZ1 1.7 0.6 / 3x150 PVC 1.2 0.4 / NR NR NO FB / 1x150 PVC 0.5 0.5 Ref: G9
MO712 - XM1 4x150 PVC NA --- 0.7-0.8 Ref: D10	

11	12
MO712 - BY2 3x150 PVC 1x90 PVC 6.3 0.6 Ref: E9	


MO71232
SEE RP 165
ANGELO ST
MILLER ST
XCC014793
XCC014147
HQ1
HS1
HT1
HU1
HX1
HY1
HZ1
XM1
KERB LINE
PLANTERS LINE
CONC BROKEN AWAY FBK 23329
CONC BROKEN AWAY FBK 23328
NO FB
2x125 PVC
4x225 PVC
2x150 PVC
4x150 PVC
3x150 PVC
1x150 PVC
1x140 PVC
6x150 PVC
1x50 PVC
6x140 FC
3x125 PVC
4x100 PVC
1x90 PVC
2x140 PVC
1x100 PVC
1x80 PVC
1x50 PVC
1x40 PVC
1x25 PVC
1x20 PVC
1x15 PVC
1x10 PVC
1x6 PVC
1x4 PVC
1x2 PVC
1x1 PVC
1x0.5 PVC
1x0.25 PVC
1x0.1 PVC
1x0.05 PVC
1x0.01 PVC
1x0.005 PVC
1x0.001 PVC
1x0.0005 PVC
1x0.0001 PVC
1x0.00005 PVC
1x0.00001 PVC
1x0.000005 PVC
1x0.000001 PVC
1x0.0000005 PVC
1x0.0000001 PVC
1x0.00000005 PVC
1x0.00000001 PVC
1x0.000000005 PVC
1x0.000000001 PVC
1x0.0000000005 PVC
1x0.0000000001 PVC
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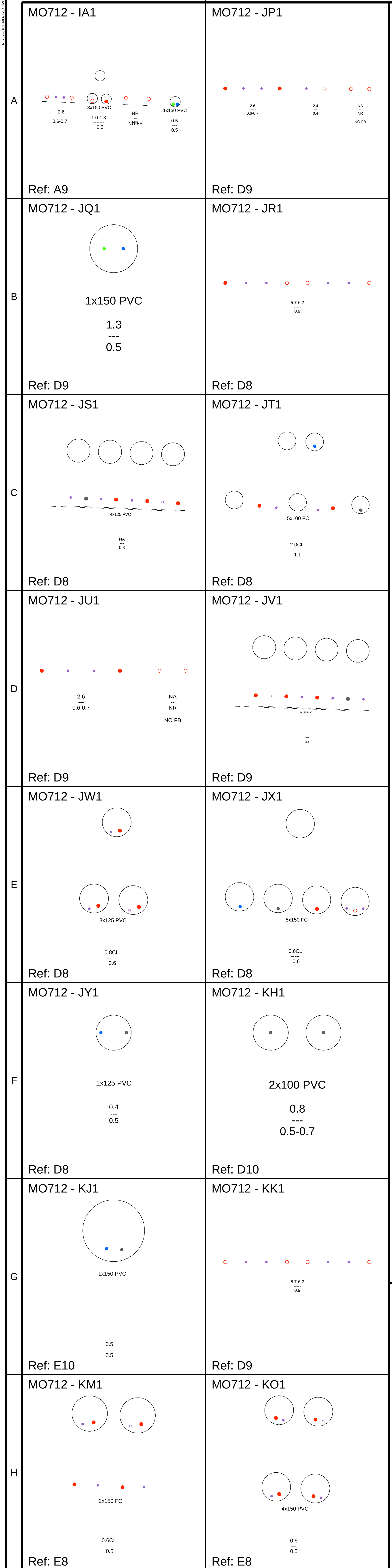

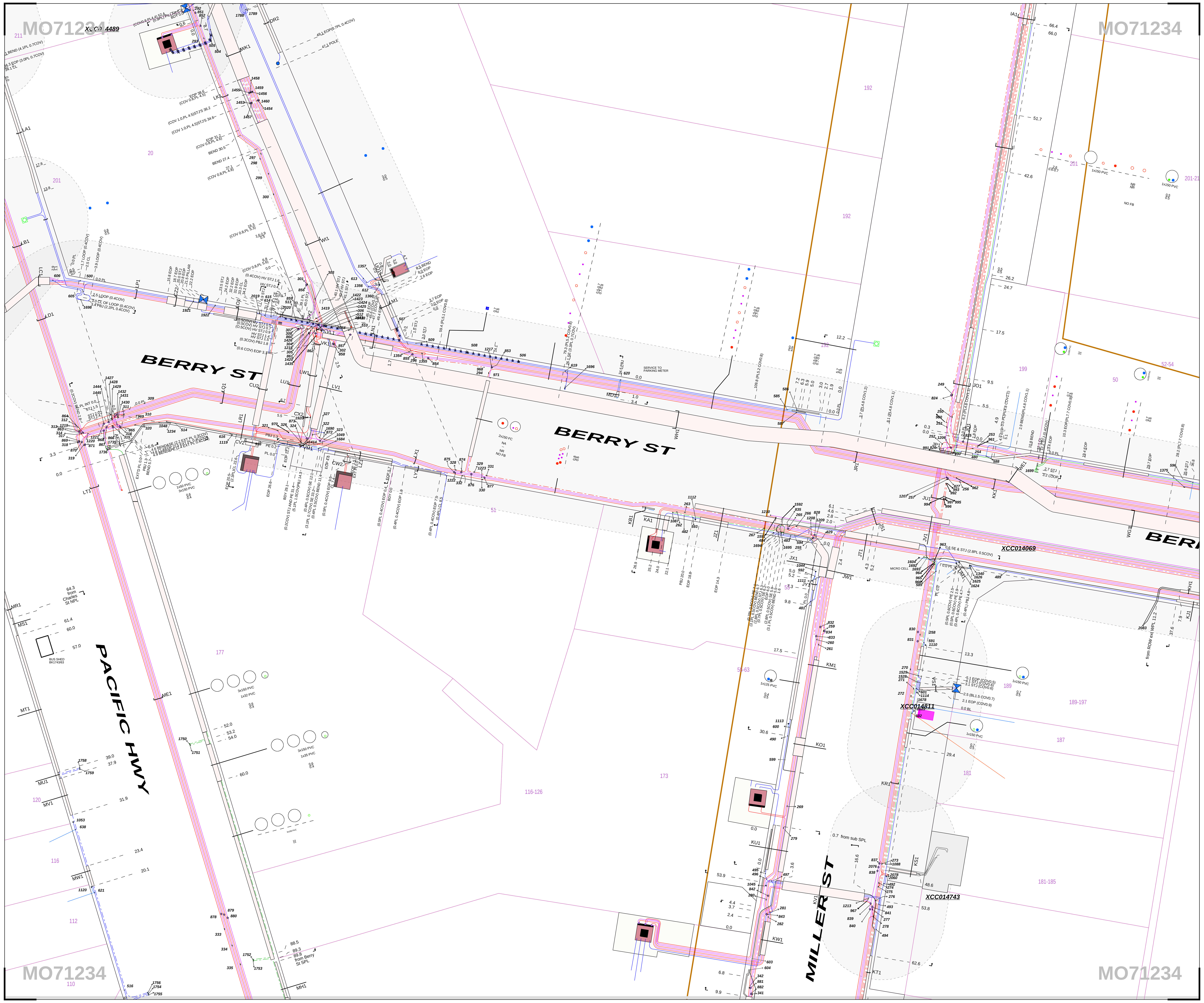

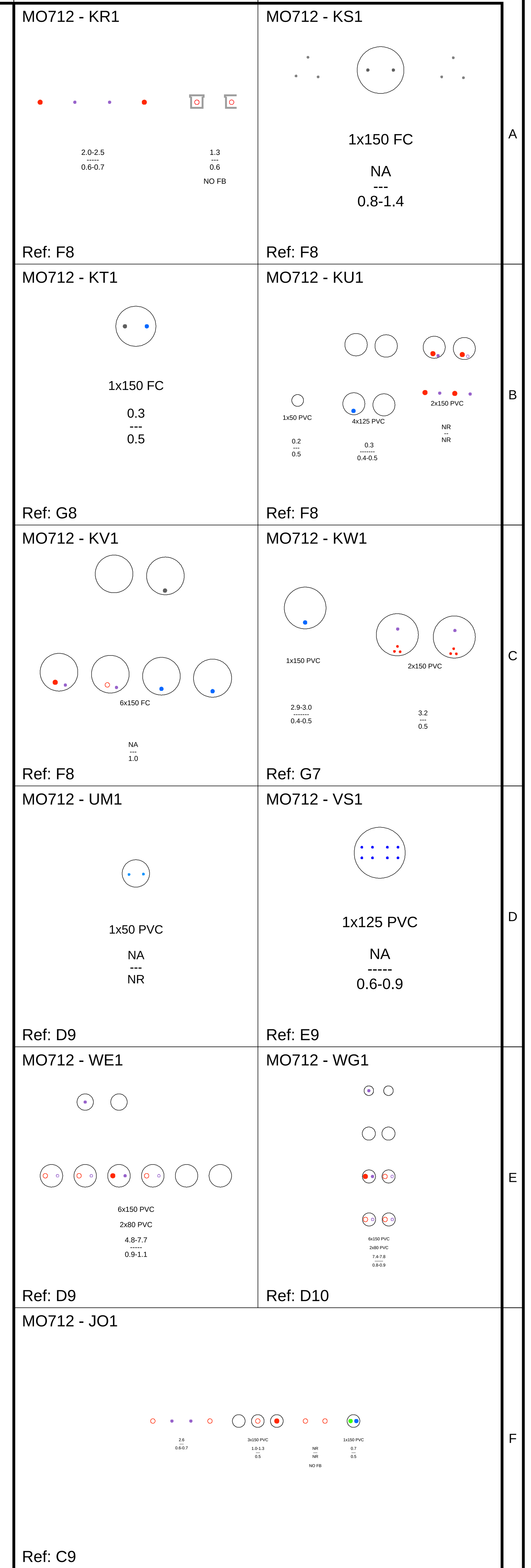

JOINT DETAIL REPORT

Map: MO712

No.	Bk-Pg	Pl/Cvr	Joint Location
249	922-59	2.40/0.60	6.5 N OF BERRY ST NPL
250	339-103	2.10/0.60	3.0 N OF BERRY ST NPL
251	1266-67	2.20/0.40	1.2 N OF BERRY ST NPL
252	922-59	2.40/0.60	0.9 S OF BERRY ST NPL
253	1266-55	0.60/0.60	2.5 E OF MILLER ST EPL
254	713-5	0.80/0.50	1.5 E OF MILLER ST EPL
255	1926-66	0.30/0.51	1.6 W OF MILLER ST WPL
256	1647-61	5.90/0.80	0.8 E OF MILLER ST EPL EXT
257	1647-61	5.90/0.80	5.9 S OF BERRY ST NPL 1.1 W OF MILLER ST EPL
258	48-77	2.21/0.66	11.6 S OF BERRY ST SPL
259	2047-71	1.40/0.61	13.3 S OF BERRY ST SPL
260	2101-95	0.71/0.51	14.8 S OF BERRY ST SPL
261	2047-75	0.61/0.51	15.5 S OF BERRY ST SPL
265	1647-12	1.40/0.61	4.8 W OF MILLER ST WPL
266	1926-63	1.09/0.51	3.7 W OF MILLER ST WPL
269	CH4-41	0.89/0.41	4.0 N OF SUB SPL
270	48-77	2.49/	17.2 S OF BERRY ST SPL
271		1.22/0.66	20.1 S OF BERRY ST SPL
272		1.37/0.66	21.3 S OF BERRY ST SPL
273	979-38	1.98/0.53	48.2 S OF BERRY ST SPL
274	979-38	1.98/0.61	51.2 S OF BERRY ST SPL
275	796-78	2.21/0.52	51.8 S OF BERRY ST SPL
276	1647-64	2.01/0.61	8.3 N OF EXT SUB SPL
277	1743-83	2.59/1.17	NA
278	1771-37	2.29/0.46	56.5 S OF BERRY ST SPL
279	CH4-41	0.79/0.41	0.5 N OF SUB SPL
280	2239-10	0.30/0.46	55.5 S OF BERRY ST SPL
281	2237-92	2.90/0.41	2.8 N OF SUB SPL
282	2239-10	/0.30	59.0 S OF BERRY ST SPL
341	2125-43	0.89/0.61	71.6 S OF BERRY ST SPL
342	2125-43	0.51/0.61	70.7 S OF BERRY ST PL
480	1139-310	1.30/0.40	2.7 E OF MILLER ST EPL
481	1416-21	0.51/0.51	9.1 S OF BERRY ST SPL
483	1416-24	0.61/0.51	4.3 W OF MILLER ST WPL
484	1221-33	0.51/0.41	7.0 W OF MILLER ST WPL
489	1221-43	0.51/0.41	10.4 E OF MILLER ST EPL
490	CH4-56	0.71/0.51	NA
492	1266-31	1.40/0.61	51.8 S OF BERRY ST SPL
493	979-38	0.84/0.61	54.6 S OF BERRY ST SPL
494	2238-25	0.61/0.69	58.5 S OF BERRY ST SPL
495	CH7-35	0.30/0.30	9.3 S OF SUB
496	CH7-47	1.30/0.99	8.5 S OF SUB
497	952-44	99.99/0.91	NA
585	1742-52	0.70/0.30	8.0 W OF MILLER ST WPL
586	1139-458	0.75/0.30	6.5 W OF MILLER ST WPL
587	1221-32	0.80/0.30	6.5 W OF MILLER ST WPL
588	1544-213	1.20/0.40	4.0 E OF MILLER ST EPL
589	CH35-50		1.3 S OF BERRY ST SPL
591	1139-316	0.60/0.45	12.7 S OF BERRY ST SPL
592	1139-315	/0.20	5.1 S OF BERRY ST SPL
594	1416-20	0.61/0.71	3.7 W OF MILLER ST WPL
596	1544-128	0.50/0.30	36.8 E OF MILLER ST EPL
599			NA
600	2210-81	0.50/0.50	29.2 S OF BERRY ST SPL
601	1139-317	0.70/0.50	20.0 S OF BERRY ST SPL
602	1139-318	0.60/0.50	24.0 S OF BERRY ST SPL
603	1221-25	0.71/0.41	67.2 S OF BERRY ST
604	1072-21	0.51/0.51	67.4 S OF BERRY ST SPL
824	922-59	2.60/0.70	6.4 N OF BERRY ST NPL
825	713-5	0.50/0.60	ON MILLER ST EPL
826	713-5	0.50/0.60	1.8 W OF MILLER ST EPL
827	1647-61	5.90/0.80	1.1 W OF MILLER ST EPL AND 5.9 S OF BERRY ST NPL
828	2151-18		NA
829	2151-18		NA
830	48-77	2.39/	11.2 S OF BERRY ST SPL
831	48-NR	2.31/0.66	12.6 S OF BERRY ST SPL
832	2047-75	0.51/0.61	12.8 S OF BERRY ST SPL
833	2101-95	0.61/0.51	14.3 S OF BERRY ST SPL
834	2047-75	1.50/0.61	13.3 S OF BERRY ST SPL
835	1647-12	1.50/0.79	4.8 W OF MILLER ST WPL
837	979-38	2.29/0.61	49.4 S OF BERRY ST SPL
838	979-38	1.83/0.61	49.6 S OF BERRY ST SPL
839	1771-37	2.44/0.69	54.9 S OF BERRY ST SPL
840	1647-64	2.49/0.71	7.0 N OF EXT SUB SPL
841	796-78	2.44/0.69	55.1 S OF BERRY ST SPL
842		0.51/0.51	6.3 N OF ROW NPL
843	2239-10	0.10/0.30	59.1 S OF BERRY ST
881	2125-43	0.51/0.61	70.7 S OF BERRY ST SPL
882	2125-43	0.89/0.61	71.6 S OF BERRY ST SPL
960	1266-67	2.40/0.40	2.0 N OF BERRY ST NPL
961	1266-55	0.60/0.60	2.5 E OF MILLER ST EPL
962	1647-61	5.90/0.80	ON MILLER ST EPL EXT AND 5.9 S OF BERRY ST NPL
963	360-59	1.22/0.61	ON BERRY ST SPL
964	360-59	1.22/0.61	ON BERRY ST SPL
965	360-59	1.22/0.61	ON BERRY ST SPL
966	360-59	1.22/0.61	ON BERRY ST SPL
967	1647-64	2.50/1.20	8.1 N OF SUB 3915 EXT NPL
990	360-59	2.60/0.60	1.2 W OF MILLER ST EPL 2.6 S OF BERRY ST NPL
991	360-59	2.60/0.60	1.2 W OF MILLER ST EPL 2.6 S OF BERRY ST NPL
992	360-59	2.60/0.60	1.2 W OF MILLER ST EPL 2.6 S OF BERRY ST NPL
993	360-59	2.60/0.60	1.2 W OF MILLER ST EPL 2.6 S OF BERRY ST NPL
994	1647-61	5.30/0.60	1.1 W OF MILLER ST EPL 5.3 S OF BERRY ST NPL
995	1647-61	5.30/0.60	1.1 W OF MILLER ST EPL 5.3 S OF BERRY ST NPL
996	1647-61	6.50/0.60	1.1 W OF MILLER ST EPL 6.5 S OF BERRY ST NPL
997	1647-61	6.50/0.60	6.5 S OF BERRY ST AND 1.1 W OF MILLER ST EPL
1044	1416-24	0.41/0.51	4.3 S OF BERRY ST SPL
1045	2238-22	0.71/1.09	53.7 S OF BERRY ST
1088			NA
1110	1139-316	0.40/0.40	13.5 S OF BERRY ST SPL
1111	1139-315		5.6 S OF BERRY ST SPL
1113	CH5-10	0.30/0.40	18.5 N OF SUB 7106 SPL
1114	1139-317	0.60/0.40	21.0 S OF BERRY ST SPL
1115	1139-318+...	0.40/0.40	24.0 S OF BERRY ST SPL
1206	713-5	/0.60	2.1 S OF BERRY ST NPL
1207	1647-61	5.90/0.80	1.1 W OF MILLER ST EPL AND 5.9 S OF BERRY ST NPL
1208	2151-18		NA
1209	1416-19		NA
1210	2012-41	0.61/0.51	8.0 W OF MILLER ST WPL
1213	1647-64	2.50/1.20	8.2 N OF EXT NPL OF SUB 3915
1340	SN121-004	0.40/	4.8m east of Miller St
1375	SN147-075	0.60/6.00	35.6 S/E OF MILLER ST PL
1528	LN08-192	0.70/0.60	3.1 N OF HOUSE 187 NBL
1529	LN08-192	0.70/0.60	4.1 N OF HOUSE 187 NBL
1591	LN10-0108	0.70/0.50	7.1 W OF MILLER ST WPL
1592	LN10-0108	0.70/0.50	6.2 W OF MILLER ST WPL
1604			
1624	LN12-0096	0.50/0.60	2.5 E OF MILLER ST EPL
1625	LN12-0096	0.50/0.60	2.9 E OF MILLER ST EPL
1626	LN12-0096	0.40/0.60	4.7 E OF MILLER ST EPL
1678			BFWR
1692	LN13-0536	2.80/0.50	0.6 N OF BERRY ST N PL
1693	LN13-0536	2.80/0.50	0.6 N OF BERRY ST N PL
1694	LN13-0535	2.80/0.50	6.3 W OF MILLER ST W PL
1695	LN13-0535	2.80/0.50	5.9 W OF MILLER ST W PL
1699	LN13-0545	2.70/0.40	12.2 E OF MILLER ST E PL
2060	SN18-0004	/0.60	49.9 S OF BERRY ST SPL
2076	SN18-0011	/0.70	49.9 S OF BERRY ST SPL
2078	SN18-0003	/0.70	49.7 S OF BERRY ST SPL
2083		0.30/0.50	6.8 E OF 52-54 BERRY ST E BDY

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the street.
Persons working near electricity networks must exercise care and will be held responsible for any damage caused.
You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.
Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets
as well as recommendations of Ausgrid's Network Standard NS156.
Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.
Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.
NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0.

MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

ISG GRID

7F5	7G5	7H5
7F6	7G6	7H6
7F7	7G7	7H7

GRID

MO71234GMLA0

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INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

Page 1 of 1

N

1:251

0 **15 metres**

Ausgrid

A0 MOCS_std_plot

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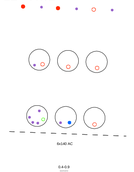
MO712 - DS1



Ref: B6

MO712 - HC1



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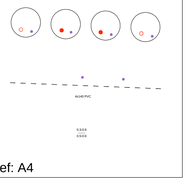
MO712 - HH1



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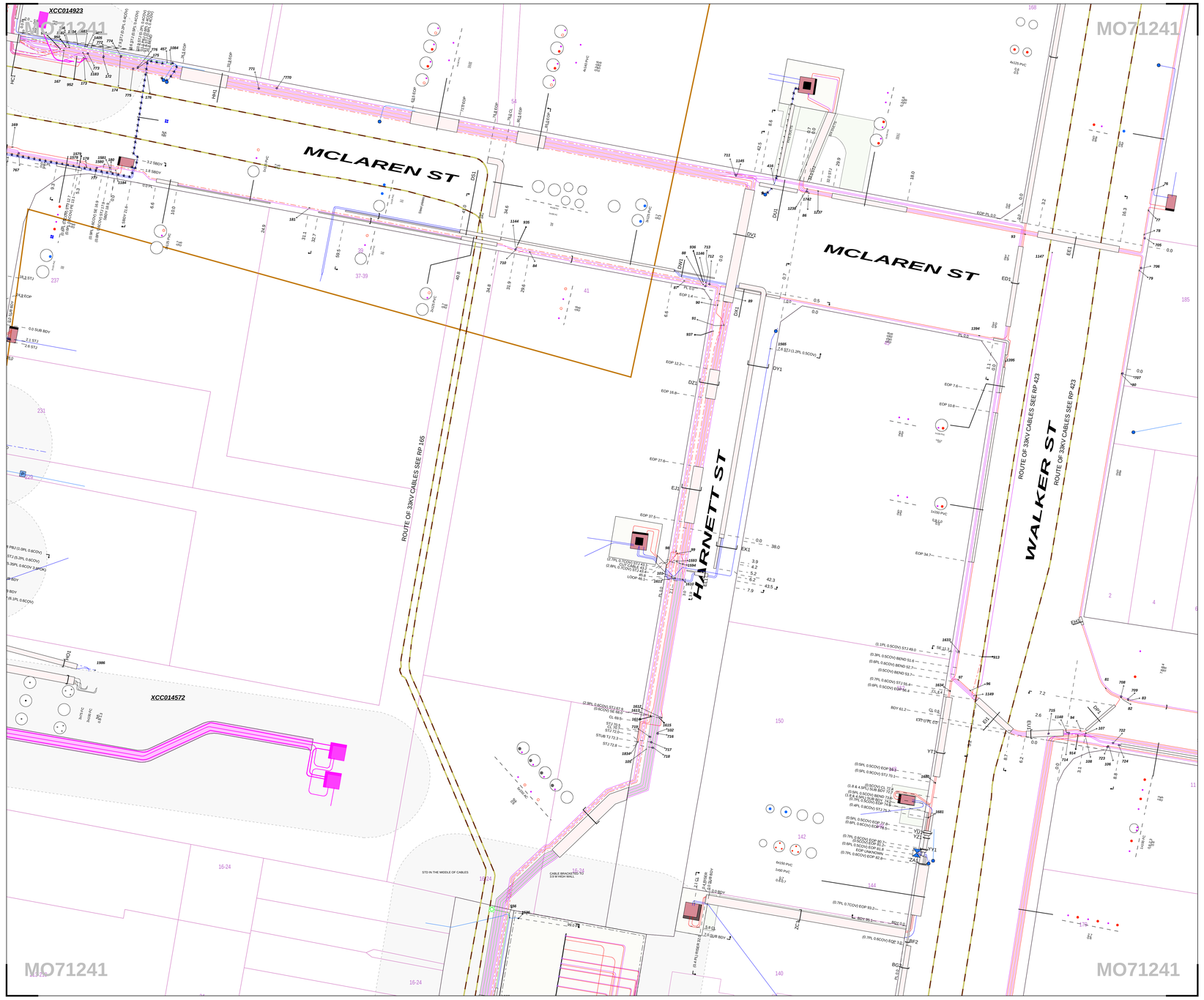

JOINT DETAIL REPORT

No....	Bk-Pg.....	PSCnr.....	Joint Location.....
Map: MO712			
84	1602-11	0.500/0.80	29.6 W OF HARNETT ST WPL
166	2239-67	0.605/0.40	6.6 E OF MILLER ST
167	2239-53	0.900/0.40	7.6 E OF MILLER ST
169	2239-52	0.800/0.70	2.2 E OF MILLER ST EPL
172	1568-83	0.605/0.50	14.0 E OF MILLER ST
173	2239-17	0.505/0.50	10.0 E OF MILLER ST
174	1568-83	0.305/0.50	16.6 E OF MILLER ST
175	1568-83	0.605/0.50	19.6 E OF MILLER ST
176	1568-83	0.900/0.40	21.1 E OF MILLER ST
178	1743-98	0.805/0.40	4.6 W OF KOSK EBL EXT
180	359-179	0.600/0.80	0.8 W OF KOSK EBL EXT
181	CH14-11	0.900/0.80	31.1 E OF KOSK EPL EXT
457	1252-80	0.600/0.50	24.6 E OF MILLER ST
710	1569-70	0.500/0.70	31.9 W OF HARNETT ST WPL
767	2239-51	0.800/0.70	3.3 E OF MILLER ST EPL
770	615-21	0.600/0.80	41.8 E OF MILLER ST
771	615-21	0.800/0.80	39.0 E OF MILLER ST
772	1568-83	0.600/0.50	14.0 E OF MILLER ST
773	2239-32	0.400/0.40	11.4 E OF MILLER ST
774	1568-83	0.305/0.50	16.6 E OF MILLER ST
775	1568-83	0.900/0.50	18.6 E OF MILLER ST
776	1568-83	0.600/0.50	19.6 E OF MILLER ST
777	1647-42	0.800/0.70	3.0 W OF KOSK EBL EXT
935	1569-70	0.500/0.70	31.9 W OF HARNETT ST WPL
950	2239-67	0.405/0.50	8.6 E OF MILLER ST
951	2239-53	0.900/0.40	7.6 E OF MILLER ST
952	2239-17	1.000/0.50	9.7 E OF MILLER ST
1084	564-47	0.305/0.80	24.7 E OF MILLER ST
1144	1569-70	0.500/0.70	33.9 W OF HARNETT ST WPL
1183	2239-32	0.400/0.40	11.4 E OF MILLER ST
1184	359-174	0.80/	19.0 E OF MILLER ST EPL
1403	N504-0025	0.600/0.40	11.1m From Miller St Eastern PL
1404	N504-0025	0.505/0.40	9.6m From Miller St Eastern PL
1405	N504-0025	0.405/0.60	11.8m From Miller St Eastern PL
1578	LN33-0066	0.800/0.80	12.7 E OF MILLER ST EXT EPL
1579	LN33-0066	0.900/0.80	13.1 E OF MILLER ST EXT EPL
1580	LN33-0066	0.900/0.80	16.9 E OF MILLER ST EXT EPL
1581	LN33-0066	0.800/0.80	12.7 E OF MILLER ST EXT EPL
1582	LN33-0371	0.200/0.40	7.9 E OF MILLER ST EPL
1583	LN33-0371	0.200/0.40	10.9 E OF MILLER ST EPL

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You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.

Ausgrid recommends that a non-destructive assessment of electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets

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MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

ISC GRID

7F3	7G3	7H3
7F4	7G4	7H4
7F5	7G5	7H5

GRID

MO71241GMLA0

Distribution - 70228101

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1:251

0 15 metres

Ausgrid

A0 MOCS_std_plot

N_70228101_MO71241GMLA0_1.mapf

MO712 - AB2

Ref: D5

MO712 - IM1

Ref: D5

MO712 - IS1

Ref: D4

MO712 - IT1

Ref: D3

MO712 - IU1

1x150 PVC

0.5

0.4

Ref: D4

MO712 - IV1

Ref: D3

MO712 - JG1

Ref: D4

MO712 - JH1

Ref: E4

MO712 - JJ1

Ref: E5

MO712 - JM1

Ref: F3

MO712 - KD1

Ref: D3

MO712 - KE1

Ref: D3

MO712 - KF1

2x100 PVC

0.8

0.5-0.7

Ref: D3

MO712 - KG1

1x150 PVC

NR

NR

Ref: D3

MO712 - KI1

2x100 PVC

0.8

0.5-0.7

Ref: D3

MO712 - WF1

Ref: D4



JOINT DETAIL REPORT

No....	Bk-Pg.....	RiCor.....	Joint Location.....
Map: MO712			
204		0.500.70	3.0 W OF WARD ST WPL
205		0.800/0.70	2.2 W OF WARD ST WPL
208	813-49	0.610.50	2.2 E OF ROW WESTERN BUILDING LINE
209	952-66	0.600.50	36.6 W OF WARD ST WPL
210	952-66	0.500.70	39.3 W OF WARD ST WPL
211	1399-82	0.800/0.70	1.4 W OF DENISON ST WPL
212	1399-88	1.000/0.80	4.7 W OF DENISON ST WPL
234	1648-78	0.400/0.70	18.5 OF BERRY ST SPL
236	1648-78	0.700.70	2.3 S OF BERRY ST SPL
237	1402-89	1.100/0.80	9.2 S OF BERRY ST SPL
238	1402-89	1.100/0.80	12.4 S OF BERRY ST SPL
239	374-55	0.500/0.50	17.7 S OF BERRY ST SPL
240	649-83		3.7 E OF DENISON ST EFL
241	1070-5		4.6 E OF DENISON ST EFL
242	1070-5		5.4 E OF DENISON ST EFL
243	1416-6	0.700.40	7.0 E OF DENISON ST EFL
244	1070-5		6.7 E OF DENISON ST EFL
245	649-83		7.0 E OF DENISON ST EFL
246	1416-6	0.700.50	3.0 E OF DENISON ST EFL
248	374-55	0.800.50	36.4 S OF BERRY ST SPL
268	813-49	0.700.50	1.1 W OF ROW WESTERN BUILDING FACE
465	1221-89	0.300.50	2.8 W OF WARD ST WPL
468	1601-91	0.300.60	10.6 E OF ROW WPL
469	1601-91	0.500.50	10.7 E OF ROW WPL
470	1601-92	1.300.60	10.7 E OF ROW WPL
471	1601-92	1.000/0.60	10.5 E OF ROW WPL
472	1601-91	1.000.50	7.5 E OF ROW WPL
473	1250-92	0.400.40	3.9 W OF DENISON ST WPL
474	1128-83	0.500/0.30	16.6 W OF DENISON ST WPL
477	2151-23	0.400.40	6.6 E OF DENISON ST EFL
478	1498-89	0.400.40	1.4 E OF DENISON ST EFL
479	1702-48	2.100.50	45.3 S OF BERRY ST SPL
485	1279-67	0.500/0.40	7.4 W OF ROW WPL
486	1601-89	1.000.30	4.5 W OF ROW WESTERN BUILDING FACE
487	1128-83A	0.400.40	2.9 W OF ROW WESTERN BUILDING FACE
488	1128-83A	0.400.40	3.3 W OF ROW WESTERN BUILDING FACE
568	1128-455	0.400.50	37.2 W OF WARD ST WPL
569	1128-429	0.400.50	3.2 N OF BERRY ST WPL
571	1250-66	0.500.40	7.8 W OF DENISON ST WPL
572	1544-233	0.400.50	9.3 W OF DENISON ST WPL
573	1807-84	0.400.50	17.3 W OF DENISON ST WPL
574	1807-84	0.500.50	15.2 W OF DENISON ST WPL
575	1807-84	0.400.50	15.2 W OF DENISON ST WPL
578	1807-85	2.500.40	17.0 S OF BERRY ST SPL
579	1340-320	0.500.40	17.1 E OF DENISON ST WPL
583	1340-87	0.800.30	40.1 S OF BERRY ST SPL
584	1139-445	0.300.50	42.0 S OF BERRY ST SPL
595	2102-42	1.300.40	3.6 W OF ROW WESTERN BUILDING FACE
597	1802-69	1.000.30	2.5 W OF ROW WESTERN BUILDING FACE
598	2102-42	1.300.40	3.0 W OF ROW WESTERN BUILDING FACE
795		0.400.50	2.1 W OF WARD ST WPL
797	1601-68	0.800.40	0.8 E OF ROW WESTERN BUILDING LINE
798	952-66	0.500.70	36.6 W OF WARD ST WPL
799	952-66	0.600.50	36.6 W OF WARD ST WPL
800	408-39	0.800.60	2.0 W OF DENISON ST WPL
801	1399-88	0.700.60	4.4 W OF DENISON ST WPL
816	1304-31	0.500.40	0.3 N OF BERRY ST SPL
817	408-39	0.800.60	1.4 S OF BERRY ST SPL
818	1304-31	0.600.50	20.3 S OF BERRY ST SPL
819	374-55	0.800.50	21.8 S OF BERRY ST SPL
820	1807-73	1.100.60	2.4 E OF DENISON ST EFL
821	1807-73	0.900.60	1.1 E OF DENISON ST EFL
822	2151-17	1.000.50	9.4 E OF DENISON ST EFL
823	2151-17	1.000.50	ASSUMED IST AS PILOT IN SERVICE
836	1601-68	0.800.40	0.8 E OF ROW WESTERN BUILDING LINE
956		1.000.60	1.5 W OF WARD ST WPL
957		0.700.60	2.1 W OF WARD ST WPL
1103	1139-429	0.500.40	2.3 N OF BERRY ST WPL
1104		NA	
1105	1544-233	0.600.50	9.3 W OF DENISON ST WPL
1192		0.900.60	1.5 W OF WARD ST WPL
1193		0.600.60	2.1 W OF WARD ST WPL
1366	1402-89	0.300.30	
1376	SK147-075	0.600.60	41.3 SE OF MILLER ST PL
1377	SK147-037	0.500.80	2.0 E OF WARD ST WPL
1378	SK147-037	0.600.80	2.0 E OF WARD ST WPL
1384	SK147-096	0.1500.70	11.8m S of Berry St.
1385	SK147-096	0.5500.80	11.8m S of Berry St.
1386	SK147-096	0.1500.70	11.7m S of Berry St.
1387		0.1500.70	
1538	1139-455		
1541		/0.30	6.7 E OF DENISON ST EPL
1676	LN13-0125	2.100.50	1.25 OF BERRY ST SPL
1677	LN13-0125	2.500.70	2.75 OF BERRY ST SPL
1691	LN13-0546	2.000.30	0.1 E OF WARD ST W PL
1701	LN13-0544	2.100.70	18.2 W OF DENISON ST W PL
1725	LN13-0559	1.100.70	5.3 S OF BERRY ST NPL
1726	LN13-0559	1.200.70	5.3 S OF BERRY ST NPL
1727	LN13-0559	1.300.70	5.3 S OF BERRY ST NPL
1728			
1729			
1730			
1848			
1842			
1871			
1873	SN15-0855	1.300.70	8.6M NTH CNR BERRY & WARD ST EXT PL
1874			
1890			
1892			
1894			
1896			
1898			
1900			
1901			
1908			
1928	SN16-0027	2.500.80	0.2s OF BERRY ST N PL
2023	SN16-0916	0.500.50	1.6 N BERRY ST NPL
2024	SN16-0916	0.300.50	1.6 N BERRY ST NPL
2025	SN16-0916	0.500.50	2.4 N BERRY ST NPL
2026	SN16-0916	0.300.50	2.4 N BERRY ST NPL
2039			
2081	SN18-0020	0.100.50	6.8 E OF SO-54 BERRY ST E BDY
2082		0.300.50	6.8 E OF SO-54 BERRY ST E BDY

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MO71222	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

SSI GRID

GRID

MO71243GMLA0

Distribution - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

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1:251

0 15 metres

N

Ausgrid

MO714 - AH2

3x125 PVC

0.4-0.5

0.6-0.7

Ref: E8

MO714 - AI2

3x125 PVC

0.4

0.6-0.7

Ref: E8

MO714 - AZ1

Ref: D7

MO714 - BD1

3x100 AC

NA

0.6-0.9

Ref: E7

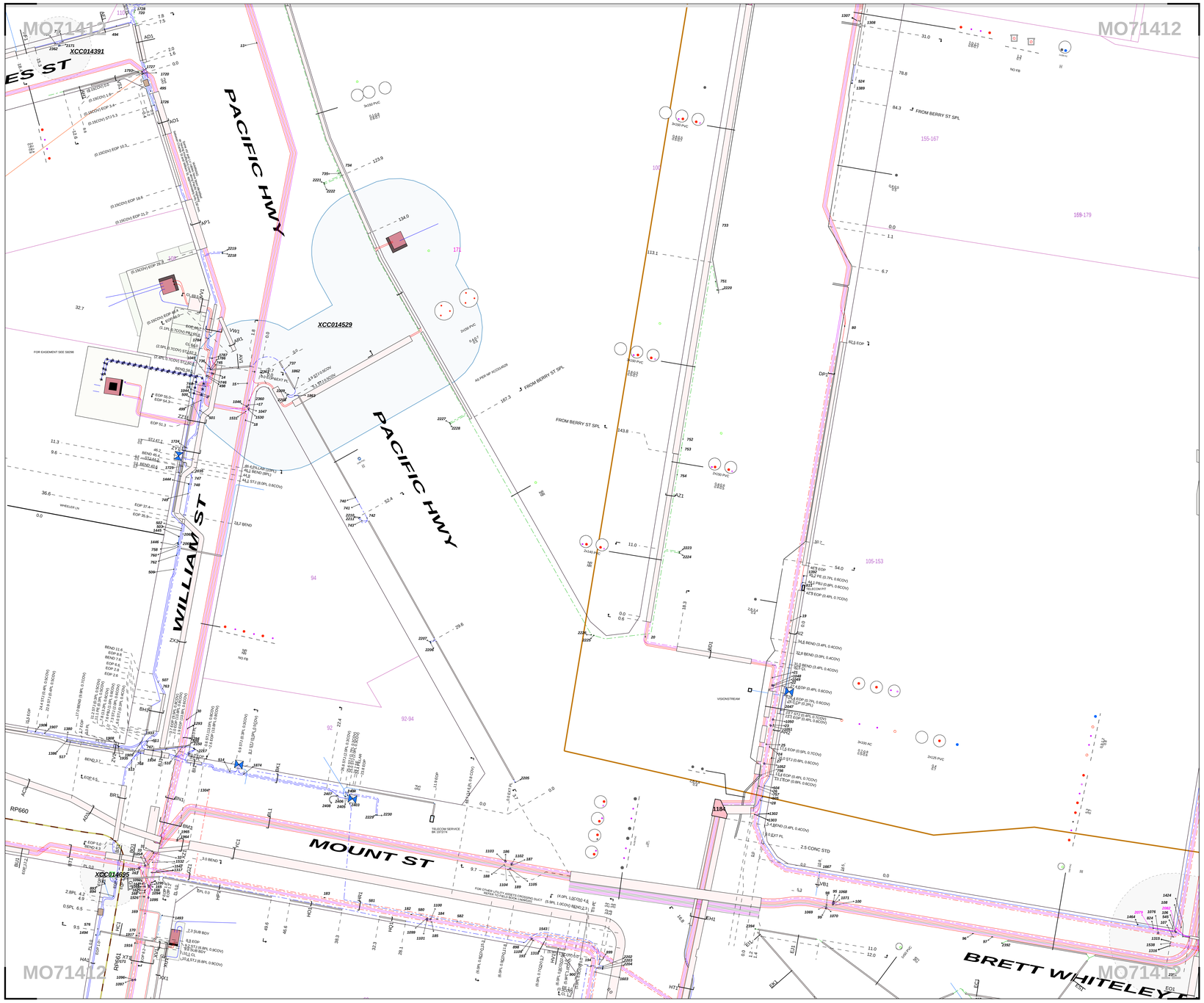
MO714 - DP1

NR 0.5

NR 0.5

NO FB

Ref: C8



JOINT DETAIL REPORT

No.	Sh.Pts	PSCvr	Joint Location
Map: MO714			
19	275-161	0.460-61	37.8 N OF MOUNT ST NPL
20	1647-24	0.515-61	3.0 S OF SPLAY
21	1647-26	0.615-61	28.5 N OF MOUNT ST NPL
22	1647-26	0.890-61	26.4 N OF MOUNT ST NPL
23	275-61	0.460-61	21.2 N OF MOUNT ST NPL
24	286-60	0.460-61	17.7 N OF MOUNT ST NPL
25	275-16	0.760-61	16.0 N OF MOUNT ST NPL
26	275-161	0.760-64	13.3 N OF MOUNT ST NPL
27	1986-43	0.615-61	16.0 N OF MOUNT ST NPL
80	1986-46	0.515-61	85.0 N OF MOUNT ST NPL
504	1986-19	0.615-38	11.5 N OF MOUNT ST NPL
524	796-63	0.300-46	81.2 S OF BERRY ST SPL
733	1053-79	0.615-46	107.0 S OF BERRY ST SPL
751	1072-23	2.110-41	116.0 S OF BERRY ST SPL
752	1647-23	0.790-51	28.7 N OF MOUNT ST NPL
753	1647-23	0.790-51	27.3 N OF MOUNT ST NPL
754	1172-24	0.42	23.0 N OF MOUNT ST NPL
756	1221-31	2.590-41	13.4 N OF MOUNT ST NPL
757	275-64	1.230-91	11.0 N OF MOUNT ST NPL
811	1986-18	0.800-60	44.1 N OF MOUNT ST NPL
1048	1647-26	0.715-61	27.3 N OF MOUNT ST NPL
1049	1647-26	0.700-60	27.3 N OF MOUNT ST NPL
1050	275-61	0.615-61	22.0 N OF MOUNT ST NPL
1051	275-61	0.615-61	21.0 N OF MOUNT ST NPL
1052	275-61	0.615-61	14.9 N OF MOUNT ST NPL
1307	1221-26	0.460-51	31.0 OF RIGHT ANGLE BENT
1308	1221-26	0.460-51	31.0 N OF RIGHT ANGLE BEND
1389	1340-275	0.500-60	21.7 N OF RIGHT ANGLE BEND
1392	1986-18	0.715-61	45.2 N OF MOUNT ST NPL
2047	UN11-0364	0.400-70	23.7 N PACIFIC HWY NPL
2220			NOT RECORDED
2223		2.400-40	NOT RECORDED
2224		2.400-40	NOT RECORDED
2225			NOT RECORDED
2226			NOT RECORDED

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MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

ISG GRID

7F6	7G6	7H6
7F7	7G7	7H7
7F8	7G8	7H8

GRID

MO71412GMLA0

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7 Apr 2018

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N

1:251

0 15 metres

Ausgrid

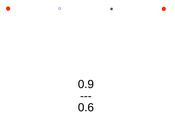
A0 MOCS_std_plot

MO714 - CB1



Ref: A4

MO714 - CE1



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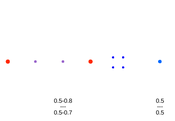
MO714 - CN1



Ref: B4

MO714 - DH1



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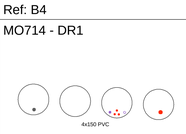
MO714 - DR1



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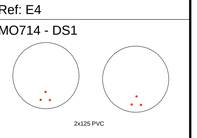
MO714 - DS1



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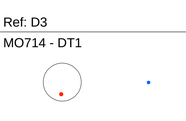

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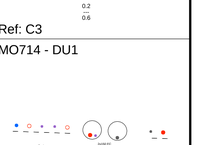

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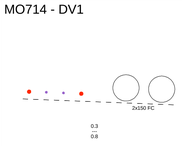

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MO714 - DW1



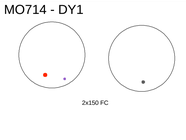
Ref: E3

MO714 - DX1



Ref: E3

MO714 - DY1



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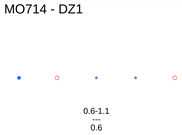

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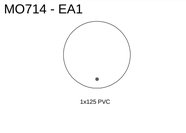
MO714 - EA1



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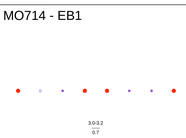
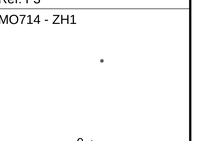
MO714 - EB1



Ref: F3

MO714 - ZH1



Ref: B4

MO714 - CY1



Ref: D3

MO714 - CU1

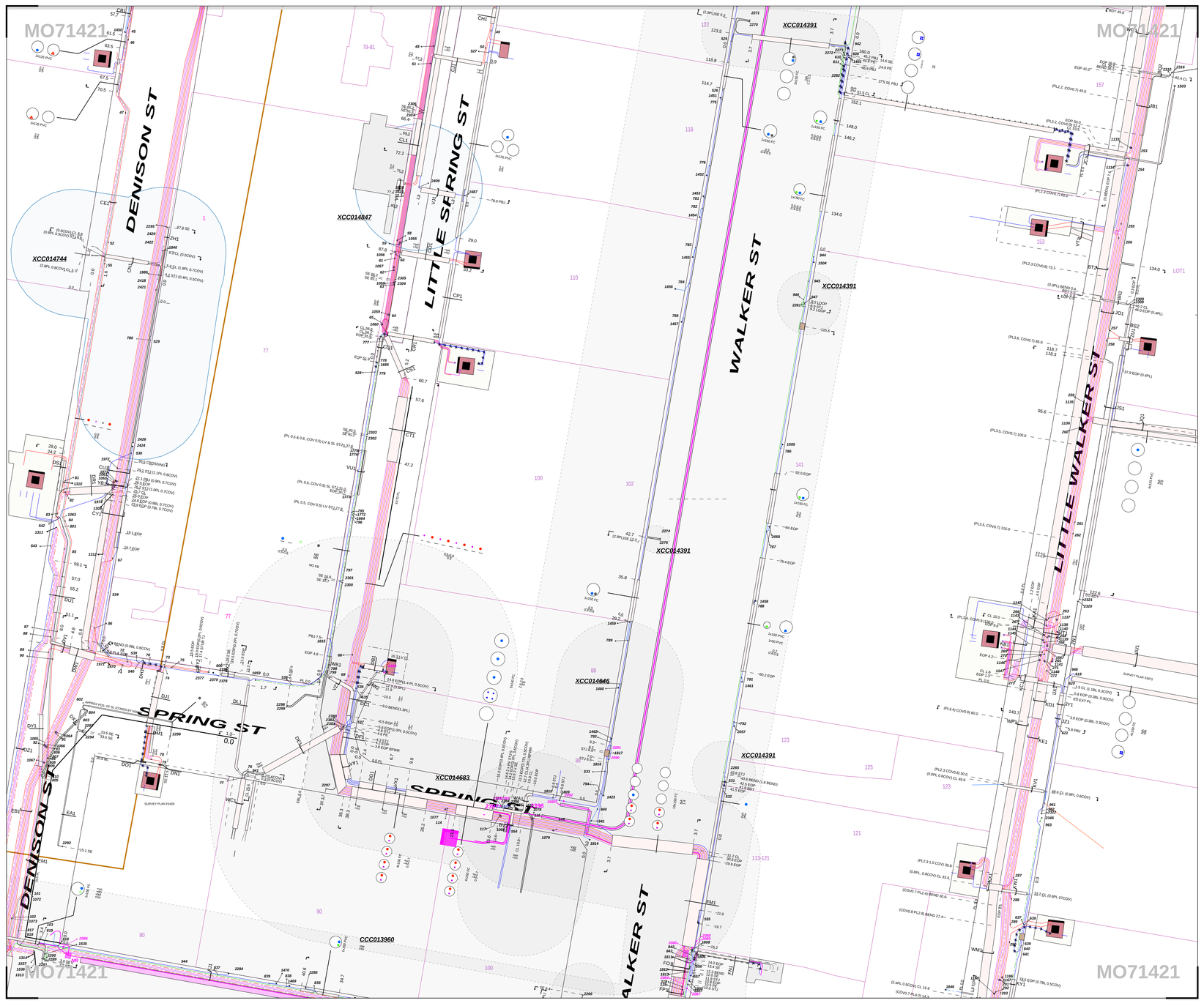


Ref: C3

MO714 - YB1



Ref: D3



JOINT DETAIL REPORT

No....	Blk Pg	PSCxr.....	Joint Location .....
Map: MO714			
45	1702-46	0.61/2.89	+1974.6 S OF BERRY ST SPL
46	374-55	0.53/0.53	62.0 S OF BERRY ST SPL
47	1702-46	0.51/0.79	73.5 S OF BERRY ST SPL
52	2126-59	2.21/0.51	0.8 S OF SUB NPL
53	2126-59	1.75/0.51	2.0 S OF SUB NPL
55	2126-54	2.11/0.51	4.2 S OF SUB SPL
67	1070-75	0.89/0.30	14.9 N OF SPRING ST NPL
70	1648-48	0.61/0.51	7.8 E OF DENISON ST EPL
71	1602-36	0.79/0.71	3.8 E OF DENISON ST EPL
72	1602-36	0.71/0.79	4.5 E OF DENISON ST EPL
81	1070-77	0.71/0.51	25.9 N OF SPRING ST EXTD NPL
82	CH5-57	2.90/0.71	23.6 N OF SPRING ST EXT NPL
83	CH5-57	0.61/0.20	20.6 N OF SPRING ST EXT NPL
84	409-28	1.14/5.79	19.7 N OF SPRING ST EXT NPL
85	627-53	3.20/-	15.2 N OF SPRING ST EXT NPL
86	1602-36	0.89/0.71	3.6 N OF SPRING ST NPL
87	1312-2	2.59/0.71	3.2 N OF SPRING ST EXT NPL
88	1312-2	2.21/0.71	1.2 N OF SPRING ST EXT NPL
89	1312-3	2.31/0.71	1.8 S OF SPRING ST EXT NPL
90	1312-2	2.59/0.71	2.2 S OF SPRING ST EXT NPL
91	813-67	0.38/0.53	3.6 S OF SPRING ST OLD SPL
92	813-69	1.52/0.61	6.2 S OF SPRING ST OLD SPL
93	805-43	2.29/0.88	6.4 S OF SPRING ST OLD SPL
94	805-43	1.90/0.88	8.1 S OF SPRING ST OLD SPL
529	1470-71	0.41/0.61	49.9 N OF SPRING ST NPL
530	1250-89	0.51/0.51	31.8 N OF SPRING ST NPL
534	1537-34	0.30/0.71	8.4 N OF SPRING ST NPL
539	1250-87	0.30/0.41	4.5 E OF DENISON ST EPL
540	1250-87	0.51/0.41	6.3 E OF DENISON ST EPL
542	CH5-57	0.61/0.20	19.4 N OF SPRING ST EXT NPL
543	CH5-57	0.61/0.20	15.4 N OF SPRING ST EXT NPL
780	1470-71	0.61/0.41	49.8 N OF SPRING ST NPL
801			NA
802	2210-11	2.69/0.20	6.6 N OF SPRING ST SPL
803	2210-11	2.69/0.20	6.1 N OF SPRING ST SPL
804	2210-31	2.90/0.41	6.4 N OF SPRING ST SPL
805	1222-52	6.81/0.61	21.0 N OF MOUNT ST NPL
806	2126-9	1.80/0.61	7.9 S OF SPRING ST OLD SPL
807	2126-9	1.80/0.61	7.9 S OF SPRING ST OLD SPL
808	2126-9	3.40/0.61	9.5 S OF SPRING ST OLD SPL
809	2126-9	3.40/0.61	9.5 S OF SPRING ST OLD SPL
810	1221-52	6.80/0.61	21.0 N OF MOUNT ST NPL
1061	1070-76	1.30/0.41	27.0 N OF SPRING ST NPL
1062	1070-76	1.30/0.41	27.0 N OF SPRING ST NPL
1063	408-28	0.91/0.53	20.1 N OF SPRING ST EXT NPL
1064	81347	0.38/0.53	3.9 S OF SPRING ST OLD SPL
1065	813-69	1.52/0.61	6.2 S OF SPRING ST OLD SPL
1066	805-43	1.29/0.88	6.4 S OF SPRING ST OLD SPL
1067	805-43	1.98/0.88	8.8 S OF SPRING ST OLD SPL
1309	1070-76	0.89/0.41	26.5 N OF SPRING ST EXTD NPL
1310	1070-77	0.71/0.51	25.7 N OF SPRING ST EXT NPL
1311	627-53		18.3 N OF SPRING ST EXT NPL
1312	1070-75	1.19/0.30	15.3 N OD SPRING ST NPL
1450	1139-446		62.0 S OF BERRY ST SPL
1840			
1870	LN09-0549	0.70/0.80	1.5 E OF DENISON ST EXTD EPL
1871	LN09-0549	0.70/0.90	1.1 E OF DENISON ST EXTD EPL
1872	LN09-0555	1.10/0.80	35.1 N OF SPRING ST NPL
1973	LN09-0555	0.90/0.70	27.1 N OF SPRING ST EXTD NPL
1974	LN09-0555	1.00/0.70	26.2 N OF SPRING ST EXTD NPL
1986	LN09-0705	0.40/0.50	4.7 N OF 105-153 DENISON ST EXT N BDY
1987	LN09-0002	0.80/0.50	6.8 N OF 105-153 DENISON ST N BDY
2292	SN15-0574	2.40/0.50	15.1 N OF MOUNT ST N PL
2293	SN15-0574	2.50/0.40	33.6 N OF MOUNT ST N PL
2294	SN15-0574	2.50/0.40	33.5 N OF MOUNT ST N PL
2295	SN15-0575	1.50/0.40	87.9 N OF SPRING ST N PL
2418			
2419			
2420			
2421			
2422			
2423			
2424			
2425			
2426			

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the area.

Persons working near electricity networks must exercise care and will be held responsible for any damage caused.

You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.

Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets

as well as recommendations of Ausgrid's Network Standard NS156.

Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.

Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.

NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0

MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

ISG GRID

701	746	
707	722	747
713	728	748

GRID

MO71421GMLA0

Distribution - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

Page 1 of 1

7 Apr 2018

1:251

0 — 15 metres

N

Ausgrid

A0 MOCS_std_plot

R_70228101_MO71421GMLA0_A0_1.mapt

You are working near Transmission Cables. You must contact Ausgrid on (02) 4951 9200 at least two weeks before work commences. See Ausgrid Network Standard NS156.



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MO71232	MO71241	MO71242
MO71234	MO71243	MO71244
MO71412	MO71421	MO71422

ISG GRID

GRID

394	704	744
395	705	745
396	706	746

MO71232GMLA0

Transmission - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

Page 1 of 1

1:251

0 15 metres

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Ausgrid

A0 TR_MOCS_std_plot

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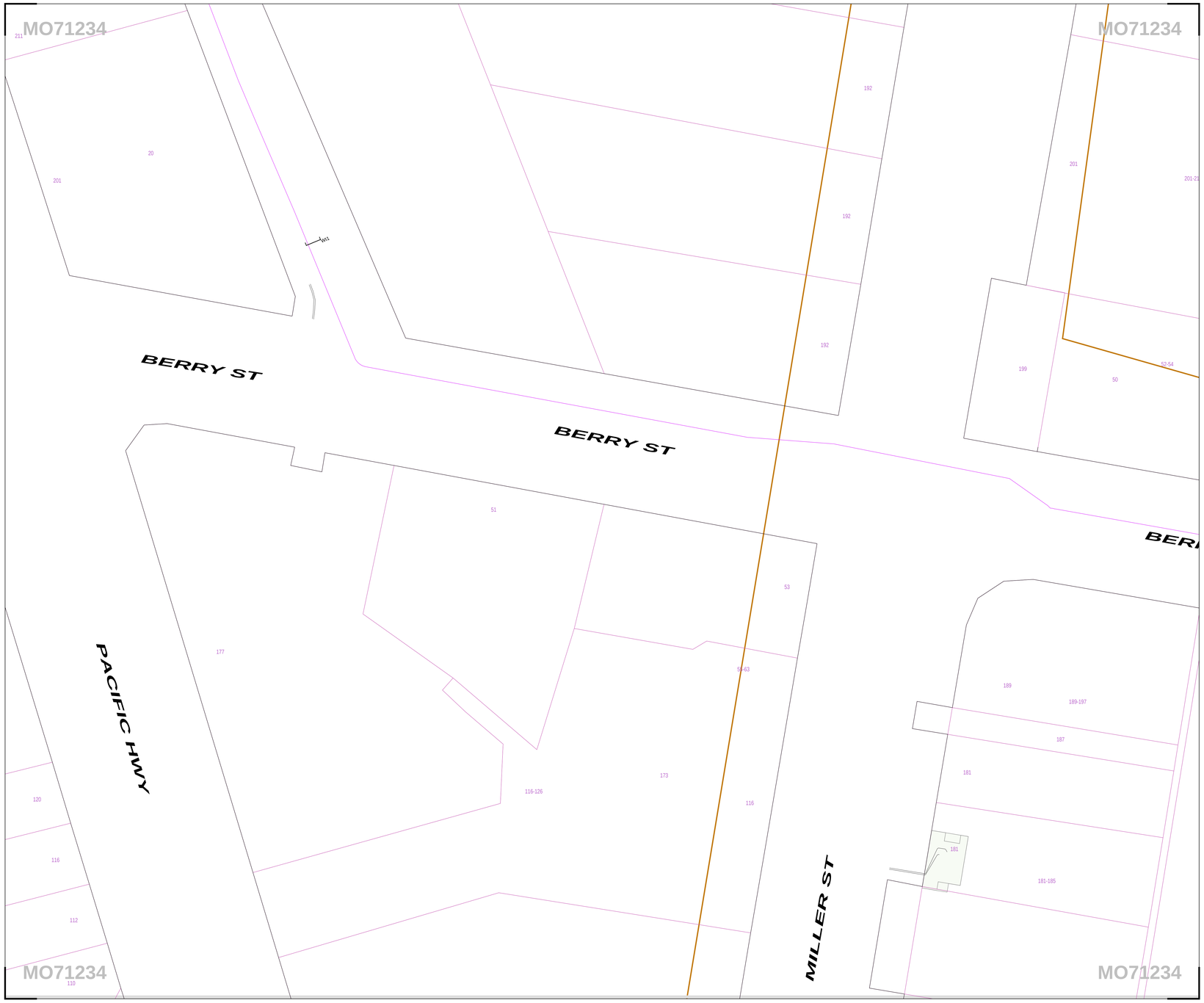

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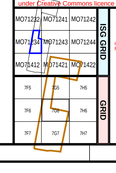
as well as recommendations of Ausgrid's Network Standard NS156.

Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present in substations, poles or towers.

Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.

NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property Information (c) 2016, used under Creative Commons licence version 4.0



MO71234GMLA0

Transmission - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

Page 1 of 1

7 Apr 2018

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0 — 15 metres

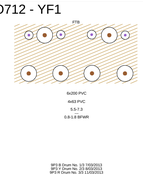
Ausgrid

A0 TR_MOCS_std_plot

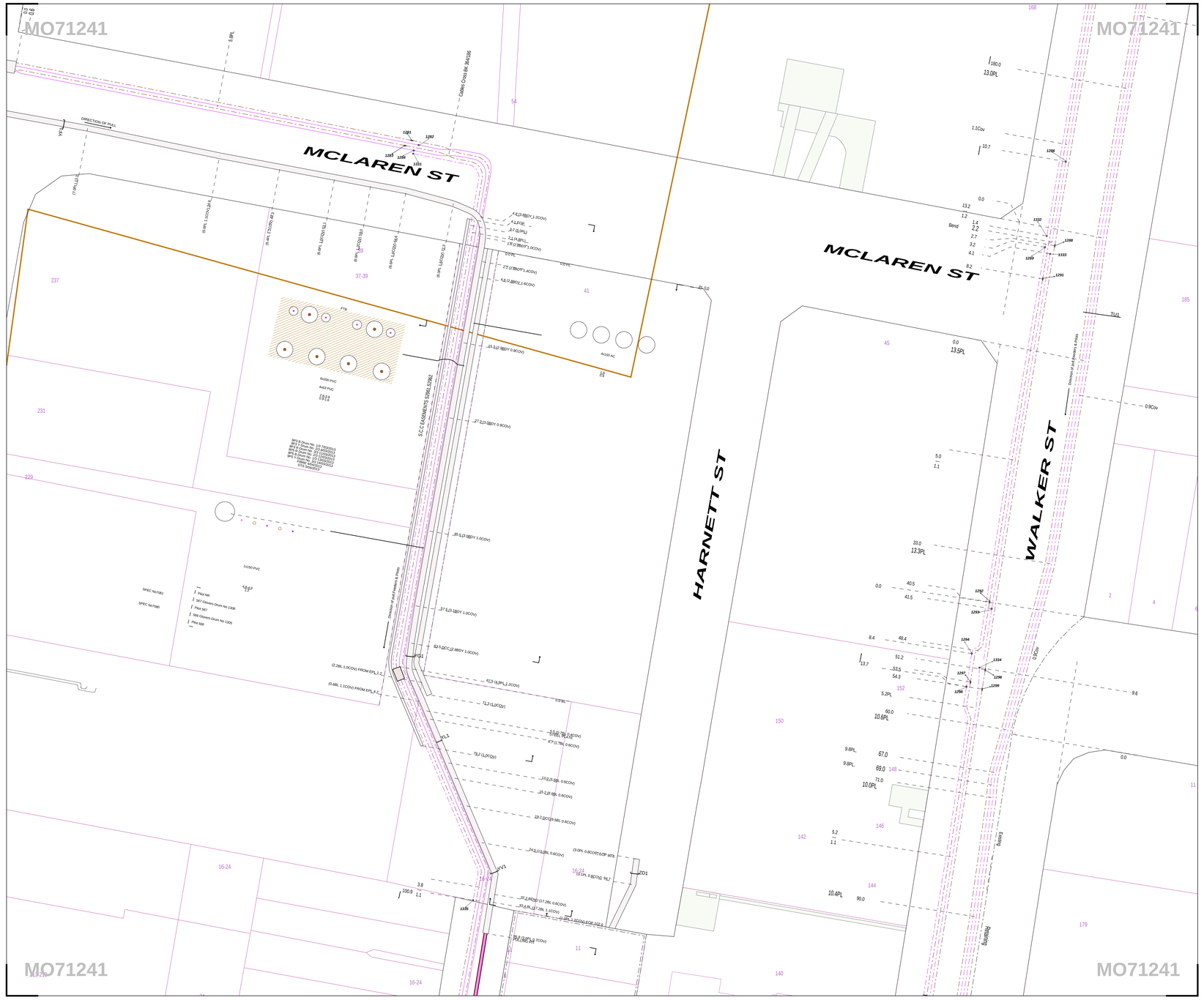
TR_A_70228101_MO71234GMLA0_V1.mapd

You are working near Transmission Cables. You must contact Ausgrid on (02) 4951 9200 at least two weeks before work commences. See Ausgrid Network Standard NS156.

MO712 - YF1



Ref: A3



JOINT DETAIL REPORT

No....	Blk.Pa.....	FSCxt.....	Joint Location.....
Map: MO712			
1281	364-186	5.90/1.10	64.3 E of W.P.L.Miller St.
1282	364-186	6.10/1.10	65.5 E of Miller St.W.P.L.
1283	364-186	6.20/1.40	63.1 E of W.P.L.Miller St.
1284	364-186	6.20/1.10	64.9 E of W.P.L.Miller St.
1331	364-55	6.00/0.90	51.2 W of W.P.L.Harnett St.

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the street.
Persons working near electricity networks must exercise care and will be held responsible for any damage caused.
You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables. Cables may also be energised.
Underground cables may be a cable sheath or conductor; shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets
as well as recommendations of Ausgrid's Network Standard NS156.
Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.
Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.
NOTE: 1. You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret them. 2. This plan information includes data from the NSW Digital Cadastral Database - Land and Property Information (c) 2016, used under Creative Commons Attribution 3.0 version 3.0.

MO71232	MO71241	MO71242	55G GRID
MO71234	MO71243	MO71244	
MO71412	MO71421	MO71422	
703	703	703	GRID
704	704	704	
705	705	705	

MO71241GMLA0

Transmission - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

Page 1 of 1

1:251

0 15 metres

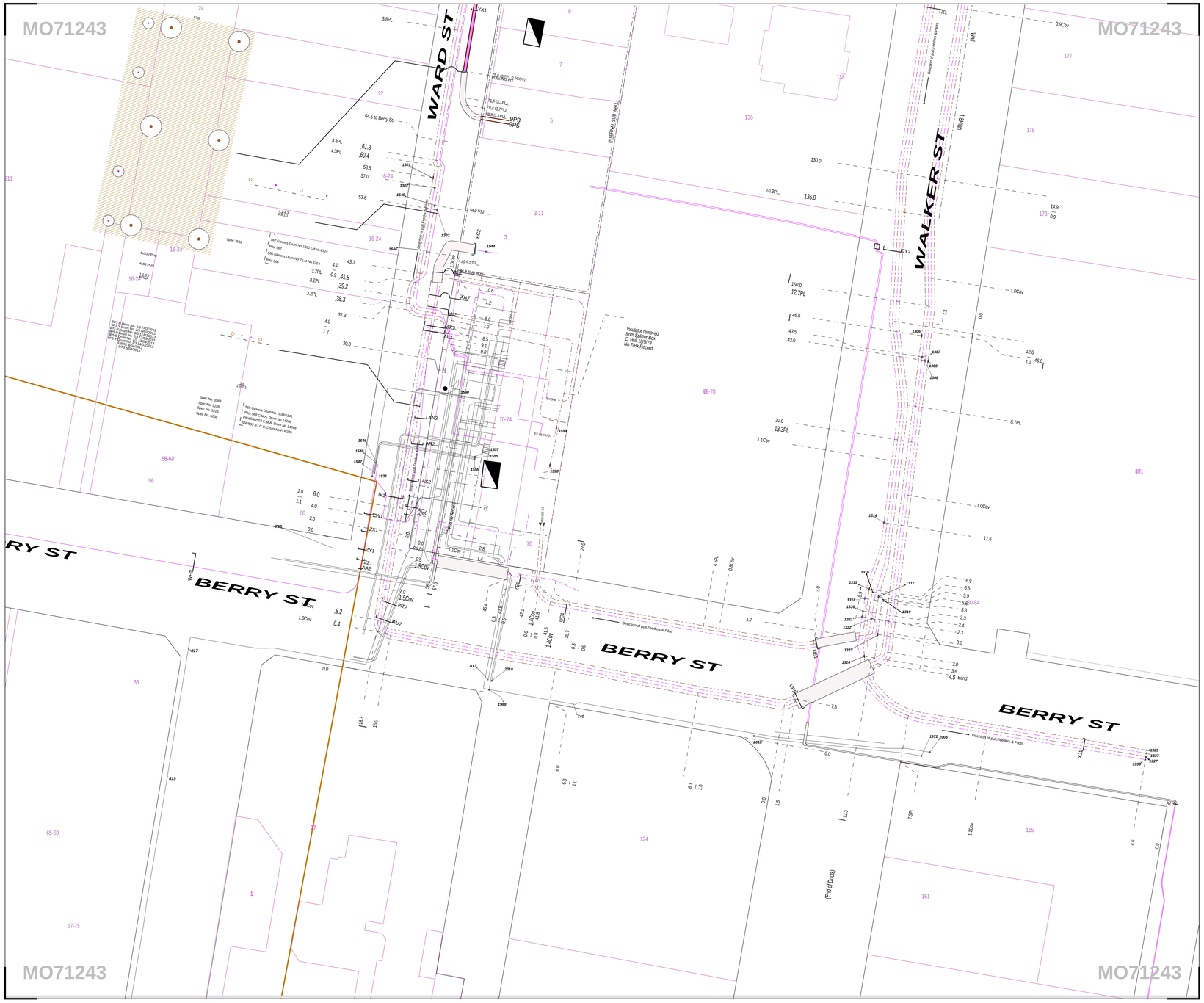
N

Ausgrid

You are working near Transmission Cables. You must contact Ausgrid on (02) 4951 9200 at least two weeks before work commences. See Ausgrid Network Standard NS156.

MO712 - WF1

Ref: D4



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MO71232	MO71241	MO71242	
MO71234	MO71243	MO71244	ISG GRID
MO71412	MO71421	MO71422	
395	396	396	
396	397	397	GRID
397	707	707	

MO71243GMLA0

Transmission - 70228101

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

7 Apr 2018

Page 1 of 1

1:251

0 15 metres

Ausgrid

A0 TR_MOCS_std_plot

Response Cover Letter

Date: 10/04/2019

AAPT (PowerTel) Limited
GPO Box 7041 Sydney 2001
Phone: 1800 786 306
A/H: 1800 786 306

To:
Mr David Wall - Customer ID: 1960272
Arcadis
levell16 - 580 George Street
Sydney NSW 2000

Email: david.wall@arcadis.com
Phone: 02 89079000
Fax: Not Supplied
Mobile: 0416742110



Dear Mr David Wall

The following is our response to your Dial Before You Dig enquiry.

AAPT ASSETS ARE AFFECTED BY YOUR ENQUIRY 82196079

Sequence Number:	82196079
Location:	Denison Street North Sydney NSW 2060
Commencement Date:	30/04/2019

In relation to your enquiry at the above address, AAPT (PowerTel) advises as follows.

The records of AAPT (PowerTel) Limited disclose that there are underground FIBRE OPTIC / TELECOMMUNICATIONS cables in the vicinity of the above enquiry.

Your enquiry has been dispatched to an AAPT (PowerTel) Route Technician who will contact you ASAP with further information regarding the exact location of the AAPT (PowerTel) network.

It is essential that no excavations are undertaken until you have been contacted by an AAPT (PowerTel) Representative. Your local AAPT (PowerTel) Field Representative can be contacted on ph: **0405 133 156**

Should the scope of your work or the area of your work change, please contact as below to receive further advice. Due to continued network expansion, the network information can only be considered valid and accurate for 28 days from issue.

AAPT will seek compensation for any damage to its network through negligence or ignorance of duty of care. Should you require any further information, please contact as below:

AAPT
Ph: 1800 786 306

DISCLAIMER: This document has been prepared solely for the use of AAPT. It should not be scaled to locate any asset. No warranty is given that the information given is accurate or complete

DUTY OF CARE

Due to the nature of underground cables and the age of some cables and records the accuracy and/or completeness of the information cannot be guaranteed and, accordingly, they are indicative only and as a result AAPT (PowerTel) does not accept any responsibility for any inaccuracies of its plans. They should not be solely relied upon when undertaking underground works. It is also inaccurate to assume that fibre optic cables follow straight lines and careful onsite investigations are essential to locate an assets exact position.

The following minimum clearances must be maintained.

1) 300mm when laying asset's inline, horizontal or vertical.

2) 500mm when operating vibrating equipment. Eg: Vibrating plates.

3) 1000mm when operating mechanical excavators or Jackhammers.

ON SITE LOCATING OF AAPT'S (POWERTEL) CABLING AND INFRASTRUCTURE MUST BE CONDUCTED BY AAPT'S (POWERTEL) PERSONNEL ONLY. AAPT (POWERTEL) WILL USE ALL LEGAL MEANS TO SEEK DAMAGES AND ANY OTHER REMEDIES AVAILABLE TO IT IN THE EVENT THAT ITS CABLE OR ANY OTHER NETWORK INFRASTRUCTURE IS DAMAGED BY YOU OR YOUR PERSONNEL AND/OR CONTRACTORS. IT IS AN OFFENCE TO OPEN ANY AAPT'S (POWERTEL) PITS OR MANHOLES AND/OR ANY ASSOCIATED INFRASTRUCTURE BELONGING TO OR PART OF AAPT'S (POWERTEL) NETWORK

Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions should be taken in the undertaking of any underground works, including (but not limited to) the following.

All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs & Manhole covers must not be disturbed. Hand excavation needs to be undertaken with extreme care to minimise the possibility of damage to the cable.

EG: Blades of hand equipment should be orientated parallel to the line of the cable rather than digging across the cable.

All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.

All excavations must be undertaken in accordance with the relevant legislation and regulations.

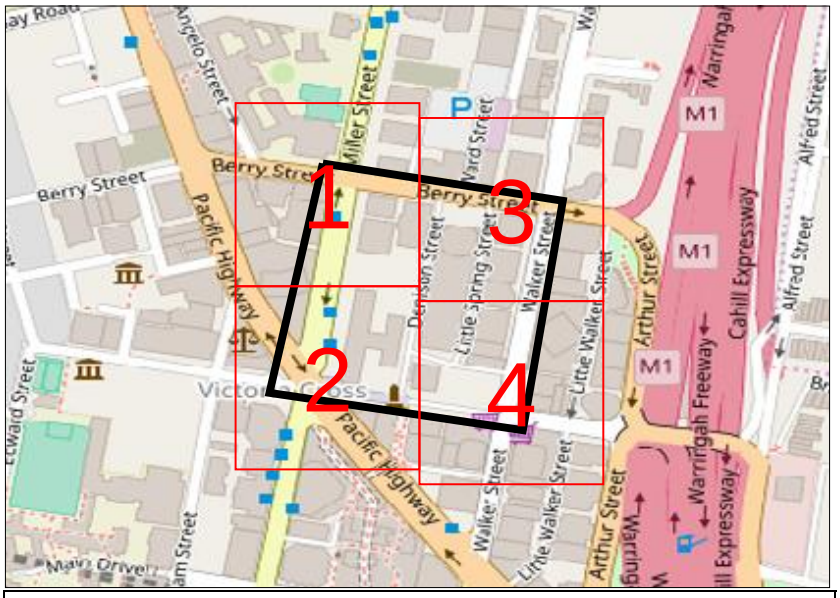
ANY DAMAGE TO AAPT (POWERTEL) NETWORK MUST BE REPORTED IMMEDIATELY TO 1800 786 306

Any information provided is valid only for 28 days from the date of issue of this document.

If the work operations extend beyond this period, or if the designs are altered in any way, you are requested to re-submit your proposal for re-assessment by contacting Dial Before You Dig ph:1100 or www.dialbeforeyoudig.com.au

Onsite visits by AAPT (PowerTel) agents may incur costs, this would solely depend on the type and extent of the work to be carried out. EG: Major roadwork's, network relocation's, Large planning and design work's.

Overview Map



0 0.07km **Scale: 1:** 6000

AAPT (for information specific to this job only) Ph 1800 786 306

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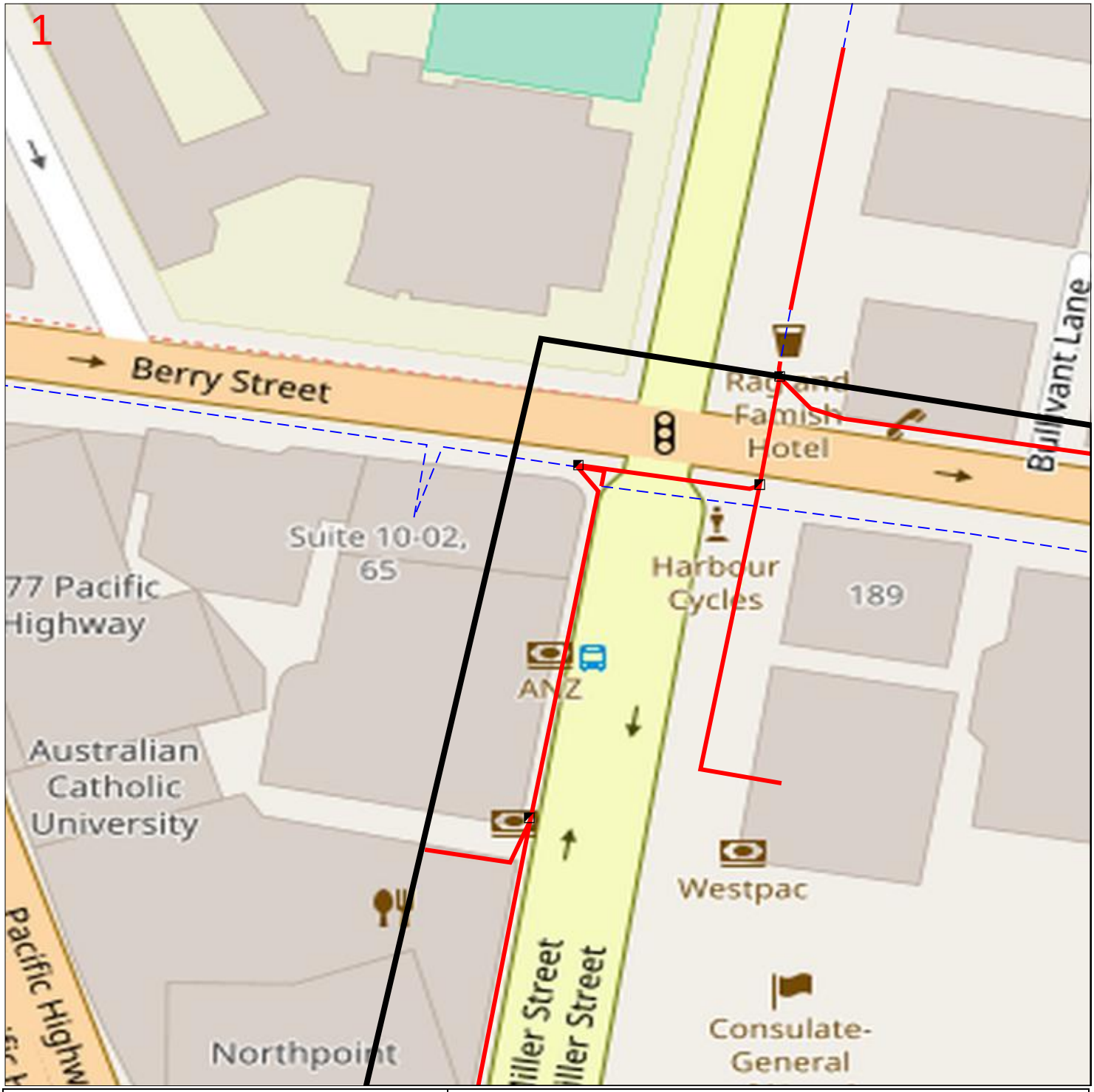
DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

AAPT

PowerTel Simply Business

AAPT (PowerTel) Limited GPO Box 7041 Sydney 2001
Phone: 1800 786 306 A/H 1800 786 306



Enquiry Number: 82196079

Map Sheet: 1

Scale: 1:750

0 0.008km

LEGEND:

- DBYD Work Area
- AAPT Duct
- Non AAPT Duct
- AAPT Manhole

N

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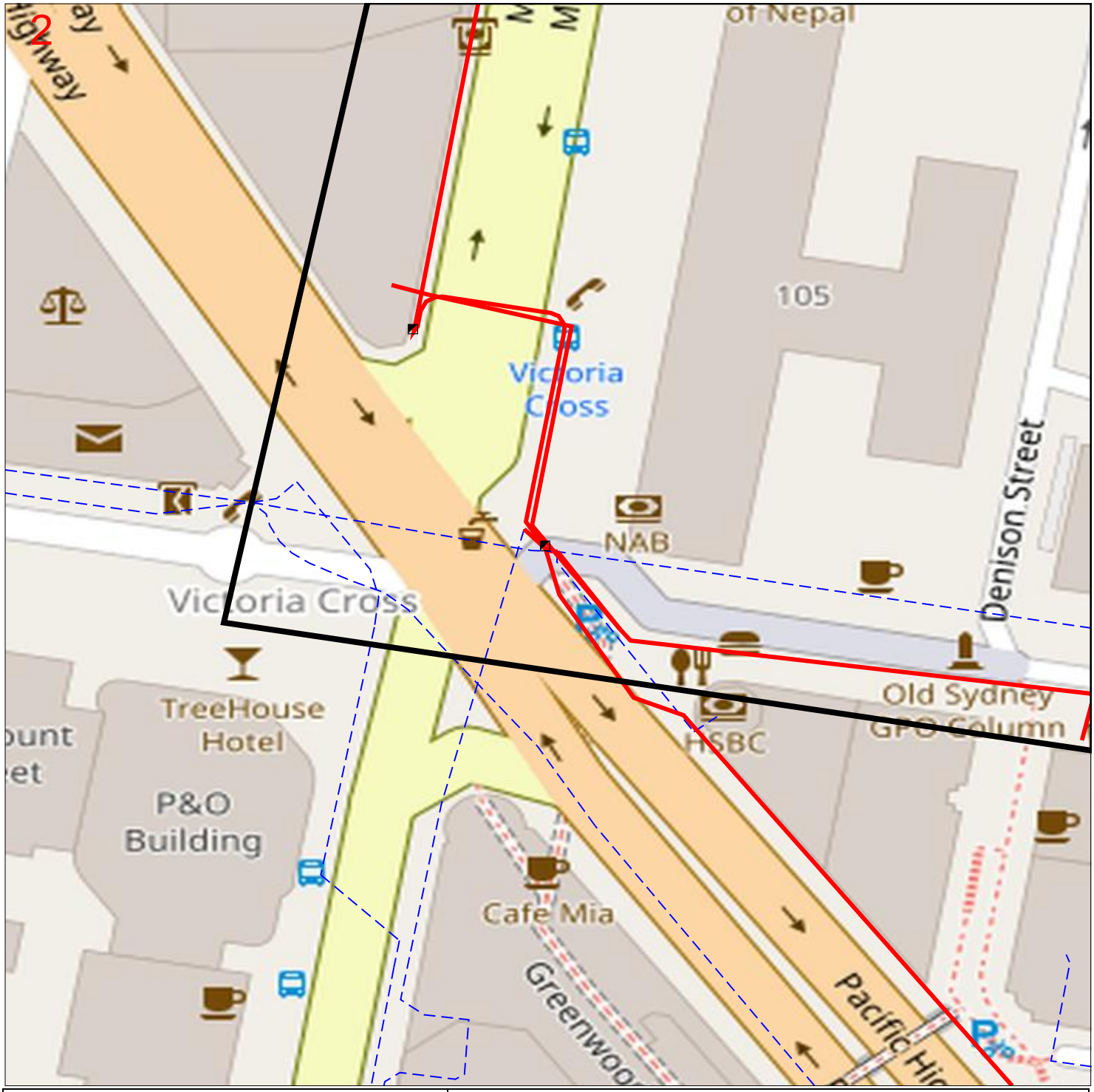
AAPT (PowerTel) Limited GPO Box 7041 Sydney 2001
Phone: 1800 786 306 A/H 1800 786 306



Enquiry Number: 82196079

Map Sheet: 2

Scale: 1:750

0 0.008km

LEGEND:

- DBYD Work Area
- AAPT Duct
- Non AAPT Duct
- AAPT Manhole

N

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AAPT

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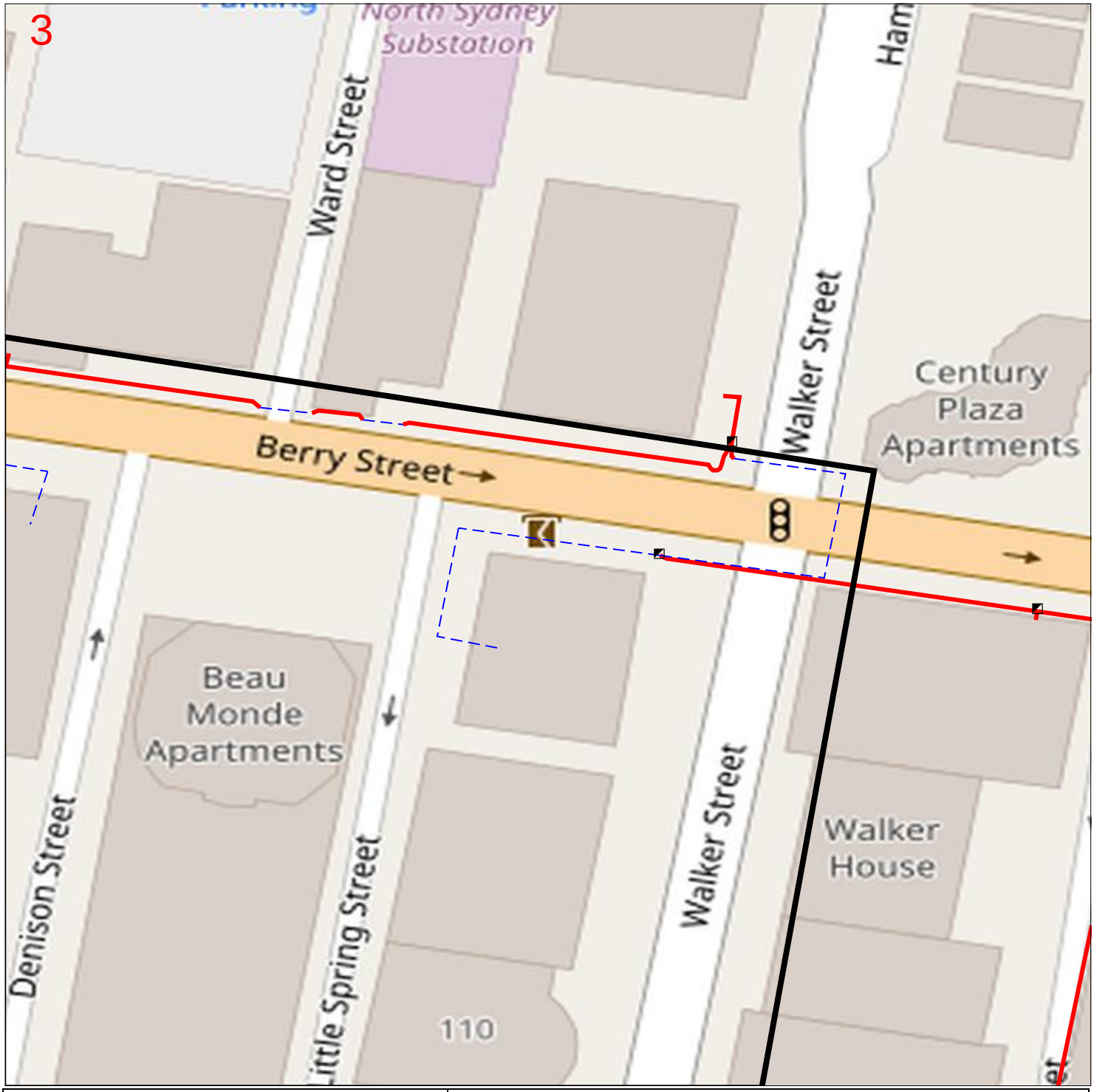

Enquiry Number: 82196079

Map Sheet: 3

Scale: 1:750

0 0.008km

LEGEND:

- DBYD Work Area
- AAPT Duct
- Non AAPT Duct
- AAPT Manhole

N

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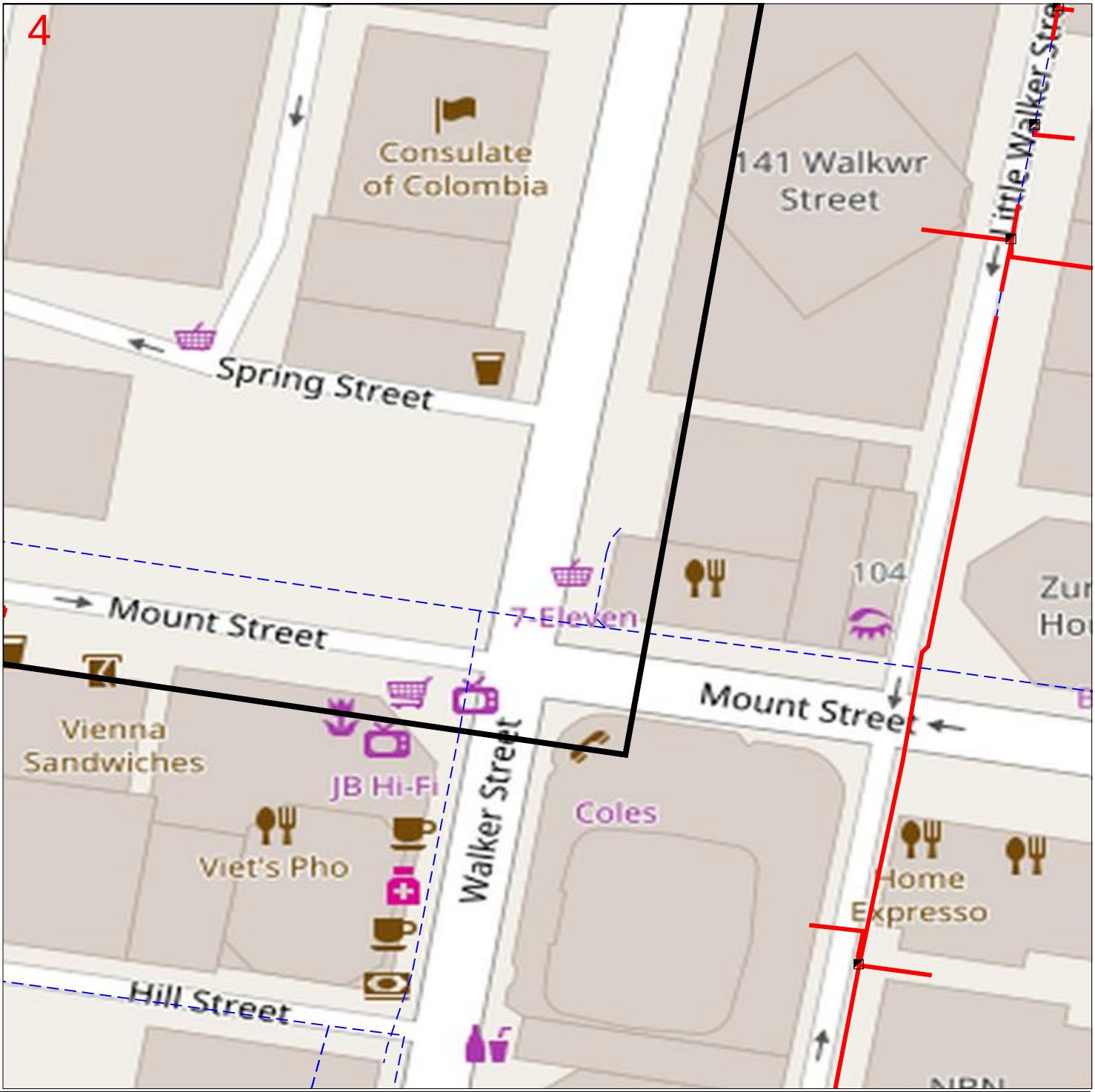
DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

AAPT

PowerTel Simply Business

AAPT (PowerTel) Limited GPO Box 7041 Sydney 2001
Phone: 1800 786 306 A/H 1800 786 306



Enquiry Number: 82196079

Map Sheet: 4

Scale: 1:750

0 0.008km

LEGEND:

- DBYD Work Area
- AAPT Duct
- Non AAPT Duct
- AAPT Manhole

N

DISCLAIMER: This document has been prepared solely for the use of AAPT. It should not be scaled to locate any asset. No warranty is given that the information given is accurate or complete

aarnet
Australia's Academic and Research Network

GPO Box 5519
Chatswood
NSW, 1515

10/04/2019

To:
Mr David Wall
Arcadis
levell16 - 580 George Street
Sydney, 2000

Sequence No: 82196086

Job No: 16094143

Location: Denison Street
North Sydney, NSW, 2060

Commencement Date: 30/04/2019

Dial Before You Dig Response – Underground Fibre Assets

Dear Mr David Wall

This letter is in relation to the proposed work at location detailed above is in the vicinity and may impact AARNet fibre optic cable assets.

Attached is a map indicating the approximate location of the AARNet assets in relation to your enquiry area. A detailed Plan is normally attached to this response. There may be additional AARNet assets in this area contained within Telstra duct. No work is to take place until plans have been obtained from Telstra and reviewed as necessary

Any information provided is valid for 28 days from the date of issue of this document.

Please review the map and if you have any further concerns, contact the AARNet NOC on 1300 APL NOC (1300 275 662).

If you are proposing to carry out digging in the vicinity of AARNet underground infrastructure you will need to carry out these works in accordance with the guidelines below.

WARNING

Where AARNet plans have been attached, they are indicative of the position of AARNet Pty Ltd's (AARNet) fibre optic installation/s only. Services belonging to other third parties are not included on these plans.

These plans have been prepared solely for the use of AARNet and any reliance placed on these plans by you is entirely at your own risk. The plans may show the position of our assets relative to fences, buildings etc., as they existed at the time the fibre etc. was installed. The plans may not have been updated to take account of any subsequent change in the location or style of those features since the time at which the plans were initially prepared.

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNet or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

GPO Box 5519
Chatswood
NSW, 1515

AARNet makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error, omission, lack of detail, transmission failure or corruption in the information provided. AARNet does not accept any responsibility for any loss that you or anyone else may suffer in connection with the provision of these plans, however that loss may arise (including whether or not arising from the negligence of AARNet, its employees, agents, officers or contractors).

The recipient of these plans must use their own care and diligence in carrying out their works and must carry out further surveys to locate services at their work site. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to AARNet's fibre optic installations.

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNet or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

All Areas

Under no circumstances shall construction, digging or excavating work entailing crossing AARNet plant be carried out without first exposing or locating the AARNet asset by an accredited locator and under the supervision of an accredited plant location contractor.

Manual pot-holing needs to be undertaken with extreme care, common-sense and employing techniques least likely to damage cables. For example, orientate shovel blades and trowels parallel to the cable rather than digging across the cable.

Visual location of asset must be carried out by hand digging or using non-destructive water jet method (pot holing) where construction activities may damage or interfere with AARNet assets.

The following minimum clearances must be maintained between mechanical construction activity and the located AARNet asset.

Jackhammers / Pneumatic Breakers	Not within 1.0m of actual location
Vibrating Plate or Wacker Packer Compactor	Not within 0.5m of actual location 300mm compact clearance before compactor can be used over AARNet conduits. 750mm compact clearance cover before compactor can be used Over AARNet Direct Buried cable
Boring Equipment (in-line, horizontal and vertical)	Not within 5.0m of actual location without supervision of accredited plant location contractor onsite OR AARNet asset must exposed via hand dig or nondestructive water jet method (pot holing). AND AARNet asset must not be crossed without first exposing the asset at the crossing point and not without an accredited plant location contractor representative onsite

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General Enquires **1300 APL NOC (1300 275 662)**

To resubmit or change the nominated search area contact DBYD via Phone 1100 or www.1100.com.au

GPO Box 5519
Chatswood
NSW, 1515

Heavy vehicle Traffic (over 3 tonnes)	Not to be driven over AARNet conduits or assets with less than 600mm of cover. Depth to be verified via hand digging
Mechanical Excavators, Farm ploughing, Boring, Tree removal, fencing	Not within 1.0m of actual location. Constructor to hand dig or use non-destructive water jet method (pot holing) and expose asset

Urban Areas

Under no circumstances shall construction, digging or excavating work be carried out: within 1.5m of AARNet assets without first locating and identifying the AARNet asset by an accredited locator and under the supervision of an accredited plant location contractor.

Rural Areas

Under no circumstances shall construction, digging or excavating work be carried out within 10m of AARNet plant be carried out without first locating and identifying the AARNet asset by an accredited locator and under the supervision of an accredited plant location contractor.

ASSET RELOCATIONS

You are not permitted to relocate, modify or alter any AARNet assets under any circumstances. Please contact AARNet Infrastructure Development Group via email apl-infdev@aarnet.edu.au for all enquiries relating to the relocation of AARNet assets.

DAMAGE

AARNet will seek Compensation for any loss caused by damage to its assets. Damage to any AARNet asset must be immediately reported to AARNet NOC on 1300 APL NOC (1300 275 662).

FURTHER ASSISTANCE

Assistance can be obtained by contacting AARNet NOC on 1300 APL NOC (1300 275 662) Where an on-site location is provided by an accredited locator, the owner is responsible for all costs associated with hand digging or use of non-destructive water jet method (pot holing) to visually locate AARNet assets. If plant location drawings or visual location of AARNet assets by digging reveals that the location of AARNet plant is situated wholly or partly within the owner work area, then AARNet Infrastructure Development Group apl-infdev@aarnet.edu.au **must be contacted to discuss possible engineering solutions**.

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The Essential First Step.

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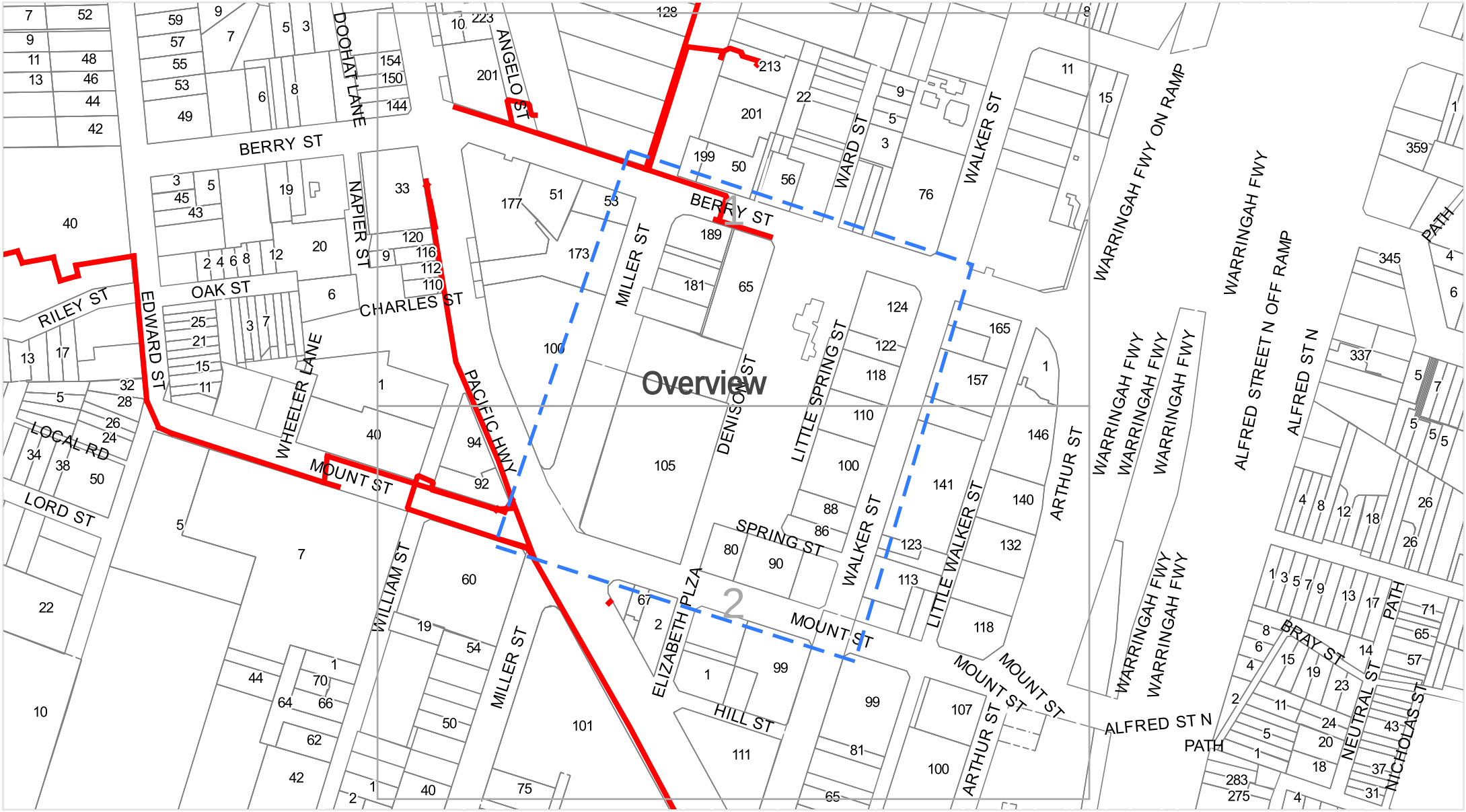
Australia's Academic and Research Network

Sequence No: 82196086
Job No: 16094143
Location: Denison Street, North Sydney, NSW 2060

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend | Scale: 1:3075

N

- Enquiry Area
- AARNet Fibre Optic Assets
- AARNet Power Assets
- Cadastre

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Sequence No: 82196086
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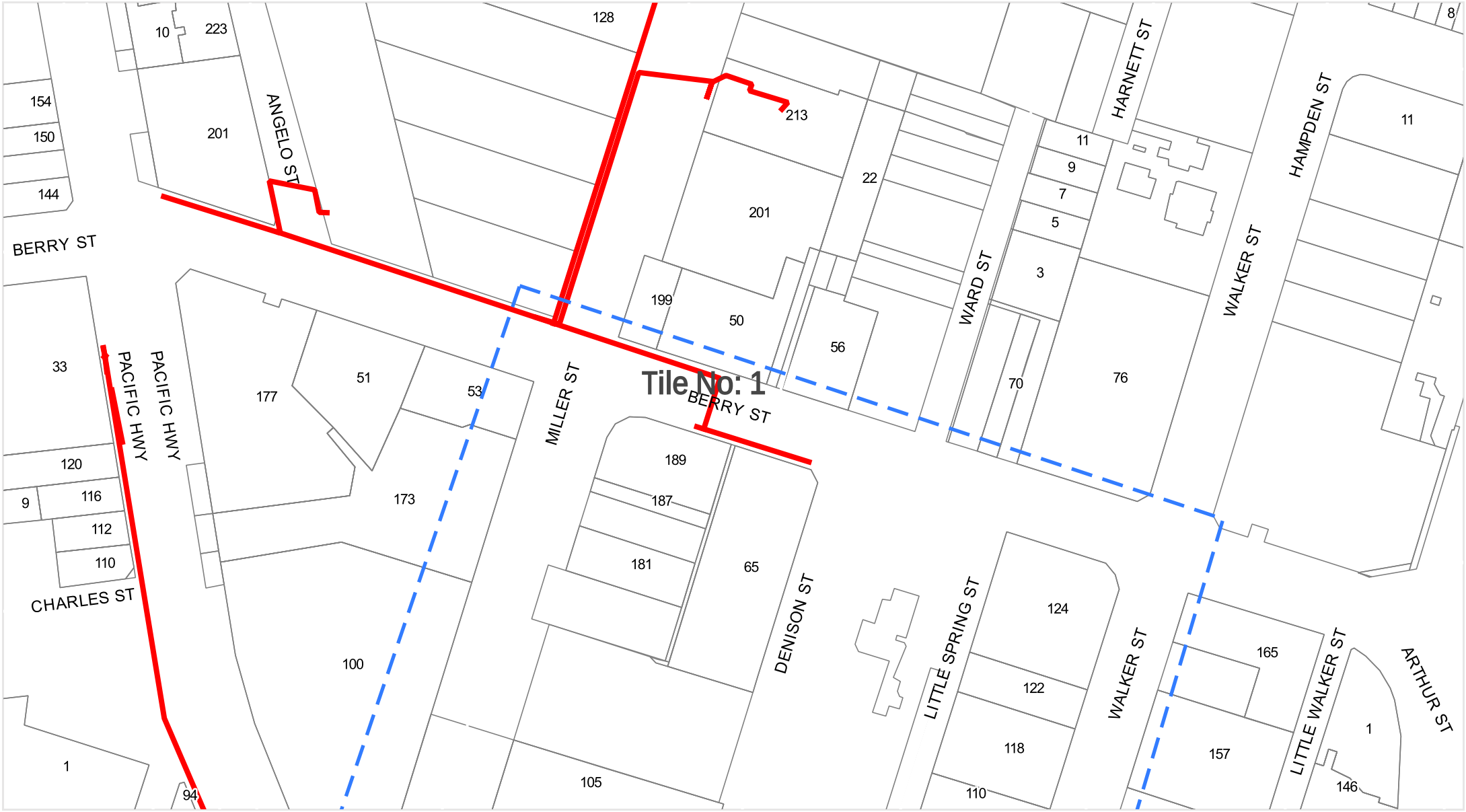

Legend | Scale: 1:1500

N

- Enquiry Area
- AARNet Fibre Optic Assets
- AARNet Power Assets
- Cadastre

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Sequence No: 82196086
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Location: Denison Street, North Sydney, NSW 2060

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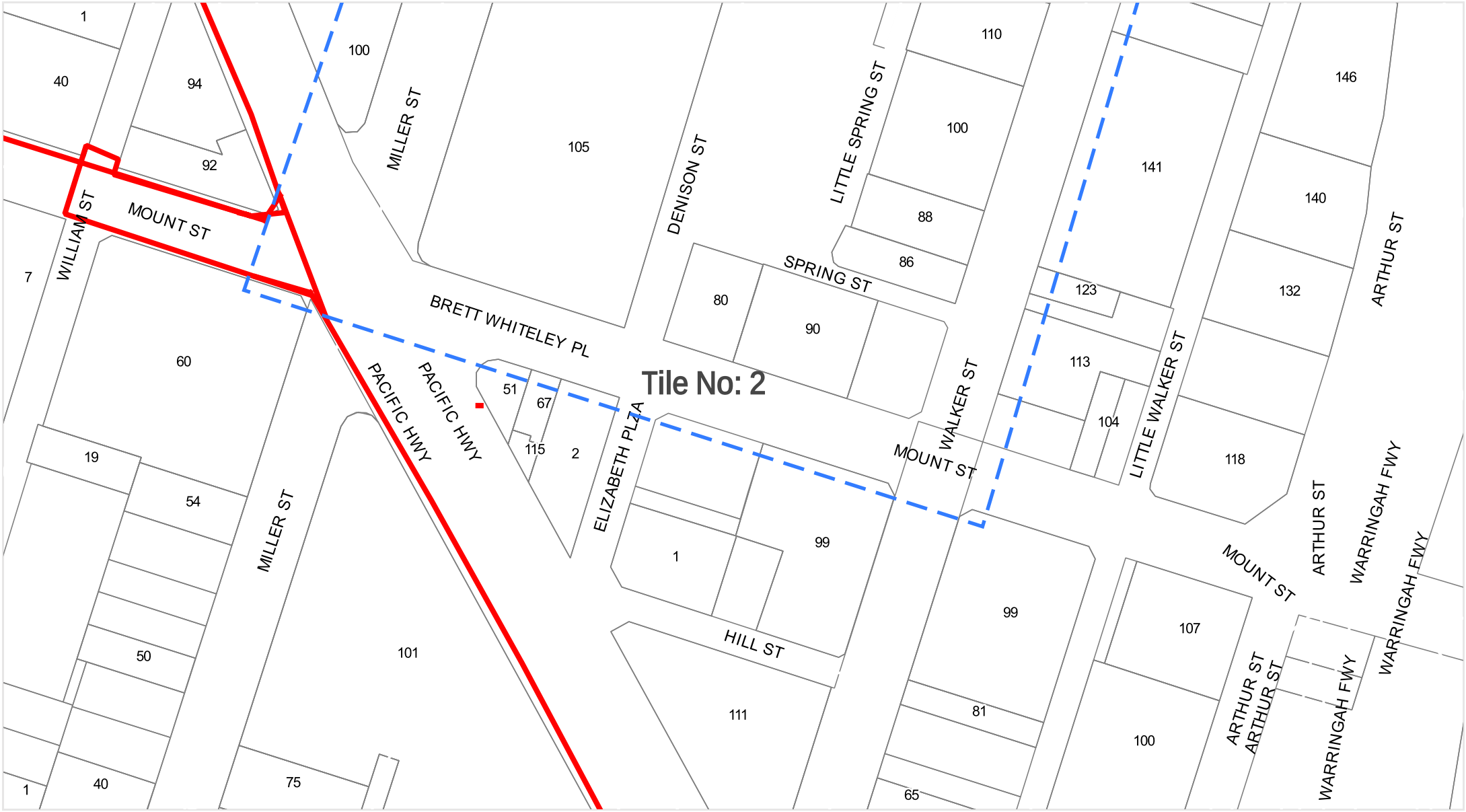

Legend | Scale: 1:1500

N

- Enquiry Area
- AARNet Fibre Optic Assets
- AARNet Power Assets
- Cadastre

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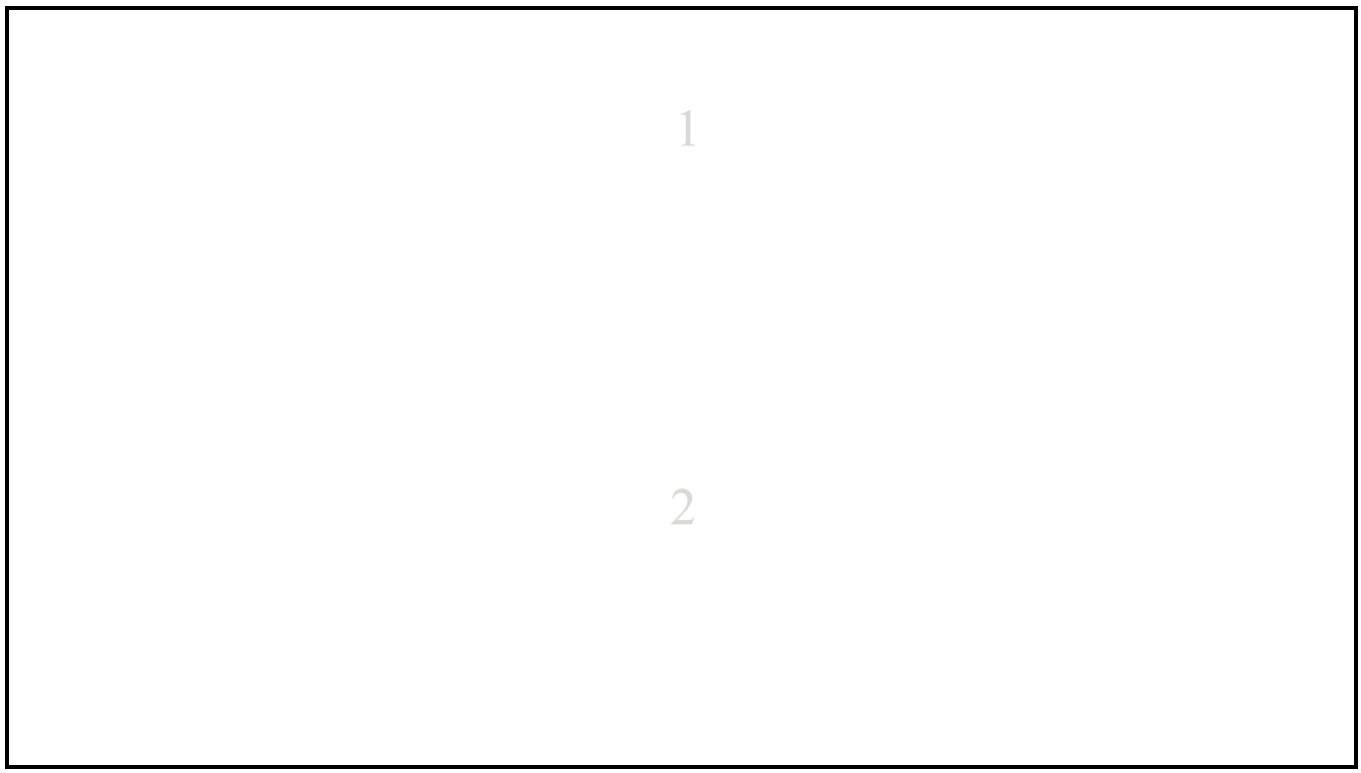
Indicative Plans

Issue Date:	10/04/2019
Location:	Denison Street , North Sydney , NSW , 2060



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Email info@nbn.com.au Web nbn.com.au

LEGEND

34	Parcel and the location
5	Pit with size "5"
2E	Power Pit with size "2E". Valid PPT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
M	Manhole "M"
2 PO – T- 25.0m P40 – 20.0m 5 — 9	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
2 10.0m 5 — 9	2 Direct buried cables between pits of sizes ,"5" and "9" are 10.0m apart.
5 — 9	Trench containing any INSERVICE (Copper/RF/Fibre) cables.
5 — 9	Trench containing only DESIGNED/CONSTRUCTED (Copper/RF/Fibre/Power) cables.
5 — 9	Trench containing any INSERVICE (Power) cables.
BROADWAY ST	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m

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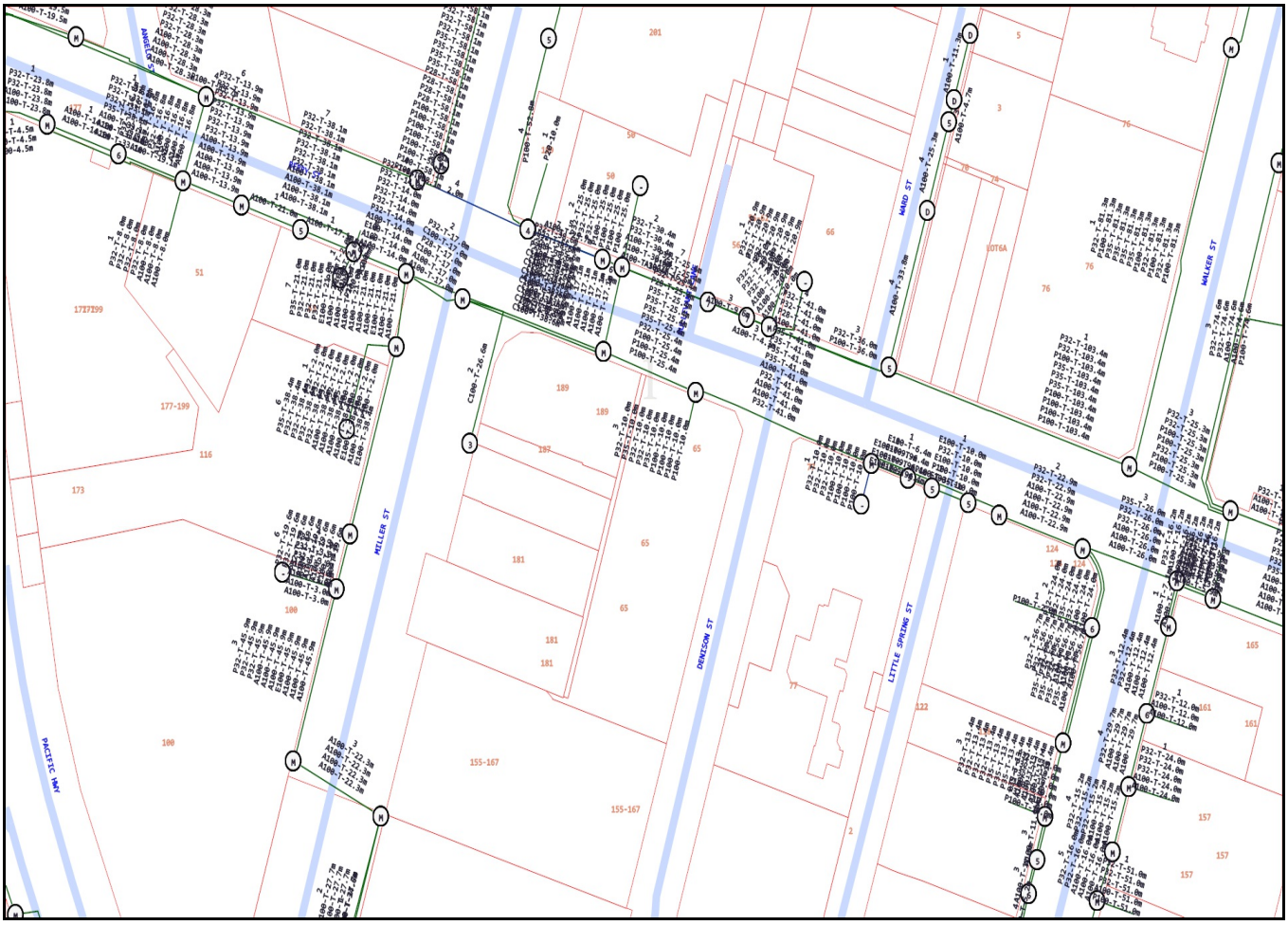

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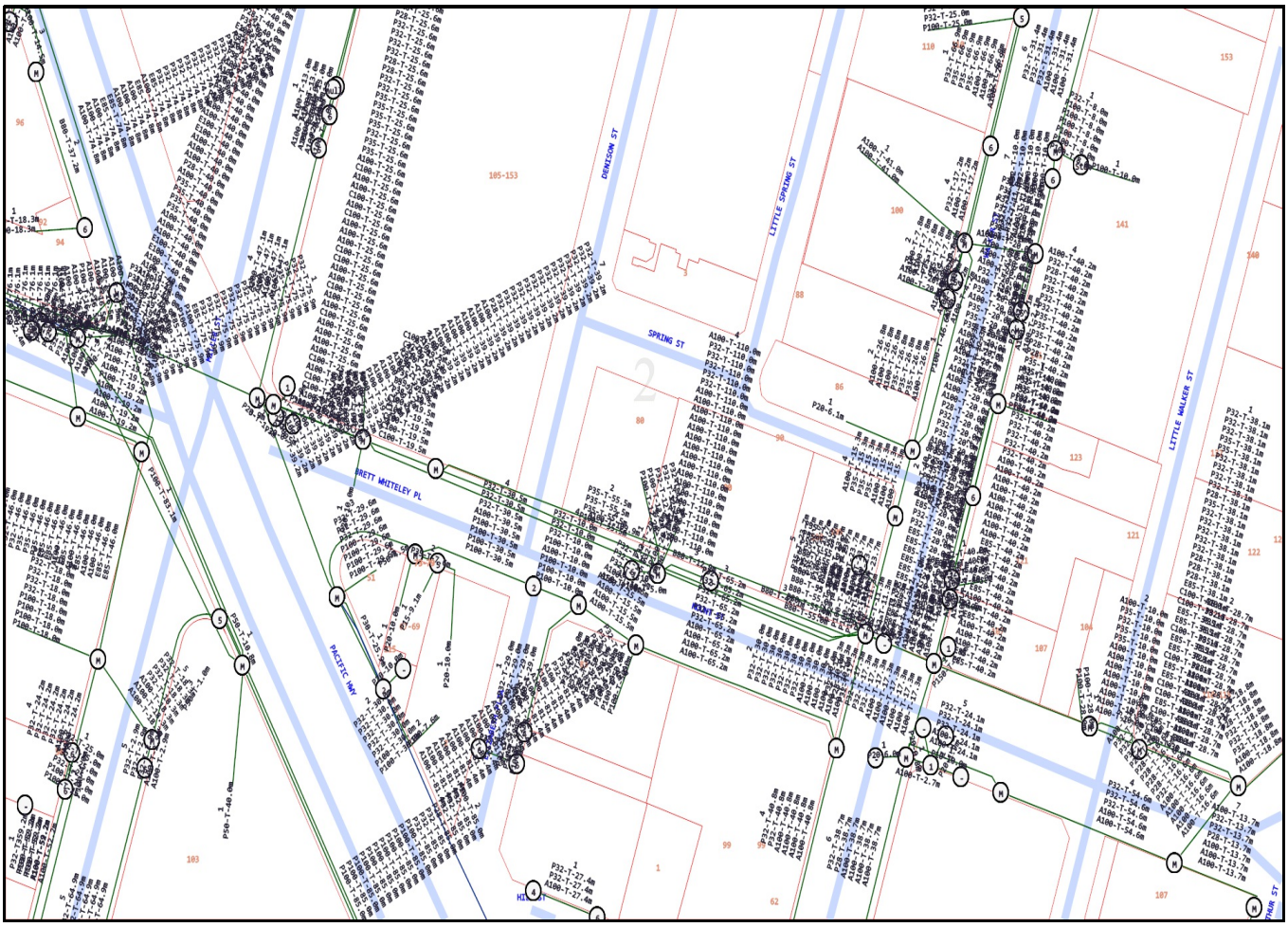

Emergency Contacts

You must immediately report any damage to **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

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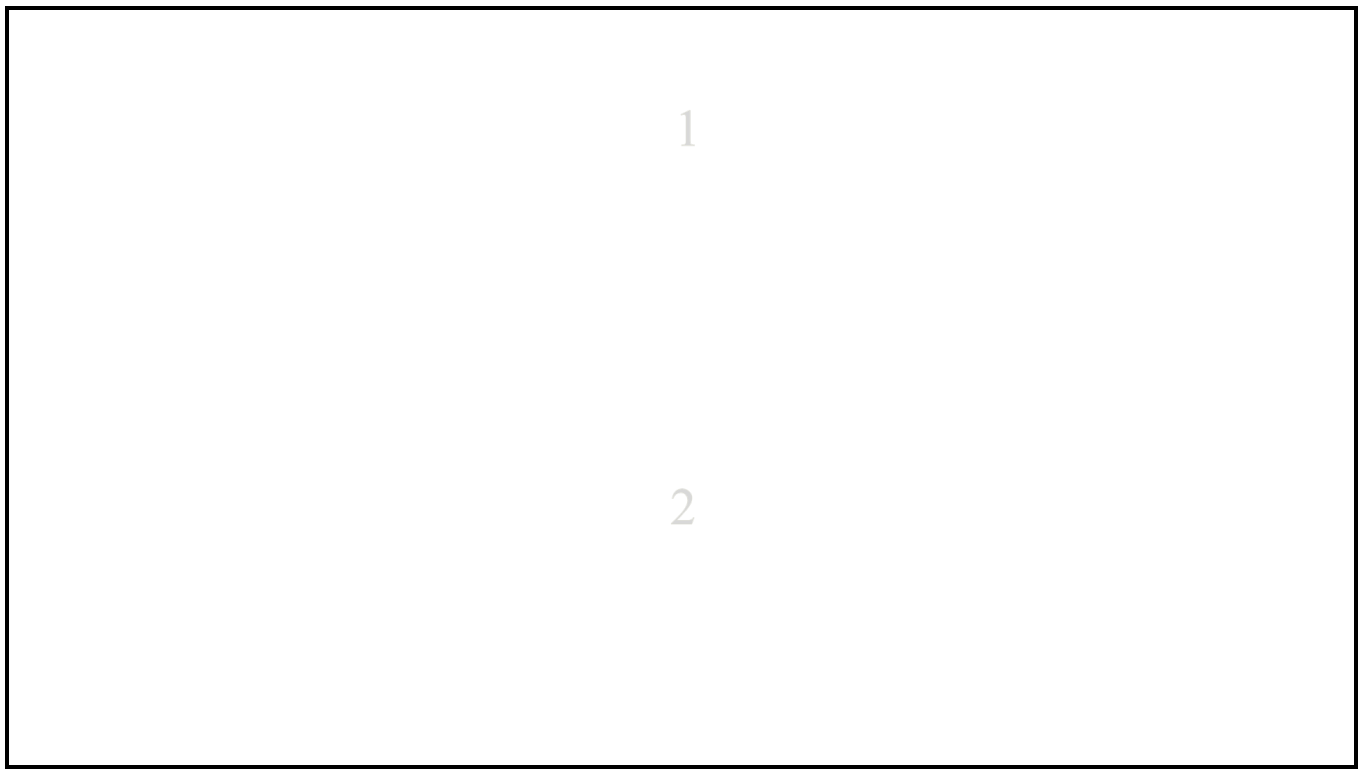
Indicative Plans

Issue Date:	10/04/2019
Location:	Denison Street , North Sydney , NSW , 2060



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LEGEND

34	Parcel and the location
5	Pit with size "5"
2E	Power Pit with size "2E". Valid PPT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
M	Manhole "M"
2 PO – T- 25.0m P40 – 20.0m 5 — 9	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
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5 — 9	Trench containing any INSERVICE (Power) cables.
BROADWAY ST	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m

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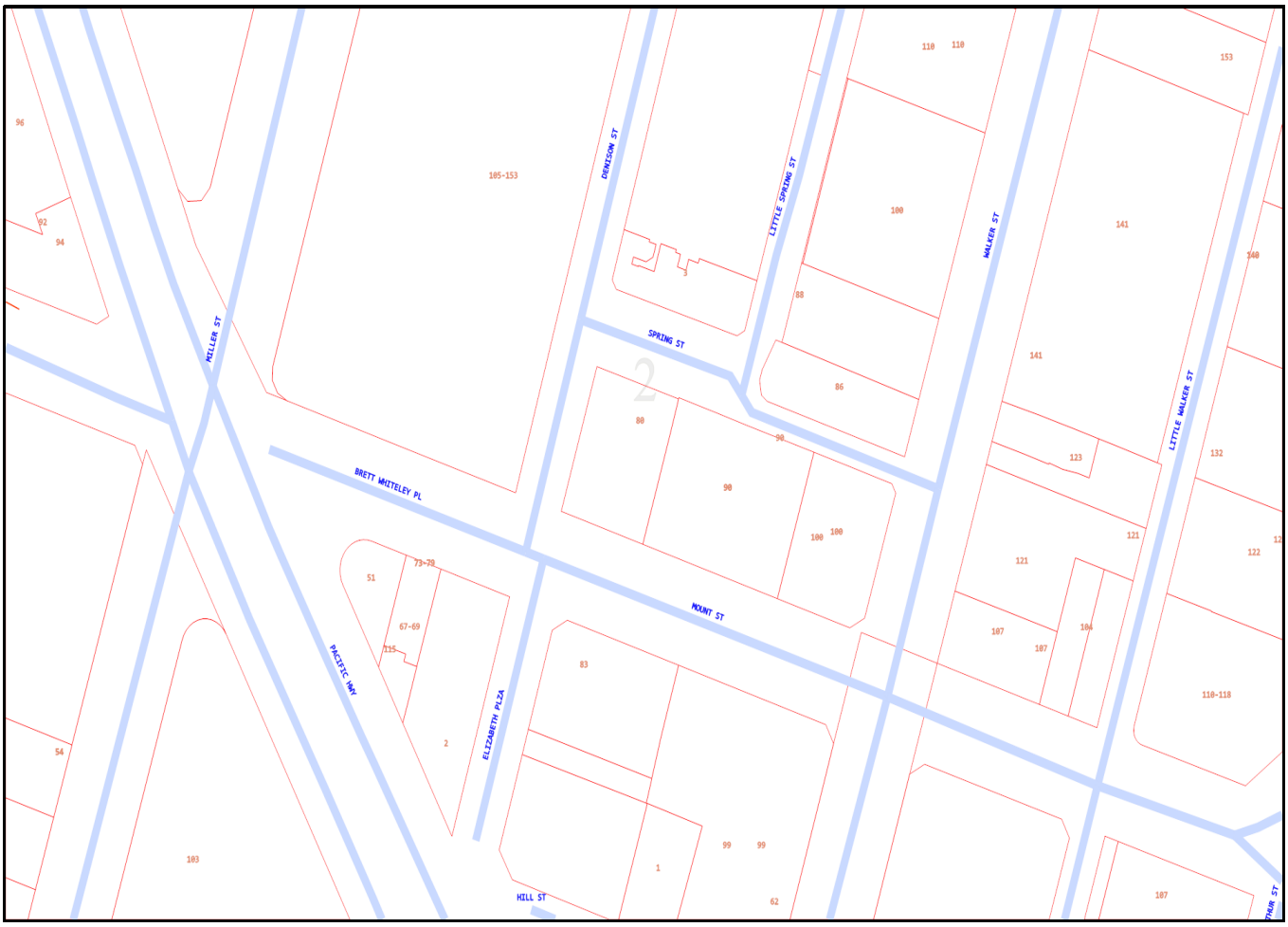

Emergency Contacts

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To:	Mr David Wall
Phone:	0416742110
Fax:	Not Supplied
Email:	david.wall@arcadis.com

Dial before you dig Job #:	16094143	DIAL BEFORE YOU DIG www.1100.com.au
Sequence #	82196088	
Issue Date:	10/04/2019	
Location:	Denison Street , North Sydney , NSW , 2060	Some impact. No onsite action required.

Information

The area of interest requested by you contains one or more assets.

nbn Assets	Search Results
Communications	Asset identified
Electricity	Asset identified

In this notice **NBN Facilities** means *underground fibre optic, telecommunications and/or power facilities, including but not limited to cables, owned and controlled by* ***nbn***

Location of Underground Power Facilities

We thank you for your enquiry. In relation to your enquiry at the above address:

- **nbn's** records indicate that there **ARE nbn** Facilities in the vicinity of the location identified above ("Location").
- **nbn** indicative plan/s are attached with this notice ("Indicative Plans").
- The Indicative Plan/s show general depth and alignment information only and are not an exact, scale or accurate depiction of the location, depth and alignment of **nbn** Facilities shown on the Plan/s.
- In particular, the fact that the Indicative Plans show that a facility is installed in a straight line, or at uniform depth along its length cannot be relied upon as evidence that the facility is, in fact, installed in a straight line or at uniform depth.
- You should read the Indicative Plans in conjunction with this notice and in particular, the notes below.
- You should note that, at the present time, the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables. As such, consistent with the notes below, particular care must be taken by you to make your own enquiries and investigations to precisely locate any power cables and manage the risk arising from such cables accordingly.
- The information contained in the Indicative Plan/s is valid for 28 days from the date of issue set out

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above.You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators at your cost to locate **nbn** Facilities during any activities you carry out on site).

We thank you for your enquiry and appreciate your continued use of the Dial Before You Dig Service. If you are planning to excavate and require further information, please contact **nbn** on 1800 626 329. For any enquiries related to moving assets or Planning and Design activities, please visit the **nbn** Commercial Works website to complete the online application form.

Notes:

1. You are now aware that there are **nbn** Facilities in the vicinity of the above property that could be damaged as a result activities carried out (or proposed to be carried out) by you in the vicinity of the Location.
2. You should have regard to section 474.6 and 474.7 of the *Criminal Code Act 1995* (CoA) which deals with the consequences of interfering or tampering with a telecommunications facility. Only persons authorised by **nbn** can interact with **nbn's** network facilities.
3. Any information provided is valid only for **28 days** from the date of issue set out above.

Referral Conditions

The following are conditions on which **nbn** provides you with the Indicative Plans. By accepting the plans,you are agreeing to these conditions. These conditions are in addition, and not in replacement of, any duties and obligations you have under applicable law.

1. **nbn** does not accept any responsibility for any inaccuracies of its plans including the Indicative Plans. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators at your expense to locate **nbn** Facilities during any activities you carry out on site).
2. You acknowledge that **nbn** has specifically notified you above that the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables.
3. You should not assume that **nbn** Facilities follow straight lines or are installed at uniformed depths along their lengths, even if they are indicated on plans provided to you. Careful onsite investigations are essential to locate the exact position of cables.
4. In carrying out any works in the vicinity of **nbn** Facilities, you must maintain the following minimum clearances:
   - 300mm when laying assets inline, horizontally or vertically.
   - 500mm when operating vibrating equipment, for example: jackhammers or vibrating plates.
   - 1000mm when operating mechanical excavators.
   - Adherence to clearances as directed by other asset owner's instructions and take into account any uncertainty for power cables.
5. You are aware that there are inherent risks and dangers associated with carrying out work in the vicinity of underground facilities (such as **nbn** fibre optic,copper and coaxial cables,and power cable feed to **nbn** assets).Damage to underground electric cables may result in:
   - Injury from electric shock or severe burns, with the possibility of death.
   - Interruption of the electricity supply to wide areas of the city.
   - Damage to your excavating plant.
   - Responsibility for the cost of repairs.
6. You must take all reasonable precautions to avoid damaging **nbn** Facilities. These precautions may include but not limited to the following:
   - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to

minimise the likelihood of damage to the cable, for example: the blades of hand equipment should be aligned parallel to the line of the cable rather than digging across the cable.

- If any undisclosed underground cables are located, notify **nbn** immediately.
- All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.
- The safety of the public and other workers must be ensured.
- All excavations must be undertaken in accordance with all relevant legislation and regulations.

7. You will be responsible for all damage to **nbn** Facilities that are connected whether directly, or indirectly with work you carry out (or work that is carried out for you or on your behalf) at the Location. This will include, without limitation, all losses expenses incurred by **nbn** as a result of any such damage.
8. You must immediately report any damage to **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.
9. Except to the extent that liability may not be capable of lawful exclusion, **nbn** and its servants and agents and the related bodies corporate of **nbn** and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any plans(including Indicative Plans) attached hereto. Except as expressly provided to the contrary in this information sheet or the attached plans(including Indicative Plans), all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

All works undertaken shall be in accordance with all relevant legislations, acts and regulations applicable to the particular state or territory of the Location. The following table lists all relevant documents that shall be considered and adhered to.

State/Territory	Documents
National	Work Health and Safety Act 2011
	Work Health and Safety Regulations 2011
	Safe Work Australia - Working in the Vicinity of Overhead and Underground Electric Lines (Draft)
	Occupational Health and Safety Act 1991
NSW	Electricity Supply Act 1995
	Work Cover NSW - Work Near Underground Assets Guide
	Work Cover NSW - Excavation Work: Code of Practice
VIC	Electricity Safety Act 1998
	Electricity Safety (Network Asset) Regulations 1999
QLD	Electrical Safety Act 2002
	Code of Practice for Working Near Exposed Live Parts
SA	Electricity Act 1996
TAS	Tasmanian Electricity Supply Industry Act 1995
WA	Electricity Act 1945
	Electricity Regulations 1947
NT	Electricity Reform Act 2005
	Electricity Reform (Safety and Technical) Regulations 2005
ACT	Electricity Act 1971

Thank You,

Network Operations Centre - Assurance

Date: 10/04/2019

This document is provided for information purposes only. This document is subject to the information classification set out on this page. If no information classification has been included, this document must be treated as UNCLASSIFIED, SENSITIVE and must not be disclosed other than with the consent of nbn co. The recipient (including third parties) must make and rely on their own inquiries as to the currency, accuracy and completeness of the information contained herein and must not use this document other than with the consent of nbn co.

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Working near nbn™ cables

nbn has partnered with Dial Before You Dig to give you a single point of contact to get information about **nbn** underground services owned by **nbn** and other utility/service provider in your area including communications, electricity, gas and other services. Contact with underground power cables and gas services can result in serious injury to the worker, and damage and costly repairs. You must familiarise yourself with all of the Referral Conditions (meaning the referral conditions referred to in the DBYD Notice provided by **nbn**).

Practice safe work habits

Once the DBYD plans are reviewed, the Five P's of Excavation should be adopted in conjunction with your safe work practices (which must be compliant with the relevant state Electrical Safety Act and Safe Work Australia "Excavation Work Code of Practice", as a minimum) to ensure the risk of any contact with underground **nbn** assets are minimised.

Plan: Plan your job ensuring the plans received are current and apply to the work to be performed. Also check for any visual cues that may indicate the presence of services not covered in the DBYD plans.

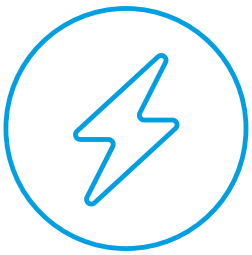
Prepare: Prepare for your job by engaging a DBYD qualified Plant Locator to help interpret plans and identify on-site assets. Contact **nbn** should you require further assistance.

Pothole: Non-destructive potholing (i.e. hand digging or hydro excavation) should be used to positively locate **nbn** underground assets with minimal risk of contact and service damage.

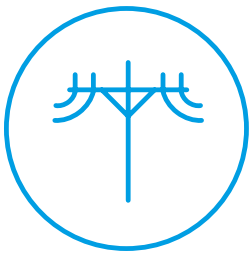
Protect: Protecting and supporting the exposed **nbn** underground asset is the responsibility of the worker. Exclusion zones for **nbn** assets are clearly stated in the plan and appropriate controls must be implemented to ensure that encroachment into the exclusion zone by machinery or activities with the potential to damage the asset is prevented.

Proceed: Proceed only when the appropriate planning, preparation, potholing and protective measures are in place.

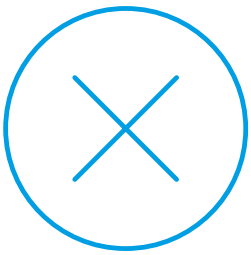
Working near **nbn**™ cables



Identify all electrical hazards, assess the risks and establish control measures.



When using excavators and other machinery, also check the location of overhead power lines.



Workers and equipment must maintain safety exclusion zones around power lines.

Once all work is completed, the excavation should be re-instated with the same type of excavated material unless specified by **nbn**. Please note:

- Construction Partners of **nbn** may require additional controls to be in place when performing excavation activities.
- The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

Contact

In the event of the **nbn**™ network facility damage please call 1800 626 329

Disclaimer

This brochure is a guide only. It does not address all the matters you need to consider when working near our cables. You must familiarise yourself with other material provided (including the Referral Conditions) and make your own inquiries as appropriate.

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DIAL BEFORE YOU DIG
www.1100.com.au

Plant Location Details

10/04/2019

Mr David Wall
Arcadis
levell16 - 580 George Street
Sydney NSW 2000
Phone: 02 89079000
Fax: Not Supplied

Nextgen Networks Pty Ltd
Level 6, 333 Collins Street
Melbourne VIC 3000
T 1800 032 532
E DBYD@nextgengroup.com.au

Dear Mr David Wall

The following is a response to your Dial Before You Dig enquiry

Assets Affected: Nextgen Assets

Sequence No: 82196078
Location: Denison Street, North Sydney NSW 2060

IMPORTANT:

- Please read and understand all the information and disclaimers provided below
- Sketches and Plans provided by Nextgen Networks are circuit diagrams only and indicate the presence of telecommunications plant in the general vicinity of the geographical area shown; exact ground cover and alignments cannot be given with any certainty and cover may alter over time. Telecommunications plant seldom follow straight lines and careful on site investigation is essential to uncover and reveal its exact position
- The accuracy and/or completeness of the information in the plans can not be guaranteed often due to changes in the surrounding land subsequent to Nextgen's deployment and, accordingly the plans are intended to be indicative only

"DUTY OF CARE"
When working in the vicinity of telecommunications plant you have a legal "Duty of Care" that must be observed. The following points must be considered:

1. It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer, and head contractor to design for minimal impact and protection of Nextgen Networks plant. Nextgen Networks will provide free plans and sketches showing the presence of its network to assist at this design stage.
2. It is the owner's (or constructor's) responsibility to:
   a) Request plans of Nextgen Networks plant for a particular location at a reasonable time before construction begins
   b) Visually locate Nextgen Networks plant by vacuum excavation (pot-holing) where construction activities may damage or interfere with Nextgen Networks plant (see "Essential Precautions and Approach Distances" section for more information)
   c) Contact Nextgen Networks Network (see below for details) if Nextgen Networks plant is wholly or partly located near planned construction activities

DAMAGE
ANY DAMAGE TO Nextgen Networks NETWORK MUST BE REPORTED TO 1800 032 532 IMMEDIATELY

- The owner is responsible for all plant damage when works commence prior to obtaining Nextgen Networks plans, or failure to follow agreed instructions
- Nextgen Networks reserves all rights to recover compensation for lose or damage to its cable network or other property including consequential losses

CONCERNING NEXTGEN NETWORK PLANS

- Phone 1100. Dial Before You Dig for free plans of Nextgen Networks plant locations. Please give at least 2 business days notice
- Nextgen Networks plans and information provided are valid for 30 days from the date of issue
- Nextgen Networks retains copyright in all plans and details provided in conjunction with your request. These plans and or details should be disposed of by shredding or any other secure disposal method after use
- Nextgen Networks plans or other details are provided for the use of the applicant, its servants, or agents, and shall not be used for any unauthorised purpose
- Please contact the Network Help Desk (see below for details) immediately should you locate Nextgen Networks assets not indicated on these plans
- Nextgen Networks, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Nextgen Networks against any claim or demand for any such loss or damage
- Please ensure Nextgen Networks plans and information provided remains on-site at all times throughout your construction phase

ESSENTIAL PRECAUTION AND APPROACH DISTANCE

NOTE: If the following clearances cannot be maintained, please contact the Nextgen Network Help Desk (see below for details) for advice on how best to resolve this situation

1. On receipt of plans and sketches and before commencing excavation work or similar activities near Nextgen Networks plant, carefully locate this plant first to avoid damage. Undertake prior exposure (vacuum excavation) such as potholing when intending to excavate or work closer to Nextgen Networks plant than the following approach distances:

- Where Nextgen Networks plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 600mm must be maintained from where it could be reasonably presumed that plant would reside
- In non established or unformed reserves and terrain, this approach distance must be at least 1.5 metres
- In country/rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distances apply:
  d) Parallel to major plant: 10 metres (for optic fibre cable)
  e) Parallel to other plant: 5 metres

  Note: Even pot-holing needs to be undertaken with extreme care, common sense and employing techniques least likely to damage cables. For example - vacuum excavation.

- If construction work is parallel to Nextgen Networks plant, then careful pot-holing at least every 5m is required to establish the location of all plant, hence continuing nominal locations before work can commence

2. Maintain the following minimum clearance between construction activity and actual location of Nextgen Networks Plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of actual locations*
Vibrating Plate or Wackers Packer Compactors	*Not within 0.5m of Nextgen Networks ducts 300mm compact clearance cover before compactor can be used across Nextgen Networks ducts, and 600mm clearance across Nextgen Networks cables in the solid*
Boring Equipment (in-line, horizontal and vertical)	*Not within 2.0m of actual location Constructor to check depth via vacuum excavation (pot-hole)*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Nextgen Networks ducts with less than 600mm cover. Not to be driven across Nextgen Networks fibre with less than 1.2m cover Constructor to vacuum excavate(pot-hole) and expose plant*
Mechanical Excavators, Boring and Tree Removal	*Not within 1.0m of actual location Constructor to vacuum excavate (pot-hole) and expose plant*

- All Nextgen Networks pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work
- All Nextgen Networks conduit should have the following minimum depth of cover after the completion of your work:

  Footway 450mm
  Roadway 450mm at drain invert and 600mm below the pavement subgrade level invert

- All Nextgen Networks fibre in the solid should have the following minimum depth of cover after the completion of your work:

  Footway 600mm
  Roadway 1200mm at drain invert and 1200mm below the pavement subgrade level invert

- For clearance distances relating to Nextgen Networks above ground infrastructure please contact the Network Help Desk (see below for details)

FURTHER ASSISTANCE

Over-the-phone assistance can be obtained by calling the Network Help Desk below.
Nextgen require 5 clear business days notice to conduct an on-site location. The initial on site location visit will not normally incur a charge, but at the discretion of Nextgen subsequent site visits may incur a charge to be applied at an hourly rate.
Where an on-site location is provided, the owner is responsible for all vacuum excavation work (pot-holing) to visually locate and expose Nextgen Networks plant.
If plant location plans or visual location of Nextgen Networks plant by vacuum excavation reveals that the location of Nextgen Networks plan is situated wholly or partly where the owner plans to work, then **Nextgen Networks** must be contacted through the **Network Help Desk** to discuss possible engineering solutions.
The contact number for the **Network Help Desk** is 1800 032 532.

NOTE:
If Nextgen Networks relocation or protection works are part of the agreed solution, then payment to Nextgen Networks for the cost of this work shall be the responsibility of the principal developer. The principal developer will be required to provide Nextgen Networks with the details of their proposed work showing how Nextgen Networks plant is to be accommodated and these details must be approved by the Nextgen National Operations Manager prior to the commencement of site works.

RURAL LANDOWNER - IMPORTANT INFORMATION

Where Nextgen Networks owned cable crosses agricultural land Nextgen Networks will provide a one off free-on-site electronic cable location. Please note that the exact location of cables can only be verified by visual proving by pot holing, which is not covered by this service. The Network Integrity HelpDesk Officer will provide assistance in determining whether a free-on-site location is required. Please ring the Nextgen Network Help Desk as listed above.

PRIVACY NOTE

Your information has been provided to Nextgen Networks by DBYD to enable Nextgen Networks to respond to your DBYD request. Nextgen Networks keeps your information in accordance with its privacy statement entitled 'Protecting Your Privacy' which can be obtained from Nextgen Networks either by calling 1800 032 532 or visiting our website www.nextgengroup.com.au

Warning: Nextgen Networks plans show only the presence of cables and plant. They only show their position relative to road boundaries, property fences etc, at the time of installation and Nextgen Networks does not warrant or hold out that such plans are accurate thereafter due to changes that may occur over time.
DO NOT ASSUME DEPTH OR ALIGNMENT of cables or plant as these vary significantly.
The customer has A DUTY OF CARE when excavating near Nextgen Networks cables and plant. Before using machine excavators NEXTGEN PLANT MUST FIRST BE PHYSICALLY EXPOSED BY VACUUM EXCAVATION (potholing) to identify its location.
Nextgen Networks will seek compensation for damages caused to its property and losses caused to Nextgen Networks and its customers.

EXPERIENCED PLANT LOCATORS (for your area)

On-site assistance should be sought from an Experienced Plant Locater if the telecommunications plant cannot be located within 2.5 metres of the locations indicated on the drawings provided. On-site advice should be obtained from a suitably qualified contractor highly skilled in locating Nextgen Networks plant. If there is any doubt whatsoever about the actual location of the telecommunications plant, the best method for locating the telecommunications plant or the correct interpretation of the drawings provided. In the case where Nextgen Networks plant is outside a recognised road reserve Nextgen Networks recommends that the **Network Help Desk** is contacted for assistance prior to engaging an Experienced Plant Locater.

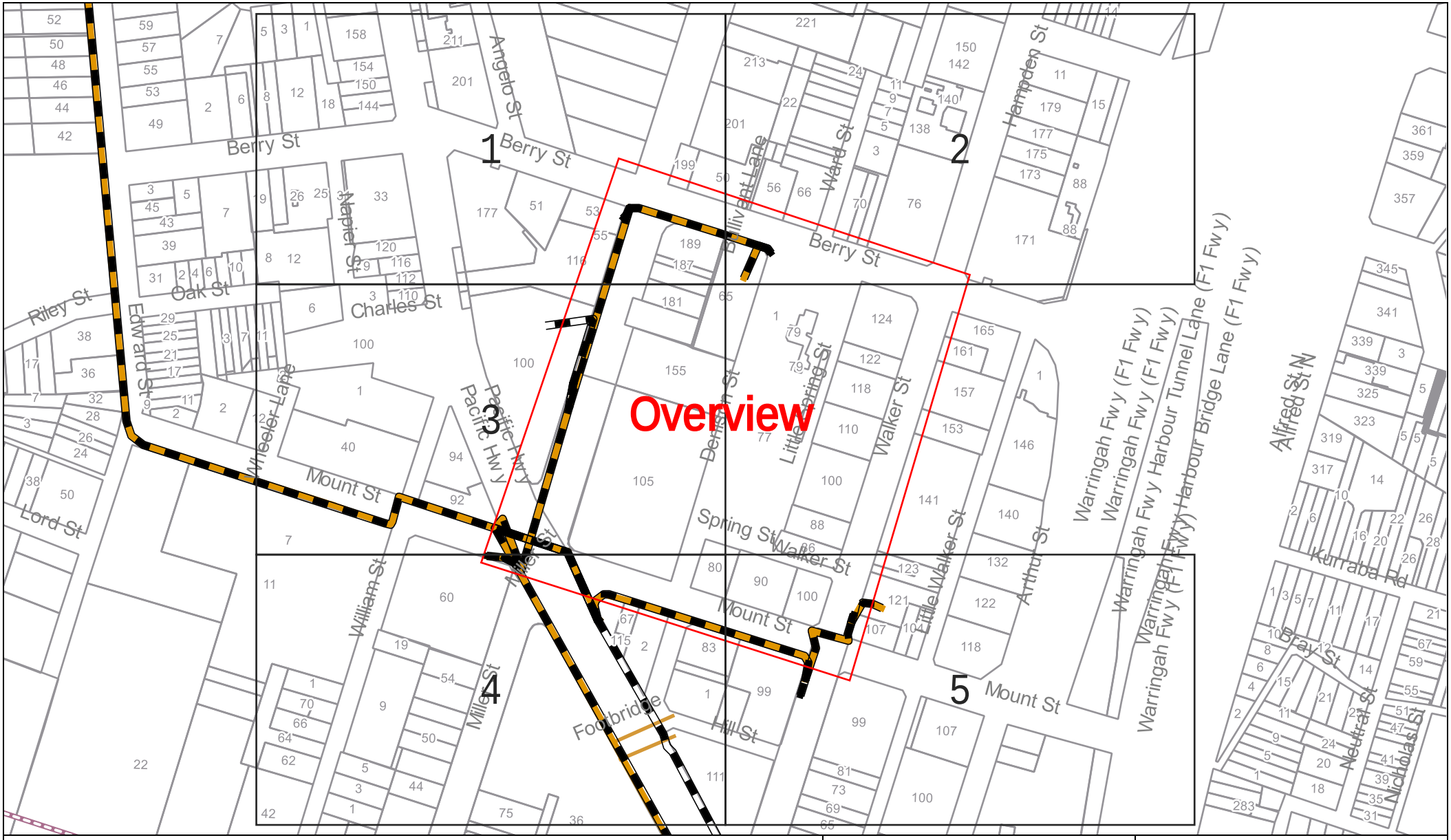
For the assistance of customers Nextgen Networks has established strict criteria to assess the skill of contractors that may be engaged by owners requiring Nextgen Networks plant locating services to perform any of the following activities if requested to do so by the owner:

- Review Nextgen Networks plans to assess the approximate location of Nextgen Networks plant
- Advise owners of the approximate location of Nextgen Networks plant according to the plans
- Advise the owners of the best method for locating Nextgen Networks plant
- Advise owners of the hazard of unqualified persons attempting to find the exact location of Nextgen Networks plant and working in the vicinity of Nextgen Networks plant without first locating its exact position
- Perform trial hole explorations by vacuum excavation (pot-holing) to expose Nextgen Networks plant with a high degree of skill, competence and efficiency and utilising all necessary safety equipment

Nextgen Networks does not accept any liability or responsibility for the performance of or advice given by any Plant Locater engaged by you but we will, if requested, recommend suitably qualified plant locators.

GENERAL DISCLAIMER

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Nexgen or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Sequence Number: 82196078

Date: 10/04/2019

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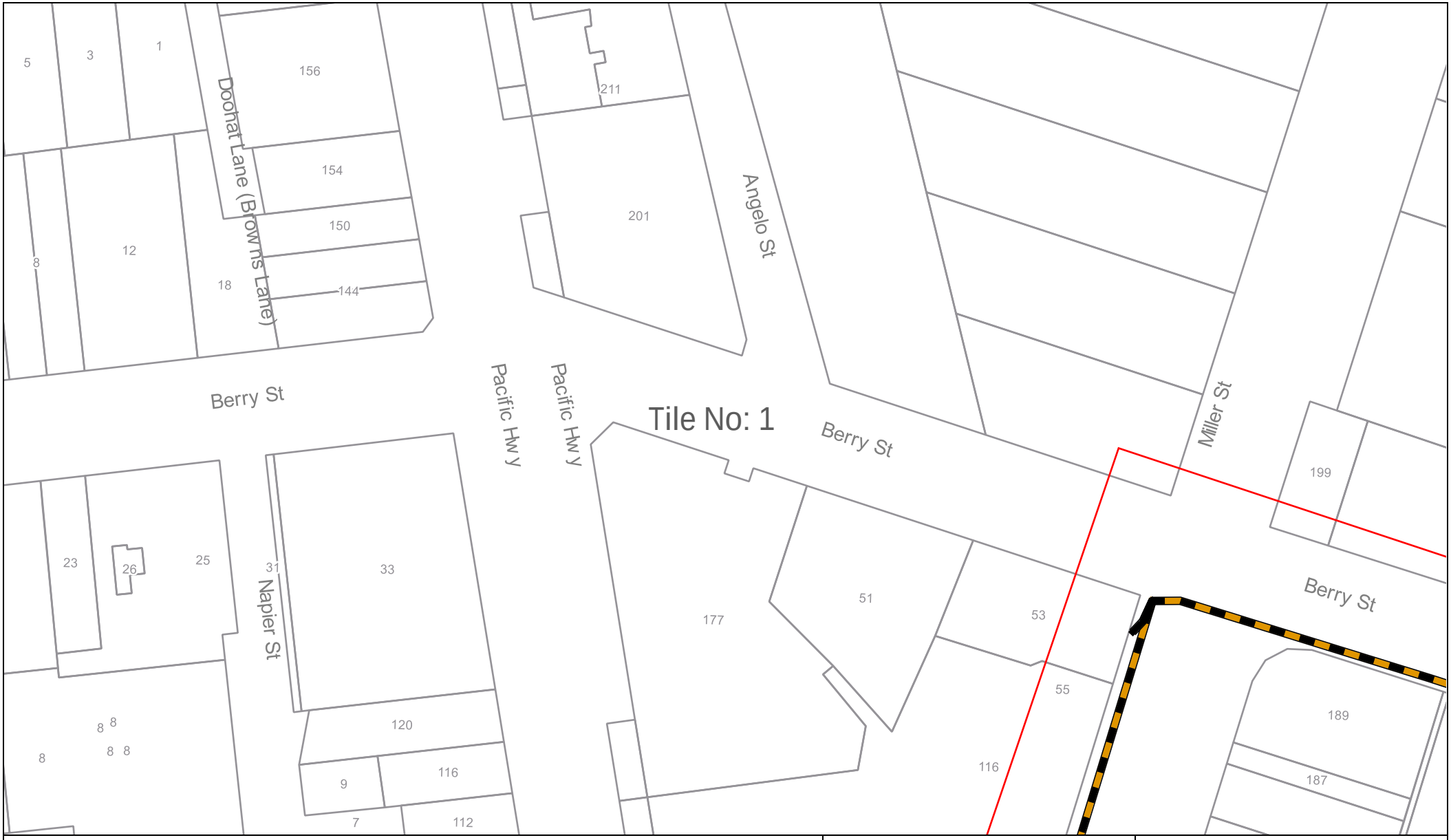
LEGEND

Digsite

- Area

Assets

- Cable
- 3rd Party Duct
- Marker Post



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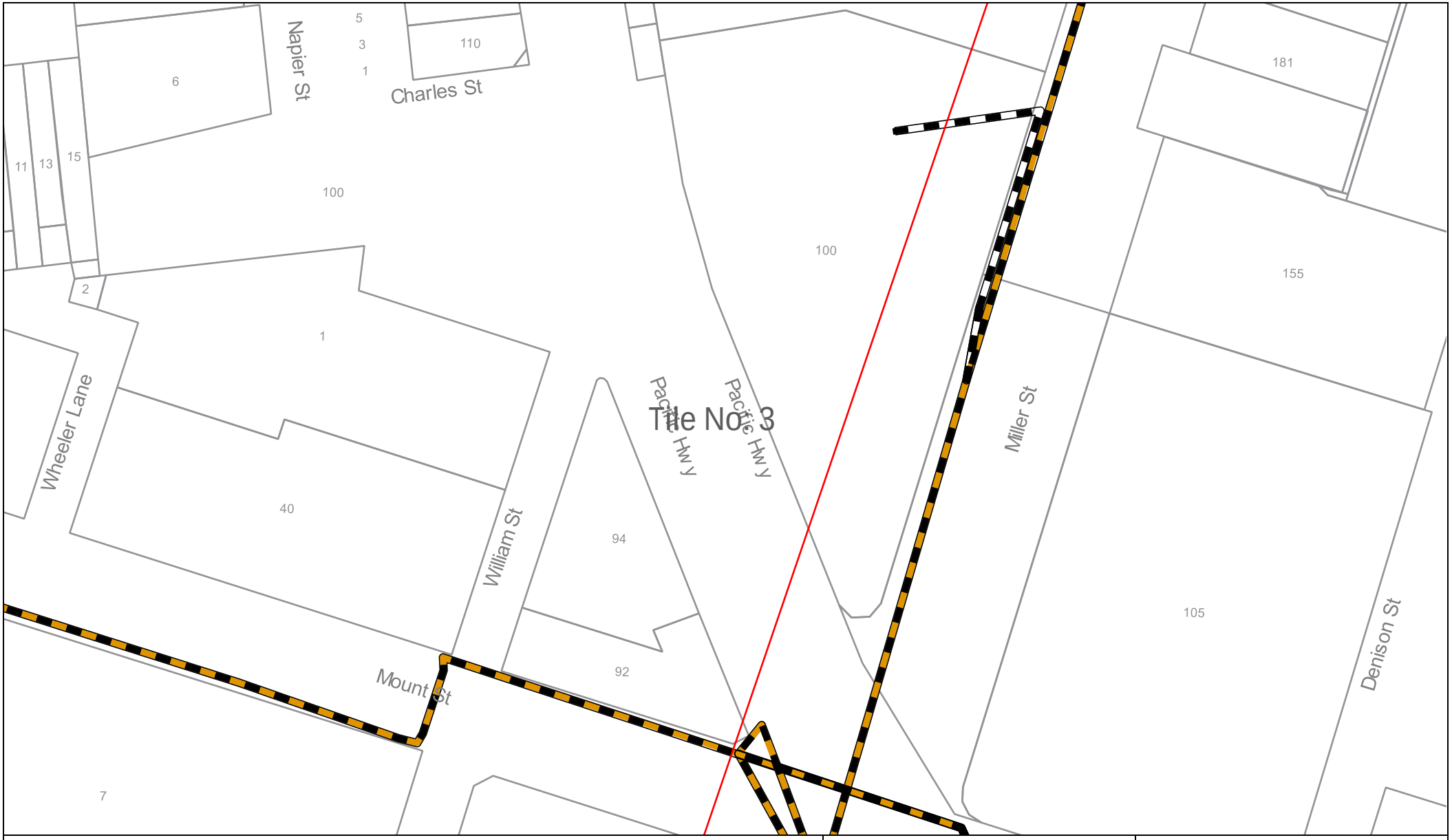

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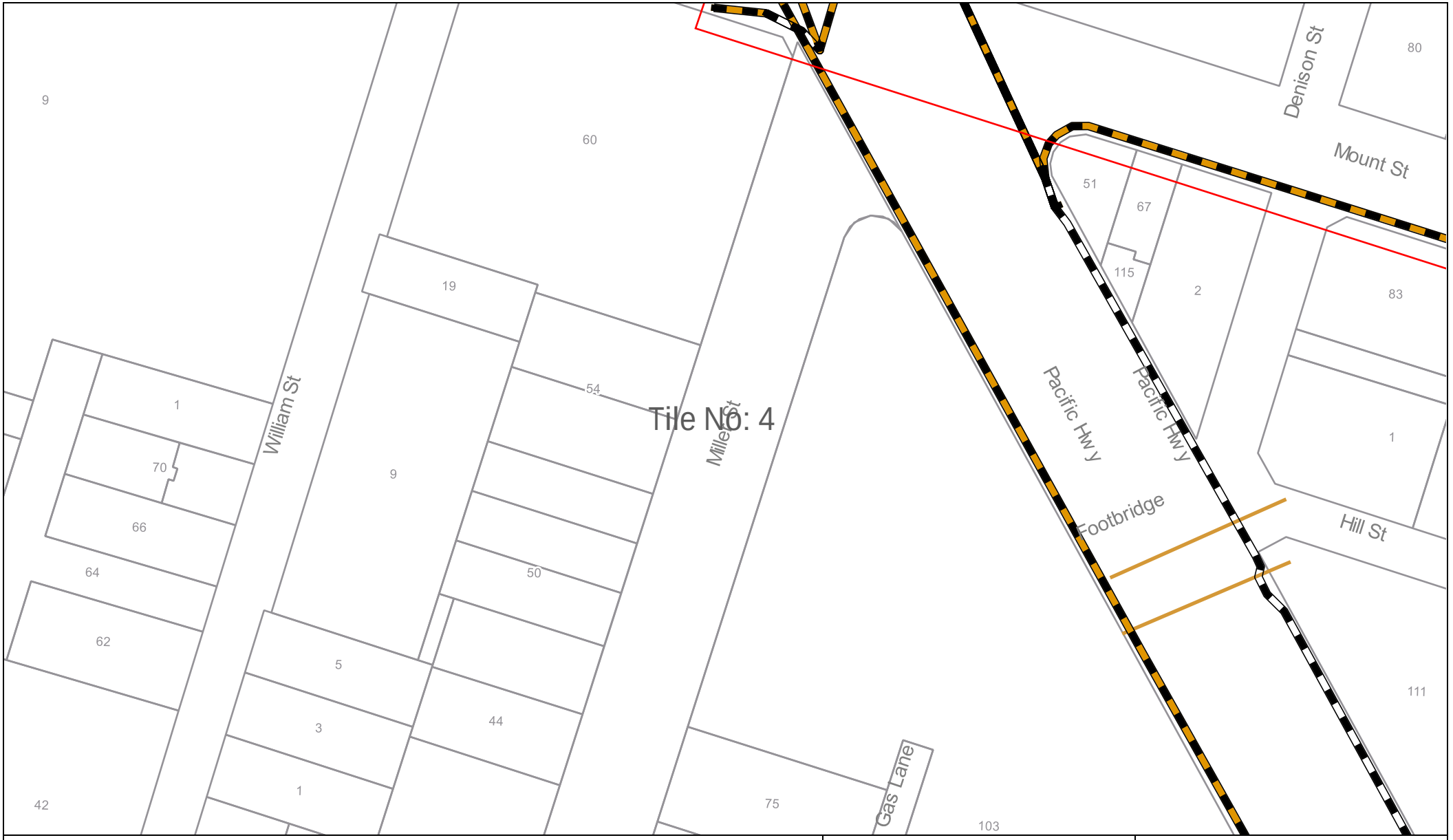

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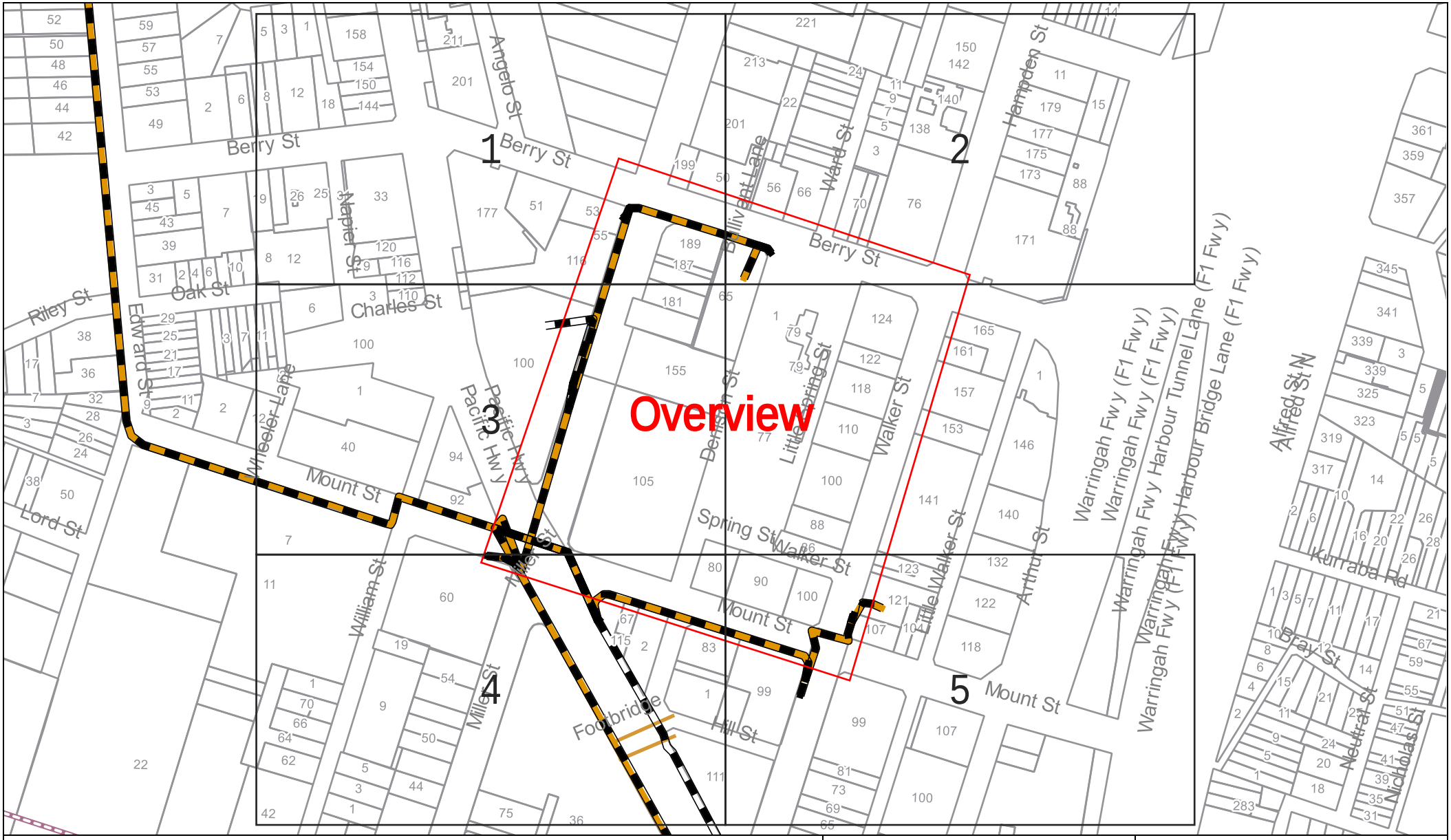

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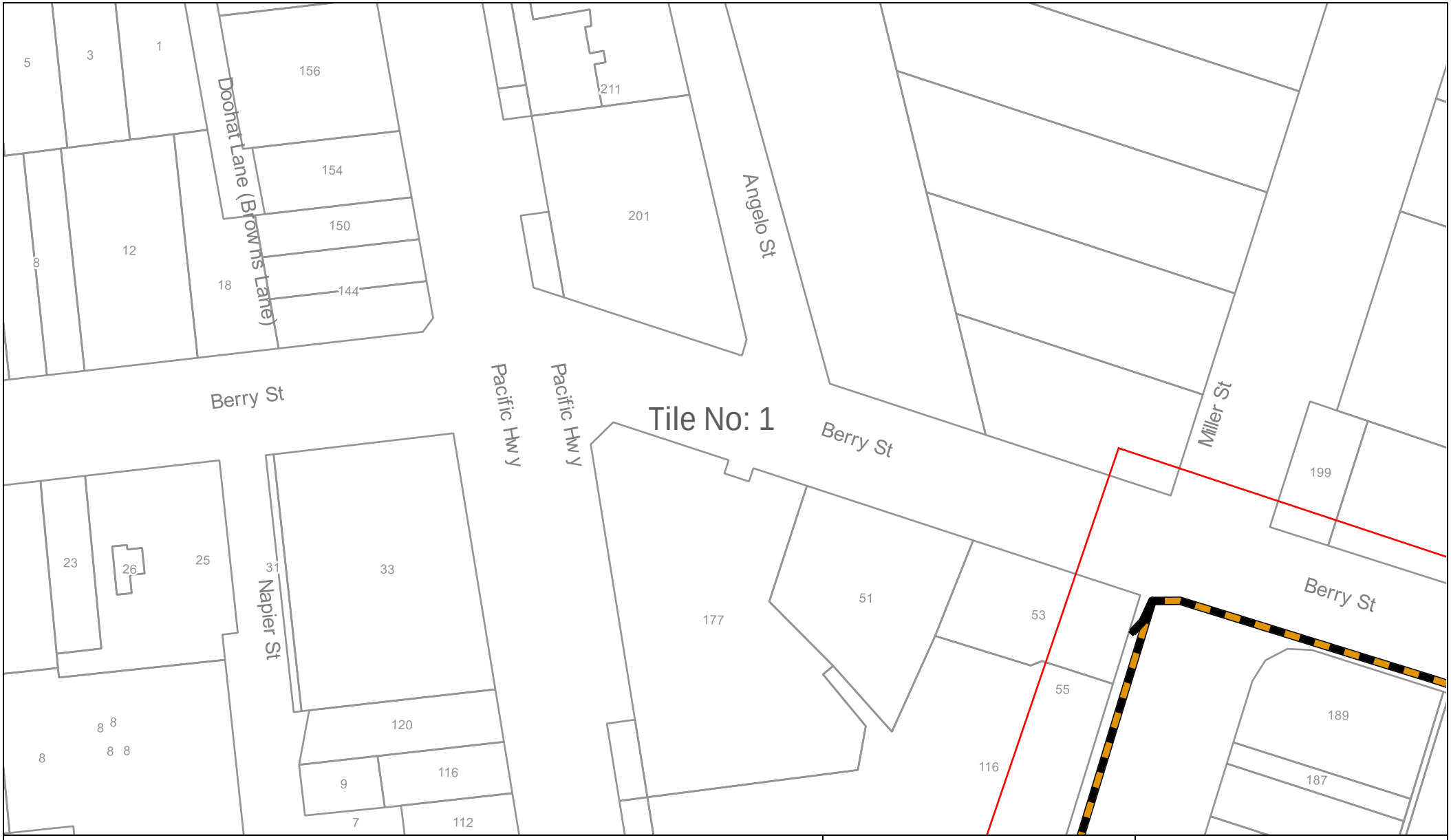

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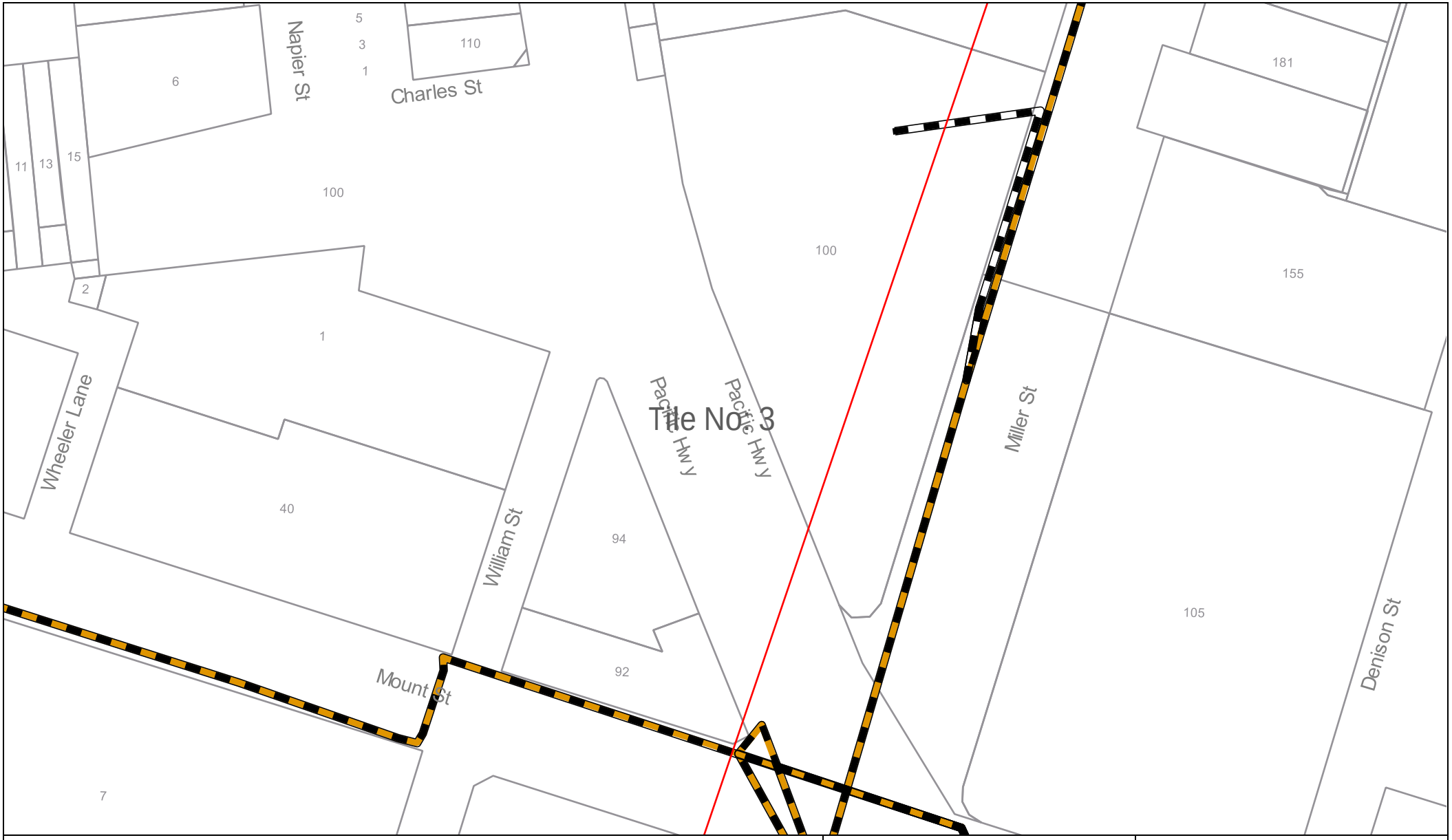

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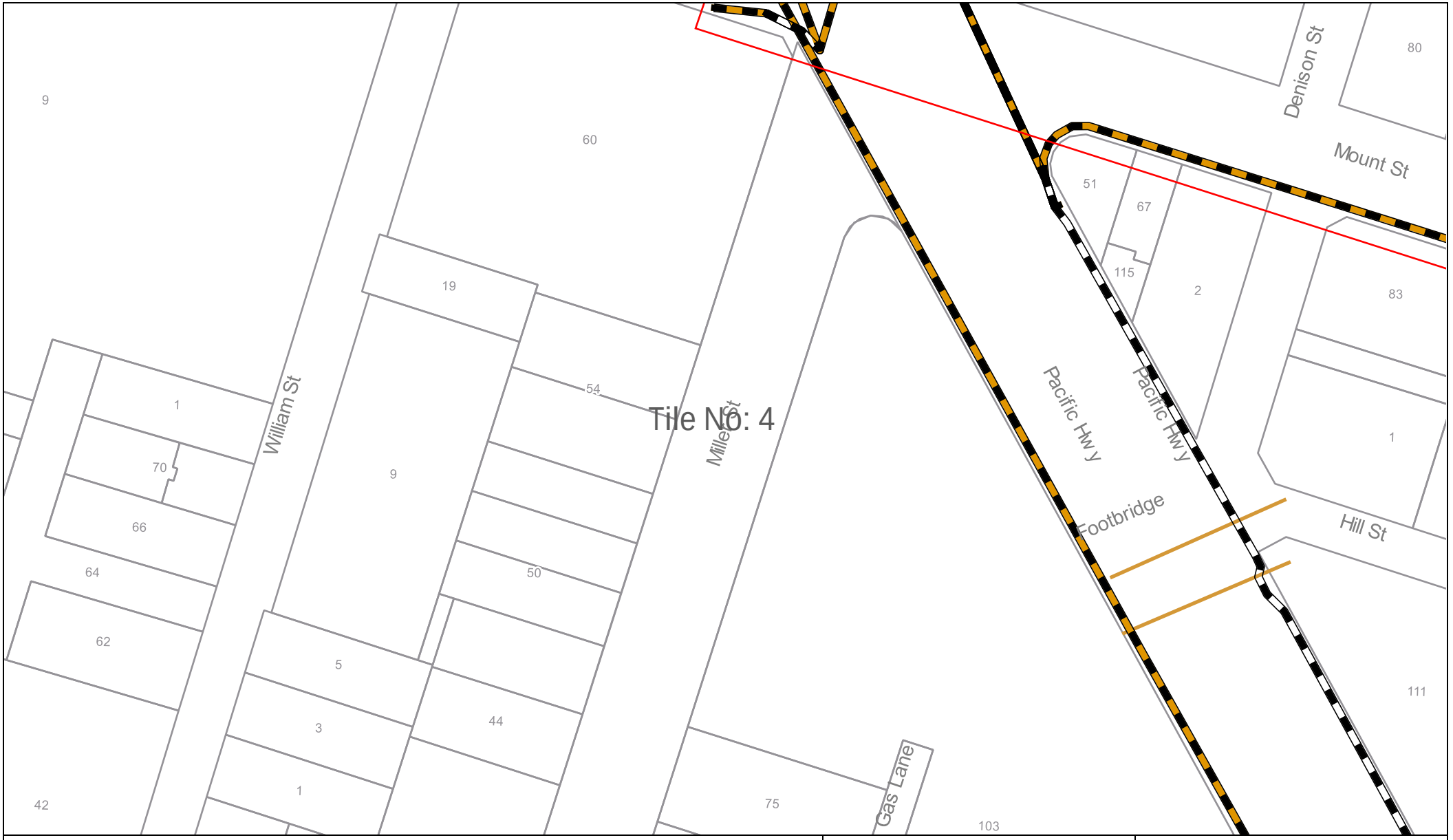

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OPTUS

DIAL BEFORE YOU DIG
www.1100.com.au

Optus Contract Management Team
Unit 9, 677 Springvale Road
Mulgrave, Victoria, 3178

Date: 10/04/2019
To: Mr David Wall
Company:
Address: levell16 - 580 George Street
Sydney, NSW 2000

ENQUIRY DETAILS
Location: Denison Street, North Sydney, NSW 2060
Sequence No.: 82196083
DBYD Reference: 16094143

In relation to your enquiry of the above location, Optus advises as follows:

Optus records indicate that there ARE underground Optus FIBRE OPTIC TELECOMMUNICATIONS ASSETS in the vicinity of the above location as per the attached drawing(s).

PLEASE NOTE THAT THE ASSETS IN THIS AREA ARE OF NATIONAL SIGNIFICANCE. Any interference with these assets has the potential to significantly disrupt communications in Australia and may be an offence under the Criminal Code Act 1995.

This reply is valid for a period of 30 days from the date above.

IMPORTANT INFORMATION
Asset location drawings provided by Optus are reference diagrams and are provided as a guide only. The completeness of the information in these drawings cannot be guaranteed. Exact ground cover and alignments cannot be provided with any certainty as these may have altered over time. Depths of telecommunications assets vary considerably as do alignments. It is essential to identify the location of any Optus assets in the vicinity prior to engaging in any works.

All Optus assets in the vicinity of any planned works will need to be electronically located to ascertain their general location. Depending on the scope of planned works in the vicinity, the assets may also need to be physically located.

You MUST engage the services of one of the Optus Asset Accredited Locators to carry out asset location (refer to list of Accredited Locators at the end of this DYBD response).

Unless otherwise agreed with Optus, where an on-site asset location is required, the requestor is responsible for all costs associated with the locating service including (where required) physically exposing the Optus asset.

DUTY OF CARE
When working in the vicinity of telecommunications assets you have a legal "Duty of Care" and non-interference that must be observed.

It is your responsibility as the requesting party (as a landowner or any other party involved in the planned works) to design for minimal impact to any existing Optus asset. Optus can assist at the design stage through consultation.

It is also your, as the requesting party (or your representative's), responsibility to:

a) Obtain location drawings (through the Dial Before You Dig process) of any existing Optus assets at a reasonable time before any planned works begin;

b) Have an Optus Accredited Asset Locator identify the general location of the Optus asset and physically locate the asset where planned works may encroach on its alignment; and

c) Contact Optus for further advice where requested to do so by this letter.

DAMAGE TO ANY OPTUS NETWORK MUST BE REPORTED TO 1800 500 253 IMMEDIATELY
You, your head contractor and any relevant subcontractor are all responsible for any Optus asset damage as a result of planned activities in the vicinity of Optus assets.

This applies where works commence prior to obtaining Optus drawings, where there is failure to follow instructions or during any construction activities.

Optus reserves the right to recover compensation for loss or damage to its assets including consequential loss. Also, you, your head contractor and any relevant subcontractor may also be liable for prosecution under the Criminal Code Act 1995 (Cth).

ASSET RELOCATIONS
You are not permitted by law to relocate, alter or interfere with any Optus asset under any circumstance. Any unauthorised interference with an Optus asset may lead to prosecution under the Criminal Code Act 1995 (Cth).

Enquiries relating to the relocation of Optus assets must be referred to the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

APPROACH DISTANCES
On receipt of Optus asset location drawings and prior to commencing any planned works near an Optus asset, engage an Optus Accredited Locator to undertake a general location of the Optus asset.

Physical location of the Optus asset by an Optus Accredited Locator will also be required where planned works are within the following approach distances of the general location of the Optus asset:

a) In built up metropolitan areas where road and footpaths are well defined by kerbs or other features a minimum clear distance of 1 meter must be maintained from the general location of the Optus asset.

b) In non-established or unformed metropolitan areas, a minimum clear distance of 3 meters must be maintained from the general location of the Optus asset.

c) In country or rural areas where wider variations may exist between the general and actual location of an Optus asset may exist, then a minimum clear distance of 5 meters must be maintained from the general location of the Optus asset.

If planned works are parallel to the Optus asset, then the Optus asset must be physically located by an Optus Accredited Locator at a minimum of 5 meter intervals along the length of the parallel works prior to work commencing.

Under no circumstances is crossing of any Optus asset permitted without physical location of the asset being carried out by an Optus Accredited Locator. Depending on the asset involved an Optus representative may be required onsite.

The minimum clearances to the physical location of Optus assets for the following specific types of works must be maintained at all times.

Note: Where the clearances in the following table cannot be maintained or where the type of work differs from those listed then advice must be sought from the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

Type of Works	**Clearance to Physical Location of Optus Asset**
Jackhammers / Pneumatic Breakers	Not within 1 meter.
Light duty Vibrating Plate or Wacker Packer type compactors (not heavy road construction vibrating rollers etc.)	500mm compact clearance cover before a light duty compactor can be used over any Optus conduit. No compaction permitted over Optus direct buried cable without prior approval from Optus.
Boring Equipment (in-line, horizontal and vertical)	Not within 5 meters parallel of the Optus asset location without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite. Not to cross the Optus asset without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite.

Type of Works	Clearance to Physical Location of Optus Asset
Heavy vehicle Traffic (over 3 tonnes)	Not to be driven across Optus conduits with less than 600mm of cover. Not to be driven across Optus direct buried cable with less than 1.2 meters of cover. Once off crossings permitted, multiple crossing (e.g. road construction or logging) will require Optus approval. Accredited Optus Asset Locator to physically expose the Optus asset to verify actual depth.
Mechanical Excavators, Farm Ploughing, Vertical Hole installation for water bore or fencing etc.	Not within 1 meter. Accredited Optus Asset Locator to physically expose the Optus asset to verify actual location.

ASSET CLEARANCES AFTER COMPLETION OF WORKS

All Optus pits and manholes must be a minimum of 1 meter from the back of any kerb, 3.5 meters of the road surface without a kerb or not within 15 meters of street intersection.

In urban areas Optus conduit must have the following minimum depth of cover:

- Footway 600mm;
- Roadway 1 meter at drain invert and at road centre crown.

In rural areas Optus conduit must have a minimum depth of cover of 1 meter and direct buried cable 1.2 meters.

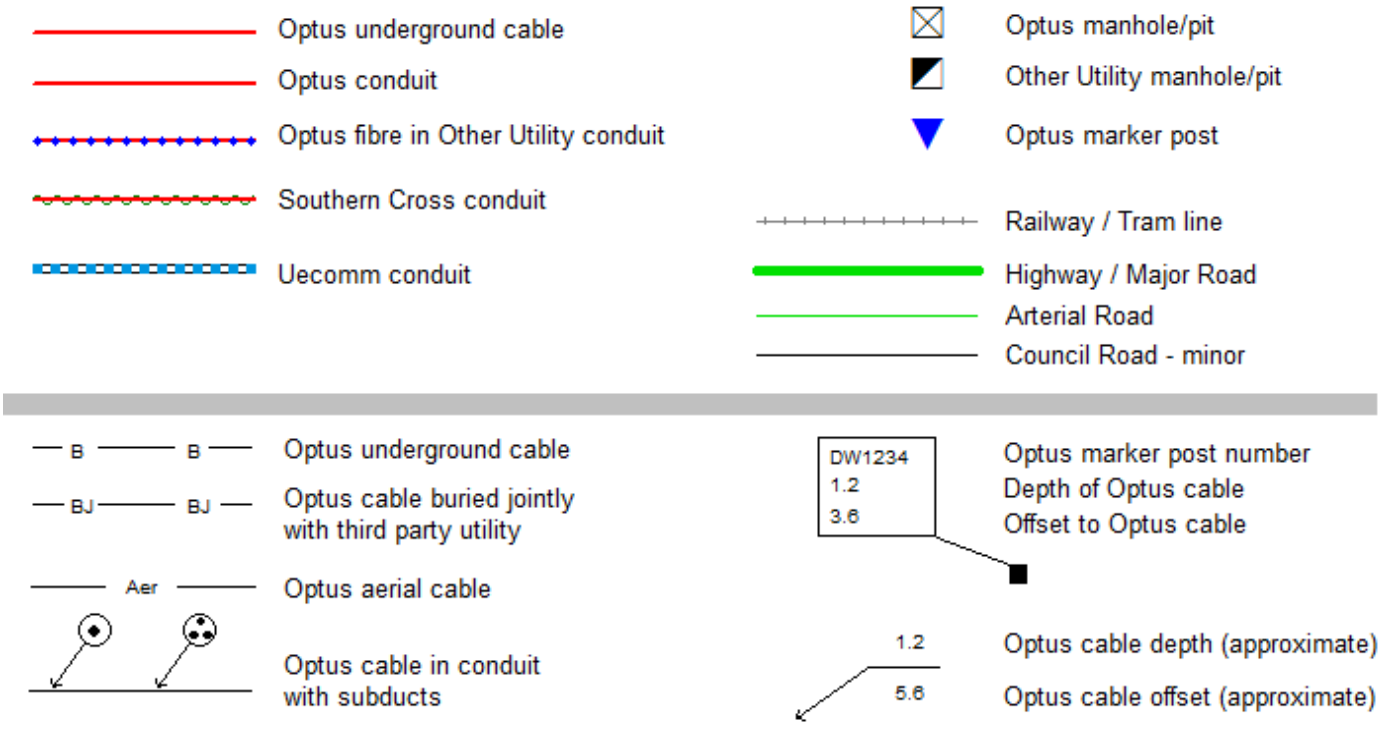
In cases where it is considered that the above clearances cannot be maintained at the completion of works, advice must be sought from the relevant Optus Damages and Relocations Team (refer "Further Assistance").

FURTHER ASSISTANCE

Further assistance on asset clearances, protection works or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:
NFODamages&RelocationsDropbox@optus.com.au

Further assistance relating to asset location drawings etc. can be obtained by contacting the Optus Network Operations Asset Analysis Team on 1800 505 777.

OPTUS ENGINEERING DRAWING SYMBOLS



OPTUS

Optus Accredited Asset Locators

Name	Company Name	Phone	Email	State	Region/Service Area
Alan Cordner	Alcom Fibre Services Pty Ltd	0400 300 337	alcomfibre@bigpond.com	NSW / ACT	Sydney
Brad McCorkindale	Bradmac Locating Services	0434 157 409	brad.mac@bigpond.com	NSW / ACT	All
Troy Redden	On Point Utility Locating	1300 6676 468	troy@onpointlocating.com.au	NSW	Sydney Only
Shane Buckley	Cable & Pipe Locations	0408 730 430	sabuckley@bigpond.com	NSW / QLD	Armidale, Casino, Coffs Harbour, Dorrigo, Glenn Innes, Grafton, Inverell, Kempsey, Lismore, Nambucca, Port Macquarie, Tamworth, Taree, Tenterfield, Yamba
Philip Pegler	Down Under Detection Services (DUDS)	0418 267 964	apegler@duds.net.au	NSW	All
Noreen Egan	SureSearch Underground Services	1300 884 520 0418 920 245	Noreen@suresearch.com.au	NSW / ACT / QLD	NSW, Sydney, Northern NSW, Canberra, QLD, South East QLD.
Leonard McGowan	Pipesure Australia	1300 411 811	len@pipesure.com.au	NSW	Sydney
Bruce Whittaker	Optical Fibre Technologies	0402 354 322	opticaltek1@aol.com	NSW	Sydney/Wollongong
Darryl Smith	Darryl Smith Electrical	02 6642 3731	office@dsmithelectrical.com.au	NSW	Grafton
George Koenig	Downunder Locations NSW Pty	0438 243 856	Downunderlocations@gmail.com	NSW	Tweed Heads, Gold Coast, Brisbane
Michael Grant	M&K Grant Bega Bobcats Pty Ltd	0427 260 423	zzbobcat@bigpond.net.au	NSW	Bega, Far South Coast
Antony Critcher	Geotrace Pty Ltd	0417 147 945	antony@geotrace.com.au	NSW	All Areas, Sydney, Wollongong, Newcastle, ACT

Anthony Lane	Hydro Digga	0447 774 000	locator@hydrodigga.com	NSW	All of NSW, ACT & South East Qld
Grant Pearson	Australian Utilities Management Pty Ltd	0427 833 222	aine@ausutilities.net.au	NSW	Sydney Metro
Nathan Ellis	Utility Locating Services	0404 087 555	nathan@utilitylocatingservices.com.au	NSW	Sydney
Rodney Pullen	Provac	0450 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Rodney Pullen	One Find Cables	0451 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Drew Misko	Australian Subsurface Pty Ltd	0427 879 600	admin@australiansubsurface.com	NSW / ACT	All of NSW/ACT
Scott O'Malley	Coastal Cable Locators Pty Ltd	0427 975 777	skomalley@bigpond.com	NSW	South Coast- Snowy Mountains- Southern Highlands
Liam Bolger	Brandon Construction Services	0438 044 008	liam.bolger@hotmail.com	NSW	Bathurst, Orange, Dubbo
Brett Pickup	All About Pipes	02 8763 4200	Brett.Pickup@allaboutpipes.com.au	NSW / VIC	All
Karen Joyce	Durkin Construction Pty Ltd	02 9712 0308	karen@durkinconstruction.com.au	NSW	Sydney
Timothy Laidler	Locate & Map	0431 191 669	tim@locateandmap.com.au	NSW	Sydney, Central Coast
Ken Brown	Riteway Traffic Control Pty Ltd	0419 212 969	kbrowne@ritewaytc.com.au	NSW	Central Coast, Hunter
Walter R Johansen	Steger & Associates	02 6296 4089	enquiries@steger.com.au	ACT / NSW	Canberra
Jean-Max Monty	Civilscan	0416 068 060	civilscan@bigpond.com	NSW	Sydney – Central Coast – Newcastle – Wollongong – Hunter Valley – Blue Mountains
Alan Hunter	Hunter Ground Search	02 4953 1244 0418 684 819	huntergroundsearch@bigpond.com	NSW	Newcastle, Central Coast, Hunter Valley, Mid North Coast, Liverpool Plains, Central West NSW
Gilbert J Cook	Datateks Communications Specialists	0408 693 660	datateks@datateks.com.au	NSW	Southern NSW

Damien Black	Mid North Coast Hydro Digging	0418 409 465	dblack1@bigpond.com	NSW	Newcastle –Foster –Taree -Wauchope -Port Macquarie -Kempsey -Coffs harbour
Sean Henry	Utility Mapping Pty Ltd	0428 229 919	sean@utilitymapping.com.au	NSW	Sydney
Daniel Fox	Epoca Environmental Pty Ltd	02 4739 2465 0433 100 642	daniel@epocaenvironmental.com.au	NSW	All NSW, ACT
Rod Shaw	Cable Find	0478 887 073	rod@cablefind.com.au	NSW	Northern Rivers
Danny Carter	Online Pipe & Cable Locating	1300 665 384	danny@onlinepipe.com.au	NSW	Sydney, Newcastle, Canberra, Blue Mountains
Sam Romano	Locating Services	0403 065 510	sam.romano@locatingservices.com.au	NSW	NSW All
Scott Allison	Crux Surveying Australia	02 9540 9940	sydneyoffice@cruxsurveying.com.au	NSW	Sydney Metro & Surrounding Areas
Ian Brown	Peter Ellsmore & Associates	0439 423 708	ian.brown@ellsmore.com.au	NSW	Wollongong, Illawarra, South Coast, Southern Highlands, Macarthur & Sydney
Donna Wullaert	Commence Communications Pty Ltd	02 6226 3869 0428 595 620	admin@commencecomms.com.au	NSW	Canberra, Yass, Bungendore, Goulburn and Surrounding regional Areas
Stephen Fraser	Advanced Ground Locations	02 4930 3195 0412 497 488	steve_agl@hotmail.com	NSW	Newcastle, Hunter Valley, Central Coast, Taree & Surrounding Areas
Andrew Findlay	LiveLocates	0429 899 777	info@livelocates.com.au	NSW	South Coast/ACT, Snowy Mountains
Graeme Teege	Armidale Electrical	0456 294 384	office@armidale-electrical.com.au	NSW	Armidale
Myles Green	Australian Locating Services	1300 761 545	myles@locating.com.au	NSW	Sydney
Brett Wallin	Utility Scan	0426 354 051	brett@utilityscan.net	NSW	Sydney CBD and Regional areas
Daniel Hudson	One Search Locators	1300 530 420	daniel@onesearchlocators.com.au	NSW	All NSW, ACT
Tim Galaz	Utec Solutions	02 9389 0040	office@utecsolutions.com.au	NSW/QLD /VIC	All areas, NSW, QLD, VIC

Gary Laneyrie	Laneyrie Electrical	0412 079 079 0413 048 048	bindy@laneyieelectrical.com.au	NSW	Illawarra, South Coast, Hunter Region
Laurence Mead	Veris Australia	0419 770 560	i.mead@veris.com.au	NSW	Sydney
Bobby Friesz	Vac Group	0447 837 267	Bobby.Friesz@vacgroup.com.au	NSW	Sydney
Chris Hall	D C Locators Pty Ltd	0419 679 741	dcloc@powerup.com.au	QLD	Brisbane, Ipswich
Jeff Trackson	J.R & L.M Trackson Pty Ltd	0417 600 978	jtrackson@tracavoid.com.au	QLD	All
Benji Lee	LADS	0478 915 237	benji@ladsqld.com.au	QLD	South East QLD
Andrew Watson	Lambert Locations Pty Ltd	07 5562 8400	admin@lambertlocations.com.au	QLD	South East QLD & Northern NSW
Ross Clarke	FNQ Cable Locators Pty Ltd	0428 775 655	onlineco@bigpond.net.au	QLD	Far North QLD, Cape York & Peninsula
Col Greville	Bsure Locators	0488 520 688	admin@bsurelocators.com.au	QLD	Wide Bay Burnett and Central Qld
Mikael White	All Asset Locations	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Andrew Cowan	Vac Group	0447 008 806	andrew.cowan@vacgroup.com.au	QLD	South East and Central QLD
Jimmy Wilkins	GeoRadar Australia	0425 677 227	jimmy@georadar.net.au	QLD	Emerald, Bundaberg
Beaumont Blake	PipeHawk CCTV	0435 558 533	accounts@pipehawkcctv.com.au	QLD	South East QLD & Northern NSW
Craig Waite	C Locate	0437 808 444	clocate@bigpond.com	QLD	South East QLD
QLD Operations	Utility Location Services	0499 775 095 07 3807 3552	qldops@utilitylocationservices.com.au	QLD	SouthEast QLD, Northern NSW
Joshua Mellors	RPS AUS East	07 3237 8899	josh.mellors@rpsgroup.com.au	QLD	Sydney
Sean Henry	Utility Mapping Pty Ltd	0428 229 919	sean@utilitymapping.com.au	QLD	
Robert Reed	All Asset Locations Pty Ltd	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Jenny Dziduch	1300 Locate Pty Ltd	1300 562 283	admin@1300locate.com.au	QLD	All Queensland, Northern NSW
Sam Hazel	Utility ID Underground Service Locators	0401 202 515	sam@utilityid.com.au	QLD	Southern QLD
Brendon Smith	Dynamic Hydro Excavations	1300 8228 7825	admin@dynamicexcavation.com.au	QLD	QLD, NSW, VIC

Adam Lloyd	Aussie HydroVac Services	07 3287 7818	adam.lloyd@aussiehydrovac.com.au	QLD	All
Gary Poppi	Ace Cable Locations	0431 517 837	garypoppi@bigpond.com	QLD	Wide Bay Burnett
Daniel Vigliarolo	Vac Group	0449 953 047	daniel.vigliarolo@vacgroup.com.au	VIC	Melbourne
Josh Taylor	Advanced Locations Victoria	0427 846 716	josh@advancedlocationsvic.com.au	VIC	All
Ben Minutoli	Geelong Cable Locations	1800 449 543	ben@geelongcablelocations.com.au	VIC	Melbourne, Geelong, Country Victoria
Mick McGoldrick	Cavan Constructions	0404 241 679	mick@locatecables.com	VIC	Western Victoria
David Kelleher	Construction Sciences	03 9553 7236	utilities@constructionsciences.net	VIC	Victoria
Stuart Miles	ELS Environmental Location Systems	03 8795 7461	accounts@radiodetection.com.au	VIC	Victoria
Darren Dean	Asset Survey Solutions	1300 035 796	darren.dean@assetsurvey.com.au	VIC	Victoria
Alex Jones	Utility Mapping Pty Ltd	0417 413 353	ajones@utilitymapping.com.au	VIC	
Adam Linford	Gippsland Pipe & Cable Locations	0409 386 817	gippspac@hotmail.com	VIC	Gippsland
Thomas Pitt	Access Utility Engineering (AUE)	03 9580 0440	info@accessue.com.au	VIC	Victoria
Infrastructure Civil Services	Trenchless Pipelaying Contractors (TPC)	08 8376 5911	tpc@trenchlesspipelaying.com.au	SA	All
Galen Shanahan	Vac Group	0447 837 000	Galen.Shanahan@vacgroup.com.au	SA	All
Marilyn Dentice	Cable Locates & Consulting	08 9524 6600	accounts@cablelocates.com.au	WA	Metro & Country
Lisa Scofield	Abaxa	08 9256 0100	accounts@abaxa.com.au	WA	All
Derek McShane	Subterranean Service Locations	0420 862 426	Derek@sslwa.com.au	WA	Midwest/Gascoyne
Ben Upton	TerraVac Vacuum Excavation	0427 531 119	locations@terravac.com.au	WA	All
Dale Shearsmith	Subtera Subsurface Locating	1300 046 636	dale@subtera.com.au	WA	All
Liam Davies	Bunbury Telecom Service Pty Ltd	08 9726 0088	liam@btswa.com.au	WA	South West WA
Tammy Thorp	B.C.E Spatial	08 9364 6408	admin@bcespatial.com.au	WA	Perth Metro & Regional

Geoff Warren	Utility Mapping Pty Ltd	0472 815 238	gwarren@utilitymapping.com.au	WA	
Chris Lee	Pulse Locating	0437 289 861	enquiries@pulselocating.com.au	WA	Perth
Nigel Nunn	CCS Group / Utility Locating Solutions	08 9385 5000	enquiry@ccswa.com.au	WA	Perth
Tim Daws	Award Contracting	0411 878 895	info@awardcontracting.com.au	WA	City & Regional
Dave Turner	Anywair Pipe & Cable	0418 890 071	dave@anywair.com.au	NT	All NT, WA, QLD
Steve Gault	Northern Comms	0407 904 319	steve@northerncomms.net.au	NT	All
Wayne Parslow	Danisam	0417 089 865	danisam@westnet.com.au	NT	Darwin NT and Surrounds
Elizabeth Young	Archers Underground Services Locations (AUS Locations)	03 6245 1298	admin@auslocations.com.au auslocations@bigpond.com	TAS	All

OPTUS

DIAL BEFORE YOU DIG www.1100.com.au

Optus Contract Management Team
Unit 9, 677 Springvale Road
Mulgrave, Victoria, 3178

Date: 10/04/2019
To: Mr David Wall
Company:
Address: levell16 - 580 George Street
Sydney, NSW 2000

ENQUIRY DETAILS
Location: Denison Street, North Sydney, NSW 2060
Sequence No.: 82196083
DBYD Reference: 16094143

In relation to your enquiry concerning the above location, Optus advises as follows:

Optus records indicate that there ARE underground Optus FIBRE OPTIC TELECOMMUNICATIONS ASSETS in the vicinity of the above location as per the attached drawing(s).

This reply is valid for a period of 30 days from the date above.

IMPORTANT INFORMATION

Asset location drawings provided by Optus are reference diagrams and are provided as a guide only. The completeness of the information in these drawings cannot be guaranteed. Exact ground cover and alignments cannot be provided with any certainty as these may have altered over time. Depths of telecommunications assets vary considerably as do alignments. It is essential to identify the location of any Optus assets in the vicinity prior to engaging in any works.

All Optus assets in the vicinity of any planned works will need to be electronically located to ascertain their general location. Depending on the scope of planned works in the vicinity, the assets may also need to be physically located.

You MUST engage the services of one of the Optus Asset Accredited Locators to carry out asset location (refer to list of Accredited Locators attached to this DYBD response).

Unless otherwise agreed with Optus, where an on-site asset location is required, the requestor is responsible for all costs associated with the locating service including (where required) physically exposing the Optus asset.

DUTY OF CARE

When working in the vicinity of telecommunications assets you have a legal "Duty of Care" and non-interference that must be observed.

It is your responsibility as the requesting party (as a landowner or any other party involved in the planned works) to design for minimal impact to any existing Optus asset. Optus can assist at the design stage through consultation.

It is also your, as the requesting party (or your representative's), responsibility to:

a) Obtain location drawings (through the Dial Before You Dig process) of any existing Optus assets at a reasonable time before any planned works begin;

b) Have an Optus Accredited Asset Locator identify the general location of the Optus asset and physically locate the asset where planned works may encroach on its alignment; and

c) Contact Optus for further advice where requested to do so by this letter.

DAMAGE TO ANY OPTUS NETWORK MUST BE REPORTED TO 1800 500 253 IMMEDIATELY
You, your head contractor and any relevant subcontractor are all responsible for any Optus asset damage as a result of planned activities in the vicinity of Optus assets.

This applies where works commence prior to obtaining Optus drawings, where there is failure to follow instructions or during any construction activities.

Optus reserves the right to recover compensation for loss or damage to its assets including consequential loss. Also, you, your head contractor and any relevant subcontractor may also be liable for prosecution under the Criminal Code Act 1995 (Cth).

ASSET RELOCATIONS
You are not permitted by law to relocate, alter or interfere with any Optus asset under any circumstance. Any unauthorised interference with an Optus asset may lead to prosecution under the Criminal Code Act 1995 (Cth).

Enquiries relating to the relocation of Optus assets must be referred to the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

APPROACH DISTANCES
On receipt of Optus asset location drawings and prior to commencing any planned works near an Optus asset, engage an Optus Accredited Locator to undertake a general location of the Optus asset.

Physical location of the Optus asset by an Optus Accredited Locator will also be required where planned works are within the following approach distances of the general location of the Optus asset:

a) In built up metropolitan areas where road and footpaths are well defined by kerbs or other features a minimum clear distance of 1 meter must be maintained from the general location of the Optus asset.

b) In non-established or unformed metropolitan areas, a minimum clear distance of 3 meters must be maintained from the general location of the Optus asset.

c) In country or rural areas where wider variations may exist between the general and actual location of an Optus asset may exist, then a minimum clear distance of 5 meters must be maintained from the general location of the Optus asset.

If planned works are parallel to the Optus asset, then the Optus asset must be physically located by an Optus Accredited Locator at a minimum of 5 meter intervals along the length of the parallel works prior to work commencing.

Under no circumstances is crossing of any Optus asset permitted without physical location of the asset being carried out by an Optus Accredited Locator. Depending on the asset involved an Optus representative may be required onsite.

The minimum clearances to the physical location of Optus assets for the following specific types of works must be maintained at all times.

Note: Where the clearances in the following table cannot be maintained or where the type of work differs from those listed then advice must be sought from the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

Type of Works	**Clearance to Physical Location of Optus Asset**
Jackhammers / Pneumatic Breakers	Not within 1 meter.
Light duty Vibrating Plate or Wacker Packer type compactors (not heavy road construction vibrating rollers etc.)	500mm compact clearance cover before a light duty compactor can be used over any Optus conduit. No compaction permitted over Optus direct buried cable without prior approval from Optus.
Boring Equipment (in-line, horizontal and vertical)	Not within 5 meters parallel of the Optus asset location without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite. Not to cross the Optus asset without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite.

Type of Works	Clearance to Physical Location of Optus Asset
Heavy vehicle Traffic (over 3 tonnes)	Not to be driven across Optus conduits with less than 600mm of cover. Not to be driven across Optus direct buried cable with less than 1.2 meters of cover. Once off crossings permitted, multiple crossing (e.g. road construction or logging) will require Optus approval. Accredited Optus Asset Locator to physically expose the Optus asset to verify actual depth.
Mechanical Excavators, Farm Ploughing, Vertical Hole installation for water bore or fencing etc.	Not within 1 meter. Accredited Optus Asset Locator to physically expose the Optus asset to verify actual location.

ASSET CLEARANCES AFTER COMPLETION OF WORKS
All Optus pits and manholes must be a minimum of 1 meter from the back of any kerb, 3.5 meters of the road surface without a kerb or not within 15 meters of street intersection.

In urban areas Optus conduit must have the following minimum depth of cover:

- Footway 600mm;
- Roadway 1 meter at drain invert and at road centre crown.

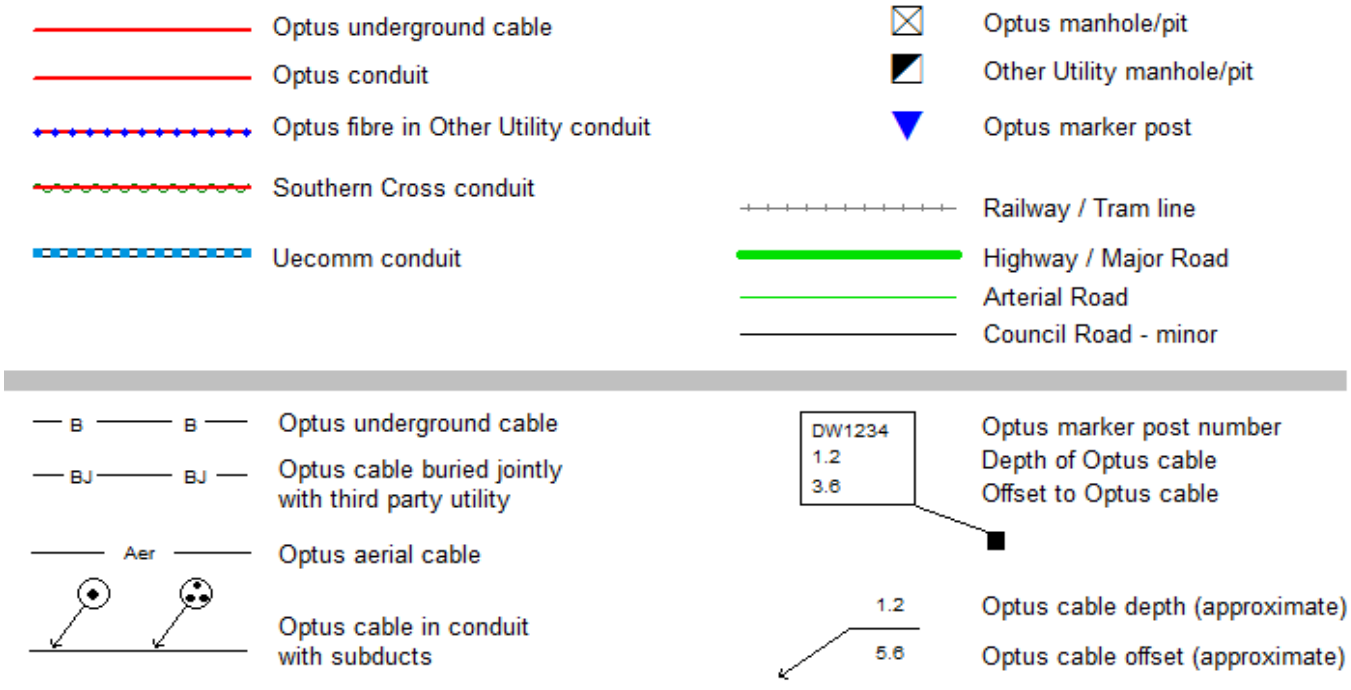
In rural areas Optus conduit must have a minimum depth of cover of 1 meter and direct buried cable 1.2 meters.

In cases where it is considered that the above clearances cannot be maintained at the completion of works, advice must be sought from the relevant Optus Damages and Relocations Team (refer "Further Assistance").

FURTHER ASSISTANCE
Further assistance on asset clearances, protection works or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:
NFODamages&RelocationsDropbox@optus.com.au

Further assistance relating to asset location drawings etc. can be obtained by contacting the Optus Network Operations Asset Analysis Team on 1800 505 777.

OPTUS ENGINEERING DRAWING SYMBOLS



OPTUS

Optus Accredited Asset Locators

Name	Company Name	Phone	Email	State	Region/Service Area
Alan Cordner	Alcom Fibre Services Pty Ltd	0400 300 337	alcomfibre@bigpond.com	NSW / ACT	Sydney
Brad McCorkindale	Bradmac Locating Services	0434 157 409	brad.mac@bigpond.com	NSW / ACT	All
Troy Redden	On Point Utility Locating	1300 6676 468	troy@onpointlocating.com.au	NSW	Sydney Only
Shane Buckley	Cable & Pipe Locations	0408 730 430	sabuckley@bigpond.com	NSW / QLD	Armidale, Casino, Coffs Harbour, Dorrigo, Glenn Innes, Grafton, Inverell, Kempsey, Lismore, Nambucca, Port Macquarie, Tamworth, Taree, Tenterfield, Yamba
Philip Pegler	Down Under Detection Services (DUDS)	0418 267 964	apegler@duds.net.au	NSW	All
Noreen Egan	SureSearch Underground Services	1300 884 520 0418 920 245	Noreen@suresearch.com.au	NSW / ACT / QLD	NSW, Sydney, Northern NSW, Canberra, QLD, South East QLD.
Leonard McGowan	Pipesure Australia	1300 411 811	len@pipesure.com.au	NSW	Sydney
Bruce Whittaker	Optical Fibre Technologies	0402 354 322	opticaltek1@aol.com	NSW	Sydney/Wollongong
Darryl Smith	Darryl Smith Electrical	02 6642 3731	office@dsmithelectrical.com.au	NSW	Grafton
George Koenig	Downunder Locations NSW Pty	0438 243 856	Downunderlocations@gmail.com	NSW	Tweed Heads, Gold Coast, Brisbane
Michael Grant	M&K Grant Bega Bobcats Pty Ltd	0427 260 423	zzbobcat@bigpond.net.au	NSW	Bega, Far South Coast
Antony Critcher	Geotrace Pty Ltd	0417 147 945	antony@geotrace.com.au	NSW	All Areas, Sydney, Wollongong, Newcastle, ACT

Anthony Lane	Hydro Digga	0447 774 000	locator@hydrodigga.com	NSW	All of NSW, ACT & South East Qld
Grant Pearson	Australian Utilities Management Pty Ltd	0427 833 222	aine@ausutilities.net.au	NSW	Sydney Metro
Nathan Ellis	Utility Locating Services	0404 087 555	nathan@utilitylocatingservices.com.au	NSW	Sydney
Rodney Pullen	Provac	0450 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Rodney Pullen	One Find Cables	0451 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Drew Misko	Australian Subsurface Pty Ltd	0427 879 600	admin@australiansubsurface.com	NSW / ACT	All of NSW/ACT
Scott O'Malley	Coastal Cable Locators Pty Ltd	0427 975 777	skomalley@bigpond.com	NSW	South Coast- Snowy Mountains- Southern Highlands
Liam Bolger	Brandon Construction Services	0438 044 008	liam.bolger@hotmail.com	NSW	Bathurst, Orange, Dubbo
Brett Pickup	All About Pipes	02 8763 4200	Brett.Pickup@allaboutpipes.com.au	NSW / VIC	All
Karen Joyce	Durkin Construction Pty Ltd	02 9712 0308	karen@durkinconstruction.com.au	NSW	Sydney
Timothy Laidler	Locate & Map	0431 191 669	tim@locateandmap.com.au	NSW	Sydney, Central Coast
Ken Brown	Riteway Traffic Control Pty Ltd	0419 212 969	kbrowne@ritewaytc.com.au	NSW	Central Coast, Hunter
Walter R Johansen	Steger & Associates	02 6296 4089	enquiries@steger.com.au	ACT / NSW	Canberra
Jean-Max Monty	Civilscan	0416 068 060	civilscan@bigpond.com	NSW	Sydney – Central Coast – Newcastle – Wollongong – Hunter Valley – Blue Mountains
Alan Hunter	Hunter Ground Search	02 4953 1244 0418 684 819	huntergroundsearch@bigpond.com	NSW	Newcastle, Central Coast, Hunter Valley, Mid North Coast, Liverpool Plains, Central West NSW
Gilbert J Cook	Datateks Communications Specialists	0408 693 660	datateks@datateks.com.au	NSW	Southern NSW

Damien Black	Mid North Coast Hydro Digging	0418 409 465	dblack1@bigpond.com	NSW	Newcastle- Foster-Taree-Wauchope -Port Macquarie - Kempsey -Coffs harbour
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Daniel Fox	Epoca Environmental Pty Ltd	02 4739 2465 0433 100 642	daniel@epocaenvironmental.com.au	NSW	All NSW, ACT
Rod Shaw	Cable Find	0478 887 073	rod@cablefind.com.au	NSW	Northern Rivers
Danny Carter	Online Pipe & Cable Locating	1300 665 384	danny@onlinepipe.com.au	NSW	Sydney, Newcastle, Canberra, Blue Mountains
Sam Romano	Locating Services	0403 065 510	sam.romano@locatingservices.com.au	NSW	NSW All
Scott Allison	Crux Surveying Australia	02 9540 9940	sydneyoffice@cruxsurveying.com.au	NSW	Sydney Metro & Surrounding Areas
Ian Brown	Peter Ellsmore & Associates	0439423708	ian.brown@ellsmore.com.au	NSW	Wollongong, Illawarra, South Coast, Southern Highlands, Macarthur & Sydney
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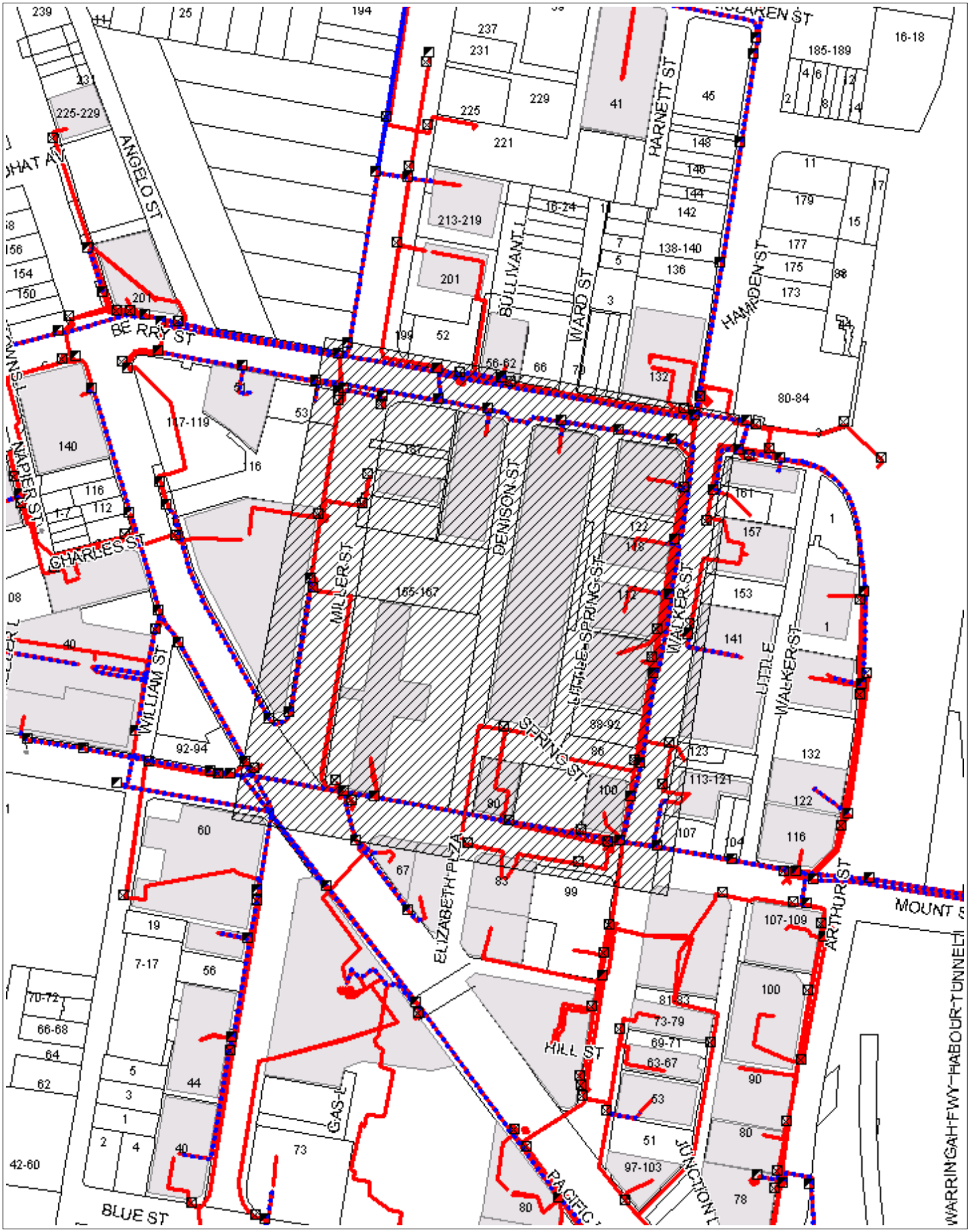
Andrew Findlay	LiveLocates	0429 899 777	info@livelocates.com.au	NSW	South Coast/ACT, Snowy Mountains
Graeme Teege	Armidale Electrical	0456 294 384	office@armidale-electrical.com.au	NSW	Armidale
Myles Green	Australian Locating Services	1300 761 545	myles@locating.com.au	NSW	Sydney
Brett Wallin	Utility Scan	0426 354 051	brett@utilityscan.net	NSW	Sydney CBD and Regional areas
Daniel Hudson	One Search Locators	1300 530 420	daniel@onesearchlocators.com.au	NSW	All NSW, ACT
Tim Galaz	Utec Solutions	02 9389 0040	office@utecsolutions.com.au	NSW/QLD/VIC	All areas, NSW, QLD, VIC

Gary Laneyrie	Laneyrie Electrical	0412 079 079 0413 048 048	bindy@laneyieelectrical.com.au	NSW	Illawarra, South Coast, Hunter Region
Laurence Mead	Veris Australia	0419 770 560	i.mead@veris.com.au	NSW	Sydney
Bobby Friesz	Vac Group	0447 837 267	Bobby.Friesz@vacgroup.com.au	NSW	Sydney
Chris Hall	D C Locators Pty Ltd	0419 679 741	dcloc@powerup.com.au	QLD	Brisbane, Ipswich
Jeff Trackson	J.R & L.M Trackson Pty Ltd	0417 600 978	jtrackson@tracavoid.com.au	QLD	All
Benji Lee	LADS	0478 915 237	benji@ladsqld.com.au	QLD	South East QLD
Andrew Watson	Lambert Locations Pty Ltd	07 5562 8400	admin@lambertlocations.com.au	QLD	South East QLD & Northern NSW
Ross Clarke	FNQ Cable Locators Pty Ltd	0428 775 655	onlineco@bigpond.net.au	QLD	Far North QLD, Cape York & Peninsula
Col Greville	Bsure Locators	0488 520 688	admin@bsurelocators.com.au	QLD	Wide Bay Burnett and Central Qld
Mikael White	All Asset Locations	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Andrew Cowan	Vac Group	0447 008 806	andrew.cowan@vacgroup.com.au	QLD	South East and Central QLD
Jimmy Wilkins	GeoRadar Australia	0425 677 227	jimmy@georadar.net.au	QLD	Emerald, Bundaberg
Beaumont Blake	PipeHawk CCTV	0435 558 533	accounts@pipehawkcctv.com.au	QLD	South East QLD & Northern NSW
Craig Waite	C Locate	0437 808 444	clocate@bigpond.com	QLD	South East QLD
QLD Operations	Utility Location Services	0499 775 095 07 3807 3552	qldops@utilitylocationservices.com.au	QLD	SouthEast QLD, Northern NSW
Joshua Mellors	RPS AUS East	07 3237 8899	josh.mellors@rpsgroup.com.au	QLD	Sydney
Sean Henry	Utility Mapping Pty Ltd	0428 229 919	sean@utilitymapping.com.au	QLD	
Robert Reed	All Asset Locations Pty Ltd	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Jenny Dziduch	1300 Locate Pty Ltd	1300 562 283	admin@1300locate.com.au	QLD	All Queensland, Northern NSW
Sam Hazel	Utility ID Underground Service Locators	0401 202 515	sam@utilityid.com.au	QLD	Southern QLD
Brendon Smith	Dynamic Hydro Excavations	1300 8228 7825	admin@dynamicexcavation.com.au	QLD	QLD, NSW, VIC
Adam Lloyd	Aussie HydroVac Services	07 3287 7818	adam.lloyd@aussiehydrovac.com.au	QLD	All
Gary Poppi	Ace Cable Locations	0431 517 837	garypoppi@bigpond.com	QLD	Wide Bay Burnett

Daniel Vigliarolo	Vac Group	0449 953 047	daniel.vigliarolo@vacgroup.com.au	VIC	Melbourne
Josh Taylor	Advanced Locations Victoria	0427 846 716	josh@advancedlocationsvic.com.au	VIC	All
Ben Minutoli	Geelong Cable Locations	1800 449 543	ben@geelongcablelocations.com.au	VIC	Melbourne, Geelong, Country Victoria
Mick McGoldrick	Cavan Constructions	0404 241 679	mick@locatecables.com	VIC	Western Victoria
David Kelleher	Construction Sciences	03 9553 7236	utilities@constructionsciences.net	VIC	Victoria
Stuart Miles	ELS Environmental Location Systems	03 8795 7461	accounts@radiodetection.com.au	VIC	Victoria
Darren Dean	Asset Survey Solutions	1300 035 796	darren.dean@assetsurvey.com.au	VIC	Victoria
Alex Jones	Utility Mapping Pty Ltd	0417 413 353	ajones@utilitymapping.com.au	VIC	
Adam Linford	Gippsland Pipe & Cable Locations	0409 386 817	gippspac@hotmail.com	VIC	Gippsland
Thomas Pitt	Access Utility Engineering (AUE)	03 9580 0440	info@accessue.com.au	VIC	Victoria
Infrastructure Civil Services	Trenchless Pipelaying Contractors (TPC)	08 8376 5911	tpc@trenchlesspipelaying.com.au	SA	All
Galen Shanahan	Vac Group	0447 837 000	Galen.Shanahan@vacgroup.com.au	SA	All
Marilyn Dentice	Cable Locates & Consulting	08 9524 6600	accounts@cablelocates.com.au	WA	Metro & Country
Lisa Scofield	Abaxa	08 9256 0100	accounts@abaxa.com.au	WA	All
Derek McShane	Subterranean Service Locations	0420 862 426	Derek@sslwa.com.au	WA	Midwest/Gascoyne
Ben Upton	TerraVac Vacuum Excavation	0427 531 119	locations@terravac.com.au	WA	All
Dale Shearsmith	Subtera Subsurface Locating	1300 046 636	dale@subtera.com.au	WA	All
Liam Davies	Bunbury Telecom Service Pty Ltd	08 9726 0088	liam@btswa.com.au	WA	South West WA
Tammy Thorp	B.C.E Spatial	08 9364 6408	admin@bcespatial.com.au	WA	Perth Metro & Regional
Geoff Warren	Utility Mapping Pty Ltd	0472 815 238	gwarren@utilitymapping.com.au	WA	
Chris Lee	Pulse Locating	0437 289 861	enquiries@pulselocating.com.au	WA	Perth

Nigel Nunn	CCS Group / Utility Locating Solutions	08 9385 5000	enquiry@ccswa.com.au	WA	Perth
Tim Daws	Award Contracting	0411 878 895	info@awardcontracting.com.au	WA	City & Regional
Dave Turner	Anywair Pipe & Cable	0418 890 071	dave@anywair.com.au	NT	All NT, WA, QLD
Steve Gault	Northern Comms	0407 904 319	steve@northerncomms.net.au	NT	All
Wayne Parslow	Danisam	0417 089 865	danisam@westnet.com.au	NT	Darwin NT and Surrounds
Elizabeth Young	Archers Underground Services Locations (AUS Locations)	03 6245 1298	admin@auslocations.com.au auslocations@bigpond.com	TAS	All



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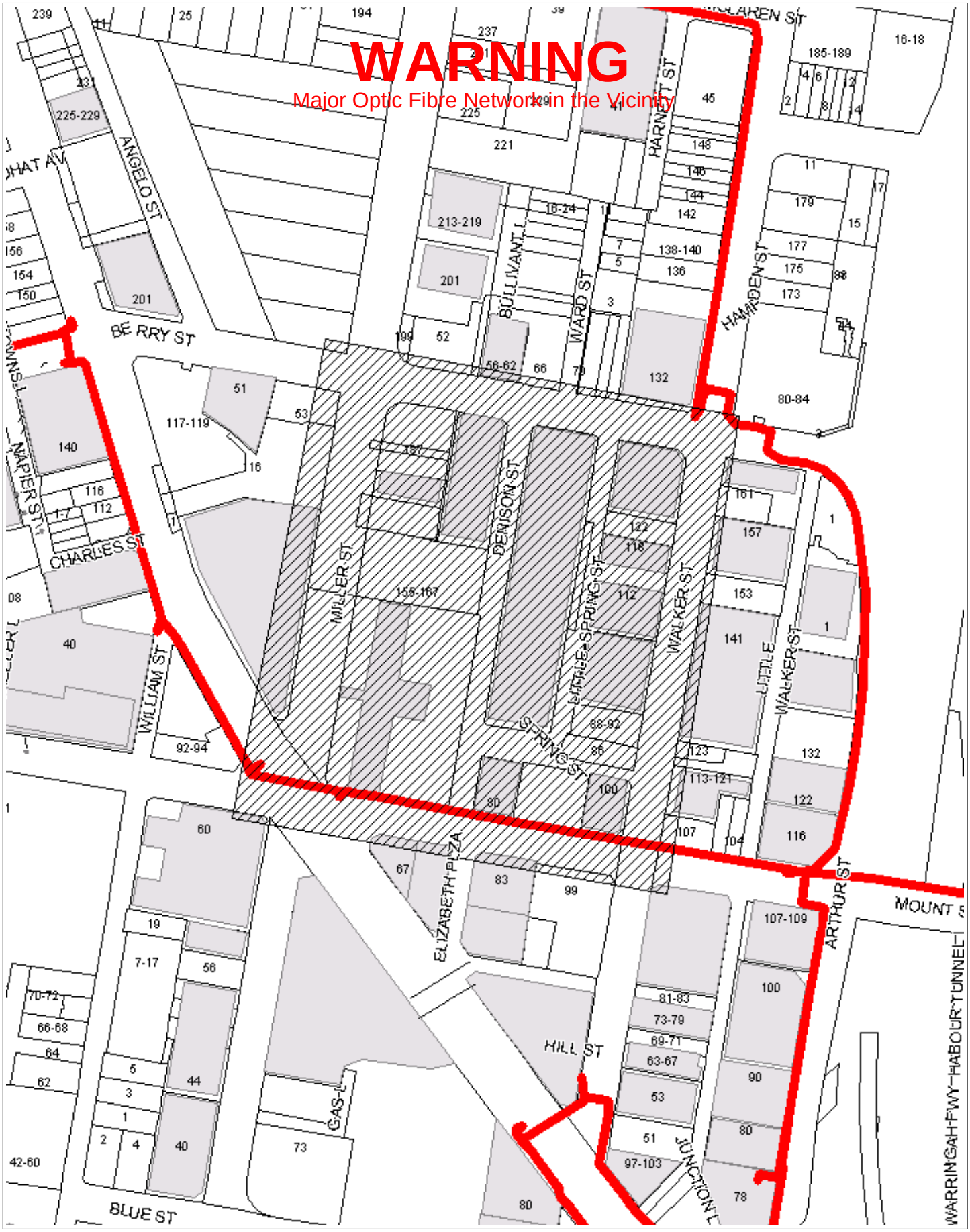
Optus Plans and information supplied are valid for 30 days from the date of issue. If this timeline has elapsed please raise a new enquiry.

Sequence Number: 82196083

Date Generated: 10/04/2019

For all Optus DBYD plan enquiries –
Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208



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Sequence Number: 82196083

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Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208

DIAL BEFORE YOU DIG www.1100.com.au

Response Cover Letter

Date: 10/04/2019

PIPE Networks
Level 17, 127 Creek St
Brisbane QLD 4000
Phone: +61 732339895
Fax: +61 732339880

To:

Mr David Wall - Customer ID: 1960272
Arcadis - Mr David Wall
levell16 - 580 George Street
Sydney
NSW
2000

Email: david.wall@arcadis.com
Phone: 02 89079000
Fax: Not Supplied
Mobile: 0416742110

Dear Mr David Wall

The following is our response to your Dial Before You Dig enquiry.

Assets Affected: Optus, PIPE Networks, Telstra

Sequence Number: 82196080

Location: Denison Street
North Sydney
NSW
2060

Commencement Date: 30/04/2019

Please read over the attached documents for more information about your enquiry.

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence.*

Note: *If the works fall in an area that adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Level 17, PIPE Networks House, 127 Creek Street, Brisbane 4000
PH:(07) 3233 9895 FAX:(07) 3233 9880

Attention: Mr David Wall
Fax: Not Supplied
DBYD Enquiry Number: 82196080

Date: 10/04/2019

Location: Denison Street
North Sydney
NSW
2060

DBYD ENQUIRY RETURN:

PIPE Networks **DOES** own or operate telecommunications network infrastructure within the area detailed above.

The affected network **is contained in the PIPE Networks duct network** and can be found on **PIPE Networks** own network plans.

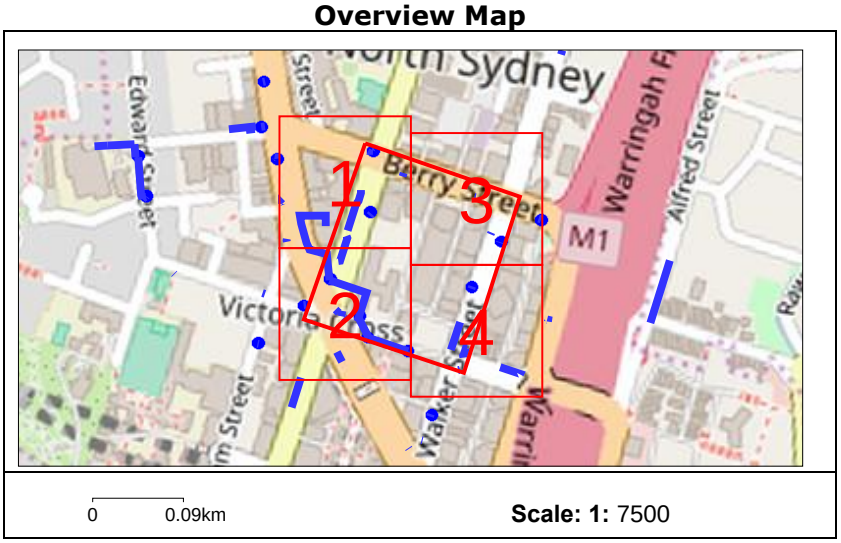
This network is vital to our operations and as such, it is critical that no works commence within the area until a PIPE Networks representative has contacted you.

A PIPE Networks representative will contact you within 24 hours to further discuss your intended works. If you do not hear from PIPE networks within 24hours please call us for assistance.

Due to continued network expansion, this network information can only be considered valid and accurate for 28 days from issue.

PIPE Networks will seek compensation for any damage to its network through negligence or ignorance of your duty of care.

Overview Map



PIPE Networks (for information specific to this job only)
Ph (07) 3233 9895
Email: dbyd@pipenetworks.com

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence.*

Note: *If the works fall in an area that adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Level 17, PIPE Networks House, 127 Creek Street, Brisbane 4000
PH:(07) 3233 9895 FAX:(07) 3233 9885

DBYD ENQUIRY RETURN:

PIPE Networks **DOES** own or operate telecommunications network infrastructure within the request area detailed above.

The affected network infrastructure is contained within the **Optus** duct network and can be found listed on the appropriate **Optus** duct Network plans. **Optus** can be contacted on 1800 505 777.

THIS NETWORK IS VITAL TO OUR OPERATIONS AND AS SUCH, IT IS CRITICAL THAT **NO WORKS** COMMENCE WITHIN THE AREA UNTIL YOU HAVE RECEIVED AND APPRAISED THE OPTUS DUCT PLANS FOR THIS AREA.

Due to continued network expansion, this network information can only be considered valid and accurate for 28 days from issue.

PIPE Networks will seek compensation for any damage to its network through negligence or ignorance of your duty of care.

PIPE NETWORKS
Ph (07) 3233 9895
Email: dbyd@pipenetworks.com
(for information specifically on this job only)

Level 17, PIPE Networks House, 127 Creek Street, Brisbane 4000
PH:(07) 3233 9895 FAX:(07) 3233 9885

DBYD ENQUIRY RETURN:

PIPE Networks **DOES** own or operate telecommunications network infrastructure within the request area detailed above.

The affected network infrastructure is contained within the **Telstra** duct network and can be found listed on the appropriate **Telstra** duct Network plans.

THIS NETWORK IS VITAL TO OUR OPERATIONS AND AS SUCH, IT IS CRITICAL THAT **NO WORKS** COMMENCE WITHIN THE AREA UNTIL YOU HAVE RECEIVED AND APPRAISED THE TELSTRA DUCT PLANS FOR THIS AREA.

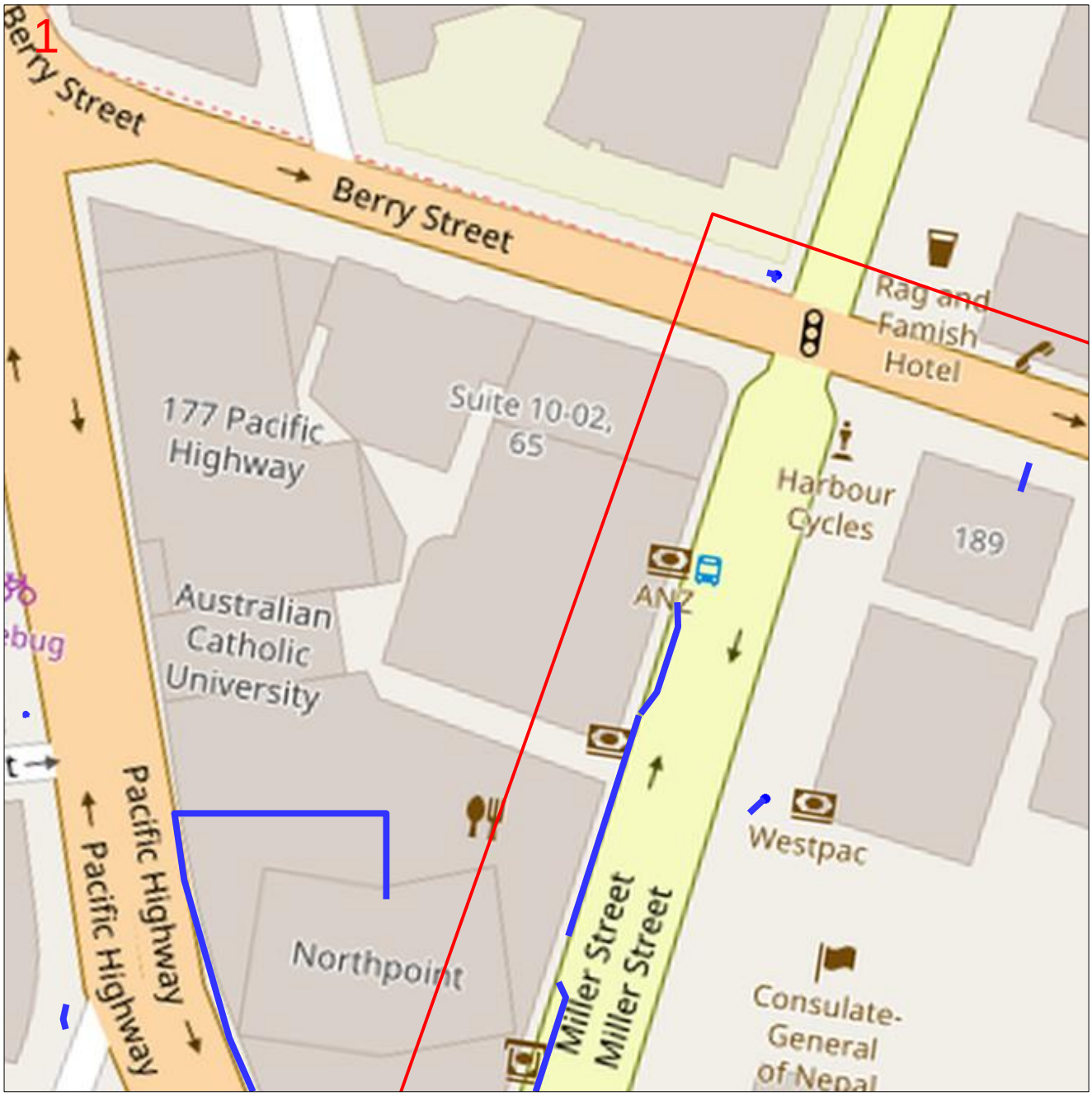
Due to continued network expansion, this network information can only be considered valid and accurate for 28 days from issue.

PIPE Networks will seek compensation for any damage to its network through negligence or ignorance of your duty of care.

PIPE NETWORKS
Ph (07) 3233 9895
Email: dbyd@pipenetworks.com
(for information specifically on this job only)

Only PIPE Networks' duct displayed.

For location of PIPE Networks cable in third-party duct, please contact third-party named on attached cover letter.



Enquiry Number: 82196080

Map Sheet: 1

Scale: 1:750

0 0.008km

LEGEND

DBYD Request Area **Asset**

Line

Area

Manhole

Duct

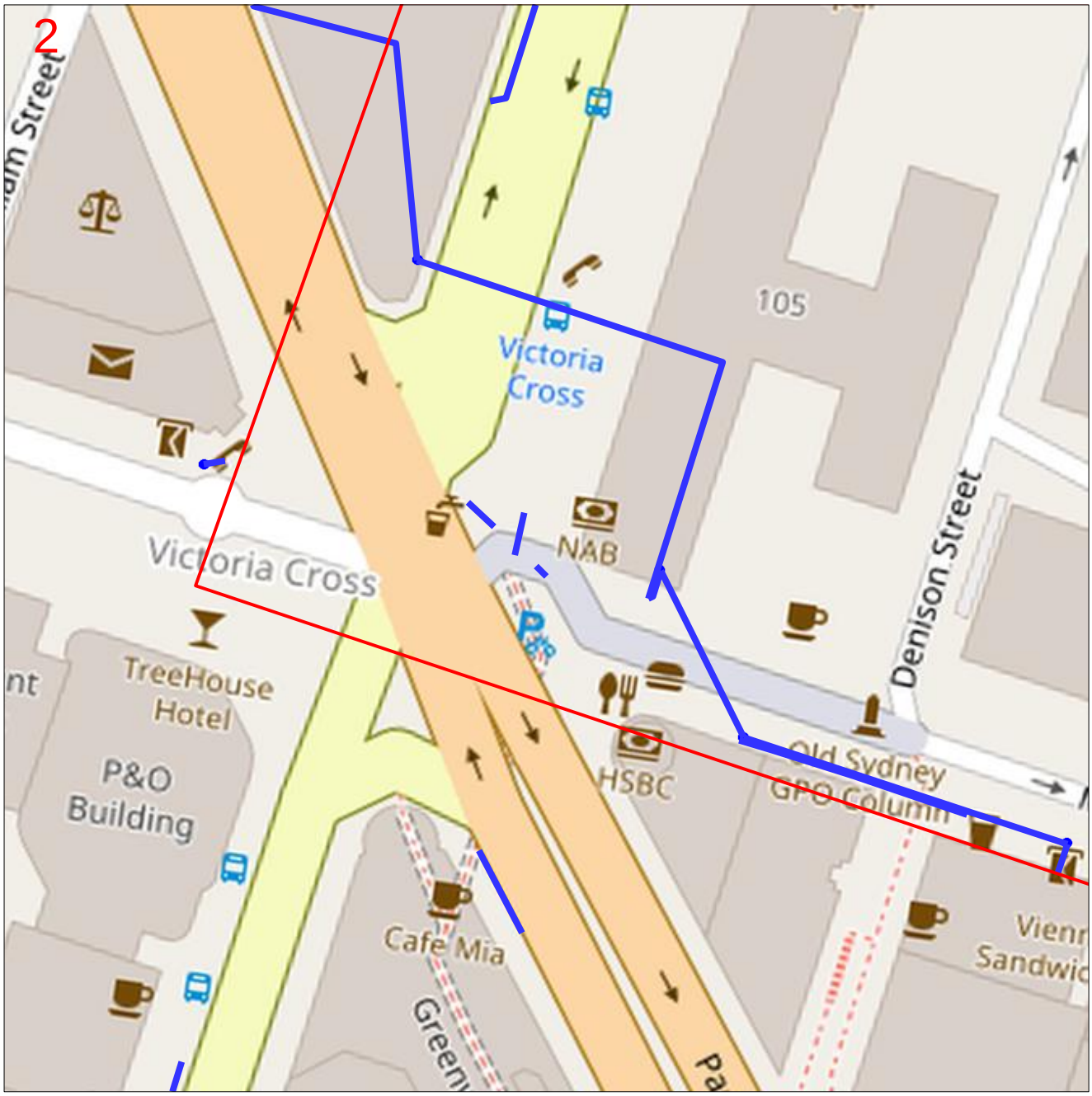
N

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence. © 2013 PIPE Networks Ltd.*

Note: *If the works fall in an area that is adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Only PIPE Networks' duct displayed.

For location of PIPE Networks cable in third-party duct, please contact third-party named on attached cover letter.



Enquiry Number: 82196080

Map Sheet: 2

Scale: 1:750

0 0.008km

LEGEND

DBYD Request Area

Line

Area

Asset

Manhole

Duct

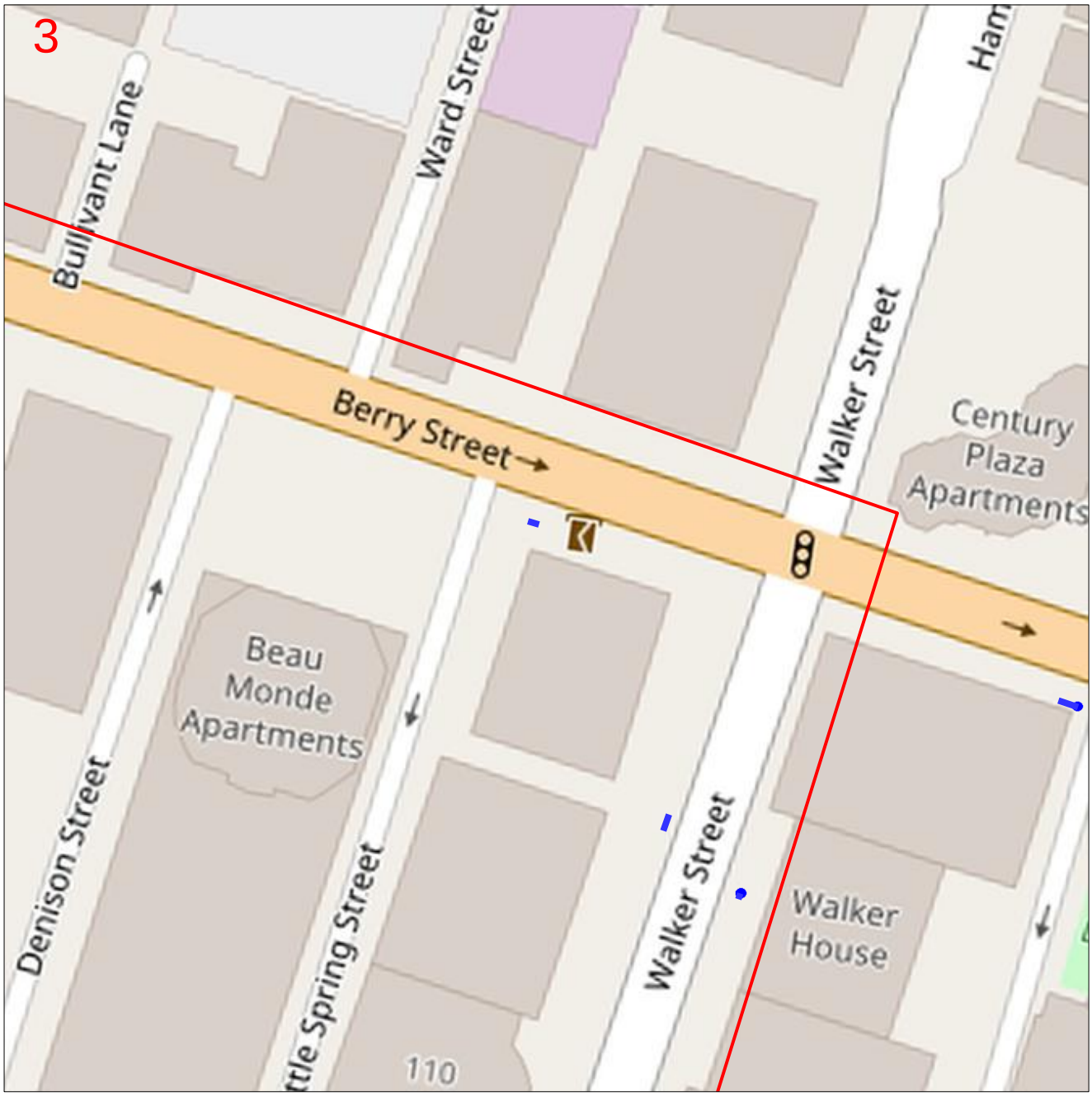
N

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence. © 2013 PIPE Networks Ltd.*

Note: *If the works fall in an area that is adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Only PIPE Networks' duct displayed.

For location of PIPE Networks cable in third-party duct, please contact third-party named on attached cover letter.



Enquiry Number: 82196080

Map Sheet: 3

Scale: 1:750

0 0.008km

LEGEND

DBYD Request Area **Asset**

Line

Area

Manhole

Duct

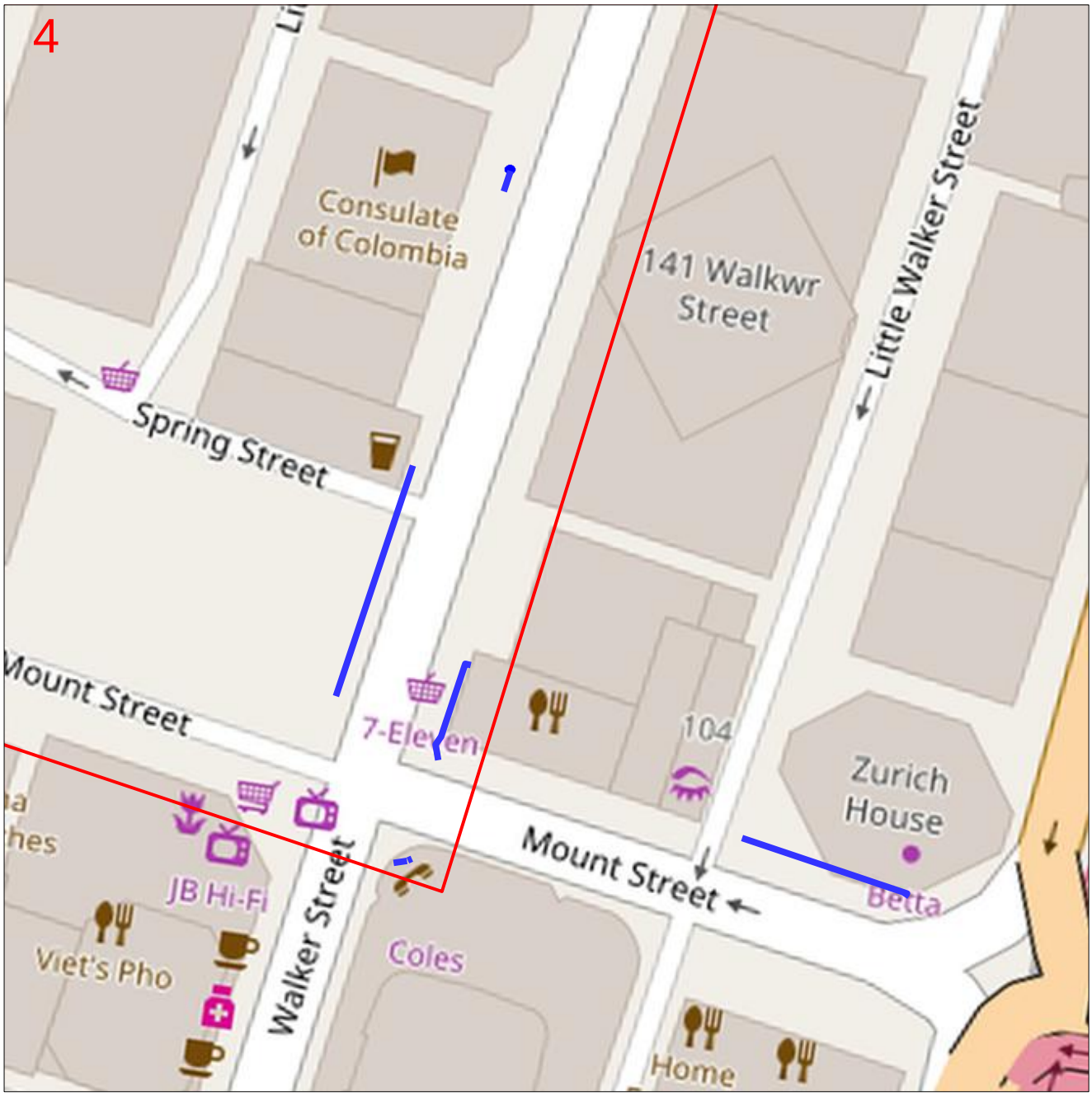
N

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence. © 2013 PIPE Networks Ltd.*

Note: *If the works fall in an area that is adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Only PIPE Networks' duct displayed.

For location of PIPE Networks cable in third-party duct, please contact third-party named on attached cover letter.



Enquiry Number: 82196080

Map Sheet: 4

Scale: 1:750

0 0.008km

LEGEND

DBYD Request Area **Asset**

Line

Area

Manhole

Duct

N

DISCLAIMER: *No responsibility/liability is taken by PIPE Networks for any inaccuracy, error, omission or action based on the information supplied in this correspondence. © 2013 PIPE Networks Ltd.*

Note: *If the works fall in an area that is adjacent to PIPE Networks infrastructure, a pre-inspection is required prior to commencement of works. Contact PIPE Networks to arrange an inspection time.* ***NO WORKS TO COMMENCE PRIOR TO INSPECTION.***

Response Cover Letter

Primus Telecom

Level 3

538 Collins Street

Melbourne VIC 3000

Date: 10/04/2019

To:
Mr David Wall
Arcadis
levell16 - 580 George Street
Sydney, 2000

According to our records your enquiry with the following details impacts our infrastructure. Please review other documents included with this response for additional details.

Sequence No: 82196087

Job No: 16094143

Location: Denison Street
North Sydney, NSW, 2060

Primus assets are contained in Telstra ducts / conduit networks and to an adjacent Primus Pit. It is your responsibility that these ducts are physically located by Telstra.

The Primus conduit has a minimum 450mm cover to the Finished Ground Level.

Please ensure excavating within two (2) metres of Primus assets is by hand method only.

In order to have your enquiry response adequately assessed, please contact Primus Telecom on (02) 9458 5808 to discuss your works in more detail.

Important Notice: This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the DBYD enquiry outlined above. Please ensure that the DBYD enquiry details and this response accurately reflect your proposed works.

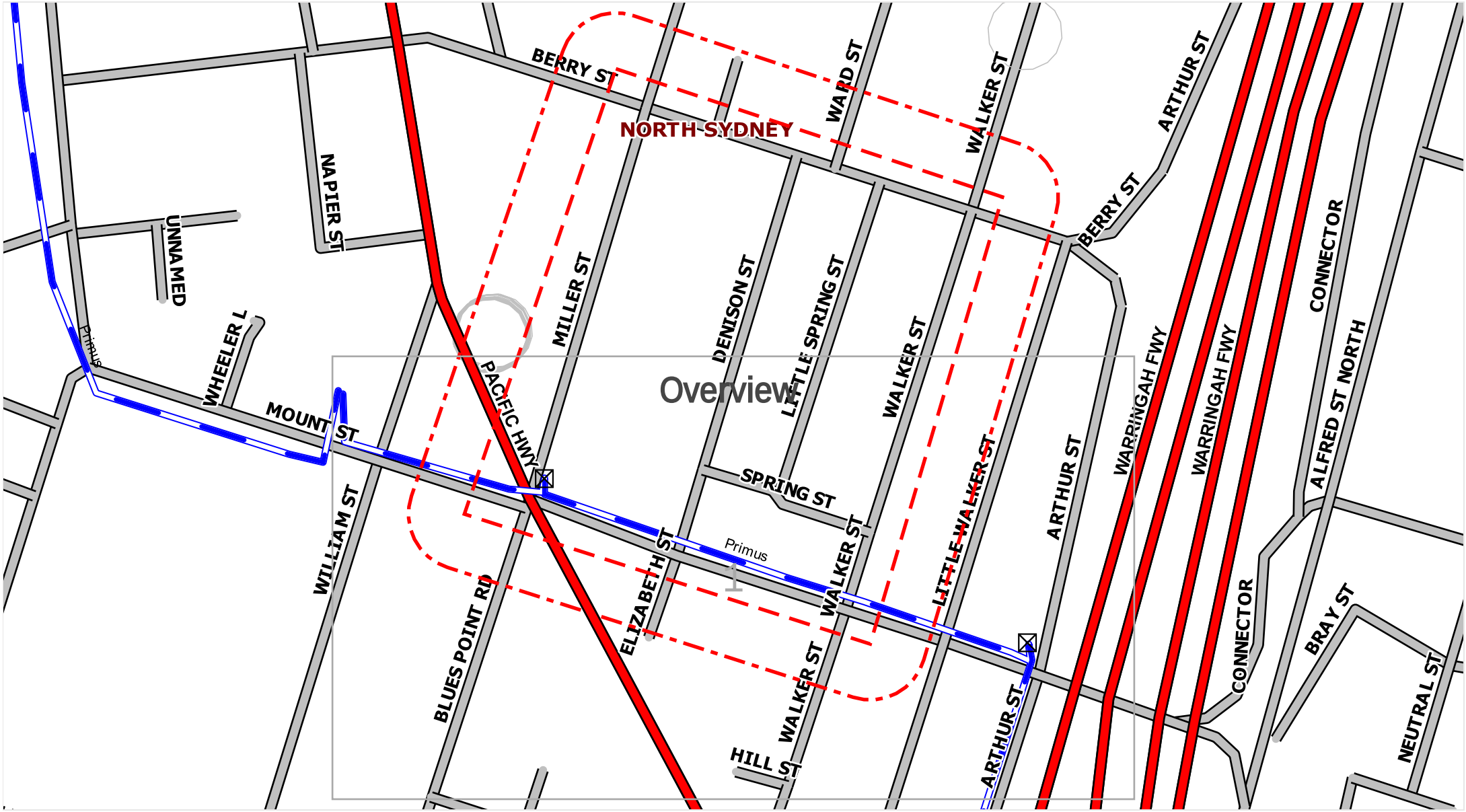
This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited.

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Primus Telecom or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

Sequence No: 82196087
Job No: 16094143
Location: Denison Street, North Sydney, NSW 2060

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend | Scale: 1:2730

N

Manhole
Cable
Road
Digsite
Buffer

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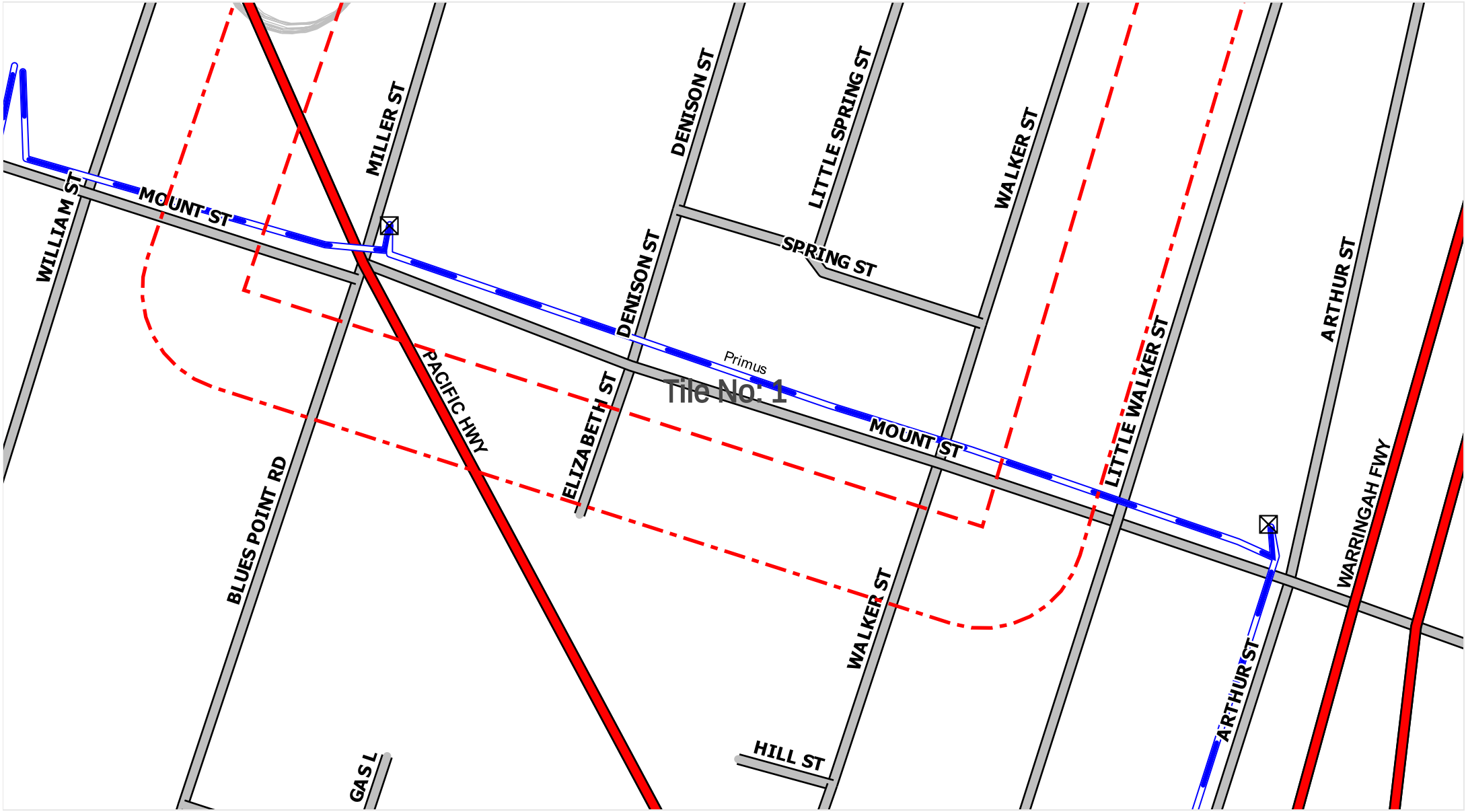
Sequence No: 82196087
Job No: 16094143
Location: Denison Street, North Sydney, NSW 2060

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend | Scale: 1:1500

N

Manhole
Cable
Road
Digsite
Buffer

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DUTY OF CARE

IT'S HOW WE CONNECT

TELSTRA CORPORATION ACN 051 775 556

IMPORTANT:

When working in the vicinity of telecommunications plant you have a "Duty of Care" that must be observed. Please read and understand all the information and disclaimers provided below.

Telstra network is complex and requires expert knowledge to interpret information, to identify and locate components, to pothole underground assets for validation and to safely work around assets without causing damage. If you are not an expert and/or qualified in these areas, then you must not attempt these activities. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers. The 5 P's to prevent damage to Telstra assets are listed below. Construction activities and/or any activities that potentially may impact on Telstra's assets must not commence without first undertaking these steps. Construction activities can include anything that involves breaking ground, potentially affecting Telstra assets.

If you are designing a project it is recommended that you also undertake these steps to validate underground assets prior to committing to your design.

(The following pages contain more detail on each step below and the contact details to seek further advice. AS5488-2013 is the Australian Standard for the Classification of Subsurface Utility Information.)

1 PLAN:

The essential first step in preventing damage -
You must have current Telstra plans via the DBYD process. Telstra advises that the accuracy of the information provided by Telstra conforms to Quality Level D as defined in AS5488-2013. This means the information is indicative only, not a precise location. **The actual location may differ substantially from that shown on the plans** - refer to steps 2 & 3 to determine actual location prior to proceeding with construction.

2 PREPARE:

The essential second step in preventing damage -
Engage a Telstra Accredited Plant Locator. To be able to trace and identify individual subsurface cables and ducts requires access to Telstra pits and manholes. Only a Telstra Accredited Plant Locator (TAPL) is authorised to access Telstra network for locating purposes. A TAPL can interpret plans, validate visible assets and access pits and manholes to undertake electronic detection of underground assets prior to further validation. All Telstra assets must be located, validated and protected prior to commencing construction. If you are not authorised to do so by Telstra, you must not access Telstra network or locate Telstra network. All Telstra Accredited Plant Locators are required to have DBYD Locator Certification.

3 POTHOLE:

The essential third step in preventing damage -
All Telstra assets must be positively identified (i.e. validated), by physically sighting them. For underground assets this can be done by potholing by hand or using non-destructive vacuum extraction methods (Refer to 'validation' as defined in AS5488-2013 QL-A). **Underground assets located by electronic detection alone (step 2), are not deemed to be 'validated' and must not be used for construction purposes.** Some TAPL's can assist with non-destructive potholing for validation purposes. **If you cannot validate the Telstra network, you must not proceed with construction**. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

4 PROTECT:

The essential fourth step in preventing damage -
Telstra assets must be protected to avoid damage from construction activities. Minimum working distances around Telstra network must be maintained. These distances are provided in this document. Telstra can also provide advice and assistance in regards to protection – refer to the following pages.

5 PROCEED:

Only proceed when the above steps have been completed.

STEP 1 - PLAN
Dial Before You Dig / Telstra Plans

The actual location of Telstra assets may differ substantially from that shown on the plans. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for the accuracy shown on the plans. Steps 2 and 3 must also be undertaken to determine actual location of network.

- Telstra DBYD plans are not suitable for displaying Telstra network within a Telstra exchange site. For advice on Telstra network within a Telstra exchange site contact Telstra Plan Service on 1800 653 935.
- Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.
- Telstra plans or other details are provided only for the use of the applicant, its servants, agents or Telstra Accredited Plant Locators. The applicant must not give the plans or details to any parties other than these, and must not generate profit from commercialising the plans or details.
- Please contact Telstra Plan Services immediately should you locate Telstra assets not indicated on these plans.
- Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.
- Please ensure Telstra plans and information provided remains on-site at all times throughout the inspection, location and construction phase of any works.
- Telstra plans are valid for 60 days after issue and must be replaced if required after the 60 days.

- **Emergency situations - receiving Telstra plans** Telstra's automated mapping system (TAMS) will provide a fast response for emergency situations (faster than an operator can provide manually via a phone call - see below for fast response requirements). Automated responses are normally available 24/7.

  To receive a fast automated response from Telstra your request must **-**

  - Be a web request lodged at DBYD (**www.1100.com.au**). The request will be then forwarded to Telstra.
  - Contain your current email address so you can receive the automated email response.
  - Be for the purposes of 'mechanical excavation' or other ground breaking DBYD activity. (Requests with activity types such as conveyancing, planning & design or other non-digging activities may not be responded to until the next business day).
  - Be for an area less than 350 metres in size to obtain a PDF map (over 350 metres will default to DWF due to size) this does not include congested CBD areas where only DWF may be supplied.
  - Be for an area less than 2500 metres in size to obtain a DWF map (CBD's less)

- **Data Extraction Fees.** In some instances a data extraction fee may be applicable for the supply of Telstra information. Typically a data extraction fee may apply to large projects, planning and design requests or requests to be supplied in non-standard formats. For further details contact Telstra Plan Services.

- **Electronic plans - PDF and DWF maps** If you have received Telstra maps via email you will have received the maps as either a PDF file (for smaller areas) or DWF file (for larger area requests). All requests over approximately *350m or in congested CBD areas can only be supplied in DWF format. There are size limits on what can be provided. (* actual size depends on geographic location of requested area). If you are unable to launch any one of the softcopy files for viewing and printing, you may need to download and install one or more of the free viewing and printing products such as Adobe Acrobat Reader (for PDF files) or Autodesk Design Review (for DWF files) available from the internet

  - **Pdf files -** PDF is the default softcopy format for all requests for areas up to approx *350m in length. (*depends on geographic location of request). The PDF file is nominally formatted to A3 portrait sheet however it can be printed on any size sheet that your printer supports, e.g. either as the full sheet or selected areas to suit needs and legibility. (to print a selected area zoom up and print 'current view') If there are multiple layers of Telstra network you may receive up to 2 sheets in the single PDF file attachment supplied. There are three types or layers of network normally recorded - local network, mains cables or a combined layer of local and mains (usually displayed for rural or semi-rural areas). If mains cable network is present in addition to local cables (i.e. as separate layer in a particular area), the mains will be shown on a separate sheet. The mains cable information should be read in conjunction with the local cable information.

- **DWF files –** DWF is the default softcopy format for all requests for areas that are over 350m in length. Maximum length for a DWF automated response is approx 2500m - depending on geographic location of request (manually-processed plans may provide larger coverage). The DWF files differ from PDF in that DWF are vector files made up of layers that can be turned on or off and are not formatted to a specific sheet size. This makes them ideal for larger areas and for transmitting electronically.
  - ***How to view Telstra DWF files –***
    Telstra DWF files come with all layers turned on. You may need to turn individual layers on or off for viewing and printing clarity. Individual layer names are CC (main cable/conduit), DA (distribution area network) and sometimes a combined layer - CAC. Layer details can be viewed by either picking off the side menu or by selecting 'window' then 'layers' off the top menu bar. Use 'layers' to turn individual layers off or on (double click or right click on layer icon).
  - ***How to print Telstra DWF files –***
    DWF files can be printed on any size sheet – either their entirety or by selected areas of interest. Some DWF coverage areas are large and are not suited to printing legibly on a single A4 sheet - you may need several prints if you only have an A4 printer. Alternatively, an A3, A1 or larger printer could be used. To print, zoom in or out and then, by changing the 'print range' settings, you can print what is displayed on your screen to suit your paper size. If you only have a small printer, e.g. A4, you may need to zoom until the text is legible for printing (which is why you may need several prints). To print what is displayed on your screen the 'view' setting should be changed from 'full page' to 'current view'. The 'current sheet' setting should also be selected. You may need to print layers separately for clarity and legibility. (Details above on how to turn layers on or off)
  - ***How to change the background colour from white to black (when viewing) Telstra DWF files –***
    If using Autodesk Design Review the background colour can be changed by selecting 'Tools' then 'options' then 'sheet'. Tick the box 'override published paper colours' and select the colour required using the tab provided.

STEP 2 – PREPARE
Telstra Accredited Plant Locator (TAPL):

Utilising a TAPL is an essential part of the process to identify network and to trace subsurface network prior to validating. A TAPL can provide plan interpretation, identification and electronic detection. This will assist in determining the position of subsurface assets prior to potholing (validating). Some TAPL's can also assist in validating underground detected network. Electronic detection is only an indication of the existence of underground network and can be subject to interference from other services and local conditions. Electronic detection must not be used solely to determine location for construction purposes. The electronic (indicative) subsurface measurements must be proven by physically sighting the asset (see step 3 – Pothole).

- All TAPL's locating Telstra network must be able to produce a current photo ID card issued by Telstra. A list of TAPL's is provided with the Telstra Dial Before You Dig plans.
- All TAPL's in addition to the Telstra photo ID card must also have current DBYD Locator Certification with ID card.
- Telstra does not permit external parties (non-Telstra) to access or conduct work on Telstra network. Only Telstra staff, Telstra contractors or locators whom are correctly accredited are authorised to work on or access Telstra manholes, pits, ducts, cables etc. This is for safety as well as for legal reasons.
- The details of any contract, agreement or retainer for site assistance to locate telecommunications plant shall be for you to decide and agree with the Telstra Accredited Plant Locator engaged. Telstra is not a party to any contract entered into between you and a Telstra Accredited Plant Locator.
- Payment for the site assistance will be your responsibility and payment details must be agreed before the engagement is confirmed.
- Telstra does not accept any liability or responsibility for the performance of or advice given by a Telstra Accredited Plant Locator. Accreditation is an initiative taken by Telstra towards the establishment and

maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.

- Neither the Telstra Accredited Plant Locator nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Telstra Accredited Plant Locator or its employees.

- **Electronically derived subsurface measurements (e.g. depths/alignments by locating devices)**

  All locator provided measurements for Telstra assets must have the AS5488-2013 quality level specified - (e.g. QL-A, B, C or D). These quality levels define the accuracy of subsurface information and are critical for determining how the information is later used – for example if suitable for excavation purposes.

  1) ***An example of a subsurface measurement with no quality level specified – (i.e. not to be used)***

     Telstra cover - **0.9m**

     *The measurement above has no AS5488-2013 quality level specified and **must not** be provided by a locator or used for design or construction. This is because it is not known whether the measurement is actual or derived (where 'actual' means validated and 'derived' means assumed and not validated, e.g. electronic or other). Typically damages occur by constructors incorrectly using unvalidated measurements as actual measurements.*

  2) ***An example of a subsurface measurement with quality level B specified –***

     Telstra cover - **0.9m** (QL-B)

     Where (QL-B) complies with AS5488-2013 QL-B (for example an electronic location that complies with QL-B)

     (Note QL-B means it has not been validated and must not be used for construction purposes around Telstra network, however it would assist further investigation to determine the actual location)

  3) ***An example of a subsurface measurement with the quality level A specified –***

     Telstra cover - **0.6m** (QL-A)

     Where (QL-A) complies with AS5488-2013 QL-A (and is deemed suitable for excavation purposes). *In this example the asset has been electronically located first, (QL-B) and then physically exposed (QL-A).*

     Note -Telstra will seek compensation for damages caused to it its property and losses caused to Telstra and its customers if unvalidated subsurface measurements are used for construction and subsequently result in damage to Telstra assets. Only measurements conforming to AS5488-2013 (QL-A) are deemed by Telstra to be validated measurements.

- **Rural landowners - Rural Locations Subsidy Scheme** Where Telstra-owned cable crosses agricultural land, Telstra may provide on-site assistance with cable location. **You must contact Telstra Plan Services to determine eligibility and to request the service**.

  Please note the following –

  - If eligible, the location assistance must be approved and organised by Telstra. Telstra will not pay for a location that has not been approved and facilitated by Telstra (Telstra is not responsible for payment assistance when a customer engages a locator directly).
  - Telstra will only "subsidise" the location up to $330 (Incl. GST). This will cover one hour on-site location only, private lead-in locations are for lead-ins 100m or longer. Any time required in addition to Telstra-funded time can be purchased directly from the assigned Telstra Accredited Plant Locator.
  - This service does NOT include the use Mechanical Aids or Hydro Excavation (Vac Trucks) to locate and should be discussed between the Accredited Plant Locator and the private rural landowner
  - The exact location, including depth of cables**,** must be validated by potholing, which may not be covered by this service.
  - This service is nominally only available to assist private rural land owners.
  - This service nominally covers one hour on-site only, private lead-in locations are for lead-ins 100m or longer. Any time required in addition to Telstra-funded time can be purchased directly from the assigned Telstra Accredited Plant Locator.
  - This service does not apply to previously located network at the same location (i.e. it is a once off).
  - This service does not apply to other carriers' cables (marked as 'OC' on Telstra plans).

STEP 3 – POTHOLE

Validation as defined in AS5488-2013 (QL-A).

After utilising a Telstra Accredited Plant Locator and prior to commencing construction, any electronically detected underground network must be positively identified (validated) by physically sighting it. This can be done by careful hand digging or using non-destructive water jet methods to expose the network.

Manual potholing needs to be undertaken with extreme care and by employing techniques least likely to damage cables. For example, align shovel blades and trowels parallel to the cable rather than digging across the cable. Some Telstra Accredited Plant Locators are able to provide or assist with non-destructive potholing methods to enable validation of underground cables and ducts.

If you cannot validate the underground network then you must not proceed with construction. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Important note: *The construction of Telstra's network dates back over many years. Some of Telstra's pits and ducts were manufactured from asbestos-containing cement. You must take care in conducting any works in the vicinity of Telstra's pits and ducts. You must refrain from in any way disturbing or damaging Telstra's network infrastructure when conducting your works. We recommend that before you conduct any works in the vicinity of Telstra infrastructure that you ensure your processes and procedures eliminate any possibility of disturbing, damaging or interfering in any way with Telstra's infrastructure. Your processes and procedures should incorporate appropriate measures having regard to the nature of this risk. For further information -*

http://ucm.in.telstra.com.au/about/media/emergencies-incidents/asbestos/index.htm?ssSourceSiteId=consumer-advice

STEP 4 – Protect:

You must maintain the following minimum clearance distances between construction activity and the validated position of Telstra plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of **actual validated location.***
Vibrating Plate or Wacker Packer Compactor	*Not within 0.5m of **actual validated location** of Telstra ducts.* *300mm compact clearance cover before compactor can be used across Telstra ducts.*
Boring Equipment (in-line, horizontal and vertical)	*Not within 2.0m of **actual validated location**.* *Constructor to hand dig or use non-destructive water jet method (pothole) and expose plant.*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Telstra ducts (or plant) with less than 600mm cover.* *Constructor to check actual depth via hand digging.*
Mechanical Excavators, Farm ploughing and Tree Removal	*Not within 1.0m of **actual validated location.*** *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*

- For blasting or controlled fire burning please contact Telstra Plan Services.
- If conducting roadworks all existing Telstra pits and manholes must be a minimum of 1.2m in from the back of kerb after the completion of your work.
- After the completion of any ground work in footways or roadway whereby the existing levels are being changed the depth of cover of the existing Telstra asset at the completion of work must not be less than the existing level before work commenced.

Regardless of whether the surface is being raised or lowered, any work impacting the depth of cover of Telstra underground assets should not commence before consultation with Telstra Network Integrity representatives, to discuss the possibility of '*protection*' or relocation (including lowering of the asset)".

- For clearance distances relating to Telstra pillars, cabinets and RIMs/RCMs please contact Telstra Plan Services.

- If Telstra plant is situated wholly or partly where you plan to work (i.e. in conflict, where a pit or manhole would be in a driveway or other vehicle thoroughfare), then Telstra's Network Integrity Group must be contacted to discuss possible engineering solutions to protect Telstra assets.
  Please phone **1800 810 443** or email NetworkIntegrity@team.telstra.com

- You are not permitted to relocate or alter or repair any Telstra assets or network under any circumstances.

  It is a criminal offence under the *Criminal Code Act 1995* (Cth) to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by Telstra as a result of any such unauthorised works may be claimed against you.

  Only Telstra and its contractors may access and conduct works on Telstra's network (including its plant and assets). This requirement is to ensure that Telstra can protect the integrity of its network, avoid disruption to services and ensure that the relocation meets Telstra's requirements.

- If Telstra relocation or protection works are part of the agreed solution, then payment to Telstra for the cost of this work shall be the responsibility of the principal developer, constructor or person for whom the work is performed. The principal developer or constructor will be required to provide Telstra with the details of their proposed work showing how Telstra's plant is to be accommodated and these details must be approved by the Regional Network Integrity Manager prior to the commencement of site works.
  Please phone 1800 810 443 or email NetworkIntegrity@team.telstra.com
  Further information -
  https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network-assets

  Damage to Telstra's network must be reported immediately -
  https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment

- You will be held responsible for all plant damage that occurs or any impacts to Telstra's network as a result of your construction activities. This includes interfering with plant, conducting unauthorised modification works and interfering with Telstra's assets in a way that prevents Telstra from accessing or using its assets in the future.

- Telstra reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

FURTHER INFORMATION - CONTACTS

NATURAL DISASTERS

Natural Disasters include (amongst other things) earthquakes, cyclones, floods and tsunamis.
In the case of such events, urgent requests for plans or information relating to the location of Telstra network can be made directly to Telstra Network Integrity Team Managers as follows:

NSW –	John McInerney	0419 485 795
NT/WA/QLD –	Glenn Swift	0419 660 147
SA/VIC/TAS -	David Povazan	0417 300 947

TELSTRA PLAN SERVICES **-** for all Telstra Dial Before You Dig related enquiries

Email - **Telstra.Plans@team.telstra.com**

Phone - 1800 653 935 (general enquiries, business hours only)

Accredited plant locator enquiries -	Anna	(07)34552974
	Glen	(07)34551011
Telstra easements -	Glen	(07)34551011

***Please note** - to make a Telstra plan enquiry the plans must be current (within 60 days of issue). If your plans have expired you will need to submit a new request via DBYD prior to contacting Telstra Plan Services.*

Information for new developments (developers, builders, home owners)
Telstra Smart Communities - https://www.telstra.com.au/smart-community

Asset relocations
Please phone 1800 810 443 or email NetworkIntegrity@team.telstra.com

https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network-assets

Telstra offers free Cable Awareness Presentations, if you believe you or your company would benefit from this offer please contact Network Integrity on 1800 810 443 or NetworkIntegrity@team.telstra.com

PRIVACY NOTE

Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website at www.telstra.com.au/privacy

LEGEND

IT'S HOW WE CONNECT

For more info contact a Telstra Accredited Locater or Telstra Plan Services 1800 653 935

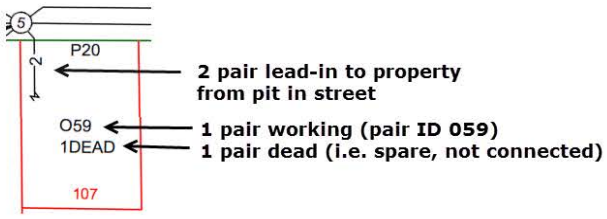
Exchange
(major cable present)

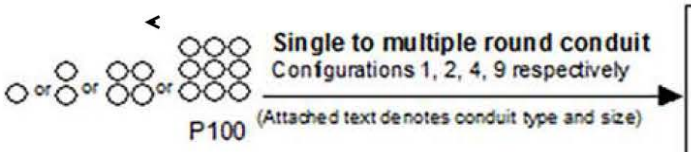
Footway access chamber
(can vary from 1-lid to 12-lid)

or **Pillar/cabinet**
(above the ground / free standing)

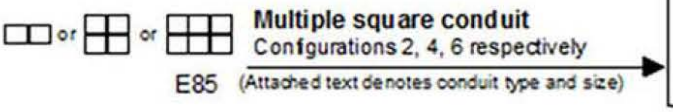
Above ground complex equipment housing (eg RIM)
Please Note: This equipment is powered by 240V electricity.

OC **other carrier**





Single to multiple round conduit
Configurations 1, 2, 4, 9 respectively
(Attached text denotes conduit type and size)



Multiple square conduit
Configurations 2, 4, 6 respectively
(Attached text denotes conduit type and size)

Some examples of conduit type and size:
A - Asbestos cement, P - PVC / plastic, C - Concrete, GI - Galvanised iron, E - Earthenware.
Conduit sizes *nominally* range from 20mm to 100mm.

P50	50mm PVC conduit
P100	100mm PVC conduit
A100	100mm asbestos cement conduit
E 85	85mm square earthenware conduit

Cable jointing pit
(number indicating pit type)

Elevated cable joint
(above ground joint on buried cable)

Telstra Plant in shared utility trench

Aerial Cable
(above ground)

Aerial Cable
(attached to joint use pole e.g. power)

Direct buried cable

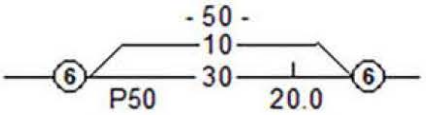
M **Marker post installed**

TR **Buried transponder**

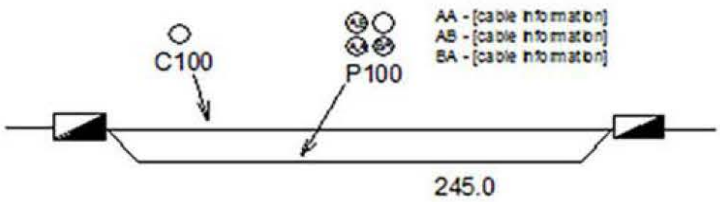
MT **Marker, transponder**

SMOF **Optical fibre cable direct buried**

Some examples of how to read Telstra plans:



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits, 20.0m apart, with a direct buried 30-pair cable along the same route.



Two separate conduit runs between two footway access chambers (manholes) 245m apart. A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along the same route.

WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK. A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works. The exact position of Telstra assets can only be validated by physically exposing it. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

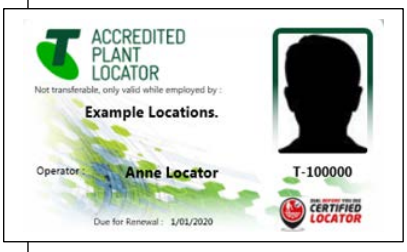
TELSTRA ACCREDITED PLANT LOCATORS

NEW SOUTH WALES - CENTRAL REGION

Location of Telstra Cables & Network – including Optic Fibre, must be performed by a locator with current Telstra Accreditation for Cable & Plant Locators. All Telstra Accredited Plant Locators have passed rigorous skills and knowledge testing by Dial Before You Dig as indicated by the DBYD Certified Locator symbol.



All Telstra Accredited Plant Locators carry an official Telstra Accreditation photo ID card – valid only while working for the business named on the card. This card will be produced on request.



Telstra plans are intended to be indicative only.
A Telstra Accredited plant location service is required to identify the exact location of the plant and ensure that the infrastructure is protected during construction or excavation work.
It is your responsibility as part of your 'Duty of Care' to engage a Telstra Accredited Plant Locator.

ONLY TELSTRA ACCREDITED PLANT LOCATORS HOLD PERMISSION TO ACCESS TELSTRA PITS & MANHOLES FOR THE PURPOSE OF CABLE & PLANT LOCATIONS.

Contact a Telstra Accredited Locator
from the pages following (FEES APPLY)

Telstra Accredited Plant Locators – New South Wales. CENTRAL

NSW Central.

Company Name & service areas	Pothole Service		
1 300 B4UDIG.	**YES** **VACUUM** **EXCAVATOR**	1300 248 344 admin@1300b4udig.com.au www.1300b4udig.com.au	Phone Mobile Fax Email Web
A1 Vac & Location. Port Macquarie, Laurieton, Wauchope, Kempsey, Central District, Orana District, New England Region, Nambucca, Buladelha	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	Adam - 0404 958 023 hurricane.gale@hotmail.com	Mobile Fax Email Web
Abitek Pty Ltd.	**NO**	02 4580 9883 0413 327 243 abitek@bigpond.com	Phone Mobile Fax Email Web
ACT Locating & Inspection Services Pty Ltd. ACT QBYN & NSW	**NO**	 0438 630 852 tp@actloc.com.au	Phone Mobile Fax Email Web
Action Locating. Sydney, Gosford, Newcastle, Wollongong and Blue Mountains.	**NO**	02 9671 5600 0415 228 466 info@actionlocating.com.au www.actionlocating.com.au	Phone Mobile Fax Email Web
Advanced Ground Locations Pty Ltd. Newcastle, Hunter Valley, Central Coast	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	02 4930 3195 0412 497 488 steve_agl@hotmail.com www.advancedgroundlocations.com	Phone Mobile Fax Email Web
Aquabend Utility Detection. Central Coast & Mid North Coast	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	 0409 925 472 aquabend@hotmail.com	Phone Mobile Fax Email Web
Australian Locating Services Pty Ltd. Sydney Metro, North, South, East & West Central Coast, Penrith & Blue Mountains Sutherland Shire, Illawarra & Wollongong	**YES** **VACUUM** **EXCAVATOR**	1300 761 545 admin@locating.com.au www.locating.com.au	Phone Mobile Fax Email Web
Australian Subsurface Pty Ltd. All of ACT & NSW	**YES** **VACUUM** **EXCAVATOR**	 0427 879 600 admin@australiansubsurface.com www.australiansubsurface.com	Phone Mobile Fax Email Web
Australian Utilities Management Pty Ltd. Central Coast Sydney & Blue Mountains	**YES** **VACUUM** **EXCAVATOR**	02 9680 0738 0424 537 952 bookings@ausutilities.com.au www.ausutilities.com.au	Phone Mobile Fax Email Web
Bradmac Locating Services Pty Ltd. Sydney Metro, Bathurst, Lithgow, Mudgee, Mittagong, Campbelltown	**NO**	 0434 157 409 brad.mac@bigpond.com	Phone Mobile Fax Email Web
Brandon Construction Services Pty Ltd. Sydney metro and surrounding districts, other country NSW areas on request	**NO**	 0438 044 008 liam.bolger@hotmail.com	Phone Mobile Fax Email Web
BurCo Plumbing Services Pty Ltd. Sunraysia Victoria, Swan Hill VIC, Broken Hill NSW, Wentworth NSW, Riverland SA	**YES** **VACUUM** **EXCAVATOR**	03 5024 7660 0428 768 241 dave@burcoplumbing.com.au www.burcoplumbing.com.au	Phone Mobile Fax Email Web

Telstra Accredited Plant Locators – New South Wales. CENTRAL

Chris Bates & Associates. Newcastle Hunter Valley Central Coast Mid North Coast	**NO**	02 4928 1519 0408 427 391 chrisbatesandassociates@yahoo.com.au	Phone Mobile Fax Email
Civilscan (Monstar Management Pty Ltd). Sydney, Blue Mountains Central Coast , Illawarra Southern Highlands	**YES** **HAND DIG & VACUUM EXCAVATOR**	0416 068 060 civilscan@bigpond.com www.civilscan.com.au	Phone Mobile Fax Email Web
Construction Sciences Pty Ltd. All areas	**YES** **VACUUM EXCAVATOR**	1300 224 664 utilities@constructionsciences.net www.constructionsciences.net	Phone Mobile Fax Email Web
CRUX Surveying Australia Pty Ltd. Sydney Metro and surrounding areas	**NO**	02 9541 9940 0404 850 381 scottallison@cruxsurveying.com.au www.cruxsurveying.com.au	Phone Mobile Fax Email Web
DATATEKS Pty Ltd. All regional areas	**YES** **VACUUM EXCAVATOR**	02 6971 7777 0408 693 660 gilbertcook@datateks.com.au www.datateks.com.au	Phone Mobile Fax Email Web
DEETECT Pty Ltd ACT and NSW	**NO**	02 6278 7548 0414 630 852 dtech@webone.com.au	Phone Mobile Fax Email Web
Dowds Pipe & Cable Locating. Sydney Wollongong South Coast Highlands	**NO**	0434 635 134 accounts@pipeandcable.com.au www.pipeandcable.com.au	Phone Mobile Fax Email Web
Down Under Detection Services.	**YES** **VACUUM EXCAVATOR**	0418 267 964 apegler@duds.net.au www.downunderdetections.com.au	Phone Mobile Fax Email Web
Down Under Pipeline Surveys Pty Ltd. Orangeville and surrounding districts	**YES** **VACUUM EXCAVATOR**	02 4653 1286 0418 675 374 02 4653 1747 office@dups.com.au www.dups.com.au	Phone Mobile Fax Email Web
Durkin Construction Pty Ltd. Central Coast, Sydney, Blue Mountains, Central & Far West, Riverina, North & North West, Clarence River, Coffs Harbour, Riverina, South West Slopes, Southern Tablelands, Far South Coast, Monaro, Albury ACT	**YES** **VACUUM EXCAVATOR**	02 9712 0308 0452 202 212 info@durkinconstruction.com.au www.durkinconstruction.com.au	Phone Mobile Fax Email Web
Dynamic Hydro Excavations Brisbane, Gold Coast, Toowoomba, Sunshine Coast, Northern NSW, Ballina, Sydney and surrounding districts.	**YES** **VACUUM EXCAVATOR**	07 5564 8142 0421 406 642 sales@dynamicexcavations.com.au www.dynamicexcavations.com.au	Phone Mobile Fax Email Web
Earth Radar (Vac group Operations Pty Ltd).	**YES** **VACUUM EXCAVATOR**	1300 822 835 0447 837 267 info@actionlocating.com.au www.earthradar.com.au	Phone Mobile Fax Email Web
East Coast Locating Services Maitland, Newcastle, Port Stephens, Hunter, Central Coast, Sydney	**YES** **HAND DIG**	0431 193 111 eastcoastlocating@hotmail.com	Phone Mobile Fax Email Web
Epoca Environmental. All of NSW & ACT	**YES** **VACUUM EXCAVATOR**	02 4739 2465 0430 606 948 evelyn@epocaenvironmental.com.au www.epocaenvironmental.com.au	Phone Mobile Fax Email Web

Telstra Accredited Plant Locators – New South Wales. CENTRAL

G MAC LOCATING. Dubbo, Young, Wagga, Yass, Goulburn, Bathurst, Orange, Temora, West Wyalong, Forbes & most NSW country regions	**YES** **VACUUM** **EXCAVATOR**	0488 520 482 0408 822 428 enquiries@gmaclocating.com.au	Mobile Mobile Fax Email Web
Geoscope Utility Detection Services Pty Ltd. Sydney Metro Blue Mountains Southern Highlands Illawarra - South Coast	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	1300 750 350 0432 296 323 info@geoscopelocating.com.au www.geoscopelocating.com.au	Phone Mobile Fax Email Web
Geotrace Pty Ltd The Hills District, Blacktown, Bankstown, Rose Bay, Chatswood, Penrith, Blue Mountains, Hawkesbury District, Central Coast, Sutherland, Menai, Double Bay, Sydney CBD, Balmain, Richmond, Yagoona	**NO**	02 8824 6654 0417 147 945 02 8824 5637 info@geotrace.com.au www.geotrace.com.au	Phone Mobile Fax Email Web
Hunter Ground Search. Newcastle, Upper & Lower Hunter Valley, Central Coast, Central West, Mid North Coast	**YES** **VACUUM** **EXCAVATOR**	02 4953 1244 0418 684 819 02 4953 1233 huntergroundsearch@bigpond.com	Phone Mobile Fax Email Web
Hunter Smith Management Pty Ltd. Sydney - all areas Northern NSW Southern NSW - including ACT Inland NSW	**NO**	02 8090 26995 0422 224 761 huntersmith@iprimus.com.au www.hsmlocating.com.au	Phone Mobile Fax Email Web
Hydro Digga. All of NSW, ACT & South East Qld.	**YES** **VACUUM** **EXCAVATOR**	0447 774 000 locator@hydrodigga.com	Phone Mobile Fax Email Web
K & K Directional Drilling. Tamworth, Gunnedah, Narrabri, Quirindi, Armidale, North & North West NSW all areas	**YES** **VACUUM** **EXCAVATOR**	02 6760 9917 0429 087 657 kkdrilling@bigpond.com	Phone Mobile Fax Email Web
Landmark Surveys Pty Ltd. Southern NSW and ACT areas	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	02 6280 9608 0413 832 038 phi@landmarksurveys.com.au www.landmarksurveys.com.au	Phone Mobile Fax Email Web
Laneyrie Electrical Pty Ltd. Helensburg, Illawarra, Shoalhaven. Southcoast, Southern Tablelands, Far Southcoast, Wollongong	**YES** **VACUUM** **EXCAVATOR**	02 4237 9865 0412 079 079 02 4237 9939 bindy@laneyrieelectrical.com.au www.laneyrieelectrical.com.au	Phone Mobile Fax Email Web
Locate & Map Pty Ltd. Sydney, Wollongong and the Central Coast	**NO**	0431 191 669 tim@locateandmap.com.au www.locateandmap.com.au	Phone Mobile Fax Email Web
Locaters Pty Ltd. Sydney, Penrith, Richmond, Macarthur, Wollongong	**YES** **VACUUM** **EXCAVATOR**	02 8214 8911 info@locators.com.au www.locators.com.au	Phone Mobile Fax Email Web
Locating Services Pty Ltd. Hawkesbury and all of NSW	**NO**	0403 065 510 sam.romano@locatingservices.com.au www.locatingservices.com	Phone Mobile Fax Email Web
Lyntet Communications (Lynco Pty Ltd). Dubbo depot, covering Forbes, Grenfell, Parkes, Bourke, Bourke North, Nyngan, Coonabarabran, Coonamble, Mudgee, Narromine, Wellington, Orange, Molong, Yeoval, Coolah, Dunedoo, Gilgandra, Mendooran	**YES** **HAND DIG &** **VACUUM** **EXCAVATOR**	0409 811 673 lyntet@bigpond.com.au	Phone Mobile Fax Email Web
MB Electrical (Mathew Barratt Electrical Pty Ltd). Far West NSW - Broken Hill, Menindee, Wilcannia, Tibooburra, Ivanhoe & surrounding areas	**YES** **VACUUM** **EXCAVATOR**	08 8088 7933 accounts@mbelectrical.net.au www.mbelectrical.net.au	Phone Mobile Fax Email Web

Telstra Accredited Plant Locators – New South Wales. CENTRAL

Meek Design & Construction Pty Ltd. Bathurst, Orange, Lithgow, Oberon, Mudgee and surrounding areas.	**YES** **VACUUM** **EXCAVATOR**	0419 633 483 ron@meekdesign.com.au	Phone Mobile Fax Email Web
Mr Mac Group. Lithgow, Mudgee, Bathurst, Wellington, Goulburn	**YES** **VACUUM** **EXCAVATOR**	0447 818 260 jon@mrmacgroup.com.au	Phone Mobile Fax Email Web
Mullane Maintenance Pty Ltd. Newcastle and Hunter Region, Central Coast, Mid-North Coast	**NO**	1300 608 999 02 4960 8933 maintenance@mullane.com.au www.mullane.com.au	Phone Mobile Fax Email Web
Newcastle Locating Services Pty Ltd. Sydney, Central Coast, Hunter Valley, Upper Hunter Valley, Port Stephens, Muswellbrook, Singleton, Slone, Gunnedah, Port Macquarie	**YES** **VACUUM** **EXCAVATOR**	0410 698 599 undergroundservices@bigpond.com.au www.newcastlelocatingservices.com.au	Phone Mobile Fax Email Web
On Point Utility Locating Pty Ltd. Sydney, Parramatta, Penrith, Wollongong, Central Coast, Highlands, Goulburn, Blue Mountains	**YES** **VACUUM** **EXCAVATOR**	1300 667 646 0499 990 478 info@onpointlocating.com.au www.onpointlocating.com.au	Phone Mobile Fax Email Web
One Search Locators Pty Ltd.	**YES** **VACUUM** **EXCAVATOR**	1300 530 420 0499 955 571 info@onesearchlocators.com.au www.onesearchlocators.com.au	Phone Mobile Fax Email Web
Online Pipe & Cable Locating Pty Ltd. Sydney, Newcastle, Canberra, Central Coast, Wollongong, Blue Mountains and Port Macquarie	**YES** **VACUUM** **EXCAVATOR**	1300 665 384 0418 402 234 02 9676 6127 office@onlinepipe.com.au www.onlinepipe.com.au	Phone Mobile Fax Email Web
Peter Ellsmore and Associates. Wollongong / Illawarra / Shoalhaven / Far South Coast / Southern Highlands & Tablelands / Wollondilly / Goulburn / Macarthur area / Campbelltown & Southern Sydney	**NO**	02 4253 5616 0439 423 708 02 4253 5660 ian.brown@ellsmore.com.au www.ellsmore.com.au	Phone Mobile Fax Email Web
Pipesure Australia Pty Ltd. Sydney and surrounding areas	**NO**	1300 411 811 0428 548 281 info@pipesure.com.au www.pipesure.com.au	Phone Mobile Fax Email Web
Riteway Traffic control Pty Ltd. Central Coast Upper Hunter	**NO**	0419 212 969 kbrowne@ritewaytc.com.au	Phone Mobile Fax Email Web
RPS Australia East Pty Ltd. South East Qld, Gold Coast, Sunshine Coast, Brisbane, Ipswich & Scenic Rim **Sydney** & surrounding areas	**YES** **VACUUM** **EXCAVATOR**	07 3539 9586 0408 839 723 andrew.watson@rpsgroup.com.au www.rpsgroup.com.au	Phone Mobile Fax Email Web
Rubicof Pty Ltd. Lower & Upper Hunter Valley Central Coast & Newcastle Port Stephens & Great Lakes areas	**YES** **VACUUM** **EXCAVATOR**	02 4990 5718 0418 103 369 rubicof@optusnet.com.au www.rubicof.com.au	Phone Mobile Fax Email Web
Rutherford Electrical Engineering Services. Hunter Valley Maitland Newcastle Central Coast	**NO**	02 4932 7344 office@ruthelect.com.au www.ruthelect.com.au	Phone Mobile Fax Email Web
SEEK LOCATIONS. Taree, Forster, Gloucestor, Hardington, Port Macquarie, Wauchope.	**NO**	0407 256 858 seek@seeklocations.com.au www.seeklocations.com.au	Phone Mobile Fax Email Web

Telstra Accredited Plant Locators – New South Wales. CENTRAL

Signal Support Services Pty Ltd. Goulburn, Southern Tablelands, South West Slopes, Central West, Far South Coast & Monaro, Riverina, Far West	**YES** **VACUUM EXCAVATOR**	0418 237 668 ted@signalsupport.com.au	Phone Mobile Fax Email Web
Suk Truk Services Pty Ltd. Newcastle, Upper Hunter Valley, Lower Hunter Valley, Central Coast, Lake Macquarie	**YES** **HAND DIG & VACUUM EXCAVATOR**	0419 125 551 suktrukservices@bigpond.com	Phone Mobile Fax Email Web
SureSearch (Utility Locating Pty Ltd). Sydney, Newcastle, Central & South Coasts, Raymond Terrace, Wollongong, Gosford, Tuggerah, Seven Hills, Port Stephens, Nowra, Picton, Blue Mountains, Lithgow, Narrabeen, Pymble, Muswellbrook, Forster	**YES** **VACUUM EXCAVATOR**	1300 884 520 schedule@suresearch.com.au www.suresearch.com.au	Phone Mobile Fax Email Web
Sydney Pipe & Cable Pty Ltd. Greater Sydney Basin - Wollongong, Blue Mountains, Nowra, Newcastle	**NO**	0416 215 667 glenn@spacls.com.au	Phone Mobile Fax Email Web
Utec Solutions Pty Ltd. NSW based covers Queensland and Victoria also	**YES** **VACUUM EXCAVATOR**	02 9389 0040 0439 994 881 tim@utecsolutions.com.au www.utecsolutions.com.au	Phone Mobile Fax Email Web
Utility ID – Underground Service and Cable Locators. Darling Downs South West Toowoomba Roma	**NO**	0401 202 515 info@utilityid.com.au www.utilityid.com.au	Phone Mobile Fax Email Web
Utility Locating Services. Sydney and surrounding regions	**YES** **VACUUM EXCAVATOR**	0404 087 555 mail@utilitylocatingservices.com.au www.utilitylocatingservices.com.au	Phone Mobile Fax Email Web
Utility Mapping (Aust) Pty Ltd. Sydney and surrounding areas	**YES** **VACUUM EXCAVATOR**	1300 MAPPING (627746) sydney@utilitymapping.com.au www.utilitymapping.com.au	Phone Mobile Fax Email Web
Utility Scan. All areas	**YES** **HAND DIG**	0426 354 051 brett@utilityscan.net	Phone Mobile Fax Email Web
Veris Australia Pty Ltd. All of NSW	**YES** **VACUUM EXCAVATOR**	1300 765 315 0419 770 560 l.mead@veris.com.au www.veris.com.au	Phone Mobile Fax Email Web
Vertex Power & Process. Western NSW - Broken Hill, Silverton, Menindee, Wilcannia, Ivanhoe, Tibooburra SA border - Cockburn, Yunta	**YES** **VACUUM EXCAVATOR**	08 8088 4301 0428 154 450 08 8087 5729 service@vertexpp.com.au www.vertexpp.com.au	Phone Mobile Fax Email Web
Wagga Directional Drilling. Riverina & surrounds	**YES** **VACUUM EXCAVATOR**	02 6925 4660 0418 473 104 02 6925 4941 sidpowell.wdd@telstra.com	Phone Mobile Fax Email Web

Cable Plan



For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)	Sequence Number: 82196082
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	CAUTION: Critical Network Route in plot area. DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935
Generated On 10/04/2019 14:26:03	

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

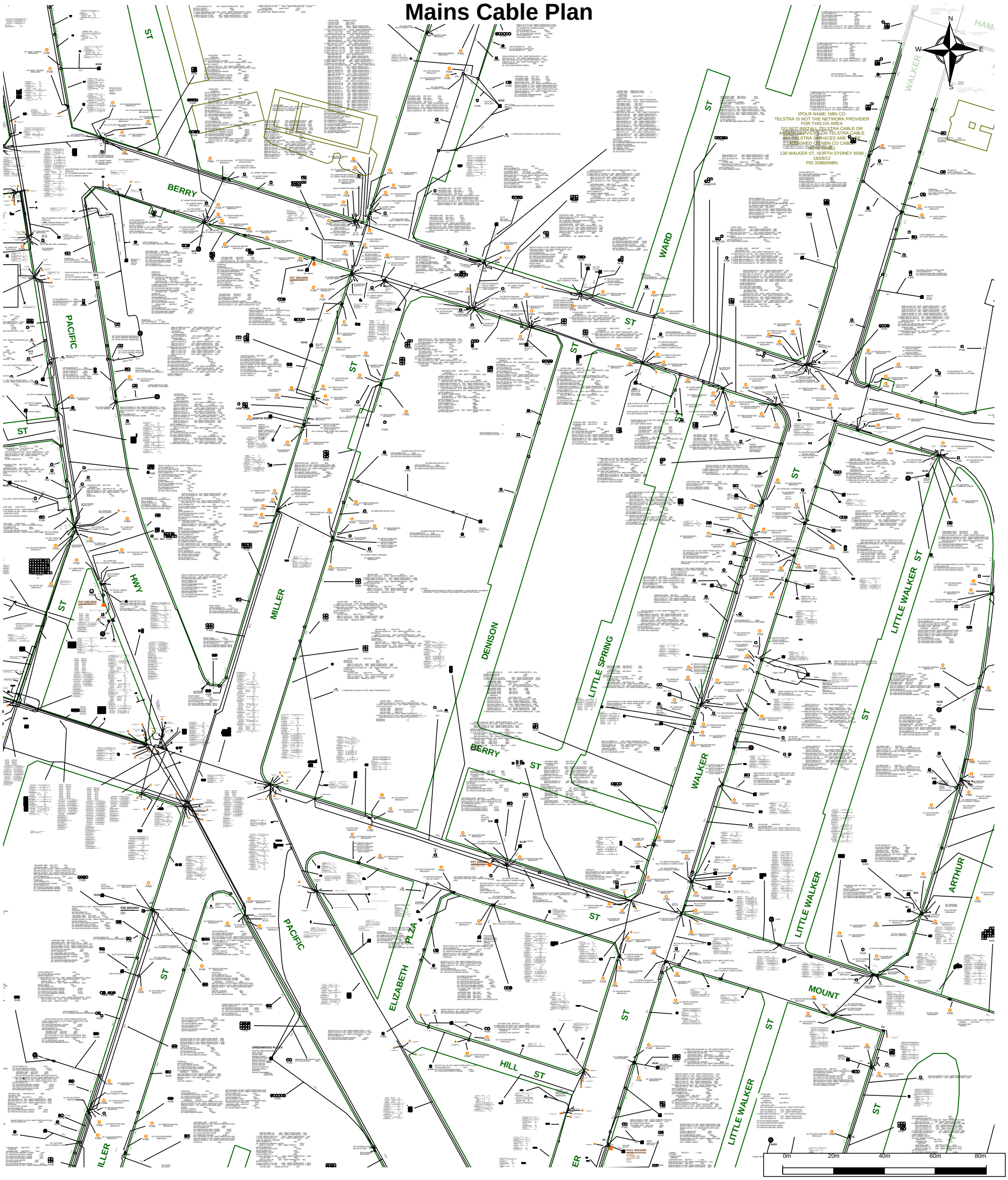
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Mains Cable Plan



Telstra	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	
Generated On 10/04/2019 14:26:42	Sequence Number: 82196082
	CAUTION: Critical Network Route in plot area. DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935

WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

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Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

To: Mr David Wall

levell16 - 580 George Street
Sydney, NSW, 2000

Uecomm Pty Limited
ABN 56 079 083 195

Building 8, 658 Church St,
Richmond, VIC 3121
Ph: (03) 9221 4100
Fax: (03) 9221 4193
Ah: 1800 707 447

LOCATION OF UNDERGROUND FIBRE OPTIC CABLE INFORMATION SHEET

IMPORTANT: PLEASE READ ALL INFORMATION AND CONDITIONS BELOW AND THE NOTICE ON THE REVERSE SIDE OF THE PLAN/S.

"Dial Before You Dig" Sequence No 82196083	**Issue Date:** 10/04/2019
Customer ID 1960272	**Issue By:**

Location: **Denison Street, North Sydney, NSW 2060**
Map Ref: **216C11, 216C12, 216D11, 216D12**
Uecomm Asset Location No. **82196083**
Dial Before You Dig Job No. **16094143**

In relation to your enquiry at the above address, Uecomm advises as follows:

The records of Uecomm Limited disclose that there ARE underground FIBRE OPTIC / TELECOMMUNICATIONS cables in the vicinity of the above enquiry as per attached plan/s.

- The underground cables referred to in this advice are defined as the underground communications cables owned or controlled by Uecomm Pty Limited.
- The person/company responsible for submitting the inquiry should take care to ensure all plans listed above have been received. For any plan listed above but not received please contact **1800 707 447**.
- Any information provided is valid only for **30 days** from the date of issue set out above.
- If the work operations extends beyond this period, or if the designs are altered in any way, you are requested to resubmit your proposal for reassessment.
- Further assistance may be obtained if necessary by telephoning **1800 707 447**.

PLEASE READ ALL INFORMATION AND DISCLAIMERS BELOW:

1. Due to the nature of underground cables and the age of some cables and records, it is impossible to conclusively ascertain the location of all cables. The accuracy and/or completeness of the information cannot be guaranteed and, accordingly, they are intended to be indicative only and, as a result, Uecomm does not accept any responsibility for any inaccuracies of its plans. They should not be solely relied upon when undertaking underground works. It is also inaccurate to assume that fibre optic cables follow straight lines and careful on-site investigations are essential to locate its exact position.

2. The following minimum clearances must be maintained:
   - 300mm when laying asset's inline, horizontal or vertical.
   - 500mm when operating vibrating equipment, e.g., jackhammers or vibrating plates.
   - 1000mm when operating mechanical excavators.

3. Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions should be taken in the undertaking of any underground works, including (but not limited to) the following:
   - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to minimise the likely hood of damage to the cable, e.g., blades of hand equipment should be orientated parallel to the line of the cable rather than digging across the cable.
   - If any undisclosed underground cables are located, Uecomm Limited should be notified immediately.
   - All personnel must be properly briefed, particularly those associated with the use of earthmoving equipment, trenching, boring and pneumatic equipment.
   - All excavations must be undertaken in accordance with the relevant legislation and regulations.

4. **DAMAGE. ANY DAMAGE TO UECOMM'S NETWORK MUST BE REPORTED IMMEDIATELY TO 1800 707 447**.

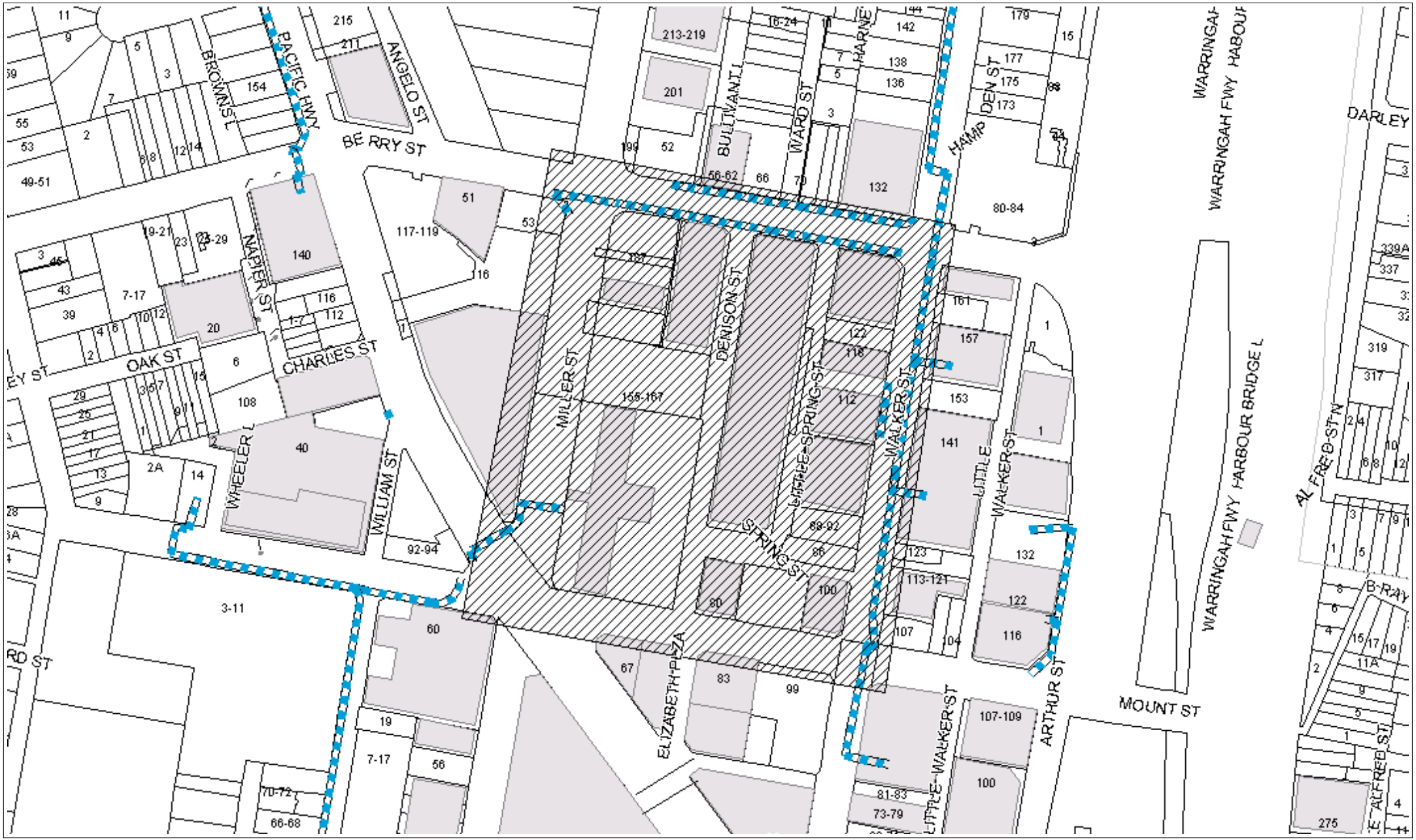
5. Uecomm recommends using Uecomm approved location contractors to provide on-site location services for Uecomm plant. You can arrange Uecomm on-site visits by calling Uecomm on 1800 707 447 and Uecomm or its approved representative will attend your site to provide guidance to the location of the Uecomm assets (the *"Uecomm Asset Alignment"*). **Uecomm requires 3 clear business days notice to conduct an on-site location.** The initial on-site visit by Uecomm will not normally incur a charge, but at the discretion of Uecomm, subsequent site visits may incur a charge to be applied at an hourly rate.

6. Uecomm will hold the relevant party responsible for any damage to Uecomm plant and all expenses incurred by Uecomm as a result of asset damage.

7. Except to the extent that liability may not be capable of lawful exclusion, Uecomm Pty Limited and its servants and agents and the related bodies corporate of Uecomm Pty Limited and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any Plans attached hereto. Except as expressly provided to the contrary in this information sheet or the attached Plans, all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

We thank you for your enquiry and appreciate your continued use of the Dial Before You Dig Service and/or Uecomm Asset Analysis Service. If you require further information please contact Uecomm on **1800 707 447**.

IMPORTANT *This document may be confidential and privileged. Unauthorised use is prohibited. If you have it in error, please notify us and shred this document. Thank you.*



Uecomm

Cable Uecomm Underground

Scale: #INSERT MAP SCALE#

Printed On: 10/04/2019

Sequence Number: 82196083

Location: Denison Street

Job Location

Line

Point

Area

Undergound Asset

Uecomm

This document is confidential and may also be privileged, and neither confidentiality nor privilege is waived lost or destroyed by virtue of it being transmitted to an incorrect addressee. Unauthorised use of the contents is therefore strictly prohibited. Any information contained in this document that has been extracted from our records is believed to be accurate, but no responsibility is assumed for any error or omission.

LEGEND

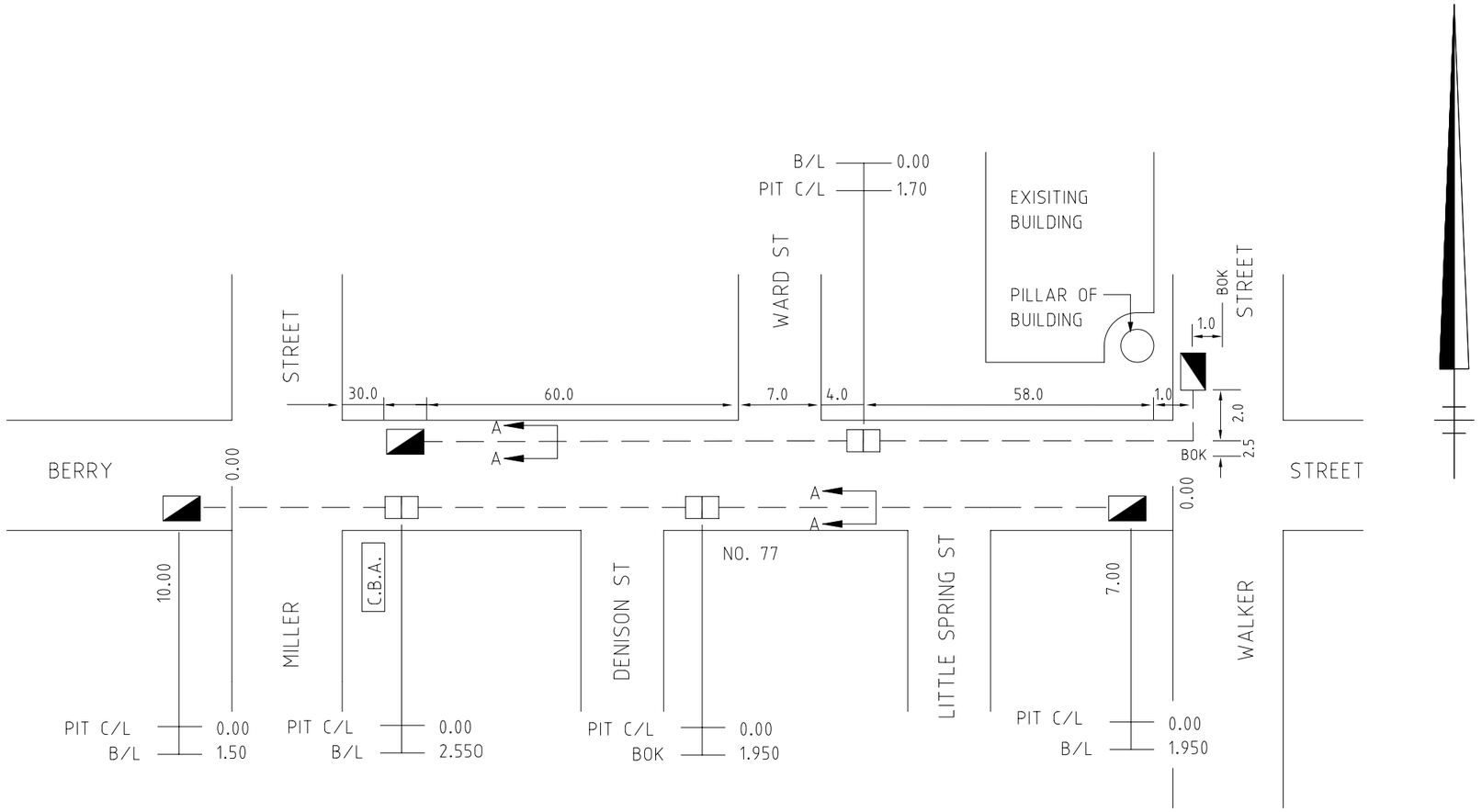
- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- UE P5 PIT
- UE P6 PIT

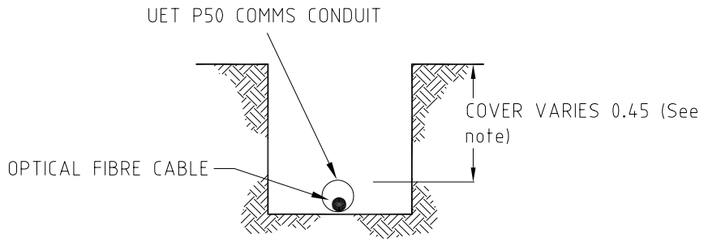
B/L - BUILDING LINE

BOK - BACK OF KERB

CO - COVER

- FENCE LINE
- TELSTRA MANHOLE
- TELSTRA PIT





SECTION A-A

Note:

Conduit depths quoted are approximate only and may change due to unforseen circumstances. Excavate by hand until conduit depth is determined.

DRAWING NOT TO SCALE

REVISIONS					
28.03.07	B	OLD DWG 2018-3 ADDED TO THIS DWG CONTENT			
27.02.01	A	UBD REF. WAS 7-D6		GRQ	

Uecomm™ MAKING THE CONNECTION

SYDNEY
Level 9 20 Berry St.
NORTH SYDNEY

DRAWN AZEEM.S. 12-9-2000

APPROVED R.Browne 29.9.00

UBD REF. 7-G6,H6

DRG No. OFN5/SYD/2018-1 | B

U/G OPTICAL FIBRE CABLE RUN
MILLER ST TO WALKER ST VIA
BERRY ST
NORTH SYDNEY NSW 2060

A3

LEGEND

- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- UE P5 PIT
- UE P6 PIT

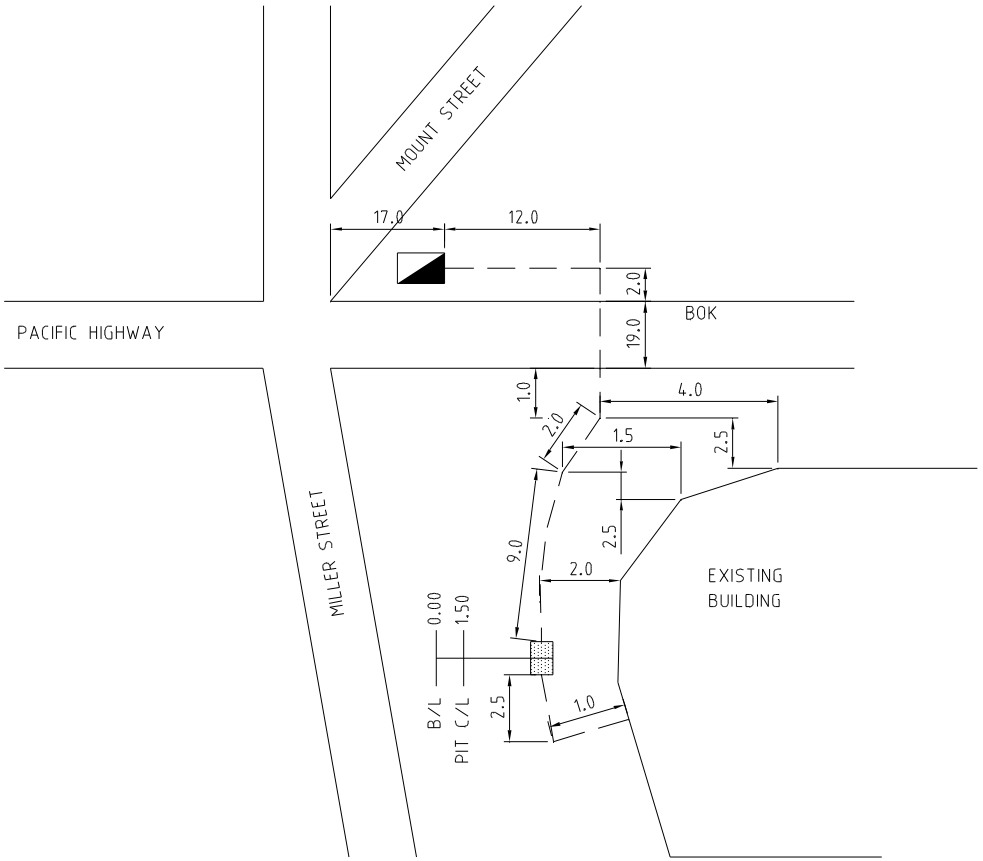
B/L - BUILDING LINE

PIT C/L - PIT CENTER LINE FROM B/L

BOK - BACK OF KERB

CO - COVER

- FENCE LINE
- TELSTRA MANHOLE
- TELSTRA PIT
- TELSTRA 6 PIT



NOTE / WARNING:
BEFORE COMMENCING WORK IN THIS AREA PLEASE CONTACT MURRAY BRICE ON MOBILE 0413 449 060 ON BEHALF OF UE COMM.

''AS-BUILT'' PLANS

NOTE: - ALL DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.

REVISIONS

REV	DESCRIPTION	DATE	CHECKED	APPROVED
A	INITIAL ISSUE (FOR JERRY)	02.02.01		
-	RENUMBERED. WAS BCE-00-0055	16.01.01		
A	REVISED WHOLE JOB	30.03.01		

BCE
Brice Civil Engineering Pty Ltd
A.B.N. 13 087 182 581
P.O. Box 378 Cherrybrook NSW 2126 Ph:(02) 8850 7550 Fax: (02) 8850 7551

Uecomm™ MAKING THE CONNECTION
ACN 079 083 195

APPROVED: R.OATES

UBD REF: 7-F8

PROJECT:
STREET: MILLER STREET & PACIFIC HIGHWAY
SUBURB: NORTH SYDNEY
CONDUIT: 50mm
DEPTH: 0.5 - 0.7m

METHOD: DIRECTIONAL BORE AND EXCAVATION

SCALE:	DRAWN	SIZE
NOT TO SCALE	SSQ P/L	A3

DOCUMENT No:	DATE:	REVISION:
OFN5/SYD/2113	02.02.01	A

PREPARED BY: S & S QUIRK PTY LTD PH:(02) 9482 7944 FAX:(02) 9482 7955. ON BEHALF OF BCE FOR UE COMM.

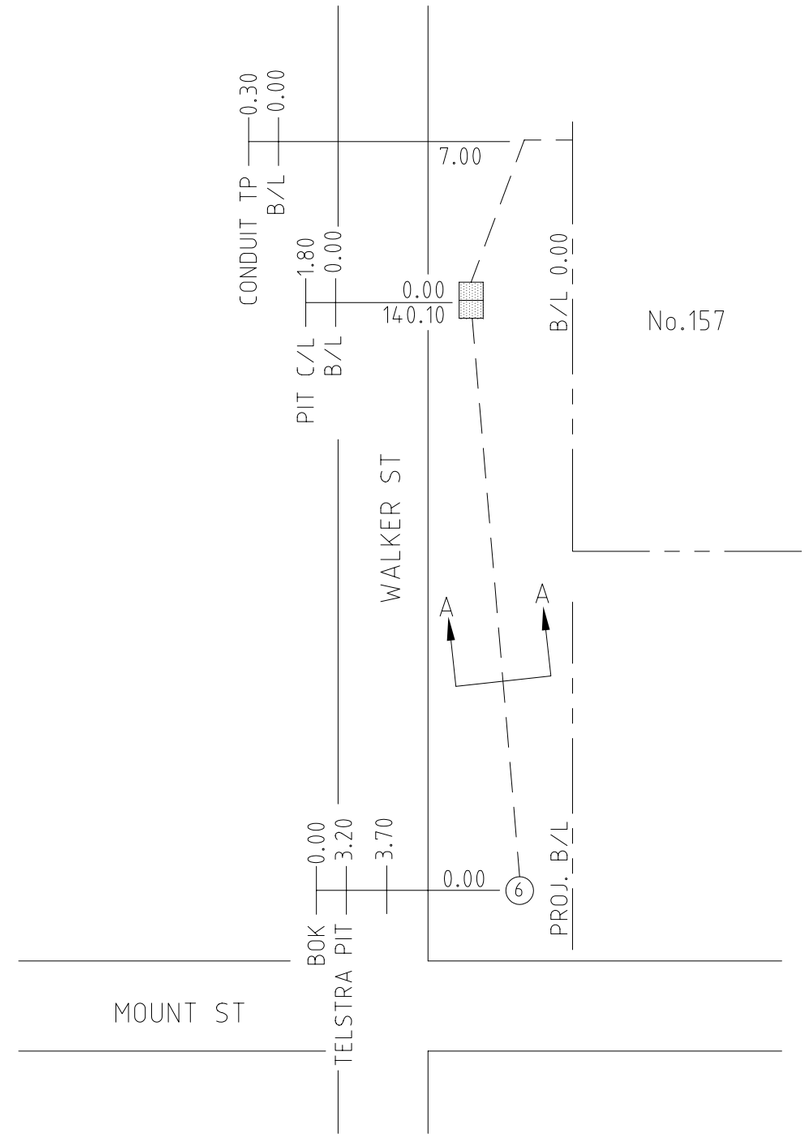
LEGEND

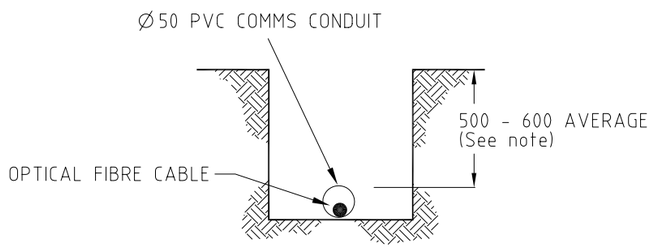
- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- CABLE CONDUIT
- UE P5 PIT
- UE P6 PIT

B/L - BUILDING LINE

BOK - BACK OF KERB

- FENCE LINE
- TELSTRA MANHOLE
- TELSTRA PIT





SECTION A-A

Note:
Conduit depths quoted are approximate only and may change due to unforseen circumstances.
Excavate by hand until conduit depth is determined.

DRAWING NOT TO SCALE

REVISIONS			
28.06.01	-	REDRAWN & RENUMBERED. WAS BCE-01-0094	GRQ

Uecomm™
MAKING THE CONNECTION
ACN 079 083 195

SYDNEY
Level 3, Angel Place
123 Pitt St,

DRAWN G.R.Quin 28.06.01

APPROVED S.Logiudice 28.06.01

UBD REF. 7-H7,H8

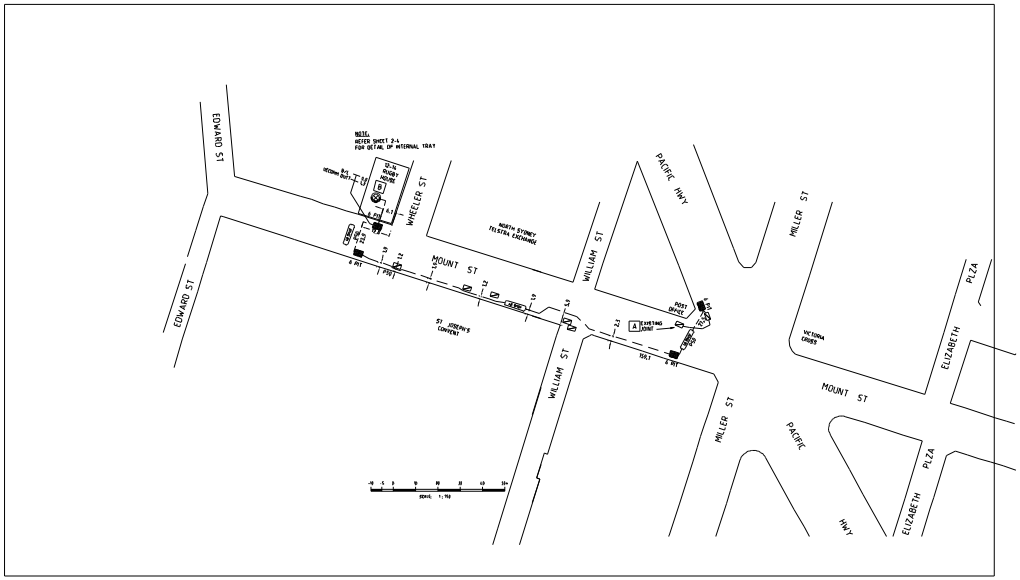
DRG No. OFN5/SYD/2193-1

UNDERGROUND FIBRE OPTICAL CABLES
MOUNT ST TO 157 WALKER ST VIA
WALKER ST
NORTH SYDNEY NSW 2060

A1

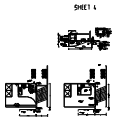
SHEET 1

EXTERNAL NETWORK



SHEET 2-4

INTERNAL CABLE ROUTES



CONSTRUCTION NOTES

EXTERNAL PLANT

1. REFER TO TRENCH CROSS-SECTION DRAWINGS FOR DETAILED INFORMATION OF PIPE INSTALLATION AND REINSTATEMENT REQUIREMENTS

2. ENSURE LOCAL COUNCIL AND RTA WORK PERMITS ARE OBTAINED AND ADHERED. PRIOR TO WORK COMMENCEMENT, NOTE THE SPECIAL REQUIREMENTS WHEN WORKING IN THE AREA OF ENVIRONMENTAL SIGNIFICANCE.

3. SITING OF THE NEW VECOMM PLANT HAS BEEN DETERMINED BASED ON THE BEST INFORMATION AVAILABLE OF OTHER UNDERGROUND PLANT (TELSTRA, GAS, POWER, WATER ETC). THE INFORMATION IS NOT ALWAYS COMPLETE OR ACCURATE, CONSEQUENTLY THERE WILL BE OTHER UNIDENTIFIED PLANT AND IN SOME INSTANCES THE INDICATED POSITION OF THAT PLANT MUST BE TREATED WITH CAUTION. THE DESIRED ALIGNMENT OF NEW VECOMM PLANT MAY NEED TO BE ADJUSTED TO MATCH IN WITH AVAILABLE SPACE.

4. IF THE DESIRED DEPTH OF THE CONDUITS CANNOT BE ACHIEVED, THE DEPTH MAY BE MADE SHALLOWER, AFTER CONSULTATION/APPROVAL WITH VECOMM, BUT A PROTECTIVE CONCRETE GROUT IS TO BE PLACED ON TOP.

5. LEAVE 30 M LOOP AT EVERY SECOND PIT FOR FUTURE JOINTS

6. PLEASE CONTACT THE DESIGNER INDICATED ON THIS PLAN BEFORE EXECUTING ANY VARIATION IN THE FIELD

NOTES:

1. CO-ORDINATE WITH WSKONSTREM TO INSTALL AND TERMINATE 48 SMOF INTO THE SITE.

2. ALL INTERNAL TRAYS SHALL BE UNISTRUT TRAYS HDG SUPPORTED USING UNISTRUT SUPPORT BRACKETS WITH THE FOLLOWING MINIMUM SPACING REQUIREMENTS.
HORIZONTAL RUNS- 1500 MM
VERTICAL RUNS- 2000 MM

GENERAL NOTES:

1. ENSURE CABLE RUN IN RISERS MUST BE FULLY SUPPORTED ON EITHER CABLE TRAY OR LADDER RACK TO PREVENT STRETCHING OR UNNECESSARY STRAIN BEING PLACED ON THE CABLES.
CABLES WILL NOT BE INSTALLED BEYOND THE BENDING RADIUS RECOMMENDED BY THE CABLE MANUFACTURER.

2. ALL FIXINGS SHALL BE SUITABLE FOR THE PARTICULAR ENVIRONMENT OF THE INSTALLATION. ALL FIXINGS AND CLIPS FOR HDG STEELWORKS SHALL BE HDG USING STAINLESS STEEL SCREWS OR NAILS WITH DIELECTRIC ISOLATION BETWEEN DISSIMILAR MATERIALS.

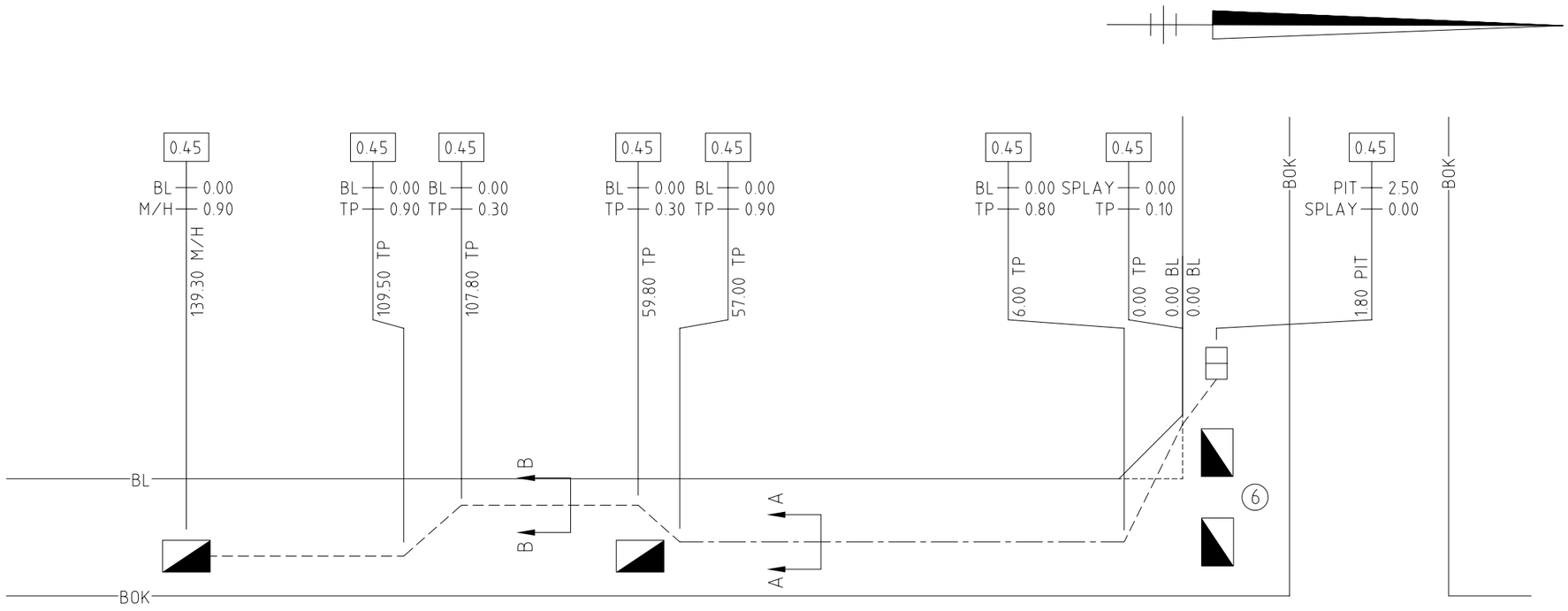
3. ALL SUPPORT SYSTEMS SHALL BE LABELLED/IDENTIFIED WITH 'VECOMM'. LABELLING SHALL BE PLACED AT INTERVALS NOT EXCEEDING 15 METRES, AT ALL CHANGES OF DIRECTION, AT ALL RISER LEVELS AND AT ALL BUILDING ENTRY POINTS.

4. ENSURE NOTIFICATION AND APPROVAL SHALL BE OBTAINED FROM THE BUILDING OWNER BEFORE ANY BUILDING SERVICES ARE INTERRUPTED AND BEFORE ANY CUTTING, DRILLING OR FIXING TO/OF STRUCTURES OR FINISHES.

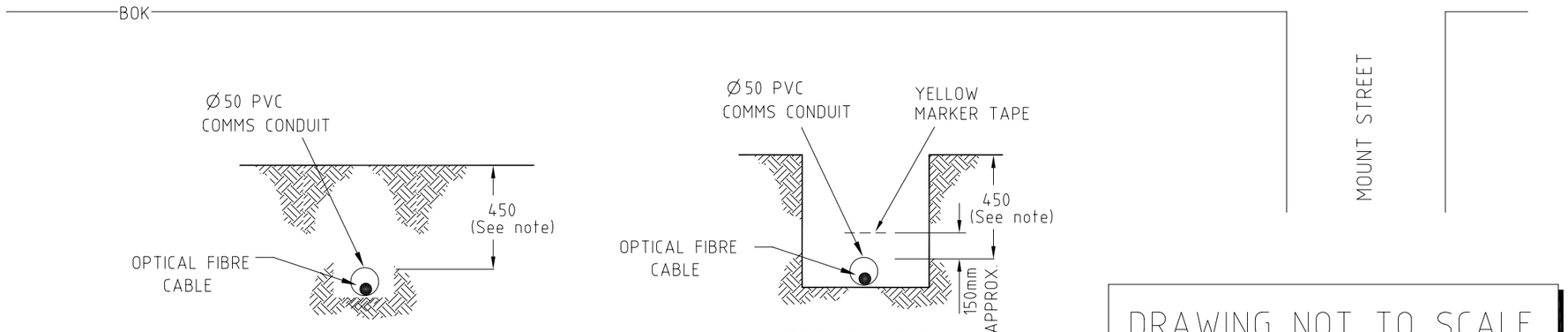
5. PLEASE CONTACT THE DESIGNER INDICATED ON THIS PLAN BEFORE EXECUTING ANY VARIATION IN THE FIELD

LEGEND

- ELECTRICITY POLE
- FIBRE OPTIC CABLE
- CABLE CONDUIT (TRENCHING)
- CABLE CONDUIT (BORE TUNNELLING)
- UE P2 PIT
- UE P5 PIT
- UE P6 PIT
- UE P8 PIT
- UE P9 PIT
- BL - BUILDING LINE
- BOK - BACK OF KERB
- CL - CENTRELINE OF CONDUIT
- TP - TURNING POINT OF CONDUIT
- FENCE LINE, FL
- TELSTRA MANHOLE
- C - COMMS PIT
- OPTICAL FIBRE JOINT
- JOINT LOOP (m) - POLE / UNDERGROUND
- CABLE HEAD POLE
- 0.6m - CABLE DEPTH



WILLIAM STREET



Note:

1. Conduit depths quoted are approximate only and may change due to unforseen circumstances.
2. In all instances it is recommended that the position of conduits & cables should be proved on site by hand, prior to commencement of works.
3. Yellow marker tape shall be installed at least 150mm above the uppermost surface of all conduits or cables.

DRAWING NOT TO SCALE

REVISION					
11.03.02	-	ISSUED FOR APPROVAL - UE.COMM (A.L.S.)			
DATE	REV.	REVISION DESCRIPTION	CHECKED	APP'D.	

CONTACT OFFICER	Adrian Szentessy PH: (03) 9781 4011
PROJECT NUMBER	UEC-NSWHS-101
PLAN No.	McCOURT DANDO
MELWAY / UBD REF	UBD 216 C12

Uecomm™ MAKING THE CONNECTION
ACN 079 083 195

UECOMM
MEL/SYD/QLD

DRAWN *BAYSIDE 06.03.03 (B.K.)*
DESIGN CHECKED
APPROVED

DRG No. OFN5/SYD/2284-1 -

U/G OPTICAL FIBRE CABLE RUN
WILLIAM STREET
WILLIAM STREET AND MOUNT STREET
NORTH SYDNEY NSW 2060

A3

verizon

PLEASE HAND TO ADDRESSEE IMMEDIATELY

The following drawing(s) is/are provided from Verizon records (formerly known as Worldcom) in response to your request to show the approximate location of our infrastructure within the vicinity requested.

Note:

This reply relates only to the location requested and is valid for 30 days from the date of this reply. Where additional works are planned that have not been specified within this request, Verizon require that an additional location request be submitted.

Please Contact a Verizon representative for confirmation and/or site visit prior to works commencing.

ALL VERIZON / WORLDCOM PITS ARE LOCKED FOR SECURITY

Only Verizon personnel have access to the security key.

Contacts:

Paul Spear **Direct:** 02 8210 3243 **Email:** paul.spear@au.verizon.com

Verizon Operational Resource Centre (ORC) **Direct:** 02 8210 3030 Option 1

Warning:

These drawings have been prepared for Verizon's own use and indicate the position of underground optical fibre networks and installations relative to property lines, kerb lines etc. as at the time the infrastructure were installed. Verizon will accept no liability for inaccuracies in the information or lack of information on such drawings for any cause whatsoever arising. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Verizon's Infrastructure. Verizon also reserves the right to recover compensation for any damages and loss of services.



LEGEND

- VERIZON DUCT
- VERIZON DUCT
- TELSTRA DUCT
- VERIZON PIT
- TELSTRA PIT

REV	DATE(D/M/Y)	DESCRIPTION	DRAWN	CHECKED	APPROVED
C1	26/1/06	AS-BUILT			

Do not scale this drawing. Information on this document is proprietary & shall not be used, copied, reproduced or disclosed in whole or in part without written consent of Verizon.

PROJECT
Verizon
NORTH SYDNEY NETWORK

verizon

DRAWING TITLE
NORTH SYDNEY NETWORK

REVISION
C1

DRAWING NUMBER
VZ/AUS/SNS

SCALE
N.T.S.

SIZE
A1

10/04/2019

Mr David Wall
Arcadis
levell16 - 580 George Street
Sydney NSW 2000

Dear Mr David Wall

DIAL BEFORE YOU DIG - JOB: 16094143 SEQ: 82196089

Thank you for your request regarding the location of telecommunication services. You requested the information for the below area:

Enquiry Date:	10/04/2019
Address:	Denison Street
Suburb:	North Sydney
State:	NSW, 2060
Additional Information:	Not Supplied

STOP

According to our records your enquiry with the following details impacts our infrastructure. A detailed Plan is normally attached to this response, however due to the large area, a single overview plan has been provided.

In order to have your enquiry response adequately assessed, you are required to contact damage.relocations@vocus.com.au to discuss your works in more detail.

IMPORTANT INFORMATION

Drawings and Plans provided by the Vocus Group are reference diagrams which were correct at the time the asset was built. Exact ground cover and alignments cannot be provided with any certainty, as these may alter over time. Depths of Telecommunications plant vary considerably as do alignments. The plans provided are to be used as a guide only. It is essential to uncover / pothole the asset and positively identify the assets exact location.

Yours sincerely,
Vocus Group DBYD Team

EMERGENCY CONTACT: 1800 262 663

The Vocus Group includes related bodies corporate of Vocus Communications Limited ACN 084 115 499.

DUTY OF CARE

When working in the vicinity of telecommunications plant, you have a legal "Duty of Care" that must be observed. The following points must be considered:

It is the responsibility of the constructor to design for protection and minimal impact of the Vocus Group plant. The Vocus Group will provide free plans showing the presence of its network to assist at the design stage. It is the constructors' responsibility to:

a. Request plans of the Vocus Group plant for a particular location at a reasonable time before construction begins through Dial Before You Dig.
b. Visually locate the Vocus Group plant by vacuum excavation (potholing) where construction activities may damage or interfere with the Vocus Group plant (see "Clearances for work in the vicinity of the Vocus Group Plant" section for more information).
c. Contact the Vocus Group (see below for details) if the Vocus Group plant is wholly or partly located near planned construction activities.

NOTE: Plans are provided free of charge up to 1 Km radius. Larger plans may incur a cost.

DAMAGE

ANY DAMAGE TO VOCUS GROUP NETWORK
MUST BE REPORTED TO 1800 262 663 IMMEDIATELY

The constructor is responsible for all plant damage when works commence prior to obtaining the Vocus Group plans, or failure to follow instructions.

The Vocus Group reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

ASSET RELOCATIONS

You are not permitted to relocate or alter any Vocus Group assets or network under any circumstance.

For all enquiries relating to the relocation of Vocus Group assets please email Damage.Relocations@vocus.com.au

ON SITE LOCATION

Region	Onsite Locations Contact	Phone	Mobile	Fax	After Hours
NSW - Sydney	QC Communications	(02) 9620 2407		(08) 9620 1701	
NT – Alice Springs	Chambers Engineering	(08) 8955 5022	0418 837 833 0418 897 332	(08) 8955 5322	
NT – Darwin	Anywair Electrics	(08) 8988 1658	0418 890 071	(08) 8988 4654	0418 890 071
NT – Darwin	Northern Communications Services		0407 904 319		(08) 8927 3994
QLD - Brisbane	Optilinx	Scheduling (07) 3901 7353	After Hours or Emergency 0404 010 658	(07) 3901 7352	
SA – Adelaide	Trenchless Pipe-Laying Contractors	(08) 8376 5911		(08) 8376 5944	
VIC – Melbourne	Linktech	Scheduling (03) 8805 0300			
WA – Perth	Abaxa / WH Location Services	Scheduling 1300 369 642	After Hours or Emergency 0411 746 657 - Boyd	(08) 9256 2922	

The Vocus Group accepts no liability for the information provided to the Constructor by the Locators provided above. Further, the Constructor acknowledges that the Locator is the agent of the Constructor and that the Vocus Group takes no responsibility for the locators' acts or omissions.

If any of the above numbers are uncontactable and your call is urgent, please call the Vocus National Service Desk on 1800 262 663

- For all work within 2.5 metres of nominal location, the Constructor is required to prove the actual location of the plant by potholing and exposing before commencing work.
- Potholing to expose and locate the Vocus Group plant is required before work commences, at least every 3 metres where the Constructors works are parallel to the Vocus Group plant.
- The Constructor is responsible for all plant damages when works commence without the Vocus Group plans or by failure to follow advice and/or instructions from the Vocus Group.

NOTE: No machinery shall be used within 1 metre of the Vocus Group plant until the actual location has been determined by potholing using hand tools.

NOTE: No heavy earth working machinery shall be used within 5 metres of the Vocus Group plant until the actual location has been determined by potholing using hand tools.

CLEARANCES FOR WORK IN THE VICINITY OF VOCUS GROUP PLANT

These figures represent the minimum clear cover to be maintained over the Vocus Group plant. Please note that the actual cover over existing plant might be greater or less than recommended figures. Exact alignment and depths cannot be given with certainty as such levels can change over time.

Footpath and Verge Areas	450mm
Roadways	600mm

These figures represent the minimum clearance between construction and actual location of the Vocus Group plant.

Jackhammers / Pneumatic Breakers	Not within 2.5 metres of actual location
Vibrating plate or Wacker Packer compactors	Not within 500mm of actual location
Heavy Vehicle Traffic	Not to be driven across Vocus Group plant with less than 600mm cover. The constructor is to check the depth by potholing using hand tools.
Mechanical Excavators	Not within 1 metre of actual location. The constructor is to pothole and expose plant using hand tools.
Boring Equipment (in-line, horizontal and vertical)	Not within 2.5 metres of actual location. The constructor is to pothole and expose plant.

Access to the Vocus Group pits must remain accessible and at ground level at all times.

Any information provided is valid only for 30 days from the date of issue of this document. If the work operations extend beyond this period, or if the designs are altered in any way, you are requested to re-submit your proposal for re-assessment by contact Dial Before You Dig.

Phone 1100 or check the website for more details http://www.1100.com.au

RESOLUTION OF POINTS OF CONFLICT

Should plant location and potholing reveal points of conflict between the Constructors planned works and the existing Vocus Group plant, the constructor should contact the Vocus Group for advice and to discuss possible solutions. The contact details are;

Fibre Operations

Phone: 1800 262 663
Email: support@vocus.com.au

Or Urgent enquiries after business hours contact 1800 262 663

ASSESSMENT OF RISK AND PROTECTIVE ACTIONS

Where protective works are required around existing Vocus Group plant, the details will be worked out on a case by case basis. Protective works are the responsibility of the Constructor.

Where relocation or protection of Vocus Group plant is part of an agreed solution, the costs of these works will be the responsibility of the Constructor. The Vocus Group will provide an estimated cost for works. Work by the Vocus Group will not commence until a Purchase Order is received.

Schedule The Criminal Code
Chapter 10 National infrastructure
Part 10.6 Telecommunications Services
Division 474 Telecommunications offences

474.6 Interference with facilities

(1) A person is guilty of an offence if the person tampers with, or interferes with, a facility owned or operated by:

(a) a carrier; or
(b) a carriage service provider; or
(c) a nominated carrier.

Penalty: Imprisonment for 1 year.

(2) For the purposes of an offence against subsection (1), absolute liability applies to the physical element of circumstance of the offence, that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier.

(3) A person is guilty of an offence if:

(a) the person tampers with, or interferes with, a facility owned or operated by:

(i) a carrier; or
(ii) a carriage service provider; or
(iii) a nominated carrier; and

(b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.

(4) For the purposes of an offence against subsection (3), absolute liability applies to the following physical elements of circumstance of the offence:

(a) that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier;

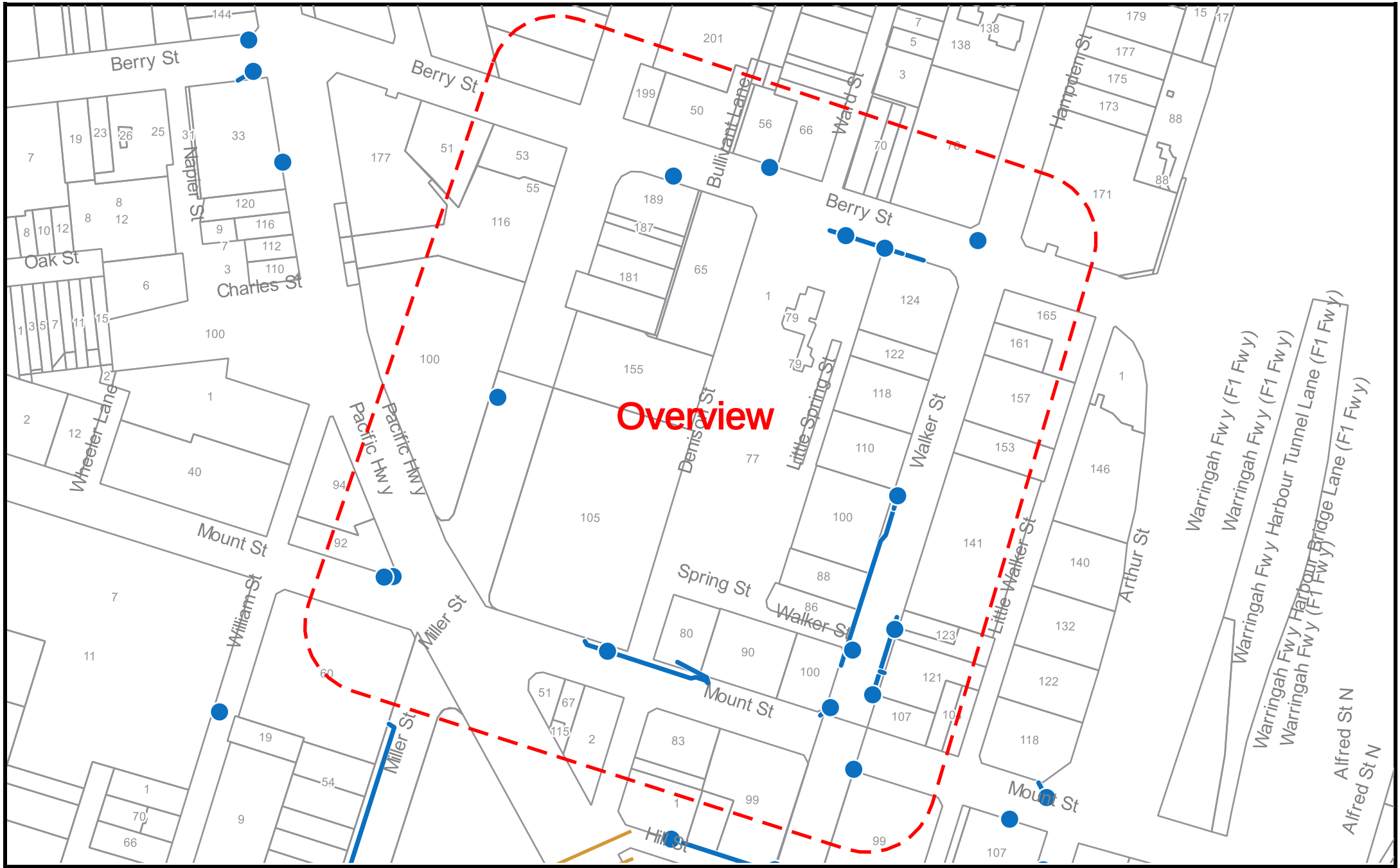
(b) that the carriage service is supplied by a carriage service provider.

(5) A person is guilty of an offence if:

(a) the person uses or operates any apparatus or device (whether or not it is comprised in, connected to or used in connection with a telecommunications network); and

(b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.



VOCUS communications

N W E S

SEQUENCE NUMBER: 82196089
JOB NUMBER: 16094143
ADDRESS: Denison Street, North Sydney, NSW 2060

LEGEND
Vocus Group Pit
Vocus Group Conduit

SCALE: 1:2141

The Vocus Group includes related bodies corporate of Vocus Communications Limited ACN 084 115 499.

Network Protection

High Pressure - Assets Affected

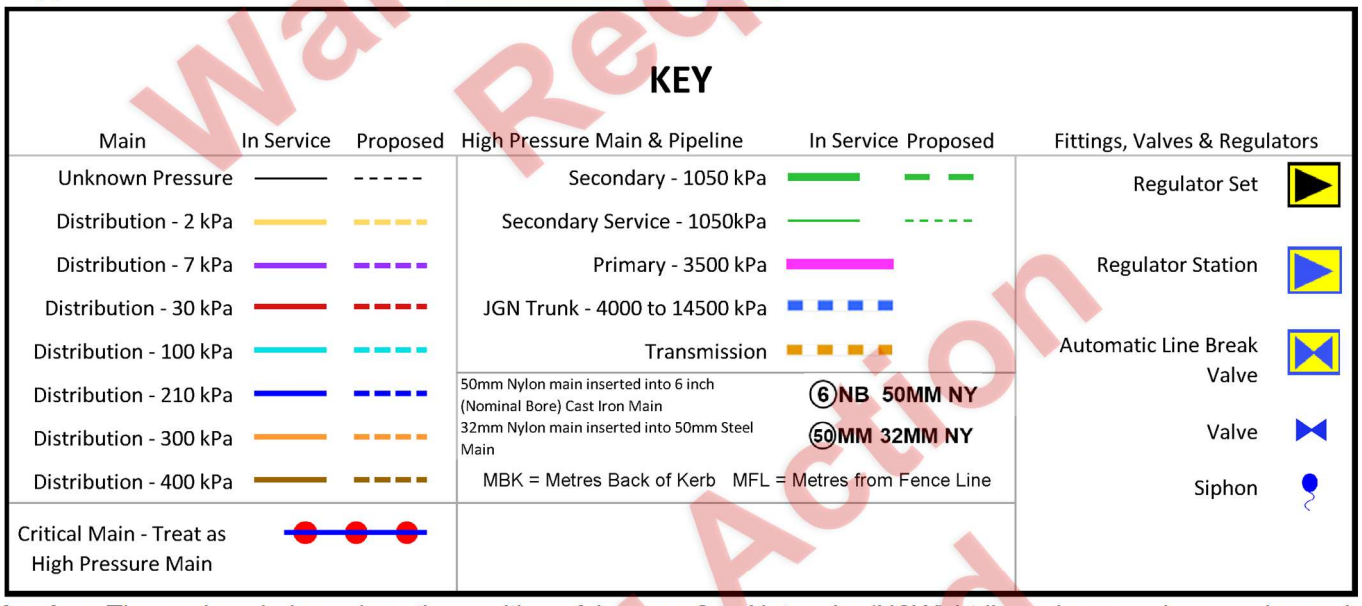
In reply to your enquiry, there are **High Pressure Gas Mains** in the vicinity of your intended work, as generally illustrated on the attached map. There may also be other mains or services at the location, as discussed in the warning below. For an explanation of the map, please see the key below.
The following excavations guidelines apply:

Excavation Guidelines:

Prior to **any** excavations in this area, you ***must*** contact the High Pressure Response Coordinator on **1300 665 380**. ***(Appointments will be coordinated with availability of a Jemena Representative)*** to arrange a survey. For all works in the vicinity of High Pressure Gas Mains you must arrange for a Jemena Representative to attend and supervise all excavations. Charges apply for attendance of any works outside the hours of 7am to 4pm, Monday to Friday ("**Standard Business Hours**") and for any attendance during Standard Business Hours that is longer than 2 hours.

In accordance with clause 34(5) of the Gas Supply (Safety and Network Management) Regulation 2013 (NSW), you should be informed that all excavation, (including pot-holing by hand to confirm the location of pipes) should be performed in accordance with "***Work Near Underground Assets Guideline"*** *published in 2007 by the Work Cover Authority.*

A copy of this Guideline is available at: www.workcover.nsw.gov.au



Warning: The enclosed plans show the position of Jemena Gas Networks (NSW) Ltd's underground gas mains and installations in public gazetted roads only. **Individual customers' services and services belonging to other third parties are not included** on these plans. These plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "**Jemena**") and any reliance placed on these plans by you is entirely at your own risk. The plans may show the position of underground mains and installations relative to fences, buildings etc., as they existed at the time the mains etc were installed. The plans may not have been updated to take account of any subsequent change in the location or style of those features since the time at which the plans were initially prepared. Jemena makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error, omission, lack of detail, transmission failure or corruption in the information provided. Jemena does not accept any responsibility for any loss that you or anyone else may suffer in connection with the provision of these plans, however that loss may arise (including whether or not arising from the negligence of Jemena, its employees, agents, officers or contractors). The recipient of these plans must use their own care and diligence in carrying out their works and must carry out further surveys to locate services at their work site. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains and equipment. Jemena advises that you may be required to carry out potholing by hand if required by a Jemena Representative to confirm the location of Jemena's main and installations. This must also be performed by you under the supervision of a Jemena Representative and be carried out in accordance with the Working Near Underground Assets Guideline published in 2007 by Work Cover Authority

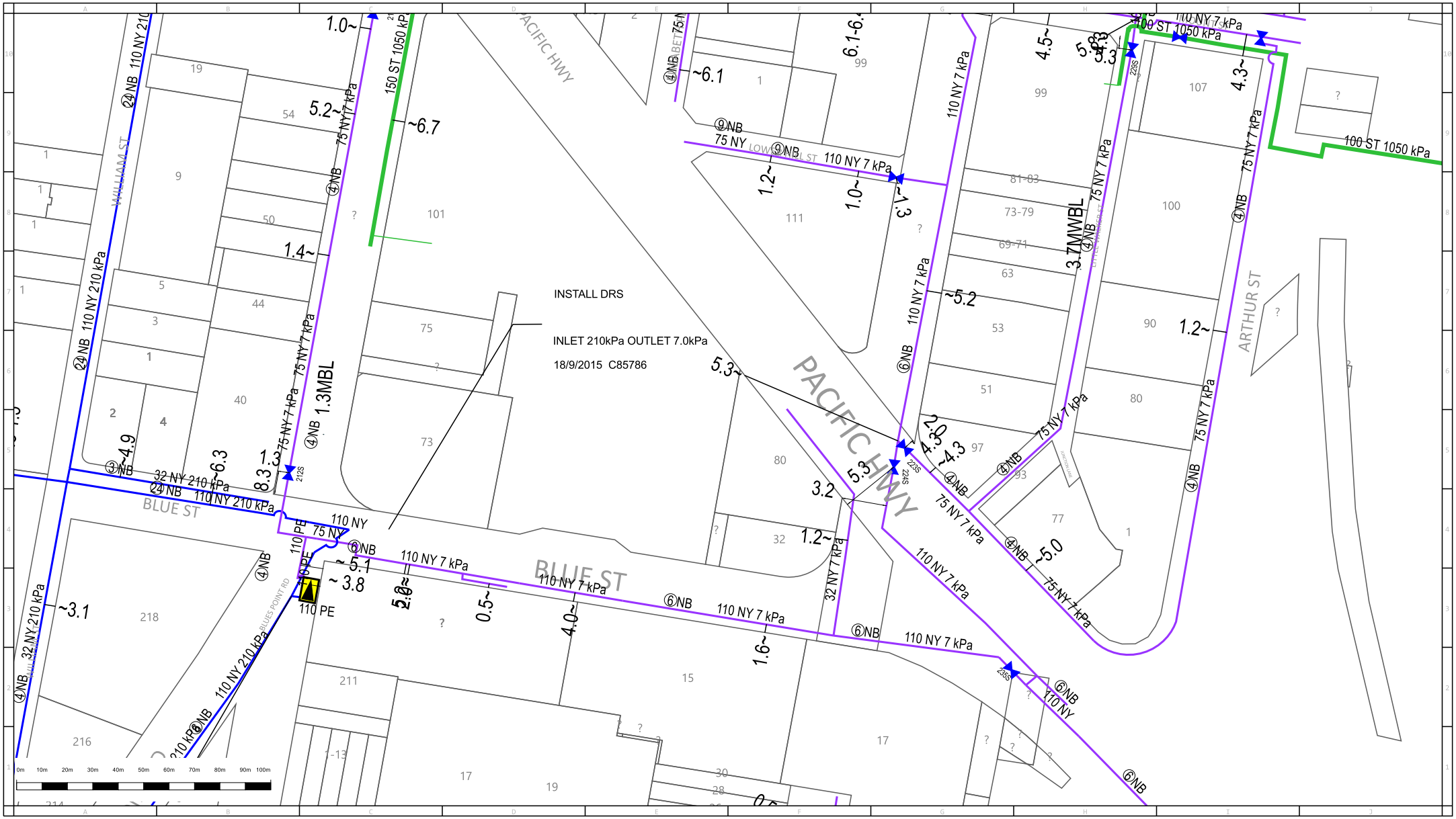
In case of Emergency Phone 131 909 (24 hours)

Admin
1300 880 906

Jemena Asset Management Pty Ltd ABN 53 086 013 461
for and on behalf of Jemena Gas Networks (NSW) Ltd ABN 87 003 004 322

Warning Action Required

DBYD Authority: Jemena Gas Networks (NSW) **DBYD Location:** Denison Street North Sydney NSW, 2060



Jemena
ABN 87 003 004 322

Main	In Service	Proposed
Unknown Pressure		
Distribution - 2 kPa		
Distribution - 7 kPa		
Distribution - 30 kPa		
Distribution - 100 kPa		
Distribution - 210 kPa		

Main	In Service	Proposed
Distribution - 300 kPa		
Distribution - 400 kPa		
Critical Main - Treat as High Pressure Main		

High Pressure Main & Pipeline	In Service	Proposed
Secondary - 1050 kPa		
Secondary Service		
Primary - 3500 kPa		
JGN Trunk - 7000 kPa		
Transmission		

Fittings, Valves & Regulators

Siphon
Valve
Distance in metres of Main from Boundary Line ~ 1.5
MBK = Metres Back of Kerb
MFL = Metres from Fence Line
Regulator Set
Regulator Station
Automatic Line Break Valve

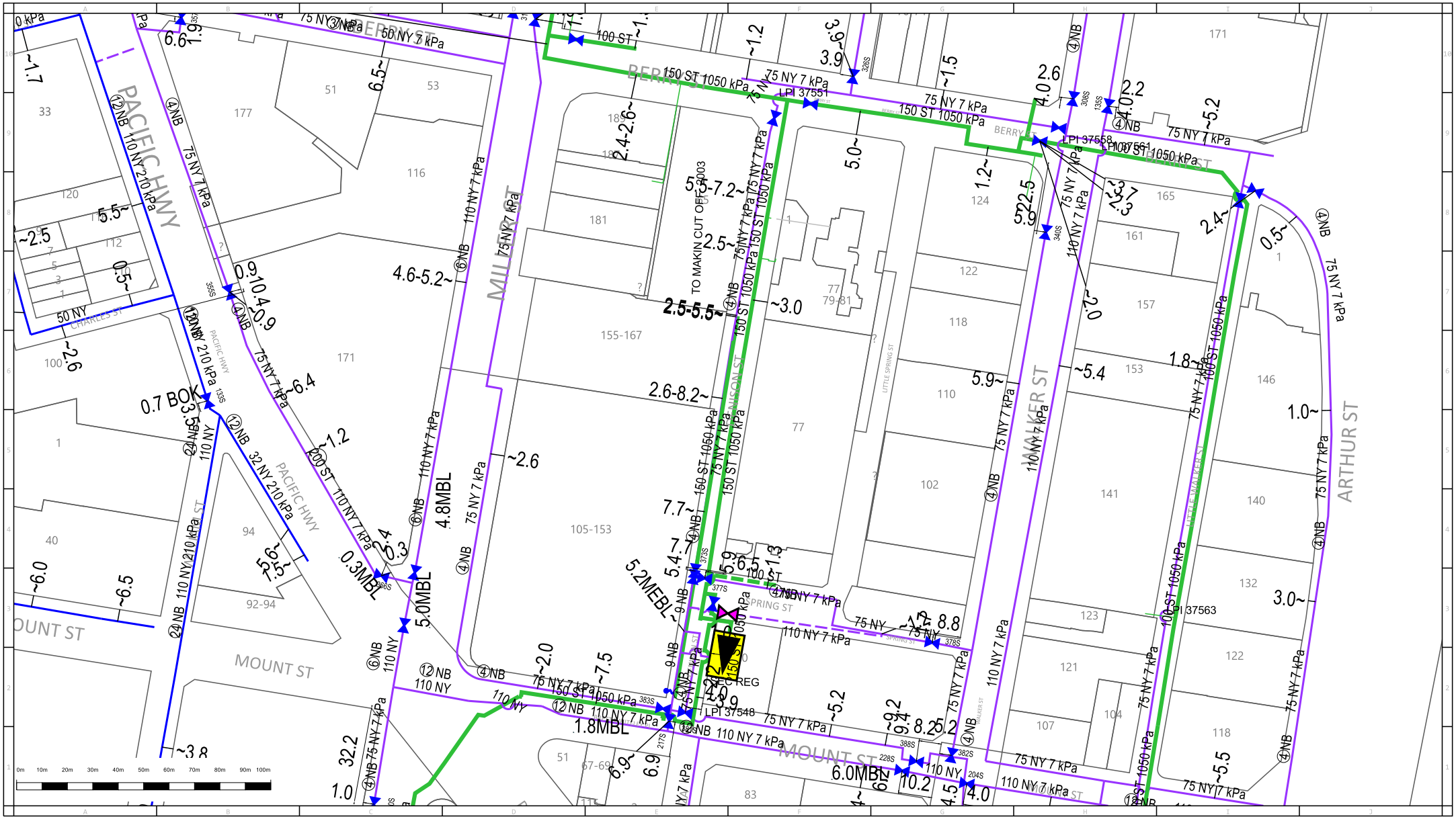
N W E S

Scale: 1:2000

Issue Date: 10/04/2019
DBYD Seq No: 82196084
DBYD Job No: 16094143

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

DBYD Authority: Jemena Gas Networks (NSW) **DBYD Location:** Denison Street North Sydney NSW, 2060



Main	In Service	Proposed
Unknown Pressure		
Distribution - 2 kPa		
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Main	In Service	Proposed
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Distribution - 400 kPa		
Critical Main - Treat as High Pressure Main		

High Pressure Main & Pipeline	In Service	Proposed
Secondary - 1050 kPa		
Secondary Service		
Primary - 3500 kPa		
JGN Trunk - 7000 kPa		
Transmission		

Fittings, Valves & Regulators: Siphon, Valve, Distance in metres of Main from Boundary Line ~ 1.5, MBK = Metres Back of Kerb, MFL = Metres from Fence Line, Regulator Set, Regulator Station, Automatic Line Break Valve

Jemena
ABN 87 003 004 322

Issue Date: 10/04/2019
DBYD Seq No: 82196084
DBYD Job No: 16094143

Scale: 1:2000

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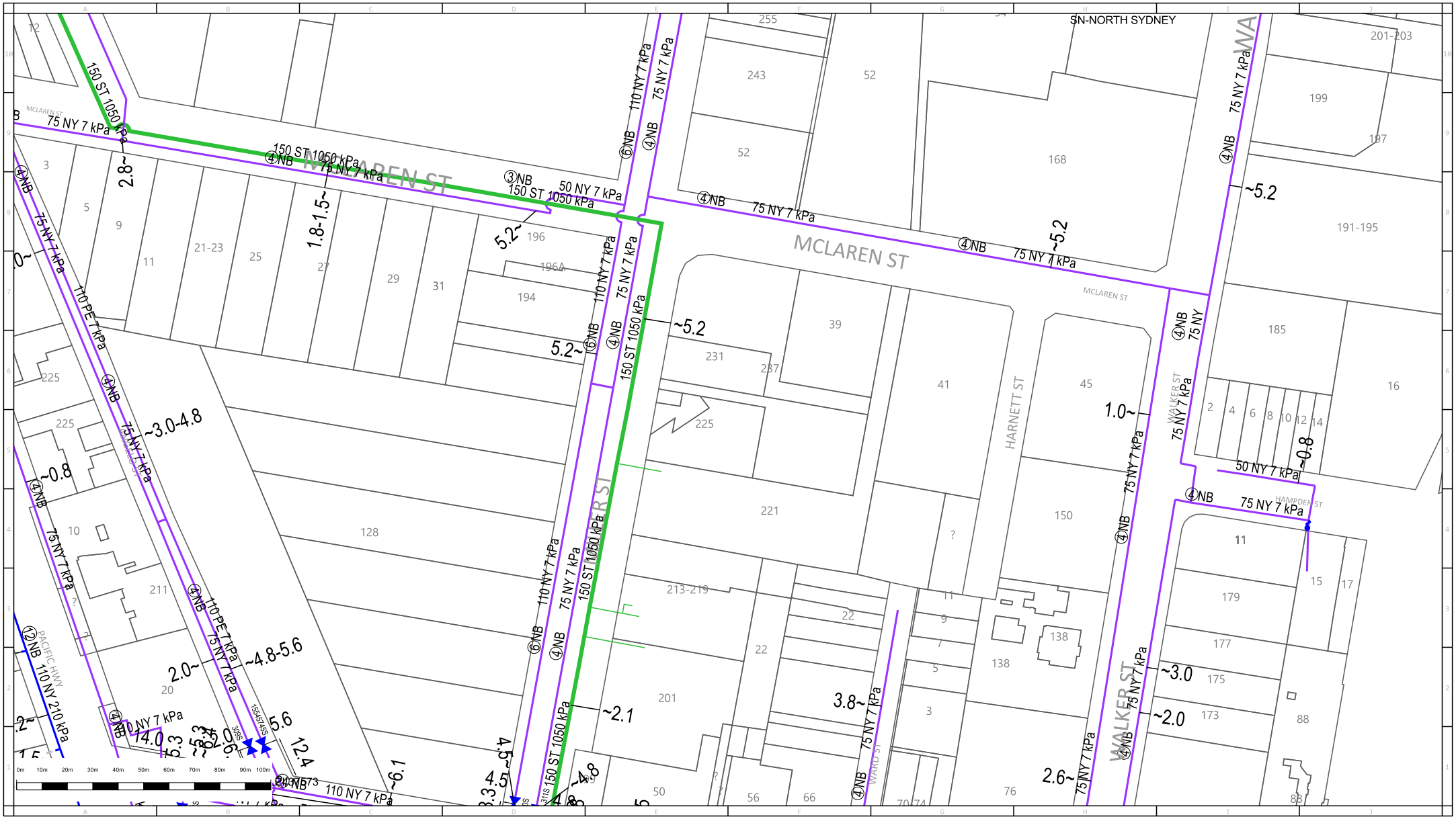
DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: Denison Street North Sydney NSW, 2060



Jemena
ABN 87 003 004 322

Main	In Service	Proposed
Unknown Pressure		
Distribution - 2 kPa		
Distribution - 7 kPa		
Distribution - 30 kPa		
Distribution - 100 kPa		
Distribution - 210 kPa		

Main	In Service	Proposed
Distribution - 300 kPa		
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Critical Main - Treat as High Pressure Main		

High Pressure Main & Pipeline	In Service	Proposed
Secondary - 1050 kPa		
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Transmission		

Fittings, Valves & Regulators

Siphon
Valve
Distance in metres of Main from Boundary Line ~ 1.5
MBK = Metres Back of Kerb
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Regulator Set
Regulator Station
Automatic Line Break Valve

Issue Date: 10/04/2019
DBYD Seq No: 82196084
DBYD Job No: 16094143

Scale: 1:2000

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The Roads Act enables North Sydney Council to specify the manner and standards to which any person who is entitled to place utility services in, on or over a road can undertake work.

The work referred to in this document involves all clearing, excavation, backfilling and restoration activities associated with the installation/programmed maintenance *or* emergency maintenance, of public utility services within public road reserves or other reserves under the control of North Sydney Council.

This document shall be read in conjunction with the current versions of the NSW Streets Opening Conference Guide to Codes & Practices for Street Opening and AUSPEC Specifications for Road Openings and Restorations.Where this and the above mentioned documents cover the same areas this document shall take precedence.

This document shall apply to works carried out by the Public Utility Authority itself or work under contract where the Principal to the Contract is the Public Utility Authority.

NOTIFICATION OF WORK

1. Notification of proposed work shall include the following details:

   - The Job/Project number.
   - Contact details for the Superintendent or Superintendent's Representative of the Public Utility/Authority.
   - Contact details for the Contractor including the site supervisor and after-hours emergency numbers.
   - Proposed hours of work.
   - Copies of notification letters to affected properties.

2. The notification process and customer service liaison during any work must be of the highest order.

3. Every attempt must be made by the Public Utility/Suthority; their contractors and sub-contractors to minimise the impact works will have on the surrounding area.

4. All affected properties are to be kept fully informed of upcoming works and the progress of works once started.

5. The contractor for the Public Utility/Authority shall take out a Street Opening Permit, prior to the commencement of any programmed work. **No application fee shall apply for this permit; however, should the contractor be responsible for permanent restoration; restoration fees shall be paid based on the estimated extent of work and as detailed below.**

6. Details supplied with the permit must include, though not be restricted to:

   - Contact details for the contractor including the site supervisor and after-hours emergency numbers.
   - The name of the Public Utility/Authority for whom the work is being undertaken including the Job/Project number and contact details for the Public Utility/Service Authority's representative.
   - Approval from Police Local Area Traffic Branch.
   - The submitted and approved Traffic Guidance Scheme for the proposed works in accordance with requirements of AUSPEC Road Openings and Restorations.
   - TMC Road Occupancy Licence where applicable.
   - Proposed hours of work.
   - Extent of restoration work required based on the guidelines in this document.
   - Copies of all notification letters.

EMERGENCY MAINTENANCE WORK

1. Emergency maintenance work must be undertaken in accordance with the requirements of this document, with the following exceptions:

   - Notification is not required.
   - No restriction to the hours of work.
   - Saw cutting the edges of the opening is not required.

2. Where traffic flows are affected due to the required work, the Transport Management Centre and Harbourside Police Traffic Branch shall be notified as soon as possible.

HOURS OF WORK

1. The standard hours of work in the Council area are 7:00am to 5:00pm Monday to Friday and 8:00am to 1:00pm Saturday.

2. Proposed hours of work outside those stated above must be noted on the notification. Refer to Practice Note vii of the RMS (RTA) Environmental Noise Management Manual for guidance in the programming of work outside standard hours of work.

3. Where a Road Occupancy Licence (ROL) is necessary, hours of work will be restricted to those stated on the approved licence.

TRAFFIC MANAGEMENT

1. The Australian Road Rules as applied in New South Wales apply to all work areas. This includes:
   - Enforcement of NO STOPPING ZONES; CLEARWAYS; TRANSIT LANES; etc. during signposted times
   - Not standing any plant or skips within 10 metres of the nearest point of an intersecting road.

2. It is an offence under Section 667 of the Local Government Act for any person to wilfully remove, destroy, damage or otherwise interfere with notices or signs erected by Council. Penalty exceeds $1,000.00.

3. All traffic control shall be in accordance with the current version of AS 1742

4. Where the works to be undertaken are likely to affect vehicular traffic on State or Regional roads; within 100m of any set of traffic lights; or on the following RMS maintained roads, a Road Development *or* Road Occupancy Licence must be obtained:

Falcon Street	–	Pacific Highway to Military Road.
Military Road	–	Falcon Street to Macpherson Street.
Pacific Highway	–	Harbour Bridge to Christie Street.
Berry Street	–	Pacific Highway to Arthur Street.
Arthur Street	–	Berry Street to Mount Street.
Miller Street	–	Falcon Street to Cammeray Suspension Bridge.

5. Vehicular and pedestrian access to properties shall be maintained wherever possible. 48 hours written notice shall be provided to property owners whose access will be affected.

6. **Emergency vehicle access must be available at all times.**

7. **All traffic control/management documents and plans shall be available on-site at all times.**

WASTE SKIPS

1. A Building Waste Skip Permit shall be taken out for each skip on-site. The placement of skips away from the work site for future use is not permitted. The contractor will be directed to remove any offending skip/s. Failure to do so may result in the impounding of the skip/s and Council seeking reimbursement for the cost of the removal. **All fees for up to three (3) skips shall be waived. For four (4) or more skips all fees shall be paid by the applicant.**

LOCATION AND MAINTENANCE OF SERVICES

7. Prior to commencement, Council's Design Section shall be contacted to obtain location details for stormwater and subsoil drainage lines; recycled water reticulation network and street lighting cabling that may be in the affected area.

8. The location of existing stormwater and subsoil drainage lines; recycled water reticulation network and street lighting cabling, shall be established by exploratory excavation prior to the principal excavation.

9. Property stormwater lines discharging into kerb and guttering or other Council drainage structures, eg. Pits or pipes, shall be maintained at all times.

10. Any damage caused to any of the above services by activities associated with the maintenance/installation work shall be repaired or replaced to the satisfaction of Council.

SURFACE PAVEMENT REMOVAL

1. The edges of all proposed trenches in concrete or asphalt footpaths or carriageway pavements shall be saw-cut for the full depth of the bound pavement layers except where located along expansion joints. Any concrete base found under segmental pavers, shall also be saw-cut for its full depth.

2. All concrete and asphalt footpath and carriageway pavement material shall be removed and legally disposed of off-site.

3. **All full segmental paving units shall be taken up by hand, neatly stacked on pallets, sealed with plastic wrap and delivered to Council's Works Depot. Pallets returned to Council's Works Depot shall be clearly marked to identify the origin of the pavers.**

4. Council approval is required to store pavers on-site. Pavers stored on-site must be at a location that will minimise interference with both vehicular and pedestrian traffic access to the area and surrounding properties.

5. **All cut and damaged segmental paving units and concrete edging associated with sections of lifted segmental pavers shall be removed and legally disposed of off-site.**

6. **Turf, small plants, shrubs and trees may be taken up and stored for possible re-use. The decision as to whether or not the turf and plants are suitable for re-use will be made by Council's Open Space & Environmental Services Division. Contact on - Ph (02) 9936 8228.**

7. All turf, small plants, shrubs and trees deemed unsuitable for re-use shall be removed and legally disposed of off-site.

EXCAVATION

1. **No excavated material shall be re-used for backfilling.**

2. All excavated material shall be legally disposed of off-site immediately.

3. Where excavating across a roadway, not more than one-half the width of the road pavement shall be opened at any one time.

4. Excavated material shall not, at any time, be stockpiled against tree trunks, buildings, fences or obstruct the free flow of water along gutters.

BACKFILLING

1. **No excavated material shall be used for backfilling.**

2. All backfilling, between the Overlay Zone for the particular service being installed and the base-course for the surface treatment, shall be undertaken in accordance with AUS-SPEC 1152 4.2 Trench Backfill.

3. The base-course backfill shall consist of DGB20 material in accordance with Council's Standards and Specifications.

4. Backfill for trenches less than 300mm in width shall be placed by hand with shovels. **In such trenches backfill shall not be pushed in from the sides with mechanical plant.**

COMPACTION

1. Backfilling shall be compacted to the requirements of Table 4.1 in AUS-SPEC 1152 4.3 Compaction of Trench Backfill.

2. All material shall be compacted in layers not exceeding 150mm compacted thickness. Each layer shall be compacted to the minimum compaction specified before the next layer is commenced.

PROTECTION OF TREES

1. All existing trees shall be protected from any damage during the works.

2. The storage, stockpiling, dumping or otherwise placing under or near trees, bulk materials and harmful materials, including oil, waste concrete, clearings, boulders and the like is prohibited.

3. The Public Utility Authority or its Contractor shall not attach stays, guys and the like to trees and shall prevent damage to tree bark.

4. **The Public Utility Authority or its contractor shall not cut tree roots without the approval of Council's Division of Open Space and Environmental Services - Ph (02) 9936 8228.**

5. All soil replacement, for a minimum 300mm thickness around tree roots, shall consist of a soil mixture approved by Council's Division of Open Space and Environmental Services, placed and compacted in layers of no more 150mm to a dry density equal to that of the surrounding soil.

6. No material shall be placed above the original ground surface around tree trunks or over the root zone unless approved by Council's Division of Open Space and Environmental Services.

RESTORATION - GENERAL

1. Carriageway pavements and pathways shall be restored in a continuous manner to a condition at least equivalent to that existing prior to the commencement of the works.

2. **Service access pits, access chamber frames and lids, etc. shall be set by the Public Utility Authority or its contractor such that carriageway pavements and pathways can be restored to original levels. All new pit installations or reconstructions must use aesthetic/pave-through pit lids where they are in existing paved areas. The Public Utility Authority or its contractor shall liaise with other utility authorities should any other utility service access pit be required to be adjusted or replaced prior to restoration.**

3. All asphalt carriageway pavement reinstatements shall include a 100mm over-cut around the entire perimeter of the opening. The minimum width for trench restoration works on asphalt roadways or paths is 600mm.

4. All concrete carriageway pavement reinstatements shall be dowelled to the existing road pavement in accordance with Council's requirements.

5. Unless approved in advance by Council, the area of concrete carriageway pavement to be reinstated (in addition to the actual area opened and all over-break as a result of the works) shall include any concrete carriageway pavement adjoining such opening that is within 500mm of:

   (a) Any edge of the concrete slab in which the opening is made.
   (b) Any edge of a previous reinstatement.

6. Where the concrete footpath is determined to be less than three (3) years old, full width slab replacement is required.

7. Unless approved in advance by Council, the area of concrete footpath to be reinstated, in addition to the actual area opened and all over-break as a result of the works, shall include any concrete footpath adjoining such opening which is within 500mm of:

   (a) Any edge of the concrete slab in which the opening is made.
   (b) Any joint in a concrete slab.
   (c) Any edge of a previous reinstatement.

8. Unless approved in advance by Council, the area of segmented paving footpath to be reinstated, in addition to the actual area opened and all over-break as a result of the works, shall include one complete paver outside the edge of the excavated area around the entire perimeter.

9. Unless approved in advance by Council, the area of sandstone paved footpath to be reinstated, in addition to the actual area opened and all over-break as a result of the works, shall include an additional 300mm outside the edge of the excavated area around the entire perimeter to allow for appropriate blending in with the existing paved footpath.

10. Unless approved in advance by Council, the length of kerb and/or gutter to be reinstated, in addition to the actual length opened and all over-break as a result of the works, shall include any kerb and/or gutter adjoining the opening, which is within 500mm of a joint or the edge of a previous reinstatement.

11. Where property stormwater pipes discharging into carriageway gutters have been cut, they shall be

replaced to the satisfaction of Council.

12. **Where a restoration has subsided or proved unsatisfactory through the incorrect backfilling of an opening, the Public Utility Authority concerned will be liable for all costs involved in restoring the faulty restoration.**

13. **Where council stormwater pipes or culverts have been damaged during the course of the work, Council's Engineering and Property Services Division shall be contacted on 9936 8100 as soon as possible. Damaged pipes or culverts shall be repaired or replaced to the satisfaction of Council. The Public Utility Authority concerned will be liable for all costs involved in restoring the damage including CCTV inspections required to confirm the extent of damage and suitability of the repair.**

RESTORATION - TEMPORARY PAVEMENT RESTORATION

1. Immediately after backfilling, the carriageway pavement, footpath or driveway shall be temporarily restored and re-opened to traffic.

2. Temporary restoration shall consist of either:

   - Hot mix compacted in accordance with industry best practice to a thickness of a minimum of 25mm and maximum of 50mm. Where required the base course material shall be built up to achieve the 50mm maximum thickness allowed.
   - Permanent patch cold mix, eg. EZ Street; Sami Pavefix or similar, compacted as per manufacturer's requirements and to a maximum thickness of 50mm. Where required the base course material shall be built up to achieve the 50mm maximum thickness allowed.
   - Steel plating, non-slip coated, overlapping the opening by 400mm on each side, of sufficient thickness to support traffic loadings, suitably secured with pins and ramped with bituminous cold mix in accordance with RMS specification M209.

3. Steel plating shall only be utilised where access is required to the trench/opening again and complete backfilling is not possible.

4. Where steel plating is used, advance warning signs shall be provided in accordance with either AS 1742.3 and its associated handbooks or the RMS document – Traffic Control at Work Sites.

RESTORATION - PERMANENT BY COUNCIL

1. Restoration orders shall be sent to Council through either:

Facsimile	-	(02) 9938 8177
Email	-	council@northsydney.nsw.gov.au
Post	-	North Sydney Council PO Box 12 North Sydney NSW 2059

2. All openings in verges or public reserves shall be restored in accordance with the requirements of Council's Division of Open Space & the Environmental Services – Ph (02) 9936 8228.

3. Minimum charge for a restoration is 1.0 square metre of area *or* 1.0 metre length. Areas/lengths over the minimum shall be measured to the nearest 0.1 square metre/metre.

4. **Where the restoration is the contractual responsibility of the contractor undertaking the work, all costs associated with the restoration shall be paid to Council, based on the estimated extent of restoration required when the Street Opening Permit is taken out prior to the commencement of any work by the contractor. Adjustments will be negotiated with the contractor once the public**

utility infrastructure works are completed and the area is ready for permanent restoration.

RESTORATION - PERMANENT BY PUBLIC UTILITY AUTHORITY

1. **Permanent restoration of the area affected by the works undertaken by the Public Utility Authority or its contractor may only be carried out with the prior agreement and approval of North Sydney Council.**
   A 12 month defects liability period applies for all work undertaken by or on behalf of the public utility.

2. The extent of work shall be agreed to by North Sydney Council and the Public Utility Authority prior to the commencement of any permanent restoration work.

3. All work shall be undertaken in accordance with North Sydney Council's current Infrastructure Specification for Roadworks, Drainage and Miscellaneous Works.

4. Where a permanent restoration carried out by the Public Utility Authority or its contractor is shown to be unsatisfactory through incorrect preparation and finishing, the Public Utility Authority concerned will be liable for all costs involved in restoring the faulty restoration to Council standards.

5. All temporary pavement material shall be removed and legally disposed of off-site by the Public Utility Authority or its contractor.

6. All concrete works shall be restored using ready mixed concrete of a minimum strength of 25Mpa.

7. Around electricity supply poles, the concrete paving shall be terminated 200mm from the pole and the resulting space filled with bituminous cold mix material.

8. Paving units shall be re-laid to match the pattern and surface levels of the existing adjacent paving. Cut or damaged paving units unsuitable for re-laying shall be replaced with new units of the same material, type, size and colour as the existing units.

9. **All openings in verges or public reserves shall be restored in accordance with the requirements of Council's Division of Open Space & the Environmental Services.**

10. A maintenance period of 4 weeks applies to all turfing and landscape restorations. Maintenance includes the following activities; watering, weeding, pest and disease control, pruning, mulching or any other horticultural activity to ensure the health and survival of the turf and/or plants.

11. **At the end of the maintenance period, any turf and/or plants that have died off shall be replaced at the public utility's own expense.**

CLEANUP

1. Upon completion of all works associated with the project, the areas affected by the works and associated construction activities; including services mark-ups shall be cleaned up and restored to a condition at least equivalent to that existing at the commencement of the works.

2. All rubbish and residual construction materials shall be legally disposed of off-site by the Public Utility Authority or its contractor.

3. Failure to comply shall result in Council undertaking the necessary remediation work with all costs including overheads being charged to the Public Utility Authority.

REFERENCE DOCUMENTS

NORTH SYDNEY COUNCIL INFRASTRUCTURE SPECIFICATION FOR ROADWORKS, DRAINAGE AND MISCELLANEOUS WORKS

NSW STREETS OPENING CONFERENCE GUIDE TO CODES AND PRACTICES FOR STREETS OPENING

RMS Manual – Traffic Control at Work Sites

Australian Standard 1742 Pt 3.

AUS-SPEC – Specification 1151 – Road Openings and Restorations

AUS-SPEC – Specification 1152 – Road Openings and Restorations (Utilities)

AUS-SPEC – Specification 1391 – Service Conduits

AUS-SPEC – Specification 1392 – Trenchless Conduit Installations

RMS Specification M209 – Road Openings and Restoration

NOTE:

WHEN UNDERTAKING WORK IN THE NORTH SYDNEY COUNCIL AREA REFERENCE DOCUMENTS SHOULD BE UTILISED IN THE FOLLOWING ORDER:

1. **NORTH SYDNEY COUNCIL – PUBLIC UTILITY AUTHORITY WORKS**
2. **NSW STREETS OPENING CONFERENCE GUIDE TO CODES AND PRACTICES FOR STREETS OPENING**
3. **AUS-SPEC Specifications**

DEFINITIONS

The definition of terms used to define components of the road reserve shall be in accordance with AS 1348.1 unless otherwise stated. The terms are:

Carriageway - That portion of the road reserve devoted for the use of vehicles, including parking lanes.

Clearing - The removal of vegetation or other obstacles at or above ground level on commencing work.

Footpath - The section the pathway paved to facilitate passage of pedestrians.

Pathway - That portion of the road reserve devoted for the movement of pedestrians.

Pavement - That portion of a carriageway placed above the sub grade for the support of, and to form a running surface for, vehicular traffic. Kerbing and guttering is deemed to be part of the pavement.

Roads Authority - North Sydney Council is the Roads Authority for the local government area under its control with the exception of those roads in its local government area classified as State Roads, the carriageway portion of these roads being under the control of Roads and Maritime Services (RMS).

Service - Physical conduits or conductors within the road reserve for the distribution of electricity; gas; telecommunications; and water. They may consist of pipes, ducts, cables, etc. with associated access points, protection devices and location indication devices. Services comprise public utility and commercially provided services and property services linking from the principal carriers to properties.

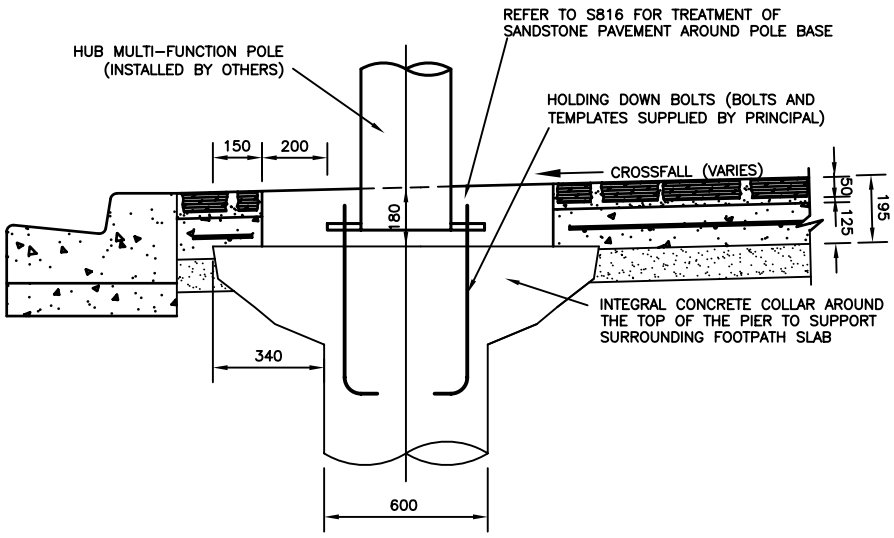
Street Opening Work - Work within the road reserve, requiring a permit from the relevant Roads Authority. This includes excavation and/or trenchless techniques; restoration; cable hauls, etc.

Trenchless Technique - Includes, but is not limited to: micro tunnelling; horizontal directional drilling; auger boring; guided boring; impact moling; rotary moling; rod pushing; pipe ramming; thrust boring; jacking and bursting.

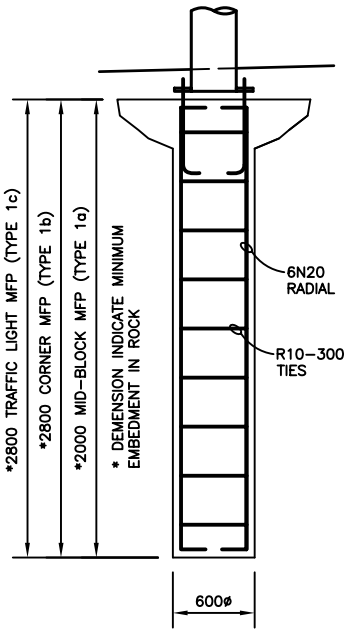
Public Utility Authority - The service provider: electricity; gas; telecommunications; or water for whom the service installation/maintenance and restoration work is being conducted.

Verge - That portion of the road formation not covered by the pavement or footpath.

NOTE: ELECTRICAL AND/OR COMMUNICATIONS CONDUITS ARE NOT SHOWN FOR CLARITY



DETAIL

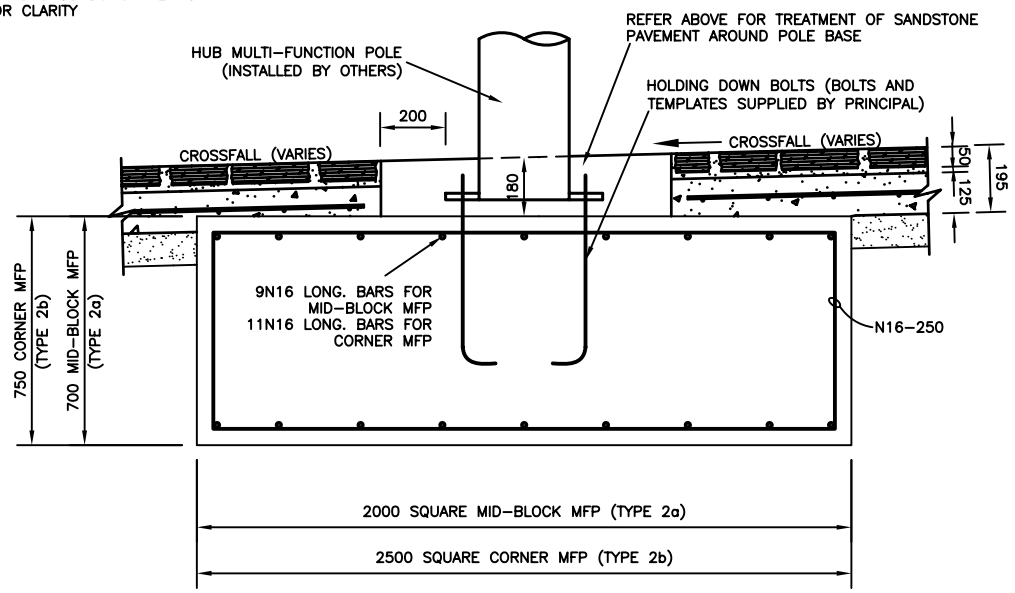


ELEVATION

STANDARD PIER FOOTING – TYPE 1

TYPE 1a: MID-BLOCK MULTI-FUNCTION POLE
TYPE 1b: CORNER MULTI-FUNCTION POLE
TYPE 1c: TRAFFIC LIGHT MULTI-FUNCTION POLE

NOTE: ELECTRICAL AND/OR COMMUNICATIONS CONDUITS ARE NOT SHOWN FOR CLARITY



SECTION

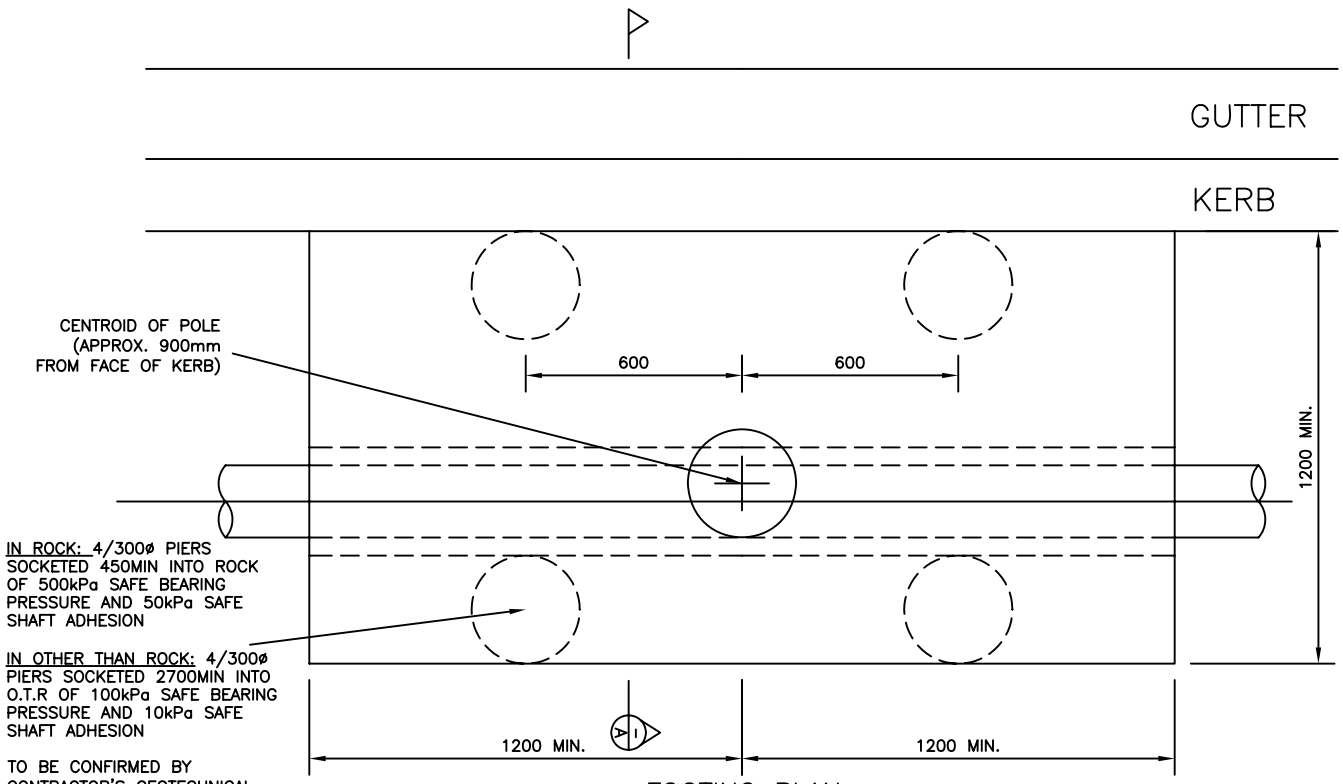
STANDARD PAD FOOTING – TYPE 2

TYPE 2a: MID-BLOCK MULTI-FUNCTION POLE
TYPE 2b: CORNER MULTI-FUNCTION POLE

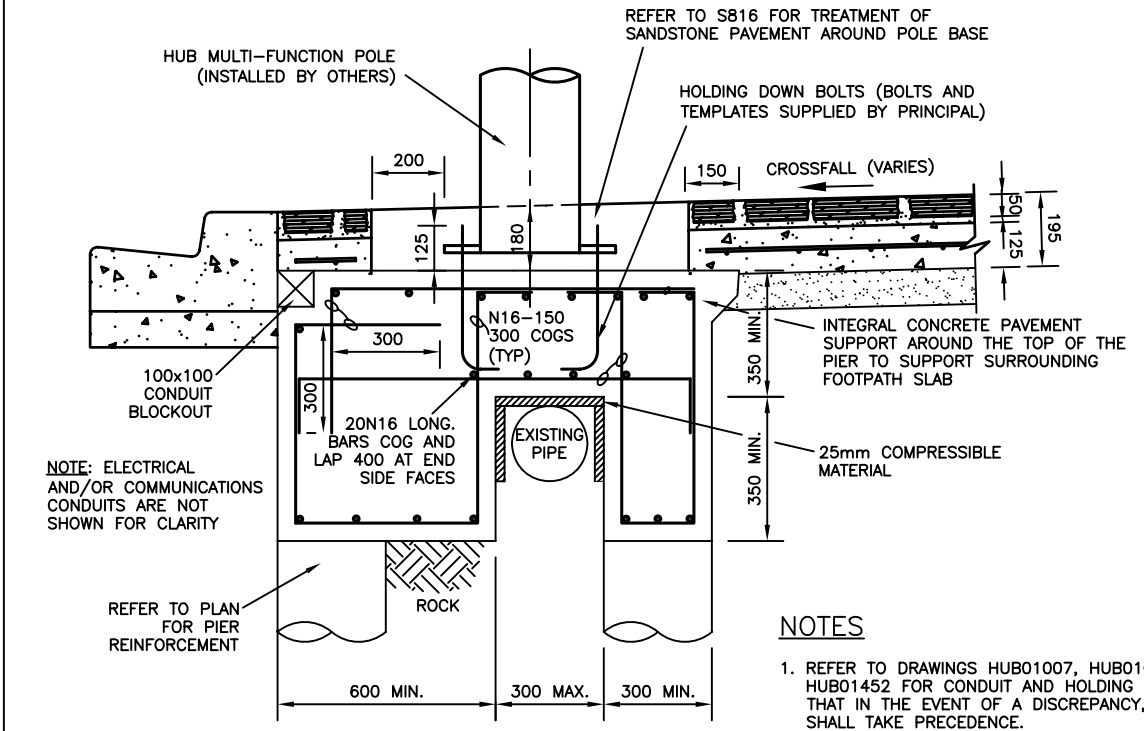
NOTES

1. REFER TO DRAWINGS HUB01007, HUB01047, HUB01435 AND HUB01452 FOR CONDUIT AND HOLDING DOWN BOLT DETAILS. NOTE THAT IN THE EVENT OF A DISCREPANCY, THE HUB DRAWINGS SHALL TAKE PRECEDENCE.
2. MINIMUM CONCRETE COVER TO REINFORCEMENT IS 40mm.
3. CONCRETE STRENGTH f'c = 32MPa.
4. PREFERRED MINIMUM CLEARANCE FROM FACE OF KERB TO FACE OF POLE IS 750mm, ABSOLUTE MINIMUM CLEARANCE IS 600mm.

APPROVED: COUNCIL ENGINEER DATE: 01/11/09	NORTH SYDNEY COUNCIL	NORTH SYDNEY COUNCIL CBD MULTI-FUNCTION POLE FOOTING TYPE 1 & 2	SCALE N.T.S. DRAWING NO. S822



FOOTING PLAN



SECTION A–A

NOTES

1. REFER TO DRAWINGS HUB01007, HUB01047, HUB01435 AND HUB01452 FOR CONDUIT AND HOLDING DOWN BOLT DETAILS. NOTE THAT IN THE EVENT OF A DISCREPANCY, THE HUB DRAWINGS SHALL TAKE PRECEDENCE.
2. MINIMUM CONCRETE COVER TO REINFORCEMENT IS 40mm.
3. CONCRETE STRENGTH f'c = 32MPa.
4. PREFERRED MINIMUM CLEARANCE FROM FACE OF KERB TO FACE OF POLE IS 750mm, ABSOLUTE MINIMUM CLEARANCE IS 600mm.

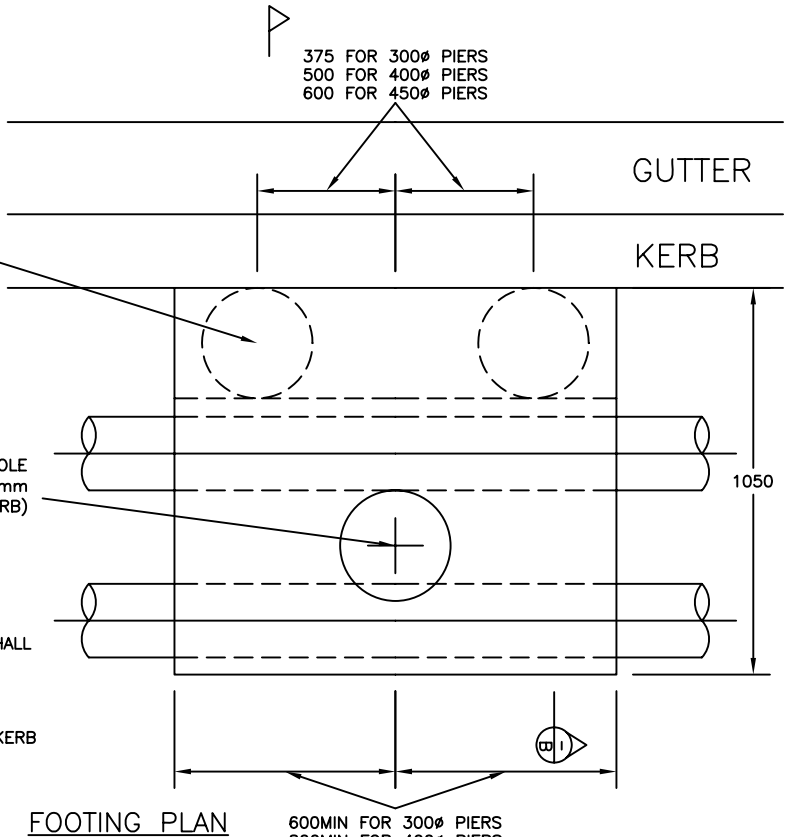
PIER AND BEAM FOOTING – TYPE 3

APPROVED: COUNCIL ENGINEER DATE: 01/04/08		NORTH SYDNEY COUNCIL CBD MULTI–FUNCTION POLE FOOTING TYPE 3	SCALE N.T.S. DRAWING NO. S823

IN ROCK
TYPE 4a: 2/300ø PIERS 3000 EMBEDMENT
TYPE 4b: 2/400ø PIERS 2000 EMBEDMENT
TYPE 4c: 2/450ø PIERS 1500 EMBEDMENT
INTO ROCK OF 500kPa SAFE BEARING PRESSURE AND 50kPa SAFE SHAFT ADHESION

IN OTHER THAN ROCK
TYPE 4c: 2/450ø PIERS 4500 EMBEDMENT
INTO O.T.R OF 100kPa SAFE BEARING PRESSURE AND 10kPa SAFE SHAFT ADHESION

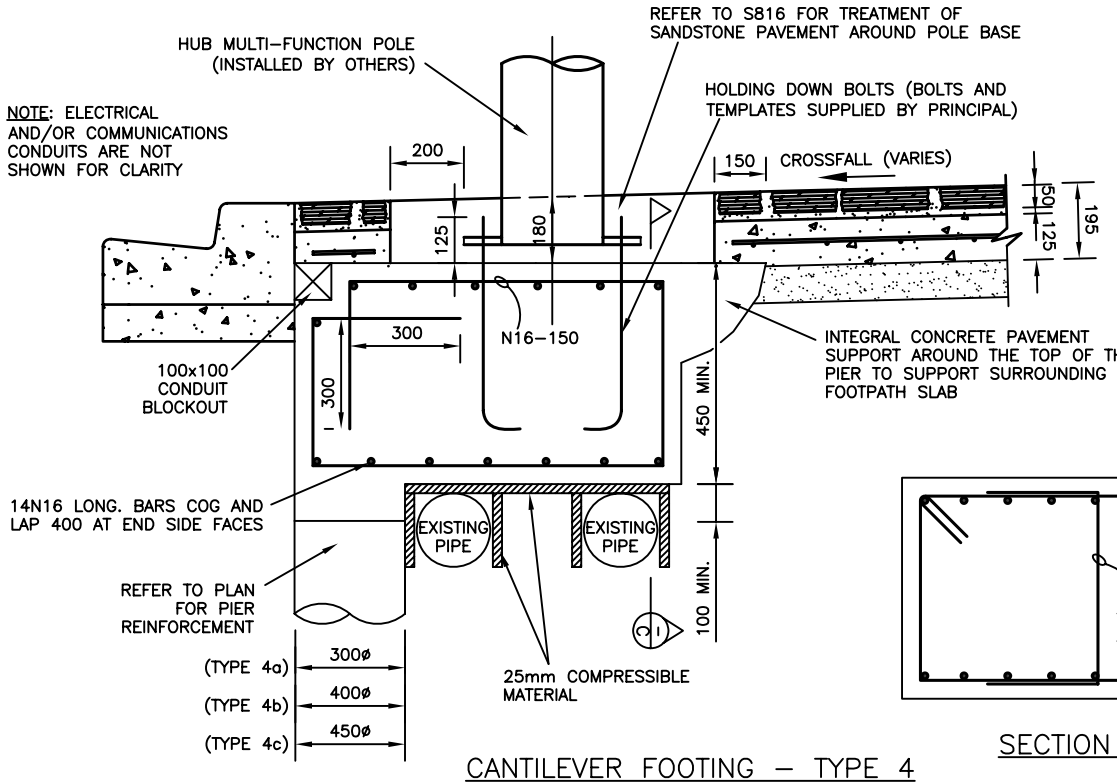
TO BE CONFIRMED BY CONTRACTOR'S GEOTECHNICAL ENGINEER. 6N20 + N12–150 PITCH. EXTEND VERTICAL BARS 500 INTO PADS AND COG 300 HORIZONTALLY.



FOOTING PLAN

NOTES

1. REFER TO DRAWINGS HUB01007, HUB01047, HUB01435 AND HUB01452 FOR CONDUIT AND HOLDING DOWN BOLT DETAILS. NOTE THAT IN THE EVENT OF A DISCREPANCY, THE HUB DRAWINGS SHALL TAKE PRECEDENCE.
2. MINIMUM CONCRETE COVER TO REINFORCEMENT IS 40mm.
3. CONCRETE STRENGTH f'c = 32MPa.
4. PREFERRED MINIMUM CLEARANCE FROM FACE OF KERB TO FACE OF POLE IS 750mm, ABSOLUTE MINIMUM CLEARANCE IS 600mm.



SECTION B–B

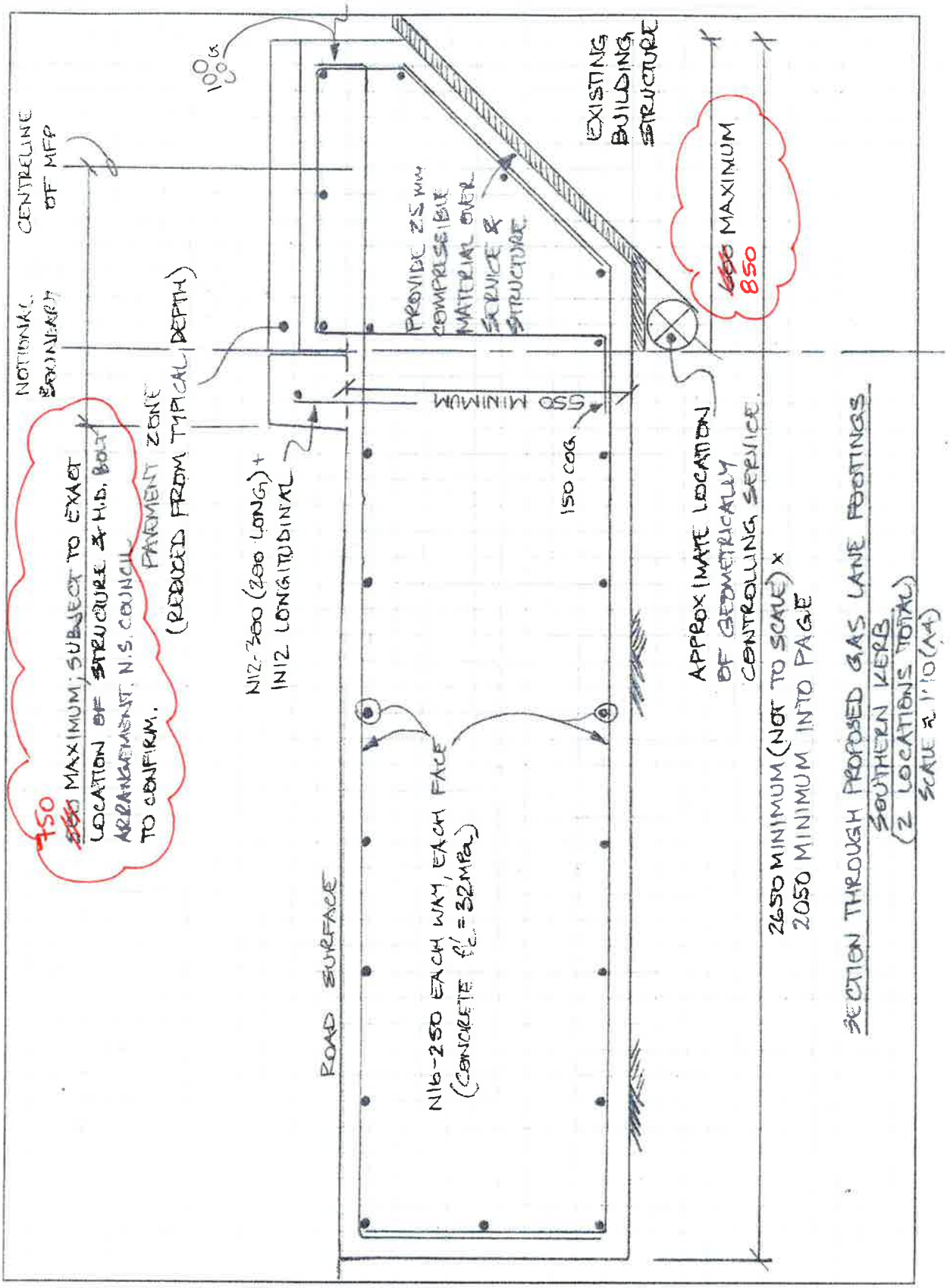
SECTION C–C

CANTILEVER FOOTING – TYPE 4

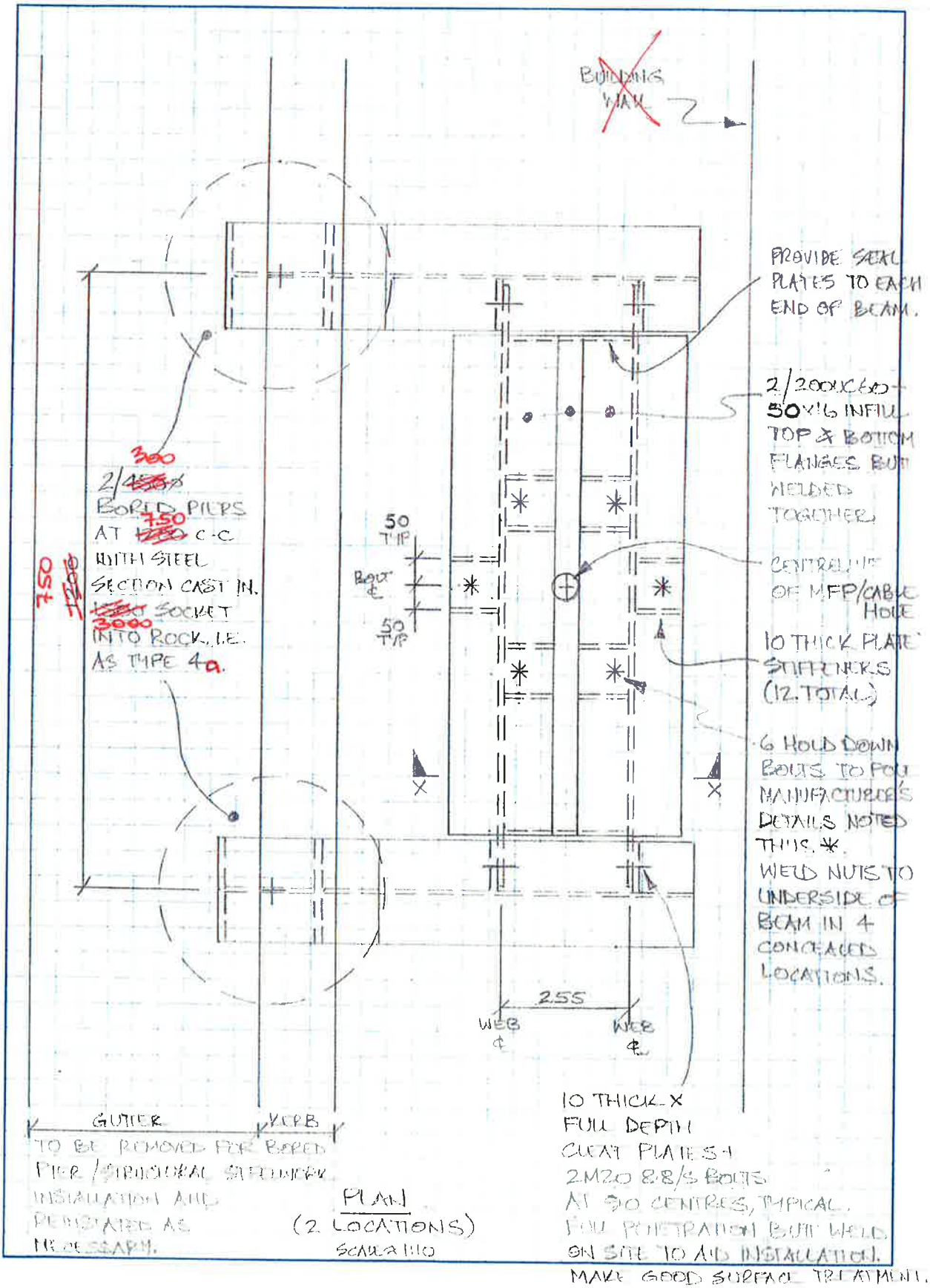
TYPE 4a: 2/300ø PIERS 3000 EMBEDMENT IN ROCK
TYPE 4b: 2/400ø PIERS 2000 EMBEDMENT IN ROCK
TYPE 4c: 2/450ø PIERS 1500 EMBEDMENT IN ROCK

APPROVED: COUNCIL ENGINEER DATE: 01/07/09		NORTH SYDNEY COUNCIL CBD MULTI–FUNCTION POLE FOOTING TYPE 4	SCALE N.T.S. DRAWING NO. S824

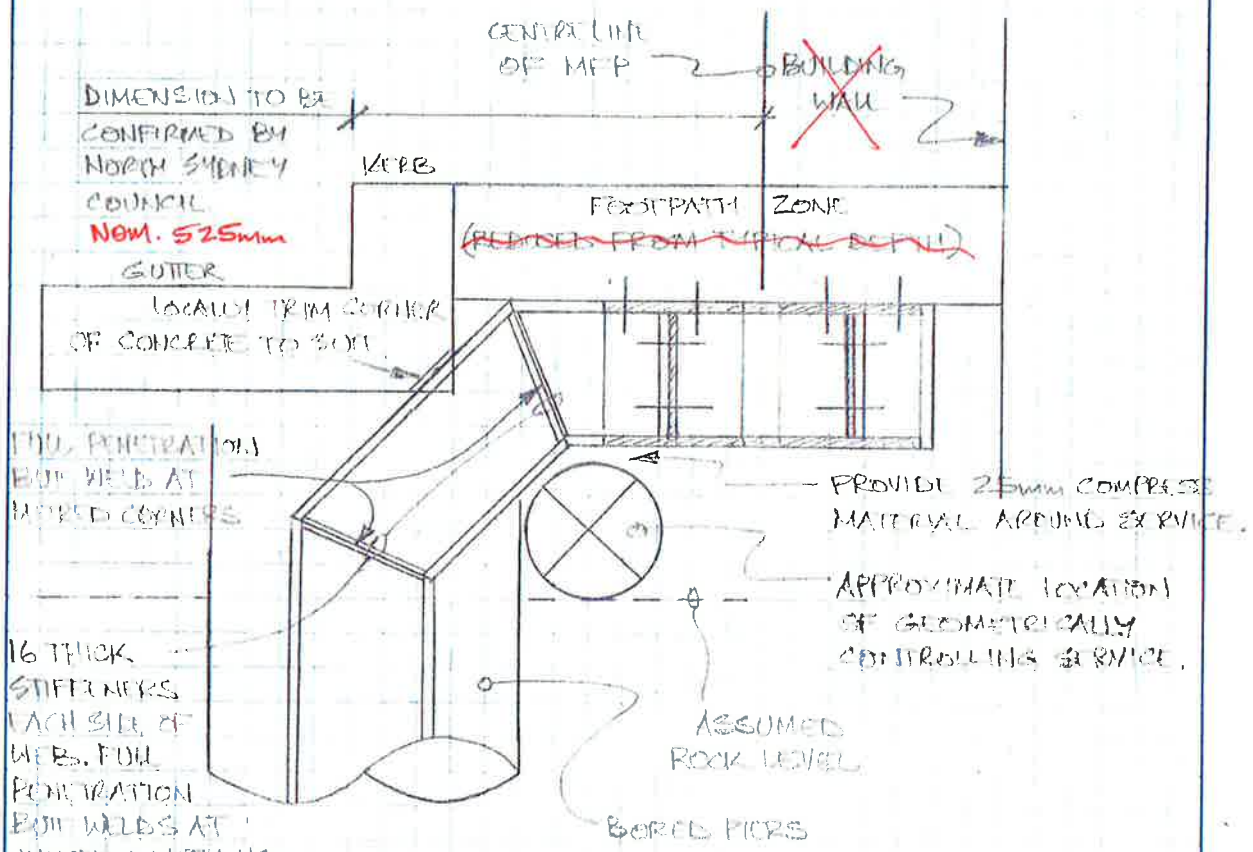
APPROVED:		NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER		CBD MULTI-FUNCTION POLE FOOTING TYPE 2s	N.T.S.
DATE: 13/01/16			DRAWING NO.



APPROVED:		NORTH SYDNEY COUNCIL	SCALE N.T.S.
COUNCIL ENGINEER		CBD MULTI-FUNCTION POLE FOOTING TYPE S	DRAWING NO.
DATE: 13/01/16			



APPROVED:		NORTH SYDNEY COUNCIL	SCALE N.T.S.
COUNCIL ENGINEER		CBD MULTI-FUNCTION POLE FOOTING TYPE S	DRAWING NO.
DATE: 13/01/16			



SECTION X-X
SCALE ≈ 1:10

NOTES:
- ALL DESIGN, MATERIALS AND WORKMANSHIP SHALL CONFORM TO AS4100 & AS1554.
- UNLESS NOTED OTHERWISE, ALL WELDS SHALL BE 6mm CONTINUOUS FILLET TYPE GP USING E41/XX ELECTRODES, BUTT WELDS SHALL BE COMPLETE PENETRATION TO AS1554. INSPECTION CRITERIA FOR ALL WELDS SHALL BE PROVIDED TO AS1554 WITH ALL WELDS BEING 100% VISUALLY SCANNED.
- ALL STEELWORK SHALL BE BLAST CLEAN CLASS 3 TO AS1627 AND HOT DIPPED GALVANISED TO AS/NZS 4680 TO 600g/m² MINIMUM (650g/m² MINIMUM). WHERE GALVANISED COATING ON-SITE MAKE GOOD WITH 2 COATS OF ETHOXY ZINC RICH PRIMER EQUIVALENT TO DRY ZINC LOAD 900 / 1100 GRAMS TO DFT 100µm. BACKFILLING AROUND STEEL PILES WITH CONCRETE FOR ADDITIONAL DURABILITY IS RECOMMENDED.

APPROVED:		NORTH SYDNEY COUNCIL	SCALE N.T.S.
COUNCIL ENGINEER		CBD MULTI-FUNCTION POLE FOOTING TYPE Sx	DRAWING NO.
DATE: 13/01/16			

6 HOLD DOWN BOLTS TO FOLL MANUFACTURER'S DETAILS NOTED THUS *. WELD NUTS TO UNDERSIDE OF BEAM IN 4 CONCEALED LOCATIONS.

PROVIDE FULL SIZE PACKER EACH END.

2/200UC60 + 50x16 INFILL TOP & BOTTOM FLANGES BUTT WELDED TOGETHER.

2/400ø BORED PIERS AT 1000 C-C WITH STEEL SECTION CAST IN. 2000 SOCKET INTO ROCK I.E. AS TYPE 4b.

10 THICK PLATE STIFFENERS (12 TOTAL)

50 TYP.

BOLT ℄

50 TYP.

1000

CENTRELINE OF 1AFP/CABLE HOLE

200UC60

200UC60

255

WEB ℄

WEB ℄

PROVIDE SEAL PLATES TO EACH END OF BEAM.

10 THICK x FULL DEPTH CLEAT PLATES + 2M20 8.8/S BOLTS AT 90 CENTRES, TYPICAL. FULL PENETRATION BUTT WELD ON SITE TO AID INSTALLATION. MAKE GOOD SURFACE TREATMENT.

Y

Y

GUTTER

KERB

PLAN

LOCATION 2.

SCALE 1:10 (A4)

LOCATION 19 SIMILAR.

UNDERGROUND ASSETS LOCATION INFORMATION

ATTENTION

The accompanying plan(s) in relation to North Sydney Council's Underground assets are forwarded in response to your recent 'Dial Before You Dig' inquiry. Please note the following important information and basis upon which the plan(s) are issued:

1. Plans indicate the general position of North Sydney Council's lighting, underground electricity, parking sensors and stormwater drainage assets **at the time of their construction**. North Sydney Council does NOT guarantee that all its existing Assets are shown on the plans. Plans have NOT necessarily been adjusted to reflect any subsequent changes to surface levels, road alignments, fences, buildings and the like. Asset locations are approximate and, accordingly, the plans are NOT suitable for scaling purposes.

2. Plans and information provided is **Valid for 30 days** from the date of issue.

3. Plans do NOT show locations of Private internal drainage systems belonging to and/or serving individual customers, or drainage systems which may be connected to North Sydney Council's Drainage network.

4. The plans have been prepared and are only intended for North Sydney Council's own use. North Sydney Council does not supply the plans on a commercial basis because it cannot and will not warrant their accuracy or completeness. It supplies them free of charge only with a view to reducing the very real risk of inadvertent damage being caused to its underground assets. Accordingly, North Sydney Council accepts no liability for any inaccuracies in the information or lack of information on the plans.

5. North Sydney Council plans or other details are provided only for the use of the applicant, its servants, or agents. **The applicant may not give the plans or details to other parties, and may not generate profit from commercialising the plans or details.**

6. To determine their precise location, North Sydney Council's underground assets MUST first be exposed by pot-holing using hand-held tools or vacuum non-destructive techniques i.e. **before** any mechanical means of excavation are employed.

7. Please contact North Sydney Council Engineering Department (02 9936 8100) immediately should you locate North Sydney Council drainage or electricity conduits not indicated on these plans.

8. Asbestos cement pipelines may form part of North Sydney Council's storm water systems and, if damaged, can pose a risk to health.

9. Persons excavating in the vicinity of North Sydney Council's underground assets **MUST** exercise care and suitably protect North Sydney Council's Assets. Protection may include timbering, shoring, sheet piling, support and/or bracing to prevent movement.

10. "DUTY OF CARE"
    When working in the vicinity of North Sydney Council Assets you have a legal "Duty of Care" that must be observed. The subsequent points must be considered:
    - It is the responsibility of the owner and any consultant engaged by the owner, including (but not limited to) an architect, consulting engineer, developer, and head contractor to design for minimal impact and protection of North Sydney Council Assets. North Sydney Council will provide free plans and sketches showing the presence of its network to assist at this design stage.
    - It is the owner's (or constructor's) responsibility to:
        - Request plans of North Sydney Council Assets for a particular location at a reasonable time before construction begins.
        - Contact North Sydney Council if Assets are wholly or partly located near planned construction activities.
11. "DAMAGE"
    ANY DAMAGE TO NORTH SYDNEY COUNCIL ASSETS MUST BE REPORTED TO (02) 9936 8100 IMMEDIATELY

NOTICE: This communication is confidential. If you are not the nominated recipient, please destroy all copies immediately. North Sydney Council prohibits unauthorised copying and/or distribution of this communication.

- The owner (or constructor) is responsible for all damage done to North Sydney Council Assets as a result of works prior to and after obtaining North Sydney Council Assets plans, or failure to follow agreed instructions.
- North Sydney Council reserves all rights to recover compensation for loss or damage to its assets including consequential losses.

12. A road opening permit is required for all works undertaken within the North Sydney Council area. An application for a road opening permit can be found online at; http://www.northsydney.nsw.gov.au/Building_Development/Building_DA_Forms/Road_Closures_Openings

13. Constructors are legally responsible for any damage and financial loss resulting from their interfering with North Sydney Council's underground assets**. In an emergency, call 9936 8100**

14. Minimum clearances MUST be maintained between North Sydney Council's underground assets and underground services belonging to other parties.

15. Plans MUST be approved by North Sydney Council prior to landscaping and/or building over or adjacent to any North Sydney Council asset.

16. Backfilling of excavation work in the immediate vicinity of North Sydney Council's Assets MUST comply with Infrastructure Specification Manual for Road works, Drainage and Miscellaneous Works. Further information and guidance is available on North Sydney Council's website at; http://www.northsydney.nsw.gov.au/Projects_Infrastructure/Specifications_Styles/Infrastructure_Specifications_and_Styles

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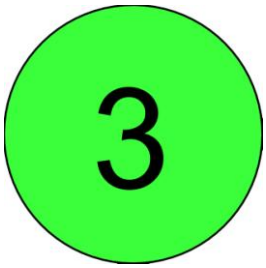
WORKING NEAR MULTI-PURPOSE POLES & UNDERGOUND POWER INFORMATION

ATTENTION

North Sydney Council has Multi-purpose poles installed throughout the North Sydney Council Local Government Area. These have been indicated on the attached plan by the following symbol;



The annotation within the symbol indicates what type of footing each pole is founded on. The footing types and details have been attached below.

Below are photos of what you may encounter;





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Underground power supply conduits are;

- Road crossings
    - Three (3) 100mm diameter PVC pipes, two (2) orange and one (1) white.
- Under footpaths
    - Three (3) 50mm diameter PVC pipes, two (2) orange and one (1) white.

If you plan to excavate within the vicinity of North Sydney Council's underground power conduits or Multi-Purpose Poles or require their removal for your works to be completed please contact the Engineering department on **(02) 9936 8100** prior to any commencement of works in order to confirm the handling procedure for the removal of these poles.

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WORKING NEAR PARKING METER SENSORS INFORMATION

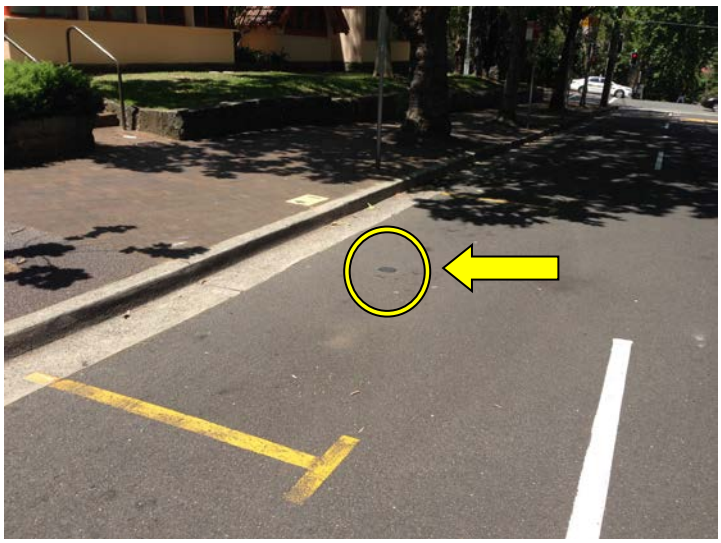
ATTENTION

North Sydney Council has **parking meter sensors** installed throughout the North Sydney Council Local Government Area. These have been indicated on the attached plan by the following symbol;

If you plan to excavate around these sensors or require their removal for your works to be completed **please contact the Parking Meter team on (02) 9936 8100** prior to any commencement of works. Council will arrange the removal of the sensor/s.

WARNING: the parking meter sensors contain long life batteries and they have the potential to explode if they are pierced with force. *Please note, any battery will explode if drilled, hammered or jackhammered regardless of the battery type.*

Below are photos of a sensor;





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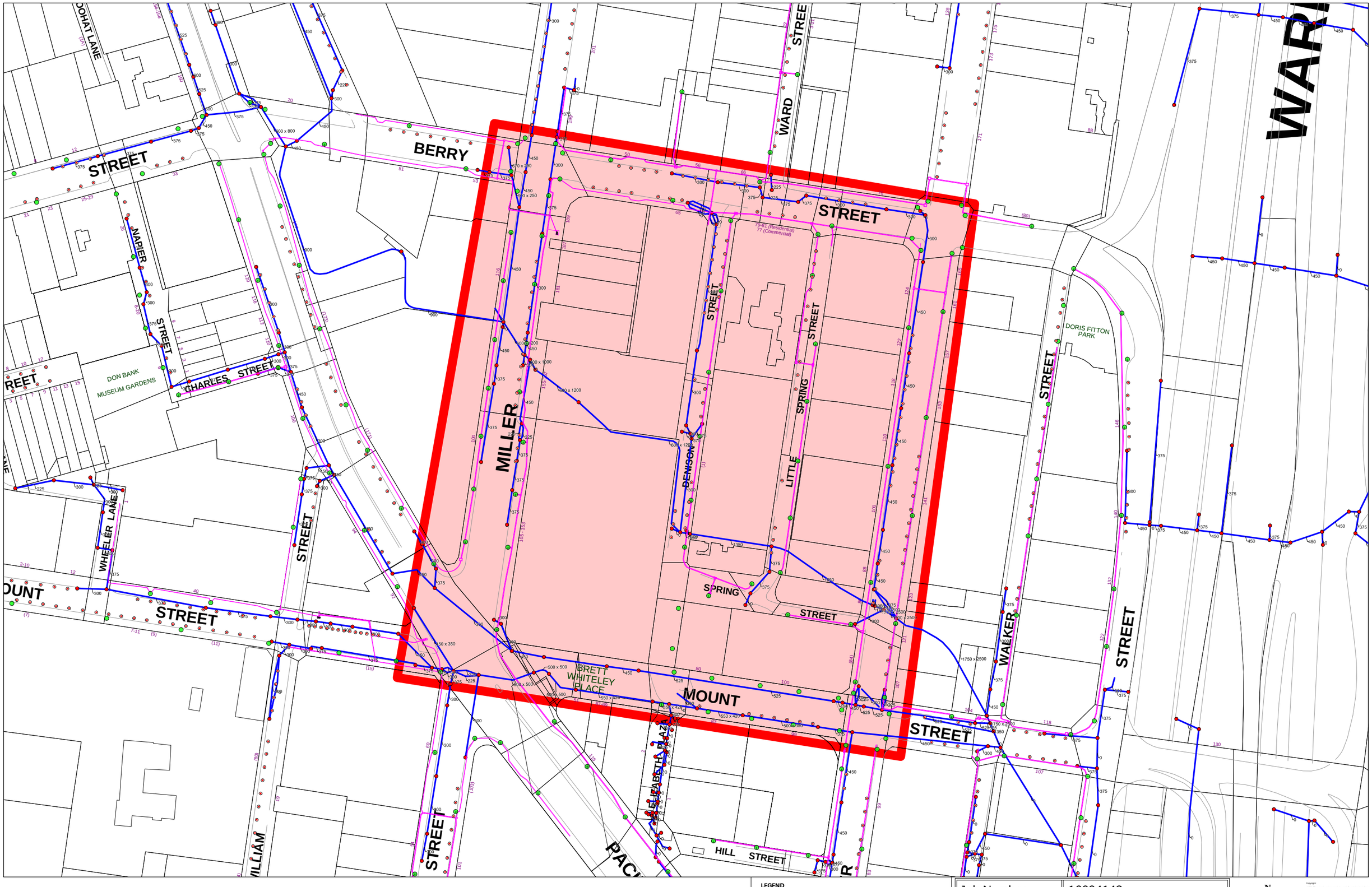

North Sydney Council

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Further details can be obtained by calling (02) 9936 8100 or e-mail dbyd@northsydney.nsw.gov.au.

NORTH SYDNEY COUNCIL STORMWATER DRAINAGE/ UNDERGROUND POWER AND LIGHTPOLE FOOTINGS/ PARKING METER SENSORS

LEGEND

- Drainage Pipe
- Drainage Pit
- Conduit / Cable
- Parking Meter Sensors
- Gross Pollutant Trap
- Litter Basket
- Distribution Board
- NSC Multi-Purpose Pole (Footing / Pole)

Job Number:	16094143
Seq Number:	82196075
Recipient:	david.wall@arcadis.com
Date: 10:04:19	Scale At A3: 1:1550

N W E S

Copyright:
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Disclaimer:
This material has been compiled from 2D and 3D digital data. Whilst all care is taken to ensure a high degree of accuracy, North Sydney Council does not accept liability for any errors or omissions. Any claim for damage arising from its use or any inaccuracies thereof, shall be limited to the cost of correcting the error or omission by council.

Planning Scheme:
North Sydney Local Environmental Plan was gazetted 2 November 1988. Zoning and heritage information is current to this date. Users of this map should note that should an amendment be made to the Local Environmental Plan or Development Control Plan, the current version shall prevail.

Note:
This map has been prepared from 2D, 3D and ortho-photographic digital data. Main cadastral 2D layers are being updated on a regular basis from property surveys carried out by the Land Information Centre and Council's Survey Unit. Some 3D layers were developed from stereo pair digital photographs (1994, 1997 & 2000) and others were developed from stereo pair aerial photographs (Oct 1997) by PSN Surveying.

Accuracy:
2D control layers (c, d, e, +) 0.5metre.
Kerbside layers (c, d, e, +) 0.1m except provided by PSN Surveying.

IMPORTANT INFORMATION - DIAL BEFORE YOU DIG

Attention: You must read the information below

The material provided or made available to you by Sydney Water (including on the Sydney Water website) in relation to your Dial Before You Dig enquiry (**Information**) is provided on each of the following conditions, which you are taken to have accepted by using the Information:

1 The Information has been generated by an automated system based on the area highlighted in the "Locality Indication Only" window on your Caller Confirmation. It is your responsibility to ensure that the dig site is properly defined when submitting your Dial Before You Dig enquiry and, if the Information does not match the dig site, to resubmit your enquiry for the correct dig site.

2 Neither Sydney Water nor Dial Before You Dig make any representation or give any guarantee, warranty or undertaking (express or implied) as to the currency, accuracy, completeness, effectiveness or reliability of the Information. The Information, including Sydney Water plans and work-as-executed diagrams, amongst other things:

(a) may not show all existing structures, including Sydney Water's pipelines, particularly in relation to newer developments and in relation to structures owned by parties who do not participate in the Dial Before You Dig service;

(b) may be out of date and not show changes to surface levels, road alignments, fences, buildings and the like;

(c) is approximate only and is therefore not suitable for scaling purposes; and

(d) does not show locations of property services (often called house service lines) belonging to or servicing individual customers, which are usually connected to Sydney Water's structures.

3 You are responsible for, amongst other things:

(a) exposing underground structures, including Sydney Water's pipelines, by pot-holing using hand-held tools or vacuum techniques so as to determine the precise location and extent of structures before any mechanical means of excavation are used;

(b) the safe and proper excavation of and for underground works and structures, including having regard to the fact that asbestos cement pipelines, which can pose a risk to health, may form part of Sydney Water's water and sewerage reticulation systems;

(c) protecting underground structures, including Sydney Water's pipelines, from damage and interference;

(d) maintaining minimum clearances between Sydney Water's structures and structures belonging to others;

(e) ensuring that backfilling of excavation work in the vicinity of Sydney Water's structures complies with Sydney Water's standards contained on its website or otherwise communicated to you;

(f) notifying Sydney Water immediately of any damage caused or threat of damage to Sydney Water's structures;

(g) ensuring that plans are approved by Sydney Water (usually signified by stamping) prior to landscaping or building over or in the vicinity of any Sydney Water structure; and

(h) ensuring that the Information is used only for the purposes for which Sydney Water and Dial Before You Dig intended.

4 You acknowledge that you use the Information at your own risk. In consideration for the provision of the Dial Before You Dig service and the Information by Sydney Water and Dial Before You Dig, to the fullest extent permitted by law:

(a) all conditions and guarantees concerning the Information (whether as to quality, outcome, fitness, care, skill or otherwise) expressed or implied by statute, common law, equity, trade, custom or usage or otherwise are expressly excluded and to the extent that those statutory guarantees cannot be excluded, the liability of Sydney Water and Dial Before You Dig to you is limited to either of the following as nominated by Sydney Water in its discretion, which you agree is your only remedy:

(i) the supplying of the Information again; or

(ii) payment of the cost of having the Information supplied again;

(b) in no event will Sydney Water or Dial Before You Dig be liable for, and you release Sydney Water and Dial Before You Dig from, any Loss arising from or in connection with the Information, including the use of or inability to use the Information and delay in the provision of the Information:

(i) whether arising under statute or in contract, tort or any other legal doctrine, including any negligent act, omission or default (including wilful default) by Sydney Water or Dial Before You Dig; and

(ii) regardless of whether Sydney Water or Dial Before You Dig are or ought to have been aware of, or advised of, the possibility of such loss, costs or damages;

(c) you will indemnify Sydney Water and Dial Before You Dig against any Loss arising from or in connection with Sydney Water providing incorrect or incomplete information to you in connection with the Dial Before You Dig service; and

(d) you assume all risks associated with the use of the Dial Before You Dig and Sydney Water websites, including risk to your computer, software or data being damaged by any virus, and you release and discharge Sydney Water and Dial Before You Dig from all Loss which might arise in respect of your use of the websites.

5 "**Sydney Water**" means Sydney Water Corporation and its employees, agents, representatives and contractors. "**Dial Before You Dig**" means Dial Before You Dig Incorporated and its employees, agents, representatives and contractors. References to "**you**" include references to your employees, agents, representatives, contractors and anyone else using the Information. References to "**Loss**" include any loss, cost, expense, claim, liability or damage (including arising in connection with personal injury, death or any damage to or loss of property and economic or consequential loss, lost profits, loss of revenue, loss of management time, opportunity costs or special damages). To the extent of any inconsistency, the conditions in this document will prevail over any other information provided to you by Sydney Water and Dial Before You Dig.

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)

Further information and guidance is available in the Building Development and Plumbing section of Sydney Water's website at www.sydneywater.com.au, where you will find the following documents under 'Dial Before You Dig':

- Avoid Damaging Water and Sewer Pipelines
- Water Main Symbols
- Depths of Mains
- Guidelines for Building Over/Adjacent to Sydney Water Assets
- Clearances Between Underground Services

Or call **13 20 92** for Customer Enquires.

Note: The lodging of enquiries via **www.1100.com.au** will enable you to receive colour plans in PDF format 24 hours a day, 7 days a week via email.

This communication is confidential. If you are not the intended recipient, please destroy all copies immediately. Sydney Water Corporation prohibits unauthorised copying or distribution of this communication.

Guide to reading Sydney Water DBYD Plans



February 2015

Asset Information

Legend

Sewer

Sewer Main (with flow arrow & size type text) — 225 PVC
Disused Main
Rising Main
Maintenance Hole (with upstream depth to invert) — 1.7
Sub-surface chamber
Maintenance Hole with Overflow chamber
Ventshalft EDUCT — VSE
Ventshaft INDUCT — VS
Property Connection Point (with chainage to downstream MH) — 10.5
Concrete Encased Section — Concrete Encased
Terminal Maintenance Shaft — TMS
Maintenance Shaft — MS
Rodding Point — RP
Lamphole
Vertical — VERT
Pumping Station — SP0882
Sewer Rehabilitation

Pressure Sewer

Pressure Sewer Main
Pump Unit (Alarm, Electrical Cable, Pump Unit) — A
Property Valve Boundary Assembly
Stop Valve
Reducer / Taper
Flushing Point — FP

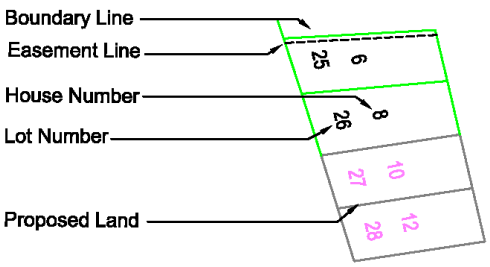
Vacuum Sewer

Pressure Sewer Main
Division Valve
Vacuum Chamber
Clean Out Point

Stormwater

Stormwater Pipe
Stormwater Channel
Stormwater Gully
Stormwater Maintenance Hole

Property Details



Sydney Water Heritage Site (please call **132 092** and ask for the **Heritage Unit**)

Water

WaterMain - Potable (with size type text) — 200 PVC
Disconnected Main - Potable
Proposed Main - Potable
Water Main - Recycled
Special Supply Conditions - Potable
Special Supply Conditions - Recycled
Restrained Joints - Potable
Restrained Joints - Recycled
Hydrant
Maintenance Hole
Stop Valve
Stop Vale with By-pass
Stop Valve with Tapers
Closed Stop Valve
Air Valve
Valve
Scour
Reducer / Taper
Vertical Bends
Reservoir
Recycled Water is shown as per Potable above. Colour as indicated

Private Mains

Potable Water Main
Recycled Water Main
Sewer Main
Symbols for Private Mains shown grey

Asset Information

Pipe Types

ABS	Acrylonitrile Butadiene Styrene	**AC**	Asbestos Cement
BRICK	Brick	**CI**	Cast Iron
CICL	Cast Iron Cement Lined	**CONC**	Concrete
COPPER	Copper	**DI**	Ductile Iron
DICL	Ductile Iron Cement (mortar) Lined	**DIPL**	Ductile Iron Polymeric Lined
EW	Earthenware	**FIBG**	Fibreglass
FL BAR	Forged Locking Bar	**GI**	Galvanised Iron
GRP	Glass Reinforced Plastics	**HDPE**	High Density Polyethylene
MS	Mild Steel	**MSCL**	Mild Steel Cement Lined
PE	Polyethylene	**PC**	Polymer Concrete
PP	Polypropylene	**PVC**	Polyvinylchloride
PVC - M	Polyvinylchloride, Modified	**PVC - O**	Polyvinylchloride, Oriented
PVC - U	Polyvinylchloride, Unplasticised	**RC**	Reinforced Concrete
RC-PL	Reinforced Concrete Plastics Lined	**S**	Steel
SCL	Steel Cement (mortar) Lined	**SCL IBL**	Steel Cement Lined Internal Bitumen Lined
SGW	Salt Glazed Ware	**SPL**	Steel Polymeric Lined
SS	Stainless Steel	**STONE**	Stone
VC	Vitrified Clay	**WI**	Wrought Iron
WS	Woodstave		

Further Information

Please consult the Dial Before You Dig enquiries page on the Sydney Water website

For general enquiries please call the Customer Contact Centre on **132 092**

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)

A3

DBYD Address:
n/a Denison Street
North Sydney NSW 2060

DBYD Job No: 16094143

DBYD Sequence No: 82196085

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SYDNEY WATER CORPORATION

Scale: 1:1500

Date of Production: 10/04/2019

Plan 1 of 1

N

0m 7m 14m 21m 28m