

Venues NSW

**Precinct Village and Carpark,
Moore Park**

**SSDA report – Infrastructure
Services Strategy**

MP1-ARP-REP-IS-0001

Issue 01 | 23 August 2021

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Job number 281025

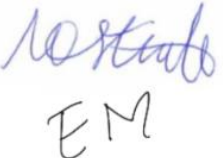


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Job title		Precinct Village and Carpark, Moore Park		Job number 281025	
Document title		SSDA report – Infrastructure Services Strategy		File reference	
Document ref		MP1-ARP-REP-IS-0001			
Revision	Date	Filename	MP1-ARP-REP-IS-0001_Precinct Village and Carpark SSDA Report.docx		
Draft	30 th July 2021	Description	First draft		
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Draft	11 th August 2021	Filename	MP1-ARP-REP-IS-0001_Precinct Village and Carpark SSDA Report.docx		
		Description	Second Draft Incorporating Client Comments.		
			Prepared by	Checked by	Approved by
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Issue 01	23 rd August 2021	Filename	MP1-ARP-REP-IS-0001_Precinct Village and Carpark SSDA Report.docx		
		Description	Issue 01		
			Prepared by	Checked by	Approved by
		Name	Matthew Stivala Ehab Morsy	Jake Cherniayeff	Andrew Johnson
		Signature	 EM		
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
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1 Introduction

On 6 December 2018, the then Minister for Planning approved a concept development application and concurrent early works package (SSD 9249) to facilitate redevelopment of the Sydney Football Stadium.

The concept approval established the maximum building envelope, design and operational parameters for a new stadium with up to 45,000 seats for patrons and allowing for 55,000 patrons in concert mode. The concurrent Stage 1 works, which were completed on 28 February 2020, facilitated the demolition of the former SFS and associated buildings.

Stage 2 of the Sydney Football Stadium (SFS) Redevelopment (SSD 9835) was approved by the Minister for Planning and Public Spaces on 6 December 2019. Stage 2 provides for:

- construction of the stadium, including:
 - 45,000 seats (additional 10,000 - person capacity in the playing field in concert mode) in four tiers including general admission areas, members seating and corporate / premium seating.
 - roof cover over all permanent seats and a rectangular playing pitch.
 - a mezzanine level with staff and operational areas.
 - internal pedestrian circulation zones, media facilities and other administration areas on the seating levels.
 - a basement level (at the level of the playing pitch) accommodating pedestrian and vehicular circulation zones, 50 car parking spaces, facilities for teams and officials, media and broadcasting areas, storage and internal loading areas.
 - food and drink kiosks, corporate and media facilities; and
 - four signage zones.
- construction and establishment of the public domain within the site, including:
 - hard and soft landscaping works.
 - publicly accessible event and operational areas.
 - public art; and
 - provision of pedestrian and cycling facilities.
- wayfinding signage and lighting design within the site.
- reinstatement of the existing Moore Park Carpark 1 (MP1) upon completion of construction works with 540 at-grade car parking spaces and vehicular connection to the new stadium basement level.
- operation and use of the new stadium and the public domain areas within the site for a range of sporting and entertainment events; and
- extension and augmentation of utilities and infrastructure.

SSD 9835 has been modified on five previous occasions:

- MOD 1 amended Conditions B14 and B15 to satisfy the regulatory requirements of the Contaminated Land Management Act 1997.
- MOD 2 approved the design, construction and operation of the Stadium Fitness Facilities.
- MOD 3 approved design refinements to the western mezzanine and introduced a new condition to facilitate approval of signage details within the approved signage zones.
- MOD 4 relocated the approved photovoltaic array from the SFS roof to the Level 5 plant room roofs and revised the approved sustainability strategy: and
- MOD 5 updated plan references and dates in the Instrument of Consent.

A sixth modification which seeks approval for the fit out and operation of the SFS' eastern mezzanine for the Sydney Roosters Centre of Excellence (MOD 6) was placed on public exhibition by the Department of Planning, Industry and Environment between 19 August and 1 September 2021.

2 Precinct Village and Car Park

2.1 Vision

Venues NSW (VNSW) is proposing to introduce a village community space, event plaza and multi-level car park to complement the SFS and adjoining Moore Park and Centennial Parklands. The proposed development will facilitate the permanent closure of the EP2 on-grass parking areas within Moore Park opposite the MP1 car park and enable its use for open space purposes consistent with the Moore Park Masterplan.

The vision for the Precinct Village and Car Park is set out below:

The Precinct Village and Car Park provides a platform and canvas for an exceptional community asset and iconic design, that visually and physically connects to the adjacent Moore Park East and Kippax Lake. It provides patrons with quality café and dining experiences in an idyllic parkland setting and well-being play and relaxation nodes which engage with all ages. An event plaza, connected to the Stadium plaza provides a seamless opportunity for greater patron and community engagement through non-event and event day functions (Architectural Design Statement, Cox August 2021).

2.2 Location

The Precinct Village and Car Park is proposed to be located on the land west of the SFS, currently approved under SSD 9835 as the MP1 Car Park. It will extend to Moore Park and Driver Avenue and will adjoin the existing UTS, Rugby Australia and NRL Central buildings, all of which are to be retained and do not form part of the project site. A Location Plan is provided at Figure 1.



Figure 1– Precinct Village and Car Park Development

2.3 Development Description

The Precinct Village and Car Park has been designed to align with the conditions and commitment established within SSD 9835, particularly relating to delivering a LEED Gold rated sustainable precinct, and will include:

- Up to a maximum of 1,500 space multilevel carpark below ground level with the following access arrangements:
 - 1 x egress point onto Moore Park Road to be used on event days only.
 - 1 x two-lane access point from Driver Ave to be used on event and non-event days: and
 - dedicated area within the car park for operation/servicing vehicles.
- Reconfiguration of the currently approved drop off requirements for the elderly and mobility impaired.
- Free flow level pedestrian access to and from the SFS concourse from Driver Ave and Moore Park Road.
- Electric car charging provision.
- A versatile and community public domain, comprising:
 - provision for 4 x north-south orientated tennis courts on non-event days with the potential to become an event platform on event days.
 - children's playground.
 - 1,500m² cafe / retail / restaurants with associated amenities in a single storey pavilion (6 metre) low level.
 - customer service office and ticket window; and
 - vertical transport provisions
- Utilities provision augmentation.

Figure 2 illustrates the proposed Precinct Village and Car Park concept. Refer to the architectural within the Architectural Design Statement (Cox, August 2021) and landscape plans (Aspect, August 2021) for further details.



Figure 2 – Precinct Village and Car Park Development

2.4 Proposed Operation

The Precinct Village is proposed to be accessible from 8am to 11pm to align with the approved operating hours for the SFS.

The tennis court operating hours are proposed to be the same as the approved operating hours for the Stadium Fitness Facilities.

The car park will be automated, replicating the existing arrangements at the nearby Entertainment Quarter and will be accessible 24 hours a day, 7 days a week.

The public domain is proposed to be curated as a series of distinct, flexible and purpose specific settings for event day patrons and the general public. These inviting public places will offer rich, engaging, and shared experiences. An indication of the activity types, frequencies and durations proposed within the public domain is provided in the Architectural Design Statement (Cox Architecture, August 2021) and Planning Statement (Ethos Urban, August 2021).

2.5 Delivery

The Precinct Village and Car Park is proposed to be delivered in two stages:

- Stage 1, herein referred to as the East Car Park, consists of the area between the Rugby Australia and NRL Central buildings, immediately adjacent to the SFS concourse.
- Stage 2, herein referred to as the West Car Park, consists of the residual area immediately adjacent to the proposed East Car Park, bounded by Driver Ave and Moore Park Road.

The East Car Park is proposed to be delivered ahead of the opening of the SFS in 2022. The West Car Park is proposed to be delivered after the SFS opening, sometime in 2023.

3 Proposed Modifications

To facilitate the Precinct Village and Car Park, SSD 9249 and SSD 9835 are required to be modified. The proposed modification to SSD 9249 (concept development application) has been submitted under separate cover. SSD 9835 is proposed to be modified to facilitate construction, fit-out and operation of Precinct Village and Car Park as described above.

4 Purpose of this Report

This Infrastructure Services Strategy Report has been prepared to support the Precinct Village and Car Park modification. This Report specifically addresses the following Secretary's Environmental Assessment Requirements (SEARs) issued in respect of SSD 9825 and as relevant to the Precinct Village and Car Park project:

Secretary's Environmental Assessment Requirements	Report Section
<p>24. Utilities</p> <p>Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.</p> <p>Prepare an Integrated Water Management Plan detailing any alternative water supplies, end uses of potable and non-potable water, and water sensitive urban design, measures for rainwater harvesting for irrigation and stormwater polishing.</p>	<p>This Infrastructure Services Strategy Report intends to outline the initial investigations made into the existing utilities surrounding the site, including conversations with utilities providers and authorities where major diversions, augmentation or easements are expected. <i>[Section 5 to Section 7]</i></p> <p>Refer to the Stormwater and Flooding Assessment by the Civil Engineer which addresses water sensitive urban design and alternative water sources.</p>

Table 1: SSD 9835 SEARS

This Infrastructure Services Strategy Report is to be read in conjunction with the following reports and documents:

- Planning Statement prepared by Ethos Urban (August 2021);
- Architectural plans/elevations/sections and Architectural Design Statement, prepared by Cox Architecture (August 2021);
- Design Integrity Assessment Report prepared by Cox Architecture (August 2021);
- Landscape plans and Landscape Design Report prepared by Aspect (August 2021);
- Transport Assessment prepared by JMT (August 2021);
- Noise and Vibration Assessment prepared by Arup (August 2021);
- Stormwater and Flooding Assessment prepared by Arup (August 2021);
- Visual Impact Assessment prepared by Ethos Urban (August 2021);
- Social/Economic Statement prepared by Ethos Urban (August 2021);
- Heritage Impact Statement prepared by Artefact (August 2021);
- Sustainability Assessment prepared by LCI (August 2021);

- Security Statement/CPTED prepared by Intelligent Risks (August 2021);
- Contamination Assessment prepared by Douglas Partners (August 2021).
- Aboricultural Assessment prepared by Tree IQ (August 2021).
- Wind Assessment prepared by Arup (August 2021).
- Geotechnical Assessment prepared by Arup (August 2021).
- Public Domain Lighting Assessment prepared by Arup (August 2021); and
- BCA and Accessibility Statement prepared by Before Compliance (August 2021).

5 Utility Services Infrastructure

5.1 Existing Information

This Infrastructure Services Strategy is largely based on ‘Dial Before You Dig (DBYD) information, discussions with utilities providers and the following utilities information made available at the time of this report.

- Survey Drawing SFS-USH-00-SV-SU00XX05 Rev 30 by Usher & Company
- Existing Utilities Services Configuration Drawing SFS-DRG-1000 P01 by Arup
- SFS infrastructure Management Plan Rev A by John Holland Group / LCI

To date, Arup has been in contact with utility providers where key utility services traverse the site and will likely be impacted by the development, to obtain preliminary advice on the infrastructure and alert the utility providers of the proposed project. Currently Arup have been in contact with Sydney Water and Jemena. Record of communication has been included in Appendix B & Appendix C.

Further communication with the utility providers, including telecommunications and incoming power providers, will need to be made during the next design phase once the scheme is further developed and building loads are better defined.

5.2 Scope of Utility Services Report

This Infrastructure Services Strategy relates to the works required for the incoming utilities to service the new Precinct Village and Car Park. A summary of the proposed services connections for the development are shown in Table 2 - Scope of Utilities Services.

The potential to connect to existing private precinct infrastructure within the vicinity of the proposed development will be further investigated during the detailed design stage with aim to rationalise utilities connections where possible.

Utility Service	Authority Name	Project connection requirements
Telecommunications	AARNet, NBN, NextGen, Optus, Telstra, Verizon, Vocus, TPG, Superloop	Telstra and Vocus whom are currently the building owner / operator’s carriers of choice.
Electrical Power	Ausgrid	High voltage connection required. Point and details of connection and reticulation to be confirmed and detailed by an ASP L3 designer and approved by Ausgrid in the next design phase.
Sewerage	Sydney Water	Sewer connections required. Point and details of connection and reticulation to be confirmed with Sydney Water through a Water Services Coordinator in the next design phase.

Mains Water	Sydney Water	Mains water connection required. Point and details of connection and reticulation to be confirmed with Sydney Water through a Water Services Coordinator in the next design phase.
Gas	Jemena	Gas connection required. Point and details of connection and reticulation to be confirmed with Jemena once building demand is known).

Table 2 - Scope of Utilities Services

Refer to the Arup Civil Stormwater and Flooding Assessment report for information on Stormwater.

5.3 Protection of Existing Utility Services

As part of the initial investigation, we have undertaken a desktop review of existing utility services using utility mapping information provided through Dial Before You Dig.

A summary of our findings from the above information is included in the following sections for each service.

The next steps are recommended to ensure existing utility services are adequately considered and protected as part of the works. These steps are subject to further development by the main contractor as part of the construction methodology plan for the project.

- Appoint utility services designers including ASP Level 3, Sydney Water WSC and Jemena Infrastructure Designer to further progress the connection applications, diversions, and protections.
- Intrusive investigations and full in ground utilities survey are to be undertaken across the site footprint and its surrounding areas to more accurately locate utilities and investigate unknown services and / or potentially redundant services. This should include consolidation of existing surveys into a single in ground utilities document.
- Prior to starting construction works on site, the main contractor is to produce a consolidated site plan of existing in ground services including any isolations, disconnections, removals, and any new connections and installations proposed as part of the works.
- Utility providers to be consulted to obtain any necessary consents to perform construction work in their vicinity and discuss necessary diversion and/or protection measures and connections for the proposed works.
- Utility technical and hazard requirements to be incorporated into the design and construction documentation.
- Safe work methods statements and inspection and test plans to be prepared by accredited contractors.
- Pre-start work checklists to be developed and implemented.
- Field safety inspectors to be present during critical works as determined by utility providers.

5.4 Sewerage

5.4.1 General

A Sydney Water, Water Services Coordinator WSC has not yet been engaged for the project. Any required sewer mains augmentation, diversion or upgrade will need be confirmed by Sydney Water through a Notice of Requirements following submission of a Section 73 application once the WSC has been appointed. This typically occurs post development approval and prior to obtaining the relevant Crown Certificate; this approach is intended to be taken for the Precinct Village and Car Park project.

5.4.2 Existing

The development has Sydney Water sewer infrastructure within the vicinity of the proposed works.

The infrastructure within and surrounding the site is as follows:

- Moore Park Road – 300mm relined salt glazed ware sewer main flows west from Oatley Road. This transitions into a 400mm relined salt glazed ware main which flows west through the north-west corner of the site and traverses under Driver Avenue.
- Driver Avenue – 225mm salt glazed ware sewer main flows south from a disused section of main at the southern boundary of the site; &
- Disused 150mm vitrified clay sewer main below existing Sydney Football Stadium.

The existing 400mm sewer main falls within the proposed site boundary of the proposed Precinct Village and Car Park project. The Stage 2 footprint extent is intended to be positioned to avoid substantial impact to this asset with the intent to avoid diversion of this main. The exact location of this asset and any protection requirements as part of the works are to be provided by Sydney Water and the WSC as part of the Section 73 application and subsequent Notice of Requirements.

Through consultation with Sydney Water, Arup understands that the 225mm sewer main in Driver Avenue is at or nearing capacity. The capacity of the 300mm / 400mm sewer main in Moore Park Road is unknown. The current capacities of the mains will need to be formally assessed by Sydney Water and the WSC as part of the Section 73 Application.

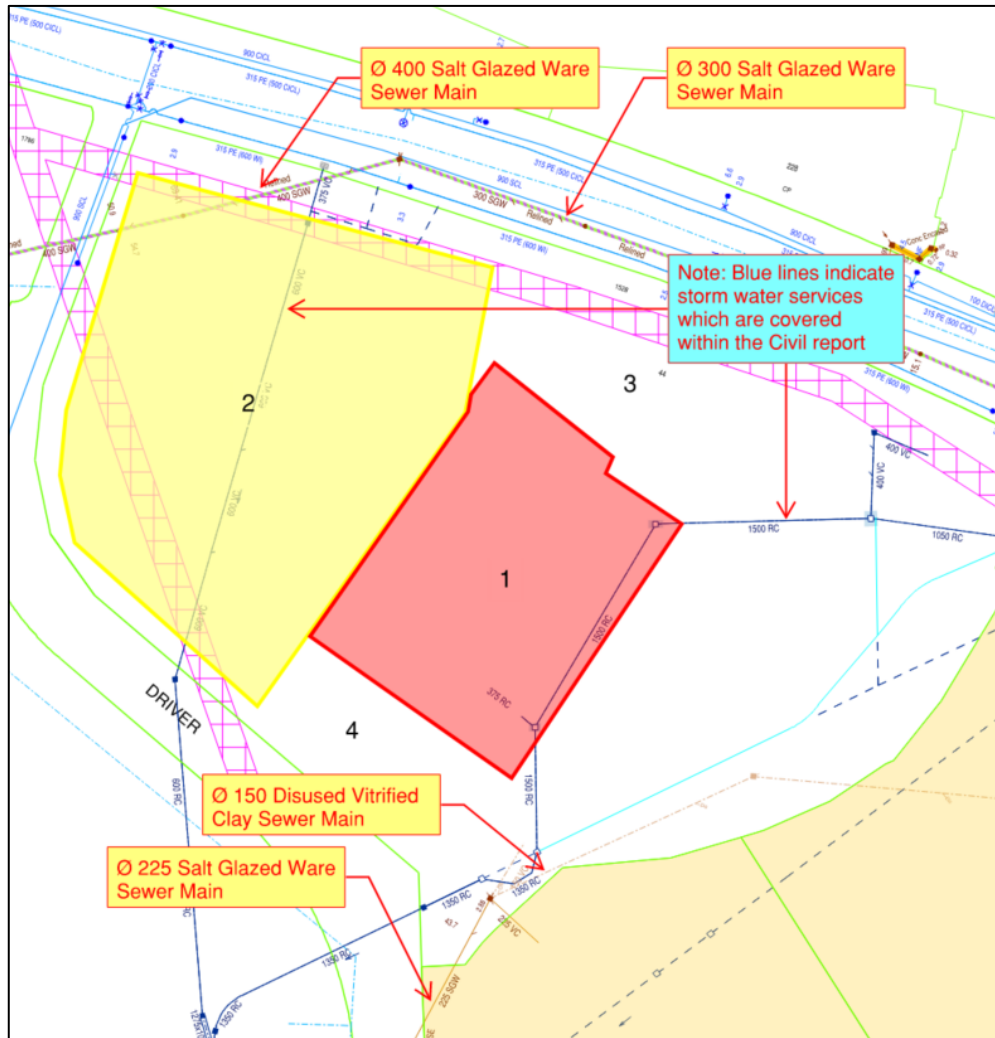


Figure 3 - Existing Sydney Water sewer utilities

5.4.3 Proposed

New sewer connections will be required to service the development. It is envisaged two connections will be provided, one for Stage 1 & one for Stage 2.

Proposed Stage 1 connection:

Connect to the existing 225mm sewer main in Driver Avenue, into the junction pit at the interface between the used and disused services. We expect that this connection may prompt the need for mains amplification on the basis that the main is at or near capacity. The requirement for mains amplification will need to be assessed by a Sydney Water WSC once the building loads are further developed at detailed design stage.

Proposed Stage 2 connection:

Connect into the existing 300mm sewer main in Moore Park Road. The requirement for mains amplification will need to be assessed by a Sydney water WSC once the building loads are further developed at detailed design stage.

Further survey and discussions with Sydney Water via a WSC will be required in the next design phase to determine the full extent of any augmentation and upgrade works.

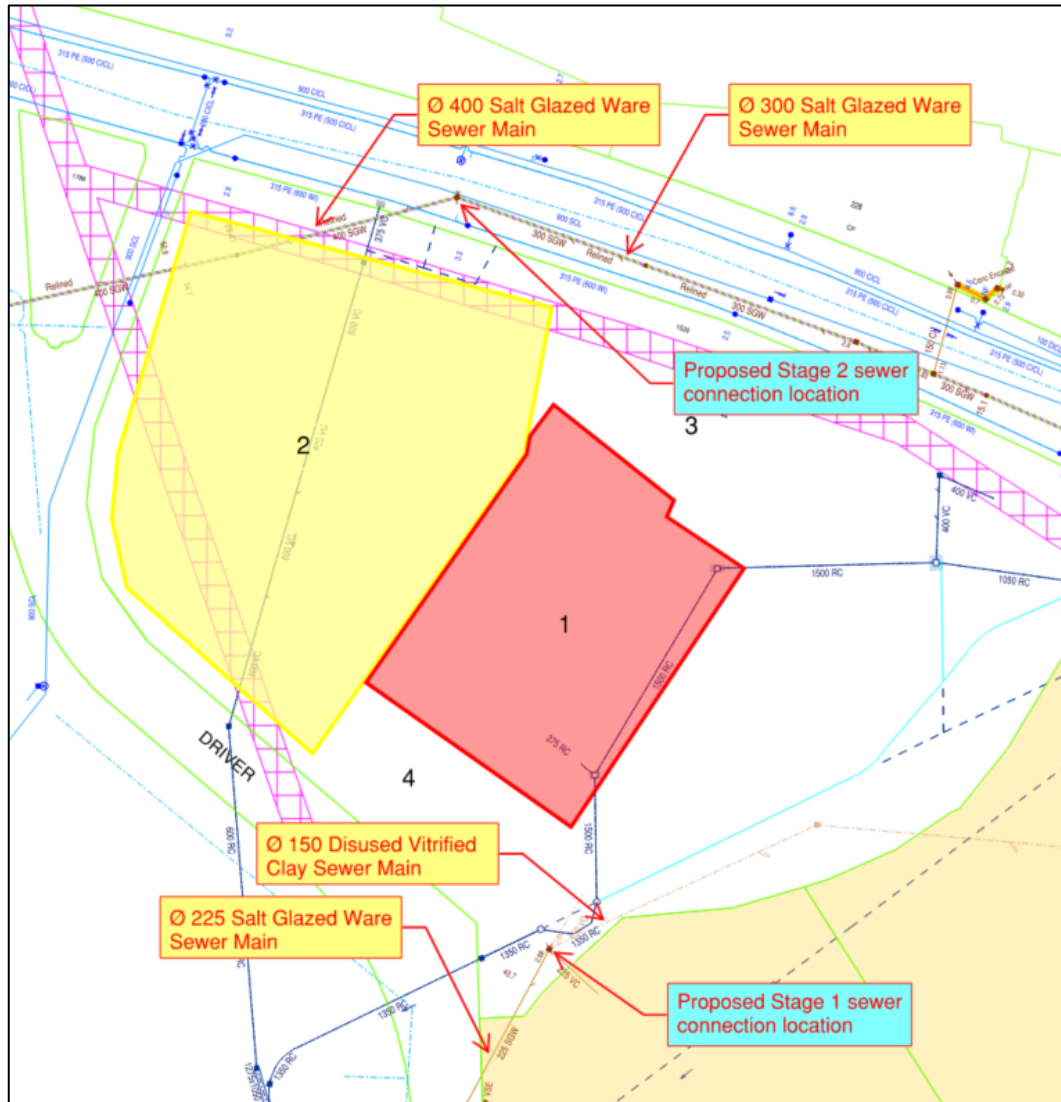


Figure 4: Proposed sewer connections

5.5 Mains Water

5.5.1 General

A Sydney Water, Water Services Coordinator WSC has not been engaged for the project. Any required water mains augmentation, diversion or upgrade will need be confirmed by Sydney Water through the Section 73 application and the subsequent Notice of Requirements once the WSC has been appointed. This typically occurs post development approval and prior to obtaining the relevant Crown Certificate; this approach is intended to be taken for the Precinct Village and Car Park project.

5.5.2 Existing

The development has the following Sydney Water, water infrastructure within and surrounding the site.

- Moore Park Road – 900mm cast iron cement lined trunk water main (north side of street). *Typically, trunk water mains are not available for connection.*
- Moore Park Road – 900mm steel cement lined trunk water main (south side of street). *Typically, trunk water mains are not available for connection.*
- Moore Park Road – 315mm polyethylene water main (north side of street).
- Moore Park Road – 315mm polyethylene water main (south side of street);
- Moore Park Road (at the eastern end adjacent Oatley Road only) – 100mm ductile iron cement line reticulation water main (north side of street).
- Driver Avenue (at the north end adjacent Moore Park Road only) – 200mm cast iron cement lined reticulation water main (east side of street).
- Drive Avenue (western arm only) – 900mm steel cement lined trunk water main (east side of street). *Typically, trunk water mains are not available for connection.*
- Driver Avenue (southern arm) – Due to observations of a fire booster assembly and a street hydrant access cover adjacent the National Rugby League Centre, it is believed that a water main is located along the Southern part of Driver Avenue. It is thought that this was extended from the 200mm main at the Northern end of the road as part of recent works. Sydney Water have verbally confirmed that this is not a Sydney Water asset and would be a private extension. The extent of this service is yet to be confirmed and should be investigated by the Contractor as a potential connection point to rationalise the design; &
- Busby's Bore (Sydney Water heritage water main) passes through the Northern and South-Western areas of the site.

The Sydney Water DBYD information shows the east-west section of Busby's Bore traversing through the northern part of the site. However, this information has been superseded by subsequent survey information which is captured on Existing Site Services Plan A10.SP.20 Rev A by Cox which shows the east-west section of Busby's Bore located under Moore Park Road.

Further to this, there is a disused Spur traversing the site diagonally from north-east to south-west adjacent to Driver Avenue, the exact location of this is unknown.

Busby's Bore is a State Heritage Register listed Sydney Water asset and as such, must be maintained and protected as part of these works. The protection requirements of this asset will be provided by Sydney Water through a Notice of Requirements following a Section 73 application by a Water Services Coordinator. These requirements will need to be coordinated with a Heritage Consultant, refer to the Heritage Impact Statement prepared by Artefact (August 2021).

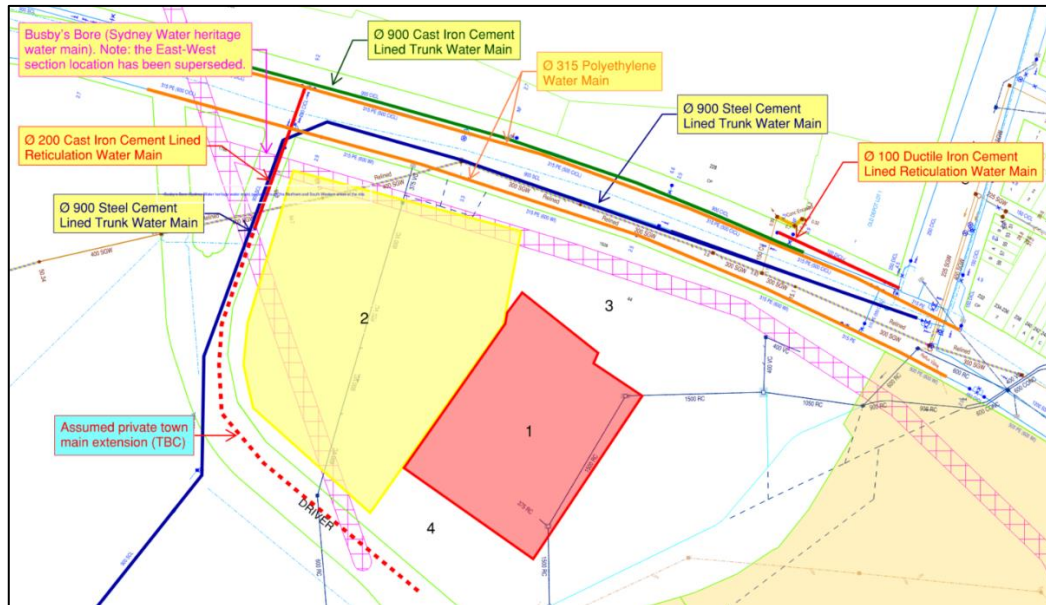


Figure 5: Existing Sydney Water utilities



Figure 6 – Existing Site Services Plan A10.SP.20 Rev A by Cox showing Busby's Bore

5.5.3 Proposed

A new incoming water supply connection will be required to service the development, for both domestic cold water and fire services. Two proposed options are presented below, in order of preference:

Option 1:

Connect into the private water main extension in Driver Avenue at the south end of the site. The extent of this service and the potential to connect into it is still to be confirmed.

Option 2:

Connect into the existing 315mm water main on the southern side of Moore Park Road.

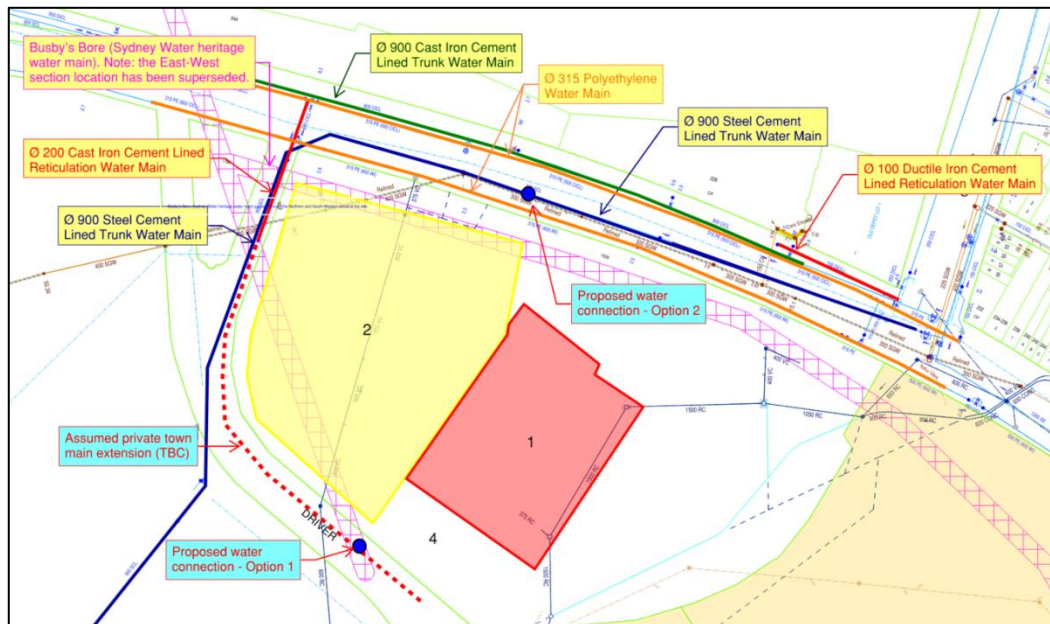


Figure 7: Proposed water connections

At this stage, it is unknown whether the proposed works would require the amplification of the water mains.

Further survey and discussions with Sydney Water, through a Water Services Coordinator will be required to determine the full extent of the required works once the development water demands are finalised.

5.6 Gas

5.6.1 Existing

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

The infrastructure surrounding the site is as follows:

- Moore Park Road – 50mm nylon 210kPa medium pressure gas main inserted into 100mm nominal bore cast iron pipe (north side of street).
- Moore Park Road – 110mm polyethylene 210kPa medium pressure gas main inserted into 300mm nominal bore cast iron pipe (south side of street).

- Driver Avenue (Southern arm) – 110mm polyethylene 210kPa medium pressure gas main passing through middle of the site and connecting to the main in Moore Park Road.

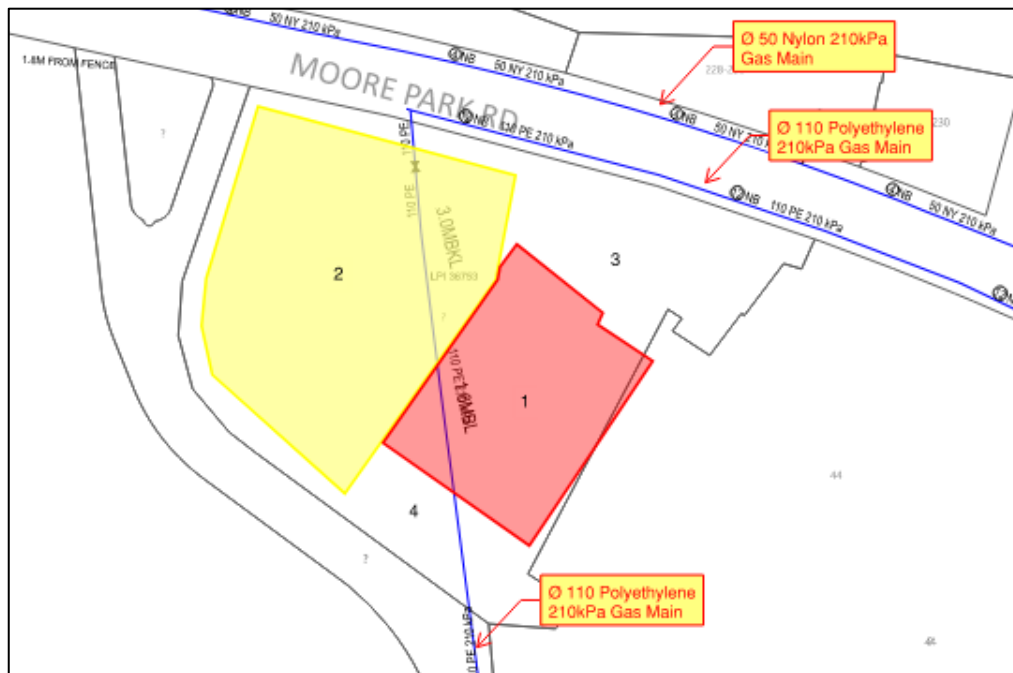


Figure 8: Existing Jemena gas utilities

The existing 110mm medium pressure gas main falls within the site boundary and it is therefore proposed to divert the service around Driver Avenue to enable the works. Jemena has advised that the diversion seems feasible, however needs to be formally reviewed to confirm its viability. Arup has lodged a Complex Works application to Jemena detailing the proposed diversion strategy (application number #000351061).

The diversion works process is outlined below:

1. Provide Jemena with potholing information of the existing asset and the proposed design for the new alignment. Once this information is reviewed, a site visit can be arranged to determine the methodology for relocation.
2. Once the scope of relocation is finalised with Jemena engineers, Jemena will provide a Letter of Offer. This generally takes 8 – 10 weeks.
3. Once the Letter of Offer is accepted, Jemena will mobilise a team to carry out the works. The works generally commences 2 weeks after the offer acceptance.
4. Jemena carries out the works, which generally takes no more than a week (and is typically completed in 2 – 3 days).

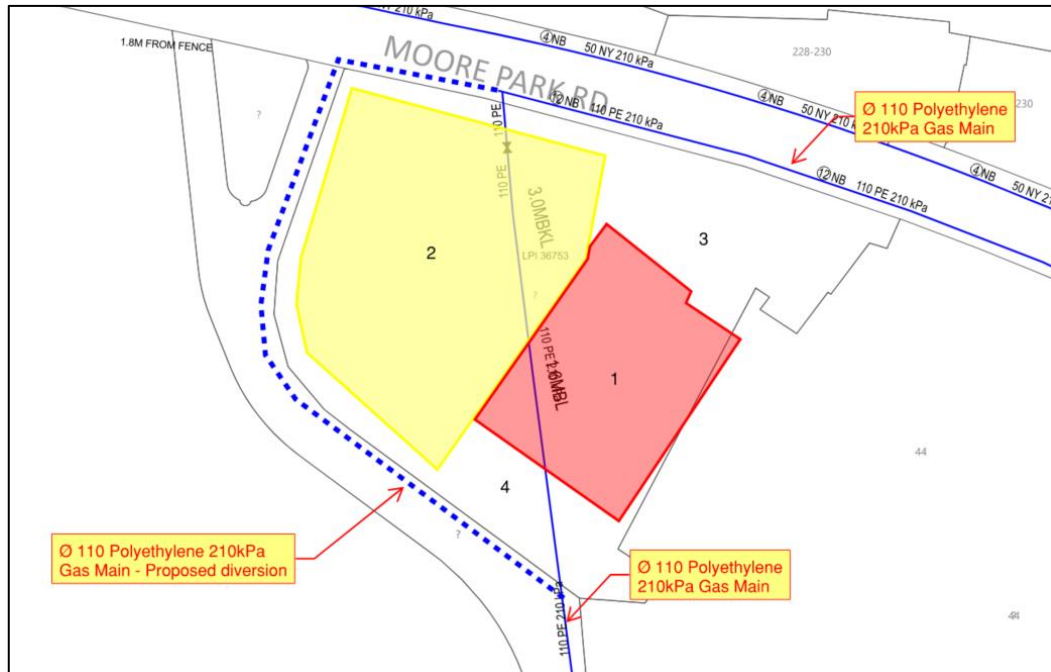


Figure 9: Proposed Jemena gas service diversion

5.6.2 Proposed

A new incoming gas supply connection will be required to service the development. Two proposed options are presented below, in order of preference:

Option 1:

Connect into the diverted 110mm 210kPa medium pressure gas main in Driver Avenue at the southern end of the site. This is subject to consultation with Jemena regarding the gas main diversion.

Option 2:

Connect into the 110mm 210kPa medium pressure gas main in Moore Park Road at the northern end of the site.

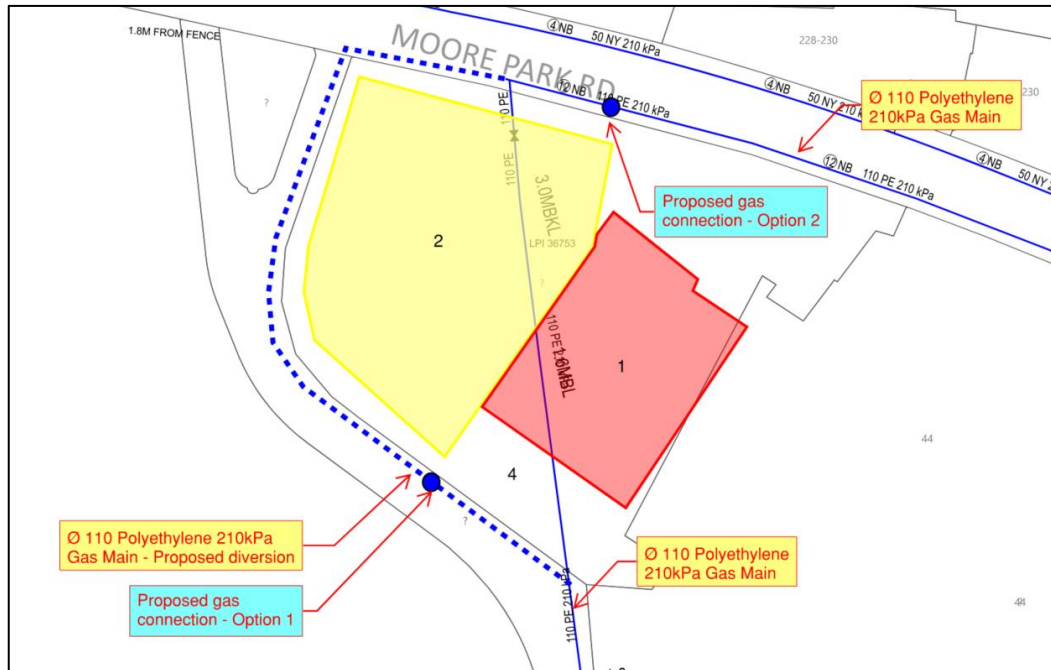


Figure 10: Proposed gas connections

Jemena has advised that generally, both connection options seem feasible and that there appears to be sufficient capacity in the network to support the preliminary estimated loads. Once the development's gas demand is confirmed, a formal application will be submitted to Jemena to determine the feasibility of connecting to their infrastructure and to confirm the full extent of the required works.

5.7 Telecommunications

5.7.1 Existing

There are multiple telecommunications carriers with assets in the area to service surrounding sites. Carriers identified as having assets in the area are:

- AARnet
- NBN
- Next Gen
- Optus
- Superloop
- Telstra
- TPG
- Verizon
- Vocus

AARNet

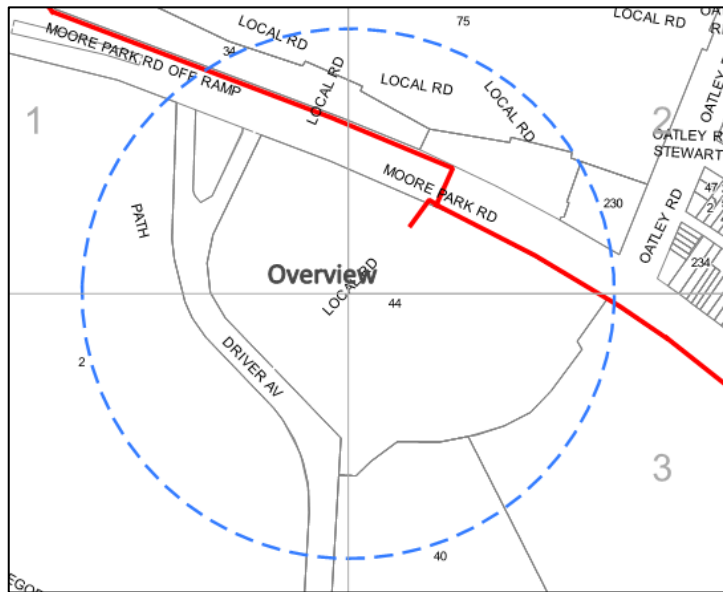


Figure 11: Existing AARNet services

According to DBYD information received in July 2021, the Australian Academic & Research Network (AARNet) has assets along Moore Park Road and encroaches slightly up the northern side of the development side. It is not anticipated that the development will impact these assets.

NBN



Figure 12: Existing NBN services

According to DBYD information received in July 2021, the National Broadband Network (NBN) has assets and a series of service pits along Moore Park Road. It is not anticipated that the development will impact these assets.

Next Gen

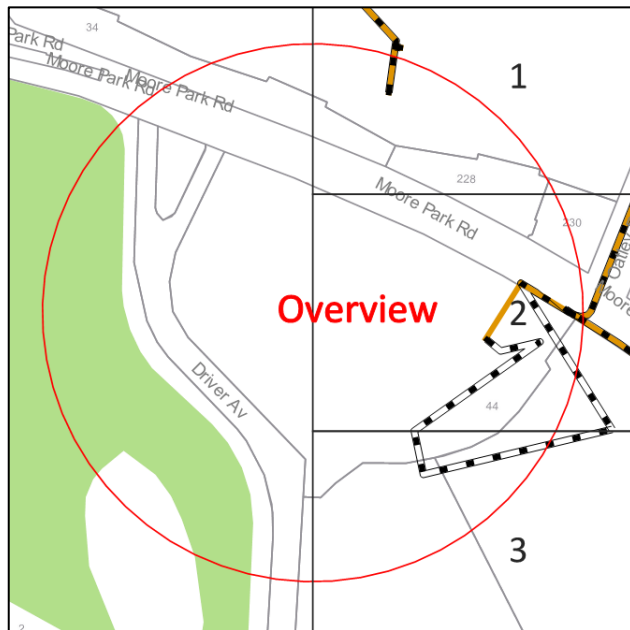


Figure 13: Existing Next Gen services

According to DBYD information received in July 2021, Next Gen has assets towards the east of the development site. It is not anticipated that the development will impact these assets.

Optus

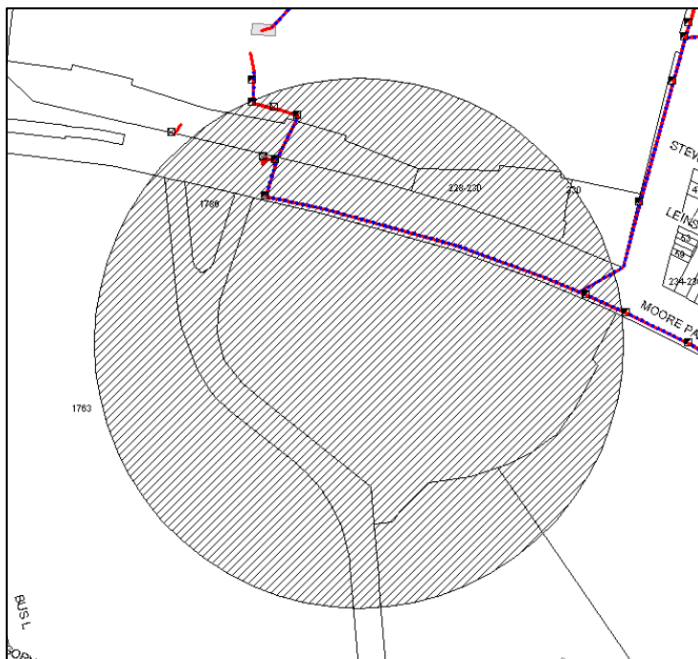


Figure 14: Existing Optus services

According to DBYD information received in July 2021, Optus has assets along Moore Park Road. It is not anticipated that the development will impact these assets.

Superloop

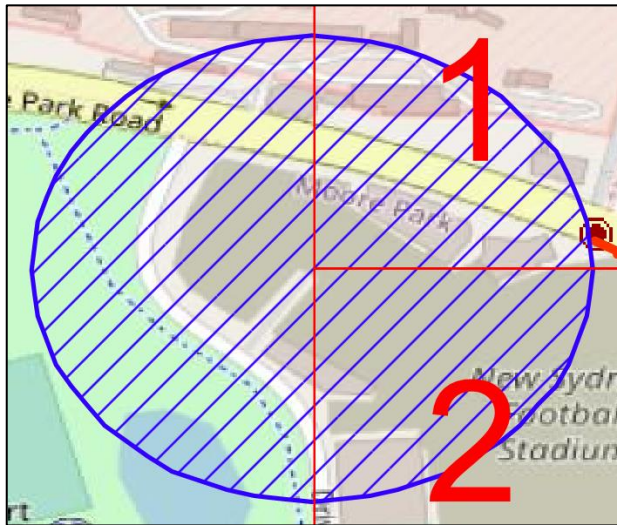


Figure 15: Existing Superloop services

According to DBYD information received in July 2021, Superloop does not appear to have any services within the development site.

Telstra

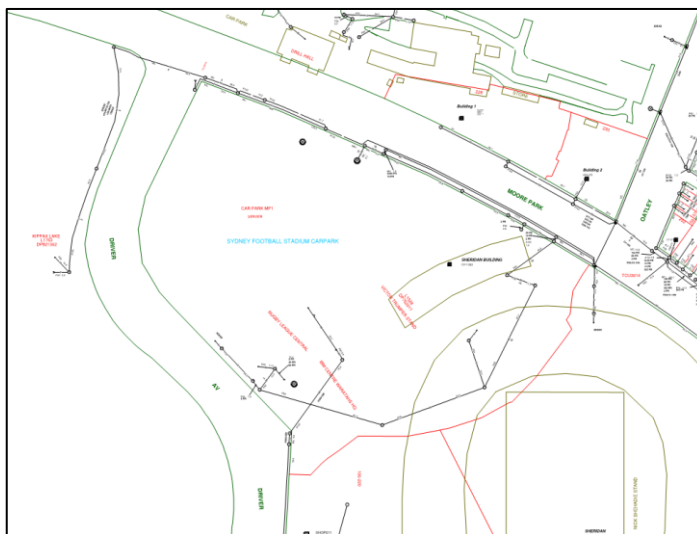


Figure 16: Existing Telstra services #1

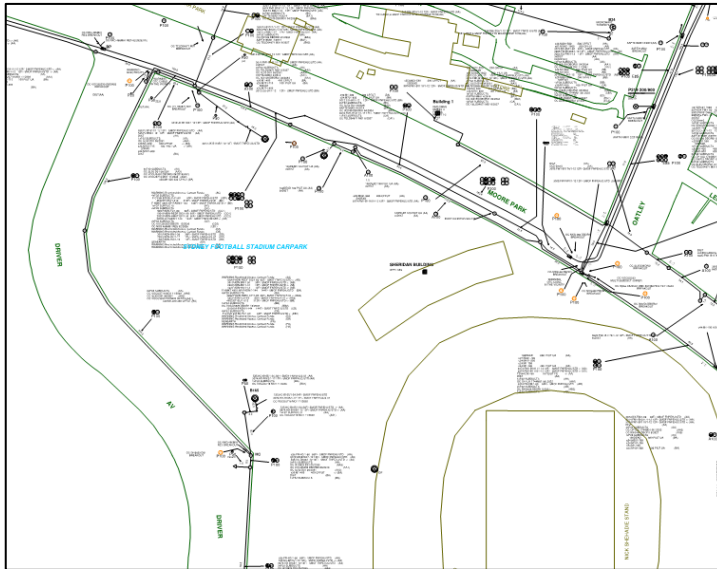


Figure 17: Existing Telstra services #2

According to DBYD information received in July 2021, Telstra has assets and a series of service pits along Moore Park Rd and within the development site.

Telstra's conduits are also likely to be used by other carriers, so any impact on Telstra infrastructure may also affect other carriers.

As part of the demolition process, this infrastructure will need to be protected, and services within the development site will need to be disconnected and removed or relocated in consultation with Telstra.

TPG

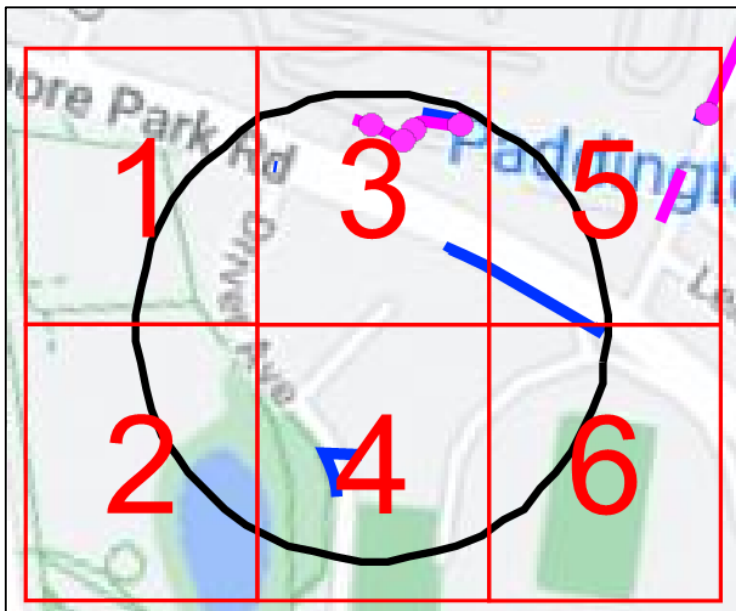


Figure 18: Existing TPG services

According to DBYD information received in July 2021, TPG has assets along Moore Park Road and Driver Avenue. It is not anticipated that the development will impact these assets.

Verizon

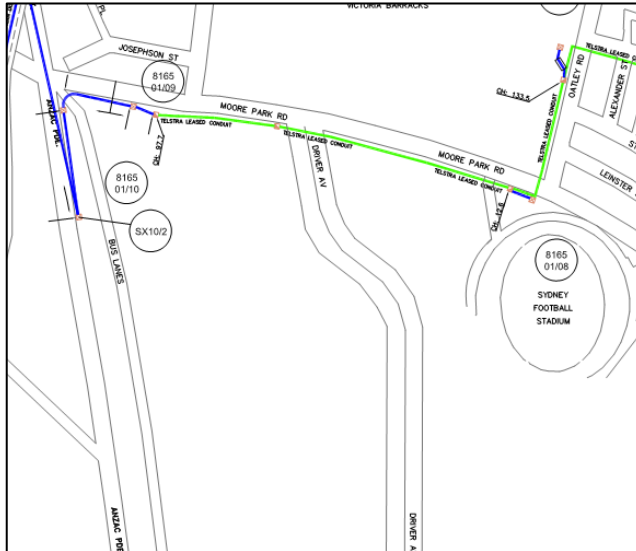


Figure 19: Existing Verizon services

According to DBYD information received in July 2021, Verizon has assets along Moore Park Road. It is not anticipated that the development will impact these assets.

Vocus

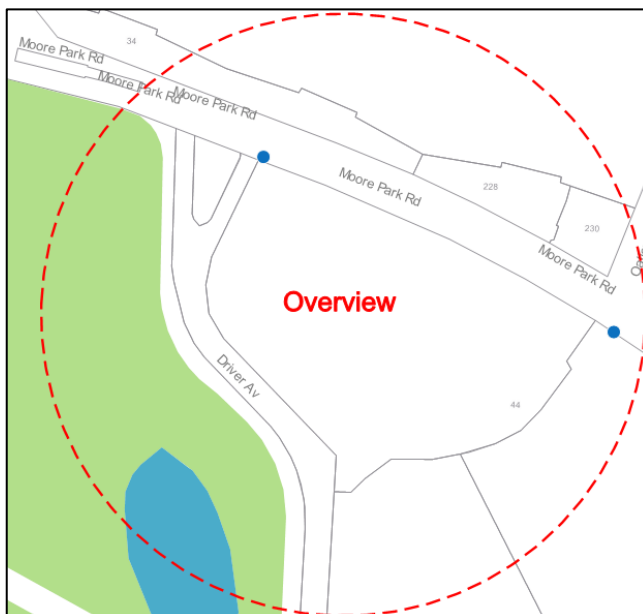


Figure 20: Existing Vocus services

According to DBYD information received in July 2021, Vocus has two pits along Moore Park Road. It is not anticipated that the development will impact these assets.

5.7.2 Proposed

New telecommunications lead-in's will be required for the development. Diverse lead-in's will be required for redundancy and it is anticipated the connection points will be via Moore Park Road and Driver Avenue.

Specific lead-in details will be dependent on the Venues NSW carrier of choice, however, internal conduits and lead-in pathways will be required within the site to the property boundary in order to enable connectivity into the carrier network.

5.8 Electrical Infrastructure

Ausgrid is the electrical services authority responsible for the operation and maintenance of existing electrical infrastructure within the development locality.

Details of existing electrical infrastructure and proposed servicing strategy is provided in the following sections.

5.8.1 Existing Electrical Infrastructure

According to Ausgrid's Dial Before You Dig information, there are existing HV services along Moore Park Rd and partially along the southern side of Driver Avenue. It does not appear that there are existing active LV connections within the development site. This shall be further investigated and confirmed during the next design stage.

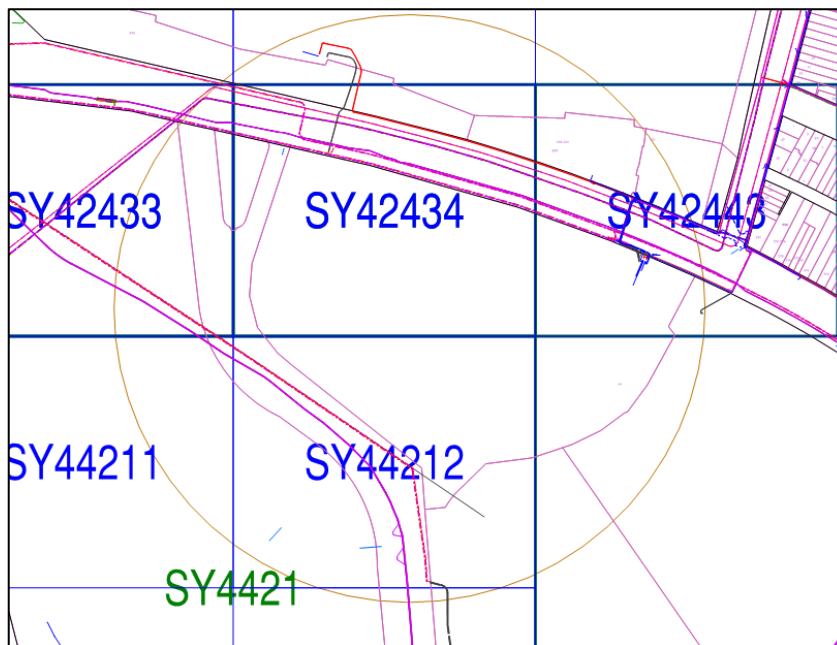


Figure 21: Existing Ausgrid services

An inground utilities site survey by Usher & Company, Reference SFS-USH-00-SV-SU00XX05 Revision 34 dated 23/04/2021 shows live HV feeders traversing North-South across Stage 1 building footprint. Although Ausgrid's DBYD information do not show these feeders, they are likely old HV feeders that belong to Ausgrid.

These feeders will have to be either diverted outside Stage 1 building footprint or encased and protected before the commencement of construction works. This shall be further investigated and confirmed by the L3 designer at the next design stage.

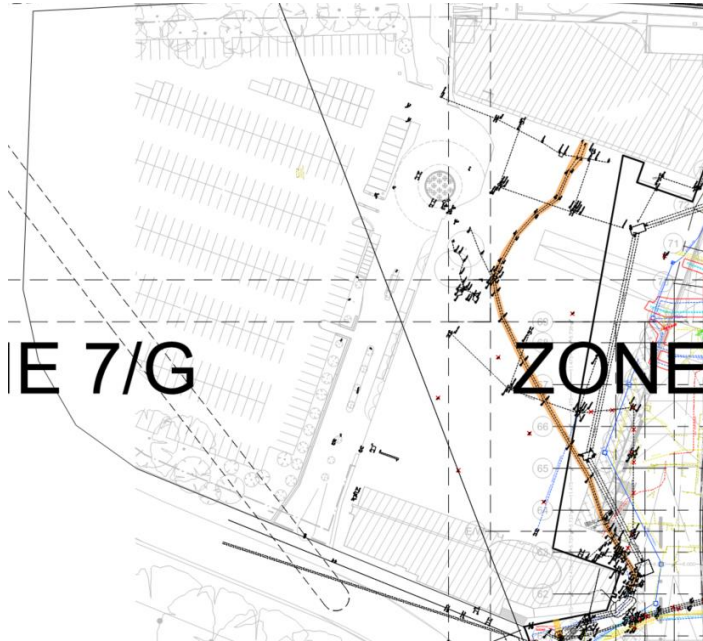


Figure 22: Survey Drawing SFS-USH-00-SV-SU00XX05 Rev 30 by Usher & Company showing existing unidentified HV

5.8.2 Proposed Servicing Strategy

Preliminary assessment of the estimated electrical demand for the development has been conducted to determine the required infrastructure works.

The preliminary calculated maximum demand for each stage including 25% spare capacity is as follows:

Stage 1: 500kVA

Stage 2: 1300kVA

The current proposal is to serve Stage 1 via one 1000kVA kiosk substation, with the remainder 500kVA being a spare capacity to feed Stage 2, which is also proposed to be served via one 1000kVA kiosk substation.

These two kiosk substations are to be located along the boundary of Stage 2 to allow Ausgrid to have unimpeded access 24/7. Alternatively, mini-chamber substations could be considered during the next design stage.

An Accredited Services Provider ASP Level 3 is to be engaged to further develop the above proposed strategy to meet Ausgrid's design requirements and obtain a L3 certified design. Existing HV feeders within Moore Park Rd or Driver Avenue can be utilised, depending on the locations of the new substations and discussions with Ausgrid to determine existing feeders' capacity.

6 Agency Consultations

Consultations have been carried out with key utility providers during the preparation of this report where major diversion, augmentation or protection of the utility appears likely as a direct result of the project based upon our review of the utilities information available. The status of these consultations is outlined below.

Sydney Water

- An initial Sydney Water Infrastructure meeting was held on 21/07/2021 to discuss the proposed connections and impact to existing within proximity of the site. Meeting minutes were recorded and are attached in Appendix B.

Jemena

- Initial Jemena advice (via email) of available capacity and proposed connection points was received on 19/07/2021 and is attached in Appendix C.
- Initial Jemena advice (via email) of the gas main diversion methodology was received on 21/07/2021 and is attached in Appendix C. This includes a checklist identifying the roles and responsibilities of each party during the site visit phase of the diversion process.

Ausgrid

- Following review of the DBYD information, it appears the site has sufficient surrounding electrical utilities to service the new development. As such applications are typically deferred to the design development stage of the project.

Telecommunication Utilities

- Following review of the DBYD information, it appears the site has sufficient surrounding telecommunications utilities to service the new development. As such applications are typically deferred to the design development stage of the project.

7 Conclusion

Available survey, utilities records and DBYD information for the site and surrounding area has been reviewed in the context of the proposed Precinct Village and Car Park development.

Utilities existing within and around the Precinct have been identified and assessed, and it has been determined that enabling works will be required to facilitate preparation of the site.

As part of the preliminary investigations Arup has been in contact with the key utility services providers to initiate the infrastructure design process based on the scheme as it is developing.

From early discussions and review of the existing work around utilities to the subject site, it is expected that some amplification works may be required to the existing sewer infrastructure to facilitate servicing of the new development and to limit any impact the new development has on the existing infrastructure. The extent of any potential amplification works is to be confirmed with utilities service providers during the design stage of the project.

The existing HV live feeders impacted by the Stage 1 works will need to be diverted or protected before commencement of construction. These requirements will be defined by the L3 designer during the design stage of the project.

Noting the context of the new works with respect to the existing utilities, it is proposed to appoint a Level 3 ASP designer and Sydney Water, Water Services Coordinator early in the project design phases to limit the impact of any approval risk.

The potential to connect to existing private precinct infrastructure within the vicinity of the proposed development will be further investigated during the detailed design stage with aim to rationalise utilities connections where possible.

Key mitigation measures to ensure existing utility services are adequately considered and protected as part of the works are summarised below. Prior to construction, this process will be further developed by the appointed contractor to suit the staging and construction methodology plan for the project.

Mitigation Measure	Status
Desktop investigation and review of existing services using DBYD information and site observations.	Complete.
Initial contact with utilities providers to understand the general feasibility of proposed connections and diversions.	Complete.
Obtain utility company as built records where possible.	To be completed by contractor during next design phase.
Discuss requirements for the protection of heritage-listed assets with utility providers and heritage consultant.	To be completed by contractor during next design phase. Refer to the Heritage Impact Statement by Artefact (July 2021) for further information on the heritage

	impacts of the proposed development on Busby's Bore and other heritage values on and adjoining the site.
Utility providers will be consulted to obtain any necessary consents to perform construction work in their vicinity and discuss necessary diversion and/or protection measures and connections for the proposed works	To be completed by contractor as part of detailed design and construction phase.
Intrusive investigations will be undertaken where considered necessary to locate utilities and investigate unknown services and/or potentially redundant services more accurately.	To be completed by contractor during construction phase.
Utility technical and hazard requirements will be incorporated into the design and construction documentation.	To be completed as part of design development and contractor during construction phase.
Safe work methods statements and inspection and test plans will be prepared by accredited contractors.	To be completed by contractor during construction phase.
Pre-start work checklists will be developed and implemented.	To be completed by contractor during construction phase.
Field safety inspectors will be present during critical works as determined by utility providers.	To be completed by contractor during construction phase.

Table 3 – Key Utilities Protection Mitigation Measures

Appendix A: DBYD Information






























































The following information has been obtained from a Dial Before You Dig Search capturing the extent of the proposed development and area surrounding the site.

Sydney Water

Guide to reading Sydney Water DBYD Plans



Legend

Sewer		Property Details	
Sewer Main (with flow arrow & size type text)		Boundary Line	
Disused Main		Easement Line	
Rising Main		House Number	
Maintenance Hole (with upstream depth to invert)		Lot Number	
Sub-surface chamber		Proposed Land	
Maintenance Hole with Overflow chamber		Sydney Water Heritage Site (please call 132 092 and ask for the Heritage Unit)	
Ventshaft EDUCT			
Ventshaft INDUCT			
Property Connection Point (with chainage to downstream MH)			
Concrete Encased Section			
Terminal Maintenance Shaft			
Maintenance Shaft			
Rodding Point			
Lamphole			
Vertical			
Pumping Station			
Sewer Rehabilitation			
Pressure Sewer		Water	
Pressure Sewer Main		WaterMain - Potable (with size type text)	
Pump Unit (Alarm, Electrical Cable, Pump Unit)		Disconnected Main - Potable	
Property Valve Boundary Assembly		Proposed Main - Potable	
Stop Valve		Water Main - Recycled	
Reducer / Taper		Special Supply Conditions - Potable	
Flushing Point		Special Supply Conditions - Recycled	
Vacuum Sewer		Restrained Joints - Potable	
Pressure Sewer Main		Restrained Joints - Recycled	
Division Valve		Hydrant	
Vacuum Chamber		Maintenance Hole	
Clean Out Point		Stop Valve	
Stormwater		Stop Valve with By-pass	
Stormwater Pipe		Stop Valve with Tapers	
Stormwater Channel		Closed Stop Valve	
Stormwater Gully		Air Valve	
Stormwater Maintenance Hole		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	

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)

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)

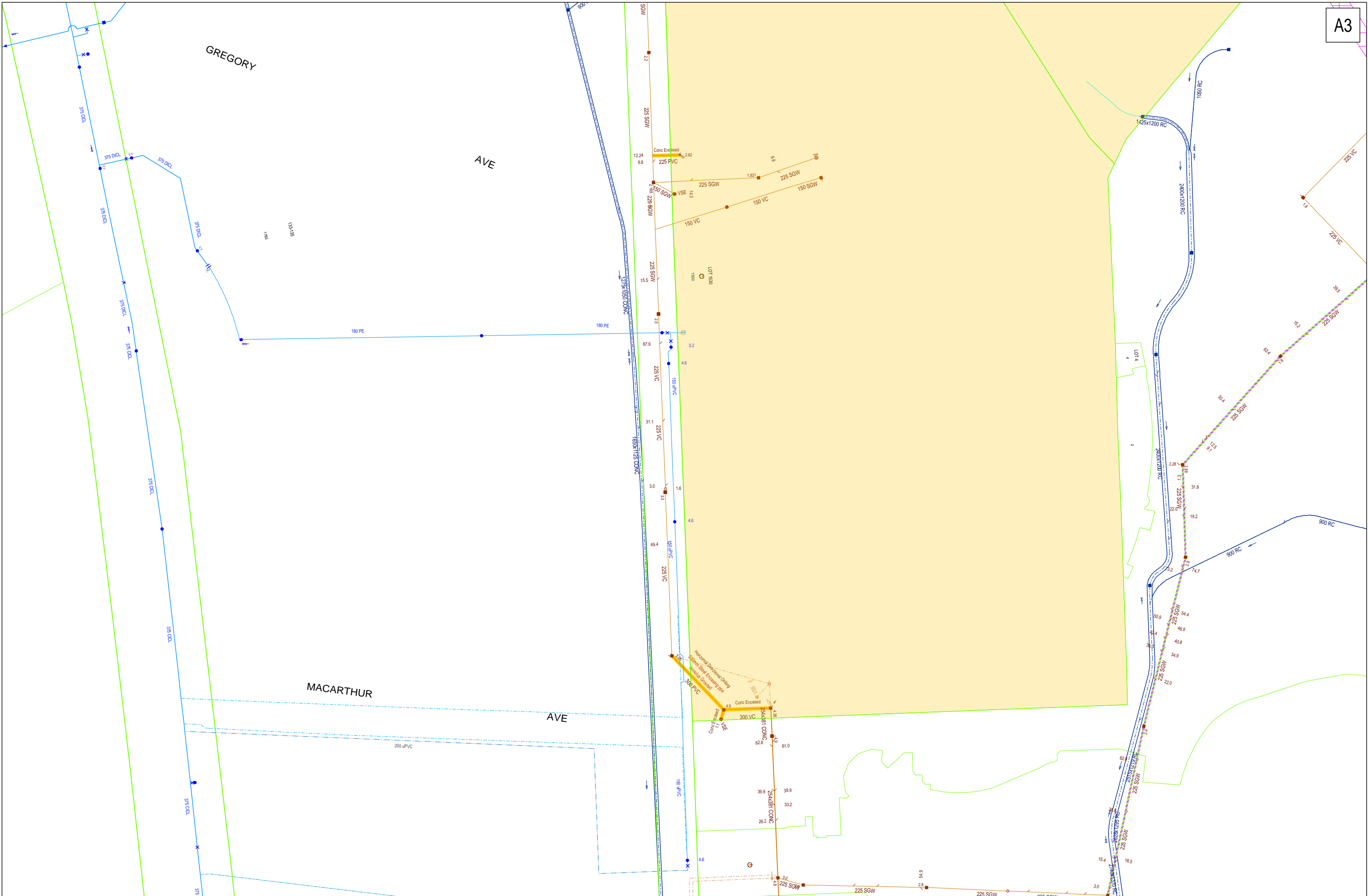
Further information and guidance is available in the Building Development and Plumbing section of Sydney Water's website at www.sydneywater.com.au, where you will find the following documents under 'Dial Before You Dig':

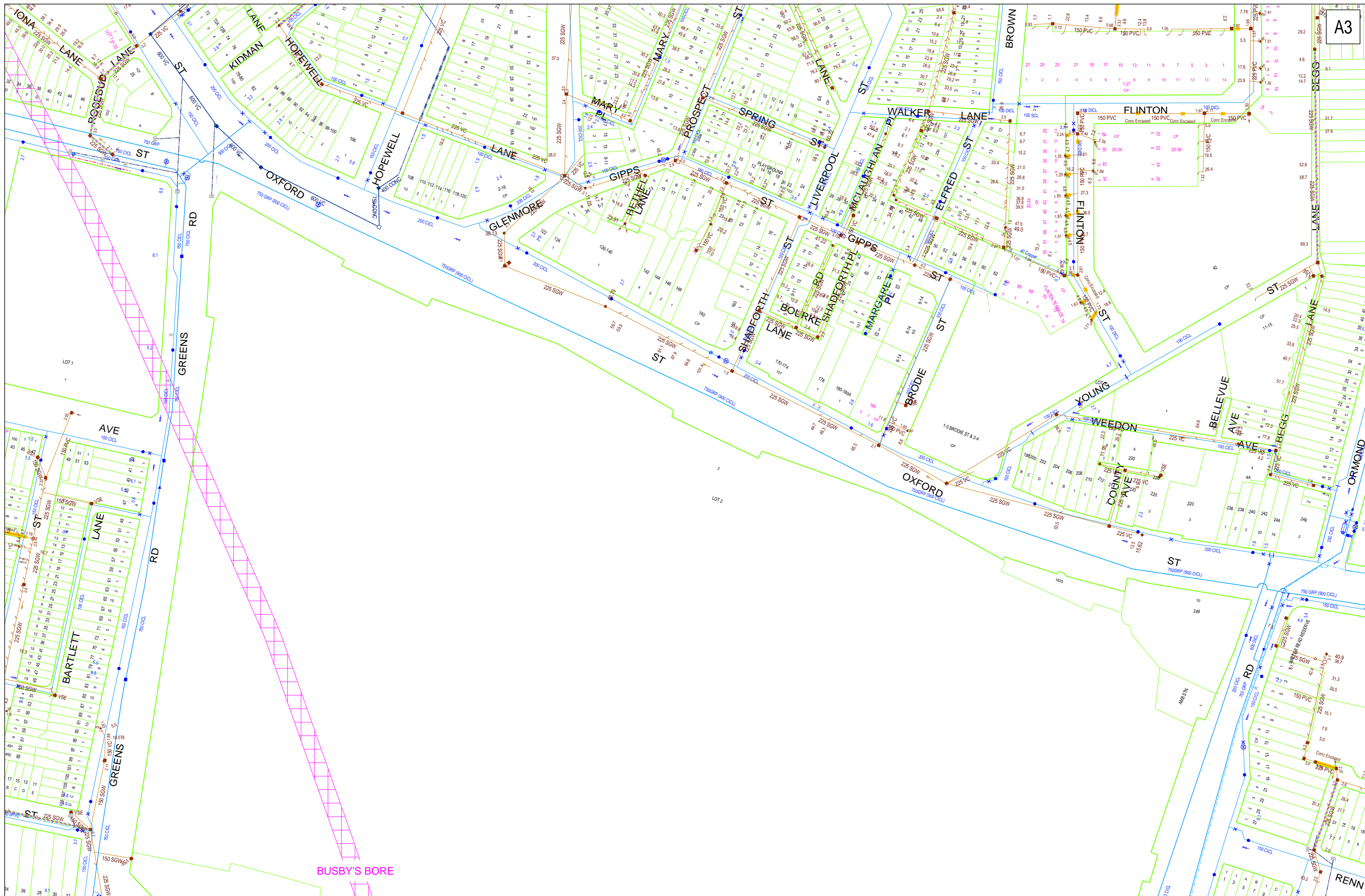
- Avoid Damaging Water and Sewer Pipelines
- Water Main Symbols
- Depths of Mains
- Guidelines for Building Over/Adjacent to Sydney Water Assets
- Clearances Between Underground Services

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.



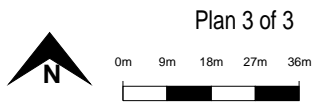


DBYD Address:
44 Driver Avenue
Moore Park NSW 2021

DBYD Job No: 30047003
DBYD Sequence No: 200256997

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SYDNEY WATER CORPORATION

Scale: 1:1500
Date of Production: 05/07/2021



Jemena

Assets Affected

This information is only valid for 28 days from the date of issue

In reply to your enquiry, there are **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 information below and the legend attachment.

Please note that you have a duty of care to ensure that Jemena gas mains are not compromised or damaged during any future development or construction work.

Excavation Guidelines

It is essential the location of gas pipe/s are confirmed by carefully pot-holing by hand excavation prior to proceeding with mechanical excavation in the vicinity of gas pipes. If you cannot locate the gas main, contact the local depot.

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.safework.nsw.gov.au

DBYD Administration 1300 880 906





















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. In accordance with the Work Near Underground Assets Guideline published in 2007 by Work Cover Authority, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.







In case of Emergency Phone 131 909 (24 hours)

Admin 1300 880 906

Network Mains

	Proposed New Main (coloured as per kPa)
	Proposed Isolate (coloured as per kPa)
	Unknown kPa
	2kPa Low Pressure gas main
	7kPa Low Pressure gas main
	30kPa Medium pressure gas main
	100kPa Medium Pressure gas main
	210kPa Medium Pressure gas main
	300kPa Medium Pressure gas main
	400kPa Medium Pressure gas main
	1050kPa High Pressure gas main
	3500kPa High Pressure gas main
	7000kPa High Pressure gas main
	>7000kPa Transmission pipeline
	Isolated Service - Former Med/High Pressure
	Isolated Steel Main - Treat as High Pressure
	Conduit or Casing
100 PVC	Size & Material (see conduit material codes)
	Critical Main - Treat as High Pressure (Main coloured as per kPa)
	Exposed Main section EXPOSED
	Shallow Main section: see Protection Code below, no code assume no protection SHALLOW-SP
SP	Steel Plate
PP	PE Plate
CS	Concrete Slab
CE	Concrete Encased
UNK	Unknown Type

Network Assets

	Siphon
	Network Valve
	High Pressure Main Line Valve (>=1050kPa)
	High Pressure Automatic Line Break Valve (>1050kPa)
	Distribution Regulator Set (=<1050kPa)
	High Pressure Regulating Station (>1050kPa)

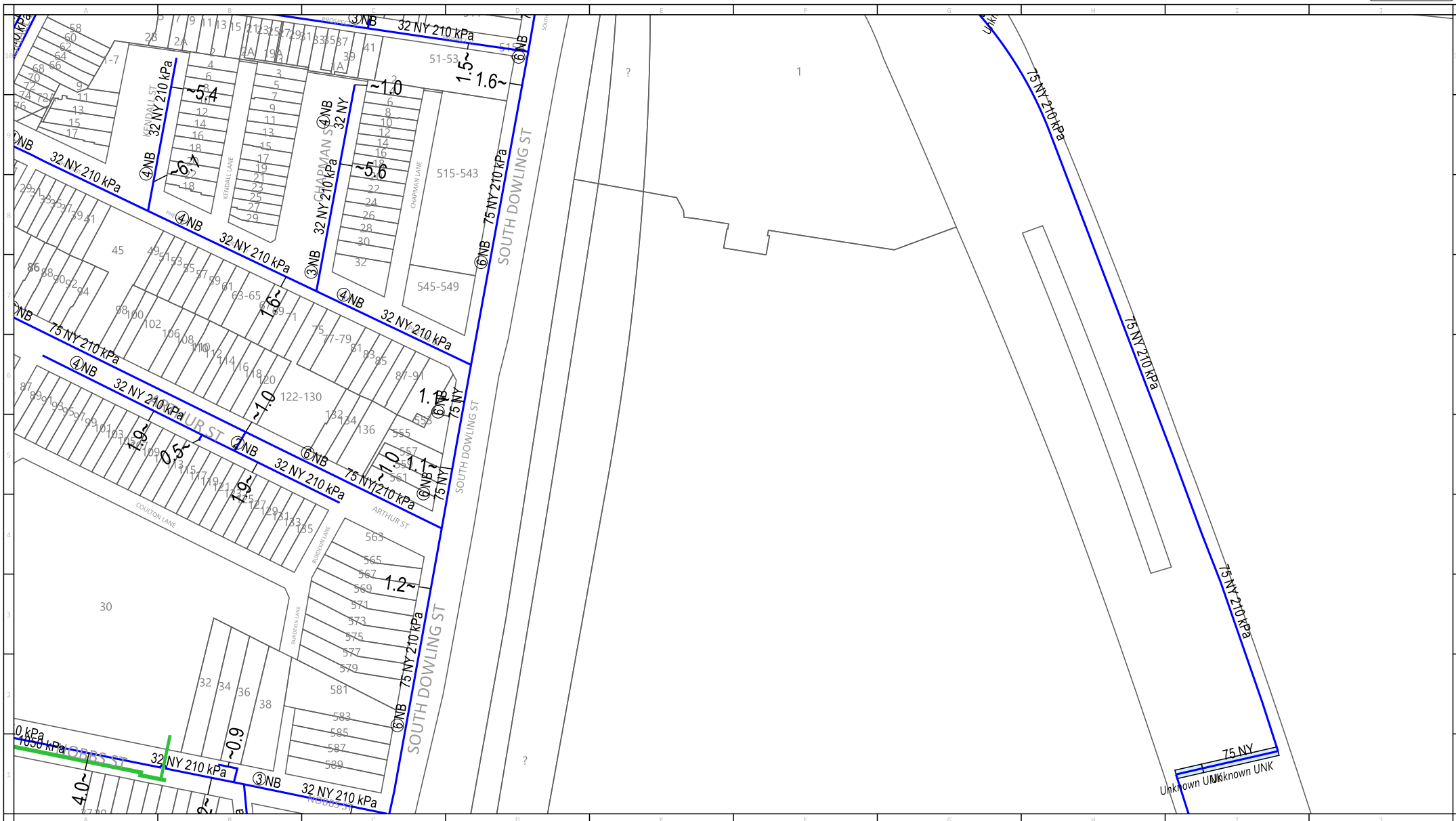
Annotations

Pipe and Conduit Material Codes

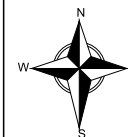
NY	Nylon	NB	Nominal Bore – Cast Iron
PE	Polyethylene	ST	Steel
P/PL	Plastic (undefined)	C/CO	Copper
PVC	Polyvinyl Chloride		

Pipe code combinations and dimension references

⑥NB 50MM NY	50mm Nylon main inserted into 6 inch (Nominal Bore) Cast Iron pipe
⑤0MM 32MM NY	32mm Nylon main inserted into 50mm Steel pipe
~1.5	Distance (in metres) of main from Boundary Line (MBL)
MBK	Distance in Metres Back of Kerb
MKL	Distance in Metres from Kerb Line
MEBL	Distance in Metres from Eastern Boundary Line (North/South/West)
MCL	Distance in Metres from Centre Line of Road
MFL	Distance in Metres from Fence Line



For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.



Scale: 1:2000

Issue Date: 05/07/2021

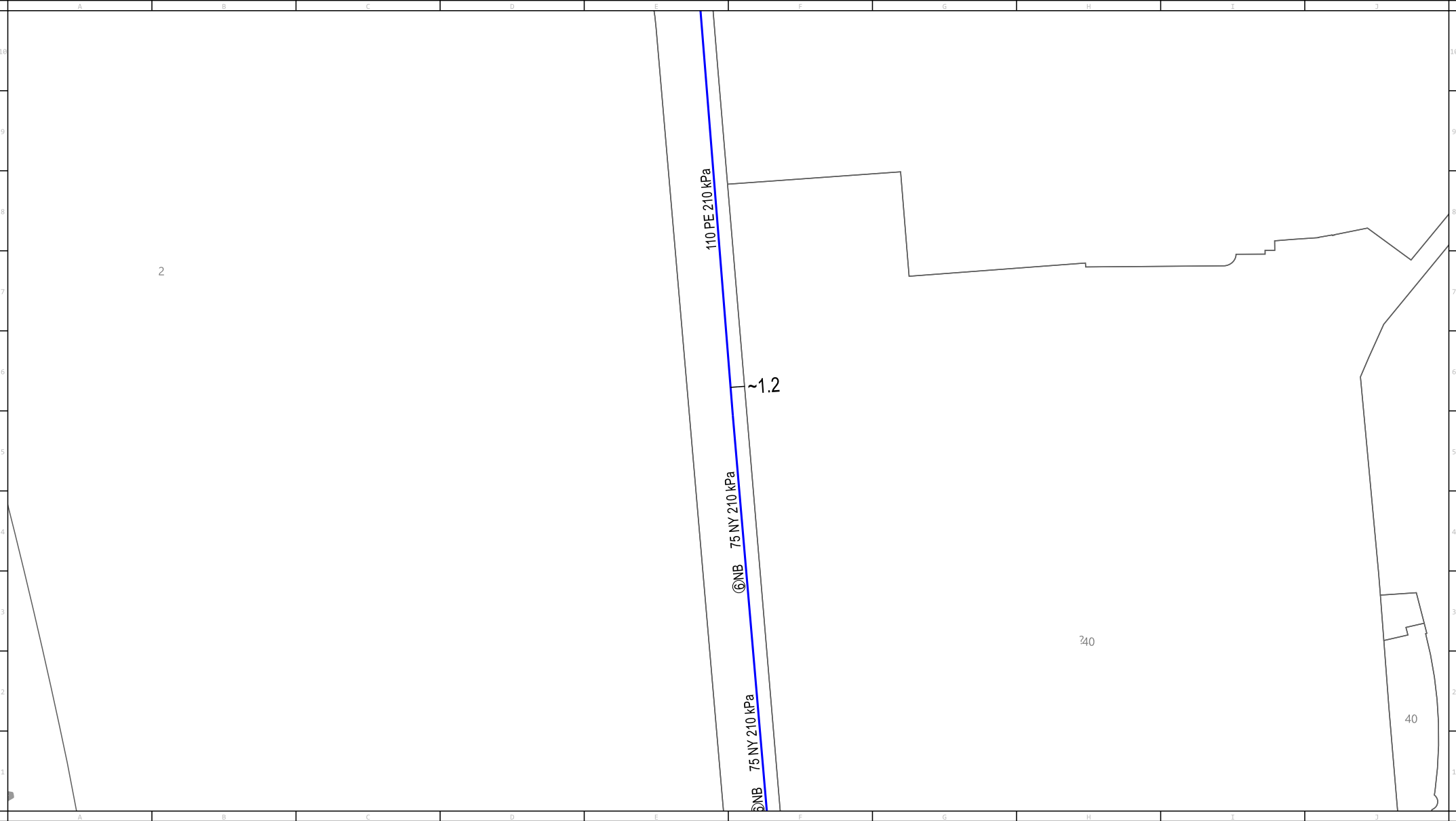
DBYD Seq No: 200257005

DBYD Job No: 30047003

0m 10m 20m 30m 40m 50m 60m 70m 80m



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 diagrammatic 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.



For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

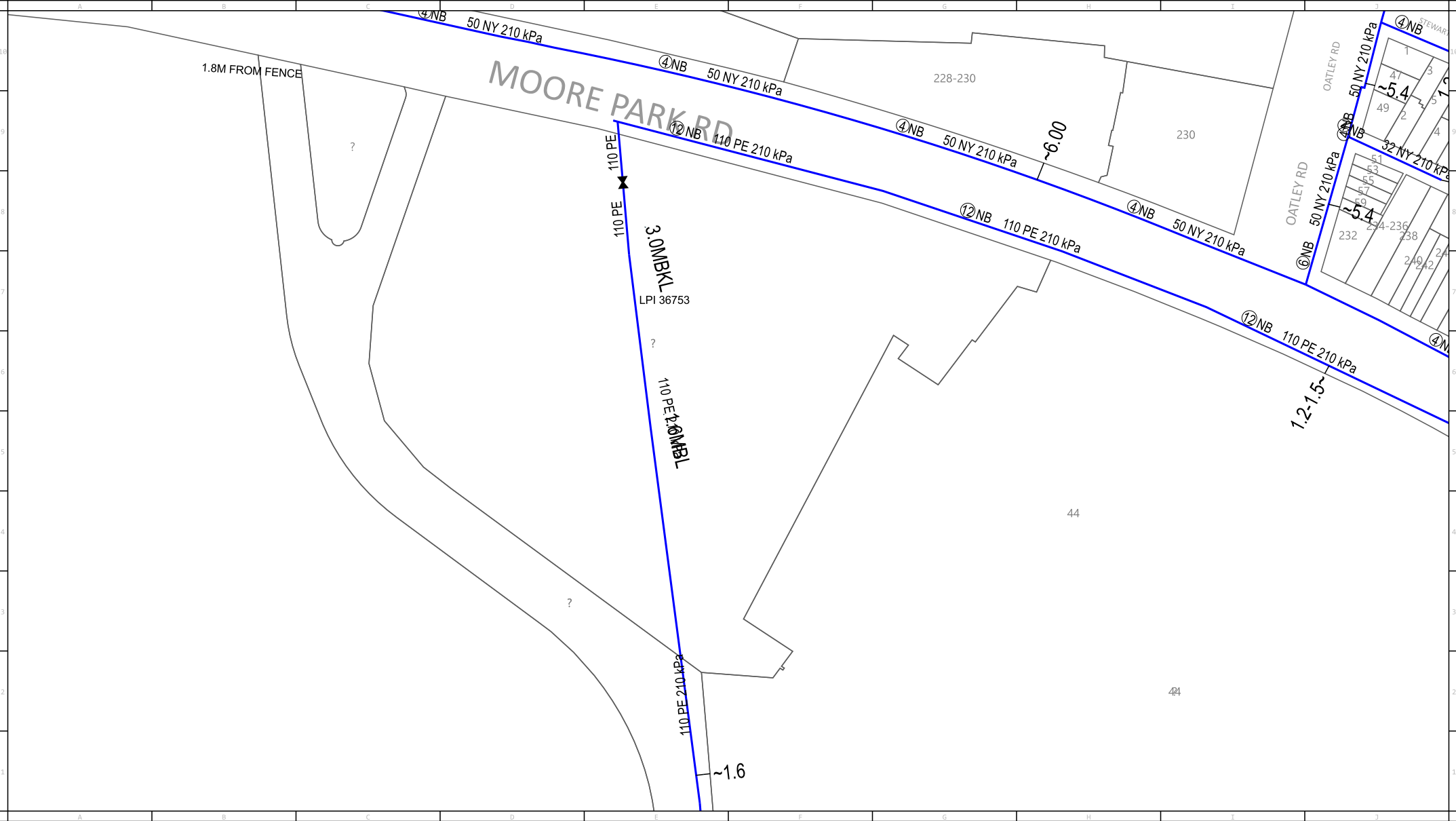


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Issue Date: 05/07/2021
DBYD Seq No: 200257005
DBYD Job No: 30047003

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For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.



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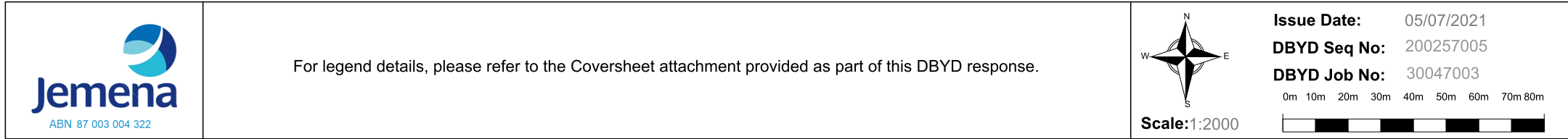
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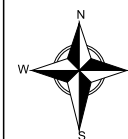
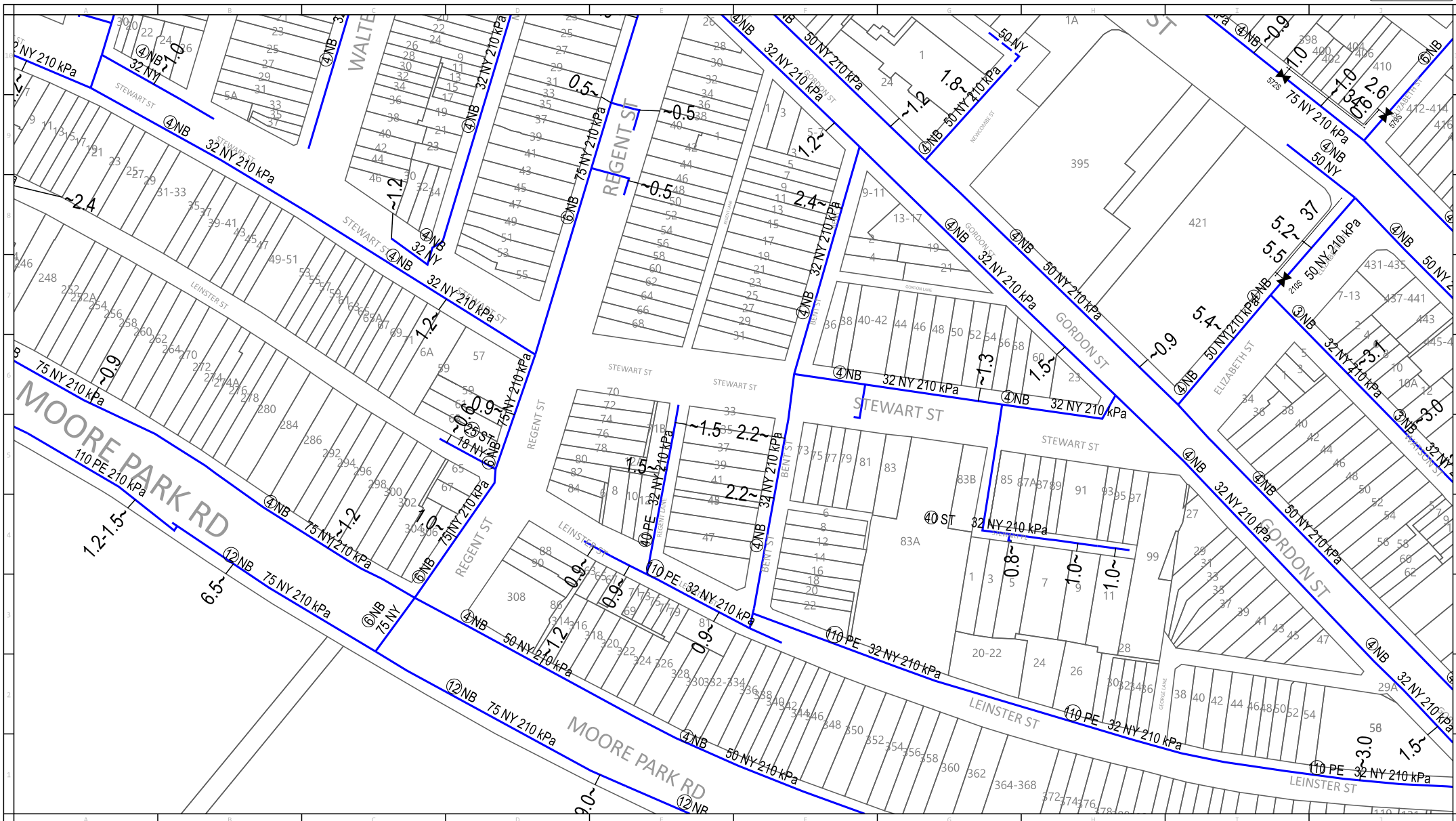
DBYD Job No: 30047003

0m 10m 20m 30m 40m 50m 60m 70m 80m

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 diagrammatic 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.



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City of Sydney

Survey Infrastructure – Permanent Survey Marks

Attention: You must read and understand the information below prior to commencement of design or construction works on affected sites

Important

Due to the nature and the age of Survey Infrastructure and records, the accuracy and/or completeness of the City's information cannot be guaranteed. The City does not make any representation or give any guarantee, warranty or undertaking as to the accuracy, currency, completeness, effectiveness or reliability of the information.

You should still undertake a thorough site examination for visible structures through field survey including the use of appropriately qualified personnel and equipment.

This information has been generated by an automated system based on the information specified by the Enquirer. It is the Enquirer's responsibility to ensure that the work site has been properly identified and is accurately reflected in the information provided by the City. If the information does not match the work site, resubmit your enquiry for the correct site.

To the extent of any inconsistency, the information contained in this document will prevail over any other information provided to you by the City and Dial Before You Dig.

Asset Ownership

Survey Infrastructure assets within the City's local government area have been placed by a number of organisations including Federal, State & Local Government bodies and other public or private entities. The City provides available information on Survey Infrastructure assets irrespective of ownership. The City does not explicitly or implicitly claim to own all assets indicated on the plans.

Identification

Mapped Survey Infrastructure within the City is typically a "Permanent Survey Mark" as prescribed in Schedule 4 of the Surveying & Spatial Information Regulation 2017 and may take one of three forms:

- A numbered brass disc set into concrete in the kerb, gutter or footpath (Type 1, Type 2 or Type 16 State Survey Mark [SSM])
- A stainless steel pin or brass bolt set into concrete under a numbered steel cover box in the footpath or carriageway (Type 4 Urban Type [also known as PM])
- A small stainless steel disc and pin set into concrete in the kerb, gutter or footpath (Type 15 State Survey Mark [SSM Urban])

Sample images are included at the end of this form to aid identification.

If any such mark identified on the supplied mapping cannot be found on site please notify Surveyors@cityofsydney.nsw.gov.au prior to commencing work for further assistance.

In addition to mapped Survey Infrastructure, there may be unmapped marks and/or cadastral reference marks in one of the forms prescribed in Schedules 2 and 3 of the Surveying & Spatial Information Regulation 2017. These are shown on Deposited Plans available from NSW Land & Registry Services.

Legal Obligations

All Survey Infrastructure (including cadastral reference marks) are protected under Section 24 of the Surveying & Spatial Information Act 2002 and penalties may be levied for unlawful damage or destruction. For further details visit <http://spatialservices.finance.nsw.gov.au/>.

Clearances

Due to the nature of Survey Infrastructure and its sensitivity to disturbance, the following minimum clearances must be adhered to:

- 1000mm when operating pneumatic tools (jackhammers, vibrating plates etc.)
- 1500mm when operating mechanical excavators

Duty of Care

You must inspect your site for and identify existing Survey Infrastructure prior to commencement of works. You should divert any works to avoid disturbing them. If Survey Infrastructure is still at risk of being disturbed or destroyed, then in accordance with the Surveying & Spatial Information Act 2002, you must engage a registered surveyor to undertake necessary works as per Surveyor-General's Direction No.11 "Preservation of Survey Infrastructure".

Further to this, in the case of City alignment marks, the Survey Infrastructure may then need to be reinstated by the City's Surveyors and a fee will be charged in accordance with the City's Fees and Charges.

Damage to Mapped Survey Infrastructure

Damage to mapped Survey Infrastructure must be reported immediately to 02 9265 9333 or council@cityofsydney.nsw.gov.au anytime, any day.

Enquirers and other parties undertaking works will be held responsible for all damage that occurs or impacts Survey Infrastructure as a result of the works. This includes interfering with Survey Infrastructure and conducting unauthorised modification works.

The City reserves all rights to recover compensation for any Loss (including consequential losses).

Relevant Approvals

Relevant approval must be obtained prior to commencement of works on or near Survey Infrastructure. The Enquirer is responsible to ensure that all requisite approvals have been obtained prior to works and that all works are undertaken in accordance with the requirements of any approval.

There is a variety of legislation, regulation and City policies that govern requirements for approval to install, remove or modify Survey Infrastructure. These requirements will also vary depending on the type of asset. Additional guidance may be provided in subsequent sections of this document. This is intended for guidance purposes only and is not comprehensive. It should also be acknowledged that standards may vary from time to time and the information supplied regarding approvals or standards may be out of date or superseded.

User Risk

The Enquirer acknowledges that they use the information at their own risk. In consideration of the information provided by the City to the fullest extent permitted by law:

- 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. To the extent that those statutory guarantees cannot be excluded, the liability of the City to the Enquirer is limited to the supplying of the information again;
- in no event will the City be liable for, and the Enquirer releases the City 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;
- the Enquirer will indemnify the City against any Loss arising from or in connection with the information and the works; and
- the Enquirer assumes all risks associated with the use of the Dial Before You Dig and City websites, including risk to the Enquirer's computer, software or data being damaged by any virus, and release and discharge the City from all Loss which might arise in respect of your use of the websites.

Glossary

“City” means The Council of the City of Sydney

“Enquirer” is the person(s) or organisation(s) requesting or using the information.

“Loss” includes 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).

“Survey Infrastructure” means any mark of the types described in Schedules 2, 3 and 4 of the Surveying & Spatial Information Regulation 2017

“Permanent Survey Mark” means any mark of the types described in Schedule 4 of the Surveying & Spatial Information Regulation 2017

References

Surveying & Spatial Information Act 2002

<https://www.legislation.nsw.gov.au/#/view/act/2002/83/full>

Surveying & Spatial Information Regulation 2017

<https://www.legislation.nsw.gov.au/#/view/regulation/2017/486>

NSW Land & Registry Services website

<http://www.nswlrs.com.au/>

NSW Spatial Services website

<http://spatialservices.finance.nsw.gov.au/>

Surveyor General's Directions No.11 “Preservation of Survey Infrastructure”

https://www.spatial.nsw.gov.au/_data/assets/pdf_file/0005/217094/Direction_11.pdf

City of Sydney Revenue Policy – Fees & Charges

https://www.cityofsydney.nsw.gov.au/_data/assets/pdf_file/0015/301515/Fees-and-charges.pdf

Sample Identification Images



1) SSM52691 – Newtown



2) SSM49303 – Alexandria



3) PM150397 – Sydney



4) PM54382 – Alexandria



5) Cover Box - Darlinghurst

Water Assets – Stormwater Structures, Conduits, Gross Pollutant Traps, Raingardens and Bioswales

Attention: You must read and understand the information below prior to commencement of design or construction works on affected sites

Important

Due to the nature and the age of stormwater assets and records, the accuracy and/or completeness of the City's information cannot be guaranteed. The City does not make any representation or give any guarantee, warranty or undertaking as to the accuracy, currency, completeness, effectiveness or reliability of the information.

You should still undertake a thorough site examination for visible structures through field survey including the use of appropriately qualified personnel and equipment.

This information has been generated by an automated system based on the information specified by the Enquirer. It is the Enquirer's responsibility to ensure that the work site has been properly identified and is accurately reflected in the information provided by the City. If the information does not match the work site, resubmit your enquiry for the correct site.

To the extent of any inconsistency, the information contained in this document will prevail over any other information provided to you by the City and Dial Before You Dig.

Asset Ownership

Stormwater assets within the City's local government area are owned by a number of organisations including Sydney Water Corporation, Roads and Maritime Services and other public or private entities. The City provides available information on stormwater assets irrespective of ownership. The City does not explicitly or implicitly claim to own all stormwater assets indicated on the plans.

Combined Storm/Sewer systems

There are a number of legacy combined stormwater/sewer systems within the City's local government area. These assets are owned by Sydney Water Corporation and are not depicted on City plans. Information regarding combined Storm/Sewers should be obtained from Sydney Water Corporation.

Data limitations

Diagrammatic information regarding the existence of stormwater assets is provided in accordance with the conditions and limitations stated in the City's documentation. It is the responsibility of the Enquirer to undertake appropriate site investigations to confirm details such as asset existence, ownership, location, type, dimensions, and levels.

The City has not undertaken survey to determine the position of its assets in relation to property boundaries. It is the responsibility of the Enquirer to ascertain the position of stormwater assets in relation to property boundaries.

Stormwater Quality Assets

Stormwater quality devices such as Gross Pollutant Traps, Raingardens and Bioswales can be impacted by construction at significant distances from these assets through actions such as insufficient erosion and sediment control. It is the responsibility of the Enquirer to ensure that construction activity does not impact stormwater quality assets.

Duty of Care

When working in the vicinity of stormwater assets, you have a “duty of care” that must be observed.

Works or proposed works should be planned to allow for minimal impact and appropriate protection of stormwater assets.

Locating Stormwater Assets

It is the Enquirer’s responsibility to:

- Request plans of stormwater assets for a particular location at a reasonable time before work begins. If you have any doubts as to the exact location of stormwater assets, we strongly recommend that you engage the service of a suitably qualified locator; and
- Visually locate stormwater assets. For buried assets this should be done by hand digging or using non-destructive methods such as water jetting (pot holing) where construction activities may damage or interfere with stormwater assets.

Damage of Assets

Damage to stormwater assets must be reported immediately to the owner of the stormwater asset. For City owned stormwater assets, please contact 02 9265 9333 or council@cityofsydney.nsw.gov.au anytime, any day.

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Relevant Approvals

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Roads and Maritime Services

Legislation

Survey marks are protected under the *Surveying and Spatial Information Act 2002 (NSW) Section 24*. The following penalties and orders apply for unauthorised removal, damage or disturbance of survey marks:

- Maximum penalty of 25 units, currently **\$2,750** per mark; and
- up to **\$10,000** per mark in compensation to the Surveyor-General towards the cost of reinstatement of each survey mark; and
- up to **\$10,000** per mark in compensation to any other person towards any loss or damage suffered by that person as a consequence of the offence.

If works are likely to impact a survey mark, an application under the *Surveying and Spatial Information Regulation 2017 Clause 90* must be lodged with the Surveyor-General.

Why are survey marks important?

Survey marks are a State asset and provide a wealth of important information to a wide range of people in the community. They are used to support the surveying of property boundaries and easements, and are important for engineering, road building, mapping and other land surveys.

The loss of survey marks can significantly degrade the integrity of the legal property boundaries and impact on the costs of development projects that depend upon position and height.

How do I preserve survey marks?

Surveyor-General's Direction No.11 – Preservation of Survey Infrastructure provides directions on how to comply with the Legislation.

You can find the Direction on the following link:
http://spatialservices.finance.nsw.gov.au/_data/assets/pdf_file/0005/217094/SG_Directon_No11_Final4.pdf

A Registered Land Surveyor will be able to provide advice about the preservation of survey infrastructure. A list of Registered Land Surveyors is available from the Board of Surveying and Spatial Information website:
http://www.bossi.nsw.gov.au/about/find_a_registered_surveyor

Additional information to assist with best practice guidelines for road infrastructure development can be found in Roads and Maritime Services QA Specification G71 – *Construction Surveys* by following the link: <http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/specifications/g071.pdf>

Types of survey marks

There are many types of survey marks used for various purposes. Many are buried and may only be identified by a Registered Land Surveyor. Some examples of common survey marks can be seen below.



More information

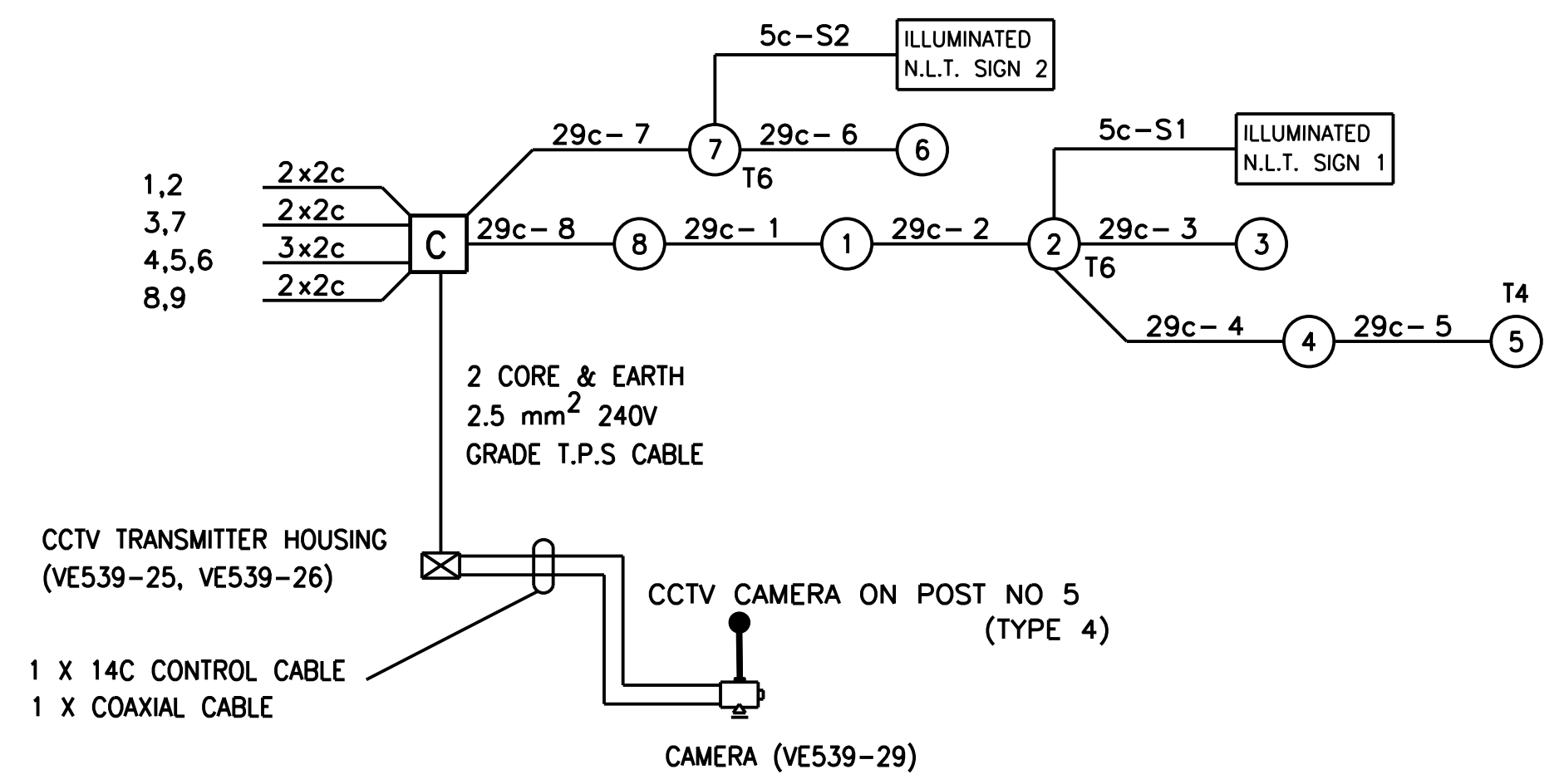
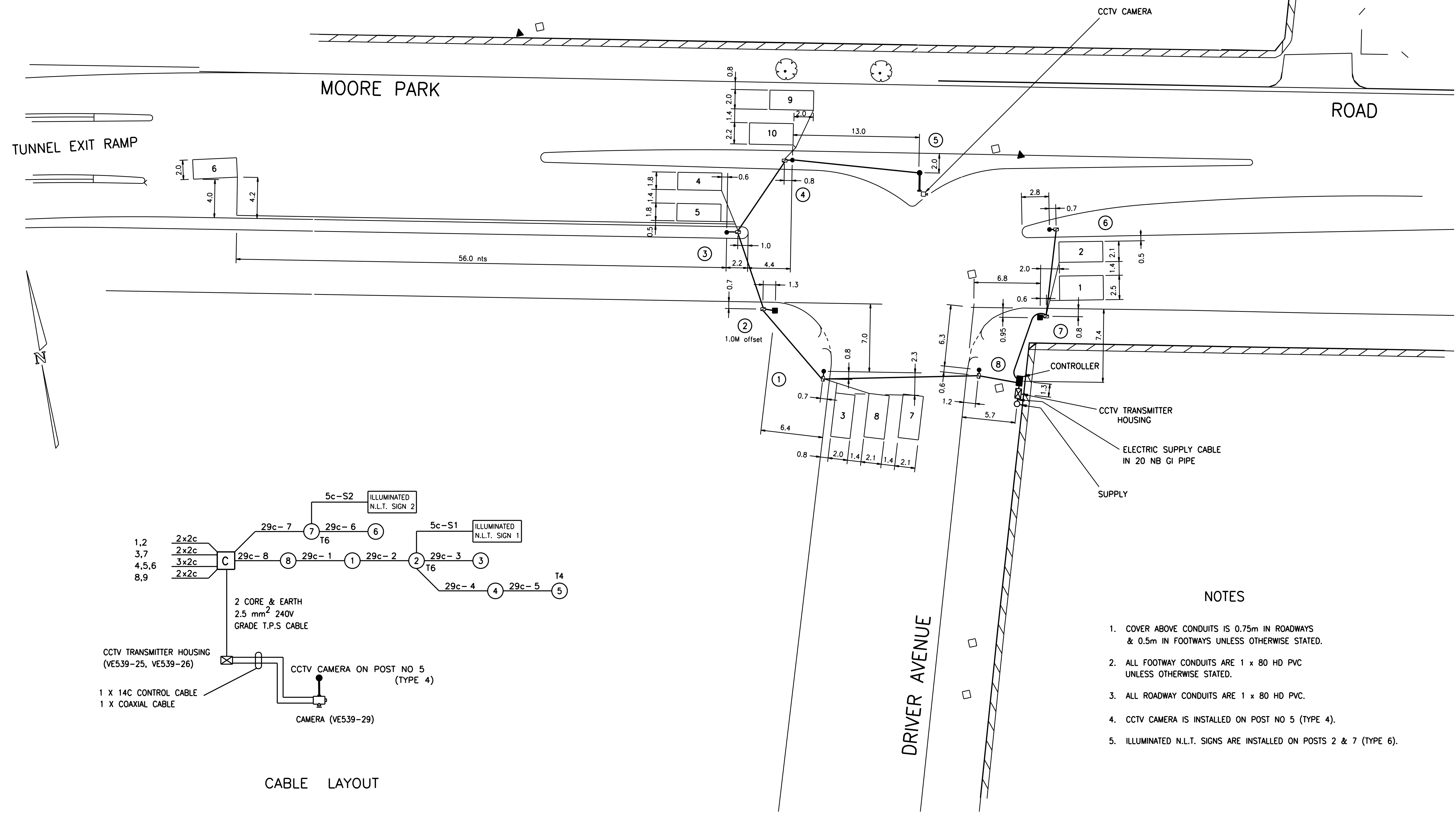
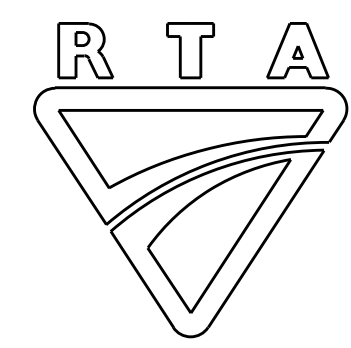
For more information or to obtain advice on compliance with Legislation, please forward your enquiry to:
Surveyor-General-Approvals@finance.nsw.gov.au

Applications to remove a Survey Mark can be lodged here: http://spatialservices.finance.nsw.gov.au/surveying/surveying_services/forms_and_applications/survey_marks_removal

7000.412.VV.3016

DRAWN BY CADD
DO NOT AMEND MANUALLY

DATE IN SERVICE : 16/11/1999



- NOTES
- 1. COVER ABOVE CONDUITS IS 0.75m IN ROADWAYS & 0.5m IN FOOTWAYS UNLESS OTHERWISE STATED.
 - 2. ALL FOOTWAY CONDUITS ARE 1 x 80 HD PVC UNLESS OTHERWISE STATED.
 - 3. ALL ROADWAY CONDUITS ARE 1 x 80 HD PVC.
 - 4. CCTV CAMERA IS INSTALLED ON POST NO 5 (TYPE 4).
 - 5. ILLUMINATED N.L.T. SIGNS ARE INSTALLED ON POSTS 2 & 7 (TYPE 6).

CABLE LAYOUT

A ORIGINAL ISSUE

'B' ISSUE: CCTV CAMERA INSTALLED POSITION AT POST 5 ALTERED R/W 02/06/01 M.W.

'C' ISSUE: SUPPLY POINT POSITION ALTERED. IN LC

'D' ISSUE: - M.E 02-07-15 ILLUMINATED N.L.T. SIGNS ADDED. POST 2 WAS SHOWN AS TYPE 2. ROAD SIGN DETECTOR 7 ADDED. R/W/LC 24-11-2016.

PUBLIC UTILITY LEGEND

HYDRANT	□	SYMBOLS/ABBS.	VD003-6
STOP VALVE	▲	STD. POSIT.	VD001-5
GAS VALVE	⊞	DET. SCHED. EXP.	VD018-10
SEWER MANHOLE	⊗	PRES. DETECT.	VC005-17
TELECOM PIT	⊕	SSG DIS. SEQ.	VD018-8
ELECT. LIGHT POLE	○	DESIGN	SHT. 1
POWER POLE	○	CABLE CHART	SHT. 3
STAY POLE	⊗		
TELEPHONE BOX	⊞	SURVEYOR : Surveyor	
TELECOM PILLAR	⊕	DATE : July 1995	

REFERENCE PLANS

U.B.D. Ref 1996 Map 277/HB	I.S.G. E: 323 650
CO-ORDS N: 1 243 100	

DESIGNED CNJ

CHECKED

SITE CHECKED

RECOMMENDED

APPROVED

[Signature]

ELECTRICAL DESIGN MANAGER

DATE 06/12/99

Roads and Traffic Authority, N.S.W.

SYDNEY COUNCIL

TRAFFIC SIGNALS AT

MOORE PARK ROAD AND DRIVER AVENUE

MOORE PARK

CABLE INSTALLATION

TCS No 3016

DESIGN OFFICE PARRAMATTA - SYDNEY TECHNICAL SERVICES

CADD FILE: VV3016_2D_INS.dgn

SCALE 5 0 (1:200) 5 10

FILE 000 TS 000

REGN. 7000.412.VV.3016

SHEET 2

ISSUE D

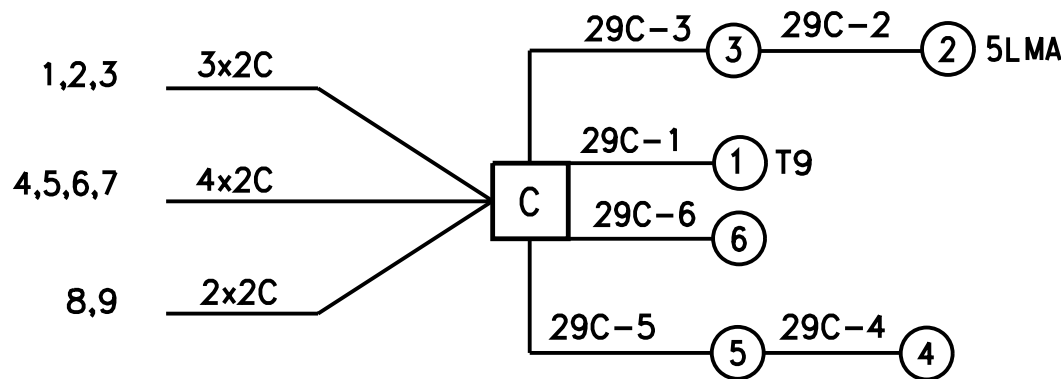
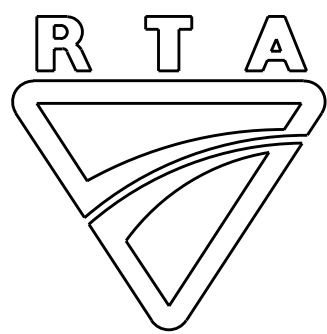
SUPERSEDES SHEET/ISSUE -

© COPYRIGHT ROADS AND TRAFFIC AUTHORITY

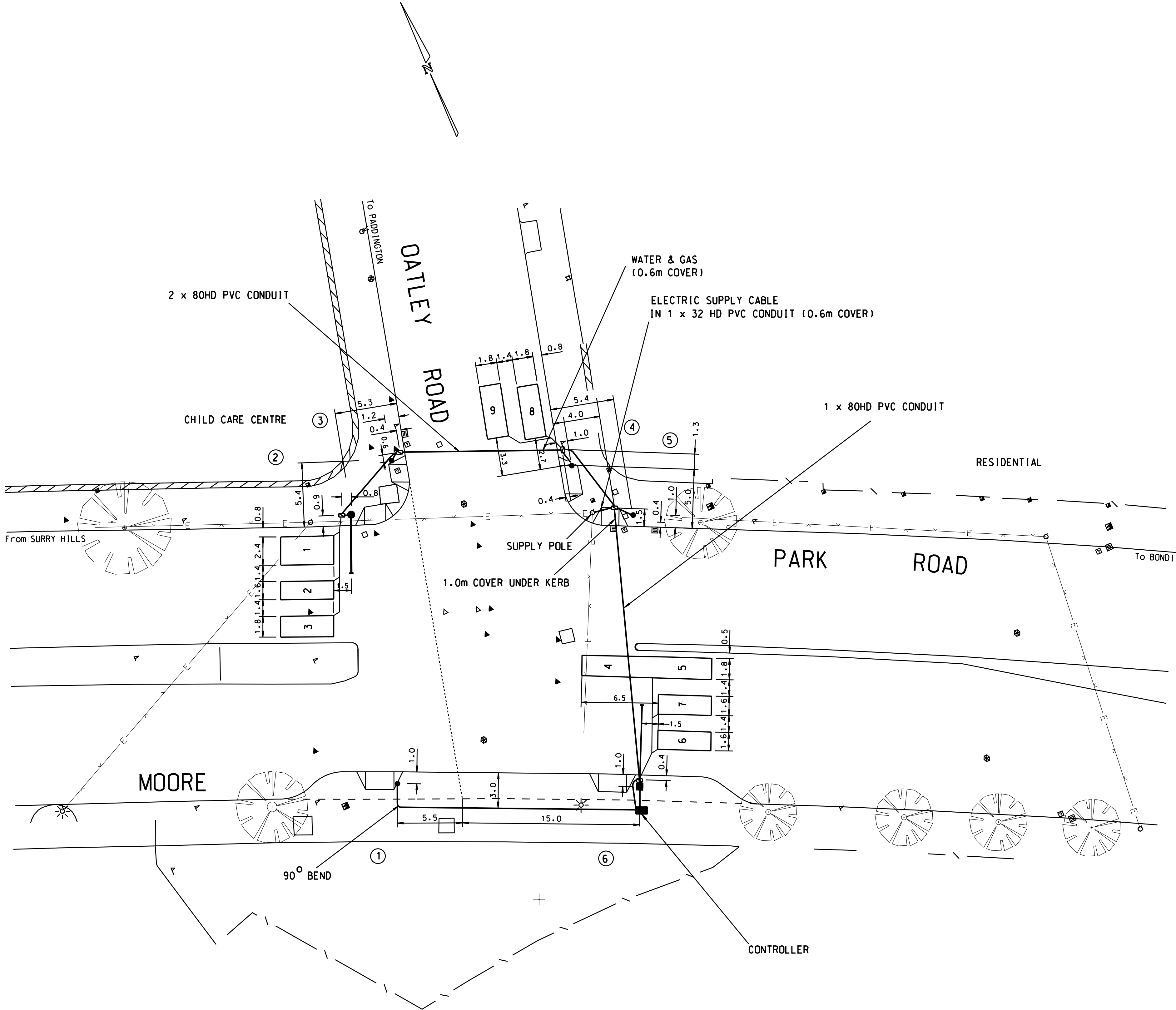
7000.413.VV.3914

DRAWN BY CADD
DO NOT AMEND MANUALLY

DATE IN SERVICE : 29/9/2004



CABLE LAYOUT



NOTES

1. CABLE COVER: IN ROADWAYS 0.75m ABOVE PIPE. IN FOOTWAYS 0.5m ABOVE PIPE UNLESS OTHERWISE STATED.
2. ALL CABLES IN FOOTWAYS ARE INSTALLED IN 1 x 80 HD PVC CONDUIT UNLESS OTHERWISE STATED.

A ORIGINAL ISSUE B ISSUE 13.10.2004 PLAN AMENDED TO SUIT WAE R.W.A. L.C.	PUBLIC UTILITY LEGEND		REFERENCE PLANS		U.B.D. Ref. Map 256 L2 I.S.G. E: 320 743 CO-ORDS N: 1 248 831		APPROVED ELECTRICAL DESIGN MANAGER 12-08-2004 DATE		Roads and Traffic Authority, N.S.W. SOUTH SYDNEY COUNCIL AREA TRAFFIC SIGNALS AT MOORE PARK ROAD AND OATLEY ROAD PADDINGTON CABLE INSTALLATION TCS No 3914		EXISTING <input checked="" type="checkbox"/> PROPOSED <input type="checkbox"/> CADD FILE: vv3914_2B_INS.dgn SCALE 5 0 (1:200) 5 10 FILE 413 TS 306 REGN. 7000.413.VV.3914 SUPERSEDES SHEET/ISSUE - ISSUE B SHEET 2	
	HYDRANT	<input type="checkbox"/>	SYMBOLS/ABBS.	VD003-6	DESIGNED:	G. BRENNAN						
	STOP VALVE	<input type="checkbox"/>	STD POSIT	VD001-5	CHECKED:	L. CLAY						
	GAS VALVE	<input type="checkbox"/>	DET SCHED EXP	VD018-10								
SEWER MANHOLE	<input type="checkbox"/>	PRES. DETECT	VC005-17									
TELECOM PIT	<input type="checkbox"/>	SSG DIS. SEQ.	VD018-8									
ELECT LIGHT POLE	<input type="checkbox"/>	DESIGN LAYOUT	SHEET 1									
POWER POLE	<input type="checkbox"/>	CABLE CHART	SHEET 3									
STAY POLE	<input type="checkbox"/>											
TELEPHONE BOX	<input type="checkbox"/>											
TELECOM PILLAR	<input type="checkbox"/>											

Sydney Trains Central

Transport Sydney Trains
477 Pitt Street
Sydney, NSW, 2000

To:

Vanessa O'Brien
131 Clarence Street
Sydney

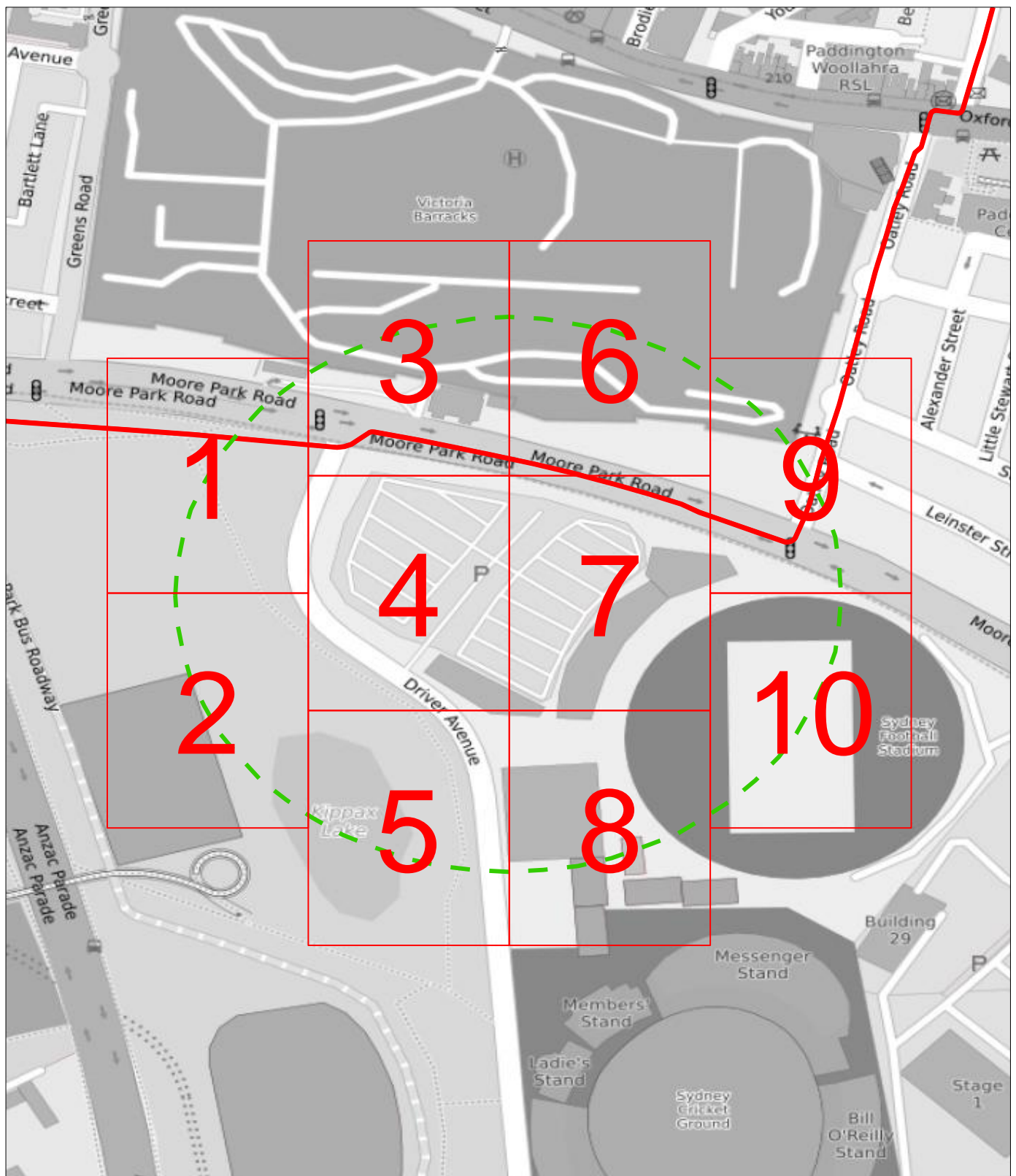
NSW

2000

This is an **AFFECTED** Response – Please get in contact with **Sydney Trains** before any work including **pot hole** is undertaken using email: DBYD-Stage2works@transport.nsw.gov.au

Enquiry Details	
Utility ID	30205 -
Sequence Number	200257002
Job Number	30047003
Enquiry Date	05/07/2021 09:00
Response	AFFECTED
Address	44 Driver Avenue Moore Park
Location in Road	Footpath,Road,Nature Strip
Activity	Planning and Design

Enquirer Details		
Customer ID	3012749	
Contact	Vanessa O'Brien	
Company		
Email	vanessa.obrien@arup.com	
Phone	+61432095452	Mobile



The precision of the location of the services on this plan varies depending on the source and method of capture. This plan should be used as a guide only. This plan shows only Sydney Trains electrical cables and tunnels located outside of the rail corridor.



Greyscale basemaps sourced from [OpenStreetMaps](https://www.openstreetmap.org/)

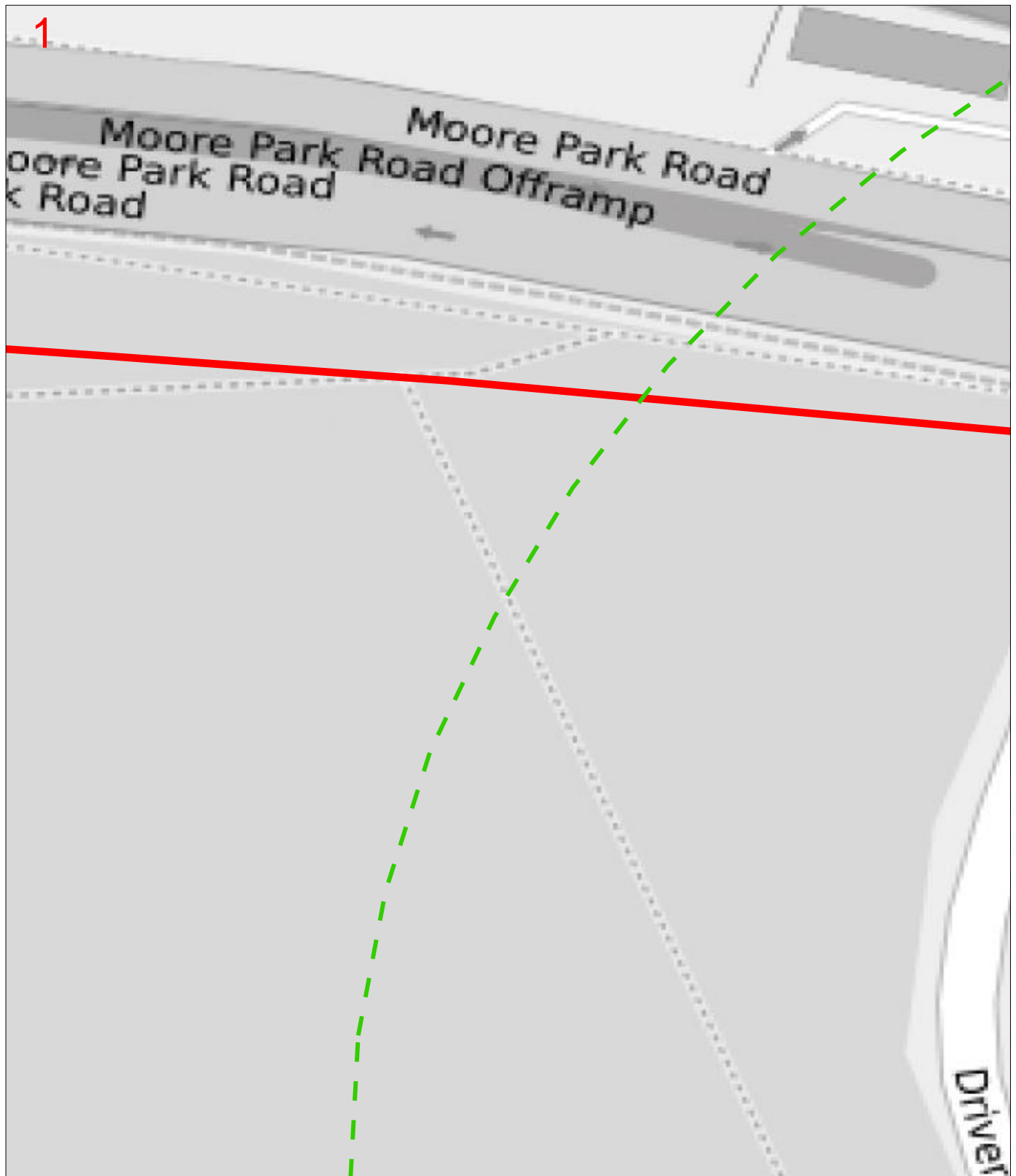
LEGEND:

1

Detail Map



Affected DBYD
Work Area

Greyscale basemaps sourced from [OpenStreetMaps](https://www.openstreetmap.org/)


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LEGEND:

Affected DBYD Work Area

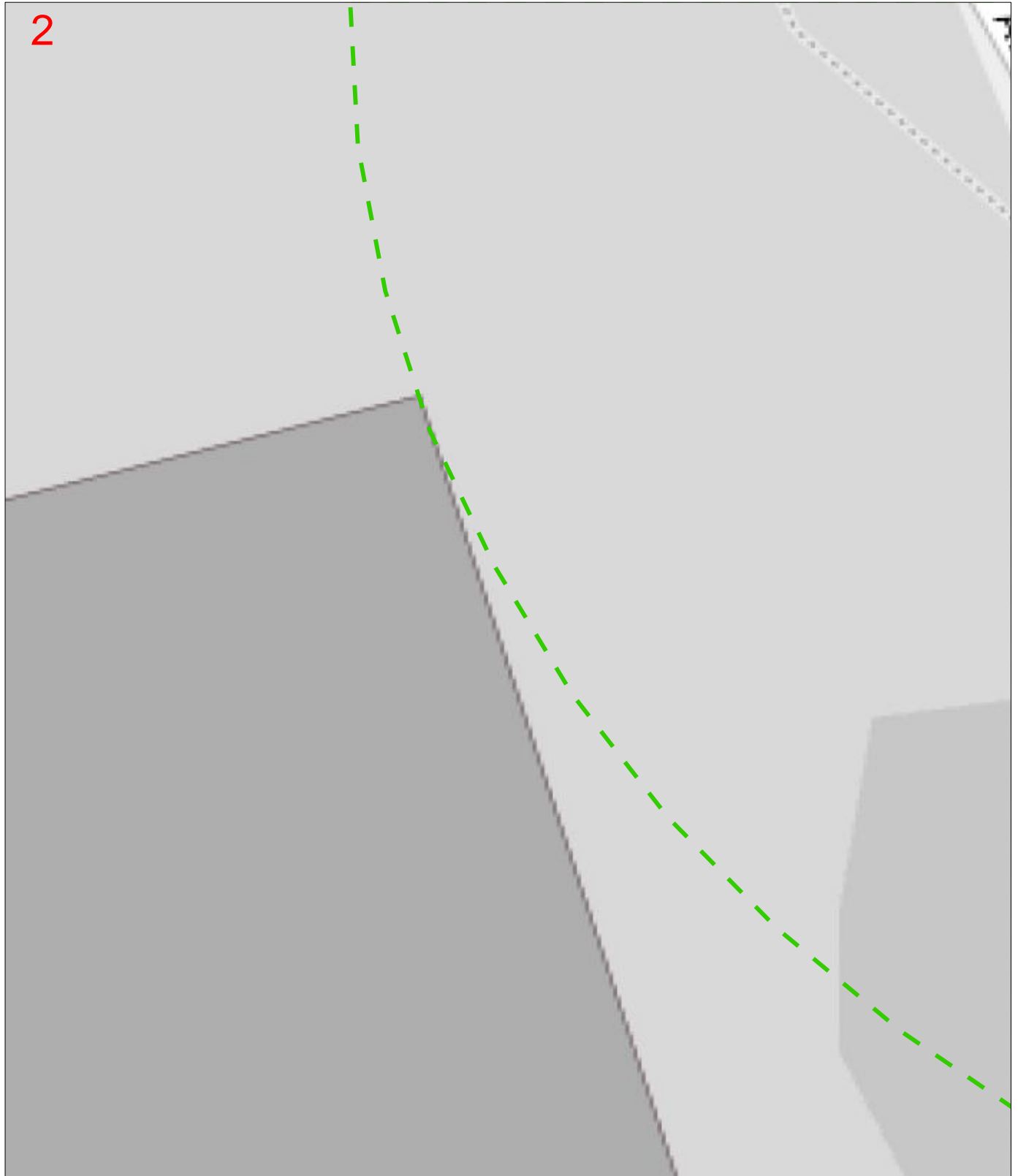


Tunnel

 HV Cable

 Communications

2

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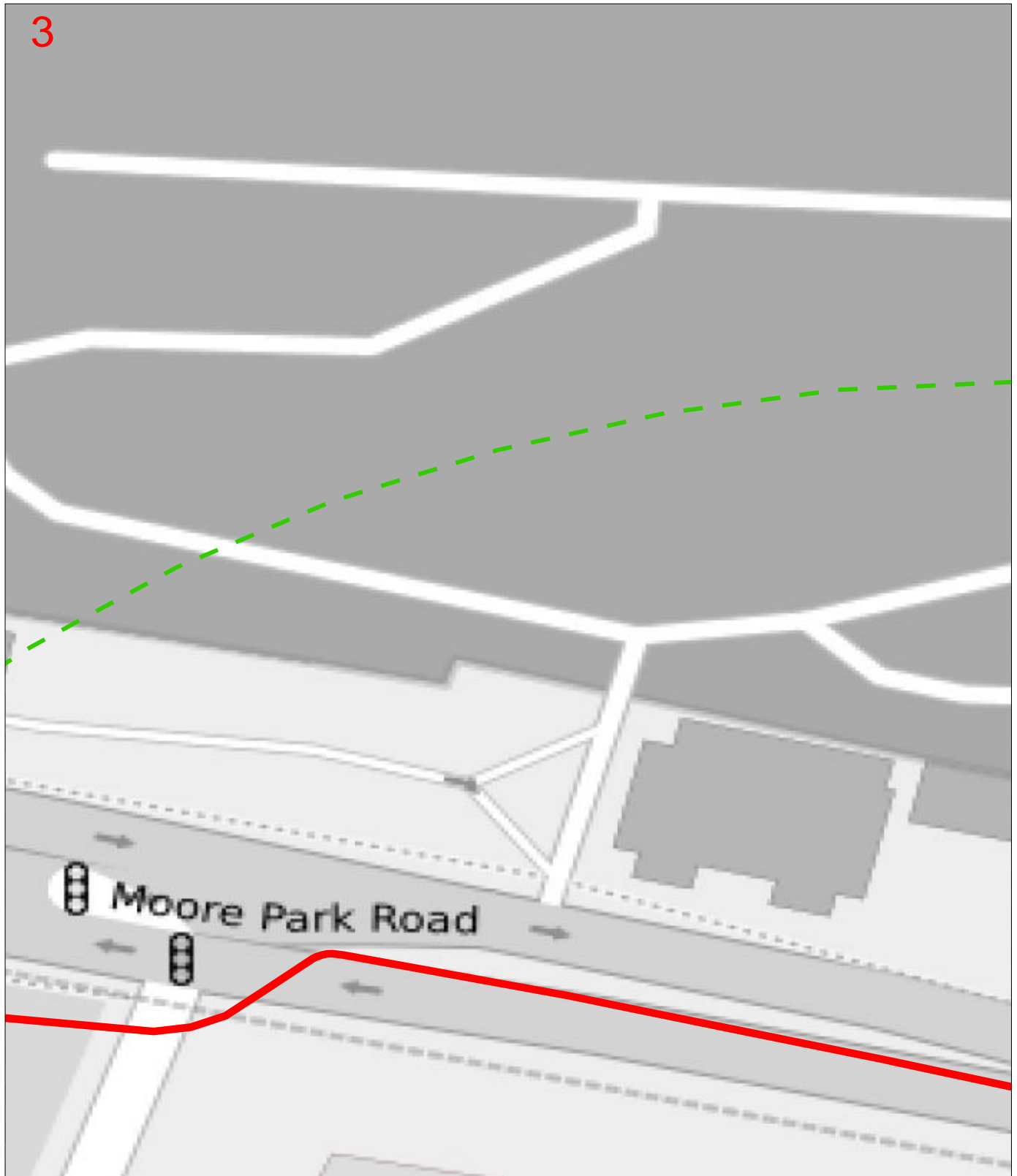
Affected DBYD Work Area



Tunnel


 HV Cable


 Communications



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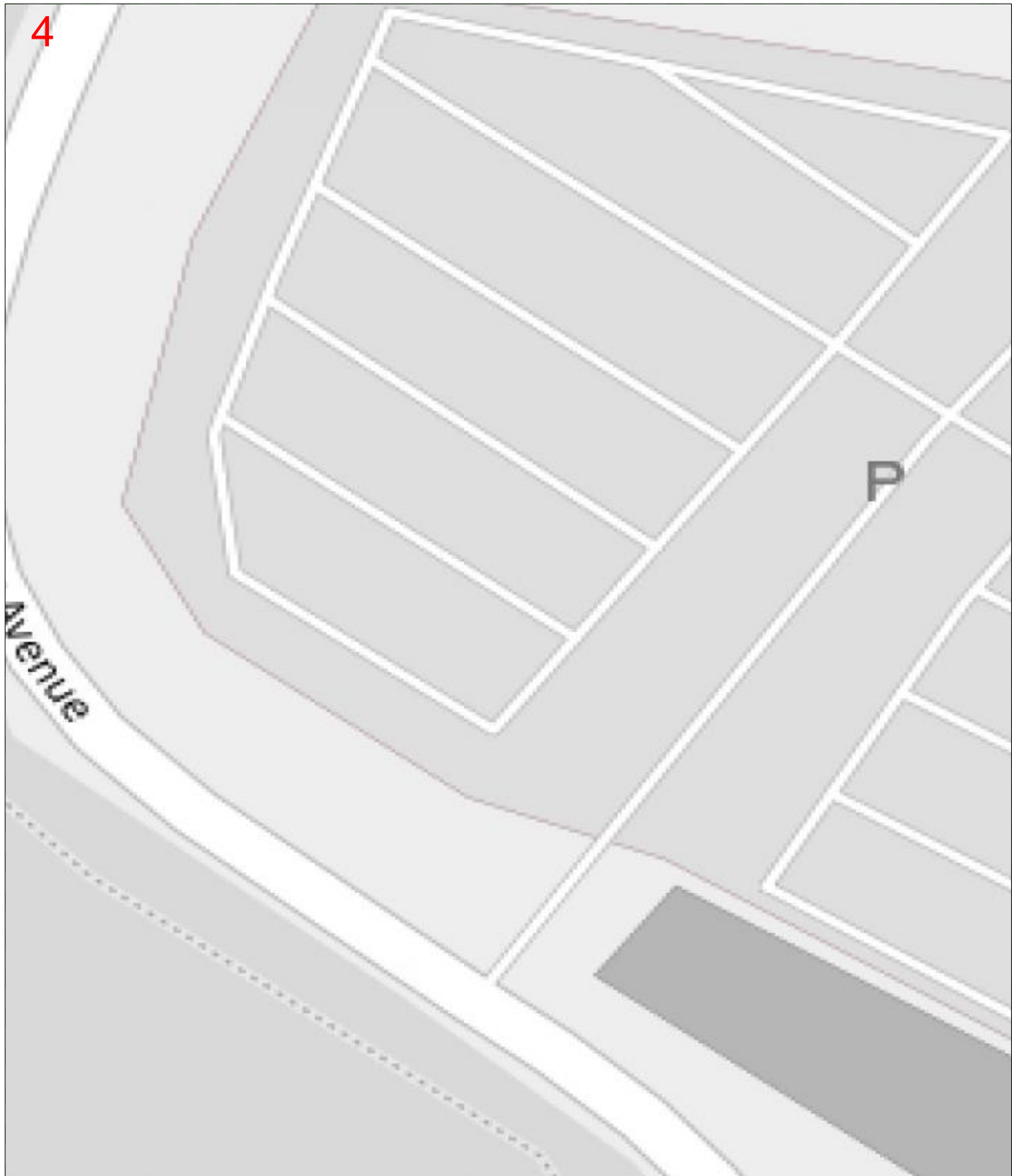
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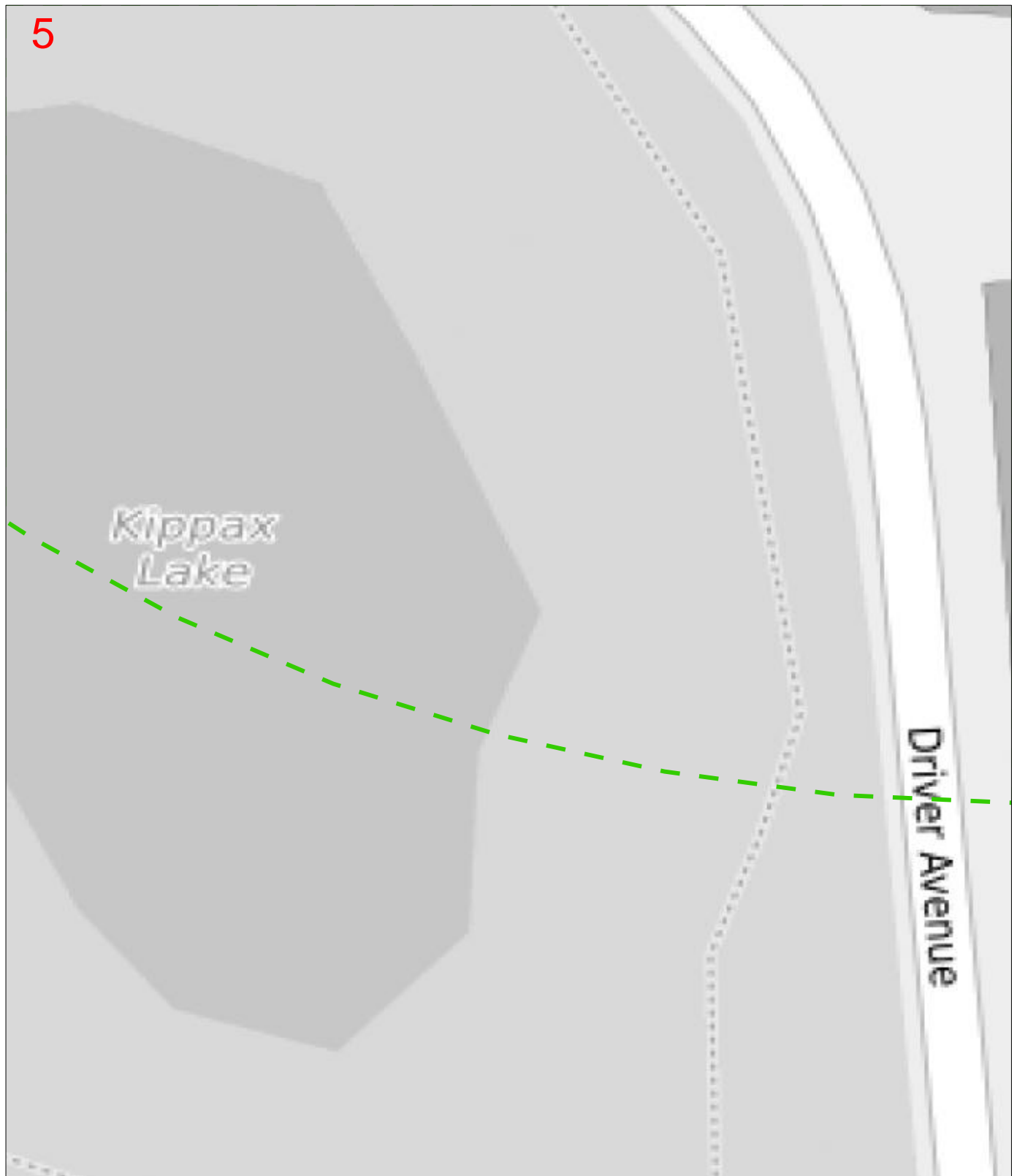
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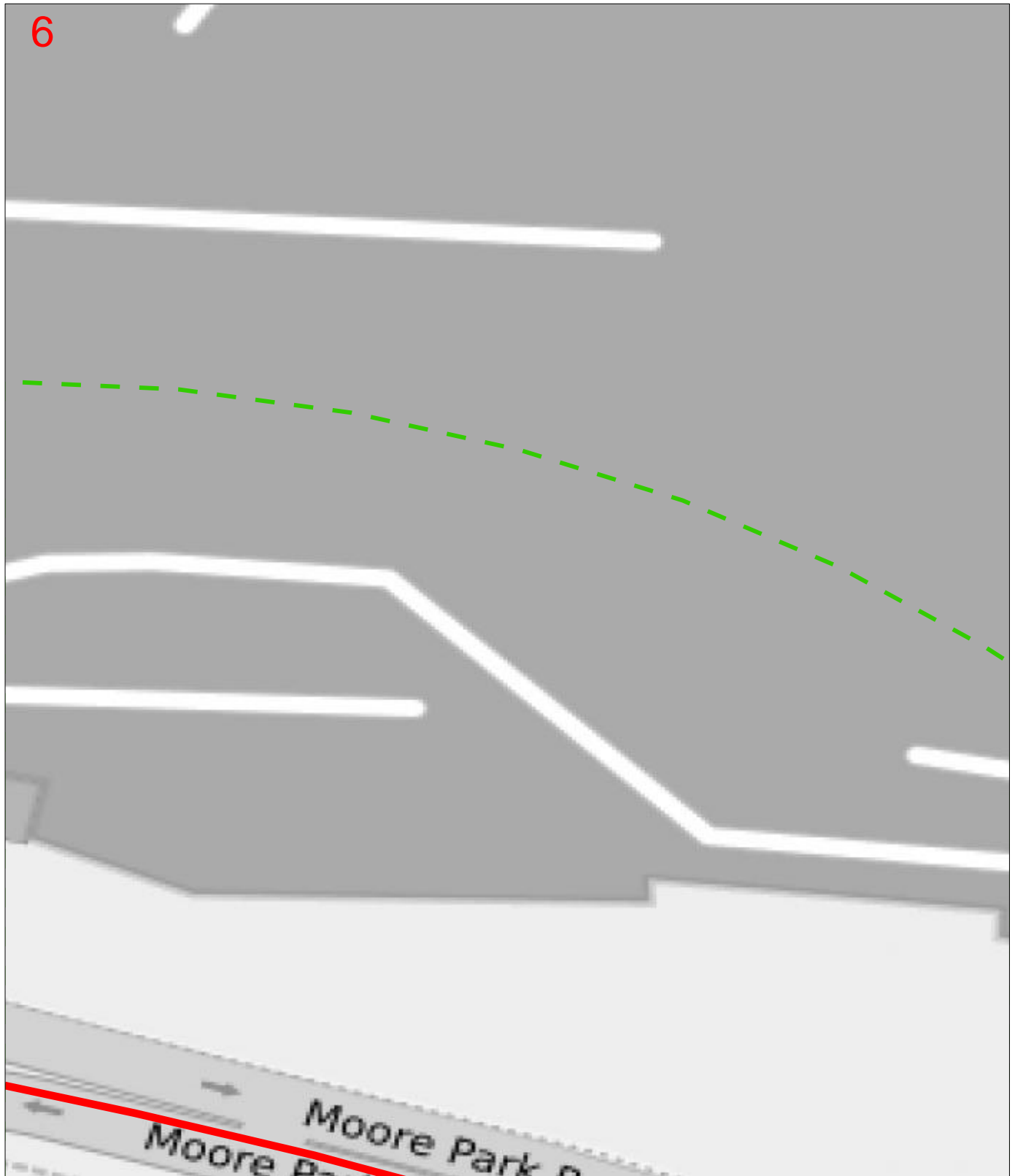
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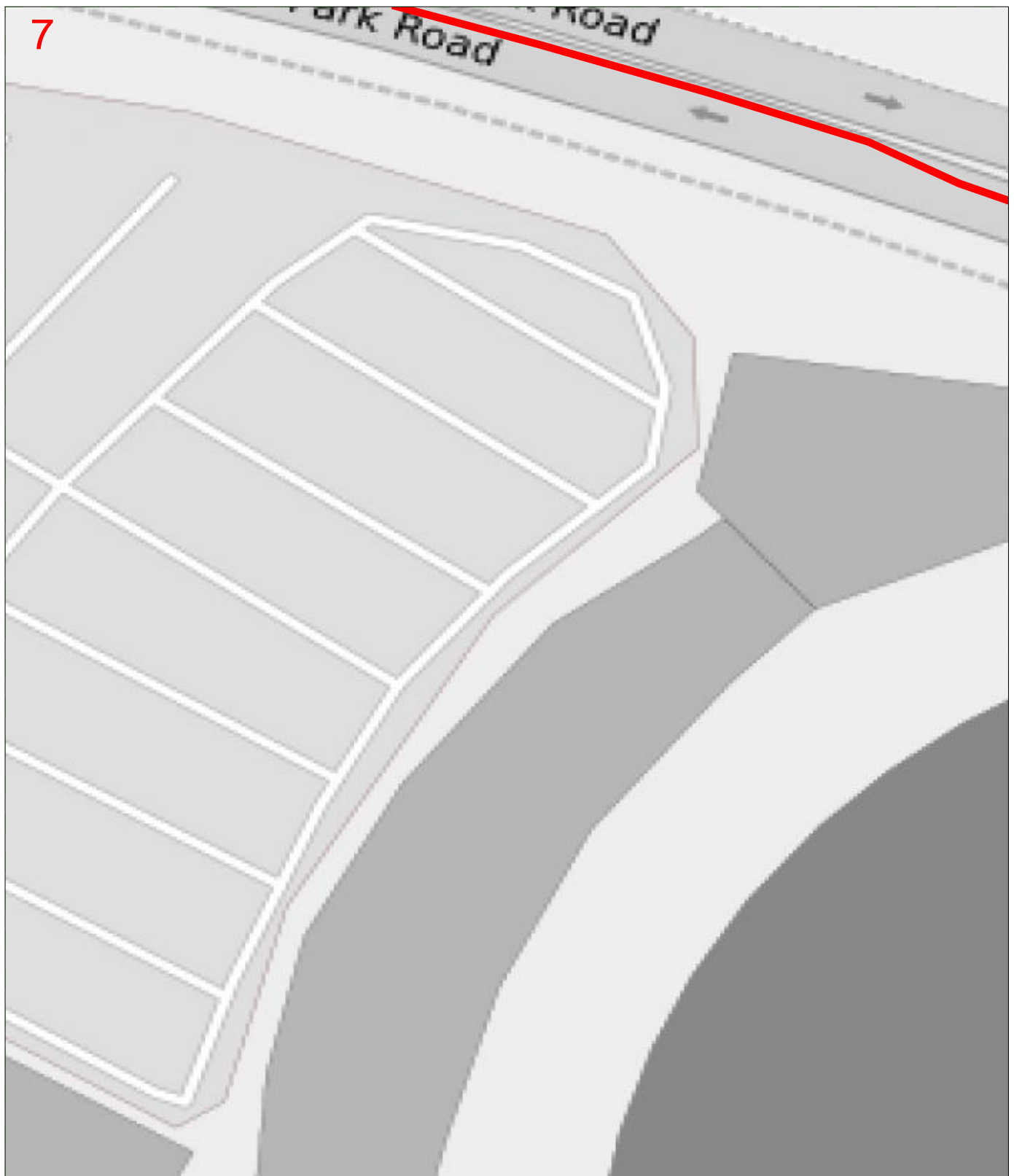
Tunnel



HV Cable



Communications



Greyscale basemaps sourced from [OpenStreetMaps](https://www.openstreetmap.org/)

The precision of the location of the services on this plan varies depending on the source and method of capture. This plan should be used as a guide only. This plan shows only Sydney Trains electrical cables and tunnels located outside of the rail corridor.

LEGEND:



Affected DBYD Work Area

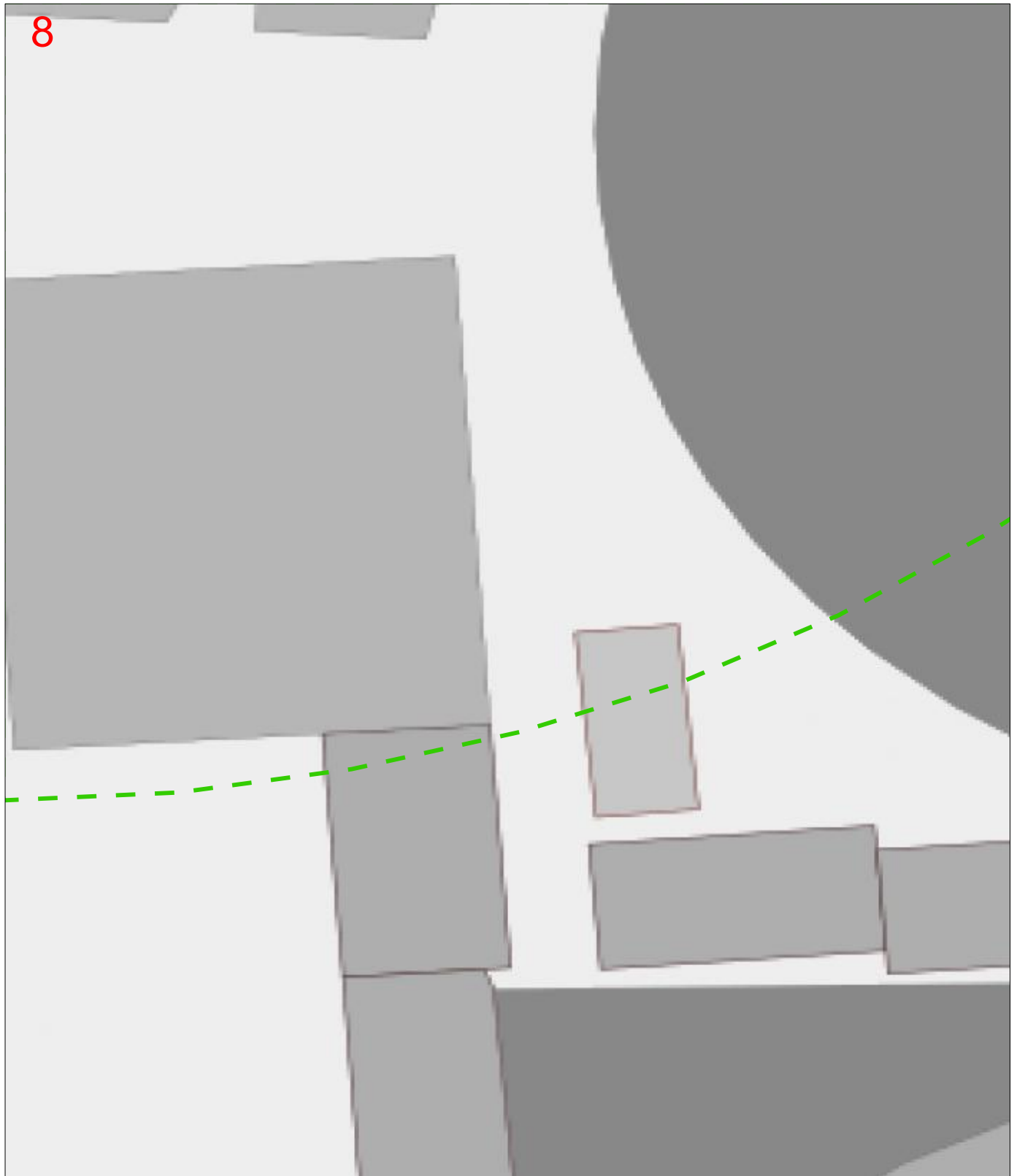


Tunnel

 HV Cable

 Communications

8

Greyscale basemaps sourced from [OpenStreetMaps](https://www.openstreetmap.org/)

The precision of the location of the services on this plan varies depending on the source and method of capture. This plan should be used as a guide only. This plan shows only Sydney Trains electrical cables and tunnels located outside of the rail corridor.

LEGEND:



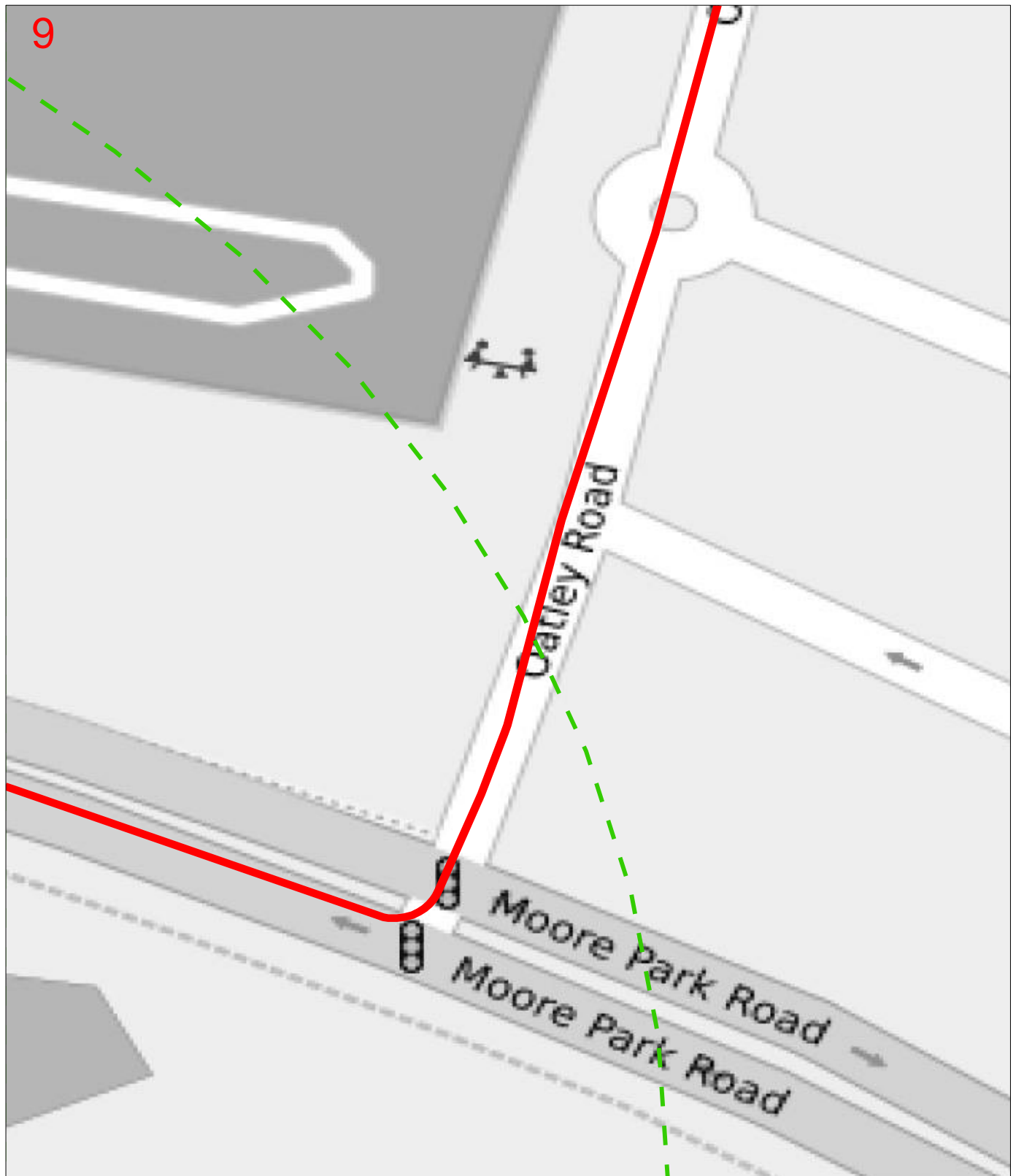
Affected DBYD Work Area



Tunnel

 HV Cable

 Communications



Greyscale basemaps sourced from [OpenStreetMaps](https://www.openstreetmap.org/)

The precision of the location of the services on this plan varies depending on the source and method of capture. This plan should be used as a guide only. This plan shows only Sydney Trains electrical cables and tunnels located outside of the rail corridor.

LEGEND:



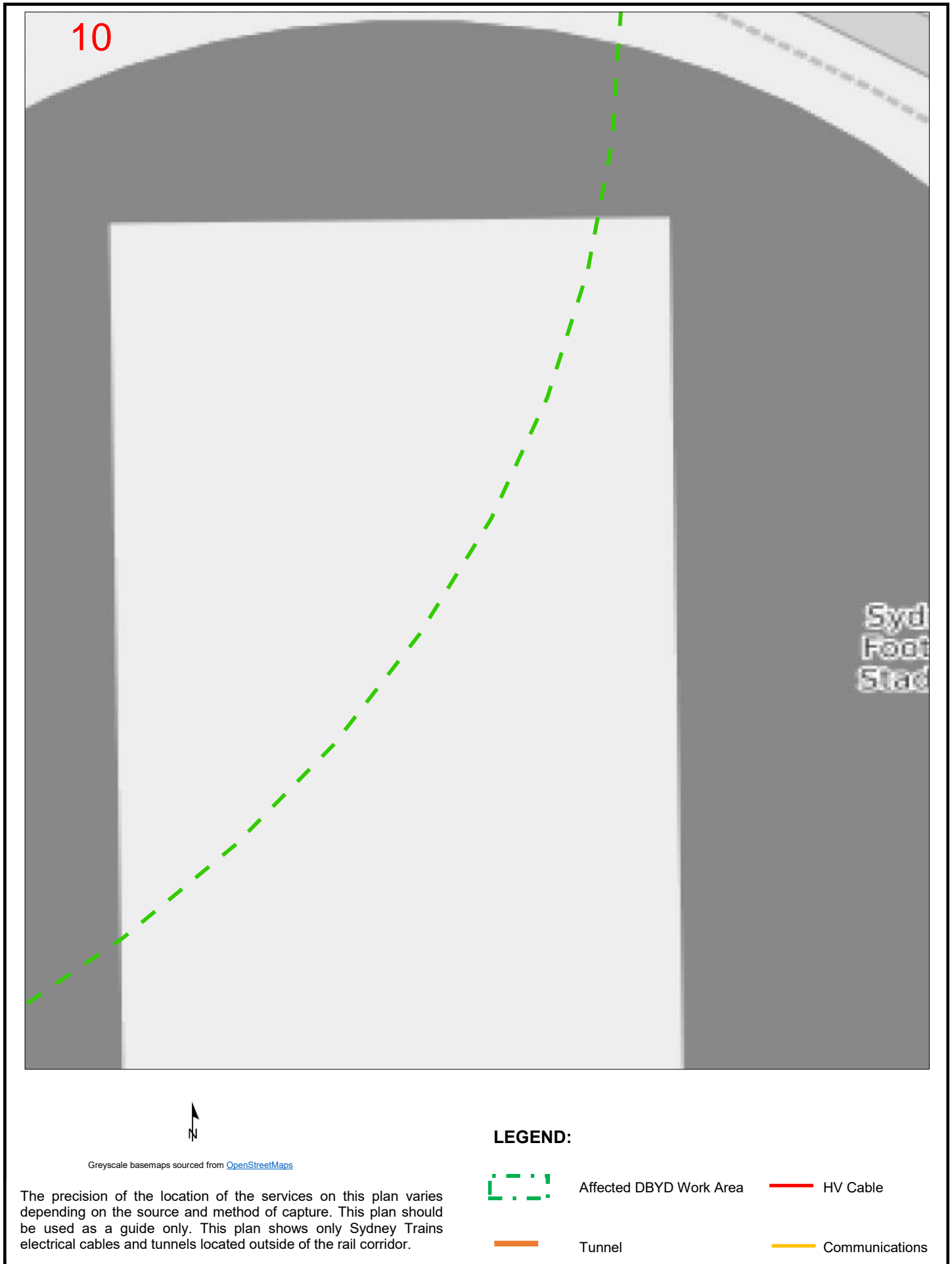
Affected DBYD Work Area

 HV Cable



Tunnel

 Communications





TERMS & CONDITIONS – DIAL BEFORE YOU DIG

The material provided or made available by Rail Corporation New South Wales (“**RailCorp**”) and its agents (including Sydney Trains) in relation to your Dial Before You Dig search (“**Information**”) in respect of the Search Area is provided subject to the following terms and conditions, which are taken to have been accepted when You use the Information:

Search Area

1. RailCorp has generated the Information based on the Search Area information You submitted to the Dial Before You Dig search. It is your responsibility to ensure the Search Area has been accurately defined, and if the Information does not match the Search Area, You must resubmit your enquiry with the Dial Before You Dig search.

RailCorp Dial Before You Dig Service Search

1. The Information **only** indicates the location of active electrical infrastructure power cables/tunnels/communication cables (“**RailCorp Assets**”) in the vicinity of the Search Area (please note the electrical infrastructure of other network providers may be located in the vicinity of the Search Area but will not be disclosed in the Information).
2. The Information only relates to proposed Works to be undertaken outside of the rail corridor. If the proposed Works are to take place within the rail corridor, you must request RailCorp to complete a separate service search.
3. The Information does not identify RailCorp’s Communication and Control systems/assets. Please contact RailCorp on (02) 9379 5000 if You require RailCorp to identify its Communications and Control systems/assets in the vicinity of the Search Area.
4. You are liable for the review of the Information before commencing any Works. You must ensure that Works have no adverse affect on any RailCorp Assets and/or RailCorp railway operations. If you determine that your works may impact upon RailCorp Assets and/or RailCorp railway operations, you may contact the appropriate RailCorp representative on the details below.

Engineering & Maintenance Interface
Airport Line Maintenance Engineer
RailCorp Communication and Control Systems

DBYD-Stage2works@transport.nsw.gov.au
phone (02) 9669 8602
phone (02) 9379 5000

5. **Validity:** The Information is only valid for a period of one (1) month after you have been provided the Information. If Works have not commenced within one (1) month of the date after the Information is provided, you must resubmit your enquiry with the Dial Before You Dig search.

RailCorp not liable for review and coordination

6. You are liable for the review of the Information before commencing any Works. You must ensure that Works have no adverse affect on any RailCorp Assets and/or RailCorp railway operations.

No representation or warranty by RailCorp

7. RailCorp does not 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 any plans or diagrams:
 - (a) only indicates the approximate location of RailCorp Assets at the time the services were installed and may not show all RailCorp Assets in the vicinity of the Search Area;
 - (b) may be out of date and not show changes to surface levels, fences and other structures in the vicinity of the Search Area; and
 - (c) may indicate the possible presence or absence of RailCorp Assets in the Search Area and has not been checked for accuracy or completeness for the purposes of the Works.



Performance of the Works

8. You are responsible for, amongst other things:

- (a) ensuring that you exercise reasonable care and diligence in performing the Works and comply with RailCorp directions (if any) in relation to undertaking the Works;
- (b) ensuring that once you have identified any services, Works are not undertaken:
 - (i) within 5 metre radius of any RailCorp electrical, Communication assets and
 - (ii) within 25 metres of any other RailCorp tunnel and/or Airport Line tunnel.
- (c) ensuring the Information and any other relevant documents related to the Works are kept at the Search Area during the duration of the Works;
- (d) immediately reporting to RailCorp's ICON-Electrical System Operator of any damage caused or threat of damage to RailCorp Assets in connection with the Works; and
- (e) ensuring that the Information is used only for the purpose for which the Dial Before You Dig search is intended.

Release and indemnity

9. You acknowledge that You use the Information at your own risk. In consideration of the Dial Before You Dig search and the Information provided by RailCorp, to the fullest extent permitted by law:

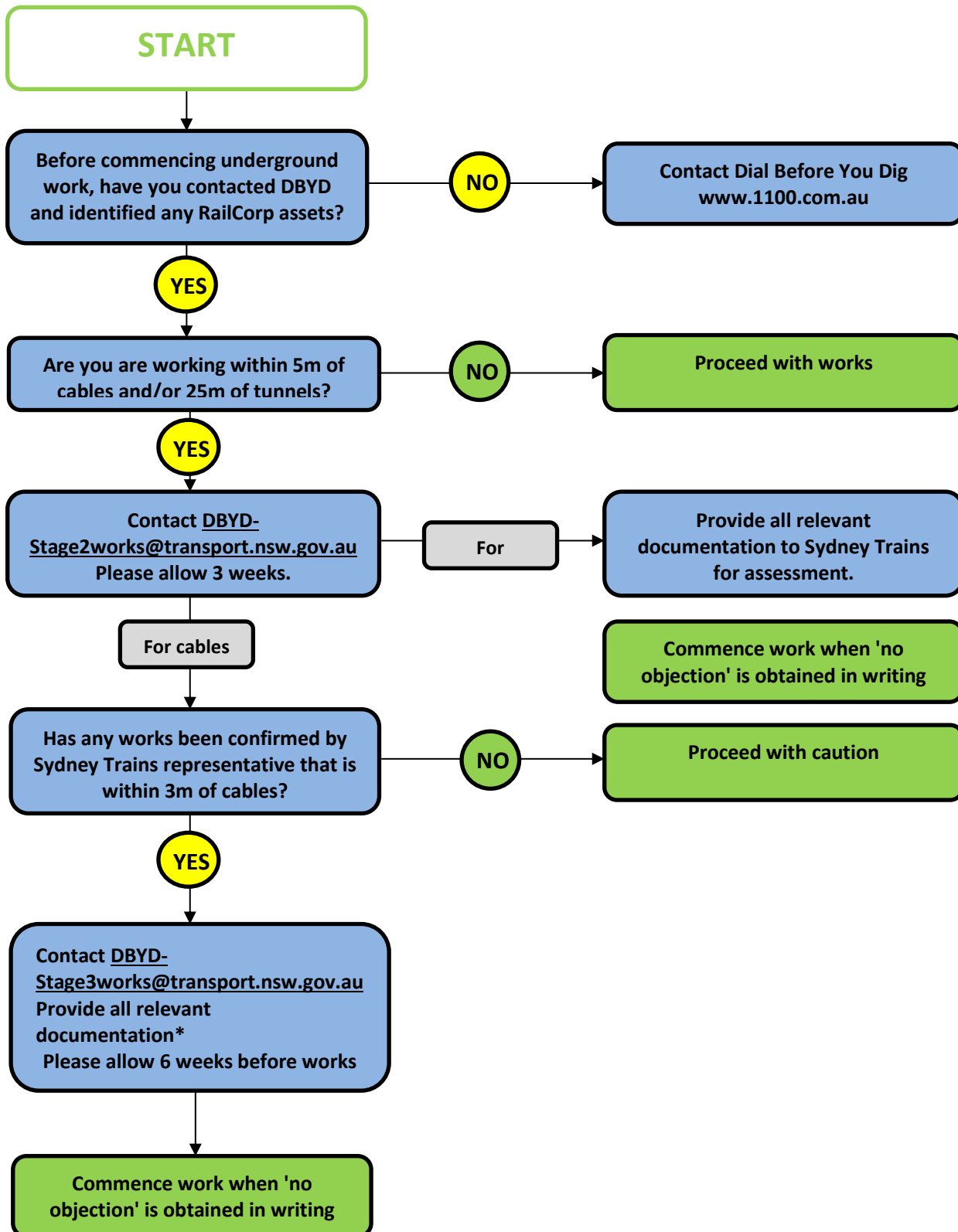
- (a) RailCorp shall not be liable for any Loss, including consequential, special or indirect loss or damage, in respect of the Information provided to You, and your exclusive remedy for all Losses arising out of the Information provided to You (whether based on negligence, breach of warranty, strict liability, contract or otherwise) shall be limited, at RailCorp's absolute discretion, to:
 - (i) supplying the Information again; and
 - (ii) payment of the cost of having the Information supplied again.
- (b) In no event will RailCorp be liable for, and You release RailCorp 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 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 RailCorp; and
 - (ii) regardless of whether RailCorp are or ought to have been aware of, or advised of, the possibility of such loss, costs or damages.
- (c) You will indemnify RailCorp against any Loss arising from or in connection with RailCorp providing incorrect or incomplete information to You in connection with the Dial Before You Dig search.
- (d) You assume all risks associated with the Information, including risk to your computer and software systems or data being damaged or destroyed by any virus, and You release and discharge RailCorp from all Loss whatsoever which might arise in respect of your use of the Information.



Legislative requirements and governing law

10. In carrying out the Works You must comply with all relevant laws and the lawful direction of any relevant authority (including RailCorp).
11. You acknowledge and agree that a person who undertakes excavation works is subject to duties and responsibilities under the *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2011*. WorkCover Authority has prepared the '*Work Near Underground Assets Guideline*' (as may be amended from time to time), which contains practical advice for working near underground utility services and guidance as to how to meet the requirements of the *Work Health and Safety Act 2011* when carrying out excavation works. A copy of the guide is available online at: <http://www.safework.nsw.gov.au/health-and-safety>
12. These terms and conditions are governed by the laws of New South Wales and You submit to the exclusive jurisdiction of the courts of New South Wales.
13. The following definitions apply in this document:
 - **“Loss”** includes 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). This definition includes “Losses”.
 - **“RailCorp”** means Rail Corporation New South Wales and its employees, officers, agents (including Sydney Trains), representatives and contractors.
 - **“Search Area”** means the property you defined when you submitted your Dial Before You Dig search.
 - **“Works”** means any type of excavation works.
 - **“You”** includes references to your employees, officers, agents, representatives, contractors and anyone else using the Information.

**In an emergency, or to notify RailCorp of any damage to its assets, contact
ICON (Electrical System Operator) on (02) 9379 4911 or 1800 060 015 **immediately****



*Relevant documentation may include construction designs, construction methodology, SWMS.

**12 week notice or more may be required for isolation and is subject to the assessment of impact on the rail network and operations.

Electrical – Ausgrid

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, under boring and directional drilling** 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.
4. Due to the inherent risk of compromising the stability of Ausgrid's power poles during excavation which could lead to pole movement or collapse, precautions must always be taken. If excavation is to be carried out within 1m from a power pole, Ausgrid must be contacted at construction.works@ausgrid.com.au for advice. Do not proceed until you have received such advice from Ausgrid.

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

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).

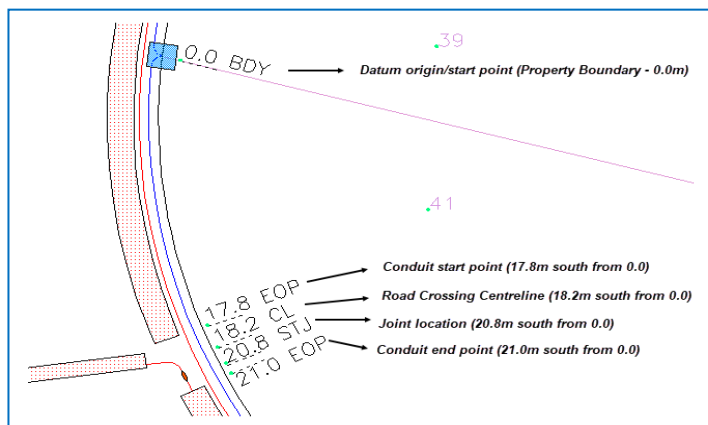


Figure 2

3 Cross Sections

A “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).

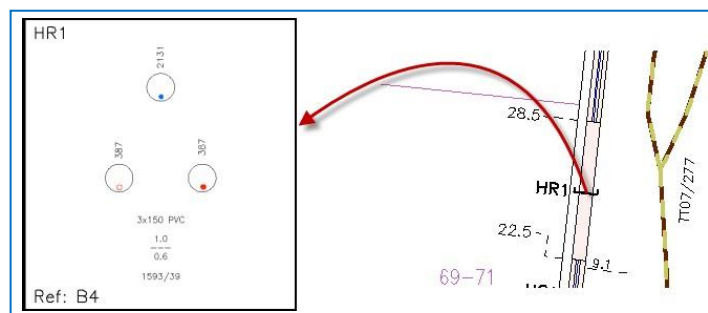


Figure 3

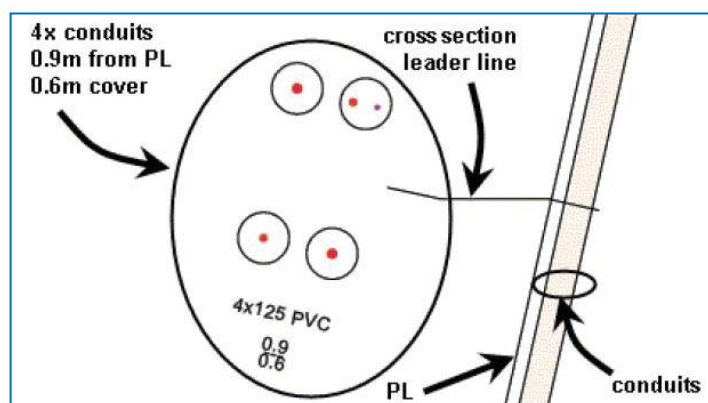


Figure 4

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).

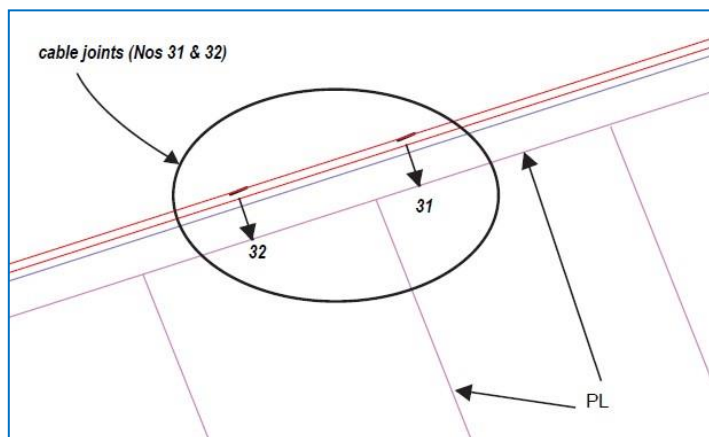


Figure 5

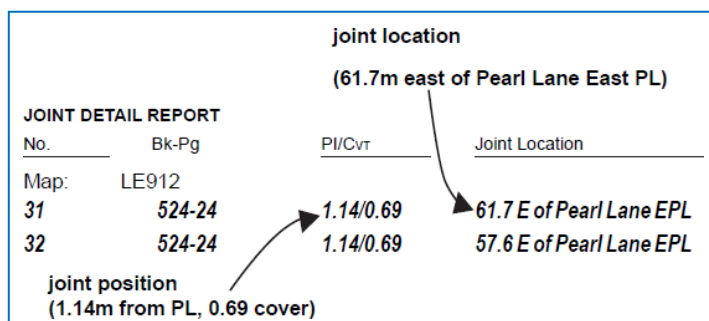


Figure 6

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.

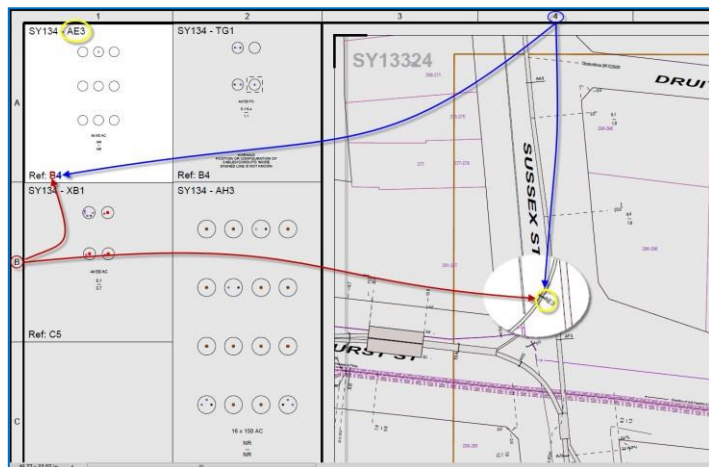


Figure 7

“Cross section” leader line and annotation is drawn on the Ausgrid plan for a reference to “cable” and/or “conduit” information in the “cross

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 (refer figure 8).

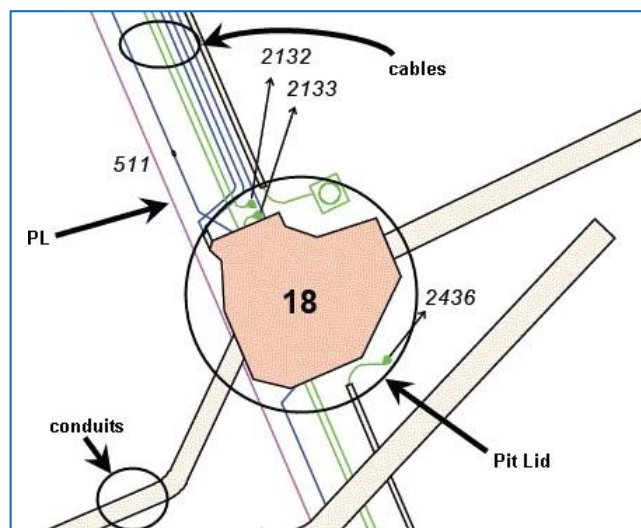


Figure 8

7 Proposal Areas

“section” detail boxes. 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).

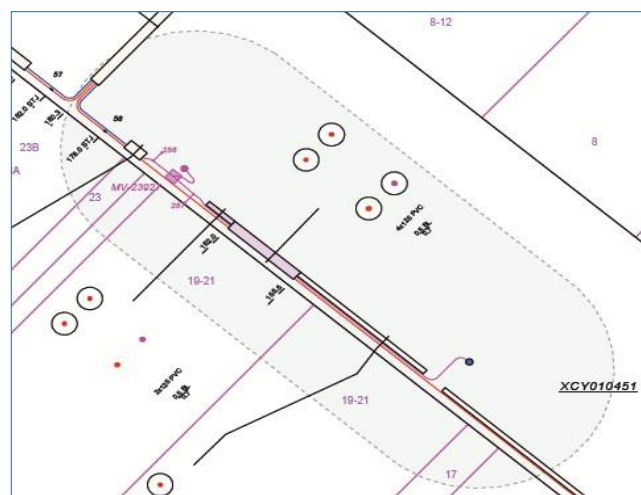


Figure 9

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).

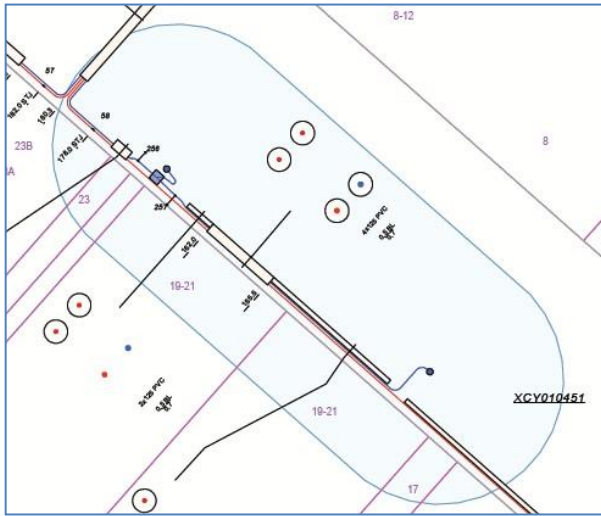


Figure 10

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 Dial Before You Dig (DBYD) office at the number indicated on the response to your DBYD enquiry for further information.

8 Ausgrid Maps

Depending on the size of the DBYD request, the response will either be a **single map area** or a **cover sheet** and several standard maps.

8.1 Single Map Area Response

The single map area response will have a buffer area shown on the plan that should relate to the original Dial Before You Dig request.

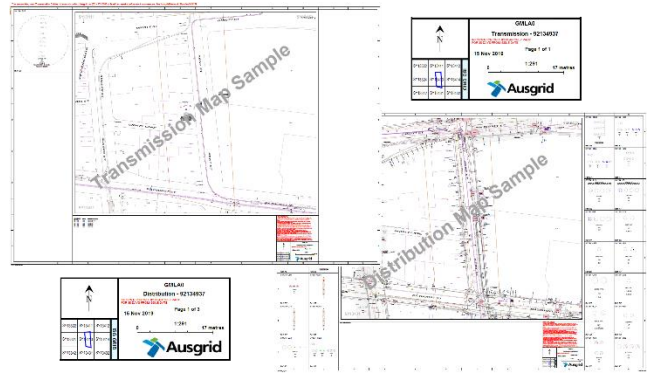


Figure 11

The **map grid index box** 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 will display on the grid index box for single map area responses

There are two different size maps that can be produced – A3 will be issued if there are no cross sections in the area, and an A0 will be issued if there are cross sections that are required to be displayed in the detail boxes on the side.

A single map area response could include two maps in the Sydney region. Ausgrid plans are separately labelled as “**Distribution – nnnnnnn**” and “**Transmission – nnnnnnn**”, where “**nnnnnnn**” refers to the DBYD sequence number quoted. If the request does not include any Transmission assets, then only one Distribution map will be issued.

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

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: “**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**”

8.2 Cover Sheet Response

On a response that includes a cover sheet, the buffer area will only be shown on the cover sheet and it will not appear on the standard maps. The cover sheet will indicate which standard maps have been included and provide a high-level view of the location of the underground details (Figure 12). The standard maps will have the detail of the underground assets (Figure 13).

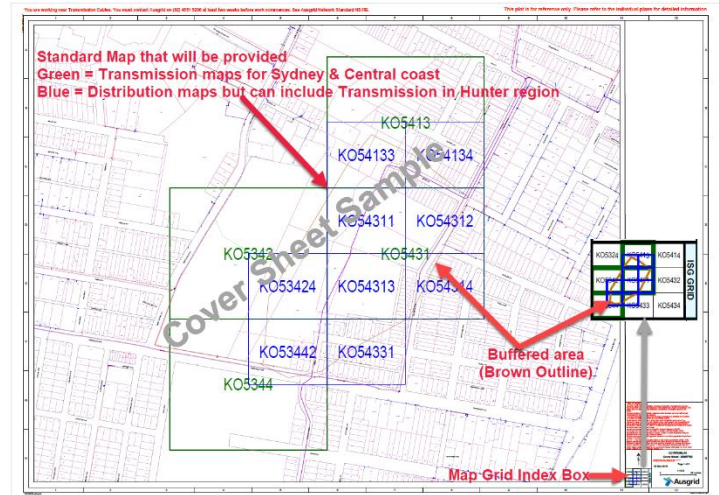


Figure 12

A **map grid index box** has been included in the cover sheet and on the standard maps. The buffer area will only display on the grid index box on the cover sheet and not on standard maps (Figure 12 + Figure 13).

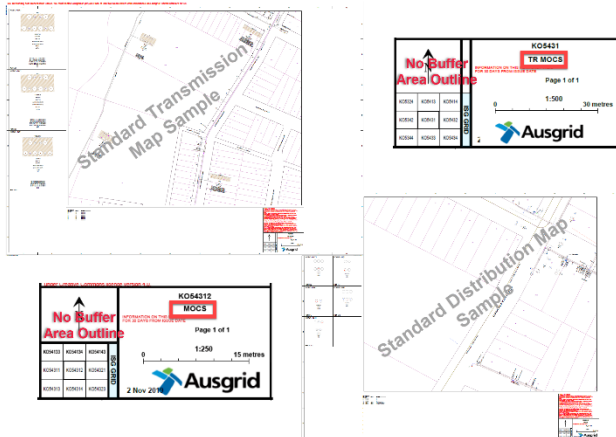


Figure 13

9. 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 14).

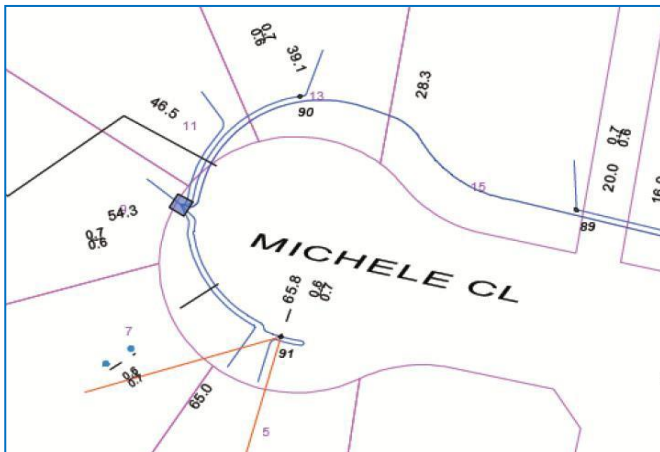


Figure 14

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).

10. “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 15) will be shown on plans to minimize risk of disturbance or damage to any Ausgrid underground earthing infrastructure in the vicinity.

Figure 15



11. Hazardous Cables – Specific Excavation Hazard

Certain low voltage cables are susceptible to deterioration or defects that may pose a risk of electric shock when working near them particularly in damp ground. Other low voltage cables may have an exposed conductive sheath or armour which may, under certain conditions, become energised. These cables may pose a significant risk and will be illustrated as in figures 15 and 16 below. For all work on or near Ausgrid’s network where workers have been trained in Ausgrid’s “Working near or around underground cables” course the work practices outlined in NS156 “Working near or around underground cables”, NS199 “Safe Electrical Work on Low Voltage Underground Assets” for low voltage cables susceptible to deterioration and the Electrical Safety Rules for low voltage exposed conductive sheath or armoured cables must be adhered to. All other persons must contact Ausgrid before excavating near or accessing areas where these cables are present to arrange for appropriate precautions to be applied.

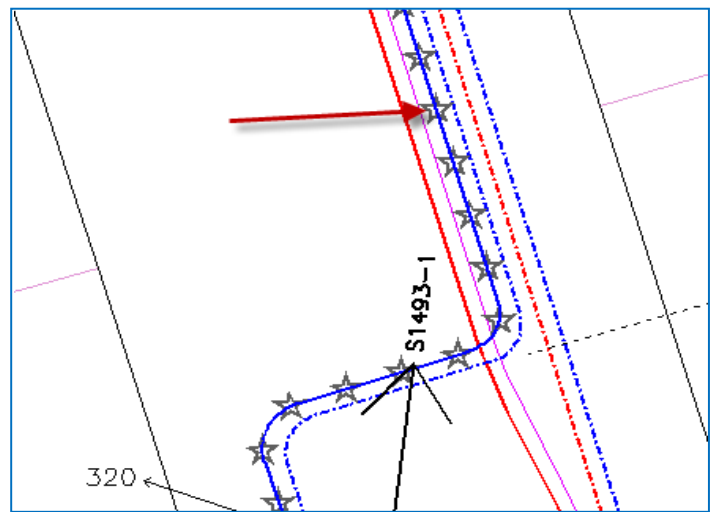


Figure 15

The **“star”** symbols over the cable indicates that it may be susceptible to deterioration or defects or the cable may contain an exposed conductive sheath or armour which could pose an electrical risk to workers.

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.

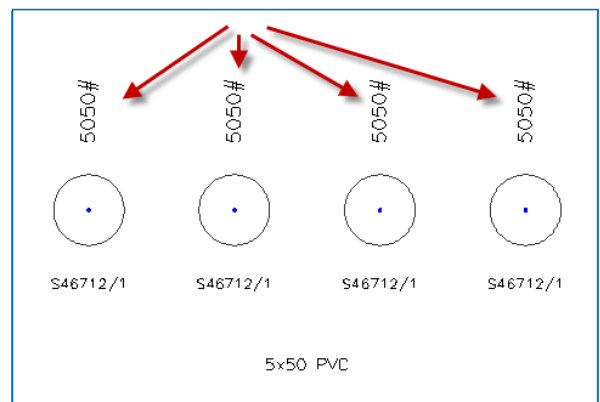













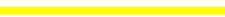
















Figure 16





















Ausgrid Underground Map Symbology

NOTE: Please note symbology is subject to change. This document provides underground (UG) related objects only. In cases where you are unsure of the data presented, please contact Ausgrid's DBYD for clarification *prior* to any planning/excavation works.

Object		Symbol
HV Cable	HV (High Voltage) 5kV-22kV	In Service  Out of Service 
	TR (Transmission) 33kV – 330kV	In Service  Out of Service 
LV Cable (Low Voltage)	Mains (Dark blue)	In Service  Out of Service 
	Street Lighting (Green) Note: Mains Connector also used as Street Lighting (dark blue)	In Service  Out of Service 
	Service (Light blue)	In Service  Out of Service 
	Stars are used to highlight At Risk cables	In Service Risk  In Service Risk  In Service Risk 
	Unknown	
Auxiliary Cable	Data	In Service  Out of Service 
	Comms	
	Telco	
	Protection	
	Fibre Optic	
	Pilot	

Object		Symbol
HV UG Joint	Straight Through, Parallel Branch or Tee	
	Switchgear, End Box or Transition	
HV UG Termination	Sealed end	
	Pot End	
	UGOH	
HV Cable Repair	5kV-330kV (HV & TR)	
LV UG Joint	Straight Through, Parallel Branch, Tee or Service	
	Network Box	
LV UG Termination	Switchgear, End Box or Transition	
	Sealed end	
	Pot End	
	UGOH	

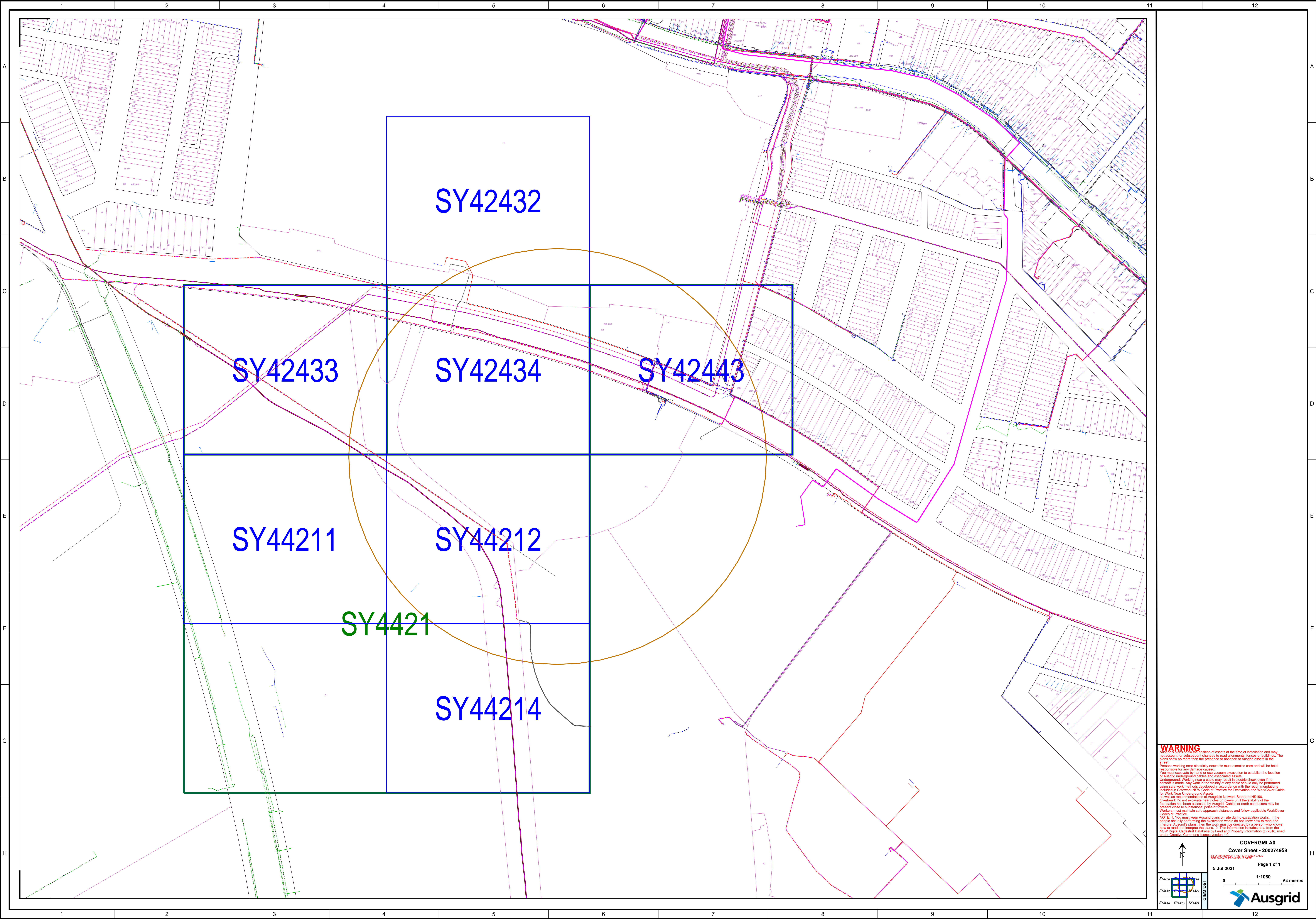
Object		Symbol
Auxiliary Fix	Pilot Window	
Auxiliary Joint	Straight Through, Parallel Branch or Tee	
Auxiliary Termination	UGOH or Pole Termination	
	Pilot	
	UGOP-ADSS Termination	
Cable Pit (Can be various shapes)	Auxiliary	
	Distribution	
	Transmission	
LV Pillar	Distribution	
	Switch	 1-3 WAY  4+WAY
	SL Pillar	 NO SLCP  SLCP
	SL Cubicle	
	Fargo	
	Private	
LV Auxiliary Pillar	All Types	
LV Link Box	2 Way & 4 Way	

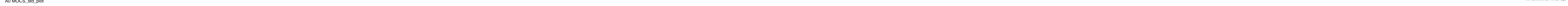
Ausgrid Underground Map Symbology

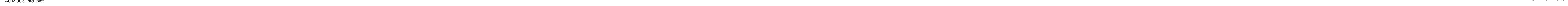
Object	Symbol
Substation	Cottage & Chamber
	Ground & Subtransmission Ground
	Kiosk & Subtransmission Kiosk
	Zone
	Transmission
	Bulk Supply Point
	Metering Station & Subtransmission Metering
Switching Station	Isolating & Earth
	Other – OH & UG
	Ring Main Unit
Earthing	UG Earth Cable
	Earth Point
Frequency Marker	Distribution and Transmission Power
	Auxiliary Communications
	Distribution and Transmission Power
	Auxiliary Communications

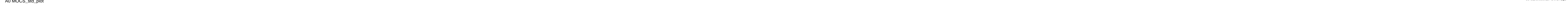
Object	Symbol
Trench	Centreline
Conduit (Can be various shapes)	Coverage (Distribution)
	Coverage (Transmission)
	Coverage (Underbore – cross hatched)
Cross Section	Marker (Staple)
	User Line
Measurement Point	
Miscellaneous Point Feature	Cable Clamp
	Cable Core split (Trifurcation)
	Cable Marker
	Electrolysis Point
	End Of Pipe
	Frequency Injection Unit
	Gas Charger
	Gas Control Cabinet
	Gas Control Kiosk
	Gas Control Point
	Gas Control Valve
	Gatic Pit lid

Object	Symbol
Miscellaneous Point Feature	Inspection Box
	Link point
	Oil Control Valve
	Oil Gauge
	Oil Tank
	Sniffer Box
	Thermocouple Box
	Transmission Cable Marker
Miscellaneous Linear Feature	Transmission Link Point
Map Note	All Geometries
	Location & Text
Dimension Feature	Placement Change
Lead Cable	Oil/Gas/Thermocouple
	Bonding
	Electrolysis

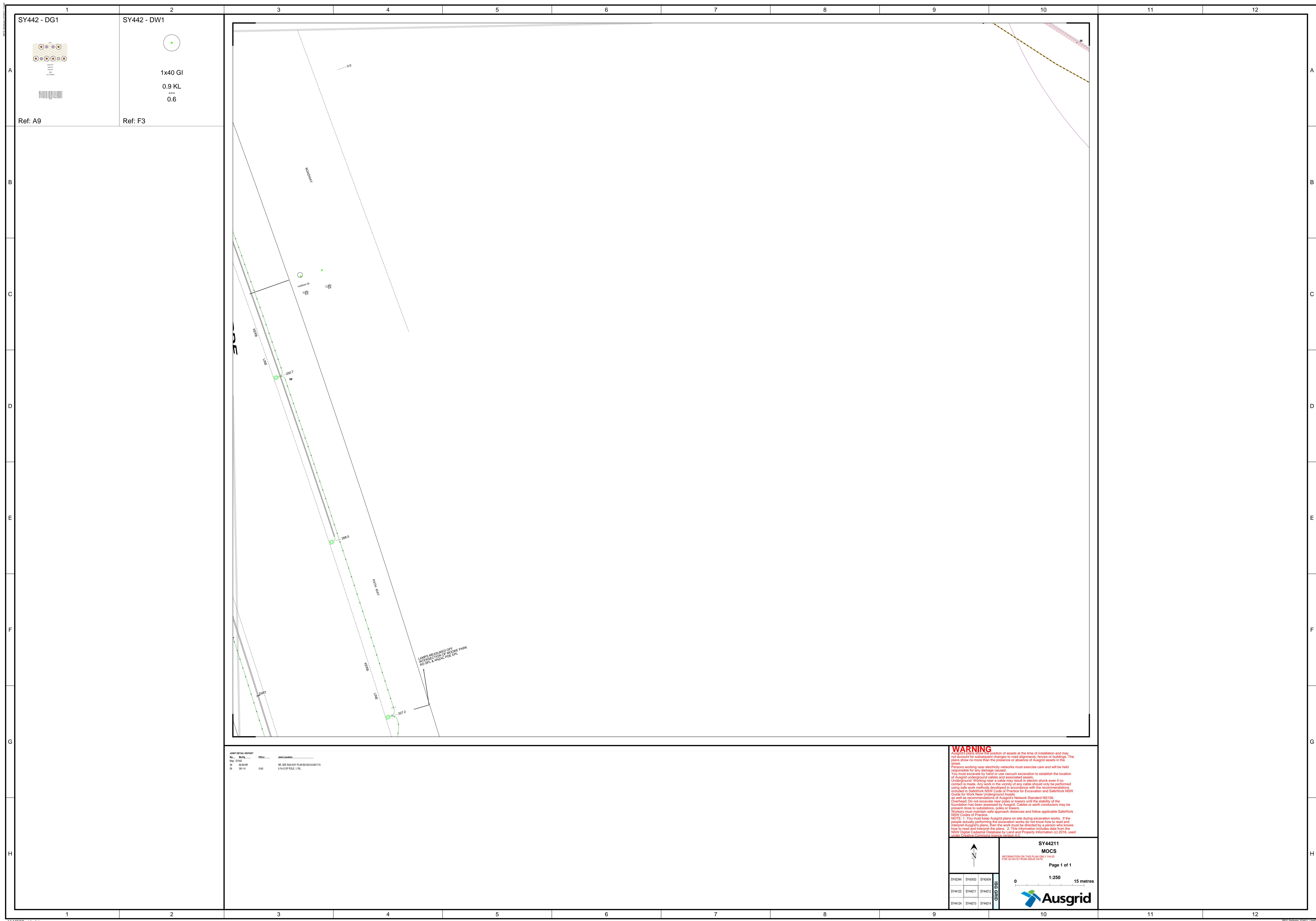


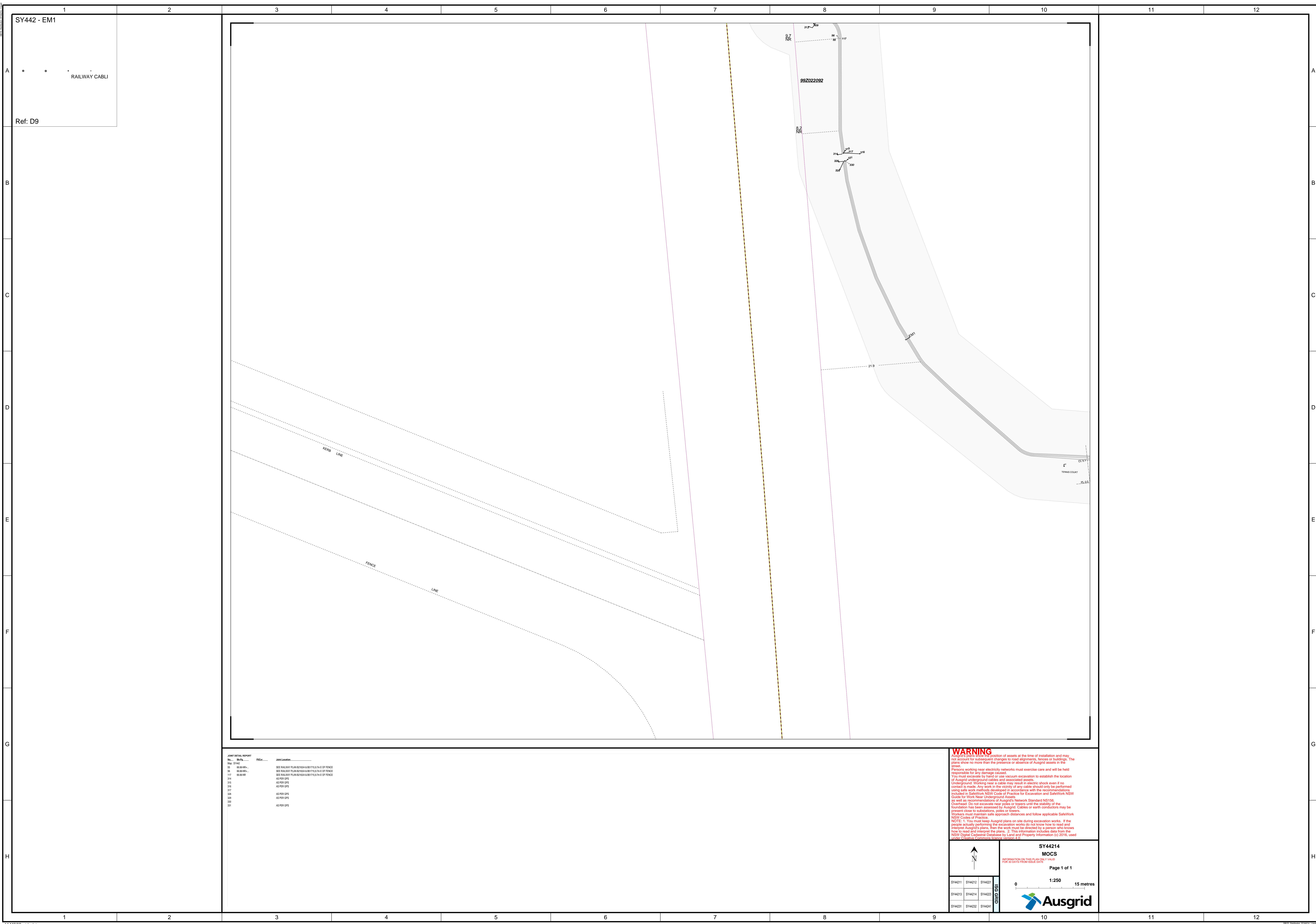


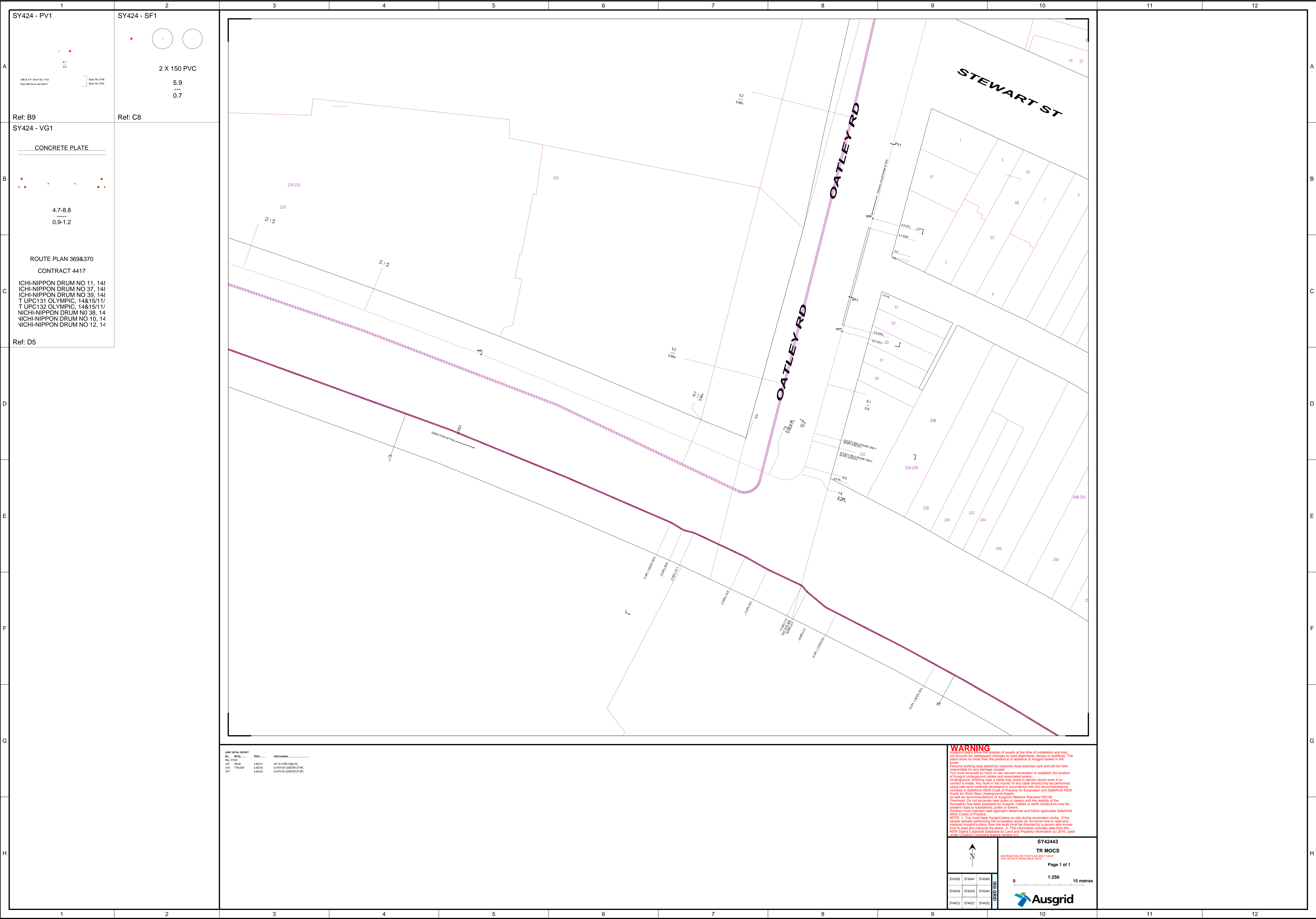












If further information is required, please contact:
Ausgrid DBYD
Phone: (02) 4951 0899
Fax: (02) 4951 0729



Emergency Phone Number 131388

Underground Cable Location Search Advice

-- Ausgrid Assets Affected including **TRANSMISSION** --

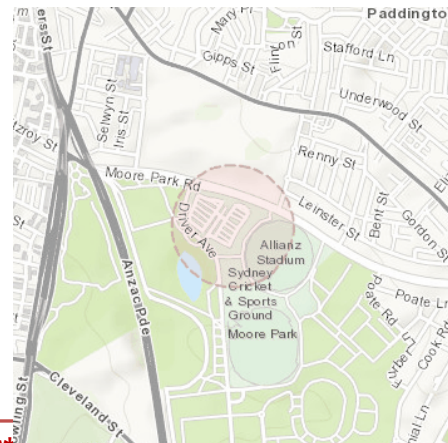
If you are working within 2 metres of **TRANSMISSION** cables you are required to have an Ausgrid Supervisor on site. The number to call to organise this is **49519200** and can also be found at the top of the supplied Transmission plan(s) in **RED**. Note: The Transmission Team requires **2 weeks notice**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

To:	Vanessa O'Brien Not Supplied 131 Clarence Street Sydney NSW 2000	Phone No:	+61432095452
		Issue Date:	5/07/2021

In response to your enquiry, Sequence No: 200274958 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:	44 Driver Avenue Moore Park NSW 2021
Job #:	30050018



****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
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
SafeWork 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]
Ausgrid's Network Standard NS199	This Network Standard applies to specific work on Ausgrid Low Voltage Underground Assets and Associated Hazards	Web Link [Click Here]
Working in Confined Spaces	For important information when working in confined spaces	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**



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.

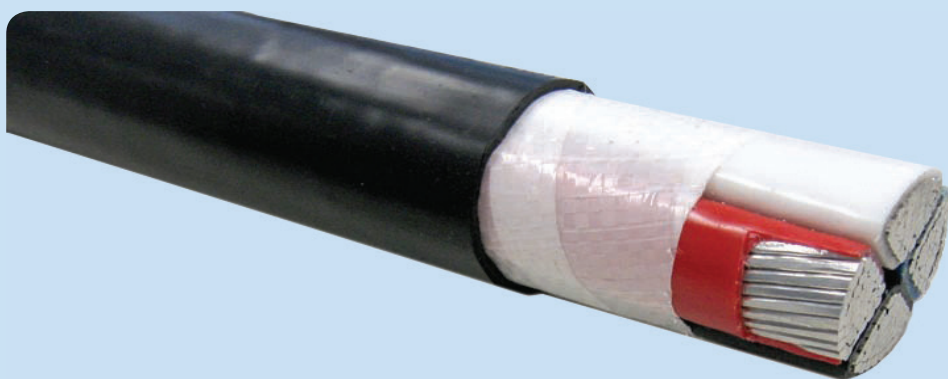
This brochure gives you a brief overview of how to prepare for excavation works near or around electricity cables. It is important that you also consult our guide How to Read Ausgrid Plans and make sure that workers engaged in excavation works fully understand how to read the plan. If the people actually 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 SafeWork NSW requirements and codes.

See also:

- **SafeWork NSW Guidelines: Work Near Underground Assets**
- **SafeWork NSW Code of Practice: Excavation Work**
- **SafeWork NSW 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](https://www.ausgrid.com.au)).
For further information call 13 13 65.

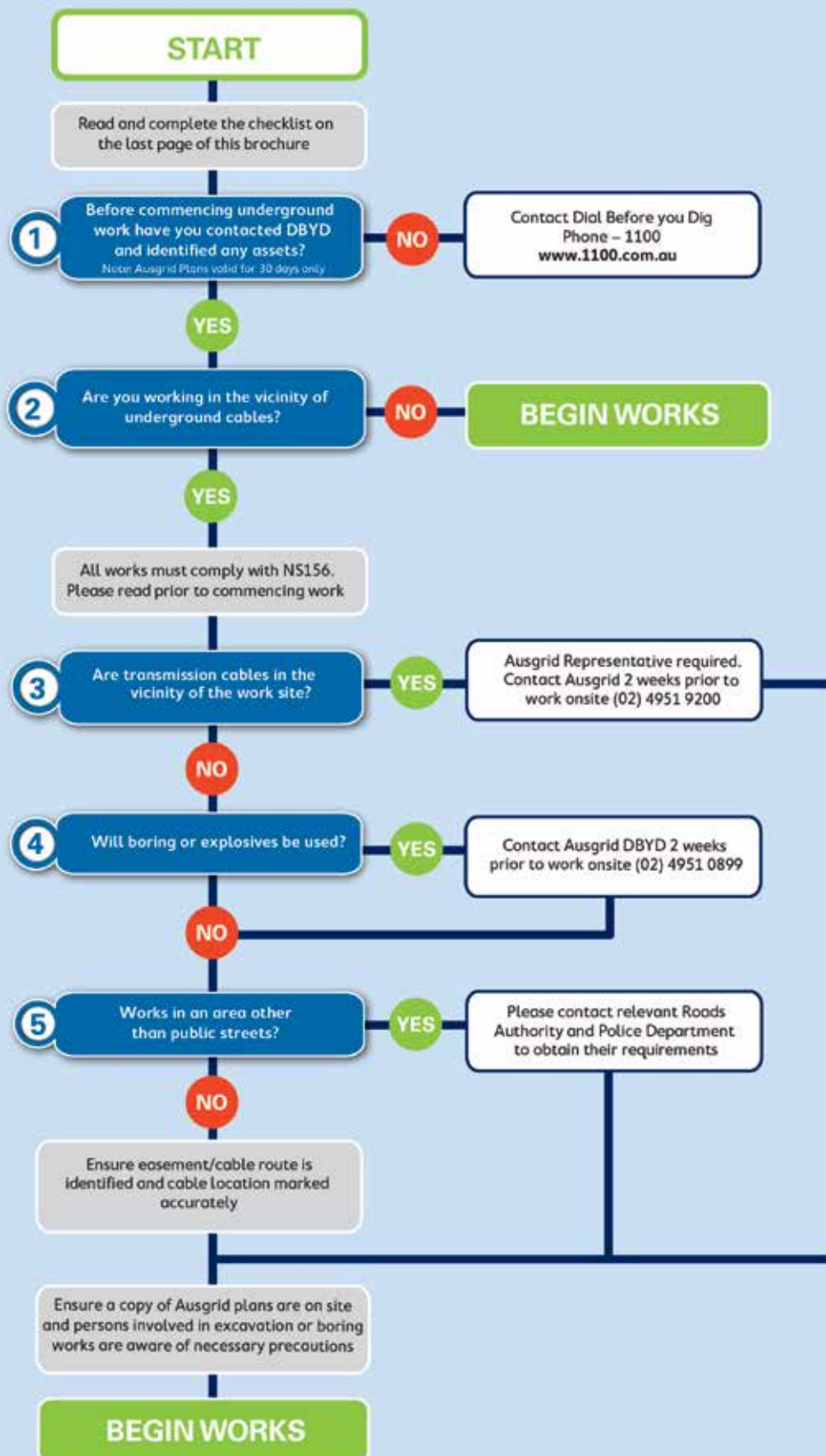
You've taken every precaution but accidents still happen. What now?

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/or 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



Telecommunications – AARNet

05/07/2021

To:
Vanessa O'Brien
Not Supplied
131 Clarence Street
Sydney, 2000

Sequence No: 200257007

Job No: 30047003

Location: 44 Driver Avenue
Moore Park, NSW, 2021

Commencement Date: 05/07/2021

Dial Before You Dig Response – Underground Fibre Assets

Dear Vanessa O'Brien

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.



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.

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

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



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.

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

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-dig@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

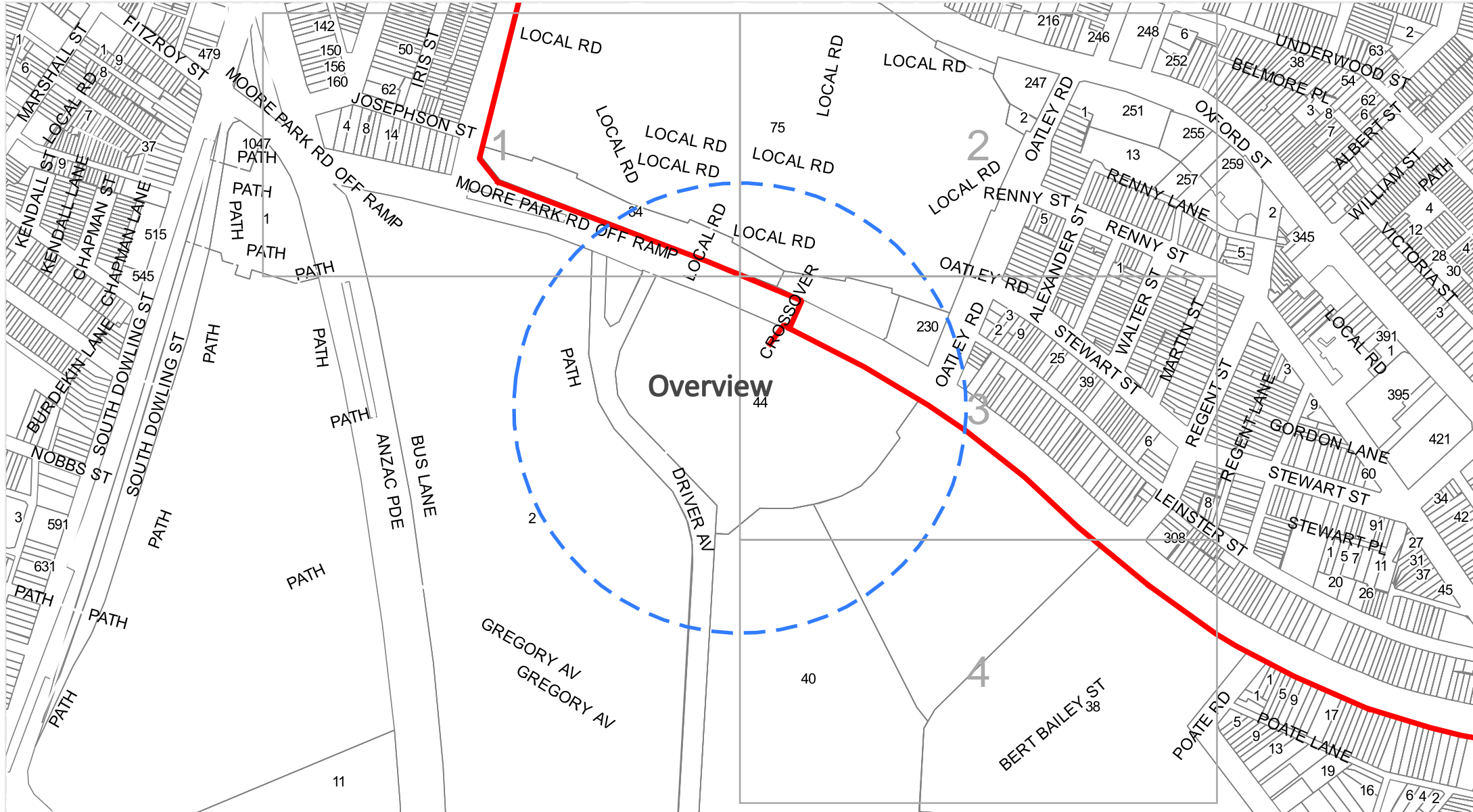
Assistance can be obtained by contacting AARNet NOC on 1300 APL NOC (1300 275 662) Where an on-site location is provided by an accredited locator, the owner is responsible for all costs associated with hand digging or use of non-destructive water jet method (pot holing) to visually locate AARNet assets. 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-dig@aarnet.edu.au **must be contacted to discuss possible engineering solutions.**



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.

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

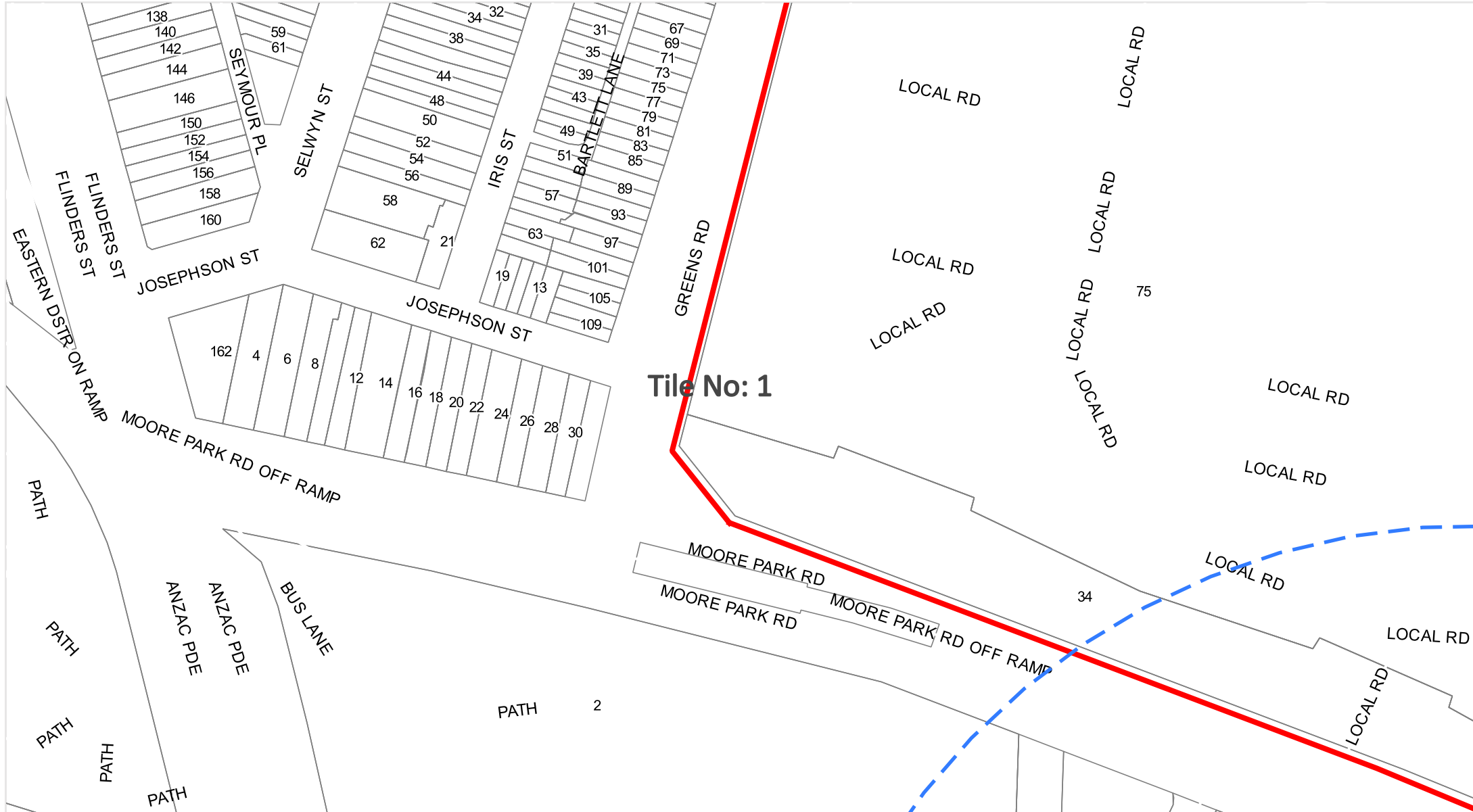


Legend | Scale: 1:4612



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

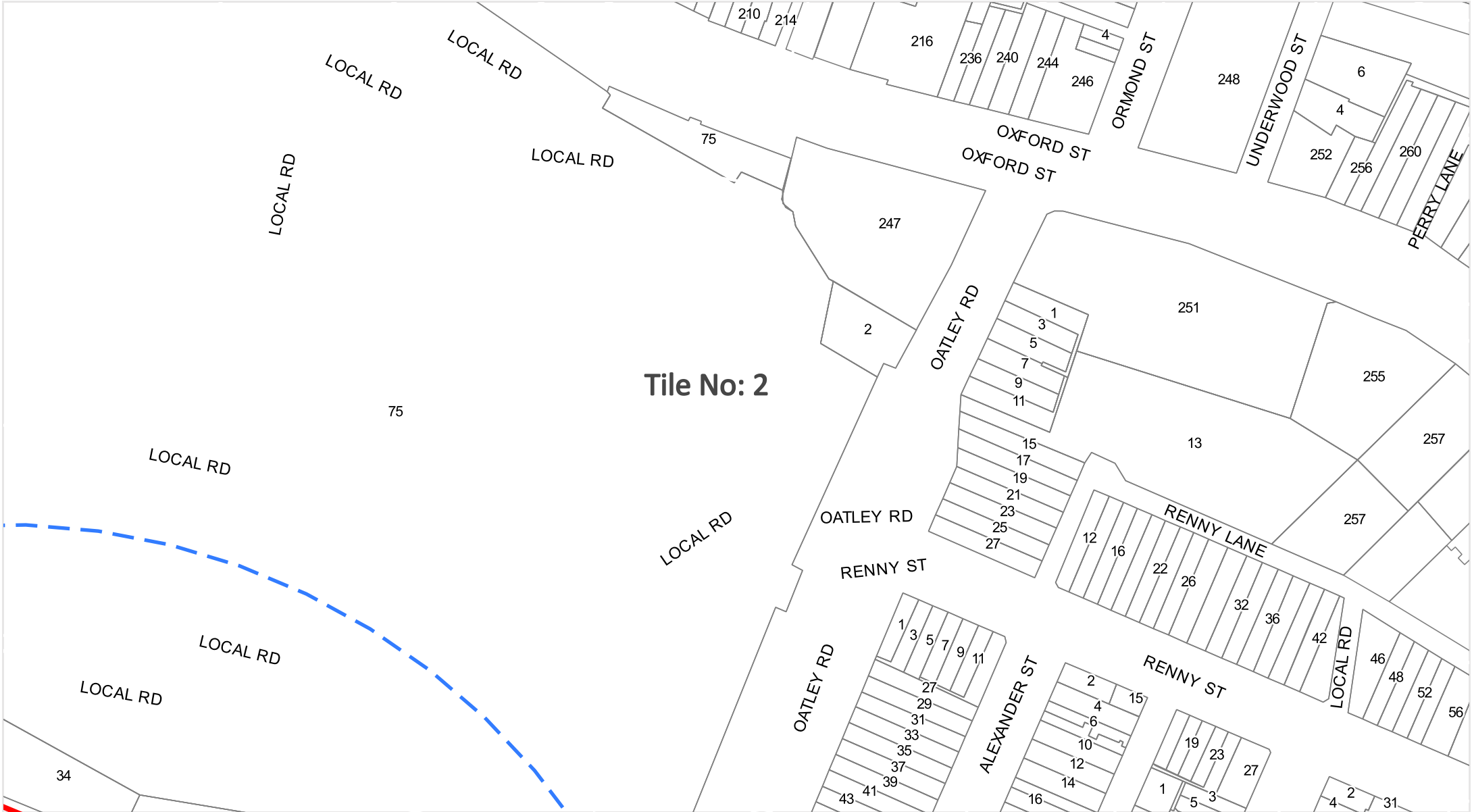
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Legend | Scale: 1:1500

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

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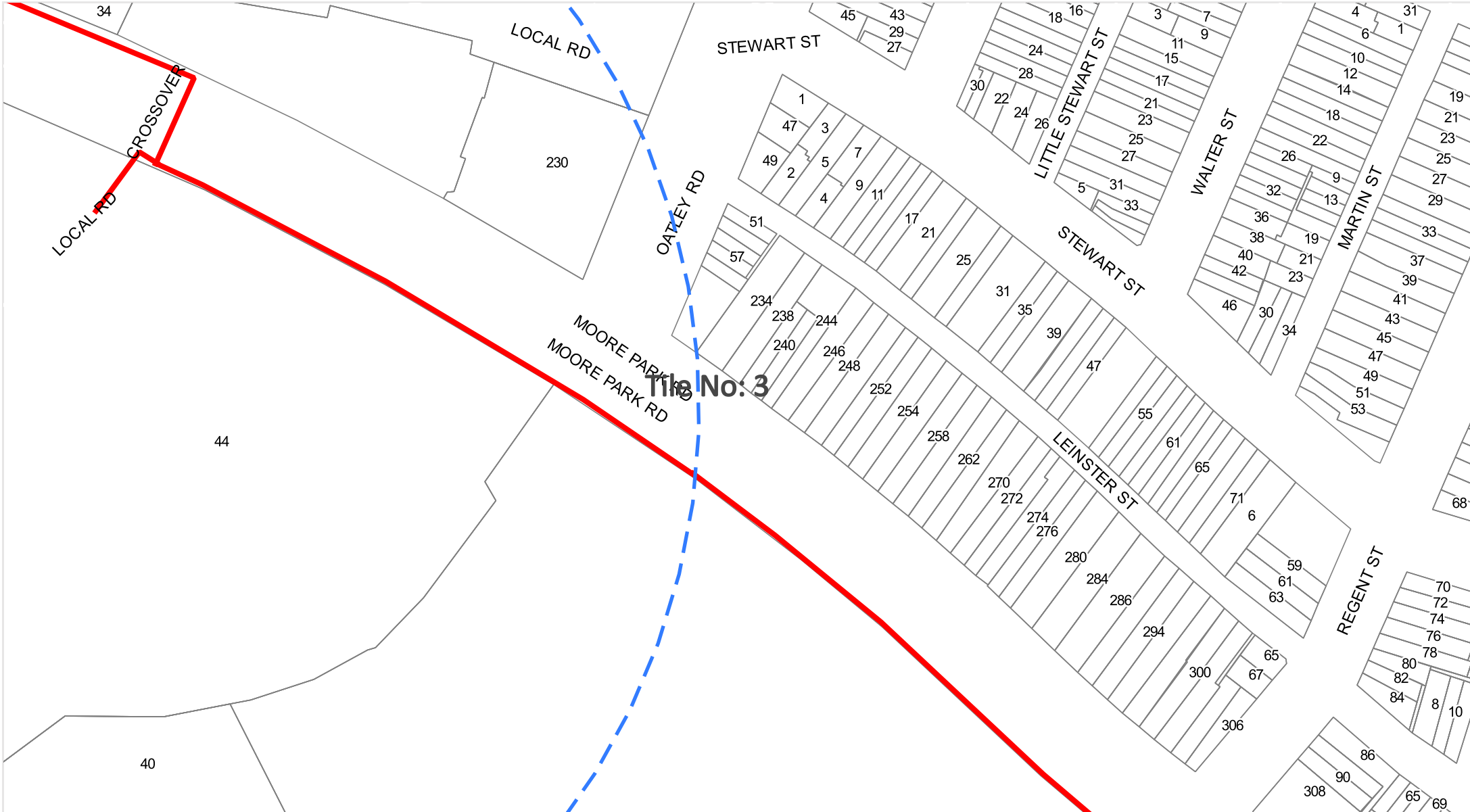


Legend | Scale: 1:1500



- Enquiry Area
- AARNET Fibre Optic Assets
- AARNET Power Assets
- Cadastrate

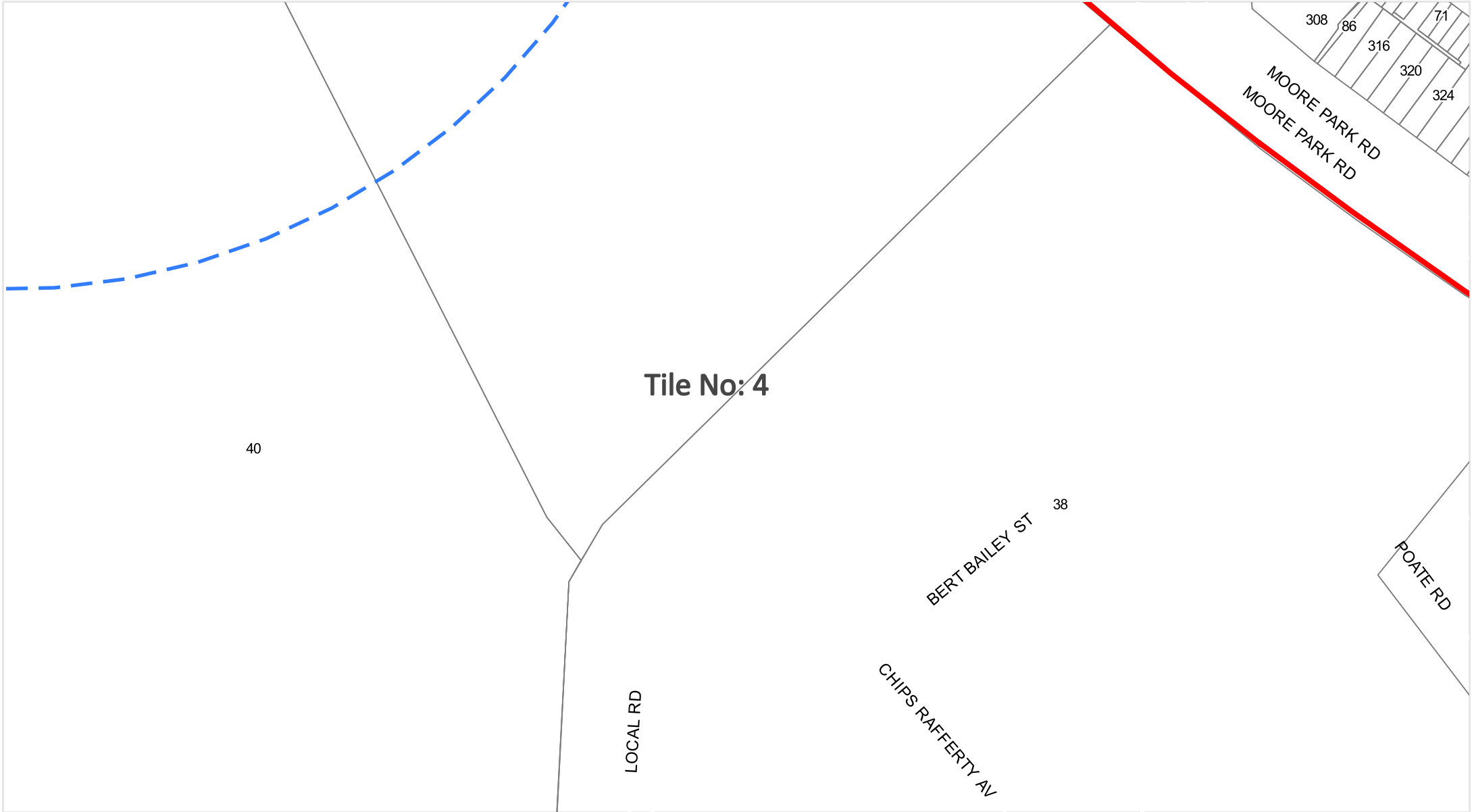
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Legend | Scale: 1:1500

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

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Legend | Scale: 1:1500



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

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Telecommunications – NBN



Working near **nbn**TM 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 providers 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.



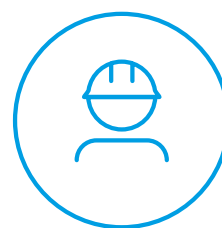
Plan: Plan your job by ensuring the plans received are current and apply to the work to be performed. Also check for any visual cues that may indicate the presence of services not covered in the DBYD plans.



Prepare: Prepare for your job by engaging a DBYD Certified 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.

To: Vanessa O'Brien
Phone: Not Supplied
Fax: Not Supplied
Email: vanessa.obrien@arup.com

Dial before you dig Job #:	30047003	
Sequence #	200256998	
Issue Date:	04/07/2021	
Location:	44 Driver Avenue , Moore Park , NSW , 2021	

Information

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

nbn™ Assets	Search Results
Communications	Asset identified
Electricity	No assets

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 nbn™ Underground Assets

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 above. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators, e.g DBYD Certified 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. 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. If you are planning to excavate and require further information, please email dbyd@nbnco.com.au or call 1800 626 329.

Notes:

1. You are now aware that there are **nbn**TM 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, e.g DBYD Certified Locators, at your cost to locate **nbn**TM 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**TM 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**TM 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**TM fibre optic, copper and coaxial cables, and power cable feed to **nbn**TM 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**TM 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**TM 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 the **nbn**TM 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,

nbn DBYD

Date: 04/07/2021

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Working near **nbn**TM 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

All **nbn**TM network facility damages must be reported online [here](#).
For enquiries related to your DBYD request 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.

nbn will not be liable or responsible for any loss, damage or costs incurred as a result of reliance on this brochure.

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To: Vanessa O'Brien
Phone: Not Supplied
Fax: Not Supplied
Email: vanessa.obrien@arup.com

Dial before you dig Job #:	30047003	 DIAL BEFORE YOU DIG <small>www.1100.com.au</small>
Sequence #	200256998	
Issue Date:	04/07/2021	
Location:	44 Driver Avenue , Moore Park , NSW , 2021	

Indicative Plans

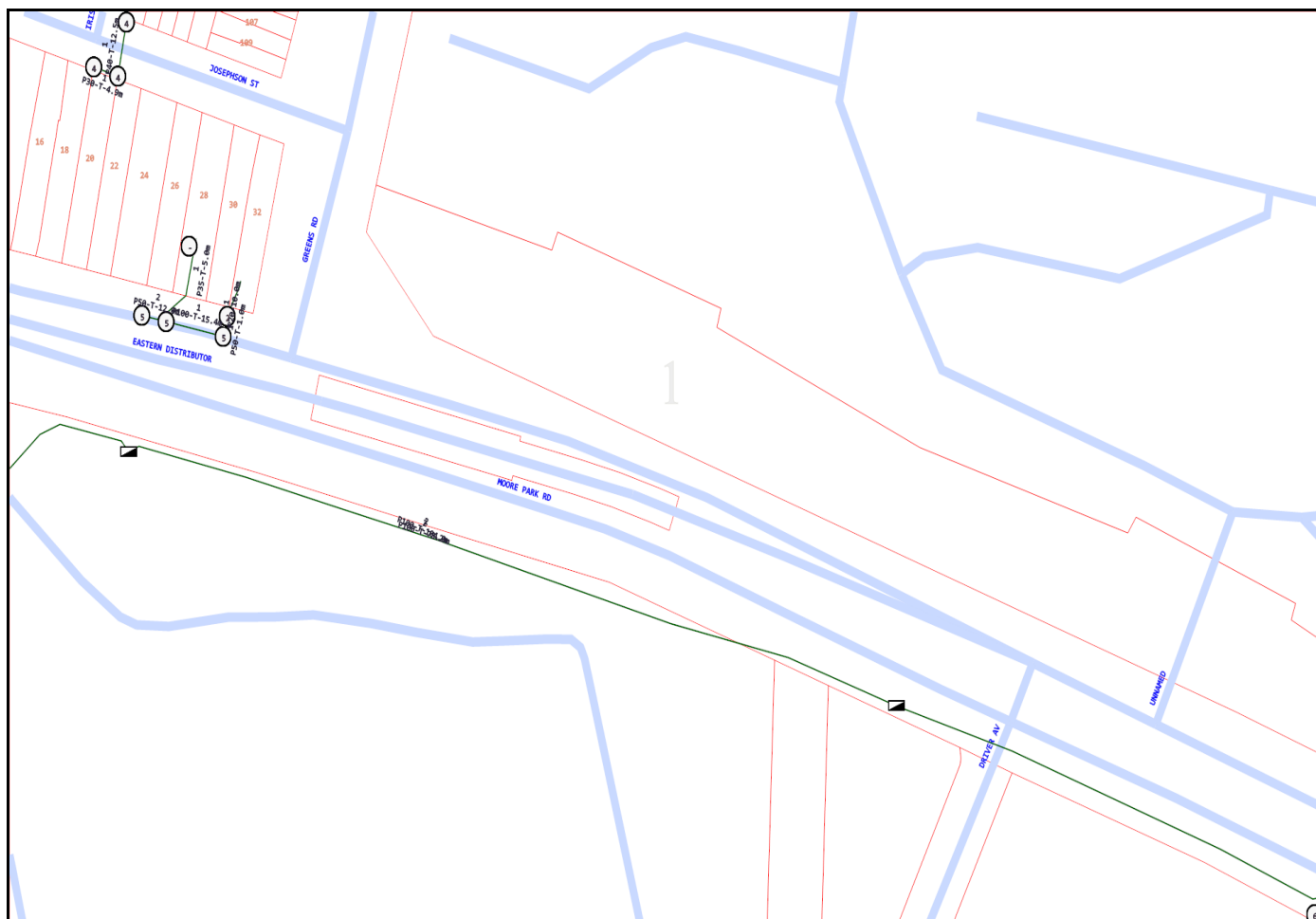
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2	5
3	6

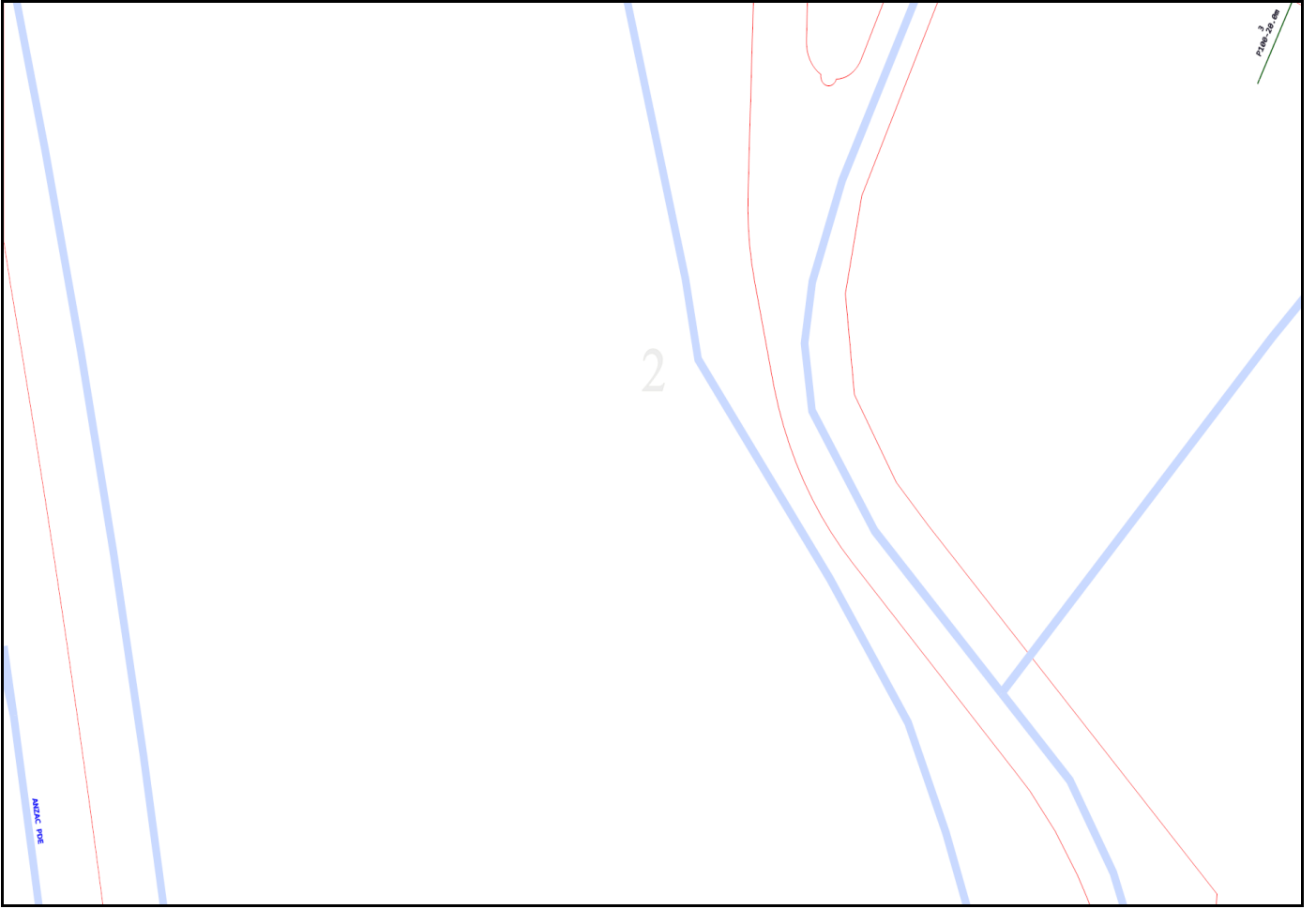


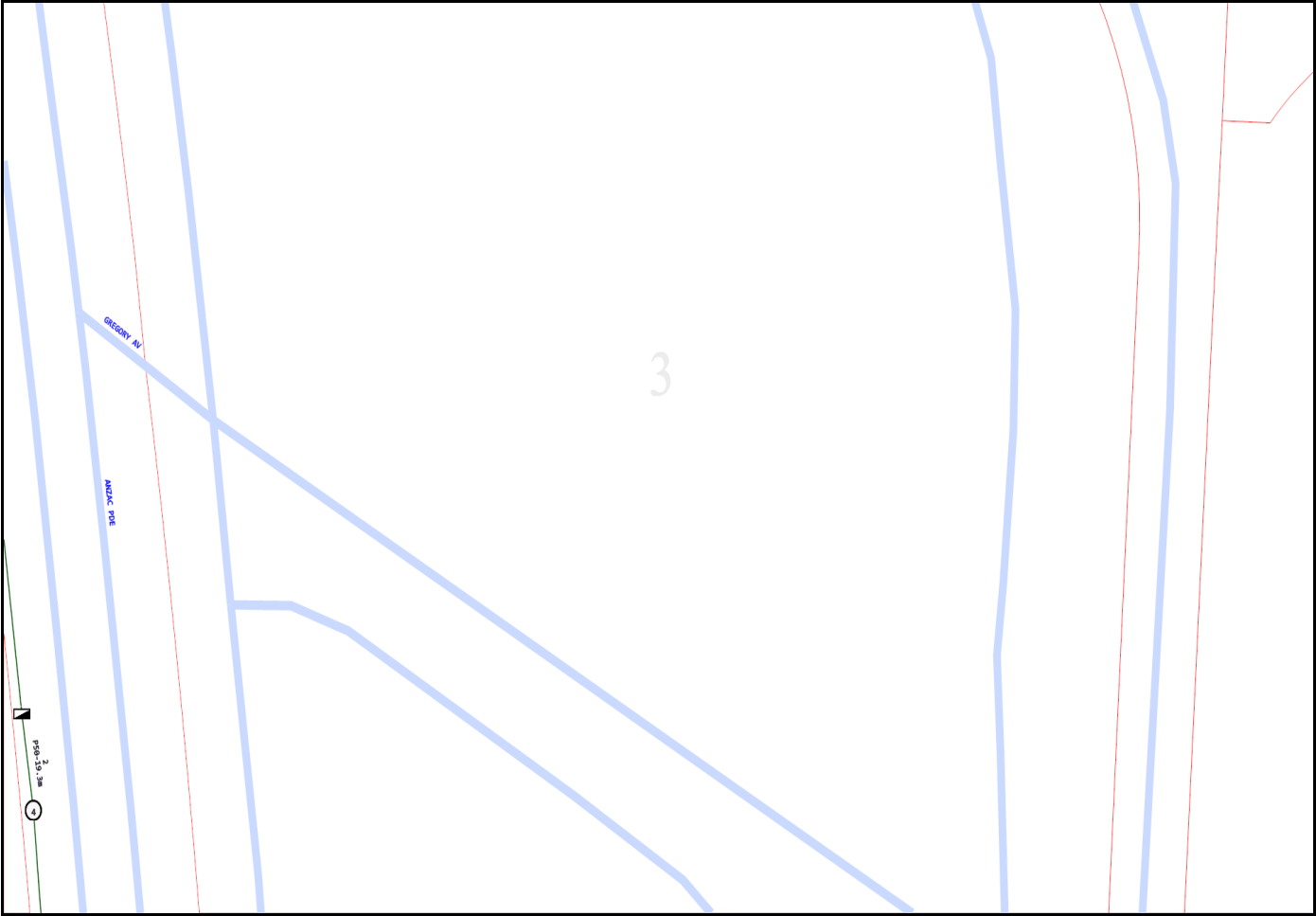
LEGEND

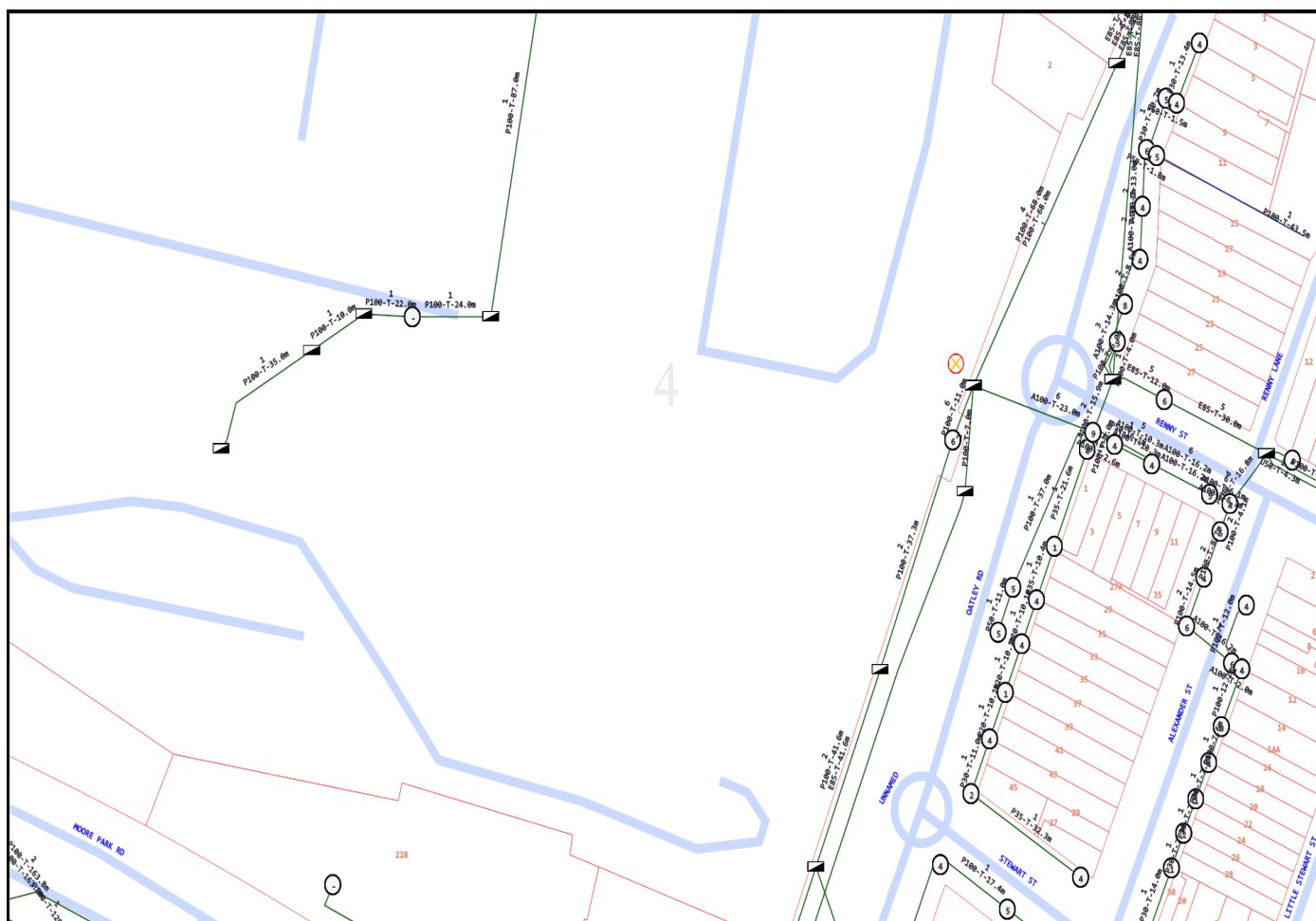


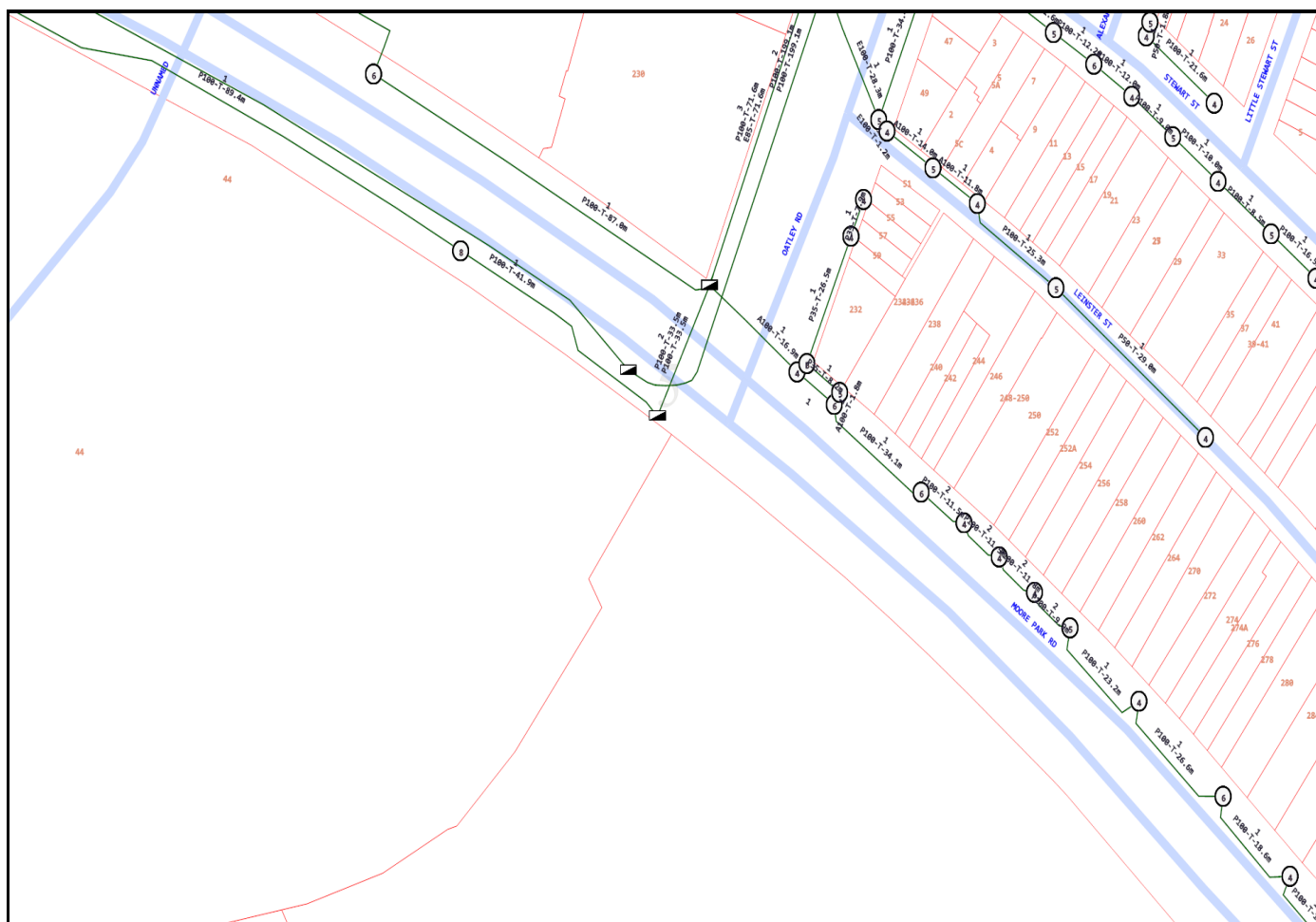
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40)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

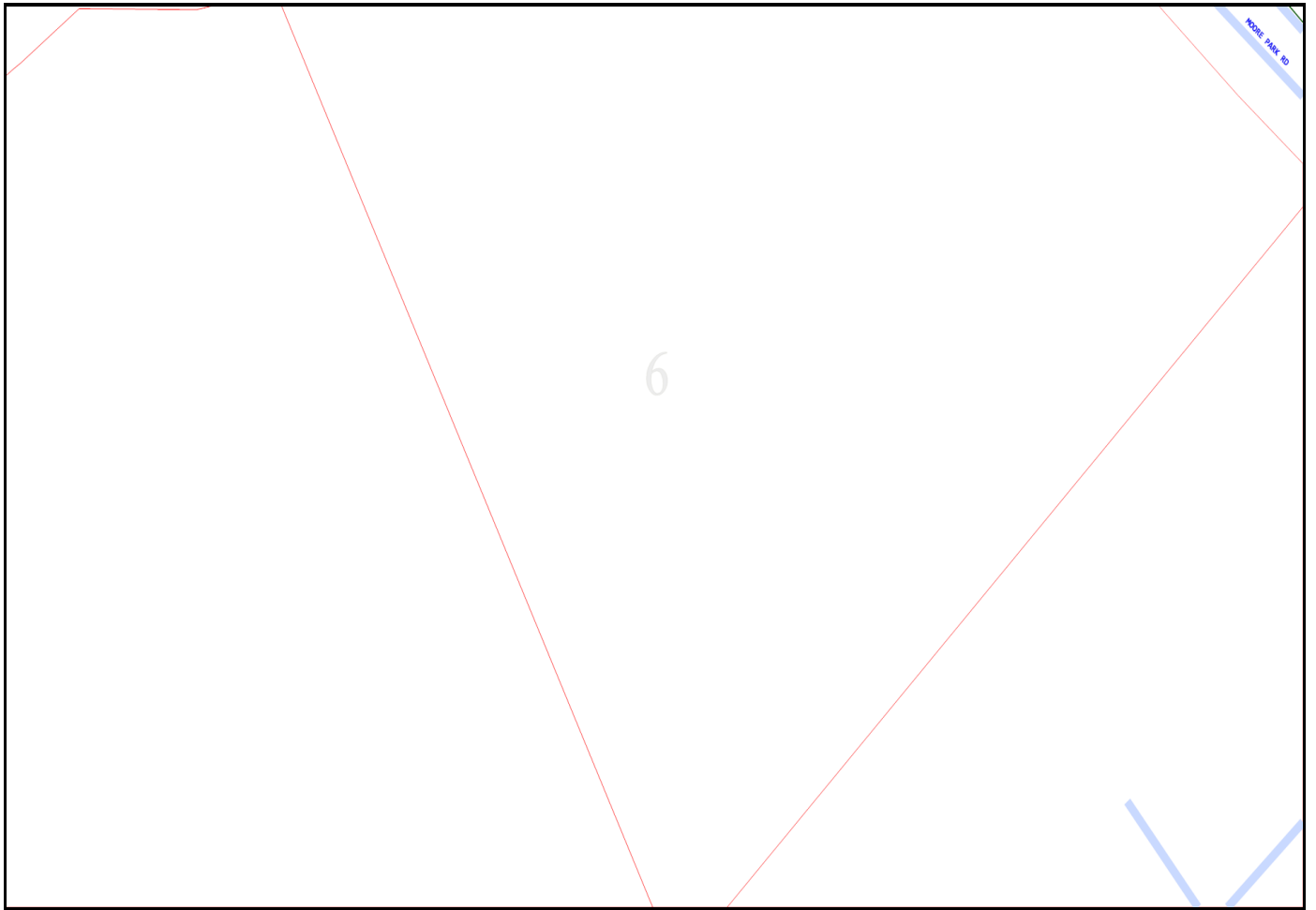












Emergency Contacts

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

Telecommunications – Next Gen

Plant Location Details



04/07/2021

Vanessa O'Brien
Not Supplied
131 Clarence Street
Sydney NSW 2000
Phone: +61432095452

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

Dear Vanessa O'Brien

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

Assets Affected:

Nextgen Assets

Sequence No:

200257000

Location:

44 Driver Avenue, Moore Park NSW 2021

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 loss 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	<i>Not within 1.0m of actual locations</i>
Vibrating Plate or Wackers Packer Compactors	<i>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</i>
Boring Equipment (in-line, horizontal and vertical)	<i>Not within 2.0m of actual location Constructor to check depth via vacuum excavation (pot-hole)</i>
Heavy Vehicle Traffic (over 3 tonnes)	<i>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</i>
Mechanical Excavators, Boring and Tree Removal	<i>Not within 1.0m of actual location Constructor to vacuum excavate (pot-hole) and expose plant</i>

- 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 Locator 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 Locator.

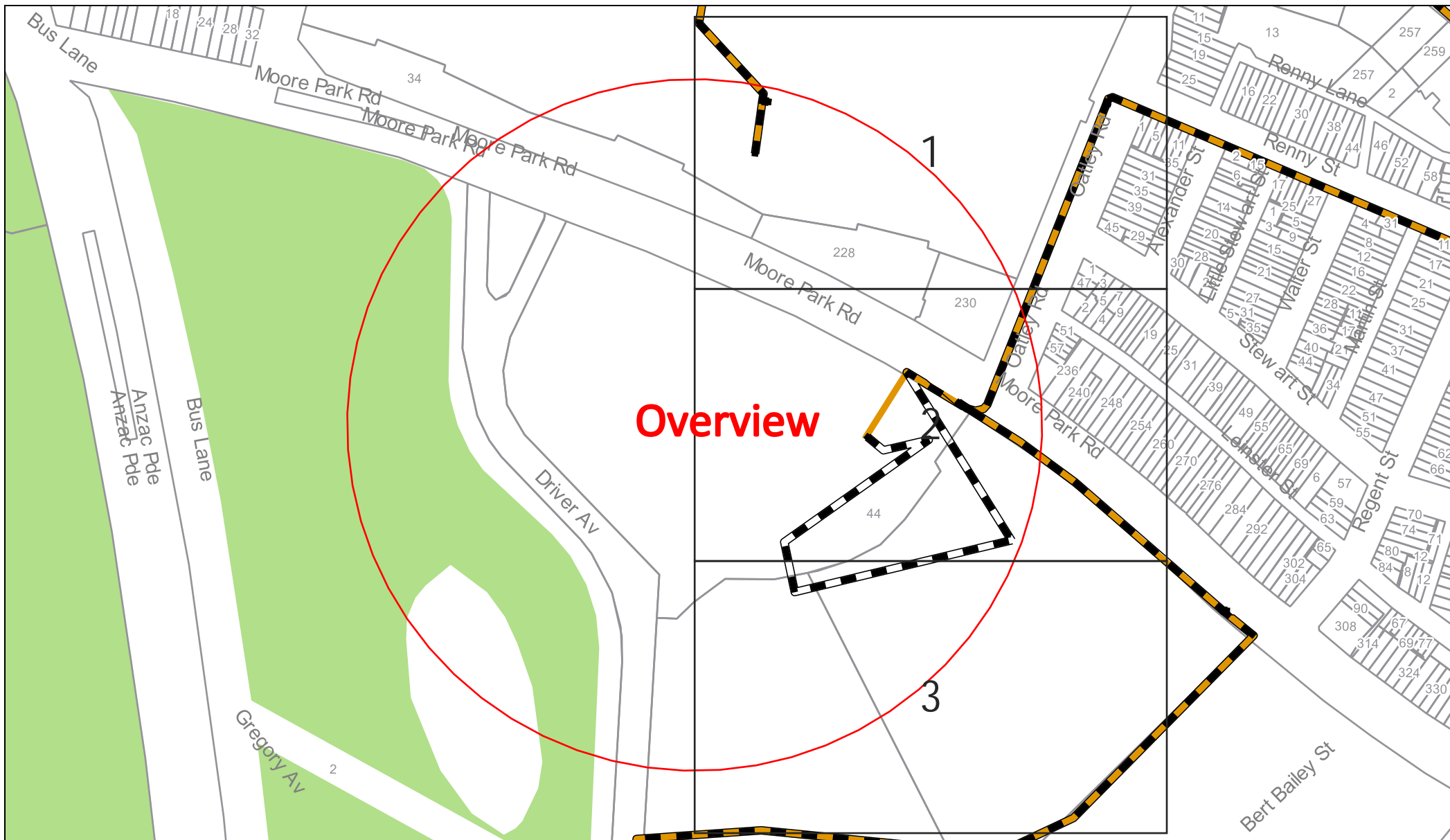
For the assistance of customers Nextgen Networks has established strict criteria to assess the skill of contractors that may be engaged by owners requiring Nextgen Networks plant locating services to perform any of the following activities if requested to do so by the owner:

- 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 Locator 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: 200257000

Date: 05/07/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.

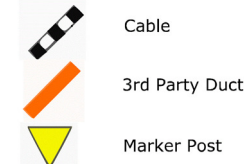


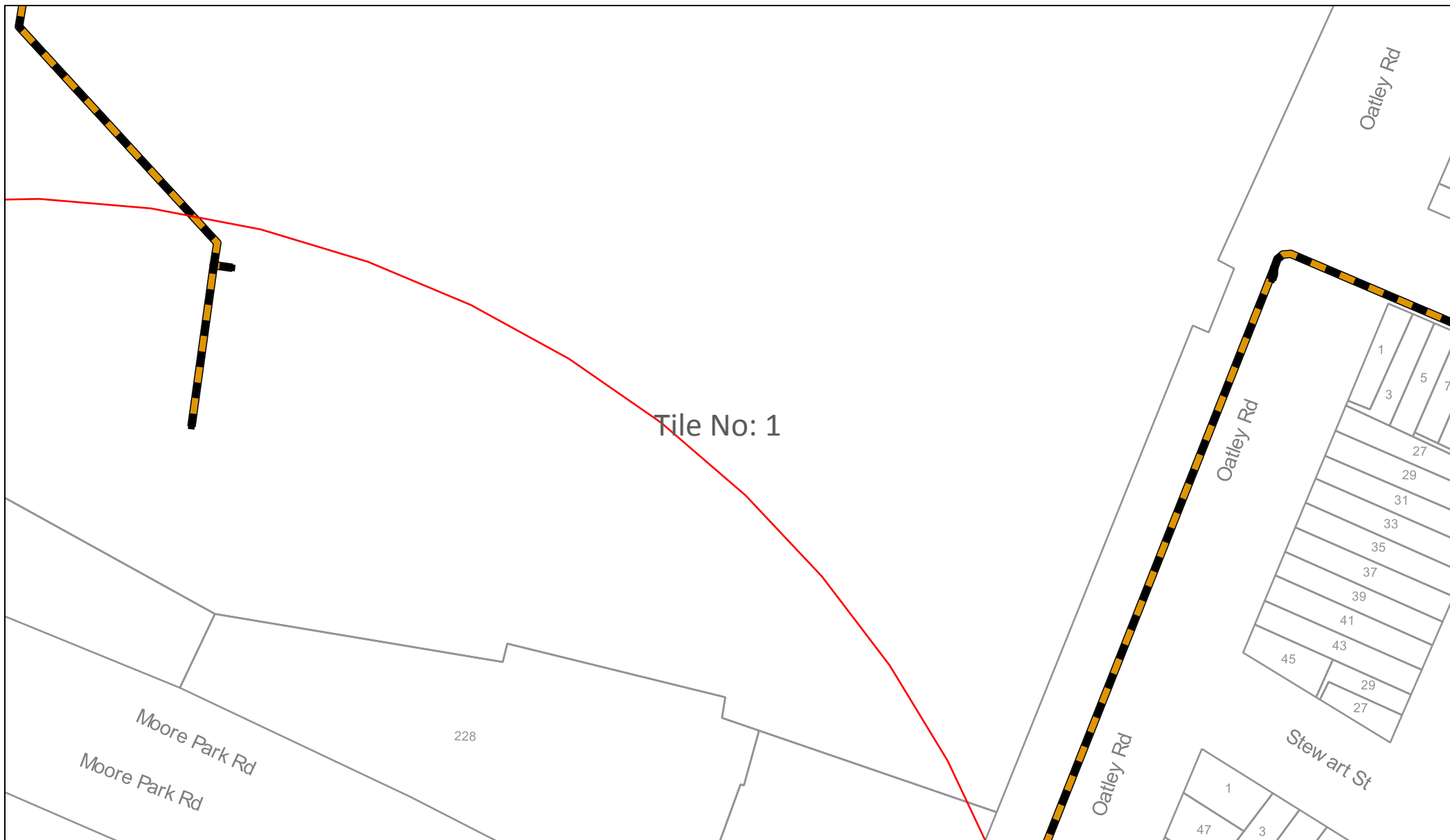
LEGEND

Digsite



Assets





Sequence Number: 200257000

Date: 05/07/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.



LEGEND

Digsite



Assets



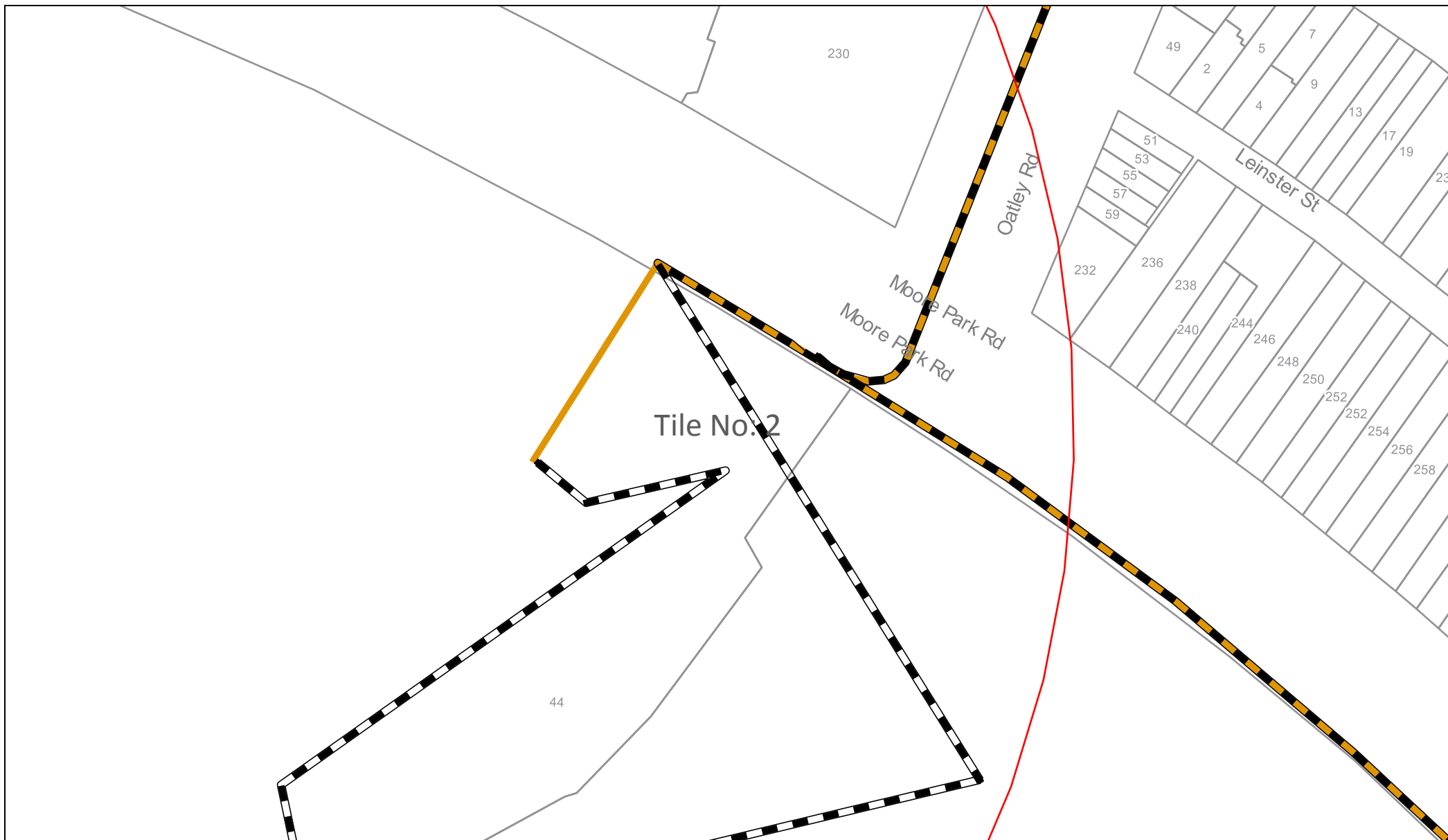
Cable



3rd Party Duct



Marker Post



Sequence Number: 200257000

Date: 05/07/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.

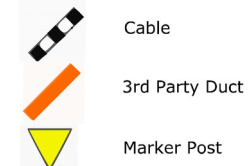


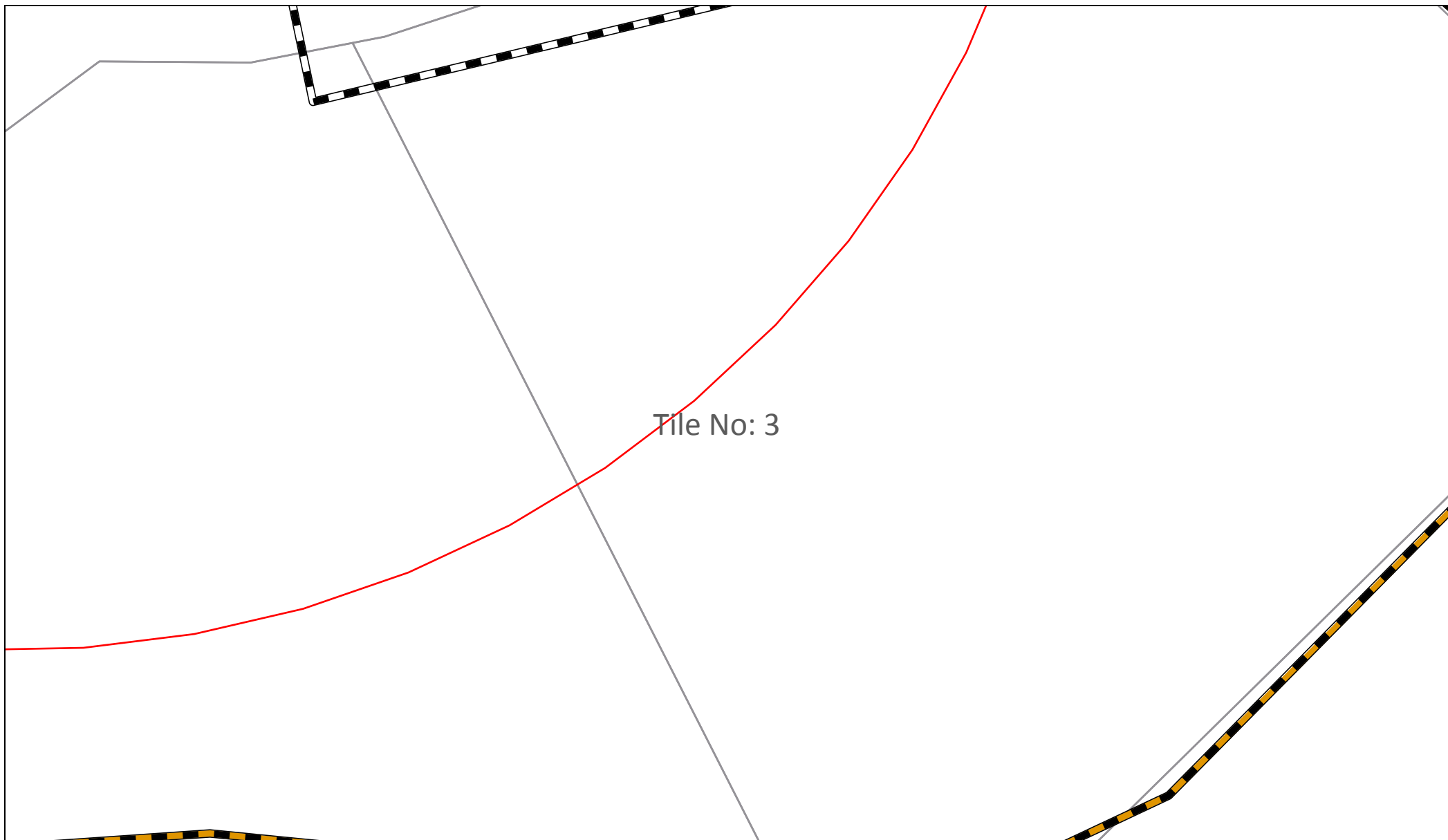
LEGEND

Digsite



Assets





Sequence Number: 200257000

Date: 05/07/2021

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.



LEGEND

Digsite



Area



Assets

Cable



3rd Party Duct



Marker Post

Telecommunications – Optus

Date: 05/07/2021
To: Vanessa O'Brien
Company:
Address: 131 Clarence Street
Sydney, NSW 2000

ENQUIRY DETAILS

Location: 44 Driver Avenue, Moore Park, NSW 2021
Sequence No.: 200256993
DBYD Reference: 30047003

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

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




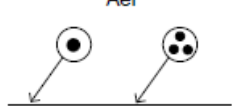
Further assistance on asset clearances, protection works or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:

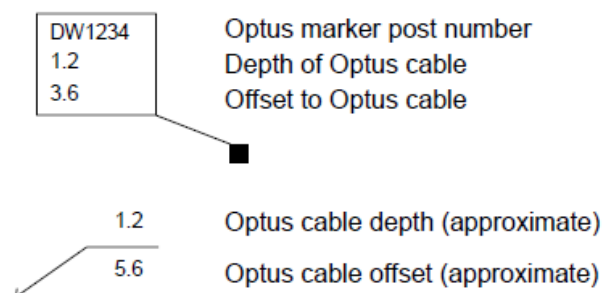
NFODamages&RelocationsDropbox@optus.com.au

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 underground cable		Optus manhole/pit
	Optus conduit		Other Utility manhole/pit
	Optus fibre in Other Utility conduit		Optus marker post
	Southern Cross conduit		Railway / Tram line
	Indigo conduit		Highway / Major Road
	Uecomm conduit		Arterial Road
			Council Road - minor

	Optus underground cable
	Optus cable buried jointly with third party utility
	Optus aerial cable
	Optus cable in conduit with subducts



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
Tina Stanhope	SureSearch Underground Services	1300 884 520 0418 920 245	tina.stanhope@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
Joshua Payne	Australian Utilities Management Pty Ltd	0427 833 222	aie@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
Neil Blenkinsop	Utility Mapping Pty Ltd	0427 318 681	nblenkinsop@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	02 6772 3702	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

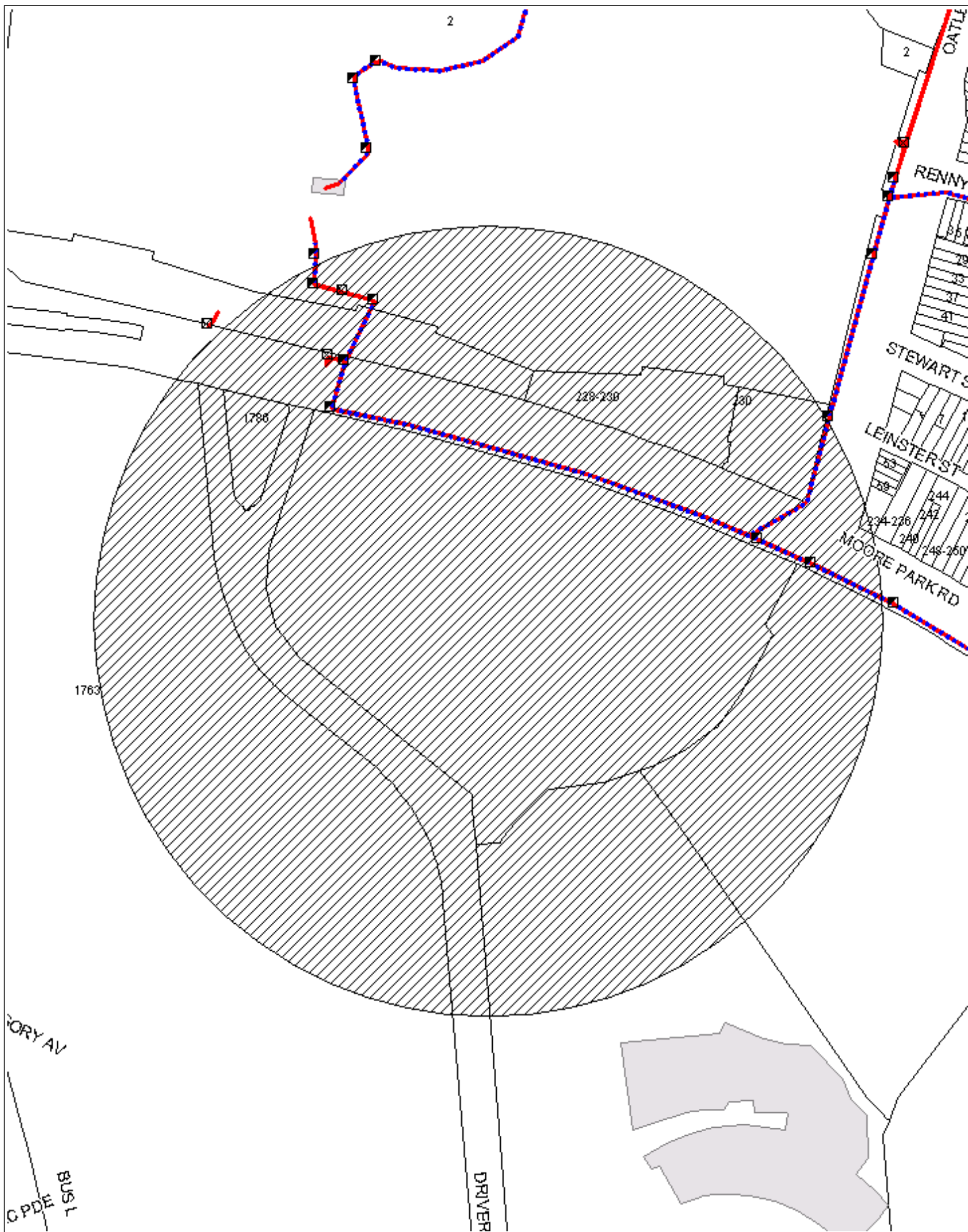
Gary Laneyrie	Laneyrie Electrical	0412 079 079 0413 048 048	bindy@laneyielectrical.com.au	NSW	Illawarra, South Coast, Hunter Region
Reece Gainsford	East Coast Locating Services	0431 193 111	eastcoastlocating@hotmail.com	NSW	Sydney, Maitland, Newcastle, Hunter, Port Stephens, Central Coast
Allan Clarke	The Control Group Pty Ltd	0421 960 017	allan@thecontrolgroup.com.au	NSW	Northern NSW
Simon Cook	Douglas Partners	0431 507 667	simon.cook@douglaspartners.com.au	NSW	NSW All
Samual Boesen	Rubicof Cable & Pipe Locators	0403 285 352 0418 103 369	rubicof@optusnet.com.au	NSW	Cessnock
Craig Vallely	Aqua Freeze & Locate Pty Ltd	0458 774 440	service@aquafreeze.com.au	NSW	Sydney
Josiah Chapman-Hunter	Suk Truk Services Pty Ltd	0419 125 551 0478 004 606	services@suktruk.com.au	NSW	Hunter/Newcastle
Laurence Mead	Veris Australia	0419 770 560	i.mead@veris.com.au	NSW	Sydney
Jason Vane	Smartscan Locators PTY Ltd	0498 025 21	admin@sslocators.com.au	NSW	Sydney
Alex Farcash	Newcastle Locating Services Pty Ltd	0410 698 599	admin@newcastlelocatingservices.com.au	NSW	Newcastle, Hunter Valley, Central Coast, Taree & Surrounding Areas
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Kaisar Sefian	Australian Utility Search Pty Ltd	0424 841 888	kaisar@aususearch.com.au	NSW/ACT	All NSW, ACT
Ian Brown	A1 Locate Services	0400 484 828	ian.brown@a1locate.com.au	NSW/ACT	All NSW, ACT
Alexander Bogdanoff	Expert Service Locating	0420 346 477	info@expertservicelocating.com.au	NSW/QLD	Brisbane, Gold Coast, Sunshine Coast, Northern Rivers NSW
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Bobby Friesz	VAC Group Operations (T/A Earth Radar)	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
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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
Simon Griffin	Pensar Utilities	0458 800 267	sgriffin@pensar.com.au	QLD	Brisbane, Gold Coast, Sunshine Coast
Andrew Cowan	VAC Group Operations (T/A Earth Radar)	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
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QLD Operations	Utility Location Services	0499 775 095 07 3807 3552	qldops@utilitylocationservices.com.au	QLD	SouthEast QLD, Northern NSW
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Luke Steadman	Utility Mapping Pty Ltd	0472 867 197	lsteadman@utilitymapping.com.au	QLD	All
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 822 878	admin@dynamicexcavation.com.au	QLD	QLD, NSW, VIC
Marty Carlson	Surveywerx Pty Ltd	0488 842 110	mike@surveywerx.com	QLD	South East QLD
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Ben Stephens	Electroscan (DTS Group)	0434 140 556	ben.s@electroscanqld.com.au	QLD	All
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
Olivier Davies	Central Locating PTY LTD	0439 995 894	ollie@cetrallocating.com.au	VIC/SA/ TAS	Melbourne, Surf Coast, Ballarat

Elliot Davies	D-Tech Ground & Overhead Services	0423 229 332	elliott@d-tech.net.au	VIC	Victoria
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
Bernie Acabal	Taylor's Development Strategists	03 9501 2800 0419 758 794	b.acabal@taylorsds.com.au	VIC	Victoria
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Maurice Tobin	Drain Solutions	1300 546 348	info@drainsolutions.com.au	VIC	Melbourne Metro
Nathan Kelleher	Seeker Utility Engineering	0439 691 840	nathan.kelleher@seekerutility.com.au	VIC	Melbourne
Jeffrey Ramos	VAC Group Operations (T/A Earth Radar)	0436 635 011	Jeffrey.ramos@earthradar.com.au	VIC	All
Ben Zurak	Veris Australia	03 7019 8400	melbourne@veris.com.au	VIC	All
Courtney Marson	CSA Specialised Service Pty Ltd	1300 859 829	courtney@csaspecialised.com.au	VIC/SA/ TAS	All
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Tony Simpson	Utility Mapping Pty Ltd	0438 630 146	tsimpson@utilitymapping.com.au	SA	All
Deninis Stray	Pinpoint Services Mapping	0428 917 020	dstray@pinpointsm.com.au	SA	All
Johnny McGlynn	Pinpoint Services Mapping	0447 185 231	jmcglynn@alexander.com.au	SA	All
Galen Shanahan	VAC Group Operations (T/A Earth Radar)	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@bcspatial.com.au	WA	Perth Metro & Regional
Alex Jones	Utility Mapping Pty Ltd	0417 413 353	ajones@utilitymapping.com.au	WA	All
Chris Lee	Pulse Locating	0437 289 861	enquiries@pulselocating.com.au	WA	Perth
Morgan O'Connor	Kier Contracting	1300 543 728	morgan@kier.com.au	WA	Perth Metro & Greater region, Regional WA
Nigel Nunn	CCS Group / Utility Locating Solutions	08 9385 5000	enquiry@ccswa.com.au	WA	Perth
Paul Stevenson	Geographe Underground Services	0427 523 811	paul.stevenson@geographeunderground.com.au	WA	All
Jeremy Brown	Spotters Asset Locations Pty Ltd	0459 130 677	jeremy@spottersassetlocations.com.au	WA	All
Reece Topham	Prime Locate	0400 888 406	reece@primelocate.com.au	WA	All

Mark Docherty	RM Surveys	08 9457 7900	mark.docherty@rmsurveys.com.au	WA	All
Jonathon Sylva	Advance Scanning Services	1300 738 118	bookings@advancescanning.com	WA	All
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
Patrick Monaghn	Paneltec Group	0447 797 544	patrick@paneltec.com.au	TAS	All
Scott Richardson	AJ Water & Leak Detection	0457 710 680	admin@ajwater.com.au	TAS	All



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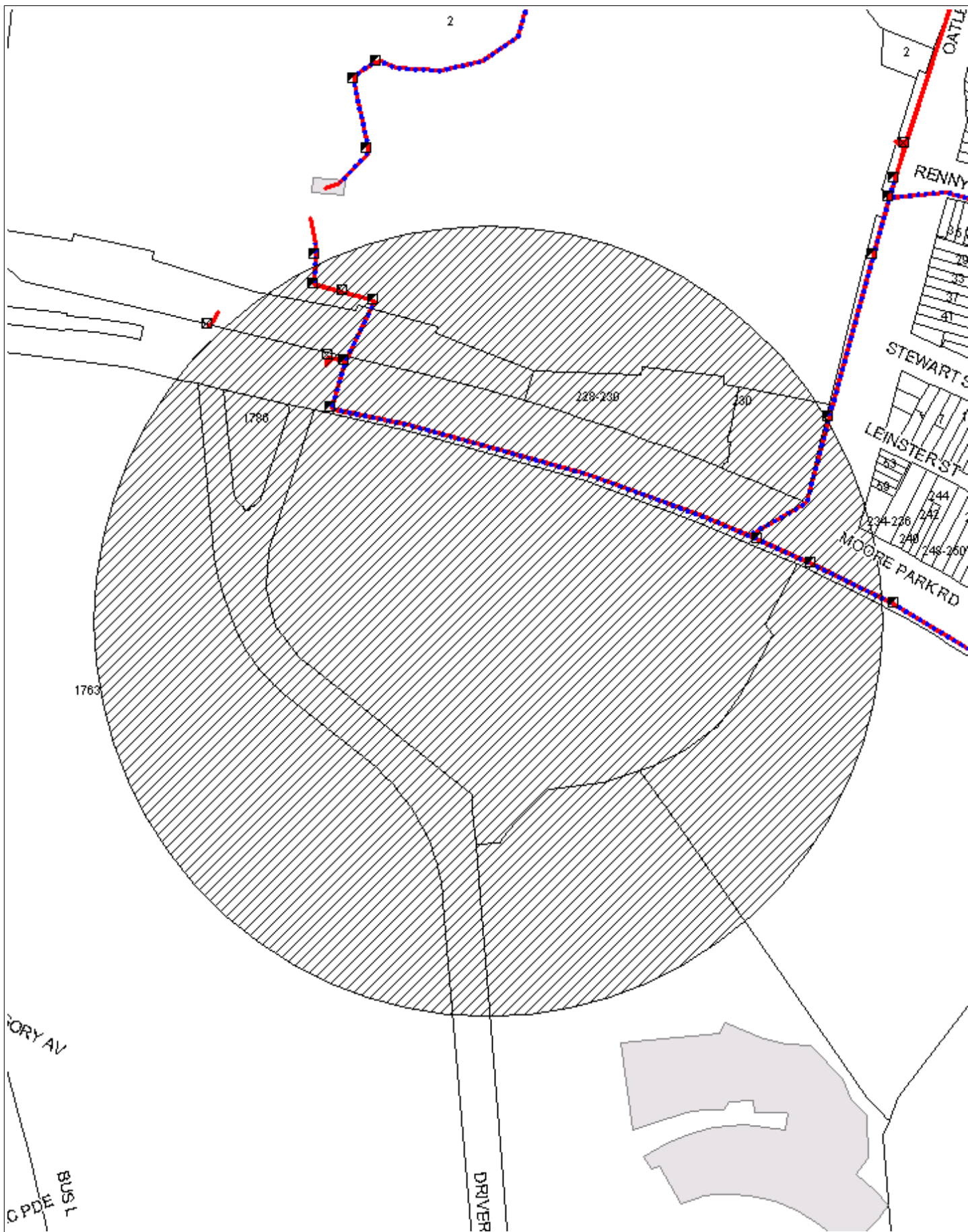
Sequence Number: 200256993

Date Generated: 05/07/2021



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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Telecommunications – Superloop

Level 17, 333 Ann Street
Brisbane, QLD, 4000
Ph: (07) 3905 2400
www.superloop.com

To:

Vanessa O'Brien
131 Clarence Street
Sydney NSW 2000

Enquiry Details

Utility ID	90428
Sequence Number	200257006
Enquiry Date	05/07/2021 09:00
Response	AFFECTED
Address	44 Driver Avenue Moore Park
Location in Road	Footpath,Road,Nature Strip
Activity	Planning and Design

Enquirer Details

Customer ID	3012749		
Contact	Vanessa O'Brien		
Company			
Email	vanessa.obrien@arup.com		
Phone	+61432095452	Mobile	

Disclaimer

Plans issued by Superloop are valid for 28 days unless otherwise stated. If this timeframe has elapsed, you will be required to reapply via Dial Before You Dig. Superloop plans are provided for the use of the applicant only and must not be distributed to any third parties. Superloop shall not be liable for any loss or damage caused by the use of its plans and/or information supplied to the applicant. Please ensure Superloop plans and information provided remain on-site at all times during construction.

Your Enquiry has fallen within the risk area for Superloop's asset.

IMPORTANT:

- The proposed work has the potential to impact Superloop underground assets (Optical Fibre) in the area. Diagrams indicating the position of Superloop's underground assets are attached.
- There may be additional Superloop assets in this area contained within Telstra duct which are not shown on these diagrams. No work is to take place until plans have been obtained from Telstra.
- **Superloop does not accept any liability for inaccuracies or any lack of information on the plans, or any damage to Superloop assets resulting from, or in connection with the information provided.**

CONCERNING SUPERLOOP PLANS:

- Drawings and Plans provided by Superloop 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. It is essential to uncover the asset and positively identify the asset's exact location.
- Superloop plans are provided as a guide only and the completeness of the information cannot be guaranteed.
- The attached diagrams are valid for 28 days from the date of this reply.
- Services belonging to other third parties are not included on these plans.
- Superloop plans are provided for the use of the applicant only and must not be distributed to any third parties.
- Please ensure Superloop plans and information provided remains on-site at all times during construction.

DUTY OF CARE:

- When working in the vicinity of telecommunications plant you have a legal "Duty of Care" that must be observed.
- 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 Superloop plant. Superloop will provide 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 Superloop plant for a particular location at a reasonable time before construction begins
 - ❖ Visually locate Superloop plant by vacuum excavation (pot holing) where construction activities may damage or interfere with Superloop plant (see "Essential Precautions and Approach Distances" section for more information)
 - ❖ Contact Superloop, if Superloop plant is wholly or partly located near planned construction activities.

DAMAGE:

IN CASE OF EMERGENCY OR TO REPORT DAMAGE

PHONE 1300 558 406

IMMEDIATELY

- All damage, regardless of severity, must be reported to Superloop immediately.
- The contractor, or other agency, is liable for all damage to Superloop assets when works commence prior to obtaining plans, or failure to follow agreed instructions.
- Superloop reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.
- **Superloop does not accept any liability for loss or damage occurring due to inaccuracy or lack of information on the plans provided.**

ESSENTIAL PRECAUTIONS AND APPROACH DISTANCES:

Note: If the following clearances cannot be maintained, please contact Superloop (see above for details) for advice on how best to resolve this situation.

1. On receipt of plans and before commencing excavation work or similar activities near Superloop plant, carefully locate this plant first to avoid damage. Undertake prior manual exposure such as potholing when intending to excavate or work closer to Superloop plant than the following approach distances:
 - Where Superloop 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.
 - NOTE: Even manual pot-holing needs to be undertaken with extreme care, common sense and employing techniques least likely to damage cables.
 - If construction work is parallel to Superloop plant, then careful hand digging or using non-destructive water jet method (pot-holing) at least every 5m is required to establish the location of all plant, hence confirming nominal locations before work can commence.
2. Maintain the following minimum clearance between construction activity and **actual location** of Superloop Plant.

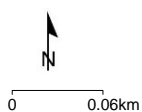
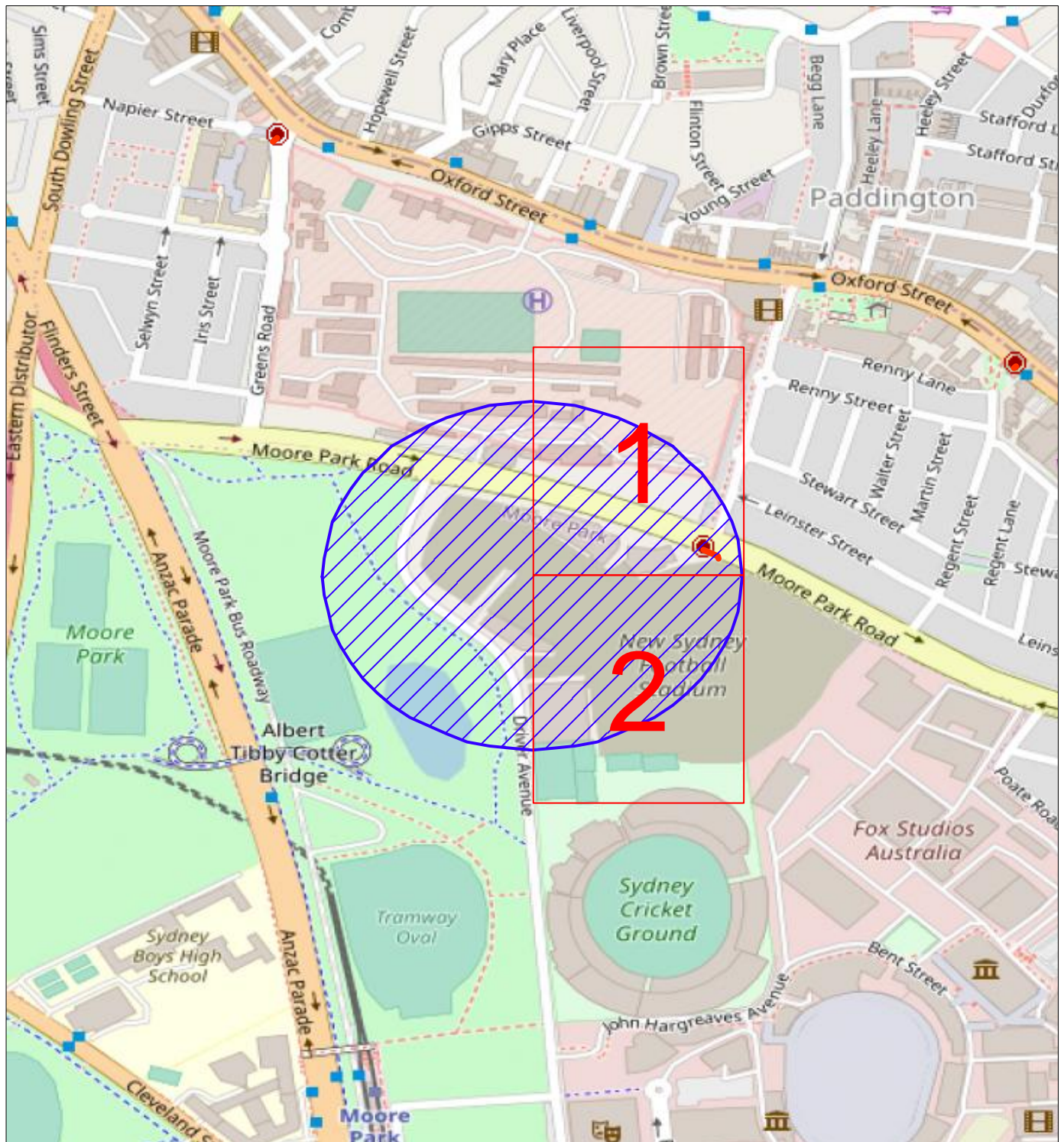
Jackhammers/Pneumatic Breakers	<i>Not within 1.0m of actual location.</i>
Vibrating Plate or Wacker Packer Compactor	<i>Not within 0.5m of Superloop ducts. 300mm compact clearance cover before compactor can be used across Superloop ducts.</i>
Boring Equipment (in-line, horizontal and vertical)	<i>Not within 2.0m of actual location. Constructor to check depth via vacuum excavation (pot-hole).</i>
Heavy Vehicle Traffic (over 3 tonnes)	<i>Not to be driven across Superloop ducts (or plant) with less than 600mm cover.</i>
Mechanical Excavators, Farm ploughing and Tree Removal	<i>Not within 1.0m of actual location. Constructor to check depth via vacuum excavation (pot-hole).</i>

- All Superloop pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work.
- All Superloop conduit should have the following minimum depth of cover after the completion of your work:
 - ❖ **Footway 450mm**
 - ❖ **Roadway 450mm at drain invert and 600mm at road centre crown**

Overview Map

Sequence No: 200257006

44 Driver Avenue Moore Park



LEGEND:



Superloop Asset



Property Boundary



Affected DBYD Work Area

1

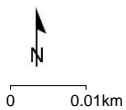
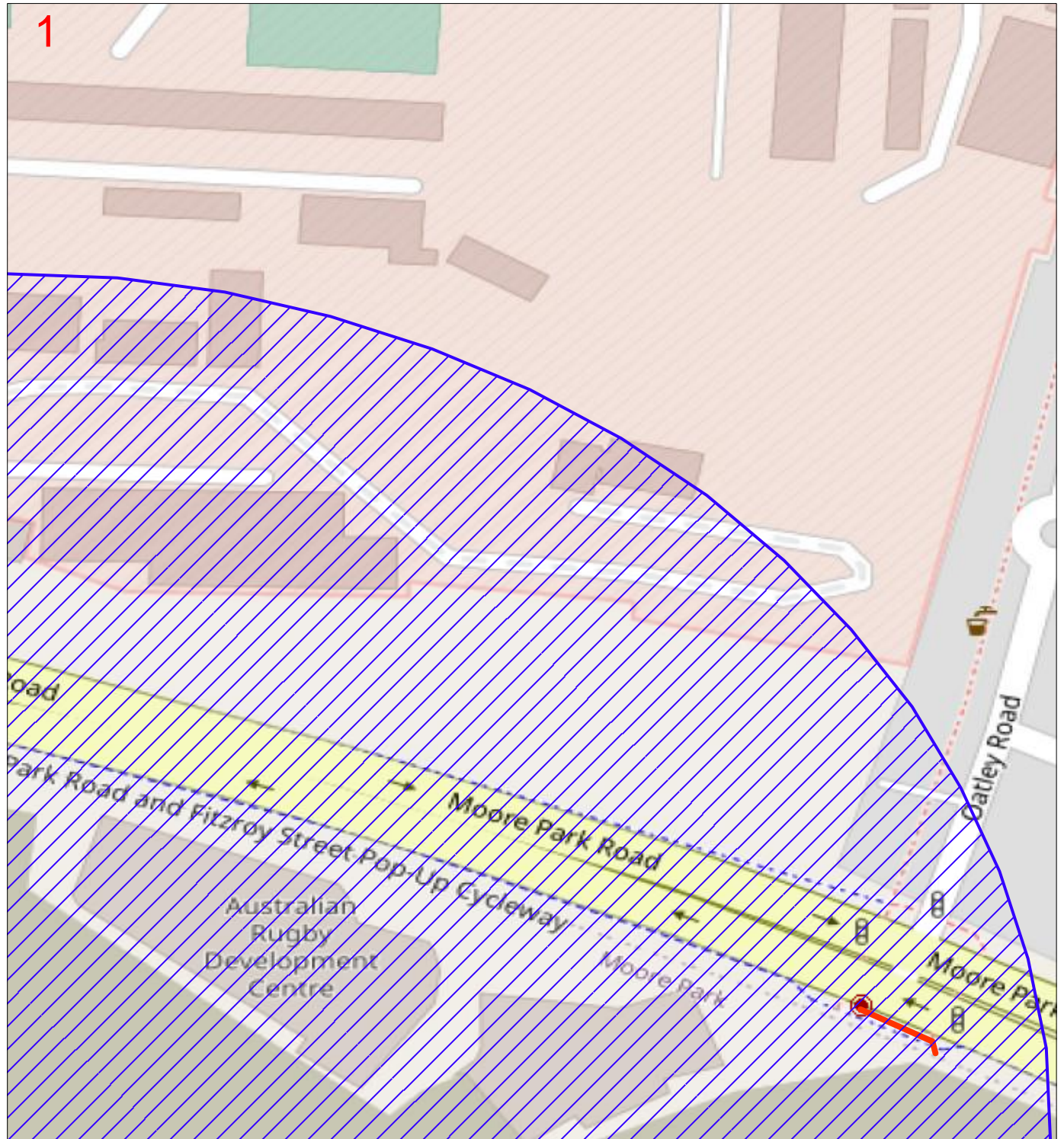
Detail Map

Superloop does not accept any liability for inaccuracies or any lack of information on the plans, or any damage to Superloop assets resulting from, or in connection with the information provided.




Background layer sourced from Open Street Maps

Sequence No: 200257006

44 Driver Avenue Moore Park



LEGEND:

-  Superloop Asset
 Property Boundary
 Affected DBYD Work Area

Superloop does not accept any liability for inaccuracies or any lack of information on the plans, or any damage to Superloop assets resulting from, or in connection with the information provided.

Background layer sourced from Open Street Maps



Telecommunications – Telstra

DUTY OF CARE



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.

All damages to Telstra Network must be reported immediately

- Call **13 22 03** Say "Damages" at the voice prompt, then press 1 to speak to an Operator
- Or report online
<https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment>

(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 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 -*

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

STEP 4 – Protect:

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

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

- 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 –

132 203 Say "Damages" at the voice prompt, then press 1 to speak to an Operator

Or report online:

<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 - 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

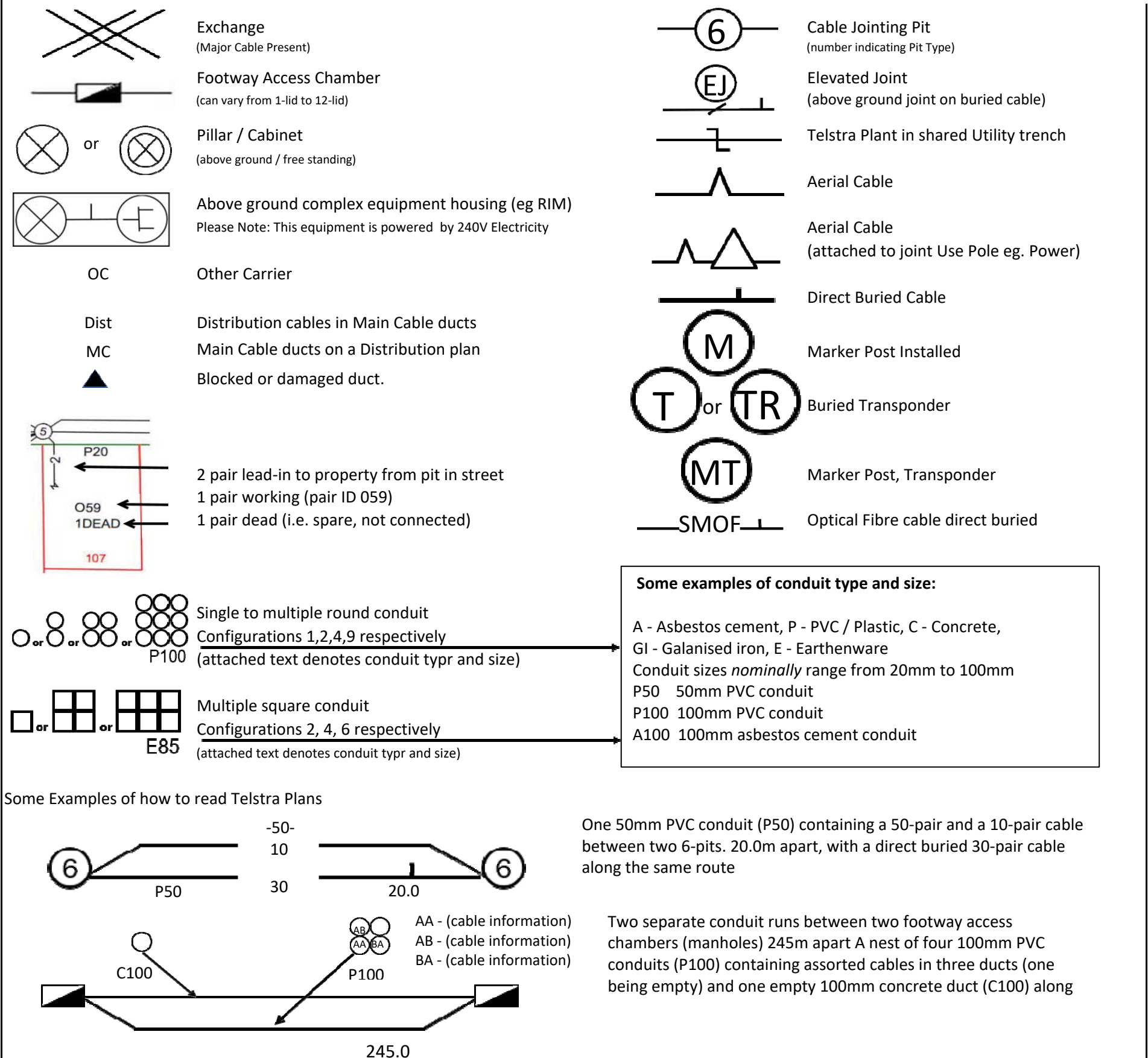
Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website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

LEGEND

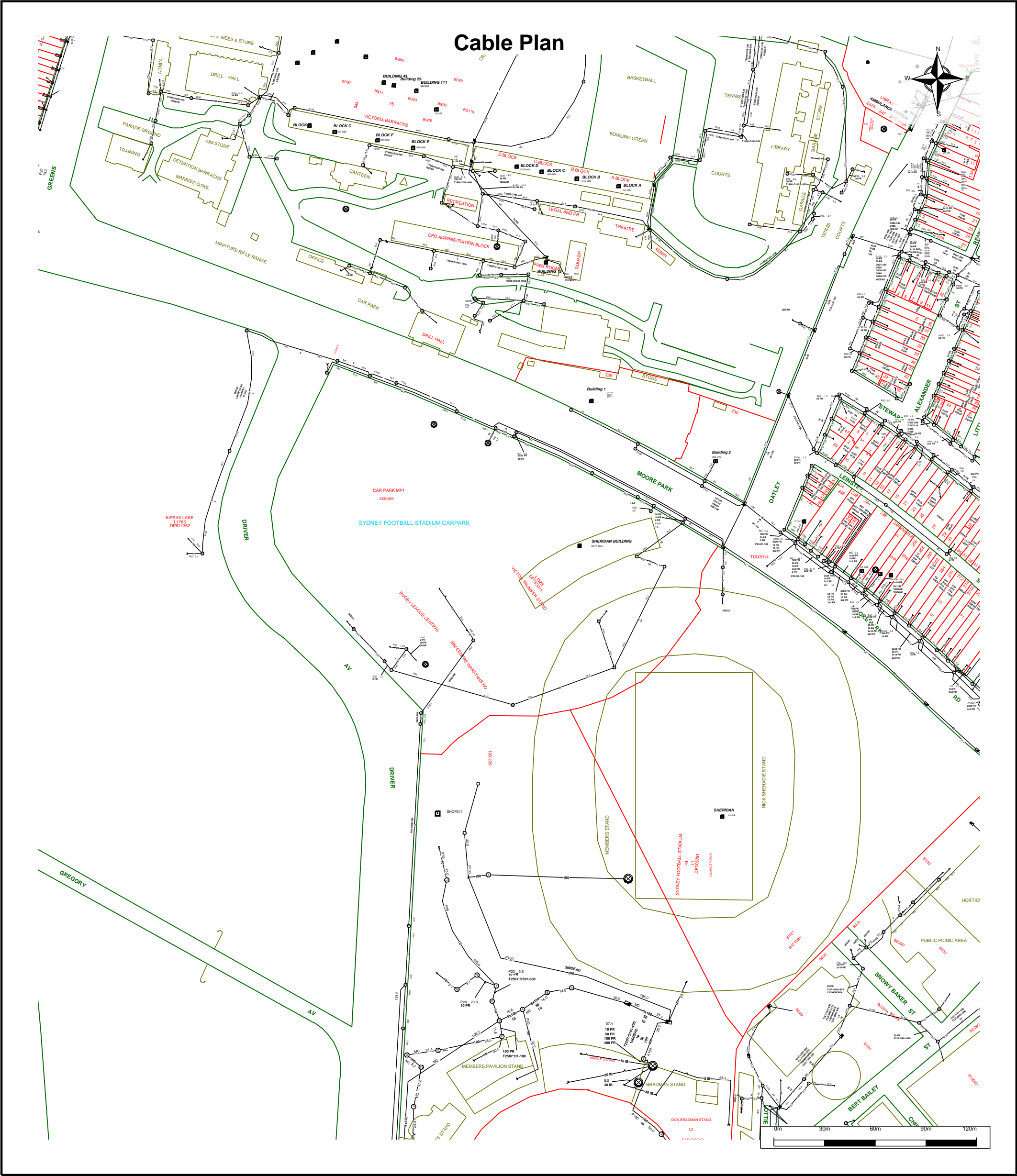
IT'S HOW
WE CONNECT




For more info contact a Certified Location Organisation or Telstra Plan Services 1800 653 935



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.



	<p>For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)</p>	<p>Sequence Number: 200274966</p>
<p>TELSTRA CORPORATION LIMITED A.C.N. 051 775 556</p>		<p>CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.</p>
<p>Generated On 05/07/2021 13:35:01</p>		

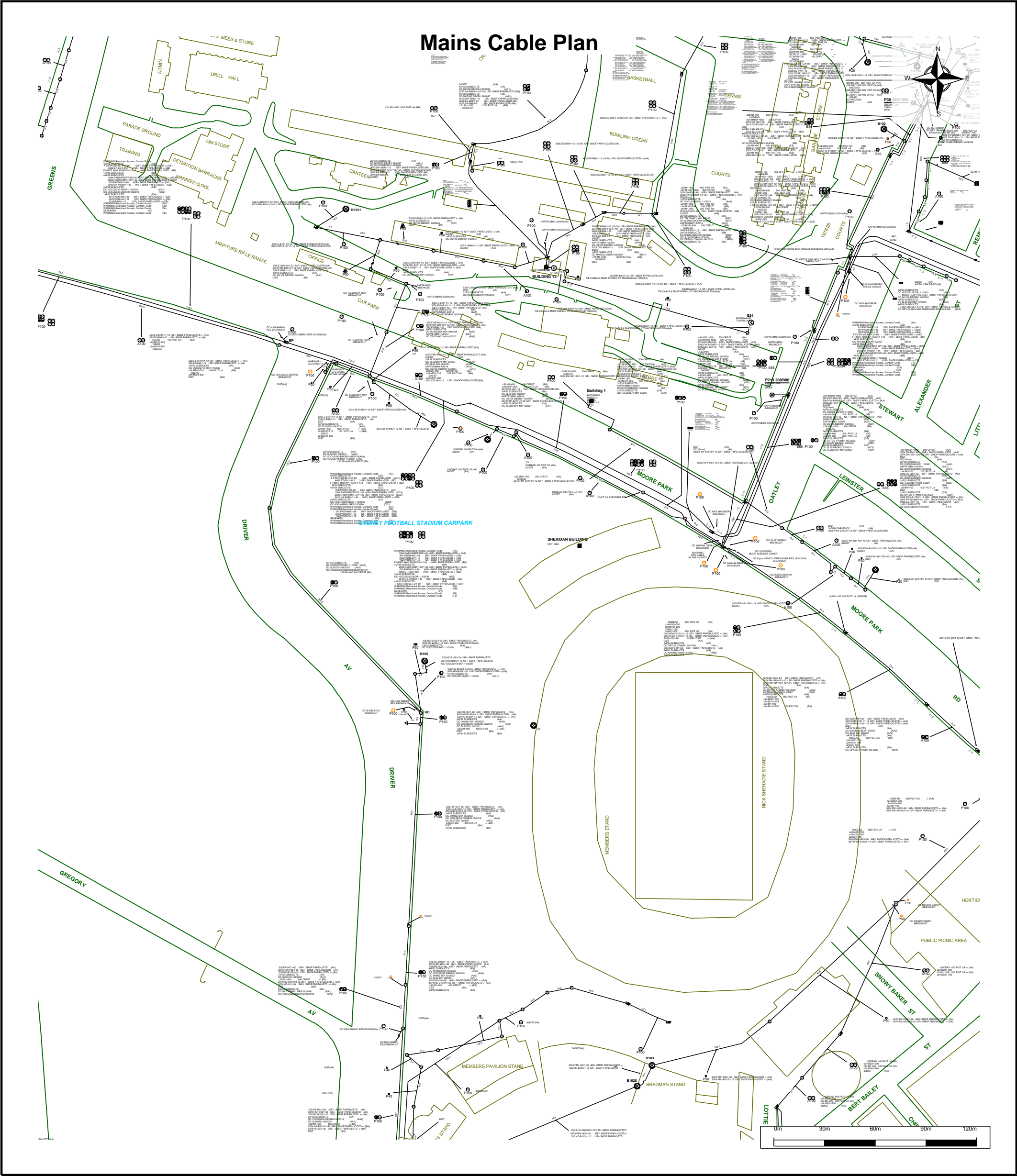
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page


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.



	<p>For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)</p>	<p>Sequence Number: 200274966</p>
<p>TELSTRA CORPORATION LIMITED A.C.N. 051 775 556</p>		<p>CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.</p>
<p>Generated On 05/07/2021 13:35:07</p>		

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.

Telecommunications – TPG



Date: 05/07/2021

Enquirer Name: Vanessa O'Brien
Enquirer Address: 131 Clarence Street
Email: vanessa.obrien@arup.com
Phone: +61432095452

Dear Vanessa O'Brien

The following is our response on behalf of each of the TPG carriers (listed below) to your Dial Before You Dig enquiry – Sequence 200274965. It is provided to you on a confidential basis under the following conditions and must be shredded or securely disposed of after use.

Assets Affected:

Carriers (each a "TPG carrier") and assets affected:

AAPT/PowerTel, PIPE Networks

Location: 44 Driver Avenue

According to our records, the underground assets in the vicinity of the location stated in your enquiry are **AFFECTED**. Please read the below information and disclaimers in addition to the any attached plans provided prior to any construction activities.

IMPORTANT INFORMATION

- The information provided is valid for 30 days from the date of this response. If your work site area changes or your construction activity is beyond 30 days please contact Dial Before You Dig on 1100 or www.1100.com.au to re-submit a new enquiry.
- Due to the nature of underground assets and the age of some assets and records, our plans are indicative of the general location only and may not show all assets in the location. You should not solely rely on these plans when undertaking construction works. It is also inaccurate to assume depth or that underground network conduit and cables follow straight lines, and careful on-site investigations are essential to locate an asset's exact position prior to excavation. It is your responsibility to locate and confirm the exact location of our infrastructure using non-destructive techniques. We make no warranty or guarantee that our plans are complete, current or error free, and to the maximum extent permitted by law we exclude all liability to you, your employees, agents and contractors for any loss, damage or claim arising out of or in connection with using our plans.
- Please note that some of our conduits carry electrical cables and gas pipes. Please exercise extreme care when working within the vicinity of these conduit and take into account the minimum clearance distances under Duty Of Care below.
- You (and your employee and contractors) must not open, move, interfere, alter or relocate any of our assets without our prior approval.
- **Note** 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 us as a result of such unauthorised works may be claimed against you.

DAMAGE

- You must report immediately any damage to our network on **1800 786 306** (24hrs). We will hold you liable and seek compensation for any loss or damage to our network, our property and our customers that is caused by or arises out of your activities.

DUTY OF CARE

You have a duty of care to carefully locate, validate and protect our assets when carrying out works near our infrastructure. For construction activities that may impact on or interfere with our network, you will need to call us on **1800 786 306** to discuss a suitable engineering solution, lead time and cost involved. The below precautions must be taken when working in the vicinity of our network:

- Contact us on **1800 786 306** to discuss and obtain relevant information and plans on our infrastructure in a particular location if the information provided in this response is insufficient.
- Physically locate and mark on-site our network infrastructure using non-destructive techniques i.e. pot holing or hand digging every 5 metres prior to commencing any construction activities. Assets located must be marked to AS5488 standard. **NO CONSTRUCTION WORK IS ALLOWED UNTIL THIS STEP IS COMPLETED.** You must use an approved telecommunications accredited locator, or we can provide a locator for you at your expense. If we provide you with a locator, and this locator attended the site and is proven to be grossly negligent in physically locating and marking our infrastructure, then to the extent any TPG carrier is liable for this locator's negligence, acts and omissions, the total liability aggregated for all TPG carriers is limited, at our option, to attend the site and re-mark the infrastructure or to pay for a third party to re-mark the infrastructure.
- If you require us to locate or monitor our infrastructure, please allow five business days' notice for us to respond.
- Ensure all information, including our network requirements and any associated plans provided by us are kept confidential and remain on-site throughout your construction works.

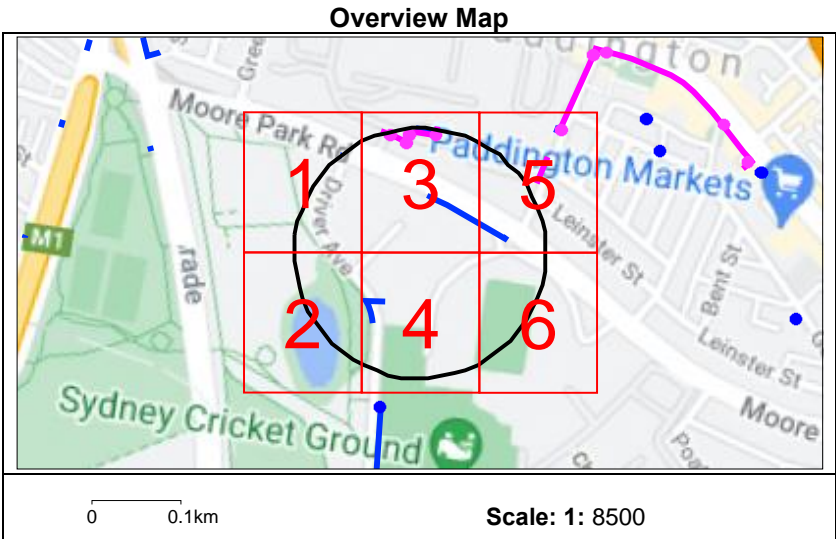
- Use suitably qualified and supervised professionals, particularly if you are working near assets that contain electricity cables or gas pipes.
- Ensure the below minimum clearance distances between the construction activities and the actual location of our assets are met. If you need clearance distances for our above ground assets, or if the below distances cannot be met, call **1800 786 306** to discuss.

Minimum assets clearance distances.

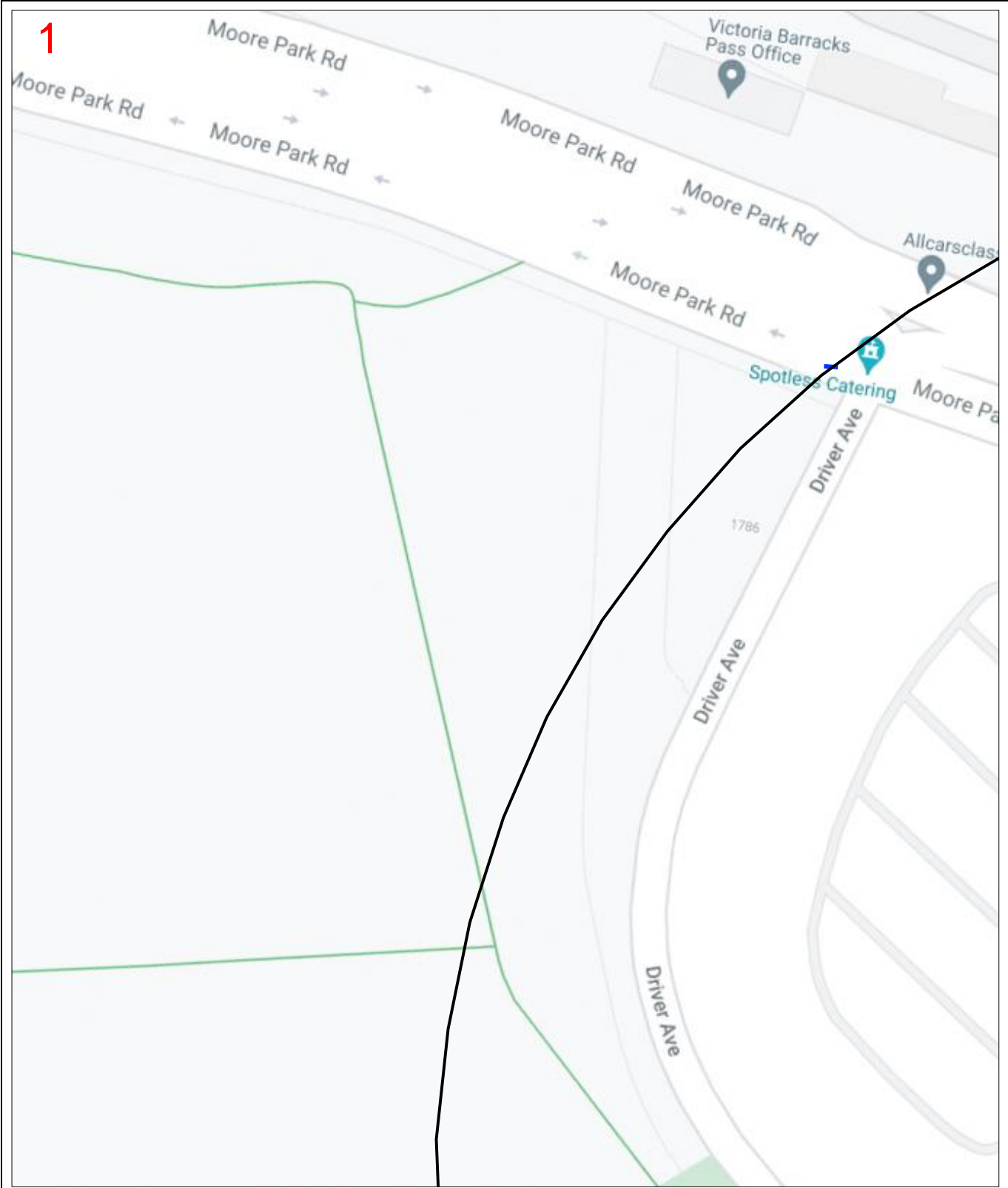
- 300mm when laying asset inline, horizontal or vertical.
 - 1000mm when operating vibrating equipment. Eg: vibrating plates. No vibrating equipment on top of asset.
 - 1000mm when operating mechanical excavators or jackhammers/pneumatic breakers.
 - 2000mm when performing directional bore in-line, horizontal and vertical.
 - No heavy vehicle over 3 tonnes to be driven over asset with less than 600mm of cover.
- Reinstate exposed TPG network infrastructure back to original state.

PRIVACY & CONFIDENTIALITY

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TPG Corporation Limited



Enquiry Number: 200274965

Map Sheet: 1

Scale: 1: 750

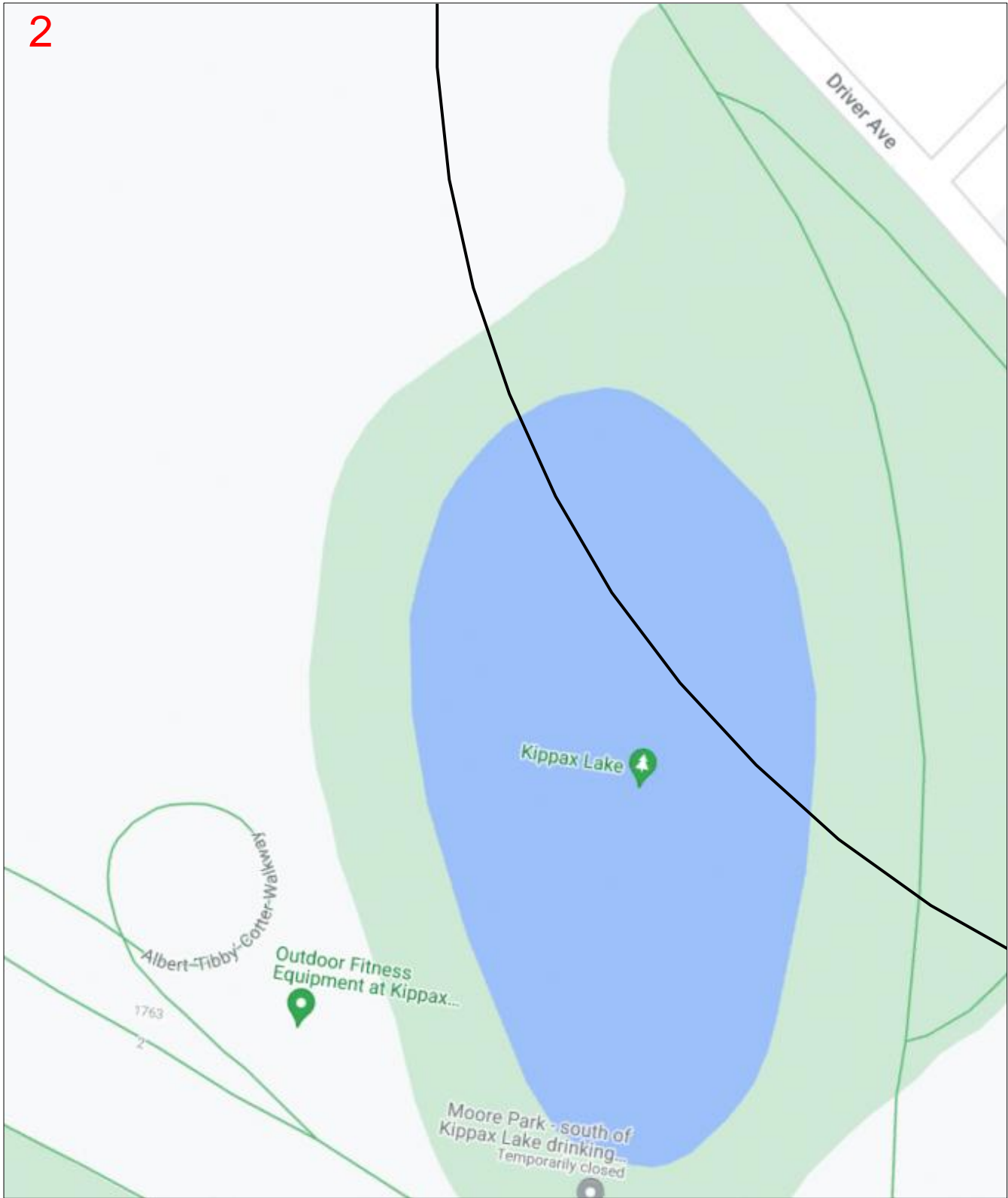
0 0.008km

LEGEND

DBYD Work Area

AAPT/PowerTel Pit		TransACT Pit	
AAPT/PowerTel Duct		TransACT Duct	
DDA Pit		SOUL Pattinson Telecoms Pit	
DDA Duct		SOUL Pattinson Telecoms Duct	
Agile/Adam Pit		PIPE Networks Pit	
Agile/Adam Duct		PIPE Networks Duct	

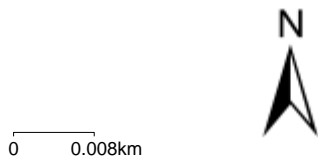
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Enquiry Number: 200274965

Map Sheet: 2

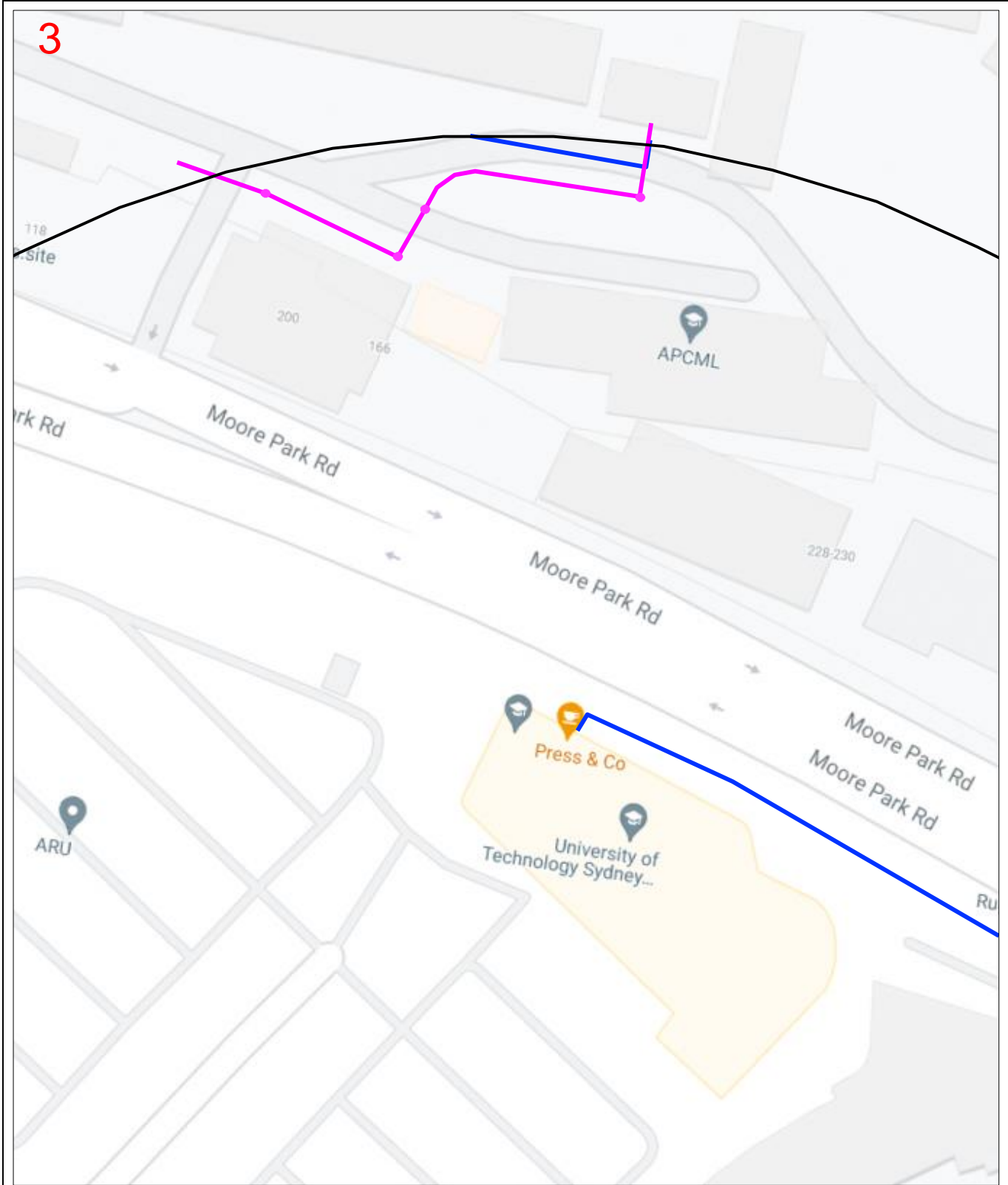
Scale: 1: 750



LEGEND

DBYD Work Area		
AAPT/PowerTel Pit		TransACT Pit
AAPT/PowerTel Duct		TransACT Duct
DDA Pit		SOUL Pattinson Telecoms Pit
DDA Duct		SOUL Pattinson Telecoms Duct
Agile/Adam Pit		PIPE Networks Pit
Agile/Adam Duct		PIPE Networks Duct

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Enquiry Number: 200274965

Map Sheet: 3

Scale: 1: 750

0 0.008km

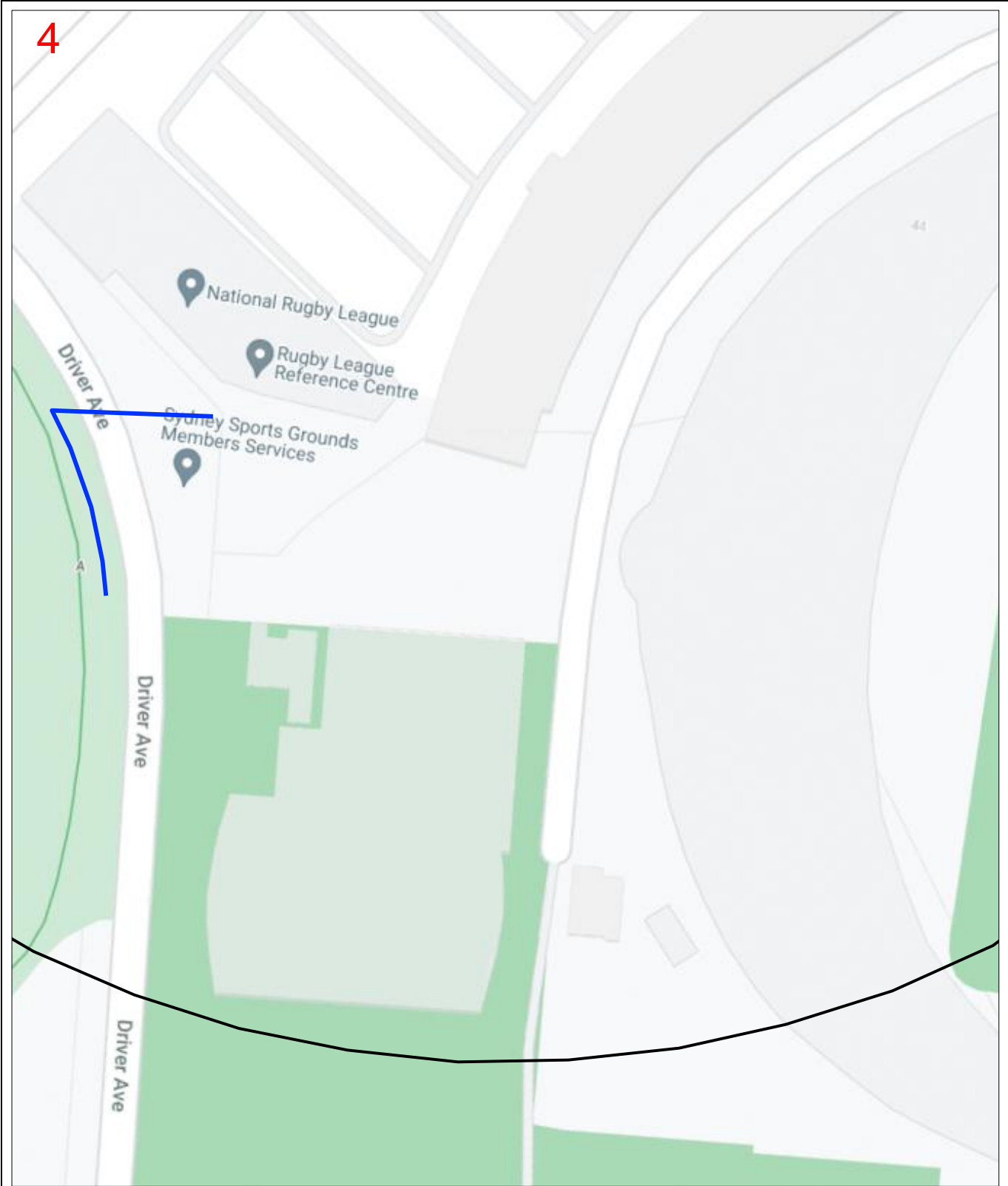


LEGEND

DBYD Work Area

AAPT/PowerTel Pit	●	TransACT Pit	●
AAPT/PowerTel Duct	—	TransACT Duct	—
DDA Pit	●	SOUL Pattinson Telecoms Pit	●
DDA Duct	—	SOUL Pattinson Telecoms Duct	—
Agile/Adam Pit	●	PIPE Networks Pit	●
Agile/Adam Duct	—	PIPE Networks Duct	—

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Enquiry Number: 200274965

Map Sheet: 4

Scale: 1: 750

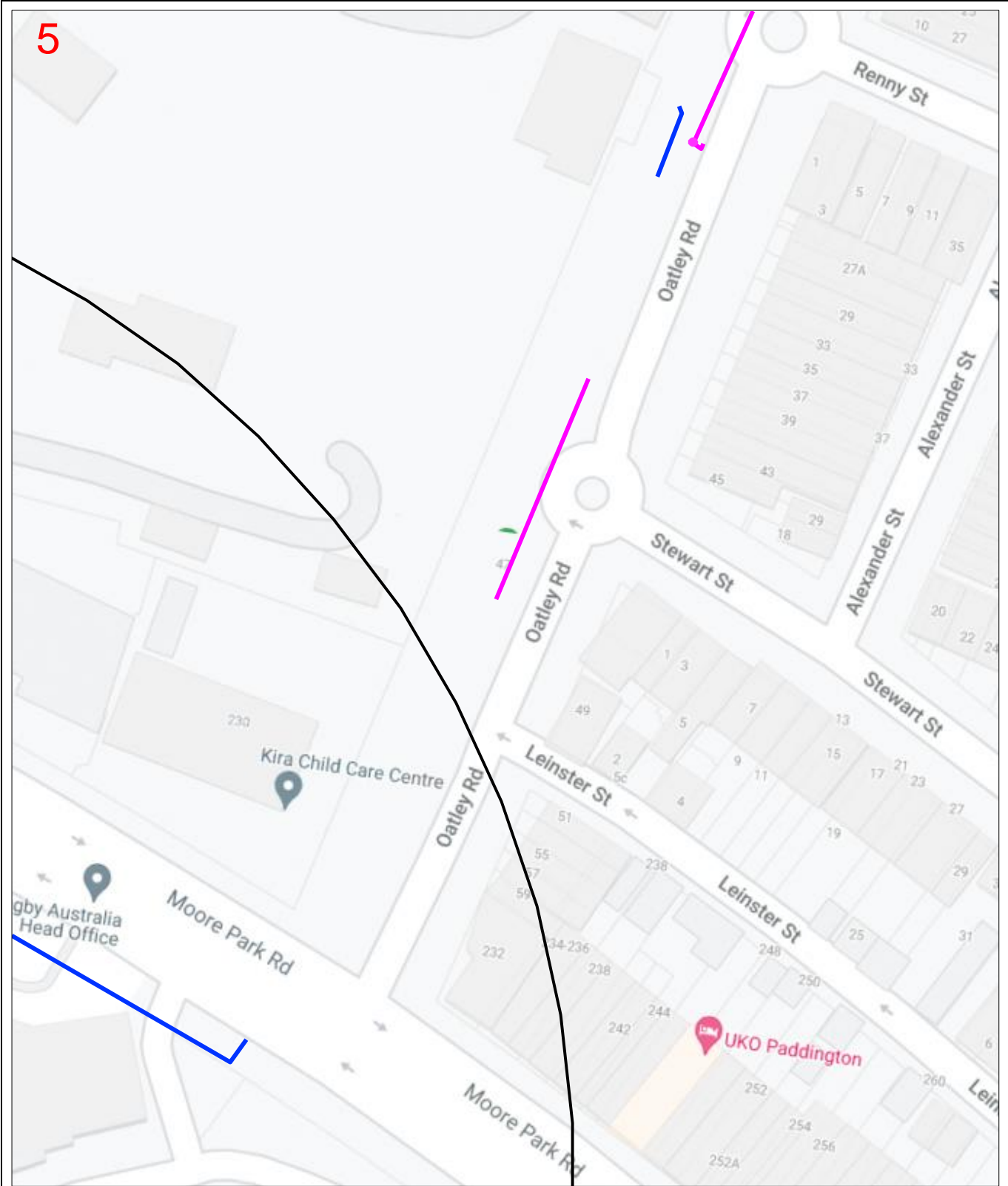
0 0.008km

LEGEND

DBYD Work Area

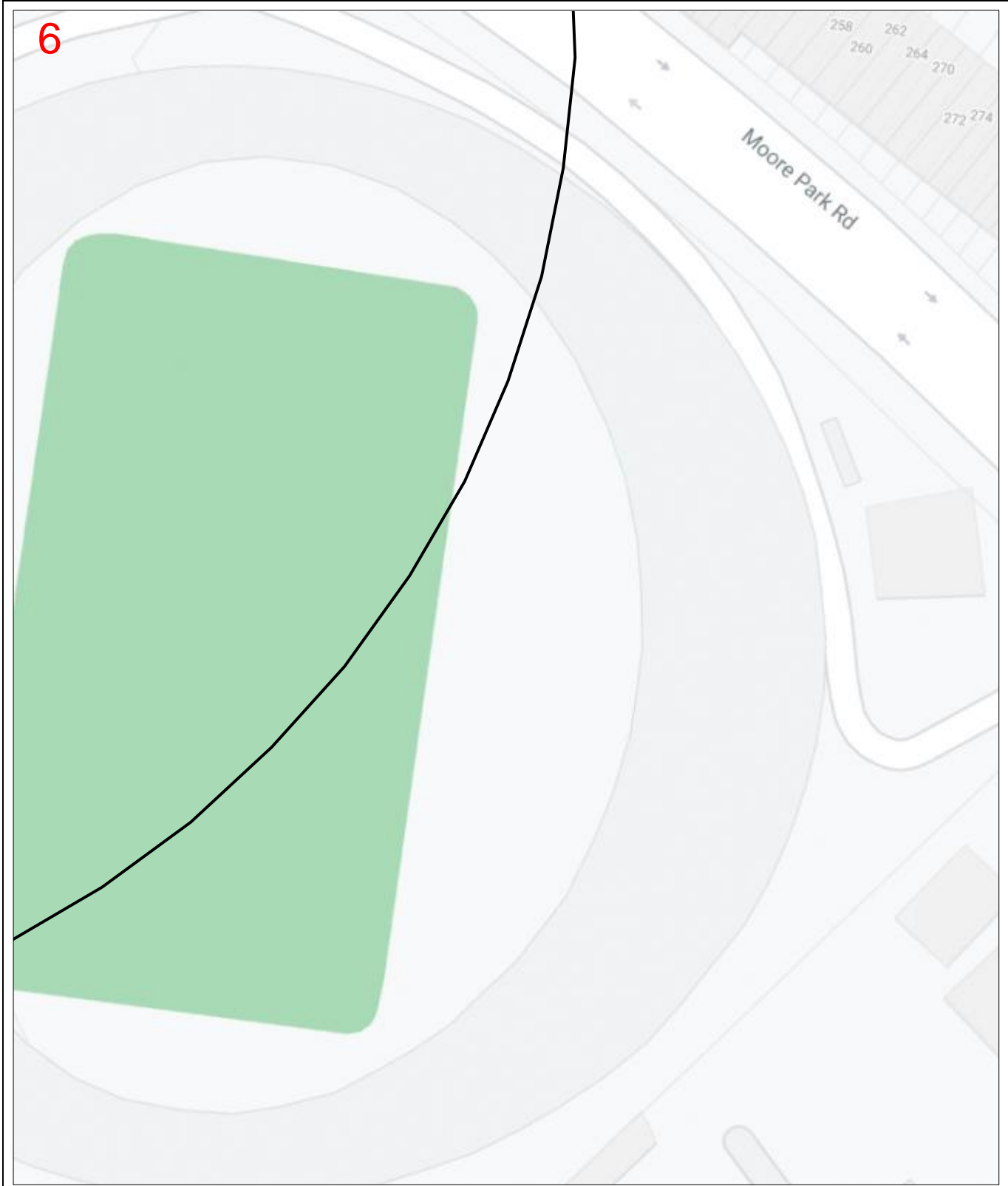
AAPT/PowerTel Pit		TransACT Pit	
AAPT/PowerTel Duct		TransACT Duct	
DDA Pit		SOUL Pattinson Telecoms Pit	
DDA Duct		SOUL Pattinson Telecoms Duct	
Agile/Adam Pit		PIPE Networks Pit	
Agile/Adam Duct		PIPE Networks Duct	

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Enquiry Number: 200274965		LEGEND	
Map Sheet: 5		DBYD Work Area	
Scale: 1: 750			

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Enquiry Number: 200274965

Map Sheet: 6

Scale: 1: 750

0 0.008km

N

LEGEND

DBYD Work Area

AAPT/PowerTel Pit	●	TransACT Pit	●
AAPT/PowerTel Duct	—	TransACT Duct	—
DDA Pit	●	SOUL Pattinson Telecoms Pit	●
DDA Duct	—	SOUL Pattinson Telecoms Duct	—
Agile/Adam Pit	●	PIPE Networks Pit	●
Agile/Adam Duct	—	PIPE Networks Duct	—

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Telecommunications – Vocus

05/07/2021

Vanessa O'Brien
Not Supplied
131 Clarence Street
Sydney NSW 2000

Dear Vanessa O'Brien

DIAL BEFORE YOU DIG - JOB: 30047003 SEQ: 200256994

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

Enquiry Date: 05/07/2021
Address: 44 Driver Avenue
Suburb: Moore Park
State: NSW, 2021

Additional Information:

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

Vocus Level 12, 60 Miller Street

North Sydney NSW 2060

T: 1300 88 99 88

E: info@vocus.com.au

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.

Appendix B: Sydney Water Record of Correspondence

The following is a record of communication between Arup and Sydney Water during the development application phase.

Minutes

ARUP

Project title	Precinct Village & Carpark, Moore Park	Job number 282684
Meeting name and number	Hydraulic Services Sydney Water Utilities 1	File reference HF-MM-01
Location	Microsoft Teams	Time and date 10:00 am 21 July 2021
Purpose of meeting	To discuss the feasibility of Sydney Water utilities connections and diversions	
Present	Matthew Stivala (Arup) Louise Millward (Arup)	Jake Cherniayeff (Arup) Steven Avery (Sydney Water)
Apologies		
Circulation	Those present	

Topic		Action
1.	Cold Water	
1.1	Connection to existing carpark <ul style="list-style-type: none">Existing connection to the site is not known. As-builts have been requested but not yet received.	Note
1.2	Sydney Football Stadium connection <ul style="list-style-type: none">SFS connection is close to capacity and the Precinct Carpark development is planned to be 'stand-alone'.Therefore, it's proposed to have a separate connection for this development.	Note
1.3	Assumed water main extension along Driver Avenue <ul style="list-style-type: none">Confirmed that this is not a Sydney Water main extension.It may be a private main extension, however its location needs to be confirmed.	Note
1.4	Connection options <ul style="list-style-type: none">Connections need to be assessed formally by Sydney Water through a WSC.	Note

Prepared by Matthew Stivala
Date of circulation 21 July 2021
Date of next meeting

Minutes

Project title

Precinct Village & Carpark, Moore Park

Job number

282684

Date of Meeting

21 July 2021

2.	Sewer	
2.1	400mm main cutting across North-West corner of site <ul style="list-style-type: none"> Building footprint isn't proposed above the sewer line, however landscaping is proposed and change of ground level may be required. Generally, the sewer line can be built over, however needs to be formally assessed by Sydney Water through a WSC. 	Note
2.2	Sewer main capacities <ul style="list-style-type: none"> SFS discharges 30 L/s to the 300mm sewer main in Moore Park Road. SFS discharges 20 L/s to the 225mm sewer main in Driver Avenue. It is expected that the 225mm sewer main in Driver Avenue is at capacity. Connecting into this asset would likely require main upgrades. However, it needs to be assessed formally by Sydney Water. It's unknown if the 300 / 400mm sewer main in Moore Park Road is at capacity and if the proposed development can discharge into it. It needs to be assessed formally by Sydney Water. 	Note
3.	Stormwater	
3.1	600mm main traversing through the Stage 2 site <ul style="list-style-type: none"> Diversion is necessary. Either diversion option (either along Driver Avenue or through the site's central road) may be feasible. 	Note
3.2	1500mm main traversing through the Stage 1 site <ul style="list-style-type: none"> This service is proposed to remain in its current location, where it would pass beneath the eastern carpark. It will be accessible through the carpark. Build over proposals will need to be formally assessed by Sydney Water. 	Note
3.3	General <ul style="list-style-type: none"> Stormwater assets require open access from above. Development plans, dimensions, elevations, etc. are to be submitted with the Sydney Water application so it can be 	Note

Minutes

Project title

Precinct Village & Carpark, Moore Park

Job number

282684

Date of Meeting

21 July 2021

	verified that adequate access to the stormwater assets are maintained.	
4.	Busby's Bore	
4.1	E-W section location <ul style="list-style-type: none">A Veris survey was completed in May 2018 which locates the E-W section of Busby's Bore in a different location to the Sydney Water DBYD survey.	Note
4.2	General <ul style="list-style-type: none">Busby's Bore location and requirements need to be discussed further with Sydney Water.	Note

Appendix C: Jemena Record of Correspondence

The following is a record of communication between Arup and Jemena during the development application phase.

Jemena advice regarding available capacity and proposed connection points

Matthew Stivala

From: Zachary Kennett <Zachary.Kennett@jemena.com.au>
Sent: Monday, 19 July 2021 8:23 AM
To: Matthew Stivala; Neale Hilton
Cc: Jake Cherniayeff
Subject: RE: Precinct Village and Carpark at Moore Park - Jemena Infrastructure

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Hi Matthew,

Specifically regarding the new connections both options for connection are feasible and would be subject to proceeding with a formal application once your hydraulic designs have been completed. I have confirmed that there is capacity available in both these locations however please note that Jemena do not reserve capacity until an application is received.

Regarding the diversion this seems reasonable however you would need to submit a request via <https://mygasservices.jemena.com.au/> to have this reviewed, engineering work completed and priced to confirm the proposed route is viable.

Regards,

Zachary Kennett

Network Development Specialist – I&C

Jemena

99 Walker Street, North Sydney NSW 2060

PO Box 1220, North Sydney NSW 2059

Tel: 02 9867 7182 | 0409 608 399

www.jemena.com.au



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From: Matthew Stivala <Matthew.Stivala@arup.com>
Sent: Friday, 16 July 2021 4:04 PM
To: Neale Hilton <Neale.Hilton@jemena.com.au>; Zachary Kennett <Zachary.Kennett@jemena.com.au>
Cc: Jake Cherniayeff <Jake.Cherniayeff@arup.com>
Subject: Precinct Village and Carpark at Moore Park - Jemena Infrastructure

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Hi Neale & Zachary,

Hope you're both keeping well with the current circumstances.

I'm a colleague of Jake Cherniayeff's (cc'd), who you assisted with some high level advice regarding a previous project.

We are now currently involved in the SSDA phase for the Precinct Village and Carpark Development at Moore Park, to be located adjacent the Sydney Football Stadium.

We want to engage with Jemena early on in the project to understand current network capacities, future upgrades and limits on the supply connection. We have summarised the proposed gas utilities strategy below and in the attached document, which outlines our investigations of the existing DBYD network map,

proposed diversions, proposed connection points and expected gas loads based on the brief and the current scheme.

The architectural scheme and indeed the brief are still in very early stages and evolving so the figures are very much a work in progress at this stage. At this stage, we are working on the basis that the development's mechanical and domestic hot water generation will be all electric, with gas being supplied only to the F&B tenants. It is expected that we will provide unmetered capped connections to these areas for tenants to arrange their own billing with their preferred utility provider.

Proposed Diversion:

- A 110mm, 210kPa gas main traverses through the site from Driver Avenue to Moore Park Road.
- We propose to divert this service around Driver Avenue to stay clear of the site.

Proposed Connection:

- Estimated gas load: 2250 MJ/hr
- Connection Option 1: Connect into the diverted gas main in Driver Avenue at the Southern end of the site.
- Connection Option 2: Connect into the gas main in Moore Park Road at the Northern end of the site.

Could you please review the scheme and comment on the feasibility of the new connection and diversion and let us know if you foresee any unique requirements for the incoming gas supply as part of the development. We would also appreciate sizing of the boundary regulator and utility meters so we can allocate these spaces in the precinct.

We appreciate your help with this, and are available to meet virtually or discuss the project in more detail over the phone early next week if it would be useful.

Thank you,

Matthew Stivala

Engineer | Sydney Building Services

Arup

Gadigal Country

Barrack Place, 151 Clarence Street Sydney 2000

d: +61 2 9320 9636 t: +61 2 9320 9320

www.arup.com

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Jemena advice regarding the gas main diversion works process

Matthew Stivala

From: Soheil Saemian <soheil.saemian@zinfra.com.au>
Sent: Wednesday, 21 July 2021 2:48 PM
To: Matthew Stivala
Cc: Viviane Nguyen
Subject: 10059292 MOORE PARK ROAD, MOORE PARK, NSW, 2021
Attachments: Precinct_Village_Carpark_Moore_Park_Gas_main_diversion.pdf; Client Checklist.xlsx

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Hi Matthew,

It was nice talking to you on the phone today. Please see below, summary of our discussion:

- 1- The first step is to provide Jemena with potholing information of the existing asset and the proposed design for new alignment. Once it is provided, I can organise a site visit to go out with you, client and our construction supervisor to find out the methodology for relocation.
- 2- Once the scope of relocation is finalised and agreed with Jemena Engineers, I will finalise the scope, price up the job and provide you with a Letter of Offer. The whole process will take approximately 8 -10 weeks.
- 3- Once the LoO is accepted and the invoice is paid, I can schedule the work and send out our contractor to deliver the work in couple of weeks time.

Please see attached, a copy of the client checklist that will be discussed with you in the site visit which identifies the roles and responsibilities of each party.

Please see below Jemena requirements in terms of depth of cover and alignment to be incorporated in your design. We would prefer to keep our asset in the footpath to be serviceable somewhere between 1.2 m to 1.8 m off the boundary.

The relocated gas main must have the following minimum cover measured from top of pipe to finished surface.

If Footpath	600mm
If Council road	750mm
If RMS road	1200mm

Maximum depth of cover must be 1500mm or less unless approved by JGN.
Please let me know once the information is ready.

Regards,
Soheil

Soheil Saemian

Project Manager
M: 0436 014 908
E: soheil.saemian@zinfra.com.au



4A Bellevue Circuit, Pemulwuy, NSW 2145

T: +61 2 9867 77 66

www.zinfra.com.au

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Jemena checklist identifying roles and responsibilities of during the site vist phase of the diversion process

Item	Activity	Party Responsible	JGN Comments	Client Comments
1	Authority Approvals (Inc. right of entry, resident notifications, Council Approvals etc.)			
2	Traffic Management and Traffic Control		This will be provided by the party providing Traffic Control.	
3	Removal of site obstacles		This need to be provided by the Client if available.	
4	Geo-technical survey		This will be provided by the party carrying out the excavation work	
5	Environmental Controls		This will be provided by the party carrying out the excavation work	
6	Locating existing services prior to construction works		JGN exclude this from our scope unless otherwise advised.	
7	Excavation and backfill		JGN exclude this from our scope unless otherwise advised.	
8	Excavations deeper than 1.5m (Shoring, benching etc.)		JGN will normally exclude this from our scope	
9	Excavations in rock		This need to be provided by the Client	
10	REF (review of environmental factors)		JGN excludes removal of contaminated waste unless otherwise advised	
11	Heritage or Aboriginal issues		JGN exclude this from our scope unless otherwise advised.	
12	Removal of excess spoil		JGN only allows for temporary restorations with cold mix unless otherwise advised	
13	Removal of abandoned pipe		Please advise the site and duration of inductions if required	
14	Restorations		Please supply the level of documentation required for site inductions/SWMS/OHS etc. to allow for appropriate resourcing.	
15	Saw-cutting of hard surfaces		This needs to be provided by the Client.	
16	Site inductions		Only class 4 concrete pipe can be used as steel main conduits. Yellow tiger stripped PE is the approved conduit for plastic gas mains.	
17	Project documentation		JGN exclude this from our scope unless otherwise advised.	
18	Survey works for property boundary and alignment of new gas main			
19	Bore or HDD			
20	Installation of conduits			
21	Work Hours			
22	Water charged ground			

Appendix D: Sydney Water Pressure & Flow Inquiries

Statement of Available Pressure and Flow

Vanessa O'Brien
113 Clarence Street
Sydney, 2000

Attention: Vanessa O'Brien

Date: 27/07/2021

Pressure & Flow Application Number: 1183757
Your Pressure Inquiry Dated: 2021-07-05
Property Address: 44 Driver Avenue, Moore Park 2021

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

ASSUMED CONNECTION DETAILS

Street Name: Moore Park Road	Side of Street: South
Distance & Direction from Nearest Cross Street	70 metres East from Driver Avenue
Approximate Ground Level (AHD):	46 metres
Nominal Size of Water Main (DN):	315 mm

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	39 metre head
Minimum Pressure	36 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	36
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5	36
	10	36
	15	36
	20	36
	26	36
	30	35
	40	35
	50	35
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	5	35
	10	35
	15	35
	20	35
	26	35
	30	35
	40	34
	50	34
Maximum Permissible Flow	120	31

(Please refer to reverse side for Notes)

For any further inquiries regarding this application please email :

swtapin@sydneywater.com.au

General Notes

This report is provided on the understanding that (i) the applicant has fully and correctly supplied the information necessary to produce and deliver the report and (ii) the following information is to be read and understood in conjunction with the results provided.

1. Under its Act and Operating Licence, Sydney Water is not required to design the water supply specifically for fire fighting. The applicant is therefore required to ensure that the actual performance of a fire fighting system, drawing water from the supply, satisfies the fire fighting requirements.
2. Due to short-term unavoidable operational incidents, such as main breaks, the regular supply and pressure may not be available all of the time.
3. To improve supply and/or water quality in the water supply system, limited areas are occasionally removed from the primary water supply zone and put onto another zone for short periods or even indefinitely. This could affect the supply pressures and flows given in this letter. This ongoing possibility of supply zone changes etc, means that the validity of this report is limited to one (1) year from the date of issue. It is the property owner's responsibility to periodically reassess the capability of the hydraulic systems of the building to determine whether they continue to meet their original design requirements.
4. Sydney Water will provide a pressure report to applicants regardless of whether there is or will be an approved connection. Apparent suitable pressures are not in any way an indication that a connection would be approved without developer funded improvements to the water supply system. These improvements are implemented under the Sydney Water 'Urban Development Process'.
5. Pumps that are to be directly connected to the water supply require approval of both the pump and the connection. Applications are to be lodged online via Sydney Water Tap in™ system - Sydney Water Website – www.sydneywater.com.au/tapin/index.htm. Where possible, on-site recycling tanks are recommended for pump testing to reduce water waste and allow higher pump test rates.
6. Periodic testing of boosted fire fighting installations is a requirement of the Australian Standards. To avoid the risk of a possible 'breach' of the Operating Licence, flows generated during testing of fire fighting installations are to be limited so that the pressure in Sydney Water's System is not reduced below 15 metres. Pumps that can cause a breach of the Operating Licence anywhere in the supply zone during testing will not be approved. This requirement should be carefully considered for installed pumps that can be tested to 150% of rated flow.

Notes on Models

1. Calibrated computer models are used to simulate maximum demand conditions experienced in each supply zone. Results have not been determined by customised field measurement and testing at the particular location of the application.
2. Regular updates of the models are conducted to account for issues such as urban consolidation, demand management or zone change.
3. Demand factors are selected to suit the type of fire-fighting installation. Factor 1 indicates pressures due to system demands as required under Australian Standards for fire hydrant installations. Factor 2 indicates pressures due to peak system demands.
4. When fire-fighting flows are included in the report, they are added to the applicable demand factor at the nominated location during a customised model run for a single fire. If adjacent properties become involved with a coincident fire, the pressures quoted may be substantially reduced.
5. Modelling of the requested fire fighting flows may indicate that local system capacity is exceeded and that negative pressures may occur in the supply system. Due to the risk of water contamination and the endangering of public health, Sydney Water reserves the right to refuse or limit the amount of flow requested in the report and, as a consequence, limit the size of connection and/or pump.
6. The pressures indicated by the modelling, at the specified location, are provided without consideration of pressure losses due to the connection method to Sydney Water's mains.

Statement of Available Pressure and Flow

Vanessa O'Brien
113 Clarence Street
Sydney, 2000

Attention: Vanessa O'Brien

Date: 27/07/2021

Pressure & Flow Application Number: 1183617
Your Pressure Inquiry Dated: 2021-07-05
Property Address: 44 Driver Avenue, Moore Park 2021

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

ASSUMED CONNECTION DETAILS

Street Name: Driver Avenue	Side of Street: East
Distance & Direction from Nearest Cross Street	40 metres South from Moore Park Road
Approximate Ground Level (AHD):	45 metres
Nominal Size of Water Main (DN):	200 mm

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	40 metre head
Minimum Pressure	36 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	36
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5	37
	10	37
	15	37
	20	36
	26	36
	30	36
	40	35
	50	35
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	5	36
	10	36
	15	36
	20	36
	26	35
	30	35
	40	34
	50	34
Maximum Permissible Flow	118	26

(Please refer to reverse side for Notes)

For any further inquiries regarding this application please email :

swtapin@sydneywater.com.au

General Notes

This report is provided on the understanding that (i) the applicant has fully and correctly supplied the information necessary to produce and deliver the report and (ii) the following information is to be read and understood in conjunction with the results provided.

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