

**ADELAIDE HILLS COUNCIL
ORDINARY COUNCIL MEETING
Tuesday 19 December 2023
CONFIDENTIAL AGENDA BUSINESS ITEM**

Item: 19.4

Responsible Officer: David Waters
Director Environment and Infrastructure
Environment and Infrastructure

Subject: Amy Gillet Bikeway Stage 4 Construction Option

For: Decision

1. Amy Gillett Stage 4 – Construction Option– Exclusion of the Public

Pursuant to section 90(2) of the *Local Government Act 1999* the Council orders that all members of the public, except:

- Chief Executive Officer, Greg Georgopoulos
- Director Community Capacity, Natalie Armstrong
- Director Corporate Services, Terry Crackett
- Director Environment and Infrastructure, David Waters
- Minute Secretary, Rebekah Lyons
- Governance Support, Tracy Riddle (Kelledy Jones Lawyers)
- Technical Support, Tom Portas

be excluded from attendance at the meeting for Agenda Item 19.4: (Amy Gillett Bikeway Stage 4 – Construction Option) in confidence.

The Council is satisfied that it is necessary that the public, except for Council staff in attendance as specified above, be excluded to enable Council to consider the report at the meeting on the following grounds:

- (j) Section 90(3)(j) of the *Local Government Act 1999*, the information to be received, discussed, or considered in relation to this Agenda Item is information the disclosure of which –
- (i) would divulge information provided on a confidential basis by or to a Minister of the Crown, or another public authority or official (not being an employee of the council, or a person engaged by the council); and
 - (ii) would, on balance, be contrary to the public interest.

Accordingly, on this basis the principle that meetings of the Council should be conducted in a place open to the public has been outweighed by the need to keep the information and discussion confidential.

2. Amy Gillett Bikeway Stage 4 - Construction Option – Confidential Item

SUMMARY

The purpose of this report is to seek the Council's direction on further consideration of the State Government's latest proposal for the construction and maintenance at Stage 4 of the Amy Gillett Bikeway (Mount Torrens to Birdwood).

The Council has a current funding agreement in place with the Federal Government for the Federal Government to provide \$2.6m funding to the project.

The State Government has recently announced its own commitment of \$2.6m to the project. Together with the Council's commitment of up to \$500,000, the total committed funding is \$5.7m.

Council has sought for the State Government to undertake the construction of the path given that the Amy Gillett Bikeway is a state asset built on State land. Stages 1 to 3 were constructed by the State Government, with the exception of a short ancillary section in Woodside (from the Recreation Grounds to Station Road) which was constructed by Adelaide Hills Council. The State Government committed to undertake designs and subsequent estimates for Stage 4.

This design process identified increased costs to deliver the project by the State Government and various negotiations between the State Government and Council have been on-going, primarily with a view to value-managing the design scope to reduce the cost of the project.

Council's most recent alternate offer as of September 2023 to the State Government was rejected, with a suggestion that Council manage the construction work.

The report presents two options: signalling intent for Council to undertake construction of Stage 4, pending further due diligence, or rejecting responsibility, risking federal funding withdrawal.

RECOMMENDATION

Council resolves:

- 1. That the report for Amy Gillett Bikeway Stage 4 – Construction Option be received and noted.**
- 2. That Council provides in-principle support for Council to undertake the construction and ongoing maintenance and operations of the Amy Gillett Bikeway Stage 4, Mount Torrens to Birdwood, subject to the following information being provided at a subsequent meeting for a final approval to proceed:**
 - a. A prudential review report.**
 - b. Approval of the variation lodged with the Federal Government under the funding agreement.**
 - c. Final construction estimates.**
 - d. Confirmation of the scope of native vegetation clearance and potential offsets.**
- 3. That Council authorise initial expenditure of \$10,000 for the engagement of a suitably qualified independent person to undertake a Prudential Review as per the *Local Government Act 1999*.**

- 4. That Council authorise initial expenditure of up to \$30,000 to engage a consultant to undertake a native vegetation assessment and commence steps to seek approval for necessary clearance from the Native Vegetation Council, noting that no actual clearance work should proceed until and unless Council subsequently confirms that it will undertake construction of the bikeway.**
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1. BACKGROUND

Following strong advocacy from the Council and local federal MP, Rebekha Sharkie, in October 2020, the Federal Government announced funding of \$2.6m towards Stage 4 of the Amy Gillett Bikeway. The funding was allocated by the previous Federal Government under the now discontinued Community Development Grants Program. The funding is confirmed in a funding agreement between the Federal Government and the Adelaide Hills Council, albeit the Council's intention was to transfer the funding to the State Government to deliver the project.

At the time, this level of funding was considered sufficient to substantially fund the construction of Stage 4 based on typical 'per km' costs of previous stages. Notwithstanding the Federal Government's funding commitment, the State Government did not prioritise the project from either a funding or project delivery perspective and, as a consequence, the project did not proceed.

The State Government did, however, progress preliminary design work for Stage 4, along with revised cost estimates.

As Council Members will be aware, the last 3 – 4 years have seen substantial increases in the cost of construction works. New cost estimates for Stage 4 by the State Government ranged from \$7.9m - \$11.7m, clearly reflecting a shortfall in funding.

Council has continued to advocate for the State Government to prioritise the construction of Stage 4, however successive State budgets have failed to allocate funding to this end.

Although the current Federal Government has honoured the \$2.6m funding commitment, Council has received regular reminders about the need to meet milestone targets contained in the funding agreement and, ultimately, to expend the funds by December 2025.

This year, a series of meetings have been held involving the Mayor, senior Council staff, the Minister for Infrastructure and Transport and senior DIT staff in attempt to bring the matter to a head. The Minister had indicated strong support for constructing Stage 4 of the bikeway and instructed DIT staff to work with Council to look at ways of reducing the potential cost of the project.

Further investigation and consideration by DIT suggested that a scope option for an unsealed path/trail could be achievable, however the cost estimate was still \$7.9M. This was the proposal that was ultimately submitted to the Federal Government and a Deed of Agreement for the federal funding was executed (between Council and the Federal

Government) in April 2023. This agreement was contingent on a commitment from the State Government of \$4.8M by October 2023.

As part of the Country Cabinet visit to the Adelaide Hills in late August 2023, the Minister announced a State Government commitment of \$2.6m to the project and requested the Council consider making an equivalent commitment to bring the total project funding to \$7.8m, i.e. \$2.6m from each tier of government.

At a Special Meeting on 4 September 2023, Council considered the State Government's offer and resolved as follows:

6.1.1 Amy Gillett Bikeway Stage 4 – Alternate Offer to State Government – Confidential Item

Moved Cr Malcolm Herrmann
S/- Cr Melanie Selwood

232/23

Council resolves:

1. That the report be received and noted
2. That the Council makes the following counteroffer to the State Government
 - a. Council maintains its commitment to provide up to \$500,000 toward the cost of Stage 4 of the Amy Gillett Bikeway (Mt Torrens to Birdwood), Council will contribute \$125,000 per annum for a total of 4 years to the State Government for the completion of Stage 4.
 - b. Council undertake sweeping, slashing, vegetation, tree management and weed spraying operations of the full length of Amy Gillett (Stages 1 - 4) for the 30 year lifecycle of those assets, at an operational cost of \$100,000 to \$160,000 per annum to Council. That, subject to all the necessary approvals being obtain, Council undertakes responsibility for maintenance of Stages 1-3 (Oakbank to Mount Torrens) from 1 July 2024 and Stage 4 (Mount Torrens to Birdwood) from 1 July in the year following its completion.
 - c. That the State Government continues to maintain the hard physical assets of the full length of Amy Gillett (Stages 1 - 4) for the lifecycle of those assets.
 - d. That the State Government completes the design collaboratively with Council to look at practical options and solutions to minimise final costs and maximise the scope of the project outcomes.
 - e. That the State Government commits \$4.8M funding towards the completion of the project to ensure that the \$2.6M Federal Government Deed of Agreement obligations are met.
 - f. The State Government undertakes the construction of Stage 4 such that it will meet the project scope obligations as identified in the Deed of Agreement between Council and the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts.
 - g. That the State Government commits to any additional costs above the total project costs of \$7.9M as identified in the Deed of Agreement between Council and the Federal Government.

3. That the Council authorise the Chief Executive Officer to present the alternate offer and enter into the necessary agreements with the State Government to ensure that Stage 4 of Amy Gillett is completed.
4. After any agreements with the State Government are finalised, the Chief Executive Officer is authorised to complete the necessary Variation Request form for Project CDG1623 – Amy Gillett Bikeway with the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts.
5. If required for the purpose of executing any agreement associated with this matter, to authorise the Mayor and Chief Executive Officer to affix the Council's common seal.
6. That the State Government is encouraged that owners of land which is bisected by the Amy Gillett Bikeway continue to have legal access to all their properties.
7. That Council remind the State Government of the original and ongoing purpose of this Bikeway which is to celebrate the life and achievements of Amy Gillett and the immense value that female athletes provide as leaders for our community.

Carried

The Council's offer was subsequently put to the Minister in writing.

In a meeting attended by the Mayor and the Chief Executive Officer with the Minister on 19 October 2023, the Minister indicated that the State Government would not be increasing its funding commitment to the project and put forward a proposal involving Council taking responsibility for managing construction of the project, with the State potentially holding some additional contingency funding if needed.

Council Members were advised of this proposal at a workshop on 24 October 2023.

In the following weeks, Council staff sought clarification from DIT officers on several aspects of the proposal. In essence, the State Government's proposal is:

1. That Adelaide Hills Council manage the construction of Stage 4 of the Amy Gillett Bikeway from Mount Torrens to Birdwood.
2. That the design and construction standard be determined by Adelaide Hills Council and not be constrained by the usual 'bikeway' standard adopted by DIT, albeit Council would need to seek DIT concurrence.
3. That the State Government would remain the owner of the land (being a former railway corridor) and of the asset built on it, and therefore be responsible for asset renewal at 'end of life'.
4. That the Adelaide Hills Council be responsible for maintenance of the corridor, including the bikeway, structures, drainage assets and vegetation, for Stage 4 only. (For the sake of clarity, DIT would retain its existing responsibility for operations and maintenance of Stages 1 – 3.)
5. That the State Government contribute \$2.6m to the Council for the construction works, with an additional contingency of up to \$200,000 if required. Any further cost overruns be borne by the Council.

Council Members were briefed on the above at a workshop on 21 November 2024.

Notwithstanding the progress of negotiations, it has been necessary to submit a variation request to the Federal to the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications, and the Arts. The variation request relates to the milestone targets contained within the funding agreement, in particular, the requirement to have sufficient funding from all parties committed by October 2023 and for works to be underway. It has also involved the revision of spending projections. Council is waiting on the approval of that variation request, however, the Federal Minister has publicly stated that the Federal Government remains committed to working with Council to find a way to complete the project.

2. ANALYSIS

➤ Strategic Management Plan/Functional Strategy/Council Policy Alignment

Strategic Plan 2020-24 – A brighter future

Goal	A functional Built Environment
Objective B1	Our district is easily accessible for Community, our businesses, and visitors.
Priority B1.1	Increase accessibility to our district through the development and delivery of high priority trails and routes for all cyclists (on-road, off road, commuters, recreational) and pedestrians.
Priority B1.3	Progress state-wide and inter-regional connectivity of cyclist routes by partnering with neighbouring councils.

Trails and Cycling Routes Management Policy

Support Tourism and economic development within the Adelaide Hills Region.
Foster community involvement and stewardship of trails and cycle routes

Prudential Management Policy

See Legal Implications section for further information.

➤ Legal Implications

Contractual matters

The Council has existing contractual obligations to the Federal Government through the Deed of Agreement for the \$2.6m Commonwealth contribution. Should any of the requirements of the agreement not be met by Council, the Federal Government's remedy is to the withdraw funding, should it choose to do so.

There will be a need to enter into agreements with the State Government to undertake construction, operations and maintenance along the railway corridor that is under the ownership of the State. An example of the Funding Deed is provided in **Appendix 2**.

Legislative matters

Section 48 of the *Local Government Act 1999* contains provisions around the requirement to undertake a prudential review for certain activities. Of particular relevance are subsections (1) and (2) which are shown below.

- (1) Without limiting subsection (aa1), a council must obtain and consider a report that addresses the prudential issues set out in subsection (2) before the council—
 - (b) engages in any project (whether commercial or otherwise and including through a subsidiary or participation in a joint venture, trust, partnership or other similar body)—
 - (i) where the expected operating expenses calculated on an accrual basis of the council over the ensuing five years is likely to exceed 20 per cent of the council's average annual operating expenses over the previous five financial years (as shown in the council's financial statements); or
 - (ii) where the expected capital cost of the project over the ensuing five years is likely to exceed \$4 000 000 (indexed); or
 - (iii) where the council considers that it is necessary or appropriate.
- (2) The following are prudential issues for the purposes of subsection (1):
 - (a) the relationship between the project and relevant strategic management plans;
 - (b) the objectives of the Development Plan in the area where the project is to occur;
 - (c) the expected contribution of the project to the economic development of the local area, the impact that the project may have on businesses carried on in the proximity and, if appropriate, how the project should be established in a way that ensures fair competition in the market place;
 - (d) the level of consultation with the local community, including contact with persons who may be affected by the project and the representations that have been made by them, and the means by which the community can influence or contribute to the project or its outcomes;
 - (e) if the project is intended to produce revenue, revenue projections and potential financial risks;
 - (f) the recurrent and whole-of-life costs associated with the project including any costs arising out of proposed financial arrangements;
 - (g) the financial viability of the project, and the short and longer term estimated net effect of the project on the financial position of the council;
 - (h) any risks associated with the project, and the steps that can be taken to manage, reduce or eliminate those risks (including by the provision of periodic reports to the chief executive officer and to the council);
 - (i) the most appropriate mechanisms or arrangements for carrying out the project;
 - (j) if the project involves the sale or disposition of land, the valuation of the land by a qualified valuer under the *Land Valuers Act 1994*.

In terms of the three potential triggers for a prudential review contained in 43(1)(b) of the Act, the following applies:

Trigger 1, operating expenses in the next five years: The cost of operating, i.e. maintaining, the new section of bikeway over the first five years beyond its

construction is expected to be in the range of \$500,000 - \$750,000 (in total) which is considerably less than 20 percent of the Council’s average annual operating expenses (approximately \$11m). This trigger is therefore not met.

Trigger 2, capital cost of the project over the next five years: The current project cost estimate remains subject to further scrutiny as discussed elsewhere in this report, however, total available funds from the three funding parties is \$5.7m plus a \$200,000 contingency. Previous DIT estimates have the project cost in the range of \$7m+ as outlined earlier in this report. The current (2023) indexed threshold for triggering a prudential review is \$5.49m and the threshold in 2024 will be \$5.81m.

While it could be argued that a prudential review is not required (based on the total committed funding of \$5.7 being below the 2024 threshold of \$5.81m), it would be prudent to take a precautionary approach. If the 2023 threshold is being used, then the trigger is unequivocally met.

Trigger 3, where the Council considers it to be necessary or appropriate: This provision gives Council discretion to commission a prudential review for any reason. The Council’s Prudential Management Policy provides no particular guidance on this.

In summary, Trigger 1 has not been met. Trigger 2 could be argued to have been met. The Administration considers that this project is of such complexity (relative to other projects typically delivered by Council) that further Council decision making would be most appropriately informed through a prudential review. As such, Council should consider commissioning a prudential review (under Trigger 3) regardless.

➤ **Risk Management Implications**

Undertaking the construction of Stage 4 will assist in mitigating the risk of:

Losing Federal Grant funding leading to Amy Gillett Stage 4 not being delivered.

Inherent Risk	Residual Risk	Target Risk
Extreme (4A)	Extreme (4B)	Low

The risk assessment outlined above directly relates to the report recommendation.

Undertaking any construction project will entail risks. Whilst an initial review of available data and design collated by the State Government provides Council with significant insight into the opportunities to deliver the project within the available funding of \$5.7m, it should be acknowledged that there are risks in a project of this scale. Some risks will relate to delivery timeframes and others for construction risks and potential costs escalations.

Identification of risk and subsequent mitigations are critical in ensuring the project scope is delivered within available funding and timelines. A crucial mitigation to the risk of cost overrun is the flexibility Council will have in the design and construction standard. For instance, the Council may determine whether or not the path should be sealed. It has flexibility in granular pavement depth, the specific alignment the path should take in the corridor and whether or not bridges should be constructed for crossings such as that over Burford Hill Road.

Native Vegetation Council (NVC) approval is another significant risk to the project. There will be a requirement to remove more than five hundred trees and impact a disused railway corridor of about 20 hectares, parts of which have become naturalised in the landscape through the passage of time. The timeline to get NVC approval will have a significant impact on Council being able to deliver the project within the required timelines and should significant redesign be required to gain approval then there will be cost escalations to the current proposal. The offset for removal of trees, either through revegetation or the payment of a significant environmental benefit (SEB) amount, will be significant. An example of a mitigation for this risk would involve early engagement with the Native Vegetation Branch at the Department for Environment and Water to discuss the project in detail and the practical construction considerations that impact the vegetation removal requirements. It is also proposed that Council proceed immediately with an initial native vegetation assessment (as part of the NVC application) in order to expedite the process.

Whilst Council has undertaken public consultation previously as part of its Annual Business Plan process, limited recent public consultation has occurred and the adjacent landowners, many of whom utilise the corridor for stock grazing or other purposes, have not had specific consultation. Whilst informal contact has been made with several of the adjacent owners, more formal engagement with each adjacent owner would be a high priority to understand current use of the corridor and impact to determine solutions in the final design phase. DIT, as the landowner and manager of land use agreements presently in place, has agreed to assist in this process.

The examples above highlight that taking on the construction of a project of this scale will come with risks. The Prudential Review recommended in this report will help refine and evaluate those risks and enable the Council to make a better informed decision about whether to proceed with the project.

➤ **Financial and Resource Implications**

Up-front costs

The Council's \$500,000 commitment towards the construction of the Amy Gillett Stage 4 has been included in the Long-Term Financial Plan adopted by Council. Originally the proposal was to provide this contribution to the State over a 4-year period. Should Council undertake the construction then this funding may required to be expended sooner, however, depending on the timing of on-ground works the Council funds could be split over 2023-24, 2024-25 and 2025-26 financial years.

Unlike most construction projects of this scale, all costs associated with the project will be considered operating expenses as the funds are not used to create an asset which the Council will own and depreciate. The effect of this is the way the income and expenditure is presented in the accounts. In essence, income and expenditure will be accounted for and shown in the operating statement in the financial years in which it is received and spent.

The up-front costs associated with the project will include project design and management costs and allowance for same will be included in Council's detailed cost estimates as further due diligence work is undertaken. It is intended to fully cost the project management resources to the project.

Ongoing operating costs

Should the Council accept the State Government’s proposal, it will be expected to maintain the new 6km section of path in perpetuity. This involves civil works associated with the pathway itself, signage, bridges and drainage infrastructure as well as vegetation management, weed spraying, litter management and periodic sweeping.

Council’s existing civil infrastructure and parks maintenance resources are fully committed achieving existing service levels across the district. Should Council take on maintenance responsibility for the new section of the path, it will be necessary to allocate additional annual operational funding.

This will include the purchase of additional equipment (some of which can be capitalised) to undertake the works along the Amy Gillett corridor. The purchase of this equipment can potentially be utilised for Council to undertake works currently undertaken by contractors elsewhere across the Council area. This may offset some of the cost impacts to Council, however the cost of this additional equipment has not been included in the cost estimates of this project or elsewhere in the budget or *Long Term Financial Plan* (LTFP).

When Council previously considered its alternate offer to the State, the cost to maintain (sweeping, slashing, weed spraying and vegetation management only) the full length of Amy Gillett Bikeway including a completed Stage 4 was estimated to range between \$100,000 and \$160,000 per annum. It should be noted that this was for the full length but did not include the hard maintenance components.

To maintain Stage 4 (only) once constructed it is considered that \$40,000 per annum will be required for sweeping, slashing, weed spraying, and vegetation management and an annual amount of \$15,000 per year should be allocated for the maintenance of the physical assets. That is, a total annual operating cost of \$55,000 is estimated for the proposed Stage 4 of the bikeway.

This has not been included in the most recent LTFP and needs to be considered an incremental cost of the project. Council will not need to account for any depreciation of the new assets as they will not be Council’s to replace in the long term and the cost will be fully expensed, rather than capitalised, when built.

Whole of Life Cycle Costs

It is important to consider whole of life cycle costs in considering whether or not to accept the proposal put forward by the State Government. While this could be done at a detailed level, the dominant costs applicable to Council are any once off up-front contributions and any annual maintenance costs.

Council Members have expressed a desire to compare whole of life costs over various options proposed previously against the current State Government proposal. This is presented in the table below.

	Scenario 1 Council contributes \$2.6m up front with no annual maintenance responsibility	Scenario 2 Council contributes \$500k up front and undertakes 'soft' asset maintenance of whole Bikeway	Scenario 3 Council contributes \$500k up front and undertakes all maintenance of only Stage 4
Up front cost	\$2.6m	\$500k	\$500k
Annual cost (ops and maintenance)	-	\$160k	\$55k
Present value of costs (30 years)	\$2.6m	\$3.26m	\$2.15m
Notes	State Government to bear risk of construction cost overruns	State Government to bear risk of construction cost overruns	Council to bear risk of construction cost overruns (beyond \$200k)

Understanding the present value of costs of an initiative can help determine the best value between several options for an initiative with a medium – long term life. Generally speaking, all other factors being equal, the option with the highest net present value, or in this case where there is no foreseen income, the lowest present value of costs, would be the most cost effective option to take.

It can be noted from the comparative table that the proposal now put to the Council from the State Government (Scenario 3) has a lower whole of life cost to Council than the proposal that Council previously put to the State (Scenario 2). This is of course contingent on no project cost overruns.

In relation to cash flow for the project, it is understood that the Council would receive the funding from the State up front when the Grant Agreement was executed. A typical Funding Deed is provided in **Appendix 2**.

The funding from the Federal Government will be provided in instalments as agreed milestones are met and validated.

Immediate costs

This report seeks approval to expend a portion of project costs, from the \$500,000 committed by the Council, immediately on the prudential review (\$10,000) and native vegetation assessment and preliminary NVC application activities (up to \$30,000). These costs are considered necessary as outlined elsewhere in this report and will inform further decision making.

➤ **Customer Service and Community/Cultural Implications**

The community has a high expectation that Stage 4 of the Amy Gillett Bikeway will be delivered, and the on-going delays are causing frustration in the community and the family of Amy Gillett.

➤ **Sustainability Implications**

Based on the experiences shared on construction of the first three stages and potential broader connections to trails, it is forecast that the Amy Gillett Bikeway would generate sustained positive impacts both economically and socially.

➤ **Engagement/Consultation conducted in the development of the report.**

Consultation on the development of this report was as follows:

Council Committees: Not Applicable

Council Workshops: 24 October 2023
21 November 2023

Advisory Groups: Not Applicable

External Agencies: Department for Infrastructure and Transport

Community: Not Applicable

➤ **Additional Analysis**

The Department of Infrastructure and Transport (DIT) has provided Council with all the investigations, reports, survey, design, and estimates undertaken by the State on this project.

This documentation includes.

- Vegetation Surveys
- Engineering Surveys
- Road Design information
- Geotechnical Reports
- Structural Report
- Hydrology Assessment

A small example of the type of information that is available to Council is included in **Appendix 4**.

Design Standards

As the asset that is constructed will be under the ownership of the State Government the administration has sought clarity from the senior DIT officers on the applicable design standards. This is critical in assessing the ability for Council to deliver the project within the available funding available, that is \$5.7m. Council officers are satisfied that a basic level of construction will be acceptable to the department, and they will not be seeking to burden and inhibit the delivery of the project through 'gold plating' design standards. DIT will be seeking an assessment from Council of the whole of life cycle considerations regarding the final option chosen.

DIT officers have indicated that a 150mm granular pavement with a sprayed bitumen seal will be acceptable, as opposed to the deeper pavement with a thicker hotmix asphalt seal applied to previous sections.

In addition, DIT considers that a lower standard of creek crossing at Angas Creek and William Creek will be acceptable, hence reducing the structural construction costs at these locations. That is, Council would design stormwater culverts in these locations to a lower flood protection level, accepting a greater frequency of the pathway itself being overtopped by flood water. For the purpose of clarity, this is not to say that there will be an increased flood risk for dwellings in adjacent properties. Rather, it is to suggest that Council accepts that the pathway itself will be potentially overtopped by floodwater more frequently (say at a 1 in 10 or 1 in 20 year average recurrence interval standard rather than 1 in 100 year standard).

General Approach to Procurement and Construction

In reviewing the cost estimations undertaken by DIT, Council has undertaken some informal markets testing regarding key elements of the construction delivery of the project.

Council will complete the native vegetation approvals utilising external qualified resources and subsequently manage the engagement of a specialised contractor to clear the corridor ready for civil construction.

In broad terms and in parallel to the native vegetation process staff will be seeking to go to the market for early contractor involvement. Council will use the current concept alignment design along the existing railway corridor as the basis for the tender. The intention is to get a contractor in place that will work with Council to finish the design and ensure ease of constructability and cost efficiencies. This will involve the final design of the creek crossing and work on Burford Hill Road bridge. It is intended to utilise LGA Procurement to assist in this method of engagement with the market.

The current intention is to use Council's existing spray seal contractor to undertake the final sealing. Given Council has recently tested the market, there is a reasonably clear understanding of rates that can be achieved.

Whilst this approach broadly outlined above is considered to be the most efficient way to deliver the project with the available funding, it does move additional risk to Council. That is for instance, if a future failure occurs in the path, the civil contractor may claim it was the spray seal contractor's fault and vice versa. This is a contractual risk and one which will need to be managed through construction management and site supervision processes.

In terms of project management, it will be necessary to set up a small project team comprising a range of skills to manage the project. This will likely require the employment of additional staff either to undertake project roles or backfill those who do. The costs of project management will be funded from the project funds.

Cost Estimations

Several options and associated cost estimates were undertaken by DIT and these have subsequently been provided to Council.

The estimate that Council has reviewed is based on discussion with DIT officers, informal market testing, recent history in civil works project costs and the proposed procurement and construction approach.

The DIT project cost estimates include significant allocations for departmental overheads, on-costs and risk. Council would not typically include the same level of overheads in project costs estimates and would generally only include overheads directly related to the project which are not already funded by Council in the operating budget.

Both Council and DIT staff also recognise that Council should be able to take a more practical, lower cost approach to on-ground delivery of a project of this nature.

Once these factors are taken into account, together with reductions for reducing the design standard for the pathway and drainage, Council staff estimates indicate that a sealed shared path from Mount Torrens to Birdwood should be feasible for the current available funding of \$5.7m. It is considered appropriate that this be validated through the prudential review process.

Factors leading to a recommendation to proceed

The Administration remains of the view that the State Government, as the proponent, owner, builder and operator of the existing Amy Gillett Bikeway from Oakbank to Mount Torrens, should build and operate the next stage to Birdwood. This would almost completely ameliorate any risk to Council and negates the need for ongoing costs.

The State Government has, however, made it clear that it is not going to increase its financial commitment to the work and will not proceed with the project without significant additional contributions from the Council to fund the project.

In light of the State Government's position, it is apparent that the only viable way to ensure the pathway is extended, within the available funding, is for the Council to take on responsibility for its construction.

As outlined in this report, the Administration considers that the Council should be able to deliver the project at a lower cost than the State Government and that, based on estimates to date, this should be achievable within the available funding. The Administration does, however, support the commissioning of an independent prudential review to confirm the Council's understanding of risks prior to making a final decision on the matter.

The recommendation provided with this report is for the Council to provide conditional and in-principle approval to accept the State Government's proposal. This decision is important at this stage to provide confidence to all funding partners that the project is likely to proceed. It further provides the Administration with approval to proceed with undertaking some preliminary activities necessary for the successful execution of the project and for a final decision to be made.

3. OPTIONS

Council has the following options:

- I. The current recommendation is not a final decision by Council to undertake the construction of Stage 4, however, it will provide a clear intention to do so subject to further due diligence. This will allow Council to communicate Council's intentions with the funding partners and commence this additional due diligence. Council can also commence preparation works for the necessary engagements immediately following a final decision in January or February 2024. (Recommended)
- II. Council can determine at this point that it does not wish to be responsible for the construction of the Amy Gillett Stage 4 and subsequently officers will inform both the Federal Department and the State Government of Council's decision. Council will not be able to meet its obligations under the Deed with the Federal Government, and it is a high possibility that funding will be withdrawn for the project. (Not Recommended)

4. APPENDICES

- (1) Council Report 4 September 2023 Amy Gillett Stage 4 – Alternate Offer to State
- (2) Draft Funding Deed State Government
- (3) Amy Gillett Project Variation Form – Commonwealth Department
- (4) Geotechnical and Structural Report

Appendix 1

*Council Report 4 September 2023 Amy Gillett Stage 4 –
Alternate Offer to State*

**ADELAIDE HILLS COUNCIL
ORDINARY COUNCIL MEETING
Tuesday 4 September 2023
CONFIDENTIAL AGENDA BUSINESS ITEM**

Item: 6.1

Responsible Officer: David Collins
Manager Strategic Assets
Infrastructure and Operations Directorate

Subject: Amy Gillett Stage 4 – Alternate Offer to State

For: Decision

1. Amy Gillett Stage 4 – Alternate Offer to State – Exclusion of the Public

Pursuant to section 90(2) of the *Local Government Act 1999* the Council orders that all members of the public, except:

- Chief Executive Officer, Greg Georgopoulos
- Director Community Capacity, David Waters
- Director Corporate Services, Terry Crackett
- Director Development & Regulatory Services, Natalie Armstrong
- Acting Director Infrastructure & Operations, John McArthur
- Executive Manager Governance & Performance, Lachlan Miller
- Manager Strategic Assets, David Collins
- Manager Open Space, Chris Janssan

be excluded from attendance at the meeting for Agenda Item 6.1: (Amy Gillett Stage 4 - Alternate Offer to State) in confidence.

The Council is satisfied that it is necessary that the public, with the exception of Council staff in attendance as specified above, be excluded to enable Council to consider the report at the meeting on the following grounds:

- (j) Section 90(3)(j) of the *Local Government Act 1999*, the information to be received, discussed, or considered in relation to this Agenda Item is information the disclosure of which –
- (i) would divulge information provided on a confidential basis by or to a Minister of the Crown, or another public authority or official (not being an employee of the council, or a person engaged by the council); and
 - (ii) would, on balance, be contrary to the public interest.

Accordingly, on this basis the principle that meetings of the Council should be conducted in a place open to the public has been outweighed by the need to keep the information and discussion confidential.

2. Amy Gillett Stage 4 – Alternate Offer to State – Confidential Item

SUMMARY

The purpose of this report is to recommend an alternate offer to the State Government regarding funding of the Amy Gillett Stage 4 (Mount Torrens to Birdwood).

The completion of the Amy Gillett Bikeway has been a high priority for the community and Council. The State Government completed 3 stages from Oakbank to Mount Torrens between 2010 and 2014.

The Council lobbied for additional funding to complete Stage 4. The Federal Government has provided \$2.6M towards completing Stage 4.

The cost to complete Stage 4 has significantly escalated. The preliminary design and cost estimate undertaken by the Department of Infrastructure and Transport identified a total cost of \$11.7M to complete Stage 4 as a sealed bikeway similar to the completed stages of Amy Gillett. An alternate scope was proposed for Stage 4 following discussions between State Government and Council officers. This would be an unsealed path / trail between Mount Torrens and Birdwood at a reduced estimated cost of \$7.9M.

This alternate scope was approved by the delegate for Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts and the Deed of Agreement (refer **Appendix 1**) was formalised on that revised scope basis.

Council has been seeking State Government funding of \$4.8M as its contribution to the reduced scope as agreed in the Deed of Agreement between the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts and Council. This funding is required for Council to meet its obligation under the Deed of Agreement between the Federal Government and Council to secure the federal funding of \$2.6M.

The State Government has offered \$2.6M and has placed additional requirements on Council as part of that offer. The report does not propose that we accept the offer as presented.

This report proposes an alternate offer to be considered by the State Government that includes Council undertaking operations and maintenance activities along the entire Amy Gillett corridor. It also proposes that Council maintains its \$500,000 contribution towards construction of Stage 4. However, it is proposed that the design, construction, including all cost escalation and ownership of Stage 4 shall be the responsibility of the State.

RECOMMENDATION

Council resolves:

- 1. That the report be received and noted**
- 2. That the Council makes the following counteroffer to the State Government**
 - a. Council maintains its commitment to provide up to \$500,000 toward the cost of Stage 4 of the Amy Gillett Bikeway (Mt Torrens to Birdwood), Council will contribute \$125,000 per annum for a total of 4 years to the State Government for the completion of Stage 4.**

- b. Council undertake sweeping, slashing, vegetation, tree management and weed spraying operations of the full length of Amy Gillett (Stages 1 - 4) for the 30 year lifecycle of those assets, at an operational cost of \$100,000 to \$160,000 per annum to Council.
 - c. That the State Government continues to maintain the hard physical assets of the full length of Amy Gillett (Stages 1 - 4) for the lifecycle of those assets.
 - d. That the State Government completes the design collaboratively with Council to look at practical options and solutions to minimise final costs and maximise the scope of the project outcomes.
 - e. That the State Government commits \$4.8M funding towards the completion of the project to ensure that the \$2.6M Federal Government Deed of Agreement obligations are met.
 - f. The State Government undertakes the construction of Stage 4 such that it will meet the project scope obligations as identified in the Deed of Agreement between Council and the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts.
 - g. That the State Government commits to any additional costs above the total project costs of \$7.9M as identified in the Deed of Agreement between Council and the Federal Government.
3. That the Council authorise the Chief Executive Officer to present the alternate offer and enter into the necessary agreements with the State Government to ensure that Stage 4 of Amy Gillett is completed.
 4. After any agreements with the State Government are finalised, the Chief Executive Officer is authorised to complete the necessary Variation Request form for Project CDG1623 – Amy Gillett Bikeway with the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts.
 5. If required for the purpose of executing any agreement associated with this matter, to authorise the Mayor and Chief Executive Officer to affix the Council's common seal.
-

1. BACKGROUND

Federal Government funding of \$2.6M through the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts was announced in October 2020 towards Stage 4 of the Amy Gillett Bikeway.

Council has been in negotiation with the South Australian Department of Infrastructure and Transport (DIT) regarding the access, design requirements and funding of the delivery of the project.

The State Government through DIT has undertaken Preliminary Design and Cost Estimates that identified a total cost to construct stage 4 of the Amy Gillett would be \$ 11.7M. This would be a sealed shared path for the full length from Mount Torrens to Birdwood similar to the current Stage 1 – 3.

To progress the Deed of Agreement and through further discussion with DIT, a reduced scope that would deliver an unsealed path/ trail from Mount Torrens to Birdwood with an estimated reduced cost of \$7.9M was proposed.

Subsequently, Council in its meeting of 26 April 2023, resolved the following:

18.1.1 Amy Gillett Bikeway – Stage 4 Agreement – Confidential Item

8.52pm Cr Pascale left the Chamber

Moved Cr Malcolm Herrmann

S/- Cr Mark Osterstock

103/23

Council resolves:

1. That the report be received and noted.
2. To commit to provide up to \$500,000, if necessary, toward the cost of Stage 4 of the Amy Gillett Bikeway (Mt Torrens to Birdwood), on the proviso that the Council's contribution is spread over a number of years, preferably not less than 4, via an arrangement with the State Government, on an interest free basis.
3. To note that Stage 4 of the Bikeway may be constructed to an unsealed (compacted road base/rubble/gravel) standard, with the ability for the State Government to seal its asset (bitumen/asphalt) in the future.
4. To authorise the Chief Executive Officer or his delegate to:
 - a. finalise arrangements concerning the Council's financial contribution;
 - b. negotiate aspects of the design and construction of the Bikeway;
 - c. enter into a "Deed of Agreement" with the Federal Department of Infrastructure, Transport, Regional Development and Communications, on behalf of the Council, subject to the State Government committing to deliver the project;
 - d. enter into any other agreements or contracts required to finalise the matter, at no additional cost to Council, now, or in the future.
5. If required for the purpose of executing any agreement associated with this matter, to authorise the Mayor and Chief Executive Officer to affix the Council's common seal.

Carried Unanimously

Council has since entered into a Deed of Agreement with the Commonwealth Government that has the first critical milestone due on 3 October 2023 (refer Figure 1). This milestone requires the confirmation of sufficient funding by the State Government. See **Attachment 2** for the signed Agreement in full.

Figure 1: 3 October 2023 Milestone

Table of Milestones, Reports and Funding payments relating to the Activity

Report	Milestone(s) / Information covered by the Report	Milestone Completion Date	Payment amount (GST Exclusive)	Due Date for Report	Due Date for Funding Payment
Progress Report 1	Evidence acceptable to the Commonwealth that the following have been achieved: <ul style="list-style-type: none"> • confirmation of final cost estimates • confirmation of final designs • confirmation of State Government funding • the activity at Item A.5 is reviewed and if required, varied to reflect the outputs of the final designs • 30 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	3 October 2023	\$780,000	1 November 2023	15 November 2023

The State Minister of Transport has written to Council, (refer **Appendix 2**) offering to match the Federal Funding offer of \$2.6M but also required Council to complete the design work, undertake construction and be responsible for ongoing maintenance of Stage 4.

This report responds to the letter of offer from the State Government.

2. ANALYSIS

➤ Strategic Management Plan/Functional Strategy/Council Policy Alignment

Strategic Plan 2020-24 – A brighter future

Goal	A functional Built Environment
Objective B1	Our district is easily accessible for Community, our businesses and visitors.
Priority B1.1	Increase accessibility to our district through the development and delivery of high priority trails and routes for all cyclists (on-road, off road, commuters, recreational) and pedestrians.
Priority B1.3	Progress state-wide and inter-regional connectivity of cyclist routes by partnering with neighbouring councils.

Trails and Cycling Routes Management Policy

Support Tourism and economic development within the Adelaide Hills Region.
 Foster community involvement and stewardship of trails and cycle routes

➤ Legal Implications

The Council is currently bound by the Deed of Agreement with the Commonwealth Government and the Commonwealth is not responsible for any additional costs to deliver the project as described in the Deed. It is critical that the State Government agree to all costs to ensure that the project scope obligations, as identified in the Deed of Agreement between the Commonwealth and Council, are completed in full without further financial obligations from Council.

There will be a need to enter into agreements with the State Government to undertake operations and maintenance along the railway corridor.

➤ **Risk Management Implications**

Reaching an agreement for the required level of investment from the State Government will assist in mitigating the risk of:

Losing Federal Grant funding leading to Amy Gillett Stage 4 not being delivered.

Inherent Risk	Residual Risk	Target Risk
Extreme (4A)	Extreme (4B)	Low

The risk assessment outlined above directly relates to the report recommendation to provide an alternative offer to the State Government.

Indirectly, if an agreement is successfully struck between the State Government and Council and the project proceeds as outlined in the recommendation there are other risks that may eventuate. These most notably include maintenance costs varying to those outlined in this report. Maintenance costs referenced in the report have been estimated and can't be confirmed until the negotiations with the State Government are completed. Even then, true maintenance costs can't be established accurately until the project is completed and on ground maintenance requirements are tangible.

If maintenance costs do vary upward or downward from those outlined in this report than Council's contribution will need to adjust accordingly.

➤ **Financial and Resource Implications**

The alternate offer by Council will have an impact of the service delivery from the Open Space team should no additional resources be engaged. The Open Space team will also require additional slashing equipment to undertake the works along the Amy Gillett corridor. The purchase of this equipment can potentially be utilised for Council to undertake works undertaken by contractors elsewhere across the Council area. This may offset some of the cost impacts to Council.

The Administration will need to undertake more detailed analysis of the current levels of service and/ or additional levels of resource to meet these additional obligations.

For the basis of this report, it is considered that the cost to maintain (sweeping, slashing, weed spraying, vegetation management) the full length of Amy Gillett including a completed Stage 4 will range between \$100,000 and \$160,000 per annum. In the absence of savings being identified within the Open Space budget, this will likely result in additional budget being required when the maintenance agreement commences.

The \$500,000 towards the construction of the Amy Gillett Stage 4 has been included in the budget and Long-Term Financial Plan adopted by Council.

➤ **Customer Service and Community/Cultural Implications**

The community has a high expectation that Stage 4 of the Amy Gillett Bikeway will be delivered, and the on-going delays are causing frustration from the community and potential impacts on the family of Amy Gillett.

➤ **Sustainability Implications**

Based on the experiences shared on construction of the first 3 stages and potential broader connections to trails, it is forecast that the Amy Gillett Bikeway would generate sustained positive impacts both economically and socially.

➤ **Engagement/Consultation conducted in the development of the report**

Consultation on the development of this report was as follows:

Council Committees: Not Applicable

Council Workshops: 28 August 2023 – Country Cabinet

Advisory Groups: Not Applicable

External Agencies: Not Applicable

Community: Not Applicable

➤ **Additional Analysis**

The current offer by the State Government of \$2.6M is less than the funding required to meet the funding obligation with the Federal Government. Noting that the Deed of Agreement with the Federal Government identified a \$4.8M contribution from the State Government.

The State Government is seeking that Council contribute additional funding, matching funding of \$2.6M, towards the project. A condition of that offer is that Council completes the final design, undertakes construction and subsequent maintenance of the completed Stage 4 of Amy Gillett.

Council has always maintained that Stage 4 of Amy Gillett Bikeway should be funded, constructed, owned and maintained by the State Government similar to Stages 1 – 3. Noting that Council did construct and maintains a 300 metre section of the Amy Gillett Bikeway in Woodside from Onkaparinga Valley Road to Station Road along the former railway corridor. This was a jointly funded project between Council and the State. This short section was completed in 2019 and constructed in line with the design requirements of the State Government.

Agreeing to the current offer by the State Government would place significant immediate financial pressure on Council. In addition to the \$2.6M impact on Council's operating position, there would be a need for additional project management and contract management resources to deliver a project of this scale over the next 18 months. Council would then have the ongoing maintenance of Stage 4 likely to be in the order of \$40,000 - \$60,000 per annum.

Currently for other off-road Bikeways the State Government advise that councils are responsible for the on-going maintenance. Delivering the maintenance of these facilities is likely to be inefficient for the State Government. One of the discussion points between the State and Council at officer level has been the ongoing maintenance of the corridor and the preference by the State Government for local government to undertake that role.

Given the required change to project scope regarding milestone delivery dates a variation agreement will need to be agreed with the Federal Government. There have already been adjustments negotiated with Officers in the Federal department and it is unknown whether any further changes will be agreed.

A further variation will be required with the Federal Government even if the State Government agrees to the funding as there are other conditions in the October 2023 milestone (refer Figure 1) that won't be met.

Given the forthcoming milestone within the Deed of Agreement with the Commonwealth Government it is imperative that consideration of the Amy Gillett Bikeway matter is forward focusing rather than what has occurred previously. Delays caused by any further investigation into background and context may compromise the \$ 2.6m Federal funding and therefore it is recommended that the alternate offer as detailed in this report is presented to the State Government.

3. OPTIONS

Council has the following options:

- I. Council presents the alternate offer to the State Government as presented in this report. Whilst this alternate offer requires Council to undertake additional operations and maintenance works as part of its program it shows a long-term commitment to the project. This additional proposal by Council is considered manageable, however noting it will require some detailed review of existing service levels and/or additional operational funding. (Recommended)
- II. The Council retain its existing position. The State Government has been clear that it expects a greater contribution from Council to progress and deliver Stage 4. Retaining our existing position is not likely to see the project delivered and may risk the loss of the Federal Grant funding. (Not Recommended)

4. APPENDICES

- (1) Deed of Agreement – Amy Gillett Bikeway
- (2) Letter of Offer State Government

3. Amy Gillett Stage 4 – Alternate Offer to State – Duration of Confidentiality

Subject to the CEO, or his delegate, disclosing information or any document (in whole or in part) for the purpose of implementing Council's decision(s) in this matter in the performance of the duties and responsibilities of office, Council, having considered Agenda Item 6.1 in confidence under sections 90(2) and 90(3)(j) of the *Local Government Act 1999*, resolves that an order be made under the provisions of sections 91(7) and (9) of the *Local Government Act 1999* to retain the Items in confidence as detailed in the Duration of Confidentiality Table below:

Item	Duration of Confidentiality NB: Item to be reviewed every 12 months if not released
Report	4 September 2024 or upon finalisation of all relevant agreements with the State and Federal Governments.
Related Attachments	4 September 2024 or upon finalisation of all relevant agreements with the State and Federal Governments.
Minutes	4 September 2024 or upon finalisation of all relevant agreements with the State and Federal Governments.
Other	Nil

Pursuant to section 91(9)(c) of the *Local Government Act 1999*, the Council delegates the power to revoke the confidentiality order either partially or in full to the Chief Executive Officer.

Appendix 1

Deed of Agreement – Amy Gillett Bikeway



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**

DEED OF AGREEMENT

FUNDING AGREEMENT IN RELATION TO AMY GILLETT BIKEWAY – MOUNT TORRENS TO BIRDWOOD

The Commonwealth of Australia as represented by the Department of
Infrastructure, Transport, Regional Development, Communications and the Arts
ABN 86 267 354 017

Adelaide Hills Council
ABN 23 995 071 393

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FUNDING AGREEMENT (LONG FORM)

FUNDING AGREEMENT IN RELATION TO THE AMY GILLETT BIKEWAY – MOUNT TORRENS TO BIRDWOOD (CDG1623)

Parties

This Funding Agreement is made between and binds the following parties:

1. **The Commonwealth of Australia** as represented by the Department of Infrastructure, Transport, Regional Development and Communications
ABN 86 267 354 017, 111 Alinga Street, Canberra, Australian Capital Territory
(**Commonwealth**)
2. **Adelaide Hills Council**
ABN 23 995 071 393, 64 Mount Barker Road, Stirling, South Australia
(**Recipient**)

Context

- A. The Commonwealth is undertaking the Community Development Grants programme, which was to support needed infrastructure that promotes stable, secure and viable local and regional economies.
- B. The Recipient submitted an application to obtain funding under the Programme to conduct the Activity. The Activity will contribute to the completion of the Project, and will help achieve the objectives of the Programme.
- C. The Commonwealth has agreed to provide Funding to the Recipient to support the carrying out of the Activity.
- D. The Recipient agrees to accept the Funding for the purposes, and subject to the terms and conditions, set out in this Agreement.
- E. The Recipient agrees that it is a precondition of entitlement to the Funding that the Recipient must:
 - a. provide to the Commonwealth with satisfactory evidence that the Recipient is registered with a Commonwealth, State or Territory Regulatory Body or satisfactory evidence of the Recipient's correct statutory authority name;
 - b. correctly use the Recipient's name on all documentation provided to the Commonwealth;
 - c. have an Australian Business Number (ABN);
 - d. immediately notify the Commonwealth if the Recipient ceases to hold an ABN;
 - e. correctly quote the Recipient's ABN on all documentation provided to the Commonwealth;
 - f. supply proof of the Recipient's GST status, if requested by the Commonwealth; and
 - g. immediately notify the Commonwealth of changes to the Recipient's GST status.

Operative provisions

In consideration of the mutual promises contained in this Agreement, the parties to this Funding Agreement agree as follows:

1. Interpretation

1.1. Definitions

1.1.1. In this Agreement, unless the context indicates otherwise:

ABN	means (Australian Business Number) as set out in section 41 of the A New Tax System (Australian Business Number) Act 1999 (Cth).
Activity	means the Activity described in Item A and includes the provision to the Commonwealth of the Activity Material;
Activity Completion date	means the date that the Activity must be completed by as set out in item A.5 of the Schedule.
Activity Material	means any Material: a. created by the Recipient for the purpose of this Agreement; b. provided or required to be provided to the Commonwealth under the Agreement; or c. derived at any time from the Material referred to in paragraphs a or b, and includes d. any Existing Material incorporated in the Material referred to in paragraphs b or c; and e. any Reports;
Activity Objectives	means the objectives of the Activity described in Item A.6 of the Schedule;
Activity Period	means the period specified in Item A during which the Activity must be completed;
Agreement	means this document and includes any Schedules and Annexures;
Annexure	means any annexure to Schedule 1;

Approved Auditor	means a person who is: <ul style="list-style-type: none"> a. registered as a company auditor under the Corporations Act 2001 (Cth) or an appropriately qualified member of the Institute of Chartered Accountants in Australia or of CPA Australia; b. not a principal, member, shareholder, officer, agent, subcontractor, employee or related entity of the Recipient or of a related body corporate (the terms 'related entity' and 'related body corporate' have the same meaning as in section 9 of the Corporations Act 2001 (Cth)); and c. not the Recipient's Qualified Accountant;
Asset	means any item of property, purchased, leased, hired, financed, created or otherwise brought into existence either wholly or in part with use of the Funding, which has a value of over \$5,000 exclusive of GST, but excludes any Intellectual Property Rights and Real Property (including any property once it becomes part of the structure of Real Property.
Auditor-General	means the office established under the Auditor-General Act 1997 (Cth) and includes any other entity that may, from time to time, perform the functions of that office;
Australian Accounting Standards	refers to the standards of that name maintained by the Australian Accounting Standards Board created by section 226 of the Australian Securities and Investments Commission Act 2001 (Cth);
Australian Auditing Standards	refers to the standards made by the Auditing and Assurance Standards Board created by section 227A of the Australian Securities and Investments Commission Act 2001 (Cth);
Australian Privacy Principle	has the same meaning as it has in the Privacy Act 1988 (Cth).
Budget	means the budget set out in Annexure B of the Schedule;
Business Day (in a place)	means a weekday other than a public holiday in the place specified or, if no place is specified, in the State or Territory specified in Item M of the Schedule;
Capital Works	means any part of the Activity that comprises construction and building activities and includes the Capital Works listed at item E.2.2 of the Schedule.

Commence Construction	means to begin a continuous programme of on-site construction for the Activity's Capital Works. For the purposes of this definition, only significant and continuous site preparation work such as major clearing or excavation or placement or assembly, or installation of facilities or equipment at the site constitute a programme of on-site construction.
Commonwealth	where the context permits, includes officers, delegates, employees and agents and successors of the Department of Infrastructure, Transport, Regional Development and Communications;
Commonwealth Material	means any Material: <ul style="list-style-type: none"> a. provided by the Commonwealth to the Recipient for the purposes of this Agreement; or b. derived at any time from the Material referred to in paragraph a;
Completion Date	means the day after the Recipient has done all that it is required to do under clauses 2 and 6 of this Agreement to the satisfaction of the Commonwealth;
Constitution	means (depending on the context): <ul style="list-style-type: none"> a. a company's constitution, which (where relevant) includes rules and any amendments that are part of the company's constitution, or b. in relation to any other kind of body: <ul style="list-style-type: none"> i. the body's charter, rules or memorandum, or ii. any instrument or Law constituting or defining the constitution of the body or governing the activities of the body or its members.
Cost Estimate	means the estimate for the Project which is the sum of the Funding and Other Contributions specified in Annexure B to the Schedule.
Cost Item	means an item of expenditure specified in the Budget at Annexure B to the Schedule.

Confidential Information	<p>means:</p> <ul style="list-style-type: none"> a. the information described in Item N; and b. information that the parties agree in writing after the Date of this Agreement is confidential information for the purposes of this Agreement;
Date of this Agreement	<p>means the date written on the execution page of this Agreement, or if no date or more than one date is written there, then the date on which the Agreement is signed by the last party to do so;</p>
Depreciated	<p>means the amount representing the reduction in value of an Asset calculated in accordance with Australian Accounting Standards;</p>
Director	<p>means any of the following:</p> <ul style="list-style-type: none"> a. a person appointed to the position of a director or alternate director and acting in that capacity for a body corporate within the meaning of the Corporations Act 2001 (Cth) regardless of the name given to their position; b. a member of the governing committee of an Aboriginal and Torres Strait Islander corporation under the Corporations (Aboriginal and Torres Strait Islander) Act 2006 (Cth); c. a member of the committee of an organisation incorporated pursuant to State or Territory laws relating to the incorporation of associations; or d. a member of the board, committee or group of persons (however described) that is responsible for managing or overseeing the affairs of the body corporate;
Dispose	<p>means to sell, licence, lease or sublease, or otherwise transfer or give up ownership or the right to occupy or use, or to enter into an agreement to do any of the preceding acts and 'Disposal' means the method of so disposing;</p>
Existing Material	<p>means all Material in existence prior to the Date of this Agreement:</p> <ul style="list-style-type: none"> a. incorporated in; b. supplied with, or as part of; or c. required to be supplied with, or as part of, <p>the Activity Material;</p>

- Financial Year** means each period from 1 July to the following 30 June occurring during the Term, or any part of such a period occurring at the beginning or end of the Term;
- Funding** means:
- a. the amount or amounts (in cash or kind) payable by the Commonwealth under this Agreement as specified in Item A.7 and Annexure A of this Agreement, and
 - b. any interest earned on the Funding once paid by the Commonwealth to the Recipient;
- GST** has the meaning that it has in the A New Tax System (Goods and Services Tax) Act 1999 (Cth);
- Information Officer** means any of the information officers appointed under the Australian Information Commissioner Act 2010 (Cth) when performing privacy functions as defined in that Act;
- Intellectual Property** includes:
- a. all copyright (including rights in relation to phonograms and broadcasts);
 - b. all rights in relation to inventions, plant varieties, trademarks (including service marks), designs, circuit layouts; and
 - c. all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields;
- but does not include:
- d. Moral Rights;
 - e. the non-proprietary rights of performers; or
 - f. rights in relation to confidential information;

Law	includes: <ul style="list-style-type: none"> a. Acts of the Commonwealth and the State(s) and Territory(s) in which the Activity will be undertaken, and any other relevant State or Territory; b. ordinances, regulations, by-laws, orders and proclamations or other instruments of legal effect made under those Acts referred to in paragraph (a); c. directions by any person exercising statutory powers regarding the Recipient or the Activity, including the Real Property; and d. all the requirements, standard, approvals, licences, registrations or permits of any government (including local government) department, authority, agency or regulatory body that apply to the Activity, including the Real Property;
Material	means anything in relation to which Intellectual Property rights arise;
Milestone	means a milestone or stage of completion of the Activity as set out in Annexure A of this Agreement;
Moral Rights	includes the following rights of an author of copyright Material: <ul style="list-style-type: none"> a. the right of attribution of authorship; b. the right of integrity of authorship; and c. the right not to have authorship falsely attributed;
Open Access Licence	means a licence to the public on broad open access terms that allows any member of the public to perform a wide range of acts in respect of the material subject to certain restrictions. An Open Access Licence includes any Australian Government open access licence and any Creative Commons Attribution licence (see http://creativecommons.org.au/learn-more/licences);
Operational	means that the completed Project is operating in a way that enables it to achieve its Purpose;
Operational Period	means the period during which the Recipient must keep the completed Project Operational;

Other Contributions	means financial or in-kind resources (with in-kind resources valued at cost other than the Funding, which are specified in Item C and Annexure B of the Schedule and are to be used by the Recipient to perform the Activity);
Personnel	means: <ul style="list-style-type: none"> a. in relation to the Recipient - any natural person who is an officer, employee, agent, or professional advisor of the Recipient or its subcontractors; and b. in relation to the Commonwealth - any natural person, other than a person referred to in paragraph a, who is an officer, employee, agent or professional advisor of the Commonwealth;
Privacy Act	refers to the Privacy Act 1988 (Cth);
Programme	means the Community Development Grants programme under which the Commonwealth is able to provide Funding to the Recipient.
Programme Guidelines	refers to the guidelines for the Programme, if any, as described in Item A of the Schedule;
Programme Objectives	means the objectives of the Programme, as set out in the Programme Guidelines or otherwise in Item A of the Schedule;
Project	has the meaning given in Item A.2 of the Schedule and includes the Activity;
Project Completion Date	means the date specified in item A.2 of the Schedule, which is the date by which the Recipient must complete the Project;
Purpose	means the purpose of the Project as set out at item A.3 of the Schedule;
Qualified Accountant	means a person who is a member of the Institute of Chartered Accountants in Australia or of CPA Australia;
Recipient	includes, where the context permits, the officers, employees, agents, volunteers and subcontractors, and successors of the Recipient;
Records	includes documents, information and data stored by any means and all copies and extracts of the same;

Report	means Activity Material that is provided to the Commonwealth for reporting purposes as stipulated in Item D of the Schedule;
Real Property	means: <ul style="list-style-type: none"> a. any land, buildings or fixtures including the Capital Works (both during and after completion) and the Works Locations; and b. any interest in the property specified in paragraph (a); that are purchased, leased, upgraded or otherwise created or brought into existence wholly or in part with the use of the Funding and includes the property listed at item E.2.1 of the Schedule.
Schedule	means the schedule to this Agreement and may include Annexures and incorporate other documents by reference;
Specified Personnel	means the Recipient's Personnel specified in Item I as Personnel required to undertake all or any part of the Activity;
Term	refers to the period described in clause 1.4.1 of this Agreement;
Third Party Interest	means any legal or equitable right, interest, power or remedy in favour of any person other than the Commonwealth or the Recipient in connection with the Agreement, including any right of possession, receivership, control or power of sale, and any mortgage, charge, security or other interest;
Undepreciated	in relation to the value of an Asset, means the value of the Asset which has not been Depreciated; and
Works Location	means a location where the Capital Works are to be undertaken including any premises in, or land on, which those Capital Works are to be undertaken and includes a Works Location listed in item E.2.3 of the Schedule.

1.2. **Interpretation**

1.2.1. In this Agreement, unless the contrary intention appears:

- a. words importing a gender include any other gender;
- b. words in the singular include the plural and words in the plural include the singular;

- c. clause headings are for convenient reference only and have no effect in limiting or extending the language of provisions to which they refer;
- d. words importing a person include a partnership and a body whether corporate or otherwise;
- e. a reference to dollars is a reference to Australian dollars;
- f. a reference to any legislation or legislative provision includes any statutory modification, substitution or re-enactment of that legislation or legislative provision;
- g. if any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- h. the use of the word “includes” or “including” in relation to a right or obligation of a party, does not limit or restrict the scope of that right or obligation;
- i. a reference to a clause is a reference to a clause in this Agreement;
- j. a reference to an Item is a reference to an Item in the Schedule;
- k. the Schedule and any attachments form part of the Agreement;
- l. if any conflict arises between the terms and conditions contained in the clauses of this Agreement and any part of the Schedule (and attachments if any), the terms and conditions of the clauses prevail; and
- m. if any conflict arises between any part of the Schedule and any part of an attachment, the Schedule prevails.

1.3. **Guidance on construction of Agreement**

- 1.3.1. This Agreement records the entire agreement between the parties in relation to its subject matter.
- 1.3.2. As far as possible all provisions of this Agreement will be construed so as not to be void or otherwise unenforceable.
- 1.3.3. If any clause in this Agreement is void or otherwise unenforceable then that clause will be severed to the extent it is void and unenforceable and the rest of the Agreement remains in force.
- 1.3.4. A provision of this Agreement will not be construed to the disadvantage of a party solely on the basis that it proposed or prepared that provision.
- 1.3.5. This Agreement may be executed in counterparts. All executed counterparts constitute one document.

1.4. **Duration of Term**

- 1.4.1. The Term of this Agreement commences on the Date of the Agreement and, unless terminated earlier, it expires on the Completion Date.

2. Activity, Project and Operational Period

2.1. Conduct of Activity

2.1.1. The Recipient agrees to carry out the Activity:

- a. to achieve the Activity Objectives;
- b. to assist the Programme to meet the Programme Objectives;
- c. to meet the Milestones;
- d. within the Activity Period;
- e. in an efficient, effective, economical and ethical manner;
- f. in accordance with this Agreement; and
- g. diligently and to a high standard.

2.1.2. Where the Commonwealth is satisfied that the Recipient does not have the capacity to adequately:

- a. manage the Funding; or
- b. undertake the Activity in accordance with this Agreement,
the Commonwealth may by written notice immediately:
- c. suspend, reduce or cease the release of Funding to the Recipient; and/or
- d. require the Recipient to refund some or all of the Funding to the Commonwealth; or
- e. terminate the Agreement in accordance with the provisions of clause 17.

2.2. Liaison and monitoring

2.2.1. The Recipient agrees to:

- a. liaise with and provide information to the Commonwealth as reasonably notified by the Commonwealth; and
- b. comply with all of the Commonwealth's reasonable requests, directions or monitoring requirements.

2.2.2. In relation to conducting a review and final evaluation of the Programme, the Recipient agrees to:

- a. provide all reasonable assistance required by the Commonwealth;
- b. respond to all of the Commonwealth's reasonable requests; and
- c. provide any information the Commonwealth reasonably requires.

2.2.3. Each of the parties may nominate, from time to time, a person who has authority to receive and sign notices and written communications for each of them under this Agreement and accept any request or direction in relation to the Activity.

2.3. **Subcontractors**

- 2.3.1. The Recipient is fully responsible for the performance of the Recipient's obligations under this Agreement, even though the Recipient may have subcontracted any of them.
- 2.3.2. Unless the Commonwealth agrees otherwise, the Recipient must have a written contract with each of the Recipient's subcontractors (subcontract) and ensure that each subcontract is consistent with, and allows the Recipient to give effect to, the Recipient's obligations under this Agreement. If requested by the Commonwealth, the Recipient must notify the Commonwealth of any subcontractors appointed to carry out any of the Recipient's obligations under this Agreement. The Recipient must notify the Commonwealth no later than 20 Business Days after the request from the Commonwealth.
- 2.3.3. The Recipient is responsible for ensuring the suitability of a subcontractor for the work proposed to be carried out and for ensuring that such work meets the requirements of this Agreement. The Commonwealth may direct the Recipient to terminate a subcontracting arrangement by notifying the Recipient in writing.
- 2.3.4. Upon receipt of a written notice from the Commonwealth directing the Recipient to terminate a subcontracting arrangement, the Recipient must, as soon as practicable (or as the Commonwealth may direct in the notice), cease using that subcontractor to perform any of the Recipient's obligations unless the Commonwealth directs that the subcontractor be replaced immediately, in which case the Recipient must comply with the direction.
- 2.3.5. If the Commonwealth directs the Recipient to terminate a subcontracting arrangement, the Recipient remains liable under this Agreement for the past acts or omissions of the Recipient's subcontractors as if they were current subcontractors.
- 2.3.6. The Recipient must, in any subcontract placed with a subcontractor, reserve a right of termination to take account of:
- a. The Commonwealth's right to direct the Recipient to terminate that subcontract under subclause 2.3; and
 - b. The Commonwealth's right of termination under clause 17,
- and the Recipient must make use of that right in the event of a termination by the Commonwealth.
- 2.3.7. The Recipient must, in any subcontract placed with a subcontractor, include a requirement for insurance that is consistent with the requirement for insurance under clause 21.5.
- 2.3.8. The Recipient must not enter into a subcontract under this Agreement with a subcontractor named by the Director of the Workplace Gender Equality Agency as an employer currently not complying with the Workplace Gender Equality Act 2012 (Cth).
- 2.3.9. For the purpose of this Agreement, 'subcontractor' includes any other member of the Recipient's consortium who is involved in the performance of the Activity.

2.4. **Reserved**

2.5. **Responsibility of the Recipient**

2.5.1. The Recipient is fully responsible for the performance of the Activity and for ensuring compliance with the requirements of this Agreement, and will not be relieved of that responsibility because of any:

- a. involvement by the Commonwealth in the performance of the Activity;
- b. subcontracting of the Activity;
- c. acceptance by the Commonwealth of Specified Personnel; or
- d. payment of any amount of Funding to the Recipient.

2.6. **Reports**

2.6.1. The Recipient agrees to provide to the Commonwealth written Reports in the manner specified in Item D of the Schedule.

2.7. **Project**

2.7.1. The Recipient must complete the Project by the Project Completion Date.

2.8. **Operational Period**

2.8.1. The Recipient must keep the completed Project Operational during the Operational Period specified in Item A.4 of the Schedule.

2A. Capital Works

2A.1. **Performance**

2A.1.1 The Recipient must perform the Capital Works:

- a. in accordance with the designs and plans submitted by the Recipient to the Commonwealth;
- b. in a good and workmanlike manner by qualified tradespeople; and
- c. with a minimum of delay.

2A.2. **Applicable Laws**

2A.2.1 The Recipient warrants and agrees that the Capital Works (whether undertaken before, on or after the Date of this Agreement) have been (if applicable) and will be carried out in accordance with all applicable Laws including, but not limited to, all necessary planning and regulatory approvals.

2A.2.2 The Recipient agrees to ensure that:

- a. the Works Locations comply at all times with all applicable Laws regarding their use as a site for the Capital Works; and
- b. the completed Capital Works comply with all Laws relating to their ongoing use throughout the Operational Period.

2A.3. **Commence Construction**

- a. The Recipient must Commence Construction required for the Activity within six months of the Date of this Agreement;
- b. The Recipient must notify the Commonwealth that the Recipient has Commenced Construction for the Activity, within five (5) Business Days of Commencing Construction; and
- c. If the Recipient fails to Commence Construction required for the Activity within six months of the Date of this Agreement, the Commonwealth may give the Recipient notice requiring the Recipient to repay the Commonwealth all or part of the Funding that the Commonwealth has previously paid to the Recipient within the period specified in the notice.

2A.4. **Completion**

2A.4.1 The Recipient must:

- a. plan, control, manage, co-ordinate and carry out the Capital Works in a manner that enables completion of all activities comprising the Capital Works by the Project Completion Date;
- b. in addition to the Recipient's reporting obligations under item D of Schedule 1, the Recipient must provide the Commonwealth with written evidence satisfactory to the Commonwealth of the completion of the Capital Works, no later than 10 Business Days after the end of the Project Completion Date; and
- c. consult the Commonwealth in advance about any proposed change to, the scope or timing of the Capital Works which is likely to delay the completion of the Capital Works, detailing the extent, or likely extent, of the change and the reasons for it.

3. **Funding**

3.1. **Payment of Funding**

- 3.1.1. Subject to sufficient funds being available, and compliance by the Recipient with this Agreement, the Commonwealth agrees to provide the Recipient with the Funding at the times and in the manner specified in Annexure A.
- 3.1.2. The Commonwealth is not responsible for the provision of additional money to meet any expenditure in excess of the Funding.

3.2. **Commonwealth's right to suspend payment or reduce the amount of Funding**

- 3.2.1. Without limiting the Commonwealth's rights, the Commonwealth may suspend any payment in whole or in part until the Recipient has performed its obligations under this Agreement.
- 3.2.2. Reserved.
- 3.2.3. The Commonwealth may reduce the amount of Funding payable under this Agreement where the Recipient:

- a. owes money to the Commonwealth, or
- b. has money that the Recipient should have, but has not yet, acquitted under any arrangement with the Commonwealth (whether contractual, statutory or otherwise).

3.2.4. Notwithstanding such suspension of any payments or reduction in the amount of the Funding, the Recipient agrees to continue to perform any obligations under this Agreement.

4. Taxes, duties and government charges

4.1.1. Except as provided by clause 4, the Recipient agrees to pay all taxes, duties and government charges imposed or levied in Australia or overseas in connection with the performance of this Agreement.

4.1.2. Unless otherwise indicated, any Funding and all other consideration for any supply made under this Agreement is exclusive of any GST imposed on the supply.

4.1.3. If one party (the supplier) makes a taxable supply to the other party (the taxable supply recipient) under this Agreement, on receipt of a tax invoice from the supplier, the taxable supply recipient will pay without setoff an additional amount to the supplier equal to the GST imposed on the supply in question.

4.1.4. No party may claim or retain from the other party any amount in relation to a supply made under this Agreement for which the first party can obtain an input tax credit or decreasing adjustment.

5. Debt and Interest

5.1.1. In this clause 5, '**Interest**' means interest calculated at an interest rate equal to the general interest charge rate for a day pursuant to section 8AAD of the *Taxation Administration Act 1953* (Cth), on a daily compounding basis.

5.1.2. The Recipient agrees, upon request of the Commonwealth, to pay any amount owed or payable to the Commonwealth or which the Commonwealth is entitled to recover from the Recipient under this Agreement, including if demanded by the Commonwealth any Interest, as a debt due by the Recipient without further proof of the debt by the Commonwealth being necessary. Such payment is without prejudice to any other rights available to the Commonwealth under the Agreement, under statute, at law or in equity.

5.1.3. If the Commonwealth notifies the Recipient that an amount is to be refunded or otherwise paid to the Commonwealth and the amount is not refunded or paid within 20 Business Days, or as otherwise notified by the Commonwealth, the Recipient agrees to pay Interest, unless the Commonwealth notifies the Recipient otherwise, on the amount outstanding after the expiry of the date it was due, until the amount is paid in full.

5.1.4. In respect to any obligation the Recipient may have under this Agreement to pay the Commonwealth any Interest, the Recipient agrees that the Interest represents a reasonable pre-estimate of the loss incurred by the Commonwealth.

6. Management of Funding

6.1.1. The Recipient agrees to spend the Funding only for the Activity in accordance with this Agreement.

6.2. Budget

6.2.1. The Recipient agrees to only spend the Funding for the Activity and in accordance with the Budget.

6.2.2. Subject to clauses 6.2.3 and 6.2.4, the Recipient may spend the Funding on any separate category of expenditure item within the Budget.

6.2.3. The Recipient agrees to obtain prior written approval from the Commonwealth for any transfer of Funding between categories of expenditure items within the Budget which exceed a percentage of the total Budget as specified in Item B of the Schedule.

6.2.4. The total amount of transfers in any Financial Year must also not exceed the percentage of the Budget specified in Item B of the Schedule.

6.3. Account and financial records

6.3.1. The Recipient agrees to ensure that the Funding is held in an account in the Recipient's name and which the Recipient solely controls, with an authorised deposit-taking institution authorised under the Banking Act 1959 (Cth) to carry on banking business in Australia and that is an account that complies with any other requirements specified in Item A.7 in the Schedule.

6.3.2. Reserved

6.3.3. The Recipient must, in relation to the account referred to in clause 6.3.1:

- a. notify the Commonwealth, prior to the receipt of any Funding, of details sufficient to identify the account;
- b. on notification from the Commonwealth, provide the Commonwealth and the authorised deposit-taking institution with a written authority for the Commonwealth to obtain any details relating to any use of the account;
- c. if the account changes, notify the Commonwealth within 10 Business Days of the change occurring and provide the Commonwealth with details of the new account;
- d. Reserved.

6.3.4. The Recipient agrees to:

- a. keep financial accounts and records relating to the Funding and the Project and Activity that identify
all receipts and payments related to the Project and Activity; and
all interest earned on the Funding.
- b. unless otherwise notified by the Commonwealth, prepare financial statements for the Project and Activity in accordance with Australian Accounting Standards including:

Reserved; and

a register of the Assets and a register of Real Property created, acquired, written-off or Disposed of during the Financial Year to date compared with the Budget; and

c. arrange for the audit of these accounts and records in accordance with Australian Auditing Standards..

6.4. **Use as security**

6.4.1. Except with the prior written approval of the Commonwealth, the Recipient agrees not to use any of the following as any form of security for the purpose of obtaining or complying with any form of loan, credit, payment or other interest, or for the preparation of, or in the course of, any litigation:

a. the Funding;

b. this Agreement or any of the Commonwealth's obligations under the Agreement; or

c. any Assets or Intellectual Property Rights in the Activity Material.

6.5. **Refunds of unexpended and misspent Funds**

6.5.1. If at any time during the term of this Agreement (including on the Completion Date):

a. there remains an amount of Funding that has not been spent or legally committed for expenditure in accordance with the Agreement and the period in which that Funding was expected to be spent or legally committed has passed; or

b. an amount of Funding has been spent in contravention of the Agreement, the Commonwealth may (at its discretion and in addition to any other rights it may have) by notice in writing to the Recipient:

c. require the Recipient to refund this amount to the Commonwealth within 20 Business Days (or other such period specified in the notice); or

d. reduce any further payments of Funding to the Recipient (if applicable) by an amount up to this amount.

6.5.2. If clause 6.5.1.a applies, the Commonwealth may by notice in writing require the Recipient to otherwise deal with this amount in accordance with any conditions that the Commonwealth considers appropriate, including conditions relating to the ongoing use and expenditure by the Recipient of that amount for particular goals or objectives associated with the Activity

6.5.3. The Recipient must immediately notify the Commonwealth in writing if any of the events in clauses 6.5.1.a or 6.5.1.b occurs.

6.5.4. If the completed Project ceases to be Operational during the Operational Period, the Commonwealth may give the Recipient notice requiring the Recipient to repay all or part of the Funding to the Commonwealth within the period specified in the notice and the Recipient must comply with that notice.

- 6.5.5. On completion of the Project, if the cost of the completed Project is less than the Cost Estimate, the Commonwealth may give the Recipient notice requiring the Recipient to return any unexpended Funding to the Commonwealth within the period specified in the notice and the Recipient must comply with that notice.
- 6.5.6. This clause survives termination or expiry of the Agreement.

7. Other Contributions and Cost Savings

7.1. Other Contributions

- 7.1.1. The Recipient must, within six (6) months of the date of the Agreement provide to the Commonwealth satisfactory written evidence that confirms the Other Contributions identified in Item C and detailed in Annexure B of the Schedule, including the amounts to be provided, the due dates for each of these amounts and the terms and conditions of the provision of the Other Contributions.
- 7.1.2. If, for any reason, the Recipient is not able to obtain the Other Contributions (including any part thereof) as required under this Agreement, then the Commonwealth may:
- a. suspend payment of the Funding or an instalment of the Funding until the Other Contributions are obtained (as the case may be);
 - b. reduce the total Funding payable under this Agreement by an amount that, in the Commonwealth's opinion, represents an equivalent proportion of the overall reduction in the total value of the Other Contributions (as the case may be) resulting from the failure; or
 - c. terminate this Agreement in accordance with clause 17.2.
- 7.1.3. The Recipient must notify the Commonwealth in writing as soon as possible after it becomes aware of any likely or actual failure (for any reason) to obtain the Other Contributions (including any part thereof) as required under this Agreement.
- 7.1.4. The Recipient agrees to notify the Commonwealth within 10 Business Days of entering into any arrangement under which the Recipient is entitled to receive any additional monetary or in-kind contributions in respect of the Project and Activity that are not identified as Other Contributions in Item C and Annexure B of the Schedule. Any such additional contribution that the Recipient becomes entitled to receive after the Date of this Agreement constitutes Other Contributions for the purposes of the Agreement (and Schedule 1 is deemed to be varied accordingly) on the date on which the Recipient notifies the Commonwealth of that contribution under this clause 7.1.4.
- 7.1.5. If the Recipient is provided with or obtains (and/or was required to provide or obtain) any Other Contributions and the cost of the completed Project is less than the Cost Estimate, the Commonwealth may give the Recipient notice requiring the Recipient to return to the Commonwealth, within the period specified in the notice, an amount equal to the Commonwealth's Proportion of the Cost Savings. In this subclause 7.1.5, 'the Commonwealth's Proportion of the Cost Savings' means $\text{savings} \times \% \text{ where:}$

- a. savings = (the Cost Estimate – the actual cost of the Project - any Funds previously repaid to the Commonwealth under this Agreement); and
- b. % = (the Funding ÷ (the maximum Funding + the maximum Other Contributions excluding any in-kind Other Contributions).

7.1.6. If the Recipient receives a notice given by the Commonwealth under subclause 18, the Recipient must comply with the notice within the period specified within the notice.

7.2. **Cost Savings**

7.2.1. Subject to compliance with this Agreement, the Recipient must:

- a. continually identify any costs saving or efficiency measures in carrying out the Activity; and
- b. in consultation with the Commonwealth:
 implement those costs saving or efficiency measures;
 ensure that any reductions in expenditure for the Activity that result from those costs saving or efficiency measures are accounted for and allocated equitably in proportion to the relative total values of the Funding, the Recipient Contributions and the Other Contributions (as applicable) as committed to the Activity.

8. **Statutory Approvals**

8.1 The Recipient must obtain all necessary statutory approvals in relation to the Project, including those specified in item K of the Schedule, and the Recipient must give the Commonwealth, within six (6) months after the Date of this Agreement, satisfactory written evidence that these statutory approvals have been obtained.

8.1A The Recipient must also provide satisfactory written evidence that the statutory approvals obtained under subclause 8.1 are sufficient for the Recipient to Commence Construction within six months after the Date of this Agreement.

8.2 If the Recipient does not comply with the requirement in subclause 8.1, the Commonwealth may at the Commonwealth's sole discretion:

- a. suspend payment of the Funding until the evidence of the statutory approvals referred to in subclause 8.1 has been received; or
- b. terminate this Agreement in accordance with clause 17.2.

9. **Assets**

9.1. **Acquisition of Asset**

9.1.1. The Recipient agrees not to use the Funding to acquire or create any Asset, apart from those detailed in the Item E, without obtaining the Commonwealth's prior written approval. Approval may be given subject to any conditions the Commonwealth may impose.

9.1.2. Unless it is specified in Item E that the Commonwealth or a third party owns the Asset or the Commonwealth provides written consent to a third party owning the Asset, then the Recipient must ensure that it owns any Asset acquired with the Funding.

9.2. **Terms applicable to Asset**

9.2.1. If the Commonwealth owns the Asset clauses 9.4 and 9.6.2 do not apply.

9.2.2. If the Asset is owned by a third party then the Recipient agrees to ensure that the terms of the lease, hire or finance arrangement are consistent with clause 9.3, and clauses 9.4, 9.5 and 9.6 do not apply.

9.3. **Recipient's responsibilities for Asset**

9.3.1. Throughout the Term, the Recipient agrees to:

- a. use any Asset in accordance with this Agreement and for the purposes of the Activity;
- b. not encumber or Dispose of any Asset, or deal with or use any Asset other than in accordance with this clause 9 without the Commonwealth's prior written approval;
- c. hold all Assets securely and safeguard them against theft, loss, damage, or unauthorised use;
- d. maintain all Assets in good working order;
- e. maintain all appropriate insurances for all Assets to their full replacement cost noting the Commonwealth's interest, if any, in the Asset under the Agreement;
- f. if required by law, maintain registration and licensing of all Assets;
- g. be fully responsible for, and bear all risks relating to, the use or Disposal of all Assets; and
- h. if specified in Item E, maintain an Assets register in the form and containing the details as described in Item E and as and when requested by the Commonwealth, provide copies of the Assets register to the Commonwealth.

9.4. **Sale or Disposal of Asset during Term**

9.4.1. If the Recipient Disposes of an Asset during the Term of this Agreement, the greater of the following proportions must, unless the Commonwealth otherwise directs, be accounted for as Funding and used for the Activity:

- a. the proportion of the sale proceeds from the Asset; or
- b. the proportion of the Undepreciated value of the Asset,

that is equivalent to the proportion of the cost of the Asset that was funded from the Funding.

9.5. **Loss, damage, etc of Asset**

9.5.1. If any of the Assets are lost, damaged or destroyed, the Recipient agrees to promptly reinstate the Assets including from the proceeds of the insurance, and this clause 9 continues to apply to the reinstated Assets. The proportion of any surplus from the proceeds of the insurance, which reflects the proportion of the cost of the Asset that was funded from the Funding, must be notified to the Commonwealth and accounted for as Funding and used for the Activity.

9.6. **Dealing with Asset**

9.6.1. On expiry of the Activity Period or earlier termination of the Agreement, the Commonwealth may require the Recipient to deal with an Asset as the Commonwealth may, at the sole discretion of the Commonwealth, notify the Recipient.

9.6.2. Subject to clause 9.6.1, if on expiry of the Activity Period or the earlier termination of this Agreement, an Asset has not been fully Depreciated, the Commonwealth may, by written notice, require the Recipient to:

- a. pay to the Commonwealth within 20 Business Days of the expiry of the Activity Period or earlier termination of the Agreement, an amount equal to the proportion of the Undepreciated value of the Asset that is equivalent to the proportion of the cost of the Asset that was funded from the Funding;
- b. sell the Asset for the best price reasonably obtainable and pay to the Commonwealth within 20 Business Days of the sale the proportion of the proceeds of the sale that is equivalent to the proportion of the cost of the Asset (less an amount equal to the reasonable Disposal costs incurred by the Recipient) that was funded from the Funding; or
- c. continue to use the Asset for the purposes, and in accordance with any conditions, notified by the Commonwealth.

10. Real Property

10.1. **Approval**

10.1.1 The Recipient must obtain the Commonwealth's prior written approval to spend the Funding on any Real Property that is not specifically identified in the Budget. The Commonwealth may grant that approval subject to conditions.

10.2. **Outgoings**

10.2.1 The Recipient must pay all rents, rates, taxes, levies and other outgoings of any nature in relation to the Real Property. The Funding must not be used to pay rent.

10.3. **Recipient's Responsibilities for Real Property**

10.3.1 Throughout the Term of this Agreement, including the Operational Period, the Recipient agrees to:

- a. hold the Real Property securely and safeguard it against theft, loss, damage, or unauthorised use;

- b. maintain the Real Property in good condition;
- c. maintain all appropriate insurances for the Real Property to its full replacement cost and use that insurance to rectify any damage to or destruction to the Real Property and this clause 10.3.1 continues to apply to the Real Property once rectified. The Recipient must notify the Commonwealth of any surplus from the proceeds of this insurance and the Recipient must use and account for that surplus as Funding under this Agreement;
- d. if required by any Law, maintain registration and licensing of the Real Property;
- e. be fully responsible for, and bear all risks relating to, the use or Disposal of all Real Property;
- f. if specified in item E.2 of the Schedule, maintain a Real Property register in the form and containing the details as described in that item of the Schedule; and
- g. as and when requested by the Commonwealth, provide copies of the Real Property register to the Commonwealth.

10.4. **Recipient's Use of Real Property**

10.4.1. The Recipient agrees to ensure that:

- a. the Real Property is used for, and is fit to be used for, the Purpose specified in item A.3 of the Schedule throughout the Operational Period; and
- b. the use of the Real Property for the Purpose specified in item A.3 of the Schedule throughout the Operational Period, does not infringe any conditions of the Recipient's ownership or occupation of the Real Property.

10.4.2. Throughout the Operational Period, the Recipient must use the Real Property for the Purpose specified in item A.3 of the Schedule.

10.4.3. If the Commonwealth requests, the Recipient must take all action necessary to grant the Commonwealth a security, including in the form of a charge or mortgage, over the Real Property and on terms acceptable to the Commonwealth.

10.5. **Third Party Interests**

10.5.1. If a third party has proprietary or other rights or interests in relation to any Real Property, the Recipient agrees to:

- a. enter into legally binding written agreements under which all such third parties agree to:
 - i. the use of the Works Locations to undertake the Capital Works throughout the Activity Period;

- ii. the use of the Works Locations, and completed Capital Works for the Purpose specified in item A.3 of the Schedule throughout the Operational Period; and
- iii. the use of any other Real Property for the Activity throughout the Activity Period and for the Purpose specified in item A.3 of the Schedule throughout the Operational Period;
- b. not do anything that would give any such third party a right to rescind its agreement to one or more of the uses specified in paragraph (a); and
- c. within 10 Business Days of a request from the Commonwealth, provide evidence to the Commonwealth that the Recipient has complied with the requirements of this subclause 10.5.

10.6. **Dealing with Real Property**

10.6.1. If:

- a. the Agreement is terminated under clause 17.2 and some or all of the Funding has been provided to the Recipient for expenditure on Real Property;
- b. the Recipient fails to Commence Construction for the Activity within six months of the Date of this Agreement;
- c. the Recipient Disposes of any Real Property during the Term of this Agreement; or
- d. the Recipient fails to or ceases to use any Real Property for the Purpose specified in item A.3 of the Schedule at any time during the Operational Period

then:

- e. the Recipient must notify the Commonwealth at least 20 Business Days prior to the event in paragraph (b), (c) or (d) occurring; and
- f. the Commonwealth may give the Recipient a notice requiring the Recipient to repay the Commonwealth some or all of the Funding provided under this Agreement and the Recipient must repay the amount specified in any such notice within the period specified in that notice.

10.6.2. If the Recipient fails to pay the Commonwealth an amount as required by a notice given under subclause 10.6.1:

- a. the Recipient must pay the Commonwealth the Interest on the unpaid amount from the date it was due, for the period it remains unpaid; and
- b. that amount, and Interest owed under this subclause 10.6.2, will be recoverable by the Commonwealth as a debt due to the Commonwealth by the Recipient.

10.6.3. The provisions relating to this clause 10 shall survive the termination or expiration of this Agreement.

11. Records

11.1. Keeping Records

- 11.1.1. The Recipient must create and maintain full and accurate accounts and records of the conduct of the Project and Activity including, without limitation, all:
- a. progress against the Milestones;
 - b. receipt and use of Funding;
 - c. Other Contributions (if any); and
 - d. creation, acquisition and Disposal of Assets or Real Property.

11.2. Retention of Records

- 11.2.1. The Recipient agrees to create and maintain records and accounts under clause 11.1.1 and retain them for a period of no less than seven (7) years after the end of the Term.

12. Intellectual Property

12.1. Use of Commonwealth Material

- 12.1.1. The Commonwealth grants a royalty-free, non-exclusive licence for the Recipient to use, reproduce and adapt the Commonwealth Material for the purposes of this Agreement.
- 12.1.2. The Recipient agrees to use the Commonwealth Material strictly in accordance with any conditions or restrictions the Commonwealth may notify to the Recipient.

12.2. Rights in Activity Material

- 12.2.1. Subject to this clause 12, Intellectual Property in Activity Material vests or will vest in the Recipient.
- 12.2.2. Clause 12.2.1 does not affect the ownership of Intellectual Property in any Commonwealth Material incorporated into the Activity Material.
- 12.2.3. The Recipient grants to (or will procure for) the Commonwealth a permanent, irrevocable, royalty-free, worldwide, non-exclusive licence (including a right of sublicense) to use, reproduce, exploit, communicate, adapt and distribute the Activity Material for any purpose.
- 12.2.4. The Recipient agrees that the licence granted in clause 12.2.3 includes a right for the Commonwealth to licence the Activity Material to the public under an Open Access Licence.
- 12.2.5. The Recipient agrees, on request by the Commonwealth, to create, sign, execute or otherwise deal with any document necessary or desirable to give effect to this clause 12.
- 12.2.6. The Recipient warrants that:
- a. it is entitled; or
 - b. it will be entitled at the relevant time,

to deal with the Intellectual Property in the Activity Material in the manner provided for in this clause 12.

12.3. **Moral Rights**

12.3.1. In this clause 12.3:

- Permitted Acts** means any of the following classes or types of acts or omissions:
- a. using, reproducing, adapting or exploiting all or any part of the Activity Material, with or without attribution or authorship;
 - b. supplementing the Activity Material with any other Material;
 - c. using the Activity Material in a different context to that originally envisaged; and
 - d. releasing the Activity Material to the public under an Open Access Licence;

but does not include false attribution of authorship.

12.3.2. Where the Recipient is a natural person and the author of the Activity Material he or she:

- a. consents to the performance of the Permitted Acts by the Commonwealth or any person claiming under or through the Commonwealth (whether occurring before or after the consent is given); and
- b. acknowledges that their attention has been drawn to the Commonwealth 's general policies and practices regarding Moral Rights.

12.3.3. Where clause 12.3.1 does not apply, the Recipient agrees:

- a. to obtain from each author a written consent which extends directly or indirectly to the performance of the Permitted Acts by the Commonwealth or any person claiming under or through the Commonwealth (whether occurring before or after the consent is given) and, upon request, will provide the executed original of any such consent to the Commonwealth; and
- b. to ensure that each author's attention is drawn to the Commonwealth 's general policies and practices regarding Moral Rights.

12.3.4. This clause 12.3 does not apply to any Commonwealth Material incorporated in the Activity Material.

13. Confidential Information

13.1. **Confidential Information not to be disclosed**

13.1.1. Subject to clause 13.2.1, a party must not, without the prior written consent of the other party, disclose any Confidential Information of the other party to a third party.

13.2. **Written Undertakings**

13.2.1. The Recipient must, on request by the Commonwealth at any time, arrange for:

- a. its Personnel; or
- b. any person with a Third Party Interest,

to give a written undertaking in a form acceptable to the Commonwealth relating to the use and non-disclosure of the Commonwealth's Confidential Information.

13.3. **Exceptions to Obligations**

13.3.1. The obligations on the parties under this clause 13.3 will not be taken to have been breached to the extent that Confidential Information:

- a. is disclosed by a party to its Personnel solely in order to comply with obligations, or to exercise rights, under this Agreement;
- b. is disclosed to a party's internal management Personnel, solely to enable effective management or auditing of Agreement-related activities;
- c. is disclosed by the Commonwealth to the responsible Minister;
- d. is disclosed by the Commonwealth, in response to a request by a House or a Committee of the Parliament of the Commonwealth of Australia;
- e. is shared by the Commonwealth (including other agencies), where this serves the Commonwealth of Australia's legitimate interests;
- f. is authorised or required by law to be disclosed; or
- g. is in the public domain otherwise than due to a breach of this clause 13.3.

13.3.2. Where a party discloses Confidential Information to another person pursuant to clauses 13.3.1.a - 13.3.1.e, the disclosing party must notify the receiving person that the information is confidential.

13.3.3. In the circumstances referred to in clauses 13.3.1.a, 13.3.1.b and 13.3.1.e, the disclosing party agrees not to provide the information unless the receiving person agrees to keep the information confidential (subject to the exceptions in this clause 13.3).

13.3.4. The Recipient agrees to secure all of the Commonwealth's Confidential Information against loss and unauthorised access, use, modification or disclosure.

13.4. **Period of Confidentiality**

13.4.1. The obligations under this clause 13.4 will continue, notwithstanding the expiry or termination of this Agreement:

- a. in relation to an item of information described in Item N – for the period set out in respect of that item; and
- b. in relation to any item of information agreed after the Date of this Agreement to be Confidential Information – for the period agreed by the parties in writing in respect of that item, and if no such period is agreed by the parties, in perpetuity.

13.5. **No reduction in Privacy Obligations**

13.5.1. This clause 13 does not detract from any of the Recipient's obligations under the Privacy Act or under clause 21.2.

14. Acknowledgement and publicity

14.1. **Acknowledgement of support**

14.1.1. Unless otherwise notified by the Commonwealth, the Recipient agrees, in all publications, promotional and advertising materials, public announcements and activities by the Recipient or on the Recipient's behalf in relation to the Activity, or any products, processes or inventions developed as a result of it, to acknowledge the financial and other support the Recipient has received from the Australian Government, in the manner set out in Item H of the Schedule, or as otherwise approved by the Commonwealth prior to its use.

14.1.2. Where the Recipient has been provided with Funding to produce any publication, a copy of the publication must, on request, be provided to the Commonwealth.

14.2. **Right to publicise Funding**

14.2.1. The Commonwealth reserves the right to publicise and report on the awarding of Funding to the Recipient. The Commonwealth may do (but is not limited to doing) this by including the Recipient's name, the amount of the Funding given to the Recipient, the date the Agreement commences and its term, and the title, location, purpose and a brief description of the Activity in media releases, general announcements about the Funding, annual reports or through any other means as determined by the Commonwealth.

14.3. **No restriction on advocacy activities**

14.3.1. The Commonwealth confirms that, subject to clause 14.3.2:

- a. no right or obligation arising under this Agreement should be interpreted as limiting the Recipient's ability to enter into public debate or criticism of the Commonwealth of Australia or its agencies, employees, servants or agents;
- b. the Commonwealth does not require the Recipient to obtain advance approval of any involvement by the Recipient in public debate or advocacy activities.

14.3.2. Nothing in this clause 14.3 limits or derogates from the Recipient's obligations under clauses 13 and 21.2.

15. Liability

15.1. **Proportionate liability regime**

15.1.1. To the extent permitted by law, the operation of any legislative proportionate liability regime is excluded in relation to any claim against the Recipient under or in connection with this Agreement.

15.2. **Indemnity**

15.2.1. The Recipient indemnifies the Commonwealth from and against any:

- a. cost or liability incurred by the Commonwealth;
- b. loss of or damage to property of the Commonwealth; or
- c. loss or expense incurred by the Commonwealth in dealing with any claim against it, including legal costs and expenses on a solicitor/own client basis and the cost of time spent, resources used, or disbursements paid by the Commonwealth,

arising from:

- d. any breach by the Recipient of the Agreement;
- e. any act or omission involving fault by the Recipient in connection with this Agreement;
- f. the use of Assets or Real Property; or
- g. the use by the Commonwealth of the Activity Material, including any claims by third parties about the ownership or right to use the Intellectual Property in the Activity Material.

15.2.2. The Recipient's liability to indemnify the Commonwealth under clause 15.2.1 will be reduced proportionally to the extent that any act or omission involving fault on the part of the Commonwealth or its Personnel contributed to the relevant cost, liability, loss, damage or expense.

15.2.3. The right of the Commonwealth to be indemnified under this clause 15.2 is in addition to, and not exclusive of, any other right, power or remedy provided by law, but the Commonwealth is not entitled to be compensated in excess of the amount of the relevant cost, liability, loss, damage or expense.

15.3. **Meaning of 'fault'**

15.3.1. In this clause 15, 'fault' means any negligent or unlawful act or omission or wilful misconduct.

16. Dispute resolution

16.1. **Procedure for dispute resolution**

16.1.1. The parties agree that a dispute arising under this Agreement will be dealt with as follows, and that, subject to clause 16.4, neither party will commence legal proceedings in relation to that dispute until this procedure is completed:

- a. the party claiming that there is a dispute will give the other party a notice setting out the nature of the dispute;
- b. within five (5) Business Days (or such other period as agreed by the parties in writing) each party will nominate a representative not having any prior involvement in the dispute;
- c. the representatives will try to settle the dispute by direct negotiation between them;

- d. failing settlement within a further 10 Business Days or such other period as agreed by the parties in writing (or failure of one or both parties to nominate a representative within the period set out in clause 16.1.1.b), the parties may agree to refer the dispute to an independent third person with power:

to intervene and direct some form of resolution, in which case the parties will be bound by that resolution; or

to mediate and recommend some form of non-binding resolution;

- e. the parties will co-operate fully with any process instigated under clause 16.1.1.d in order to achieve a speedy resolution; and
- f. if the parties have been unable to agree to refer the dispute to an independent third person, or they have agreed and a resolution is not reached within a further 20 Business Days (or such other period as the parties) may agree in writing), either party may commence legal proceedings.

16.2. **Costs**

- 16.2.1. Each party will bear its own costs of complying with this clause 16 Dispute resolution, and the parties will bear equally the cost of any third person engaged under clause 16.1.1.d.

16.3. **Continued performance**

- 16.3.1. Despite the existence of a dispute, the Recipient will (unless requested in writing by the Commonwealth not to do so) continue to perform the Recipient's obligations under this Agreement.

16.4. **Application of clause**

- 16.4.1. This clause 16 does not apply to:
 - a. legal proceedings by either party for urgent interlocutory relief; or
 - b. action by the Commonwealth under or purportedly under clauses 3, 6, 17 and 21.2.

17. Termination or reduction in scope of Agreement

17.1. **Termination for convenience**

- 17.1.1. The Commonwealth may by notice, at any time and in its absolute discretion, terminate this Agreement or reduce the scope of the Agreement immediately.

- 17.1.2. The Recipient agrees, on receipt of a notice of termination or reduction, to:
 - a. stop or reduce the performance of the Recipient's obligations as specified in the notice;
 - b. take all available steps to minimise loss resulting from that termination or reduction;
 - c. continue performing any part of the Activity not affected by the notice; and

- d. immediately return to the Commonwealth any Funding in accordance with clause 17.1.5, or deal with any such Funding as directed by the Commonwealth.
- 17.1.3. In the event of termination under clause 17.1.1, the Commonwealth will be liable only:
- a. to pay Funding due and owing to the Recipient under the payment provisions of the Agreement before the date of the notice of termination; and
 - b. to reimburse any expenses the Recipient unavoidably incurs that relate directly and entirely to the Activity and not covered by clause 17.1.3.a.
- 17.1.4. The Commonwealth will not be liable to pay amounts under 17.1.3.a and 17.1.3.b which would, added to any payments already paid to the Recipient under this Agreement, together exceed the Funding set out in Item A.7 of the Schedule and Annexure A.
- 17.1.5. The Commonwealth will be entitled to recover from the Recipient any part of the Funding which:
- a. is not legally committed for expenditure by the Recipient in accordance with the Agreement and due and payable by the Recipient by the date that the notice of termination is received; or
 - b. has not, in the Commonwealth's opinion, been spent by the Recipient in accordance with the Agreement.
- 17.1.6. In the event of a reduction in the scope of the Agreement under clause 17.1.1, the Commonwealth's liability to pay any part of the Funding will, unless there is agreement in writing to the contrary, reduce in accordance with the reduction in the Activity.
- 17.1.7. The Commonwealth's liability to pay any compensation under or in relation to this clause 17.1 is subject to:
- a. the Recipient's compliance with this clause 17.1; and
 - b. the Recipient's substantiation of any amount claimed under clause 17.1.3.b.
- 17.1.8. The Recipient will not be entitled to compensation for loss of prospective profits or loss of any benefits that would have been conferred on the Recipient.
- 17.2. **Termination for fault**
- 17.2.1. If the Recipient does not comply with any of its obligations under this Agreement, then the Commonwealth:
- a. *if it considers that the non-compliance is not capable of remedy* - may by notice terminate this Agreement immediately;
 - b. *if it considers that the non-compliance is capable of remedy* - may, by notice require that the non-compliance be remedied within the time specified in the notice, and if not remedied within that time, may terminate the Agreement immediately by giving a second notice.

- 17.2.2. The Commonwealth may also by notice terminate this Agreement immediately if:
- a. the Recipient comes under one of the forms of external administration referred to in Chapter 5 of the Corporations Act 2001 (Cth) or equivalent provisions in legislation of the States and Territories pertaining to incorporated associations or Chapter 11 of the Corporations (Aboriginal and Torres Strait Islander) Act 2006 (Cth) or has an order made against it for the purpose of placing it under external administration;
 - b. the Recipient is unable to pay all its debts as and when they become due and payable or it fails to comply with a statutory demand within the meaning of sections 459E and 459F of the Corporations Act 2001 (Cth);
 - c. proceedings are initiated with a view to obtaining an order for winding up the Recipient, or any shareholder, member or director convenes a meeting for the purpose of considering or passing of any resolution for winding up the Recipient;
 - d. in relation to this Agreement, the Recipient breaches any law of the Commonwealth of Australia, or of a State or Territory;
 - e. the Recipient becomes bankrupt or enters into a scheme of arrangement with creditors;
 - f. another clause of this Agreement allows for termination under this clause 17.2; or
 - g. the Commonwealth is satisfied that any statement made in the Recipient's application for Funding is incorrect, incomplete, false or misleading in a way which would have affected the original decision to approve the Funding.

17.2.3. Where the Commonwealth terminates this Agreement under clause 17.2 the Commonwealth:

- a. will be liable only to pay Funding due and owing to the Recipient under the payment provisions of the Agreement before the date of the notice of termination; and
- b. will be entitled to recover from the Recipient any part of the Funding which:

is not legally committed for expenditure by the Recipient in accordance with the Agreement and payable by the Recipient by the date that the notice of termination is received; or

has not, in the Commonwealth's opinion, been spent by the Recipient in accordance with the Agreement.

17.3. **Preservation of other rights**

- 17.3.1. Clause 17.2 does not limit or exclude any of the Commonwealth's other rights under this Agreement.

18. Notices

18.1. Format, addressing and delivery

18.1.1. A notice under this Agreement is only effective if it is in writing, and addressed as follows:

- a. *if given by the Recipient to the Commonwealth* - addressed to the Commonwealth at the address specified in Item L of the Schedule, or other address as notified by the Commonwealth; or
- b. *if given by the Commonwealth to the Recipient* - given by the Commonwealth and addressed as specified in Item L of the Schedule, or other address as notified by the Recipient.

18.1.2. Any such notice must be delivered to the other party by hand, prepaid post or transmitted electronically (via email or facsimile) and be signed by the sending party. For the avoidance of doubt, an electronic signature on an email will be taken to be a signed notice for the purpose of this clause 18.

18.2. When received

18.2.1. Subject to clause 18.2.2, a notice is deemed to be received:

- a. *if delivered by hand* - upon delivery to the relevant address;
- b. *if sent by prepaid post* - upon delivery to the relevant address; or
- c. *if transmitted electronically* - upon receipt by the sender of either an electronic receipt notification (generated by the system transmitting the notice) or an acknowledgement from the other party that it has received the notice (whichever is earlier).

18.2.2. If a notice is received:

- a. after 5.00 pm on any Business Day; or
- b. on a day that is not a Business Day,

it is deemed to be received at 9:00am on the next Business Day for the purposes of this clause 18.

19. Reserved

20. Work Health and Safety

20.1. Use of Commonwealth's premises

20.1.1. The Recipient agrees, when using the Commonwealth's premises or facilities, to comply with all reasonable directions and procedures relating to work health and safety and security in effect at those premises or in regard to those facilities, as notified by the Commonwealth or as might reasonably be inferred from the use to which the premises or facilities are being put.

20.2. Assistance to the Commonwealth

20.2.1. Without limiting clause 2.2 of this Agreement, the Recipient agrees to, on request, give all reasonable assistance to the Commonwealth, by way of

provision of information and documents, to assist the Commonwealth and its officers (as defined in the Work Health and Safety Act 2011 (WHS Act)) to comply with the duties imposed on them under the WHS Act.

- 20.2.2. The Recipient acknowledges that the Commonwealth may direct the Recipient to take specified measures in connection with the Recipient's work under this Agreement or otherwise in connection with the Activity that the Commonwealth considers reasonably necessary to deal with an event or circumstance that has, or is likely to have, an adverse effect on the health or safety of persons. The Recipient must comply with the direction. The Recipient agrees that it is not entitled to an adjustment to the Funding merely because of compliance with the direction.

20.3. **Reserved**

21. General Provisions

21.1. **Reserved**

21.2. Obligations of Recipient in relation to privacy

- 21.2.1. The Recipient agrees, in conducting the Activity:
- a. not to do any act or engage in any practice which, if done or engaged in by the Commonwealth, would be a breach of an Australian Privacy Principle; and
 - b. to comply with any directions, guidelines, determinations or recommendations of the Commonwealth, to the extent that they are consistent with the Australian Privacy Principles.

21.2.2. The Recipient agrees to notify the Commonwealth immediately if it becomes aware of a breach or possible breach of any of its obligations under this clause 21.2.

21.2.3. The provisions of this clause 21.2 survive the termination or expiration of this Agreement.

21.3. Audit and Access

- 21.3.1. The Recipient agrees:
- a. to give the Commonwealth, or any persons authorised in writing by the Commonwealth, access to premises where obligations under this Agreement are being carried out; and
 - b. to permit those persons to inspect and take copies of any Material relevant to this Agreement.

21.3.2. The rights referred to in clause 21.3.1. are subject to:

- a. the Commonwealth providing reasonable prior notice; and
- b. the reasonable security procedures in place at the premises.

21.3.3. The Auditor-General and Information Officer (and their delegates) are persons authorised for the purposes of clause 21.3.1.

21.3.4. This clause 21.3 does not detract from the statutory powers of the Auditor-General or Information Officer.

21.4. **Access to Documents**

21.4.1. In this clause 21.4, 'document' and 'Commonwealth contract' have the same meaning as in the Freedom of Information Act 1982 (Cth). This clause 21.4 only applies if this Agreement is a 'Commonwealth contract', as defined in the Freedom of Information Act 1982 (Cth).

21.4.2. Where the Commonwealth has received a request for access to a document created by, or in the possession of, the Recipient or any subcontractor that relates to the performance of this Funding Agreement (and not to the entry into the Funding Agreement), the Commonwealth may at any time by written notice require the Recipient to provide the document to the Commonwealth and the Recipient must, at no additional cost to the Commonwealth, promptly comply with the notice.

21.4.3. The Recipient must include in any subcontract relating to the performance of this Agreement provisions that will enable the Recipient to comply with its obligations under this clause 21.4.

21.5. **Insurance**

21.5.1. The Recipient agrees:

- a. to effect and maintain the insurance specified in Item F and
- b. on request, to provide proof of insurance acceptable to the Commonwealth.

21.5.2. This clause 21.5 continues in operation for so long as any obligations remain in connection with this Agreement.

21.6. **Extension of provisions to subcontractors and Personnel**

21.6.1. In this clause 21.6:

Requirement means an obligation, condition, restriction or prohibition binding on the Recipient under this Agreement.

21.6.2. The Recipient agrees to ensure that:

- a. its subcontractors and Personnel comply with all relevant Requirements; and
- b. any contract entered into in connection with this Agreement imposes all relevant Requirements on the other party.

21.6.3. The Recipient agrees to exercise any rights it may have against any of its subcontractors, Personnel or third parties in connection with a Requirement in accordance with any direction by the Commonwealth.

- 21.7. **Conflict of interest**
- 21.7.1. In this clause 21.7:
- Conflict** means any matter, circumstance, interest or activity involving or affecting the Recipient, its Personnel or subcontractors which may or may appear to impair the ability of the Recipient to perform the Activity diligently and independently.
- 21.7.2. The Recipient warrants that, to the best of its knowledge after making diligent inquiry, at the Date of this Agreement no Conflict exists or is likely to arise in the performance of the Recipient's obligations under the Agreement.
- 21.7.3. If during the Term a Conflict arises, the Recipient agrees to:
- a. notify the Commonwealth immediately;
 - b. make full disclosure of all relevant information relating to the Conflict; and
 - c. take any steps the Commonwealth reasonably requires to resolve or otherwise deal with that Conflict.
- 21.8. **Relationship of parties**
- 21.8.1. The Recipient is not by virtue of this Agreement an officer, employee, partner or agent of the Commonwealth, nor does the Recipient have any power or authority to bind or represent the Commonwealth.
- 21.8.2. The Recipient agrees:
- a. not to misrepresent its relationship with the Commonwealth; and
 - b. not to engage in any misleading or deceptive conduct in relation to the Activity.
- 21.9. **Waiver**
- 21.9.1. A failure or delay by a party to exercise any right or remedy it holds under this Agreement or at law does not operate as a waiver of that right.
- 21.9.2. A single or partial exercise by a party of any right or remedy it holds under this Agreement or at law does not prevent the party from exercising the right again or to the extent it has not fully exercised the right.
- 21.10. **Variation of Agreement**
- 21.10.1. No variation of this Agreement is binding unless it is agreed in writing and signed by both parties.
- 21.11. **Assignment**
- 21.11.1. The Recipient cannot assign its obligations, and agrees not to assign its rights, under this Agreement without the Commonwealth's prior written approval.
- 21.11.2. The Recipient agrees not to enter into negotiations with any other person for the purposes of entering into an arrangement that will require novation of this Agreement without first consulting the Commonwealth.

21.12. **Survival**

21.12.1. Unless the contrary intention appears, the expiry or earlier termination of this Agreement will not affect the continued operation of any provision relating to:

- a. Intellectual Property;
- b. confidentiality;
- c. security;
- d. privacy;
- e. dealing with copies;
- f. books and records;
- g. audit and access;
- h. an indemnity;
- i. acknowledgement and publicity;
- j. rights or obligations following termination or expiry of the Agreement; or
- k. any other provision which expressly or by implication from its nature is intended to continue.

21.13. **Compliance with Legislation and Policies**

21.13.1. In this clause 21.13:

Legislation means a provision of a statute or subordinate legislation of the Commonwealth of Australia, or of a State, Territory or local authority.

21.13.2. The Recipient agrees to comply with any Legislation applicable to its performance of this Agreement.

21.13.3. The Recipient agrees, in carrying out its obligations under this Agreement, to comply with any of the Commonwealth's policies as notified, referred or made available by the Commonwealth to the Recipient (including by reference to an internet site), including those listed in Item J.

21.14. **Applicable law and jurisdiction**

21.14.1. This Agreement is to be construed in accordance with, and any matter related to it is to be governed by, the law of the Australian Capital Territory specified in Item M.

21.14.2. The parties submit to the jurisdiction of the courts of the Australian Capital Territory.

21.15. **Child Safety**

In this Agreement:

Child means an individual(s) under the age of 18 years and Children has a similar meaning;

Child-Related Personnel

means officers, employees, contractors (including subcontractors), agents and volunteers of the Grantee involved with the Activity who as part of that involvement may interact with Children;

Legislation means a provision of a statute or subordinate legislation of the Commonwealth, or of a State, Territory or local authority;

National Principles for Child Safe Organisations

means the National Principles for Child Safe Organisations, which have been endorsed in draft form by the Commonwealth Government (available at: <https://www.humanrights.gov.au/national-principles-child-safe-organisations>) and subsequently, from the time of their endorsement by the Council of Australian Governments, the final National Principles for Child Safe Organisations as published by the Australian Government;

Relevant Legislation

means Legislation in force in any jurisdiction where any part of the Activity may be carried out;

Working With Children Check or WWCC

means the process in place pursuant to Relevant Legislation to screen an individual for fitness to work with Children.

Relevant Checks and authority

- 21.15.1. The Grantee must:
- a. comply with all Relevant Legislation relating to the employment or engagement of Child-Related Personnel in relation to the Activity, including all necessary Working With Children Checks however described; and
 - b. ensure that Working With Children Checks obtained in accordance with this clause 21.15.1 remain current and that all Child-Related Personnel continue to comply with all Relevant Legislation for the duration of their involvement in the Activity.

National Principles for Child Safe Organisations and other action for the safety of Children

- 21.15.2. The Grantee agrees in relation to the Activity to:

- a. implement the National Principles for Child Safe Organisations;
- b. ensure that all Child-Related Personnel implement the National Principles for Child Safe Organisations;
- c. complete and update, at least annually, a risk assessment to identify the level of responsibility for Children and the level of risk of harm or abuse to Children;
- d. put into place and update, at least annually, an appropriate risk management strategy to manage risks identified through the risk assessment required by this clause 21.15.2;
- e. provide training and establish a compliance regime to ensure that all Child-Related Personnel are aware of, and comply with:
 - i. the National Principles for Child Safe Organisations;
 - ii. the Grantee's risk management strategy required by this clause 21.15.2;
 - iii. Relevant Legislation relating to requirements for working with Children, including Working With Children Checks;
 - iv. Relevant Legislation relating to mandatory reporting of suspected child abuse or neglect, however described; and
- f. provide the Commonwealth with an annual statement of compliance with clauses 21.15.1 and 21.15.2, in such form as may be specified by the Commonwealth.

21.15.3. With reasonable notice to the Grantee, the Commonwealth may conduct a review of the Grantee's compliance with this clause 21.15.

21.15.4. The Grantee agrees to:

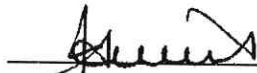
- a. notify the Commonwealth of any failure to comply with this clause 21.15;
- b. co-operate with the Commonwealth in any review conducted by the Commonwealth of the Grantee's implementation of the National Principles for Child Safe Organisations or compliance with this clause 21.15; and
- c. promptly, and at the Grantee's cost, take such action as is necessary to rectify, to the Commonwealth's satisfaction, any failure to implement the National Principles for Child Safe Organisations or any other failure to comply with this clause 21.15.

Executed as a deed

Executed by the parties as evidence of their agreement.

SIGNED for and on behalf of the
COMMONWEALTH OF AUSTRALIA,)
as represented by and acting through)
the **Department of Infrastructure,**)
Transport, Regional Development,)
Communications and the Arts:)
ABN 86 267 354 017

Jane Hunt
Name of signatory


Signature

Alg Assistant Secretary
Regional Programs Branch
Position


28 April 2023
Insert Date

In the presence of:

Meighan Philippa
Name of witness


Signature of witness

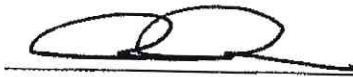
Executed on behalf of
ADELAIDE HILLS COUNCIL,)
ABN 23 995 071 393 by David Waters)
who by signing warrants they are)
authorised to bind the)
Adelaide Hills Council


Signature

28 Apr. 7 2023
Insert Date

In the presence of:

PETER BICE
Name of witness


Signature of witness

SCHEDULE 1 PARTICULARS

A. Programme, Project, Purpose, Activity and Funding and Payment (Recital A, clauses 1.1.1 and 2.1.1)

Programme

The Commonwealth is undertaking the Community Development Grants programme, which was to support needed infrastructure that promotes stable, secure and viable local and regional economies.

Project

The project to be undertaken by the Recipient is the construction of a shared unsealed bike path of at least 5.4 km from Mount Torrens to Birdwood, South Australia, along a disused railway corridor. This is an extension of the current Amy Gillett Bikeway. The Project will include the Activity that the Programme will fund, defined in more detail in item A.5 of the Schedule.

The Project Completion Date is **2 September 2024**

A.3. Purpose

The Purpose for which the completed Project is required to be used is:

- Increased tourism and social amenity in the area; and
- Increased employment, with increased local spending on goods and services.

A.4. Operational Period

The Operational Period commences on the date the Commonwealth accepts the Project Completion Report, to the Commonwealth's satisfaction. The duration of the Operational Period is dependent on the amount of Funding provided by the Commonwealth under this Agreement. The thresholds are set out in the table below:

Amount of Funding	Duration of Operational Period
Over \$1,000,000	Five (5) years

During the Operational Period, the Recipient must, if requested by the Commonwealth to do so, promptly provide evidence satisfactory to the Commonwealth that the Project is Operational.

A.5. Activity

The Activity to be undertaken by the Recipient is an extension of at least 5.4 km of the Amy Gillett Bikeway as a bike path (unsealed trail) from Mount Torrens to Birdwood, continuing along a disused railway corridor including:

- Construction of at least 3 bridges with the following dimensions –
 - Bridge 1 – at least 7.5m long – 7.5m single span x 2.5m clear width
 - Bridge 2 – at least 15m long – at least 2 x 7.5m Double Span x 2.5m Clear Width

- Bridge 3 – at least 22.5m long – at least 3 x 7.5m Double Span x 2.5m Clear Width
- Clearing of timber as required to ensure path is trafficable and overhead branches do not impede the use of the bike path by all users
- Base Preparation – structural base for the bike path (unsealed trail) surface. To be undertaken in accordance with the Guide to Bikeway Pavement Design Construction and Maintenance
- Signage for the Bikeway – at least 4 interpretative and descriptive signs that meet section 2 of the Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices (SA Department of Planning, Transport and Infrastructure) along the Bikeway.

The Activity Period commences on the Date of this Agreement and ends on the Activity Completion Date which is **2 September 2024**.

A.6. Reserved

A.7. Funding and Payment

(clauses 1.1.1, 3.1, 6)

The total Funding for the Activity is **\$2,600,000** GST exclusive. The Funding will be paid as follows:

1. The first payment of Funding specified in the table at Annexure A will not be made until:
 - a) this Agreement has been executed by all Parties and all Milestones specified in the table at Annexure A that relate to the first payment have been achieved to the Commonwealth's satisfaction; and
 - b) all Reports identified in item D of the Schedule as being due on or before the due date for the first payment have been received and accepted by the Commonwealth; and
2. The second and each subsequent payment specified in the table at Annexure A will not be made until:
 - a) all Milestones specified in the table at Annexure A that relate to the relevant payment have been achieved to the Commonwealth's satisfaction;
 - b) all Reports identified in item D of this Schedule as being due on or before the due date for the relevant payment have been received and accepted by the Commonwealth; and
 - c) the Recipient has provided the Commonwealth with evidence that all previously paid Funds have been expended or committed.

Invoicing

The Commonwealth must receive a properly rendered invoice or, if required a tax invoice which meets the requirements of the Australian Taxation Office for the amount of the payment and;

The Recipient must provide the Commonwealth with evidence that all previous paid Funding has been expended or committed.

B. Budget

(clause 6.2)

The Budget for the Activity, identifying the Funding and Other Contributions, is at Annexure B.

The percentage of the Budget (Total Cost) below which Funding may be transferred between Cost items without the Commonwealth's approval is 10%.

The percentage of the Budget (Total Cost) which must not be exceeded in total transfers between expenditure items per Financial Year is 20%.

C. Other Contributions

(clause 7)

Other Contributions

Other Contributions are specified at the table titled "Other Contributions" in Annexure B. Any financial or in-kind assistance that the Recipient has received from the Commonwealth of Australia or a State, Territory or local government and which the Recipient intends to, or is required to, use to perform the Activity must be identified in Other Contributions.

D. Reporting

(clauses 1.1.1, 2.6)

Progress Reports, Activity Completion Report and Project Completion Report

D.1.1 The Recipient must give the Commonwealth the Progress Reports, the Activity Completion Report and Project Completion Report by the times specified in the Table of Milestones, Reports and Payments relating to the Activity at Annexure A.

D.1.2 Each Progress Report must contain:

- a. details of progress and performance against the Activity, and the Project (to the extent that it is directly related to the relevant part of the Activity which is being covered by that Progress Report) and evidence of completion of the Milestones listed in Annexure A of the Schedule that are due for completion (including but not limited to photographs to demonstrate completion of Milestones) during the period between the Recipient's previous Progress Report and the due date of this Progress Report (or in the case of the first Progress Report, the period between the Date of this Agreement and the due date of the first Progress Report);
- b. details of mitigating circumstances and remedial action undertaken in the event a Milestone is not met or completed in the manner and/or by the time specified;
- c. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Project;
- d. evidence that the Recipient has obtained and/or utilised in-kind Other Contributions specified in the table at Annexure B;
- e. a statement of receipts (which separately identifies any interest earned on the Funding) and expenditure to date in respect of the Funding; and

- f. a statement of receipts and expenditure to date in respect of Other Contributions (excluding in-kind).

D.1.3 The Activity Completion Report must contain:

- a. evidence that the Activity and the Milestones have been completed;
- b. an analysis of the planning, implementation and overall process the Recipient followed to deliver the Activity;
- c. any recommendations on improved practice, relevant to the Recipient's and the Commonwealth's practices, that may assist in the delivery of future projects;
- d. a copy of the current Assets register described in item E.1.2 of this Schedule and a copy of the Real Property register described in item E.2.4 of this Schedule;
- e. evidence that the Recipient has obtained in-kind Other Contributions for the Activity specified in the table at Annexure B;
- f. an up to date Audited Financial Report in respect of the Activity; and
- g. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Activity, not already included in the Progress Report/s.
- h. a copy of the Assets register described in item E.1 of this Schedule and a copy of the Real Property register described in item E.2 of this Schedule.

D.1.4 The Project Completion Report must contain:

- a. evidence that the Project has been completed;
- b. an analysis of the planning, implementation and overall process the Recipient followed to deliver the Project;
- c. any recommendations on improved practice, relevant to the Recipient's and the Commonwealth's practices, that may assist in the delivery of future projects;
- d. a copy of the Assets register described in item E.1 of this Schedule and a copy of the Real Property register described in item E.2 of this Schedule.
- e. evidence that the Recipient obtained in-kind contributions specified in the table at Annexure B;
- f. an Audited Financial Report; and
- g. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Project, not already included in the Progress Report/s.

In addition, the Project Completion Report must also:

- h. describe the Recipient's activities during the Term;

discuss in detail the conduct, benefits and outcomes of the Activity as a whole and the Activity's results and findings; and

Reserved.

The Recipient must also include in the Project Completion Report a discussion of any other matters relating to the performance of the Project and Activity, which

the Commonwealth notifies the Recipient is required to be included in the Project Completion Report. Any such requirement will be notified to the Recipient at least 20 Business Days before the Project Completion Report is due.

- D.1.5. Unless otherwise agreed by the Commonwealth in writing, all Reports must be:
- a. supplied in hard copy or electronic form;
 - b. supplied in a format that is acceptable to the Commonwealth; and
 - c. signed by the Recipient's Chief Executive Officer, Chief Financial Officer or other person authorised by the Recipient to execute documents and legally bind the Recipient by their execution.

Audit and certification

The Activity Completion Report and Project Completion Report must be accompanied by a copy of a letter to the Recipient from the Approved Auditor, or a report from the Approved Auditor, that includes:

- a. separate audited statements of receipts and expenditure in respect of the Funding and Other Contributions (excluding in-kind), which must:
 - i. comply with all relevant Australian Accounting Standards
 - ii. separately identify any interest earned on the Funding
 - iii. include a definitive statement made by an Approved Auditor as to whether:
 1. the statements of receipts and expenditure are fair and true
 2. Funding and Other Contributions (excluding in-kind) were held and expended in accordance with this Agreement
- b. a certificate, signed by the Recipient's Chief Executive Officer, Chief Financial Officer or a person authorised by the Recipient to execute documents and legally bind the Recipient by their execution, that:
 - i. all Funding and Other Contributions (excluding in-kind) received was expended for the purpose of the Activity and Project and expended and held in a manner in accordance with this Agreement
 - ii. salaries and allowances paid to persons involved in the Activity are in accordance with any applicable award or agreement in force under any relevant Law on industrial or workplace relations.

Other Reports

Throughout the Term, the Commonwealth may require the Recipient to provide ad-hoc Reports concerning:

any significant developments concerning the Activity;

any significant delays or difficulties encountered in performing the Activity in accordance with the Agreement; and

the outcomes and outputs of the project as listed in the application.

The Recipient must provide any such ad-hoc Reports within the timeframe notified by the Commonwealth.

E. Assets and Real Property
(clauses 1.1.1 and 9)

Assets

- E.1.1. For the purposes of Clause 9, the Recipient may create, acquire or upgrade the following Assets: None Specified.
- E.1.2. The Recipient must for the Term of this Agreement maintain an Asset Register in the following form and containing the following information:
- a. Asset description;
 - b. acquisition, upgrade or creation price or total lease cost;
 - c. date of acquisition, creation, upgrade or lease;
 - d. if leased, type and term of lease;
 - e. location of Asset;
 - f. date of Disposal;
 - g. disposal method; and
 - h. if the Asset was partly created, acquired or upgraded using the Funding, the proportion of that creation, acquisition or upgrade that was paid for with the Funding.
- E.1.3. The Recipient must use the Assets created, acquired, or upgraded under this Agreement for the Purpose set out in item A.3 of the Schedule for the duration of the Operational Period.

Real Property

- E.2.1. The Real Property includes the Amy Gillett Bikeway – Mount Torrens to Birdwood project.
- E.2.2. The Capital Works includes the construction of an unsealed shared bike path from Mount Torrens to Birdwood, South Australia including the Works Location.
- E.2.3. The Works Locations extends from Mount Torrens to Birdwood SA, along the designated project track.
- E.2.4. The Recipient must for the Term of this Agreement maintain a Real Property Register in the following form and containing the following information:
- a. Real Property description;
 - b. acquisition, upgrade or creation price or total lease cost;
 - c. date of acquisition, creation, upgrade or lease;
 - d. if leased, type and term of lease;
 - e. location of Real Property;
 - f. date of Disposal;
 - g. disposal method; and

- h. if the Real Property was partly created, acquired or upgraded using the Funding, the proportion of that creation, acquisition or upgrade that was paid for with the Funding.

E.2.5. The Recipient must use the Real Property created, acquired, or upgraded under this Agreement for the Purpose set out in item A.3 of the Schedule for the duration of the Operational Period.

F. Insurance
(clause 21.5)

The Recipient must maintain:

workers compensation insurance as required by law where the Recipient carries out activities under this Agreement;

public liability insurance to the value of at least \$10 million for each and every claim, or occurrence giving rise to a claim, in respect to activities undertaken under this Agreement, where occurrence means either a single occurrence or a series of occurrences if these are linked or occur in connection with one another from one original cause, as the case may be; and

insurance against any loss or damage to an Asset or Real Property for its full replacement cost including where relevant the costs of demolition and removal of debris and the cost of architects, engineers and other consultants.

G. Reserved

H. Acknowledgement and publicity
(clause 14)

H.1.1 If the Recipient erects or maintains any signage in relation to the Project, the signage must be approved by the Commonwealth prior to use and contain an acknowledgement of the Funding as required under Clause 14 of this Agreement. Any signage must remain in place during the Operational Period for the Project as specified in Item A.4. Signage for the Activity may be paid from the Budget if approved by Us. Signage for any other part of the Project must be at the Recipient's own cost.

H.1.2 If a Federal, State or Local Government election is announced, the Recipient must cover any sign that is displayed within 100 metres of a polling place with an opaque (impenetrable to sight), durable and water repellent material from a period not less than 48 hours before the commencement of polling at that polling place until the polls close.

H.1.3 The Recipient must include the Commonwealth logo in all signage, publications and promotional activities related to the Activity.

H.1.4 The Recipient must not use the Commonwealth's logo without the Commonwealth's approval. If the Commonwealth provides approval for the Recipient's use of the Commonwealth's logo, the Recipient must use it in accordance with the Commonwealth's Print Style Guidelines (as advised by the Commonwealth).

- H.1.5 All the Recipient's publicity, announcements and media releases relating to the Activity must be cleared through the Commonwealth's contact officer specified at item L of the Schedule with at least 10 Business Days' notice, before release.
- H.1.6 The Commonwealth reserves the right to publicise and report on the provision of Funding to the Recipient, including progress on completing the Activity and the Project. The Commonwealth may do this by including the information specified in clause 14.2 in media releases, general announcements about the Funding and in annual reports and in electronic media.
- H.1.7 The Recipient must conduct an official opening of the completed Activity and Project unless otherwise agreed by the Commonwealth.
- H.1.8 The Recipient must provide to the Commonwealth with at least 3 options for dates for the official opening, or any other milestone events that the Recipient chooses to conduct (e.g. stage completion), for the Activity and the Project. These dates must be provided at least 56 days prior to the first proposed date for each event to be conducted.
- H.1.9 The date of official openings or other official public function for the completed Activity and Project must be agreed by the Commonwealth.
- H.1.10 The Recipient must invite the Commonwealth's representative to officiate at any official opening or other official public function relating to the Activity or the Project.
- H.1.11 The Commonwealth Minister's prior agreement must be sought, to invite any other Commonwealth or State elected official or other officials to attending either function. This invitation must be provided to the Commonwealth no later than 56 days before the date of the official opening or other official public function relating to the Activity or the Project.
- H.1.12 The Recipient must coordinate requests for the Commonwealth's agreement to the date of official openings and requests for Commonwealth representation at official openings or other official functions relating to the Activity or the Project through the Commonwealth's contact officer specified at item L of the Schedule.

I. Reserved

**J. Compliance with laws and policies
(clause 21.13)**

The Recipient must comply with the following laws and policies in carrying out the Activity:

- Crimes Act 1914;
- Criminal Code of Conduct 1995;
- Disability Discrimination Act 1992;
- Workplace Gender Equality Act 2012;
- Building and Construction Industry (Improving Productivity) Act 2016;
- Racial Discrimination Act 1975;
- Sex Discrimination Act 1984;

- Migration Act 1958
- Work Health and Safety Act 2011.

For the purposes of clause 21.13, the following policies are identified:

Community Development Grants Programme – Grant Programme Guidelines

K. Statutory Approvals

(clause 2A.2)

For the purposes of subclause clause 2A.2, the Recipient must obtain statutory approvals for the Project.

L. Notices

(clause 18.1)

The Commonwealth's details for notices are as follows:

Name: Jane Hunt
A/g Assistant Secretary
Regional Programs Branch

Address: Department of Infrastructure, Transport, Regional
Development, Communications and the Arts
GPO Box 594
CANBERRA ACT 2601

Email: CDG@infrastructure.gov.au

The Recipient's details for notices are as follows:

Name: Mr David Waters

Position: A/g Chief Executive Officer

Address: PO Box 44
WOODSIDE SA 5244

Telephone: 08 8408 0400

E-mail: dwaters@ahc.sa.gov.au

M. Applicable Law

(clause 21.14)

The Laws of the Australian Capital Territory apply to this Agreement.

N. Confidential Information

(clause 13)

Commonwealth's Confidential Information

None Specified

Recipient's Confidential Information

None Specified

ANNEXURE A

Table of Milestones, Reports and Funding payments relating to the Activity

Report	Milestone(s) / Information covered by the Report	Milestone Completion Date	Payment amount (GST Exclusive)	Due Date for Report	Due Date for Funding Payment
Progress Report 1	<p>Evidence acceptable to the Commonwealth that the following have been achieved:</p> <ul style="list-style-type: none"> • confirmation of final cost estimates; • confirmation of final designs; • confirmation of State Government funding; • the activity at Item A.5 is reviewed and if required, varied to reflect the outputs of the final designs; and • 30 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	3 October 2023	\$780,000	1 November 2023	15 November 2023
Progress Report 2	<p>Evidence acceptable to the Commonwealth that the following has been achieved:</p> <ul style="list-style-type: none"> • 75 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	1 February 2024	\$1,170,000	1 March 2024	15 March 2024

Report	Milestone(s) / Information covered by the Report	Milestone Completion Date	Payment amount (GST Exclusive)	Due Date for Report	Due Date for Funding Payment
Progress Report 3	<p>Evidence acceptable to the Commonwealth that the following have been achieved:</p> <ul style="list-style-type: none"> • an Event Invitation has been submitted to the Department as required at Item H of the Schedule; and • 90 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	3 June 2024	\$390,000	1 July 2024	15 July 2024
Project Completion Report	<p>Evidence acceptable to the Commonwealth that the following have been achieved:</p> <ul style="list-style-type: none"> • the Activity, at Item A.5 of the Schedule, is complete; • the Project, at Item A.2 of the Schedule, is complete; • all approvals required to enable public access and use of the facility have been met; and • the Project is fully Operational. 	2 September 2024	\$260,000	2 December 2024	16 December 2024

ANNEXURE B

BUDGET FOR THE EXPENDITURE OF CDG FUNDING		
Cost item	Description	Amount (GST exclusive)
Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$2,600,000
	Funding (A)	\$2,600,000

OTHER CONTRIBUTIONS (FINANCIAL)			
Name of Contributor	Cost Item	Description of item	Amount (GST exclusive)
South Australian Government	Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$4,800,000
Adelaide Hills Council	Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$500,000
		Other Contributions (Financial) (B)	\$5,300,000

TOTAL COST ESTIMATE (A + B) (GST exclusive):	\$7,900,000
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Appendix 2

Offer from State Government



23MIT9382

Dr Jan-Claire Wisdom
Mayor
Adelaide Hills Council
63 Mount Barker Road
STIRLING SA 5152

Minister for Infrastructure
and Transport

Minister for Energy and
Mining

Level 14, 83 Pirie Street
Adelaide SA 5000

GPO Box 1533
Adelaide SA 5001

Tel 08 7133 1100

minister.koutsantonis@sa.gov.au

Dear Dr Wisdom

I write to you regarding Stage 4 of the Amy Gillett Bikeway.

The Department for Infrastructure and Transport (the Department) advises that planning and design works to develop the concept for Stage 4 of the Amy Gillett Bikeway have continued to be undertaken on behalf of Council. As discussed with you previously, these investigations had identified that the estimated cost for the project exceeds the funding raised by Council.

Planning works have continued in good faith on the basis that Council would raise the required funding to deliver the works.

I acknowledge the additional funding proposed by Council of \$500,000 towards the project.

The South Australian Government is prepared to provide \$2.6 million to Council (inclusive of costs incurred by the Department to date – approximately \$510,000) to match the Federal Government's contribution of \$2.6 million. This offer is subject to the following conditions:

- Council contributing \$2.6 million towards the project.
- Council to be responsible for finalising the planning and design.
- Council to be responsible for construction of the project.
- Council to be responsible for ongoing maintenance of the facility under a Head and Licence Agreement (similar to the section you own and manage in Woodside between Onkaparinga Valley Rand and Tiers Road).

This arrangement also aligns with the approach taken with other councils regarding regionally significant paths that provide recreation, transport and tourism benefits that have been developed on State Government land in partnership with local government. Examples include the Westside Bikeway, the Marino Rocks Greenway, the Coast to Vines Trail, the Riesling Trail, the Copper Coast Rail Trail and the Mount Gambier Rail Trail.

To discuss this funding offer further, please contact Mr Andrew Excell, the Department's Executive Director Transport Strategy and Planning, on 0407 080 149 or email andrew.excell@sa.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Tom Koutsantonis'.

Hon Tom Koutsantonis MP
Minister for Infrastructure and Transport

21 / 8 / 2023

Appendix 2

Draft Funding Deed - State Government

FUNDING DEED under **GREENWAYS AND CYCLE PATHS PROGRAM**

Amy Gillett Bikeway between Mount Torrens and Birdwood

\$XXXXXX

Between

MINISTER FOR INFRASTRUCTURE AND TRANSPORT
(Minister)

And

THE COUNCIL NAMED IN THE SCHEDULE
(Council)

DEED dated the day of

PARTIES:

MINISTER FOR INFRASTRUCTURE AND TRANSPORT, a body corporate pursuant to the *Administrative Arrangements Act 1994*.....(**Minister**)

And

THE COUNCIL NAMED IN THE SCHEDULE a body corporate under the *Local Government Act 1999*.....(**Council**)

It is agreed:

1. FUNDING

- 1.1 Subject to this deed, the Minister will pay the Council up to the amount of money specified in the Schedule (**Funding**).
- 1.2 The Council must only use the Funding for the **Purpose** set out in clause 3 of the Schedule.
- 1.3 For the purposes of this deed, the **Funding Period** is the period commencing on the Start Date and, subject to funding being available, will continue until the End Date. The **Start Date** and **End Date** are set out in the Schedule.
- 1.4 The Funding is payable by way of a lump sum in accordance with the Schedule. During the Funding Period, the Council is entitled in accordance with the conditions set out in the Schedule to invoice the Minister for the payment of the Funding.
- 1.5 At the end of the Funding Period the Council must provide a report on the level of any unexpended Funding.
- 1.6 The Council must repay any part of the Funding which is unexpended at the end of the Funding Period to the Minister unless the Minister gives written approval for the Council to retain the money.
- 1.7 The Council must pay at least fifty per cent of the total cost of the works undertaken for the Purpose.

Unless otherwise agreed in writing with the Minister, if by the end of the Funding Period, the total cost of the works for the Purpose is less than double the amount of the grant (GST Exclusive) then in addition to repaying any unexpended Funding, the Council must repay to the Minister the difference between the amount of the Funding and a half of the actual cost of the works.

2. GST

- 2.1 In addition to any amounts payable by the Grantor as part of the Funding (**Base Payment**), the grantor must, if in relation to a Taxable Supply for which the grantor has received a Tax Invoice, pay to the Council an additional amount (**GST Payment**) calculated by multiplying the Base Payment by the rate at which GST is levied at the time of this deed.
- 2.2 The GST Payment is payable at the same time and subject to the same conditions as the Base Payment. "*Taxable supply*", "*GST*" and "*Tax Invoice*" have the meaning attributed under the *A New Tax System (Goods and Services Tax) Act 1999*.

3. ADMINISTRATION OF DEED

- 3.1 Any power or discretion exercisable by the Minister under this deed may be exercised by the person (**Minister's Representative**) for the time being in the position within the Department for Infrastructure and Transport (**Department**) set out in the Schedule.
- 3.2 Any power or discretion exercisable by the Council under this deed may be exercised by the person (**Council's Representative**) for the time being in the position within the Council set out in the Schedule.

4. PROVISION OF FINANCIAL INFORMATION

- 4.1 The Council must provide the Minister with appropriate and regular information, records and reports as the Minister may request from time to time about:
- 4.1.1 the administration and financial affairs of the Council;
 - 4.1.2 the progress of and any change to the authorised scope of the Purpose;
 - 4.1.3 any significant changes to the nature and scope of the activities conducted by the Council;
 - 4.1.4 any other matter relevant to the granting of assistance;
 - 4.1.5 any other funding or financial assistance promised or received from any source other than the Minister;
 - 4.1.6 the Council's management of the Funding, including, but not limited to, the economic and efficient use of resources to achieve the outcomes of the Purpose; and
 - 4.1.7 the performance of the Council's undertakings and obligations under this deed.
- 4.2 The information provided by the Council must be sufficient for the Minister to make an informed judgement about:
- 4.2.1 the Council's ongoing financial position and its resources and expertise in relation to the Purpose;
 - 4.2.2 the Council's performance in managing public moneys, acquiring, and using resources economically and efficiently and in achieving specified objectives in relation to the Purpose;
 - 4.2.3 the overall effectiveness of the Funding throughout the Funding Period;
 - 4.2.4 compliance with legislation and generally accepted accounting principles; and
 - 4.2.5 compliance with the Council's constitution and the conditions of this deed.
- 4.3 The Council must permit any officer authorised by the Minister:
- 4.3.1 to enter the Council's premises and to have access to all accounting records, equipment, documents, and information in possession of the Council; and
 - 4.3.2 to interview employees of the Council on matters pertaining to the operations of the Council.

5. OBLIGATIONS OF THE COUNCIL

The Council must:

- 5.1 ensure that any works undertaken towards the Purpose are undertaken in accordance with (and to the standard required by) any applicable Standards published by Austroads and Standards Australia Limited;
- 5.2 maintain accounting records of the Funding in accordance with generally accepted accounting principles;
- 5.3 ensure that any activity carried out by the Council in connection with the Council's use of the Funding complies with the laws from time to time in force in South Australia;
- 5.4 comply with its constitution;
- 5.5 comply with the reporting requirements set out in the Schedule;
- 5.6 prepare financial statements in accordance with Australian Accounting Standards at the end of the Funding Period and submit the financial statements, signed by a senior office holder of the Council, to the Minister no later than one calendar month after the expiry of the Funding Period; and
- 5.7 where requested by the Minister, provide to the Department management accounts, annual reports, financial statements and any other information or documents relevant to the Council's operations.

6. TERMINATION

- 6.1 If the Council fails to comply with this deed, the Minister may:
 - 6.1.1 require the Council to repay either the whole or a portion of the Funding (whether expended or not);
 - 6.1.2 withhold all future funding from the Council;
 - 6.1.3 pursue any legal rights or remedies which may be available to the Minister; and
 - 6.1.4 terminate or curtail any program or project conducted by the Minister of which the Purpose conducted by the Council is part.
- 6.2 The Minister may review any decision made pursuant to this clause if the Council is able to satisfy the Minister within a period of 30 days from the decision that the Council has complied with the conditions of this deed.
- 6.3 Nothing in this deed is to be taken to limit the Minister's discretion to determine whether and how any program or project of the Minister is to be conducted, except if and to the extent that the Minister gives an express undertaking in that regard.

7. INSURANCE

The Council warrants that it is a member of the Local Government Association Mutual Liability Scheme (**Scheme**) and is bound by the Scheme pursuant to section 142 and Schedule 1, Part 2 of the *Local Government Act 1999* (SA) (**Act**) and in the event that the Council ceases to be a member of the Scheme it will forthwith, pursuant to Section 142(1) of the Act and the regulations under that Act, take out and maintain insurance to cover its civil liabilities at a minimum level of cover of AUD \$50 million.

8. **ACKNOWLEDGEMENTS**

The Council acknowledges that the Funding represents a one-off contribution by the Minister towards the Purpose, and the Council agrees that any request for subsequent funding will require a new application to the Minister.

The Minister is under no obligation to agree to pay any subsequent funding to the Council.

The Council further acknowledges and agrees that the Minister will not be liable to reimburse the Council for any losses (or cost over runs) that may result from the operation of this Agreement or the carrying out of the Purpose or a Project.

9. **INDEMNITY**

The Council acknowledges and agrees that it remains at all times solely responsible for the conduct of the Purpose and any Project and it releases and indemnifies the Minister, the Commissioner of Highways and the Crown in right of the State of South Australia together with their employees, contractors and agents (**those indemnified**) from and against any loss or liability incurred or suffered by any of those indemnified as a result of any claim, suit, demand, action or proceeding brought by any person against any of those indemnified in respect of the works to carry out the Purpose and/or a Project or otherwise caused by any breach or default of the Council under this Agreement.

10. **AUDIT**

The Minister may direct the Council to arrange for the financial accounts relating to the Funding to be audited at the Council's expense. The Minister may specify the minimum qualifications to be held by a person appointed to conduct the audit.

11. **ASSIGNMENT**

The Council must not assign, novate, or encumber any of its rights or obligations under this deed.

12. **PUBLICITY**

The Council must not make or permit a public announcement or media release to be made about any aspect of this deed without first obtaining the Minister's consent.

13. **CONSENT**

If the Council requires the Minister's consent under this deed, the Minister may, in its absolute discretion, give or withhold its consent and if giving consent, the Minister may impose any condition on that consent that it considers appropriate. The Minister's consent will not be effective unless it is in writing and signed.

14. **ENTIRE DEED**

This deed incorporates any attached schedules and annexures. This deed contains the entire agreement between the parties with respect to its subject matter and supersedes any prior agreement, understanding or representation of the parties on the subject matter.

15. **PROPER LAW**

The laws in force in South Australia apply to this deed.

16. **JURISDICTION OF COURTS**

The courts of South Australia have non-exclusive jurisdiction to determine any

proceeding in relation to this deed. Any proceeding brought in a Federal Court must be instituted in (and remain with) the Adelaide Registry of that Federal Court.

17. COMPLIANCE WITH LAWS

The Council must comply with the laws in force in South Australia in the course of performing its obligations under this deed.

18. NOTICES

A notice is properly given or served if the party delivers it by hand, posts it or transmits it by electronic mail or facsimile, to the address of the Representative of the other party. A notice is taken to be received:

18.1 if sent by post, at the time it would have been delivered in the ordinary course of the post to the address to which it was sent;

18.2 if sent by electronic mail, only in the event that the sender receives confirmation that the e-mail has been successfully transmitted to the correct e-mail address; or

18.3 if delivered by hand, the party who sent the notice holds a receipt for the notice signed by a person employed at the physical address for service.

19. WAIVER

Any waiver of any provision of this deed is ineffective unless it is in writing and signed by the party waiving its rights. A waiver by either party in respect of a breach of a provision of this deed by the other party is not a waiver in respect of any other breach of that or any other provision. The failure of either party to enforce any of the provisions of this deed at any time must not be interpreted as a waiver of that provision.

20. VARIATION

Any variation of this deed must be in writing and signed by each party (or its Representative).

Any request by the Council for agreement to vary the Funding or the Purpose must be accompanied by sufficient details explaining the reasons for the requested variation to enable the Minister to have regard to its merits.

21. READING DOWN AND SEVERANCE

In the event that any provision (or portion of any provision) of this deed is held to be unenforceable or invalid by a Court of competent jurisdiction, the validity and enforceability of the remaining provisions (or portions of such provisions) of this deed shall not be adversely affected.

The offending provision or part of a provision shall be read down to the extent necessary to give it legal effect or shall be severed if it cannot be read down, and the remaining part and provisions of this deed shall remain in full force and effect.

22. AUDITOR GENERAL

Nothing in this deed derogates from the powers of the Auditor-General under the *Public Finance and Audit Act 1987* (South Australia). Without limiting this clause, the Council acknowledges the Auditor General's obligations and powers under sections 32 and 34 of the *Public Finance and Audit Act 1987* (South Australia).

23. PUBLIC DISCLOSURE

The Minister may disclose this deed and/or information relating to this deed in both printed or electronic form and either generally to the public or to a particular person as a result of a specific request. Nothing in this clause derogates from the Council's obligations under any provision of this deed or the provisions of the *Freedom of Information Act, 1991*.

24. ADDITIONAL CONDITIONS

The additional conditions set out in the Schedule (if any) form part of this deed.

SCHEDULE

1. THE COUNCIL

Legal Name: Adelaide Hills Council
 Trading Name: Adelaide Hills Council
 Site Address: 63 Mount Barker Road, STIRLING SA 5152
 Postal Address: 63 Mount Barker Road, STIRLING SA 5152
 ABN: 23 955 071 393

2. REPRESENTATIVES

Minister's Representative	Council's Representative
Name: Mr Andrew Excell	Name: XXXX
Position: Executive Director, Transport Strategy and Planning	Position: XXXX
Address: Level 7, 83 Pirie Street, ADELAIDE SA 5000	Address: 63 Mount Barker Road, STIRLING SA 5152
Telephone: 7133 1675	Telephone: XXXX
E-mail: andrew.excell@sa.gov.au	E-mail: XXXX

3. PURPOSE

The Funding is provided for the Purpose of the Council undertaking (within the Funding Period) the **Project** described below (and in the proposal and plans attached to this deed) in accordance with (and to the standard required by) any applicable Standards published by Austroads and Standards Australia Limited.

Description of Project

Amy Gillett Bikeway between Mount Torrens and Birdwood

4. FUNDING PERIOD

Start Date: XX XXXX 202X
End Date: XX XXXX 202X

5. FUNDING

Amount (AUD): \$XXXX (GST exclusive)

6. MANNER & CONDITIONS OF PAYMENT

Limit on payments

The Funding of \$XXXX (GST exclusive) is the maximum total amount the Minister may be liable to pay the Council under this deed.

Invoice

The Minister is **not** obligated to pay an invoice unless properly rendered. An invoice is properly rendered if it:

- (a) is issued in respect of a payment for which the Council is entitled to invoice for under this deed;
- (b) quotes the relevant purchase order number allocated by the Minister;
- (c) reflects the correct amount for payment under this deed; and
- (d) is a valid Tax Invoice in accordance with GST Law.

Payment Term

Provided that the total amount of the Funding has not been (or will be) exceeded, the Minister must pay the amount of a properly rendered invoice for the Funding within 30 days of receiving the Council's invoice.

7. **ADDITIONAL REPORTING REQUIREMENTS**

Report (Title)	Frequency (By when)	Requirements (Information and applicable standard)
Project Report	Every 3 months or 7 days from request.	<ul style="list-style-type: none"> • The progress of the Project and scheduling of works. • Updated Expenditure forecasts during the term of the funding period • The management of the Funding (i.e., break down of expenditure of the Funding). • Any changes to the authorised scope of the Project. • Any significant changes to the nature and scope of the activities conducted by the Council. • Any operational matters requested from time to time by the Minister for inclusion in the Project Report.
Financial Statements (As referred to in clause 5)	Within 30 days from the expiry of the Funding Period.	Financial Statements prepared in accordance with Australian Accounting Standards setting out in detail the Council's expenditure of the Funding (with invoices attached from any contractors engaged for the Purpose) and signed by a senior office holder of the Council.

8. **SPECIAL CONDITIONS****Alteration to DIT Roads or other Assets**

If the Project requires any traffic management, alteration to (or effect on) a road or other asset that is under the care, control, and management of (or is otherwise the responsibility of) the Commissioner of Highways or is the responsibility of the Department for Infrastructure and Transport (**DIT**), the Council must seek the written approval of the appropriate DIT Regional Manager prior to commencing any work.

Traffic Control Devices

The installation of Traffic Control Devices must comply with the requirements outlined in the Manual of Legal Responsibilities and Technical Requirements for Traffic Control devices – Part 2 – Code of Technical Requirement – February 2012.

Appendix 3

*Amy Gillett Project Variation Form – Commonwealth
Department*

SCHEDULE 1 PARTICULARS

A. Programme, Project, Purpose, Activity and Funding and Payment (Recital A, clauses 1.1.1 and 2.1.1)

Programme

The Commonwealth is undertaking the Community Development Grants programme, which was to support needed infrastructure that promotes stable, secure and viable local and regional economies.

Project

The project to be undertaken by the Recipient is the construction of a shared unsealed bike path of at least 5.4 km from Mount Torrens to Birdwood, South Australia, along a disused railway corridor. This is an extension of the current Amy Gillett Bikeway. The Project will include the Activity that the Programme will fund, defined in more detail in item A.5 of the Schedule.

The Project Completion Date is ~~2 September 2024~~ **30 April 2025**

A.3. Purpose

The Purpose for which the completed Project is required to be used is:

- Increased tourism and social amenity in the area; and
- Increased employment, with increased local spending on goods and services.

A.4. Operational Period

The Operational Period commences on the date the Commonwealth accepts the Project Completion Report, to the Commonwealth's satisfaction. The duration of the Operational Period is dependent on the amount of Funding provided by the Commonwealth under this Agreement. The thresholds are set out in the table below:

Amount of Funding	Duration of Operational Period
Over \$1,000,000	Five (5) years

During the Operational Period, the Recipient must, if requested by the Commonwealth to do so, promptly provide evidence satisfactory to the Commonwealth that the Project is Operational.

A.5. Activity

The Activity to be undertaken by the Recipient is an extension of at least 5.4~~6~~ km of the Amy Gillett Bikeway as a bike path (unsealed trail) from Mount Torrens to Birdwood, continuing along a disused railway corridor including:

- ~~Construction of at least 3 bridges with the following dimensions—~~
 - ~~Bridge 1— at least 7.5m long— 7.5m single span x 2.5m clear width~~
 - ~~Bridge 2— at least 15m long— at least 2 x 7.5m Double Span x 2.5m Clear Width~~

~~○ Bridge 3 – at least 22.5m long – at least 3 x 7.5m Double Span x 2.5m Clear Width~~

- Construction/upgrade of 1 bridge at Burford Hill Road and construction of two large box culverts. The two large box culverts will be installed to cross Angus Creek and Williams Creek near Mullers Road.
- Clearing of timber as required to ensure path is trafficable and overhead branches do not impede the use of the bike path by all users
- Base Preparation – structural base for the bike path (unsealed trail) surface. To be undertaken in accordance with the Guide to Bikeway Pavement Design Construction and Maintenance
- Signage for the Bikeway – at least 4 interpretative and descriptive signs that meet section 2 of the Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices (SA Department of Planning, Transport and Infrastructure) along the Bikeway.

The Activity Period commences on the Date of this Agreement and ends on the Activity Completion Date which is ~~2 September 2024~~ **30 April 2025**

A.6. Reserved

**A.7. Funding and Payment
(clauses 1.1.1, 3.1, 6)**

The total Funding for the Activity is **\$2,600,000** GST exclusive. The Funding will be paid as follows:

1. The first payment of Funding specified in the table at Annexure A will not be made until:
 - a) this Agreement has been executed by all Parties and all Milestones specified in the table at Annexure A that relate to the first payment have been achieved to the Commonwealth's satisfaction; and
 - b) all Reports identified in item D of the Schedule as being due on or before the due date for the first payment have been received and accepted by the Commonwealth; and
2. The second and each subsequent payment specified in the table at Annexure A will not be made until:
 - a) all Milestones specified in the table at Annexure A that relate to the relevant payment have been achieved to the Commonwealth's satisfaction;
 - b) all Reports identified in item D of this Schedule as being due on or before the due date for the relevant payment have been received and accepted by the Commonwealth; and
 - c) the Recipient has provided the Commonwealth with evidence that all previously paid Funds have been expended or committed.

Invoicing

The Commonwealth must receive a properly rendered invoice or, if required a tax invoice which meets the requirements of the Australian Taxation Office for the amount of the payment and;

The Recipient must provide the Commonwealth with evidence that all previous paid Funding has been expended or committed.

B. Budget

(clause 6.2)

The Budget for the Activity, identifying the Funding and Other Contributions, is at Annexure B.

The percentage of the Budget (Total Cost) below which Funding may be transferred between Cost items without the Commonwealth's approval is 10%.

The percentage of the Budget (Total Cost) which must not be exceeded in total transfers between expenditure items per Financial Year is 20%.

C. Other Contributions

(clause 7)

Other Contributions

Other Contributions are specified at the table titled "Other Contributions" in Annexure B. Any financial or in-kind assistance that the Recipient has received from the Commonwealth of Australia or a State, Territory or local government and which the Recipient intends to, or is required to, use to perform the Activity must be identified in Other Contributions.

D. Reporting

(clauses 1.1.1, 2.6)

Progress Reports, Activity Completion Report and Project Completion Report

D.1.1 The Recipient must give the Commonwealth the Progress Reports, the Activity Completion Report and Project Completion Report by the times specified in the Table of Milestones, Reports and Payments relating to the Activity at Annexure A.

D.1.2 Each Progress Report must contain:

- a. details of progress and performance against the Activity, and the Project (to the extent that it is directly related to the relevant part of the Activity which is being covered by that Progress Report) and evidence of completion of the Milestones listed in Annexure A of the Schedule that are due for completion (including but not limited to photographs to demonstrate completion of Milestones) during the period between the Recipient's previous Progress Report and the due date of this Progress Report (or in the case of the first Progress Report, the period between the Date of this Agreement and the due date of the first Progress Report);
- b. details of mitigating circumstances and remedial action undertaken in the event a Milestone is not met or completed in the manner and/or by the time

specified;

- c. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Project;
- d. evidence that the Recipient has obtained and/or utilised in-kind Other Contributions specified in the table at Annexure B;
- e. a statement of receipts (which separately identifies any interest earned on the Funding) and expenditure to date in respect of the Funding; and
- f. a statement of receipts and expenditure to date in respect of Other Contributions (excluding in-kind).

D.1.3 The Activity Completion Report must contain:

- a. evidence that the Activity and the Milestones have been completed;
- b. an analysis of the planning, implementation and overall process the Recipient followed to deliver the Activity;
- c. any recommendations on improved practice, relevant to the Recipient's and the Commonwealth's practices, that may assist in the delivery of future projects;
- d. a copy of the current Assets register described in item E.1.2 of this Schedule and a copy of the Real Property register described in item E.2.4 of this Schedule;
- e. evidence that the Recipient has obtained in-kind Other Contributions for the Activity specified in the table at Annexure B;
- f. an up to date Audited Financial Report in respect of the Activity; and
- g. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Activity, not already included in the Progress Report/s.
- h. a copy of the Assets register described in item E.1 of this Schedule and a copy of the Real Property register described in item E.2 of this Schedule.

D.1.4 The Project Completion Report must contain:

- a. evidence that the Project has been completed;
- b. an analysis of the planning, implementation and overall process the Recipient followed to deliver the Project;
- c. any recommendations on improved practice, relevant to the Recipient's and the Commonwealth's practices, that may assist in the delivery of future projects;
- d. a copy of the Assets register described in item E.1 of this Schedule and a copy of the Real Property register described in item E.2 of this Schedule.
- e. evidence that the Recipient obtained in-kind contributions specified in the table at Annexure B;
- f. an Audited Financial Report; and
- g. copies of any published reports, promotional material, media publicity, pamphlets or other documentation relevant to the Project, not already included in the Progress Report/s.

In addition, the Project Completion Report must also:

- h. describe the Recipient's activities during the Term;
discuss in detail the conduct, benefits and outcomes of the Activity as a whole
and the Activity's results and findings; and

Reserved.

The Recipient must also include in the Project Completion Report a discussion of any other matters relating to the performance of the Project and Activity, which the Commonwealth notifies the Recipient is required to be included in the Project Completion Report. Any such requirement will be notified to the Recipient at least 20 Business Days before the Project Completion Report is due.

- D.1.5. Unless otherwise agreed by the Commonwealth in writing, all Reports must be:
 - a. supplied in hard copy or electronic form;
 - b. supplied in a format that is acceptable to the Commonwealth; and
 - c. signed by the Recipient's Chief Executive Officer, Chief Financial Officer or other person authorised by the Recipient to execute documents and legally bind the Recipient by their execution.

Audit and certification

The Activity Completion Report and Project Completion Report must be accompanied by a copy of a letter to the Recipient from the Approved Auditor, or a report from the Approved Auditor, that includes:

- a. separate audited statements of receipts and expenditure in respect of the Funding and Other Contributions (excluding in-kind), which must:
 - i. comply with all relevant Australian Accounting Standards
 - ii. separately identify any interest earned on the Funding
 - iii. include a definitive statement made by an Approved Auditor as to whether:
 - 1. the statements of receipts and expenditure are fair and true
 - 2. Funding and Other Contributions (excluding in-kind) were held and expended in accordance with this Agreement
- b. a certificate, signed by the Recipient's Chief Executive Officer, Chief Financial Officer or a person authorised by the Recipient to execute documents and legally bind the Recipient by their execution, that:
 - i. all Funding and Other Contributions (excluding in-kind) received was expended for the purpose of the Activity and Project and expended and held in a manner in accordance with this Agreement
 - ii. salaries and allowances paid to persons involved in the Activity are in accordance with any applicable award or agreement in force under any relevant Law on industrial or workplace relations.

Other Reports

Throughout the Term, the Commonwealth may require the Recipient to provide ad-hoc Reports concerning:

any significant developments concerning the Activity;

any significant delays or difficulties encountered in performing the Activity in accordance with the Agreement; and

the outcomes and outputs of the project as listed in the application.

The Recipient must provide any such ad-hoc Reports within the timeframe notified by the Commonwealth.

E. Assets and Real Property

(clauses 1.1.1 and 9)

Assets

- E.1.1. For the purposes of Clause 9, the Recipient may create, acquire or upgrade the following Assets: None Specified.
- E.1.2. The Recipient must for the Term of this Agreement maintain an Asset Register in the following form and containing the following information:
- a. Asset description;
 - b. acquisition, upgrade or creation price or total lease cost;
 - c. date of acquisition, creation, upgrade or lease;
 - d. if leased, type and term of lease;
 - e. location of Asset;
 - f. date of Disposal;
 - g. disposal method; and
 - h. if the Asset was partly created, acquired or upgraded using the Funding, the proportion of that creation, acquisition or upgrade that was paid for with the Funding.
- E.1.3. The Recipient must use the Assets created, acquired, or upgraded under this Agreement for the Purpose set out in item A.3 of the Schedule for the duration of the Operational Period.

Real Property

- E.2.1. The Real Property includes the Amy Gillett Bikeway – Mount Torrens to Birdwood project.
- E.2.2. The Capital Works includes the construction of an unsealed shared bike path from Mount Torrens to Birdwood, South Australia including the Works Location.
- E.2.3. The Works Locations extends from Mount Torrens to Birdwood SA, along the designated project track.
- E.2.4. The Recipient must for the Term of this Agreement maintain a Real Property Register in the following form and containing the following information:
- a. Real Property description;

- b. acquisition, upgrade or creation price or total lease cost;
- c. date of acquisition, creation, upgrade or lease;
- d. if leased, type and term of lease;
- e. location of Real Property;
- f. date of Disposal;
- g. disposal method; and
- h. if the Real Property was partly created, acquired or upgraded using the Funding, the proportion of that creation, acquisition or upgrade that was paid for with the Funding.

E.2.5. The Recipient must use the Real Property created, acquired, or upgraded under this Agreement for the Purpose set out in item A.3 of the Schedule for the duration of the Operational Period.

F. Insurance
(clause 21.5)

The Recipient must maintain:

workers compensation insurance as required by law where the Recipient carries out activities under this Agreement;

public liability insurance to the value of at least \$10 million for each and every claim, or occurrence giving rise to a claim, in respect to activities undertaken under this Agreement, where occurrence means either a single occurrence or a series of occurrences if these are linked or occur in connection with one another from one original cause, as the case may be; and

insurance against any loss or damage to an Asset or Real Property for its full replacement cost including where relevant the costs of demolition and removal of debris and the cost of architects, engineers and other consultants.

G. Reserved

H. Acknowledgement and publicity
(clause 14)

H.1.1 If the Recipient erects or maintains any signage in relation to the Project, the signage must be approved by the Commonwealth prior to use and contain an acknowledgement of the Funding as required under Clause 14 of this Agreement. Any signage must remain in place during the Operational Period for the Project as specified in Item A.4. Signage for the Activity may be paid from the Budget if approved by Us. Signage for any other part of the Project must be at the Recipient's own cost.

H.1.2 If a Federal, State or Local Government election is announced, the Recipient must cover any sign that is displayed within 100 metres of a polling place with an opaque (impenetrable to sight), durable and water repellent material from a period not less than 48 hours before the commencement of polling at that polling place until the polls close.

- H.1.3 The Recipient must include the Commonwealth logo in all signage, publications and promotional activities related to the Activity.
- H.1.4 The Recipient must not use the Commonwealth's logo without the Commonwealth's approval. If the Commonwealth provides approval for the Recipient's use of the Commonwealth's logo, the Recipient must use it in accordance with the Commonwealth's Print Style Guidelines (as advised by the Commonwealth).
- H.1.5 All the Recipient's publicity, announcements and media releases relating to the Activity must be cleared through the Commonwealth's contact officer specified at item L of the Schedule with at least 10 Business Days' notice, before release.
- H.1.6 The Commonwealth reserves the right to publicise and report on the provision of Funding to the Recipient, including progress on completing the Activity and the Project. The Commonwealth may do this by including the information specified in clause 14.2 in media releases, general announcements about the Funding and in annual reports and in electronic media.
- H.1.7 The Recipient must conduct an official opening of the completed Activity and Project unless otherwise agreed by the Commonwealth.
- H.1.8 The Recipient must provide to the Commonwealth with at least 3 options for dates for the official opening, or any other milestone events that the Recipient chooses to conduct (e.g. stage completion), for the Activity and the Project. These dates must be provided at least 56 days prior to the first proposed date for each event to be conducted.
- H.1.9 The date of official openings or other official public function for the completed Activity and Project must be agreed by the Commonwealth.
- H.1.10 The Recipient must invite the Commonwealth's representative to officiate at any official opening or other official public function relating to the Activity or the Project.
- H.1.11 The Commonwealth Minister's prior agreement must be sought, to invite any other Commonwealth or State elected official or other officials to attending either function. This invitation must be provided to the Commonwealth no later than 56 days before the date of the official opening or other official public function relating to the Activity or the Project.
- H.1.12 The Recipient must coordinate requests for the Commonwealth's agreement to the date of official openings and requests for Commonwealth representation at official openings or other official functions relating to the Activity or the Project through the Commonwealth's contact officer specified at item L of the Schedule.

I. Reserved

**J. Compliance with laws and policies
(clause 21.13)**

The Recipient must comply with the following laws and policies in carrying out the Activity:

- Crimes Act 1914;
- Criminal Code of Conduct 1995;
- Disability Discrimination Act 1992;
- Workplace Gender Equality Act 2012;
- Building and Construction Industry (Improving Productivity) Act 2016;
- Racial Discrimination Act 1975;
- Sex Discrimination Act 1984;
- Migration Act 1958
- Work Health and Safety Act 2011.

For the purposes of clause 21.13, the following policies are identified:

Community Development Grants Programme – Grant Programme Guidelines

**K. Statutory Approvals
(clause 2A.2)**

For the purposes of subclause clause 2A.2, the Recipient must obtain statutory approvals for the Project.

L. Notices

(clause 18.1)

The Commonwealth's details for notices are as follows:

Name: ~~Jane Hunt~~ **Dr Jennie Hood**
~~Ag~~ Assistant Secretary
Regional Programs Branch

Address: Department of Infrastructure, Transport, Regional
Development, Communications and the Arts
GPO Box 594
CANBERRA ACT 2601

Email: CDG.projects@infrastructure.gov.au

The Recipient's details for notices are as follows:

Name: ~~Mr David Waters~~ **Mr Greg Georgopoulos**

Position: ~~Ag~~ Chief Executive Officer

Address: PO Box 44
WOODSIDE SA 5244

Telephone: 08 8408 0400

E-mail: ggeorgopoulos@ahc.sa.gov.au

M. Applicable Law

(clause 21.14)

The Laws of the Australian Capital Territory apply to this Agreement.

N. Confidential Information

(clause 13)

Commonwealth's Confidential Information

None Specified

Recipient's Confidential Information

None Specified

ANNEXURE A

Table of Milestones, Reports and Funding payments relating to the Activity

Report	Milestone(s) / Information covered by the Report	Milestone Completion Date	Payment amount (GST Exclusive)	Due Date for Report	Due Date for Funding Payment
Progress Report 1	Evidence acceptable to the Commonwealth that the following have been achieved: <ul style="list-style-type: none"> confirmation of final cost estimates; confirmation of final designs; confirmation of State Government funding; the activity at Item A.5 is reviewed and if required, varied to reflect the outputs of the final designs; and 30 10 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	3 October 2023 15 May 2024	\$780,000 \$500,000	1 November 2023 12 June 2024	15 November 2023 26 June 2024
Progress Report 2	Evidence acceptable to the Commonwealth that the following have been achieved: <ul style="list-style-type: none"> 40 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	16 October 2024	\$280,000	13 November 2024	27 November 2024
Progress Report 2-3	Evidence acceptable to the Commonwealth that the following has been achieved: <ul style="list-style-type: none"> 75 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	1 February 2024 20 December 2024	\$1,170,000	1 March 2024 17 January 2025	15 March 2024 31 January 2025

Report	Milestone(s) / Information covered by the Report	Milestone Completion Date	Payment amount (GST Exclusive)	Due Date for Report	Due Date for Funding Payment
Progress Report 3-4	Evidence acceptable to the Commonwealth that the following have been achieved: <ul style="list-style-type: none"> an Event Invitation has been submitted to the Department as required at Item H of the Schedule; and 90 per cent of the Project is completed and certified by the Project Manager, Quantity Surveyor, or similar. 	3 June 2024 3 March 2025	\$390,000	1 July 2024 31 March 2025	15 July 2024 14 April 2025
Project Completion Report	Evidence acceptable to the Commonwealth that the following have been achieved: <ul style="list-style-type: none"> the Activity, at Item A.5 of the Schedule, is complete; the Project, at Item A.2 of the Schedule, is complete; all approvals required to enable public access and use of the facility have been met; and the Project is fully Operational. 	2 September 2024 30 April 2025	\$260,000	2 December 2024 23 July 2025	16 December 2024 6 August 2025

ANNEXURE B

BUDGET FOR THE EXPENDITURE OF CDG FUNDING		
Cost item	Description	Amount (GST exclusive)
Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$2,600,000
Funding (A)		\$2,600,000

OTHER CONTRIBUTIONS (FINANCIAL)			
Name of Contributor	Cost Item	Description of item	Amount (GST exclusive)
South Australian Government	Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$4,800,000 \$2,600,000
Adelaide Hills Council	Construction and Upgrade	Amy Gillett Bike Bikeway – Mount Torrens to Birdwood	\$500,000
Other Contributions (Financial) (B)			\$5,300,000 \$3,100,000

TOTAL COST ESTIMATE (A + B) (GST exclusive):	\$7,900,000 \$5,700,000
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Appendix 4

Geotechnical and Structural Report

Geotechnical Investigation Report

Document no: IW278200-CG-RPT-002

Revision no: A

Department for Infrastructure and Transport (DIT)
17C811

Amy Gillett Bikeway Stage 4
26 July 2022



Geotechnical Investigation Report

Client name: Department for Infrastructure and Transport (DIT)
Project name: Amy Gillett Bikeway Stage 4
Client reference: 17C811 **Project no:** IW278200
Document no: IW278200-CG-RPT-002 **Project manager:** Vahid Bhaskaran
Revision no: A **Prepared by:** Takashi Huang; Steven Turner
Date: 26 July 2022 **File name:**
Doc status: DRAFT

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Revision	Date	Description	Author	Checked	Reviewed	Approved
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Revision	Issue approved	Date issued	Issued to	Comments

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Important note about your report

The sole purpose of this report is to present the findings of a geotechnical investigation carried out by Jacobs for the Client (DIT) in connection with the Amy Gillett Bikeway project. This report was produced in accordance with and is limited to the scope of services set out in the contract between Jacobs and DIT. That scope of services, as described in this report, was developed with DIT.

An assessment or study of on-site conditions investigates the potential for exposure to the presence of ground risk. All reports and conclusions that deal with sub-surface conditions are based on interpretation and judgement and as a result have uncertainty attached to them. You should be aware that this report contains interpretations and conclusions which are uncertain, due to the nature of the investigations. No study can investigate every risk, and even a rigorous assessment and/or sampling programme may not detect all problem areas within a site.

This report is based on assumptions that the site conditions as revealed through sampling are indicative of conditions throughout the site. The findings are the result of standard assessment techniques used in accordance with normal practices and standards, and (to the best of Jacobs knowledge) they represent a reasonable interpretation of the current conditions on the site.

Sampling techniques, by definition, cannot determine the conditions between the sample points and so this report cannot be taken to be a full representation of the sub-surface conditions. This report only provides an indication of the likely sub-surface conditions.

Conditions encountered when site work commences may be different from those inferred in this report, for the reasons explained in this limitation statement. If site conditions encountered during site works are different from those encountered during Jacobs site investigation, Jacobs reserves the right to revise any of the findings, observations and conclusions expressed in this report.

The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report.

In preparing this report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by DIT and from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

This report does not address environmental or geo-environmental issues including the presence of any contaminants or hazardous materials at the site unless Jacobs was specifically and expressly retained to do so.

Except as specifically stated in this report, Jacobs makes no statement or representation of any kind concerning the suitability of the site for any purpose or the permissibility of any use. Use of the site for any purpose may require planning and other approvals and, in some cases, Environmental Protection Authority and accredited site auditor approvals. Jacobs offers no opinion as to the likelihood of obtaining any such approvals, or the conditions and obligations which such approvals may impose, which may include the requirement for additional environmental investigations and/or works.

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1. Introduction

The Amy Gillett Bikeway is a shared user path in the Adelaide Hills along the historic Mount Pleasant railway line, which has been funded and completed in stages, with Stage 3 between Charleston and Mount Torrens most recently completed and opened in 2014. Stage 4, between Mount Torrens and Birdwood, will provide approximately 5.6 km of dedicated, Shared Use Pathway providing a 'right of way' for pedestrians, cyclists and horse-riders in the Adelaide Hills.

The South Australian Department for Infrastructure and Transport (DIT) has commissioned Jacobs to undertake the detailed design of Stage 4 of the Amy Gillett Bikeway. The proposed location of the Stage 4 Bikeway is shown in Appendix A.

Jacobs has undertaken a desktop assessment and geotechnical investigations to inform the design of the Williams Creek and Angas Creek bridges. This geotechnical investigation report documents the findings of the desktop assessment, the field works and laboratory testing carried out and provides an assessment of the ground conditions encountered during the investigation.

1.1 Proposed infrastructure

The proposed bikeway infrastructure includes two proposed bridges over Williams Creek and Angas Creek. The proposed bridge locations coincide with railway bridges associated with the now decommissioned Mount Pleasant railway line. A plan showing the proposed bridge locations and the as constructed borehole locations is included in Figure 1-1.



Figure 1-1. Plan showing proposed bridge and as constructed borehole locations (Source QGIS)

1.2 Scope of geotechnical investigation

The geotechnical investigations were undertaken between 21st and 24th June 2022 by Jacobs. The scope of works for the investigations has been summarised below and further descriptions of the field and laboratory investigations is presented in the subsequent sections of the report.

- A desk top assessment of publicly available information relevant to the site was completed.
- A site walkover was undertaken prior to the investigation to review site access and provisionally assess the borehole positions at each bridge.
- A Dial Before You Dig search was undertaken prior to mobilising to site. A service locator from Trenchless Pipelaying Contractors was engaged by Jacobs to clear the borehole locations prior to drilling.
- 4 No. boreholes were drilled to depths of between 11.5 m and 15.0 m below ground level (BGL), using hollow auger methods (MK/5 drill rig – Beyond Drilling Pty Ltd).

- Visual and tactile assessment of the ground conditions encountered in the boreholes was undertaken by Jacobs staff in accordance with AS1726-2017 [Ref 1].
- In order to characterise the ground conditions, the following geotechnical laboratory tests were undertaken on recovered samples: Atterberg limit, moisture content, unconsolidated undrained triaxial, particle size distribution and hydrometer. SMS Geotechnical were engaged by Jacobs to carry out geotechnical soils laboratory testing.
- Aggressivity testing was also undertaken to allow the exposure classifications of in-ground concrete and steel to be assessed. SMS Geotechnical were engaged by Jacobs to carry out geotechnical soils laboratory testing.

1.3 Objectives of geotechnical investigation

The objectives of the geotechnical investigation documented in this report are summarised below:

- Determine the ground profile at the proposed bridge crossings.
- Provide preliminary recommended geotechnical parameters for design.
- Provide a summary of any potential ground related construction issues.

2. Desktop Assessment

2.1 Review of existing geotechnical information

DIT has not provided any existing project related geotechnical information for review. The following publicly available information sources have been reviewed to gather useful geotechnical information:

- Australian Stratigraphic Units Database: <https://asud.ga.gov.au/search-stratigraphic-units>
- [Commonwealth Scientific and Industrial Research Organisation \(CSIRO\) Australian Acid Sulfate Soils Map: http://www.asris.csiro.au/mapping/hyperdocs/NatASS_metadata\(06-11\).pdf](http://www.asris.csiro.au/mapping/hyperdocs/NatASS_metadata(06-11).pdf)
- CSIRO Depth of Regolith Database: https://www.asris.csiro.au/arcgis/rest/services/TERN/DER_ACLEP_AU_NAT_C/MapServer
- Geological Survey of South Australia (GSSA), Department for Energy and Mining, Adelaide Sheet 6628: 1:100,000, 2020
- GSSA Department for Energy and Mining, Bulletin 54 The geology of South Australia
- South Australian Resources Information Gateway SARIG (<https://map.sarig.sa.gov.au/>)
- Water Connect (<http://www.waterconnect.sa.gov.au>)

2.2 Site location

The project site is located within a disused rail corridor approximately 30 km east of Adelaide CBD between Birdwood in the north and Mount Torrens in the south (See Appendix A). While the Williams Creek bridge and Angas creek bridge which are the focus of this report are located approximately 1 km south of Birdwood and accessed via Mullers Road.

2.3 Site description and topography

The William Creek bridge site is at the location of a disused railway bridge. The bridge deck is no longer in place but, the concrete abutments, wingwalls and piers are still in place within Williams Creek (See Section 2.9.3). The railway embankment fill directly behind the abutments has been partially removed. The site is within the flood plain of Williams Creek at an elevation of approximately 380 m AHD. The creek is approximately 15 m wide at the location of the bridge, but heavily overgrown with reeds and some large trees to the west. The creek is ephemeral and during the site walkover the water level was nominally 0.4 m deep.

The Angas Creek bridge site is at the location of a disused railway bridge. The bridge deck is no longer in place but, the concrete abutments, wingwalls and piers are still in place within Angas Creek (See Section 2.9.3). The site is within the flood plain of Angas Creek at an elevation of approximately 382 m AHD. The creek is approximately 20 m wide at the location of the bridge, but heavily overgrown with reeds and large trees to the west. The creek is ephemeral and during the site walkover there was water in the creek, but we were unable to assess the depth.

2.4 Regional geology

The regional geology of the proposed bikeway crosses 5 geological units, and in some sections straddles the geological boundaries of those units (See Figure 2-1).

The proposed route passes through multiple geological units, but is predominantly within the Kanmantoo Group (Ek) of early Cambrian age. The Kanmantoo Group (Ek) is composed of marine metasediments, phylites, schist, gneiss, minor calcisilicate rock and marble. However, some section may be within the Belair Subgroup (NI) of Neoproterozoic age, which is composed of siltstones, sandstone, dolomite interbeds and quartzite.

Based on the geological information at the location of the proposed William Creek bridge and Angas Creek bridges, the ground profile will likely to consist of Quaternary deposits (alluvium) underlain by rocks (limestone and/or schist) that are part of Kanmantoo Group (Ek).

The CSIRO Regolith Depth Database indicates that the depth to bedrock in the area ranges from 6.8 to 8.0 m BGL.

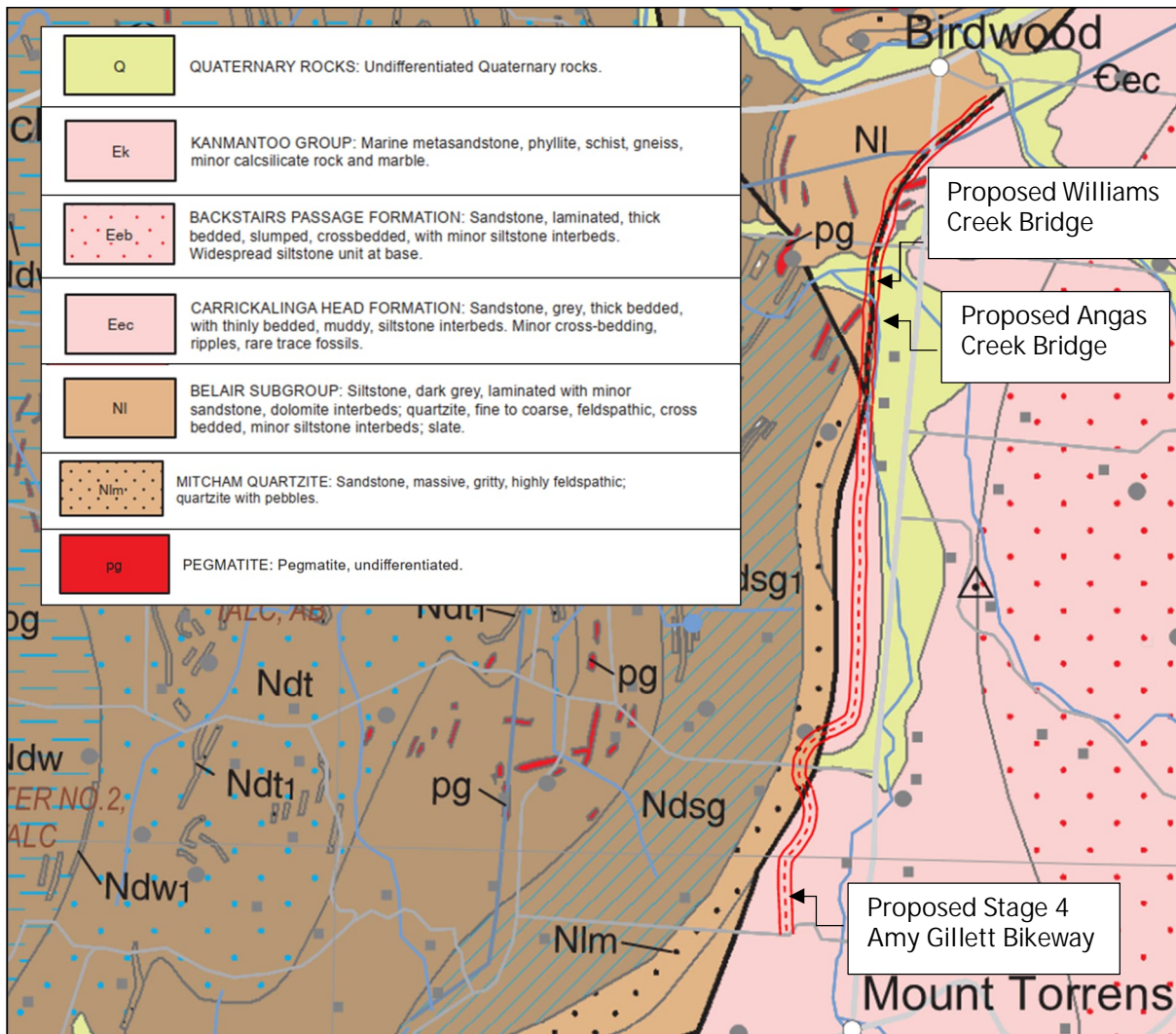


Figure 2-1. Geology map extract

2.5 Groundwater

The Water Connect (watterconnect.sa.gov.au) website was used to assess the anticipated groundwater level at Williams Creek and Angas Creek. The results are summarised below:

- Two groundwater wells (6628-20674 and 6628-28752) were identified nominally 200 m to the west and east Williams Creek respectively. The standing groundwater level was recorded as 0.5 m BGL (6628-20674) and 3.1 m BGL (6628-28752).
- A groundwater well (6628-8513) was identified several metres to the southwest of the Angas Creek bridge location and had a standing groundwater level of 2.74 m BGL.

2.6 Previous geotechnical investigations

The SARIG data based was used to identify existing borehole information within the vicinity of the sites. The following borehole ID's were 55504, 189244, 186866, 55490, 190586, 181047, 61337, 181993 and 57731 were identified to be within the vicinity of the site. A review of these boreholes indicated that shallow rock, typically < 5m BGL should be anticipated along the proposed bikeway route and at the bridge locations.

2.7 Acid sulphate soils (ASS)

The CSIRO Acid Sulfate Soils Map indicates the likelihood of sulphate soil occurring at the location of proposed Williams Creek Bridge and Angas Creek Bridge is extremely low (Class Cn(p4)). In addition, the CSIRO Regolith Depth Database indicate the depth to bedrock in the area ranges from 6.8 to 8 m BGL.

2.8 Services location information

A Dial Before You Dig search was provided by DIT. The plans with associated mark-ups are included in Appendix C.

The relevant asset owners identified and alerted by DYBD include NBN, SAPN, SA Water and Telstra. Services identified within the vicinity of the site included:

- SA Water water main and associated meters following Pipe Lane, Onkaparinga Valley Road and William Street, Burfords Hill Road and Oval Road
- SAPN cables along Martha Street, Pipe Lane and William Street. Electricity poles near Mullers Road and associated underground cables approximately 150 m north to Posen Road
- Telstra cables along Onkaparinga Valley Road and the rail corridor
- NBN cables following Pipe Lane, Onkaparinga Valley Road and William Street

2.9 Site walkover

A site walk-over was undertaken on the 17th June 2022 with representatives of the Jacobs design team and DIT project manager. The walkover was used to observe the near surface ground conditions along the proposed bikeway alignment and access constraints for the geotechnical investigations at Williams Creek bridge and Angas Creek bridge. Due to access constraints, the site walk-over did not cover the entire alignment, only publicly accessible parts of the alignment were inspected. Notable findings from the site walkover are summarised in the following sections.

2.9.1 Shallow rock head

At the northern part of the bikeway alignment, between Blocks Lane and William Street in Birdwood, rock outcrops were observed in the railway cutting (See Appendix B – Photographs 1 to 3). The rocks observed include dolomite, sandstone, and siltstones, which are interbedded and at shallow depth, less than 1 m BGL. This is consistent with the geological information summarised in Section 2.4, and are likely to be part of Belair Subgroup (NI). An outcrop of schist was also observed in the same area, which is likely to be part of the Kanmantoo Group (Ek) (See Appendix B – Photograph 4).

2.9.2 Access constraints

Site access constraints were identified from the site walk-over, which include fences (electrified), localised ditches, unconsolidated soil cover and dense vegetation. Through discussion with a property owner it was highlighted that during winter some paddock will become waterlogged and would be unsuitable for heavy machinery to traverse. Examples of access constraints can be seen in Figure 2-2 and Figure 2-3.

The engineering survey identified that NBN underground optic fibres cross Williams Creek at the location shown in Figure 2-3. This was also confirmed through discussions with the property owner during the site walkover. The area shown in Figure 2-3 was confirmed to be the only access route to the southern abutment of the Williams Creek bridge and the northern abutment of the Angas Creek bridge.



Figure 2-2. Electrified fence encountered during site walk-over



Figure 2-3. Angas creek directly to the west of the disused railway bridge abutments

2.9.3 Existing structures

In addition to the scattered remains of decommissioned railway infrastructure, structures were observed at Williams Creek, Angas Creek and Burfords Hill Road.

Bridge abutment fill has been removed at Williams Creek and Angas Creek, and the reinforced concrete wingwalls are in poor condition. The concrete surfaces of the wingwalls have been affected by spalling, honeycombing and cracking; steel reinforcement is exposed. Inspection of bridge piers from distance showed exposed footings in poor conditions similar to the wingwalls. Figure 2-4 shows the bridge wingwalls and pier at Williams Creek and Figure 2-5 shows the bridge piers and northern wingwall at Angas Creek.

At Burfords Hill Road, the railway bridge deck and the abutment wingwalls were inspected. The whole structure is in a poor condition, with cracks throughout. Exposed steel reinforcement was observed throughout the bridge deck. However, no steel reinforcement was observed in the abutment wingwalls, where there were cracks throughout. As bridge construction drawings are not available it is not known if the wingwalls are comprise reinforced or mass concrete. The abutment fill is missing at the northern abutment, as shown in Photograph 8 of Appendix B, and a large crack was observed at the southern abutment, as seen in Figure 2-6.



Figure 2-4. Williams Creek railway bridge abutment, wingwalls and pier (looking east)



Figure 2-5. Angas Creek railway bridge piers and northern abutment (looking south)



Figure 2-6. Burfords Hill Road bridge, south-west wingwall showing significant cracking

2.9.4 General conditions of rail corridor

Several areas of water ponding were observed along the proposed bikeway alignment during the site walkover, as shown in Photograph 12 in Appendix B. It is noted that the inspection was undertaken during winter time after consecutive days of rain, therefore, ponding may not be present throughout the course of a year. However, such observations indicate that the decommissioned railway embankments and cuttings have poor drainage in places.

In addition, the rail corridor has generally been poorly maintained. Ballast has been removed along the majority of the former rail corridor. Where ballast was found, it was generally in piles or patches, as shown in Photograph 13 in Appendix B.

3. Geotechnical investigation

3.1 Field methodology

The geotechnical investigation was undertaken between the 21st June and 24th June 2022. A total of 4 boreholes were drilled to depths of between 11.5 m BGL and 15 m BGL. Three out of the four boreholes were terminated at shallower depths than the target depth of 15 m, as a result of machine refusal in very dense sand and weathered rock.

The boreholes were logged on site in accordance with AS 1726-2017 [Ref 1] by a Jacobs geotechnical engineer. The boreholes were back filled with arisings on completion. The borehole locations are shown in Figure 1-1, and the soil profiles encountered are described in the engineering logs included in Appendix D and summarised in Section 4.1.

3.2 Laboratory testing

Bulk disturbed and undisturbed U50 samples were collected at various depths within each borehole and submitted to SMS Geotechnical in Adelaide for testing, which included:

- Atterberg limits (5 No. tests)
- Moisture content (5 No. tests)
- Particle size distribution (11 No. tests, including 5 No. hydrometer tests)
- Undrained unconsolidated triaxial (3 No. tests)
- pH (8 No. tests)
- Resistivity (8 No. tests)
- Sulphate (8 No. tests)
- Chloride (8 No. tests)

3.3 In-situ testing

Standard Penetration Tests (SPTs) were undertaken at nominal 1.5 m intervals and the materials recovered in the SPT split spoon sampler were logged in accordance with AS 1726-2017 [Ref 1].

4. Geotechnical site conditions

4.1 Sub-surface conditions

The sub-surface conditions encountered during the investigation were in general agreement with the regional geology described in Section 2. A summary of the typical sub-surface profiles encountered in each borehole is presented in Table 4-1.

Table 4-1. Summary of sub-surface conditions

Structure name / type	Typical depth range (m BGL)	Typical level range (m AHD)	Summary of sub-surface conditions encountered
Williams Creek Bridge North Abutment (BH01)	0.0 – 0.5	380.8 – 380.3	TOPSOIL (Silty CLAY, low plasticity)
	0.5 – 1.5	380.3 – 379.3	Stiff CLAY, medium plasticity
	1.5 – 5.0	379.3 – 375.8	Loose to medium dense Clayey SAND / sandy GRAVEL, fine to coarse grained
	5.0 – 7.5	375.8 – 373.3	Very stiff CLAY, high plasticity
	7.5 – 8.5	373.3 – 372.3	Clayey SAND, fine grained
	8.5 – 15.0	372.3 – 365.8	Extremely weathered Schist (hard Sandy SILT / CLAY, low plasticity)
Williams Creek Bridge South Abutment (BH02)	0.0 – 1.0	381.1 – 380.1	TOPSOIL (CLAY, low plasticity)
	1.0 – 2.5	380.1 – 378.6	Medium dense, silty SAND, fine grained
	2.5 – 4.7	378.6 – 376.4	Very soft to firm CLAY, medium plasticity with interbedded very loose SAND, fine grained
	4.7 – 7.0	376.4 – 374.1	Residual Soil (very stiff Sandy CLAY / SILT, non-plastic))
	7.0 – 13.5	374.1 – 367.6	Extremely weathered Schist (hard clayey sandy SILT, non-plastic)
Angas Creek Bridge North Abutment (BH03)	0.0 – 0.6	380.9 – 380.3	TOPSOIL (sandy SILT, non-plastic)
	1.0 – 3.0	380.3 – 377.3	Clayey SAND / sandy CLAY, firm to very stiff, low plasticity fines, fine to medium grained sand.
	3.0 – 5.4	377.3 – 375.5	Medium dense SAND/ gravelly silty SAND , fine to medium grained.
	5.4 – 5.8	375.5 – 375.1	Residual soil – hard SILT, low plasticity
	5.8 – 7.3	375.1 – 374.4	Residual soil - medium dense gravelly silty SAND / sandy gravelly SILT, sand is fine to coarse grained
	7.3 – 12.0	374.4 – 368.9	Residual soil – very dense, clayey sandy GRAVEL, fine to medium grained, sub-angular to angular
Angas Creek Bridge	0.0 – 2.0	382.7 – 380.7	FILL – medium dense gravelly COBBLES, angular to sub-angular and gravelly silty SAND
	2.0 – 5.7	380.7 – 377.0	Medium dense clayey silty SAND, fine to coarse grained

Structure name / type	Typical depth range (m BGL)	Typical level range (m AHD)	Summary of sub-surface conditions encountered
South Abutment (BH04)	5.7 – 7.0	377.0 – 375.7	Residual Soil (medium dense sandy silty GRAVEL, coarse grained / very stiff sandy gravelly SILT, non-plastic)
	7.0 – 7.7	375.7 – 375.0	Residual Soil (very dense gravelly silty SAND, fine grained)
	7.7 – 8.6	375.0 – 374.1	Residual Soil (hard gravelly SILT, low plasticity / very dense silty Gravel, fine to coarse grained)
	9.0 – 11.5	373.7 – 371.2	Residual soil and weathered rock –recovered as silty GRAVEL, fine to coarse, sub-angular to angular.

4.2 Standard penetration test plots

Standard penetration tests (SPTs) were undertaken in all boreholes and the results have been used to correlate undrained shear strengths in fine grained soils and friction angles in coarse grained soils. The SPT results versus reduced level for each bridge site are presented in Figure 4-1.

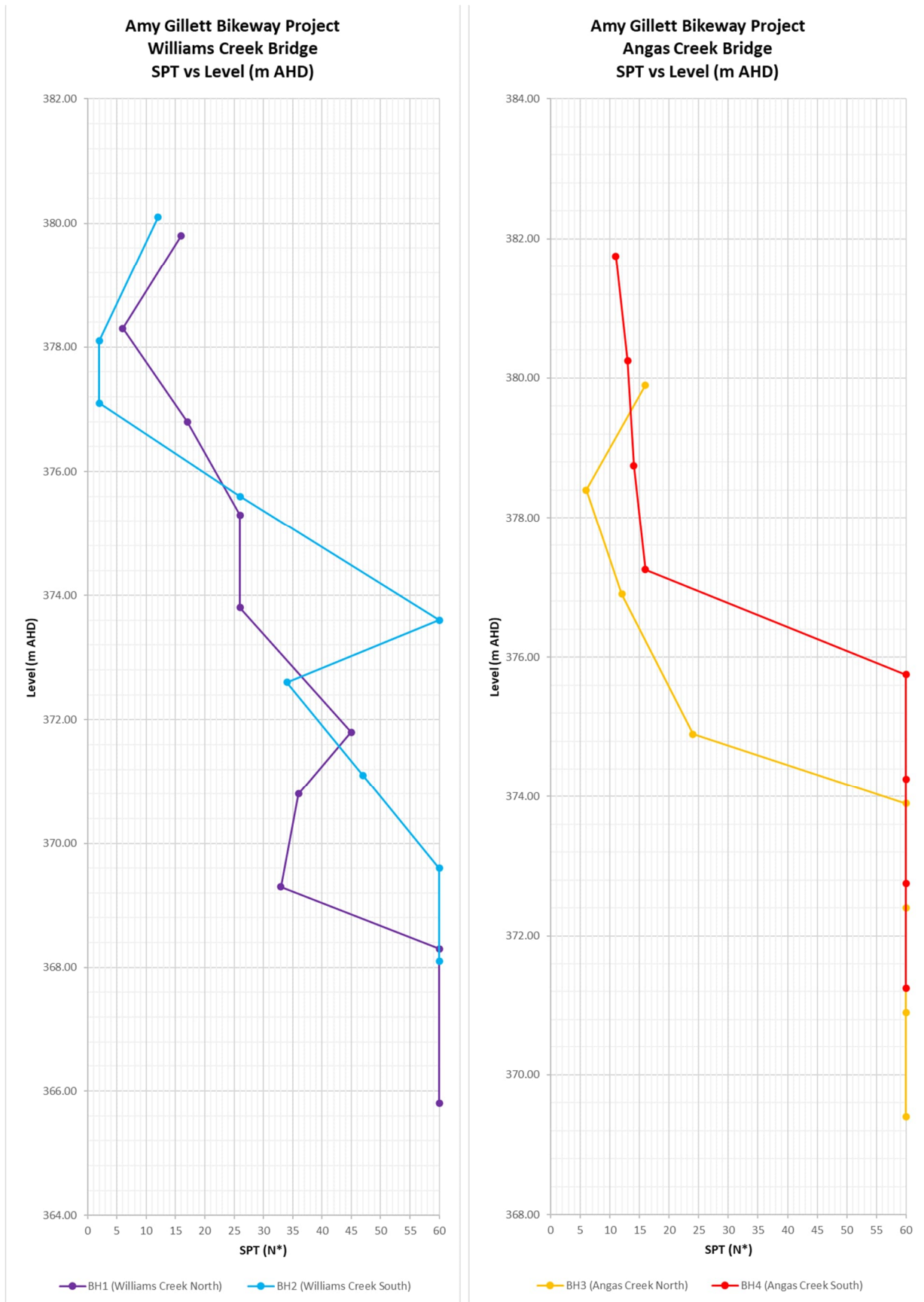


Figure 4-1. Structure specific SPT N values verses m AHD

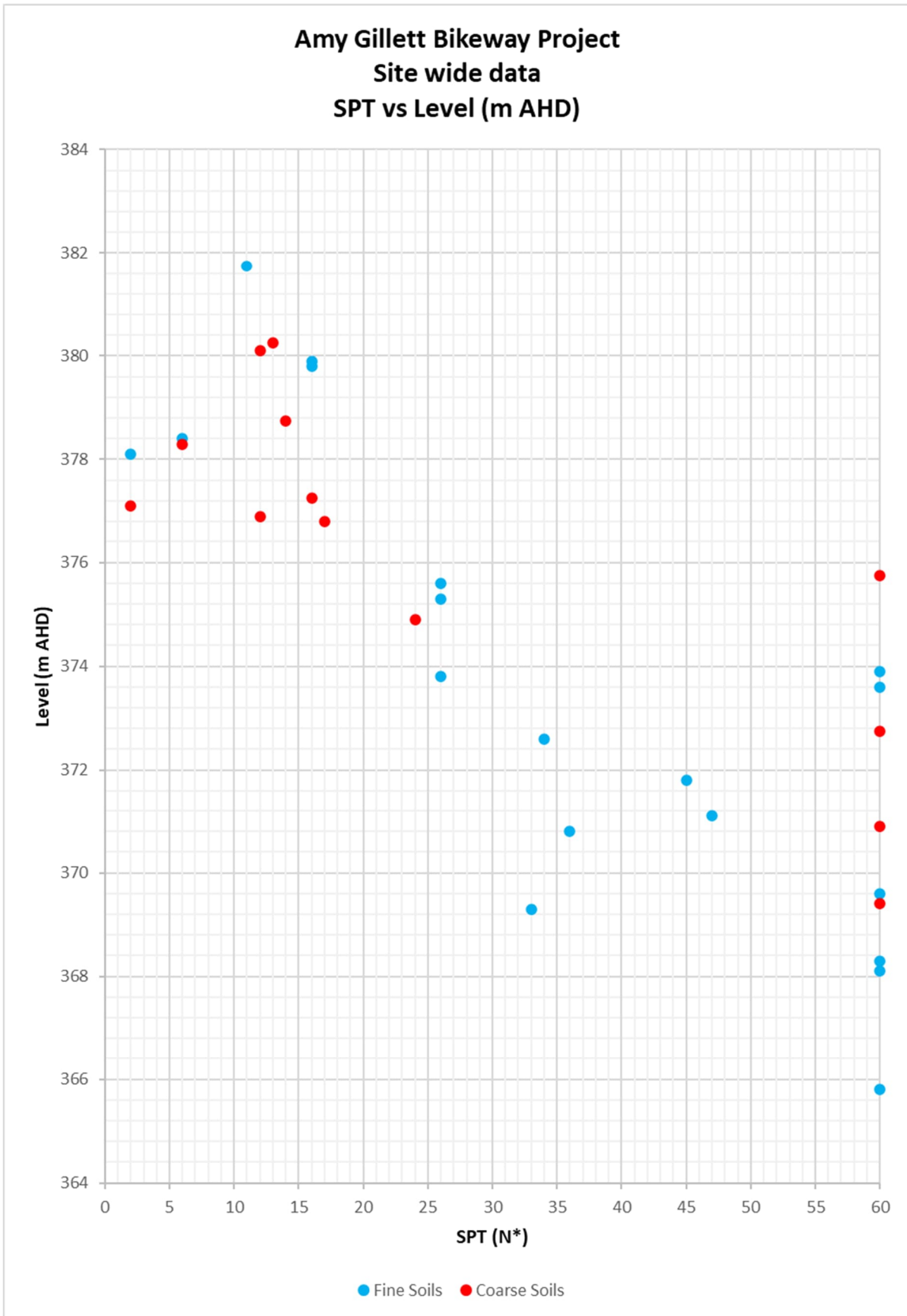


Figure 4-2. Site-wide fine grained and coarse-grained soil SPT N values verses m AHD

4.3 Groundwater

Due to the proximity of the sites to Williams Creek and Angas Creek groundwater was expected to be shallow. The groundwater archives from the South Australian Government Water Connect website (www.waterconnect.sa.gov.au) indicate that groundwater levels in the vicinity of the sites range from 2.0 m BGL to 7.5 m BGL.

The groundwater level observations during the investigation ranged from 2.5 m BGL to 5.5 m BGL. It is noted that all the observations were made during drilling and no standpipe piezometers were installed as part of the investigation.

Table 4-2. Summary of groundwater observations

Structure Name	Borehole I.D.	Observed Depth (m BGL)	Observed Level (m AHD)
Williams Creek Bridge (North Abutment)	BH01	3.0	377.8
Williams Creek Bridge (South Abutment)	BH02	3.0	378.1
Angas Creek Bridge (North Abutment)	BH03	2.5	378.4
Angas Creek Bridge (South Abutment)	BH04	5.5	377.2

4.4 Geotechnical laboratory testing

A suite of geotechnical laboratory tests was undertaken on a selection of the recovered samples. The types of tests undertaken are summarised in Section 4.4 and the results are presented in the subsequent sections. Laboratory test certificates are included in Appendix E.

4.4.1 Summary of geotechnical laboratory testing

Geotechnical laboratory tests were undertaken in accordance with the following Australian Standards where applicable:

Table 4-3. Summary of standards adopted during laboratory testing

Australian Standard	Description / Title
AS1289 2.1.1	Soil moisture content tests – Determination of the moisture content of a soil
AS1289 3.1.1	Soil classification tests – Determination of liquid limit of soil
AS1289 3.2.1	Soil classification tests – Determination of plastic limit of soil
AS1289 3.3.1	Soil classification tests – Calculation of the plasticity index of a soil
AS1289 3.4.1	Soil classification tests – Determination of linear shrinkage
AS1289 3.6.1	Soil classification tests – Determination of particle size distribution – standard method of analysis by sieving
AS1289 3.6.3	Soil classification tests – Determination of particle size distribution – standard method of fine analysis using a hydrometer
AS1289.4.4.1	Soil Chemical Tests – Determination of the electrical resistivity of a soil – methods for sands and granular materials

Australian Standard	Description / Title
AS1289 6.4.1	Soil strength and consolidation tests – Determination of compressive strength of a soil – Compressive strength of soil tested in undrained triaxial compression without measurement of pore pressure.
NEPM 1999	Sulphate testing
APHA 4500 Cl-B	Soluble chloride testing
Rayment and Lyons 2011 4B1	pH (CaCl ₂) testing

4.4.2 Atterberg limit testing

A total of 5 Atterberg limit tests, including linear shrinkage, were undertaken on a selection of the recovered samples across the site. The results are presented in the plasticity chart in Error! Reference source not found. and indicate that the fine-grained material that was tested ranged from low plasticity CLAY and SILT to medium plasticity CLAY.

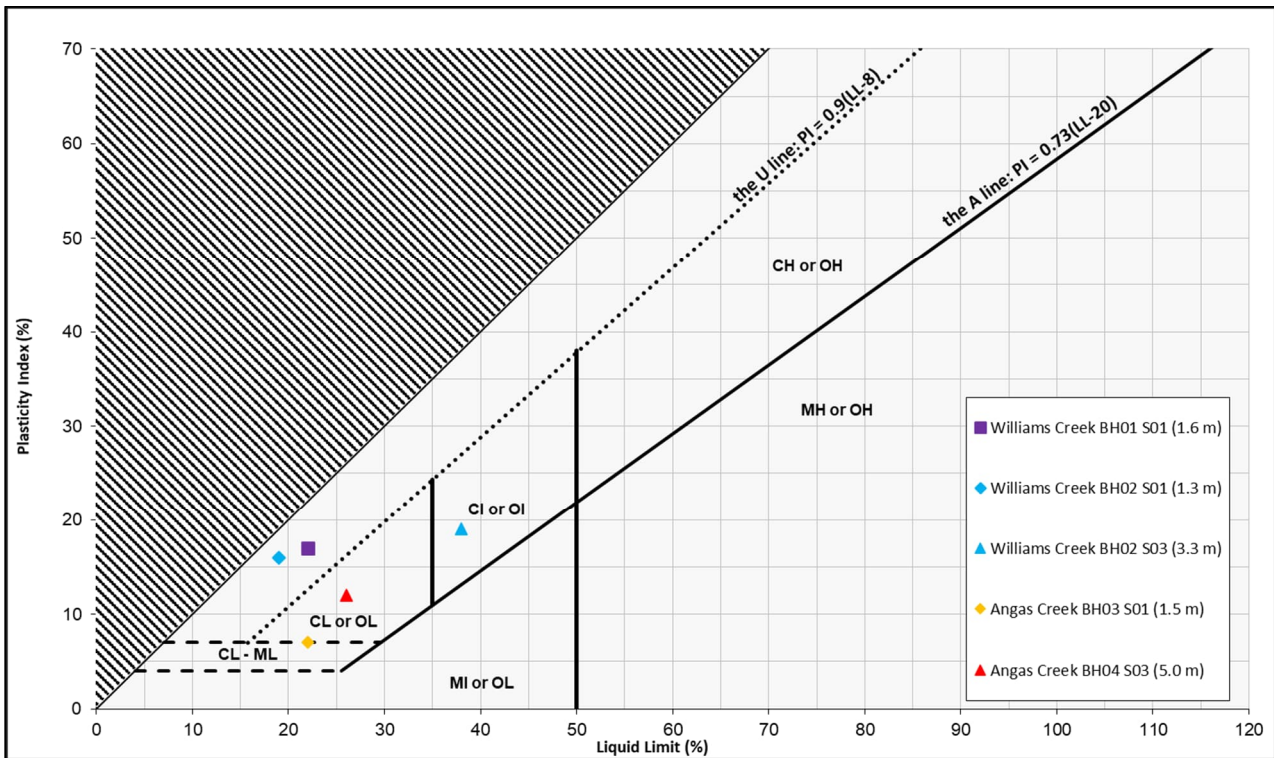


Figure 4-3. Plasticity chart for site wide data

4.4.3 Particle size distribution

Particle size distribution (PSD) tests were undertaken on 11 recovered samples. 5 out of the 11 tests included hydrometer analyses. The PSD curves are presented in Figure 4-4.

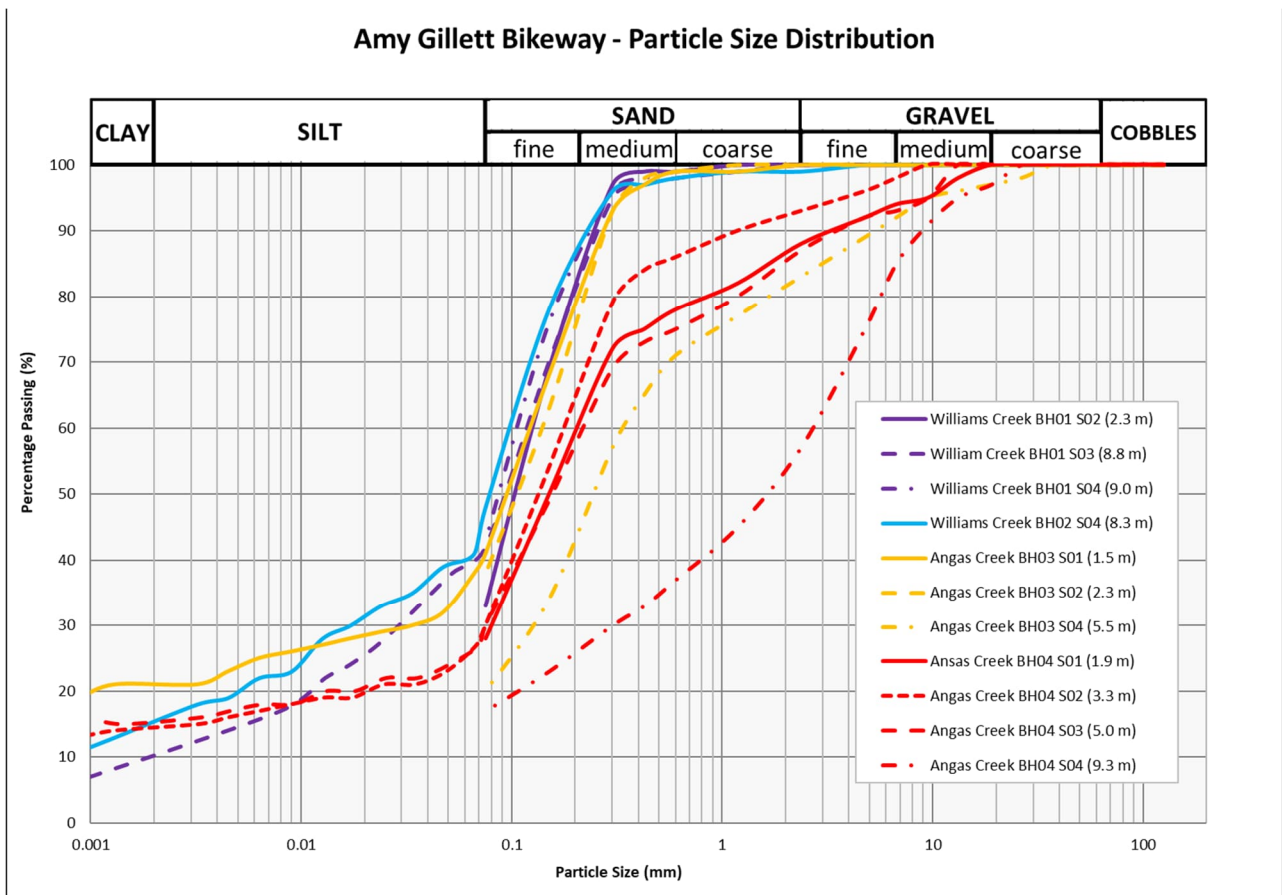


Figure 4-4. Particle size distribution curves (average depth of sample)

4.4.4 Unconsolidated undrained triaxial tests

A total of 3 No. unconsolidated undrained triaxial tests were undertaken on recovered U50 samples. The undrained shear strengths ranged from 49 kPa to 360 kPa, from firm to hard and are shown in Figure 4-6.

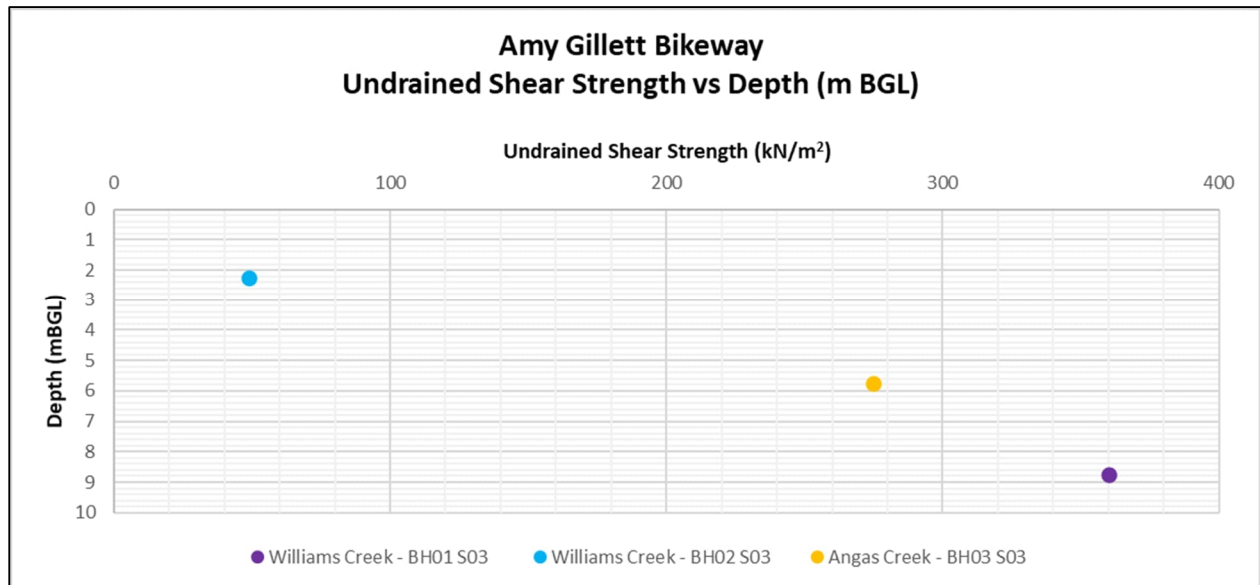


Figure 4-5. Undrained shear strength vs depth

4.4.5 Soil aggressivity testing

The results of 8 No. (4 No. tests per bridge) aggressivity tests on soil samples recovered across the site during the investigation indicate that soils have the following properties as summarised below:

Table 4-4. Summary of soil aggressivity testing

Structure name	Test	Minimum	Maximum	Average
Williams Creek Bridge	pH	8.5	9.3	9
	Soluble Sulfate (mg/L) (as SO ₄)	30	230	105
	Chloride (mg/L)	160	900	385
	Resistivity (ohm.cm)	1650	6710	3902
Angas Creek Bridge	pH	5.2	8.6	7.28
	Soluble Sulfate (mg/L) (as SO ₄)	70	290	177
	Chloride (mg/L)	60	930	390
	Resistivity (ohm.cm)	1490	10500	5510

4.4.5.1 Williams Creek Bridge

Based on the results above a concrete exposure classification of mild is considered appropriate for the site, based on Table 6.4.2(C) in AS 2159-2009 for concrete piles in soil, assuming soil conditions A.

The soil samples tested for resistivity as part of this investigation indicate that the soils have a moderate exposure classification for soil conditions A, based on Table 6.5.2 (C) in AS 2159-2009 for steel piles in soil.

4.4.5.2 Angas Creek Bridge

Based on the results above a concrete exposure classification of mild is considered appropriate for the site, based on Table 6.4.2(C) in AS 2159-2009 for concrete piles in soil, assuming soil conditions A.

The soil samples tested for resistivity as part of this investigation indicate that the soils have a moderate exposure classification for soil conditions A, based on Table 6.5.2 (C) in AS 2159-2009 for steel piles in soil.

5. Geotechnical assessment

5.1 Geotechnical properties

Geotechnical properties for the soils encountered have been derived by comparing descriptions and in situ test results with published values and correlations. A design ground profile has been provided for each abutment where intrusive geotechnical investigations were conducted. Explanations of the parameter derivations are provided below:

- The effective angle of shearing resistance is based on published correlations in AS 4678-2022 [Ref 2] Figure D1 and Table D2 for fine-grained and coarse-grained materials respectively.
- The undrained shear strength is based on unconsolidated undrained triaxial tests and correlations of 5 x SPT N value, which is presented in Tomlinson 2001 Foundation Design and Construction [Ref 3].
- The drained modulus for the coarse-grained material is based on a 1 x SPT N (MPa) correlation as presented in CIRIA Report 143 – SPT Methods and Use [Ref 4]. The undrained modulus (MN/m²) of the fine-grained material is based on a correlation of $E_u / c_u = 300$ presented in Tomlinson 2001 Foundation Design and Construction. The drained modulus of the fine-grained soils is taken as 0.75 of the undrained modulus.
- The unit weight of the soils has been estimated based on site descriptions and values presented in Table D1 of AS 4678-2022.

Table 5-1. Summary of geotechnical properties – William Creek Bridge (North Abutment – BH01)

Material	Typical Depth Range (m BGL)	Typical Level Range (m AHD)	Effective friction angle Φ' (degrees)	Apparent cohesion c' (kN/m ²)	Undrained shear strength c_u (kN/m ²)	Saturated unit weight (kN/m ³)	Undrained Modulus E_u (MN/m ²)	Drained Modulus E' (MN/m ²)
Topsoil	0.0 – 0.5	380.8 – 380.3	-	-	-	-	-	-
Stiff CLAY	0.5 – 1.5	380.3 – 379.3	26	2	85	19	25.5	19
Loose to medium dense SAND / GRAVEL	1.5 – 5.0	379.3 – 375.8	34	0	N/A	20	N/A	6
Very stiff CLAY	5.0 – 7.5	375.8 – 373.3	26	5	130	19	39	29
SAND	7.5 – 8.5	373.3 – 372.3	32	0	N/A	21	N/A	5
Hard SILT / CLAY	8.5 – 15.0	372.3 – 365.8	28	10	300	20	90	67.5

Table 5-2. Summary of geotechnical properties – Williams Creek Bridge (South Abutment – BH02)

Material	Typical Depth Range (m BGL)	Typical Level Range (m AHD)	Effective friction angle Φ' (degrees)	Apparent cohesion c' (kN/m ²)	Undrained shear strength c_u (kN/m ²)	Saturated unit weight (kN/m ³)	Undrained Modulus E_u (MN/m ²)	Drained Modulus E' (MN/m ²)
Topsoil	0.0 – 1.0	381.1 – 380.1	-	-	-	-	-	-
Medium dense SAND	1.0 – 2.5	380.1 – 378.6	32	0	N/A	20	N/A	12
Very soft CLAY	2.5 – 4.7	378.6 – 376.4	26	2	50	19	15	11
Very stiff CLAY / SILT	4.7 – 7.0	376.4 – 374.1	26	5	130	19	39	29
Hard SILT / CLAY	7.0 – 13.5	374.1 – 367.6	28	10	250	20	75	56

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Table 5-3. Summary of geotechnical properties – Angas Creek Bridge (North Abutment – BH03)

Material	Typical Depth Range (m BGL)	Typical Level Range (m AHD)	Effective friction angle Φ' (degrees)	Apparent cohesion c' (kN/m ²)	Undrained shear strength c_u (kN/m ²)	Saturated unit weight (kN/m ³)	Undrained Modulus E_u (MN/m ²)	Drained Modulus E' (MN/m ²)
Topsoil	0.0 – 0.6	380.9 – 380.3	-	-	-	-	-	-
Stiff CLAY	1.0 – 3.0	380.3 – 377.3	26	2	80	19	24	18
Medium dense SAND	3.0 – 5.4	377.3 – 375.5	32	0	N/A	19	N/A	9
Hard SILT	5.4 – 5.8	375.5 – 375.1	28	10	275	20	82.5	62
Medium dense gravelly SAND	5.8 – 7.3	375.1 – 374.4	36	0	N/A	21	N/A	24
Very dense clayey sandy GRAVEL	7.3 – 12	374.4 – 368.9	38	0	N/A	21	N/A	60

Table 5-4. Summary of geotechnical properties – Angas Creek Bridge (South Abutment – BH04)

Material	Typical Depth Range (m BGL)	Typical Level Range (m AHD)	Effective friction angle Φ' (degrees)	Apparent cohesion c' (kN/m ²)	Undrained shear strength c_u (kN/m ²)	Saturated unit weight (kN/m ³)	Undrained Modulus E_u (MN/m ²)	Drained Modulus E' (MN/m ²)
FILL – SAND / COBBLES	0.0 – 2.0	382.7 – 380.7	36	0	N/A	20	N/A	11
Medium dense SAND	2.0 – 5.7	380.7 – 377.0	34	0	N/A	21	N/A	13
Medium dense sandy silty GRAVEL	5.7 – 7.0	377.0 – 375.7	34	0	N/A	21	N/A	16
Very dense gravelly silty SAND	7.0 – 7.7	375.7 – 375.0	38	0	N/A	21	N/A	60
Hard gravelly SILT	7.7 – 8.6	375.0 – 374.1	26	10	300	20	90	67.5
Very dense silty GRAVEL / GRAVEL	9.0 – 11.5	373.7 – 371.2	38	0	N/A	20	N/A	60

5.1.1 Foundation options

The initial foundations options are likely to be either strip footings or piled foundations. Although, based on the above ground profiles it is unlikely that a shallow strip footing will provide the required bearing capacity. Therefore, piles are likely to be the preferred founding solution. Although, both are still subject to confirmation.

5.1.2 Pile design parameters

Based on initial pile capacity assessments for an assumed 0.4 m x 0.4 m square driven pile pre-cast concrete, with 4 no. piles at each abutments the following pile design parameters may be adopted:

Geotechnical Investigation Report

Table 5-5. Summary of pile design parameters – William Creek Bridge (North Abutment – BH01)

Material	Typical depth range (m BGL)	Typical level range (m AHD)	Design unit shaft friction f_s (kPa)	Design base resistance f_b (kPa)
Topsoil	0.0 – 0.5	380.8 – 380.3	-	-
Stiff CLAY	0.5 – 1.5	380.3 – 379.3	45	600
Loose to medium dense SAND / GRAVEL	1.5 – 5.0	379.3 – 375.8	10	1450
Very stiff CLAY	5.0 – 7.5	375.8 – 373.3	40	900
SAND	7.5 – 8.5	373.3 – 372.3	25	2300
Hard SILT / CLAY	8.5 – 15.0	372.3 – 365.8	80	2150

Table 5-6. Summary of pile design parameters – William Creek Bridge (South Abutment – BH02)

Material	Typical depth range (m BGL)	Typical level range (m AHD)	Design unit shaft friction f_s (kPa)	Design base resistance f_b (kPa)
Topsoil	0.0 – 1.0	381.1 – 380.1	-	-
Medium dense SAND	1.0 – 2.5	380.1 – 378.6	5	550
Very soft CLAY	2.5 – 4.7	378.6 – 376.4	50	350
Very stiff CLAY / SILT	4.7 – 7.0	376.4 – 374.1	40	900
Hard SILT / CLAY	7.0 – 13.5	374.1 – 367.6	70	1800

Table 5-7. Summary of pile design parameters – Angas Creek Bridge (North Abutment – BH03)

Material	Typical depth range (m BGL)	Typical level range (m AHD)	Design unit shaft friction f_s (kPa)	Design base resistance f_b (kPa)
Topsoil	0.0 – 0.6	380.9 – 380.3	-	-
Stiff CLAY	1.0 – 3.0	380.3 – 377.3	45	550
Medium dense SAND	3.0 – 5.4	377.3 – 375.5	15	1250
Hard SILT	5.4 – 5.8	375.5 – 375.1	85	1950
Medium dense gravelly SAND	5.8 – 7.3	375.1 – 373.6	20	3850
Very dense clayey sandy GRAVEL	7.4 – 12	373.6 – 368.9	35	8000

Table 5-8. Summary of pile design parameters – Angas Creek Bridge (South Abutment – BH04)

Material	Typical depth range (m BGL)	Typical level range (m AHD)	Design unit shaft friction f_s (kPa)	Design base resistance f_b (kPa)
FILL – SAND / COBBLES	0.0 – 2.0	382.7 – 380.7	10	2200
Medium dense SAND	2.0 – 5.7	380.7 – 377.0	20	3050
Medium dense sandy silty GRAVEL	5.7 – 7.0	377.0 – 375.7	30	4150

Material	Typical depth range (m BGL)	Typical level range (m AHD)	Design unit shaft friction f_s (kPa)	Design base resistance f_b (kPa)
Very dense gravelly silty SAND	7.0 – 7.7	375.7 – 375.0	35	8000
Hard gravelly SILT	7.7 – 8.6	375.0 – 374.1	85	2150
Very dense silty GRAVEL / GRAVEL	9.0 – 11.5	373.7 – 371.2	45	8000

5.1.3 Pile testing

It is recommended that high strain dynamic testing with wave matching analysis (PDA testing) is conducted on a minimum of one driven pile per abutment, which is 25% of the proposed total number of driven piles. Dynamic testing should be conducted using a Pile Driving Analyzer® with CAPWAP modelling (or similar).

The pile test load is calculated by dividing the design action effect on the pile (i.e. the pile ULS load), E_d , by the geotechnical strength reduction factor, Φ_g , where $\Phi_g = \Phi_{gb} + (\Phi_{tf} - \Phi_{gb}) * K \geq \Phi_g$

- Φ_g = geotechnical strength reduction factor
- Φ_{gb} = basic geotechnical strength reduction factor
- Φ_{tf} = intrinsic geotechnical strength reduction factor = 0.8 for dynamic load testing of preformed piles
- K = testing benefit factor = $1.13p/(p+3.3) \leq 1$
- p = percentage of the total piles that are tested and meet the specified acceptance criteria

For this site, it is estimated that $\Phi_{gb} = 0.5$. For 25% of piles tested, a Φ_g of 0.80 is appropriate.

5.1.4 Seismicity

The seismic design categorisation of the site has been assessed according to AS 1170.4 [Ref 5]. The hazard factor for the site (z) is 0.1, based on Fig 3.2(B) of AS1170.4. The site is classified as Class Ce site (Shallow soil) and:

- The site is not a strong rock, rock, or deep soil site.
- The depth of the soil does not exceed the maximum depth limits as defined by AS 1170.4 Table 4.1.

5.1.5 Design groundwater level

Due to the nature of the site and shallow groundwater recorded. It is recommended that the design groundwater level is taken as the cut-off level of the piles.

As discussed in Section 2 the wingwalls, abutments and piers of the disused railway bridges across Williams Creek and Angas Creek are present at the location of the proposed new bridges.

It is understood that it is currently planned to span the existing structural elements and form new foundations behind the existing abutments to avoid applying additional load to the existing wingwalls, abutments or piers.

However, the nature and location of the existing abutments and wingwalls will mean that they will act as retaining walls and protect the soil from scour and erosion at the location of the new bridge abutments. The design and construction of the bridges will need to take this into account and not cause any additional stress to the abutments and wingwalls.

5.2 Construction considerations

5.2.1 Foundations

It is currently anticipated that the bridge structures will be founded on piles. Earlier stages of the Amy Gillett Bikeway utilised screw piles for similar styles of bridges, but with much shorter spans.

Due to the larger spans and desire to use a single span bridge at Williams Creek and Angas Creek screw piles may not have the capacity required. Therefore, it is anticipated that the piles will be either driven reinforced concrete piles or small diameter CFA piles.

Geotechnical foundation design for the two structures will be undertaken as a standalone exercise once the design has been developed sufficiently to provide the preferred foundation type and structural loads.

5.2.2 Existing services

As discussed in Section 2.5 Telstra / NBN fibre optic cables are located within the rail corridor and at the location of Williams Creek bridge and Angas Creek bridge. The location / route of the fibre optic cables was identified by the topographical survey and Dial Before You Dig search.

The Telstra / NBN fibre optic cable will need to be physically located and protected during the construction of the William Creek Bridge and Angas Creek bridge.

There are other services located along the proposed route. However, this report is specific to the geotechnical investigations undertaken at William Creek bridge and Angas Creek bridge.

5.2.3 Excavatability

The boreholes across the site generally encountered SILT/CLAY and SAND/GRAVEL, which had maximum consistency and relative density of hard and very dense, respectively. It is expected that standard excavation plant would be used during construction and would have no difficulty in excavating the materials encountered during the ground investigation.

However, as loose to soft SAND and CLAY were encountered there may be a need for small / low bearing pressure plant to reduce the risk of becoming bogged or the need for access track to be formed to provide access for construction plant.

5.2.4 Re-use of excavated materials

It is currently understood that the bridges will be founded on driven piles. This founding method would likely lead to minimal material being excavated. Therefore, it is unlikely that there will be suitable volumes of excavated material that could be re-used across the site.

5.2.5 Groundwater

Groundwater is expected to be relatively shallow at all sites (≥ 2.0 m BGL). Therefore, if excavations are required to form the foundations of the structures, there is a high risk that groundwater will be encountered and should be accounted for in the construction methodology adopted.

5.2.6 Excavation and trench support

Excavation work and trench support are to be undertaken in accordance with Safe Work Australia – Code of Practice for Excavation Work 2012. The person with responsibility for the management or control of the workplace must manage the risks associated with all types of excavations at the workplace, regardless of depth.

The following health and safety risks associated with a person (construction workers and/or the general public) must be actively managed:

- falling into the excavation

- being trapped by the collapse of an excavation
- being struck by items falling into an excavation
- being exposed to airborne contaminants while working in an excavation
- groundwater inflow or surface run-off into a trench

Where excavation works are to be at least 1.5 m deep the person with management responsibility or control of the site must ensure, so far as reasonably practicable, that the work area is secured from unauthorised access (including inadvertent entry), having regard to risks to health and safety arising from unauthorised access and the likelihood of unauthorised access occurring in the work area.

The person with management responsibility or control of the site must also minimise the risk to any person arising from the collapse of the trench by ensuring that all sides of the trench are adequately supported by doing one or more of the following:

- shoring by shielding or other comparable means
- benching
- battering
- limiting unnecessary entry into the excavation / trench

5.2.7 Geotechnical risk

The following geotechnical risks need to be considered by the designers of the proposed bridges as Williams Creek and Angas Creek:

- Installation of the foundations for the new bridges could cause damage to the existing wingwalls and abutments, if installed too close to the existing structure.
- Due to the very dense and hard conditions there may be a risk of driven piles refusing at a shallower depth than required by the design.
- Scour could be an issue during flooding events. An allowance for scour should be considered in the geotechnical and structural designs.

5.2.8 Flooding during construction

Due to the location of the sites, the risk of natural flooding during construction needs to be considered. When designing the site access the level (RL) of protection provided needs to be agreed with the Client prior to design of the temporary works and creek crossings, where required.

6. References

- 1] AS 1726-2017, Australian Standard for geotechnical site investigations.
- 2] AS 4678-2002, Australian Standard for earth retaining structures.
- 3] M.J., Tomlinson, Foundation Design and Construction, 7th Edition (2001).
- 4] CIRIA Report 143 – The Standard Penetration Test (SPT): Methods and Use (1995).
- 5] AS 1170.4, Australian Standard for structural design action. Part 4 earthquake actions in Australia.

Appendix A. Site location plan



Appendix B. Site photographs



Jacobs

Rock outcrop in Birdwood showing interbedded sandstone and Dolomite

Photograph 1



Jacobs

Rock outcrop in Birdwood showing interbedded sandstone and siltstone

Photograph 2



Jacobs

Rock outcrop in Birdwood showing a thin bed of sandstone

Photograph 3



Jacobs

Schist outcrop in Birdwood

Photograph 4



Jacobs

Structural remains from the historical railway near Birdwood

Photograph 5



Jacobs

Structural remains from the historical railway near Birdwood

Photograph 6



Jacobs

Asphalt spill within the proposed bikeway footprint in Birdwood

Photograph 7



Jacobs

North abutment of the decommissioned railway bridge over Williams Creek

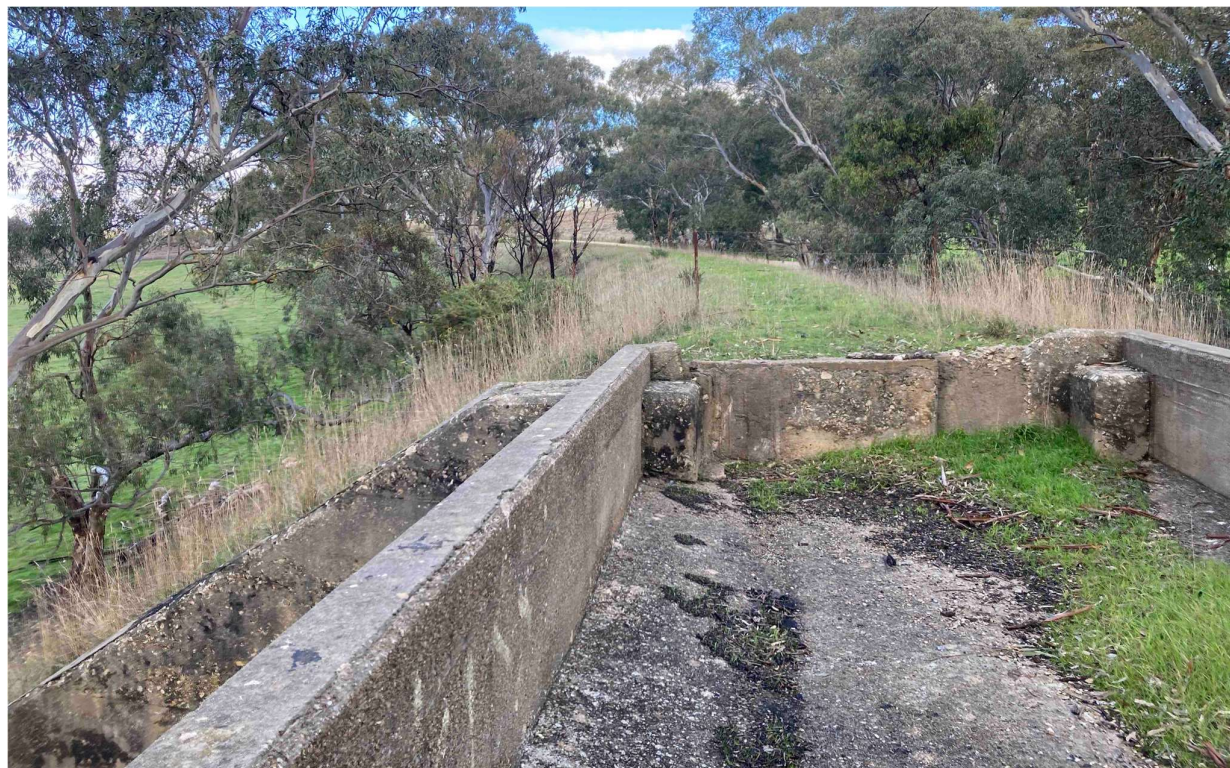
Photograph 8



Jacobs

Burfords Hill Road Bridge

Photograph 9



Jacobs

Burfords Hill Road Bridge showing signs of structural distress

Photograph 10



Jacobs

Burfords Hill Road Bridge North Abutment, abutment fill missing and covered by vegetation

Photograph 11



Jacobs

Water ponding at the southern end of the proposed bikeway alignment

Photograph 12



Jacobs


Typical conditions of ballasts encountered during site walkover

Photograph 13

Appendix C. DBYD services plans including DIT mark-ups

Underground Services

Underground Services Locator Procedure

 <p>Government of South Australia Department for Transport, Energy and Infrastructure</p>	<p>Transport Services Division</p> <p>GEOSPATIAL SERVICES</p>
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APPENDIX B
Underground Services Checklist

To be completed by the underground service locator and handed to the surveyor

USL name: Hamish Genovese Signature: [Signature] Date: 20-04-22
 Project Description (Road Name): Amy Gillett Bikeway stage 4

Task Description	Compliance	Details of non compliance (Attach separate statement if insufficient space)
Occupational Health Safety & Welfare	✓	
DBYD/ Utility information received from the surveyor	✓	
Traffic Management	NA	
Traffic Management invoice supplied (if sub-contracted)	NA	
Services marked on ground as per ground marking requirements	✓	
Indicative depths provided (if requested)	✓	
Drainage inverts provided / measured	NA	
USR- Marked up service plans for Quality Classes	✓	
Different services in common trench located separately	NA	
Services located not shown on DBYD/ Utility plans;		
• <u>WS on Posen rd</u>	✓	<u>QLD (GDR)</u>
•		
•		
•		
Services not located / unable to be found;		
• <u>Some ⊕ cables in birdwood</u>		
• <u>⊕ going to Mt Fife (Mt torrens)</u>		
•		
•		
Utility / Asset owner locator required to discover service		
• <u>Possible Sewer or Effluent ?</u>		<u>No plans, some lids found randomly.</u>
•		
•		
•		
Marked up Utility plans submitted to the Surveyor	✓	
Hours worked detailed on invoice to the Surveyor	✓	



#1
Job No 31512631

Phone: 1100
 www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022

Address:
 Lot 102 Bleeze Street
 Mount Torrens SA 5244

Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

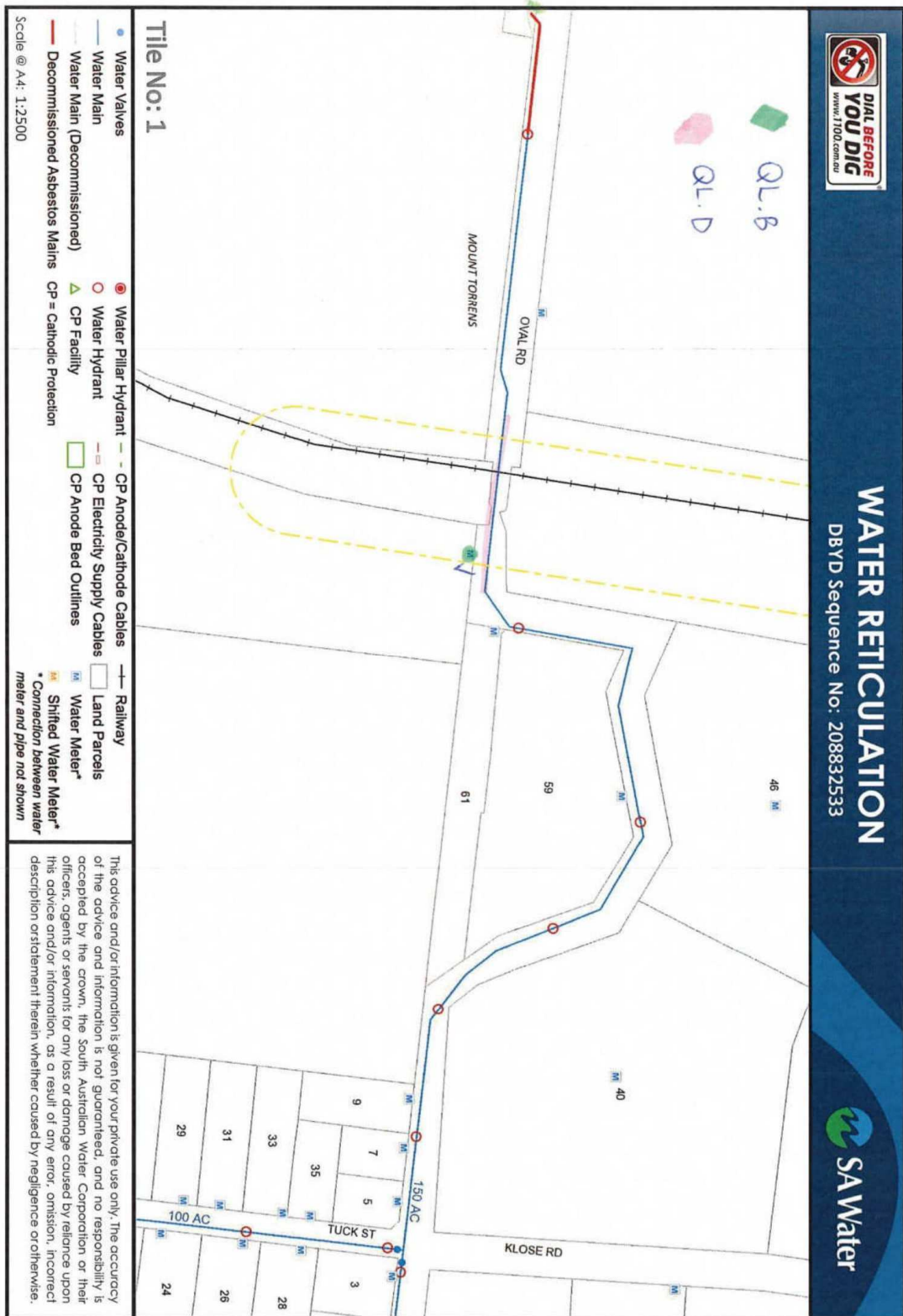
The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
 # Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
208832534	SA Power Networks ✓ NONE	(08) 8292 0218	NOTIFIED
208832533	SA Water ✓	(08) 7424 1117	NOTIFIED
208832532	Telstra SANT ✓	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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



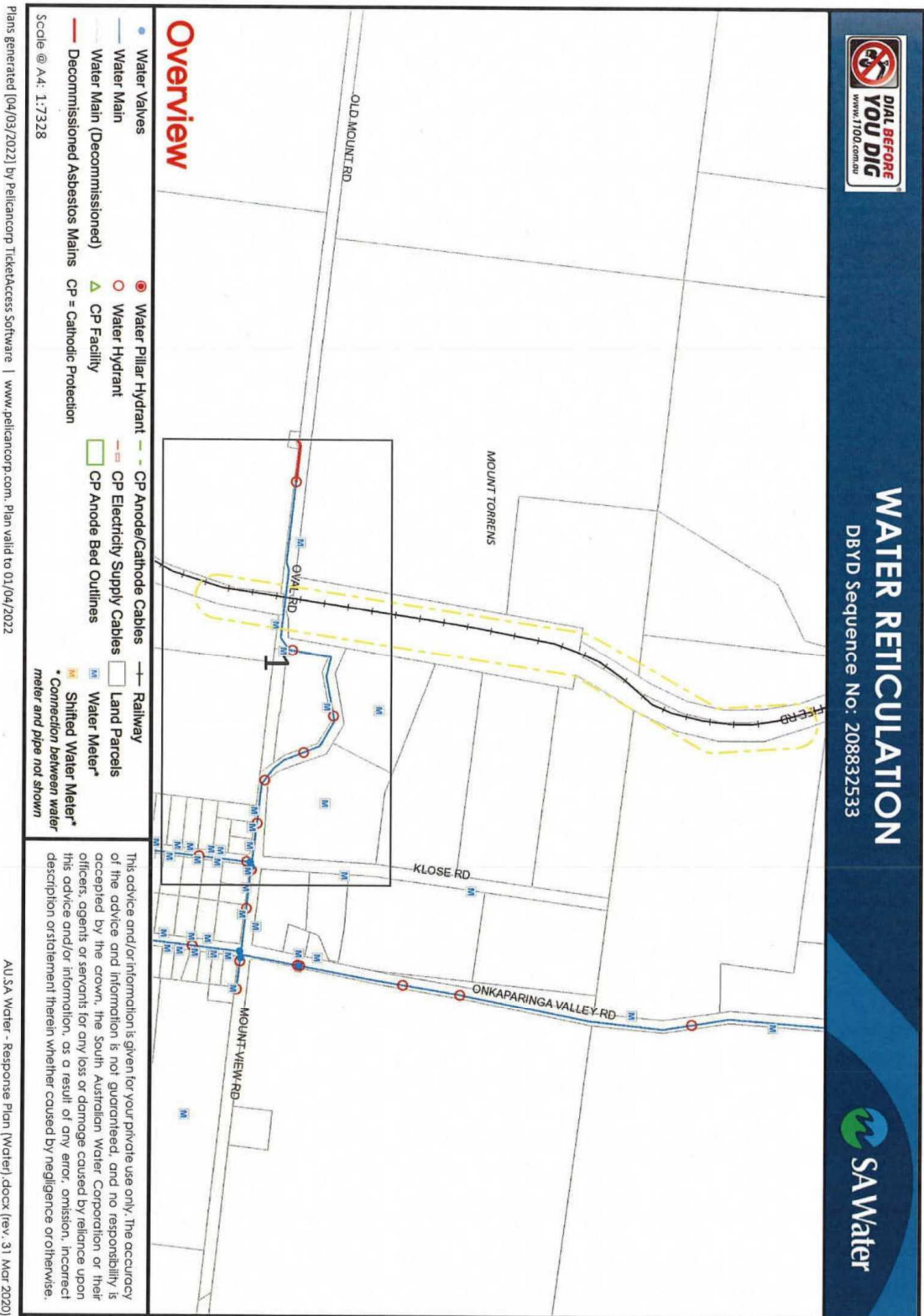
Plans Generated [04/03/2022] by PelicanCorp TicketAccess Software | www.pelicancorp.com | Plan valid to 01/04/2022

AUSA Water - Response Plan (Water).docx (rev. 31 Mar 2020)



WATER RETICULATION
DBYD Sequence No: 208832533





WATER RETICULATION
 DBYD Sequence No: 208832533

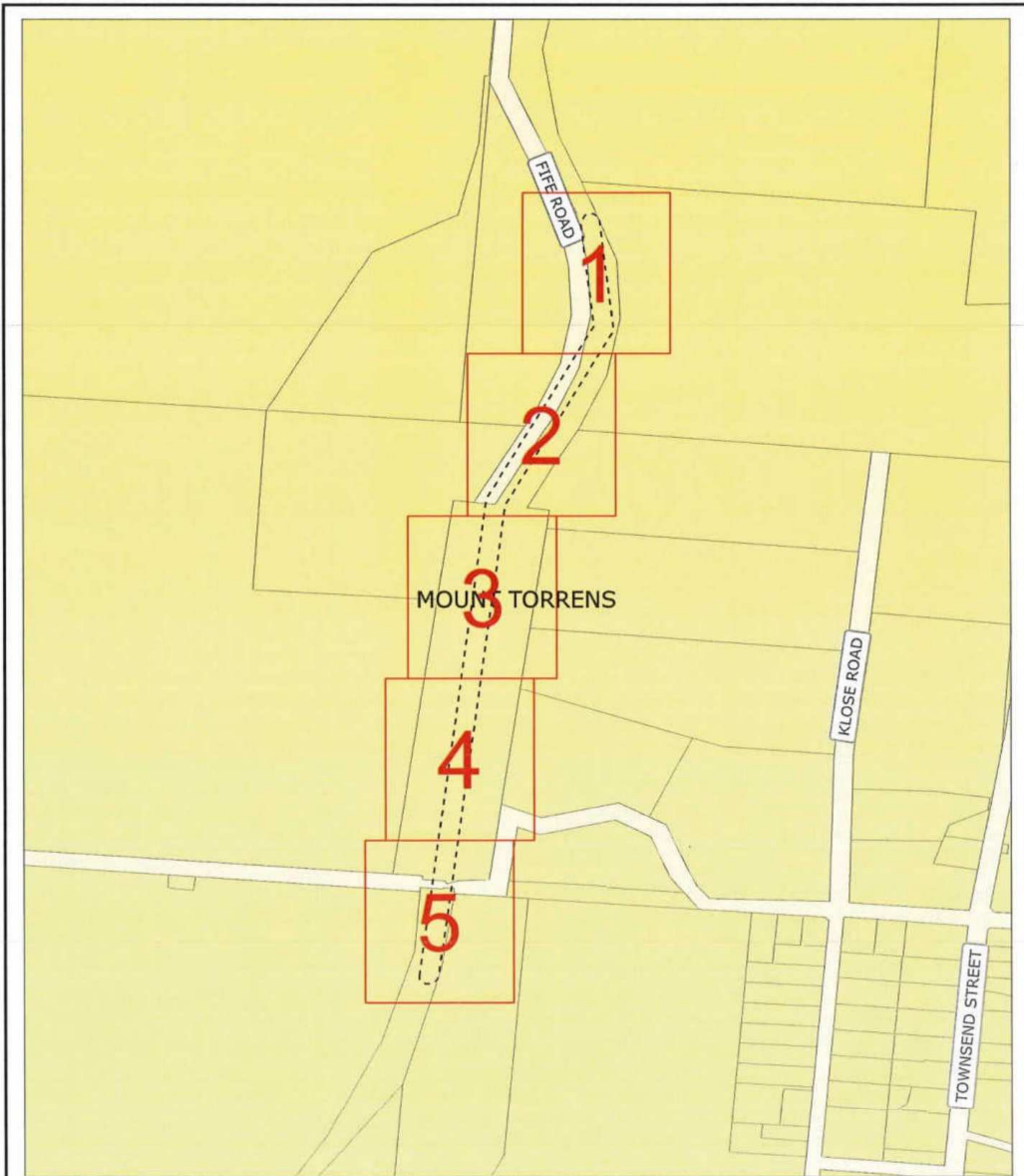




Overview Map

Sequence No: 208832534

Lot 102 Beeze Street Mount Torrens



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

- 1** Detail Map
- DBYD Requested Area

Powered by dbyd

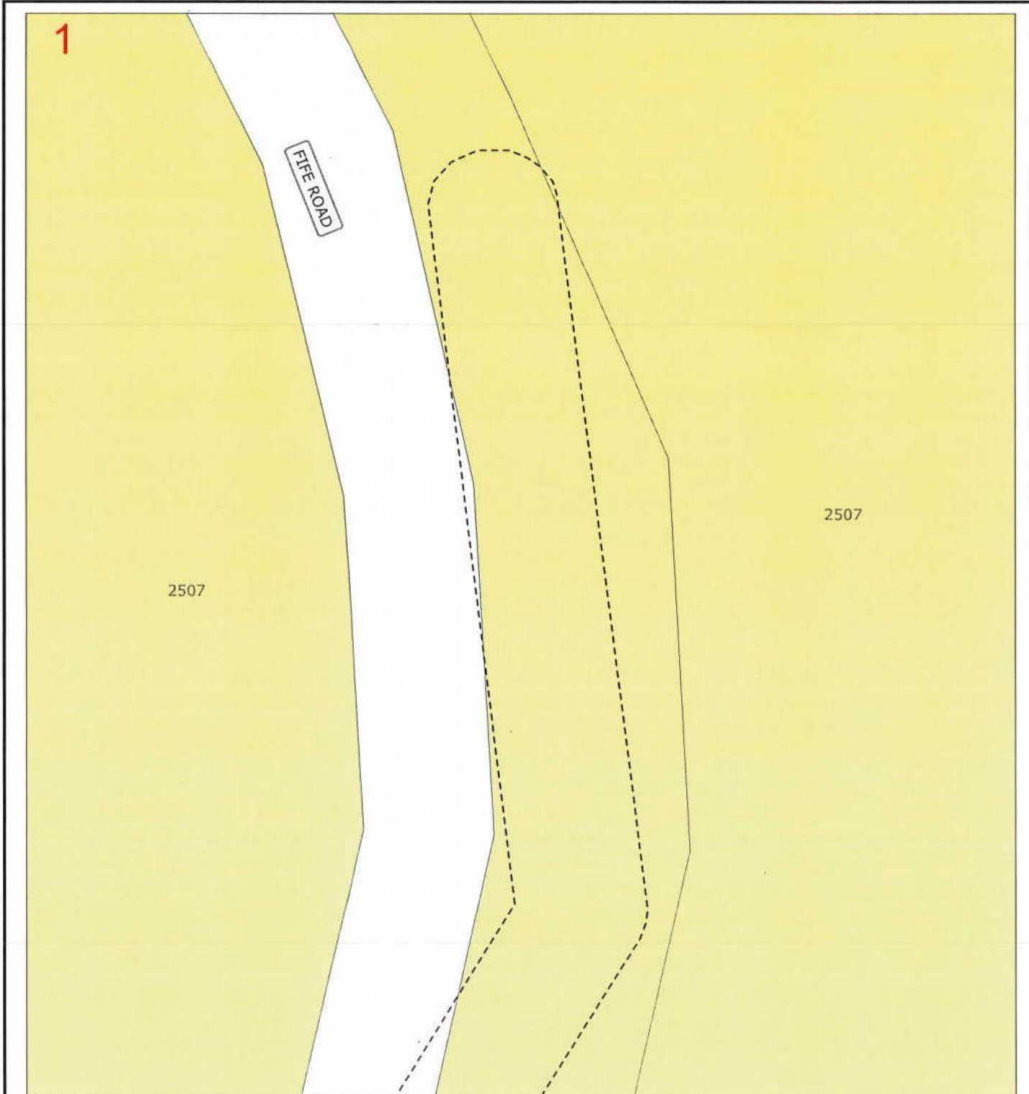
Date: 04/03/2022



Map 1

Sequence No: 208832534

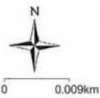
Lot 102 Bleeze Street Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
					Fibre Optic Cable/Duct
					Fibre Manhole/Pit
					Pilot Cable
					Pilot Manhole/Pit
					Substation
					Electricity Pole
					Light Column



Powered by dbyd

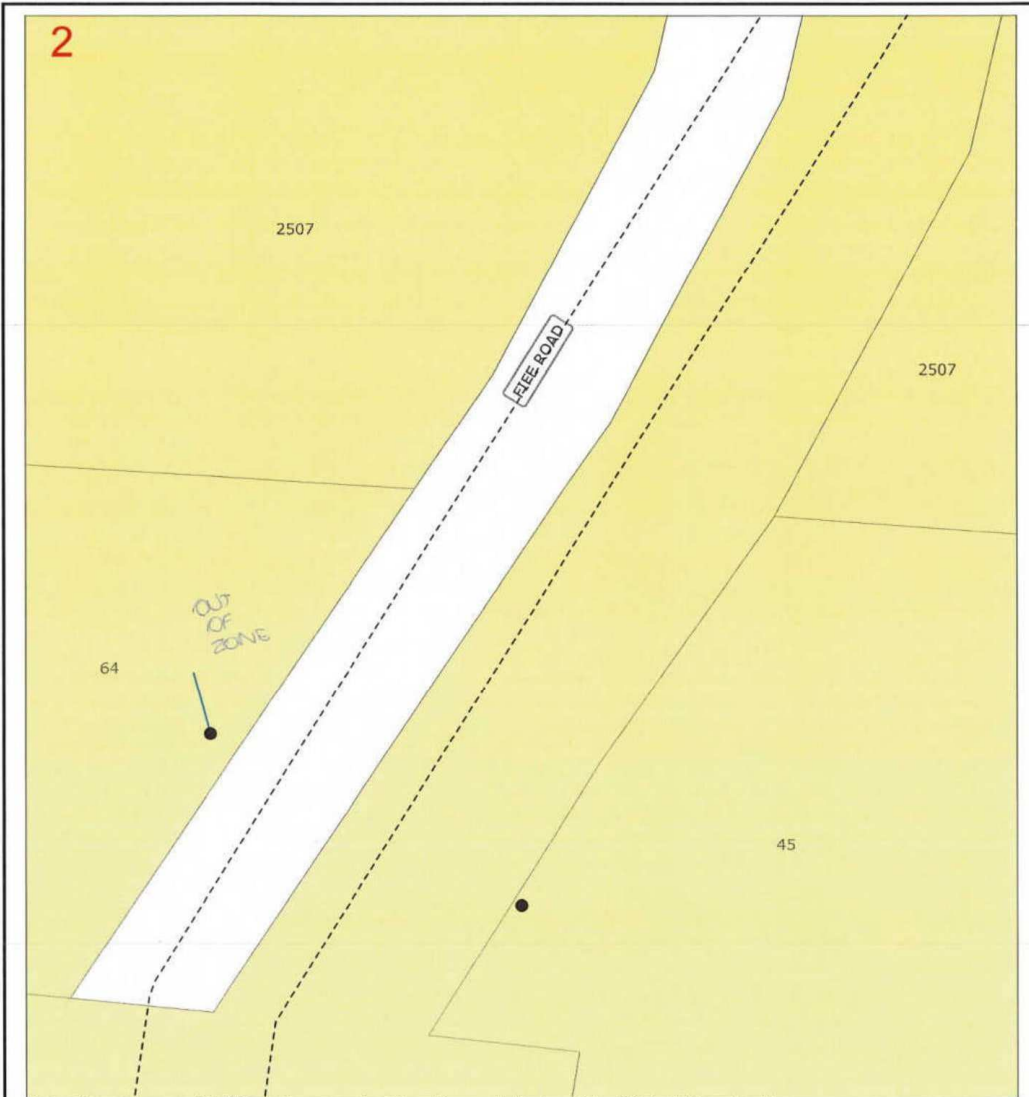
Date: 04/03/2022



Map 2

Sequence No: 208832534

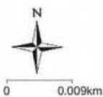
Lot 102 Bleeze Street Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
66kV/132kV	66kV/132kV	DBYD Requested Area	Fibre Manhole/Pit
33kV	33kV	HV Switching Cubicle	Pilot Cable
19kV	19kV	Transformer Cubicle	Pilot Manhole/Pit
11kV	11kV	Cable Joint Bay	Substation
7.6kV	7.6kV	LV Switching Cubicle/Pit	Electricity Pole
Not In Service	Not In Service	Service Pit/Pillar	Light Column
Low Voltage	Low Voltage	Earthing Grid	



Powered by dbyd

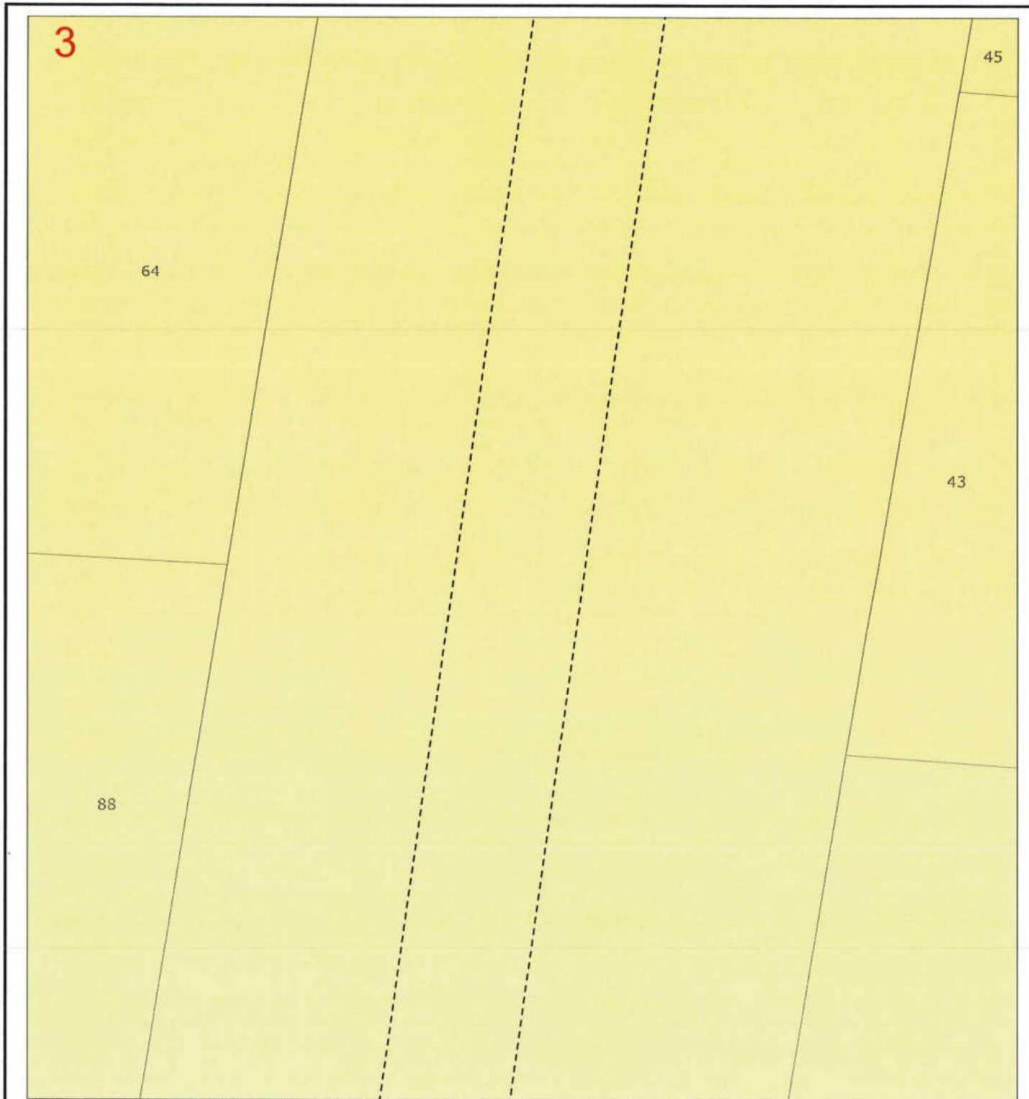
Date: 04/03/2022



Map 3

Sequence No: 208832534

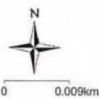
Lot 102 Bleeze Street Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
66kV/132kV	66kV/132kV	DBYD Requested Area	Fibre Manhole/Pit
33kV	33kV	HV Switching Cubicle	Pilot Cable
19kV	19kV	Transformer Cubicle	Pilot Manhole/Pit
11kV	11kV	Cable Joint Bay	Substation
7.6kV	7.6kV	LV Switching Cubicle/Pit	Electricity Pole
Not In Service	Not In Service	Service Pit/Pillar	Light Column
Low Voltage	Low Voltage	Earthing Grid	



Powered by xtrio dbyd

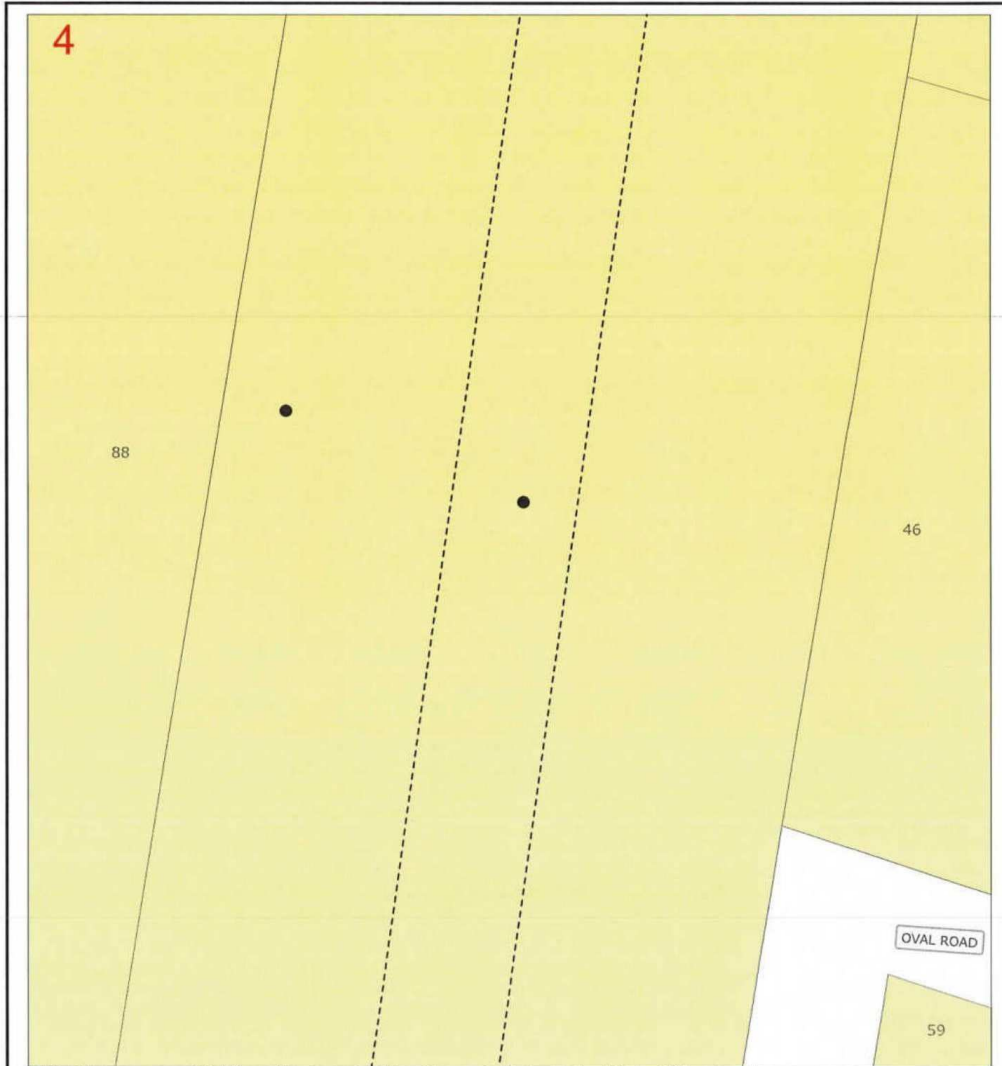
Date: 04/03/2022



Map 4

Sequence No: 208832534

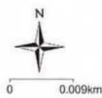
Lot 102 Bleeze Street Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
▼ 66kV/132kV	▼ 33kV	▼ 66kV/132kV	▼ 33kV	□ DBYD Requested Area	□ HV Switching Cubicle	— Fibre Optic Cable/Duct	□ Fibre Manhole/Pit
▼ 19kV	▼ 11kV	▼ 19kV	▼ 11kV	□ Transformer Cubicle	□ Cable Joint Bay	— Pilot Cable	□ Pilot Manhole/Pit
▼ 7.6kV	▼ Not In Service	▼ 7.6kV	▼ Not In Service	□ LV Switching Cubicle/Pit	● Service Pit/Pillar	■ Substation	● Electricity Pole
▼ Low Voltage	▼ Low Voltage	▼ Low Voltage	▼ Low Voltage	⊗ Earthing Grid	● Light Column		



Powered by dbyd

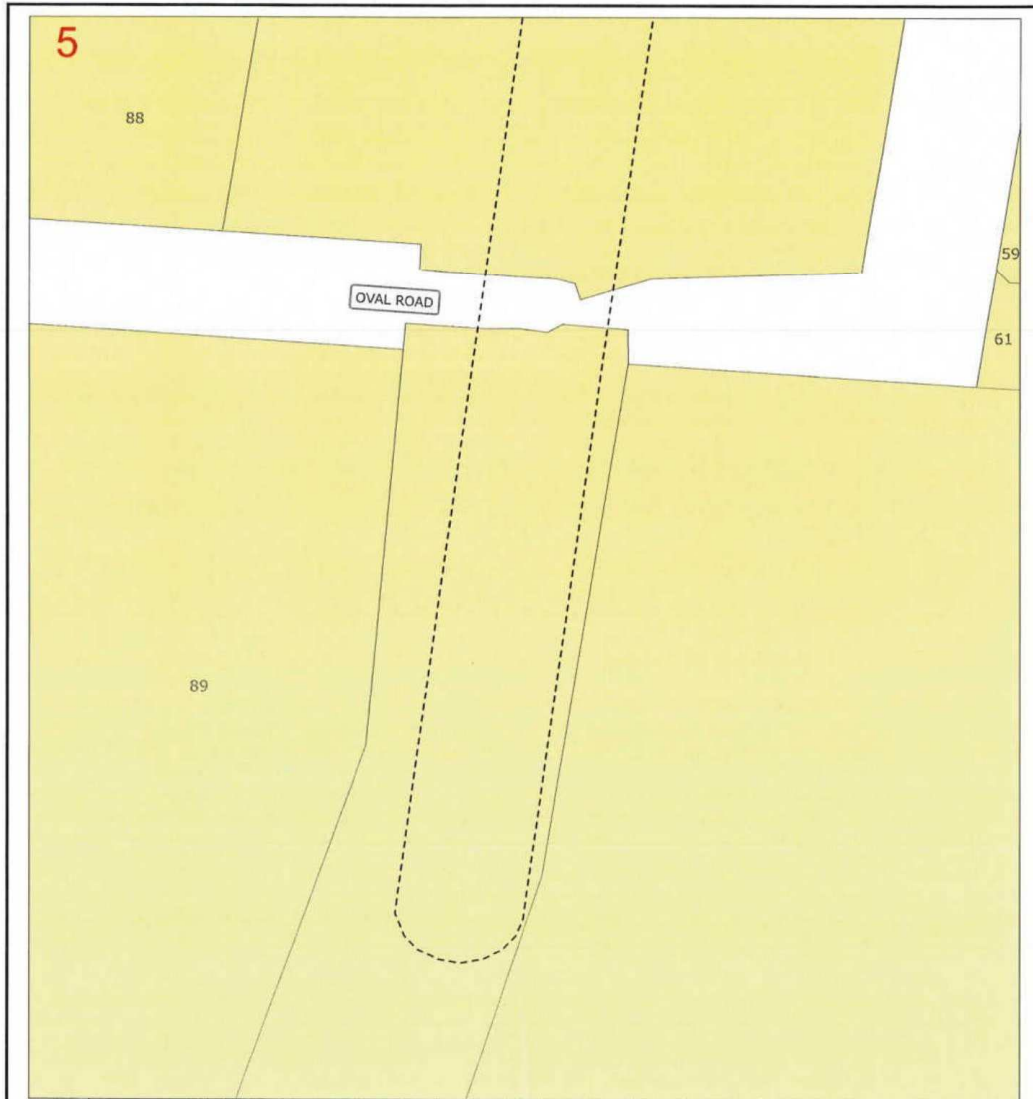
Date: 04/03/2022



Map 5

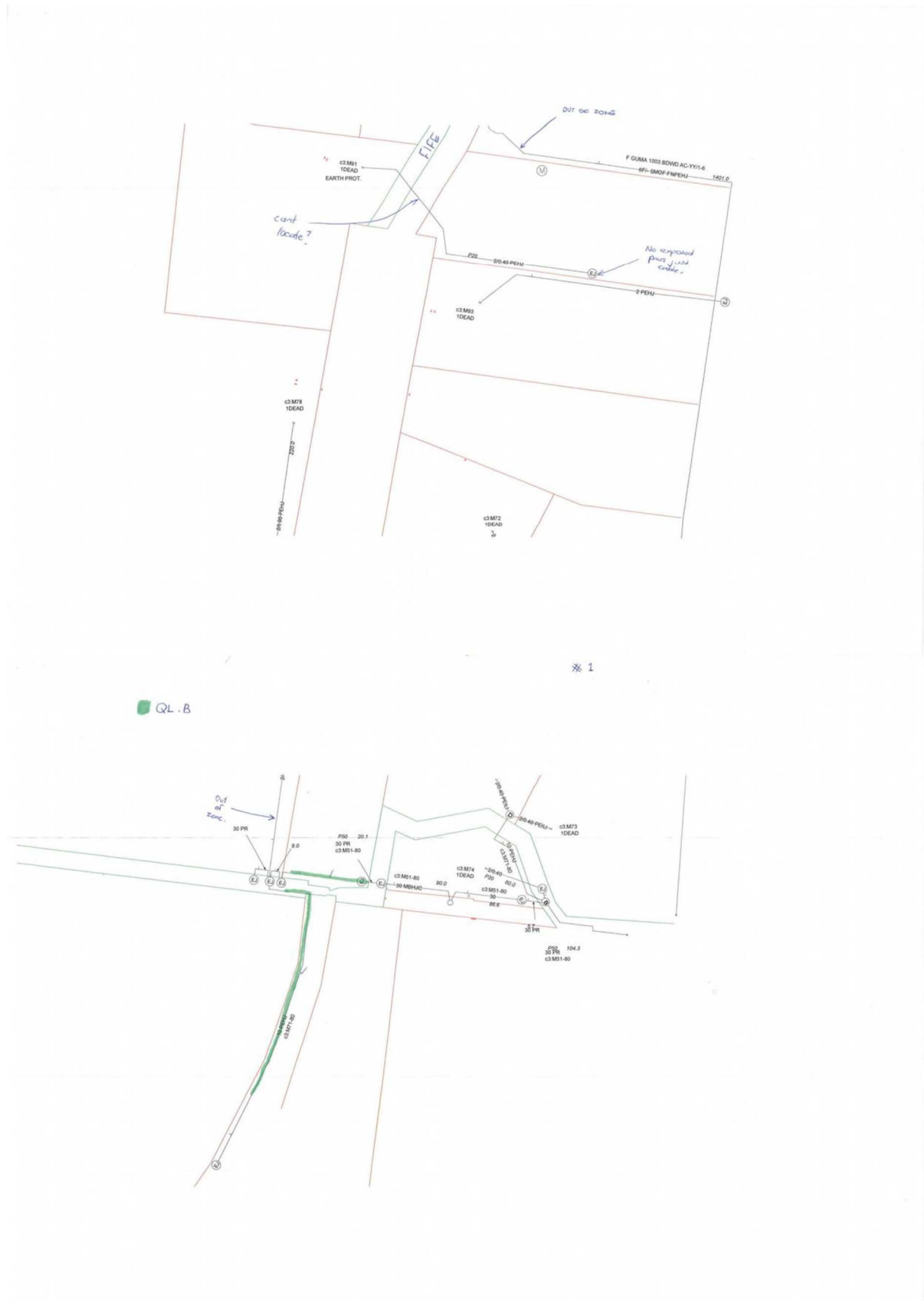
Sequence No: 208832534

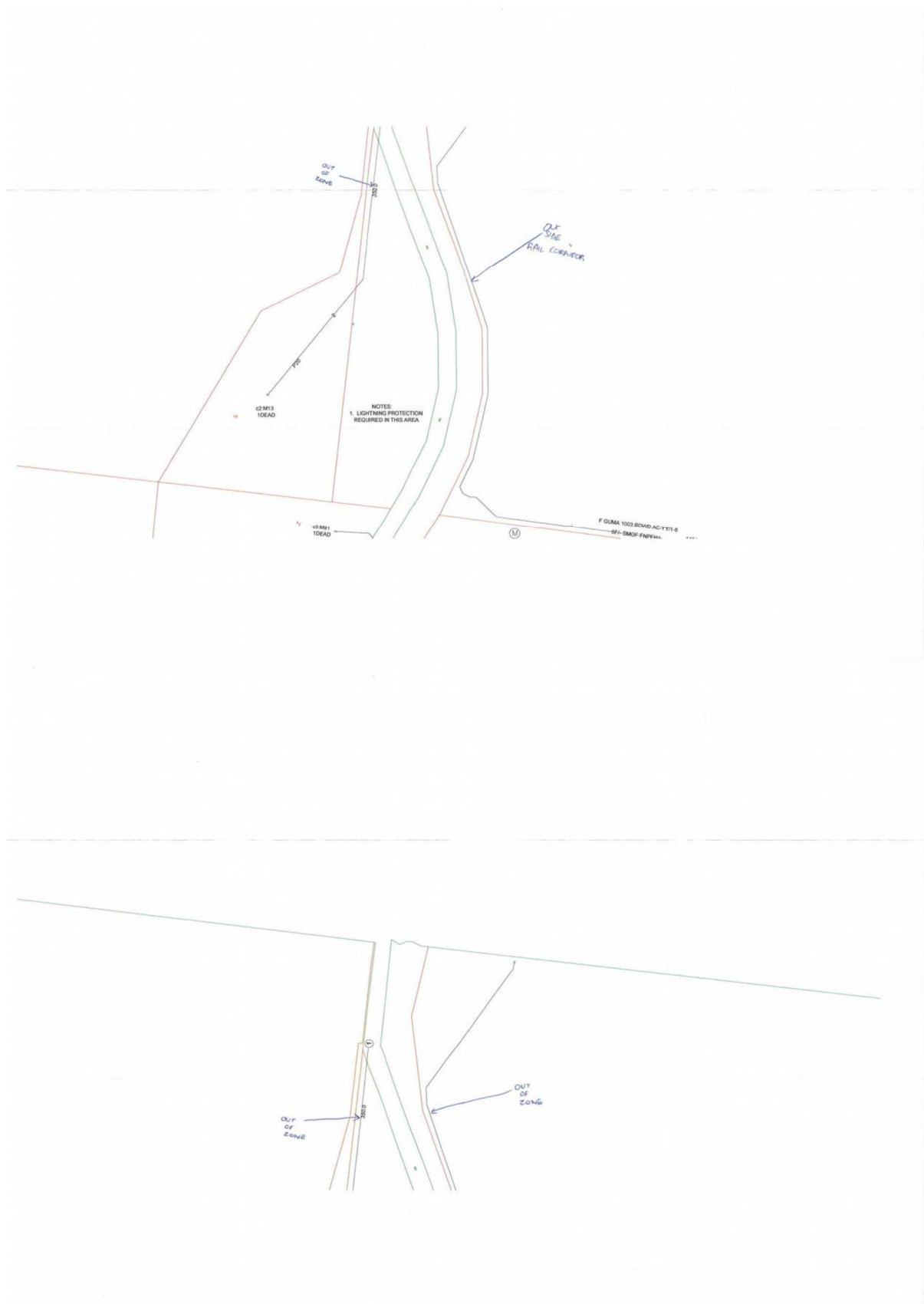
Lot 102 Bleeze Street Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct															
▼ 66kV/132kV	▼ 33kV	▼ 19kV	▼ 11kV	▼ 7.6kV	▼ Not In Service	▼ Low Voltage	▼ Low Voltage	▭ DBYD Requested Area	■ HV Switching Cubicle	■ Transformer Cubicle	■ Cable Joint Bay	■ LV Switching Cubicle/Pit	● Service Pit/Pillar	⊗ Earthing Grid	~ Fibre Optic Cable/Duct	■ Fibre Manhole/Pit	~ Pilot Cable	□ Pilot Manhole/Pit	■ Substation	● Electricity Pole	● Light Column







#2 ✓

Job No 31512658

Phone: 1100
www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 2
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022

Address:
 Lot 1 Burfords Hill Road
 Mount Torrens SA 5244

Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

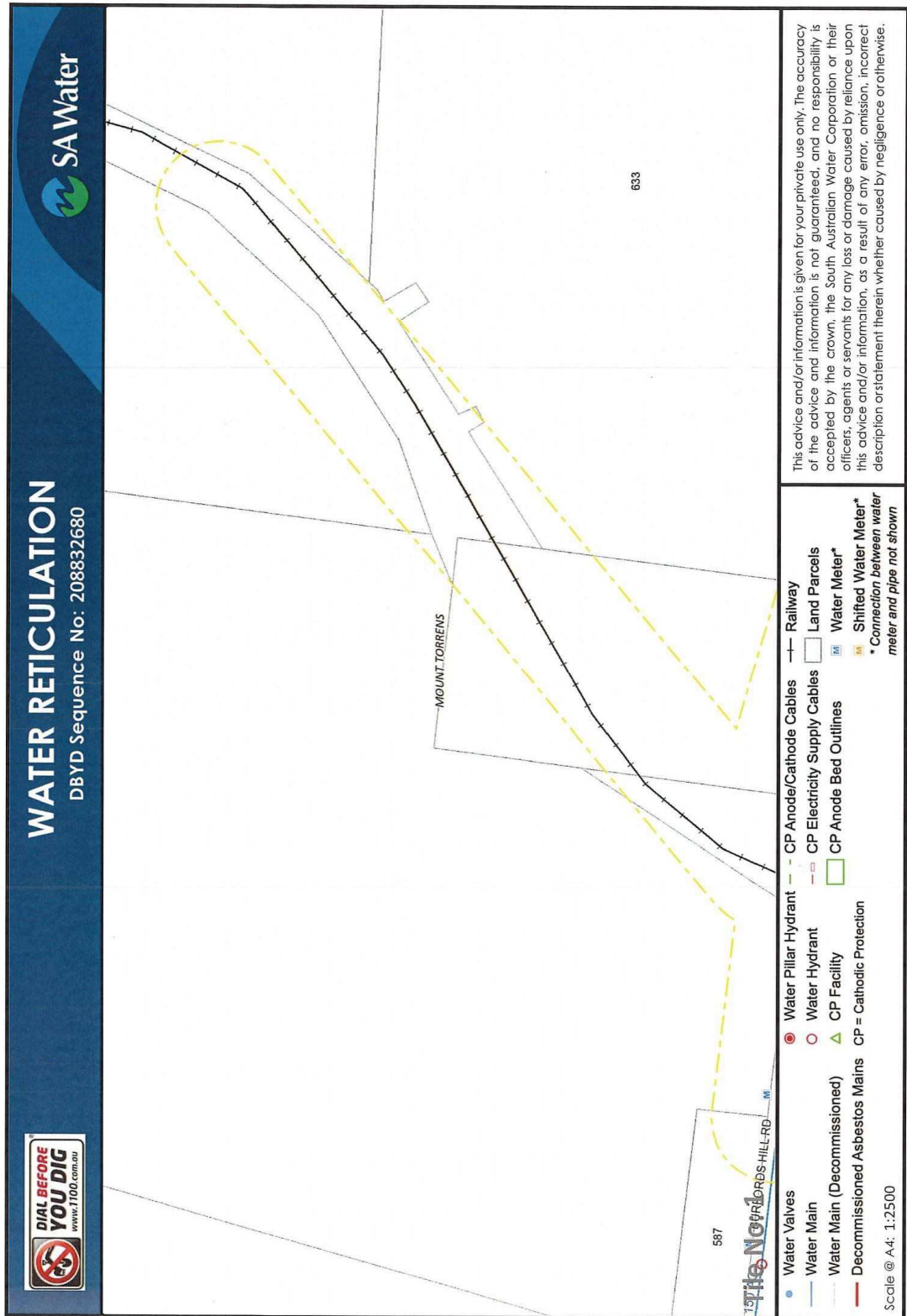
The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

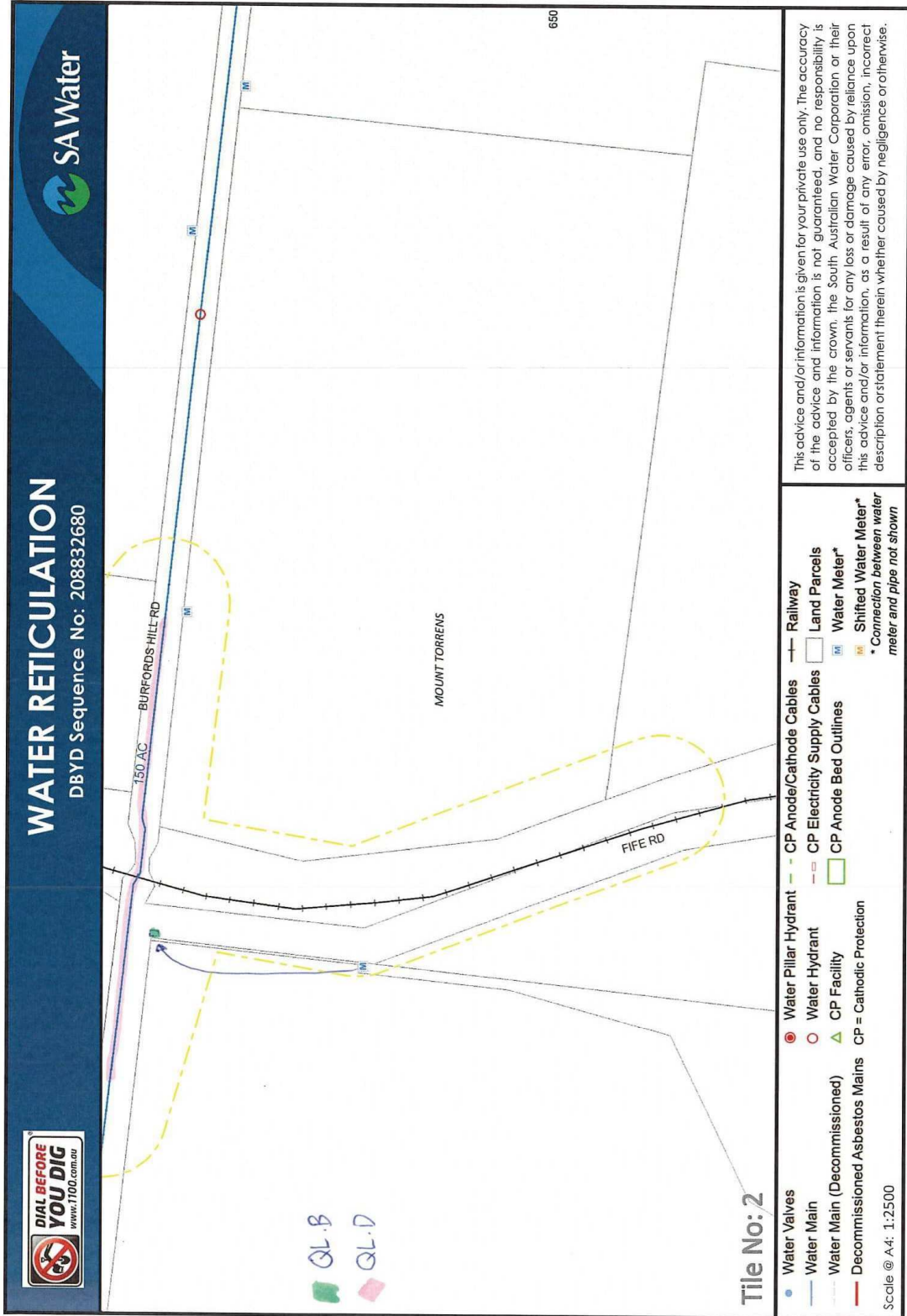
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
 # Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
208832681	SA Power Networks	(08) 8292 0218	NOTIFIED
208832680	SA Water	(08) 7424 1117	NOTIFIED
208832679	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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





WATER RETICULATION
 DBYD Sequence No: 208832680

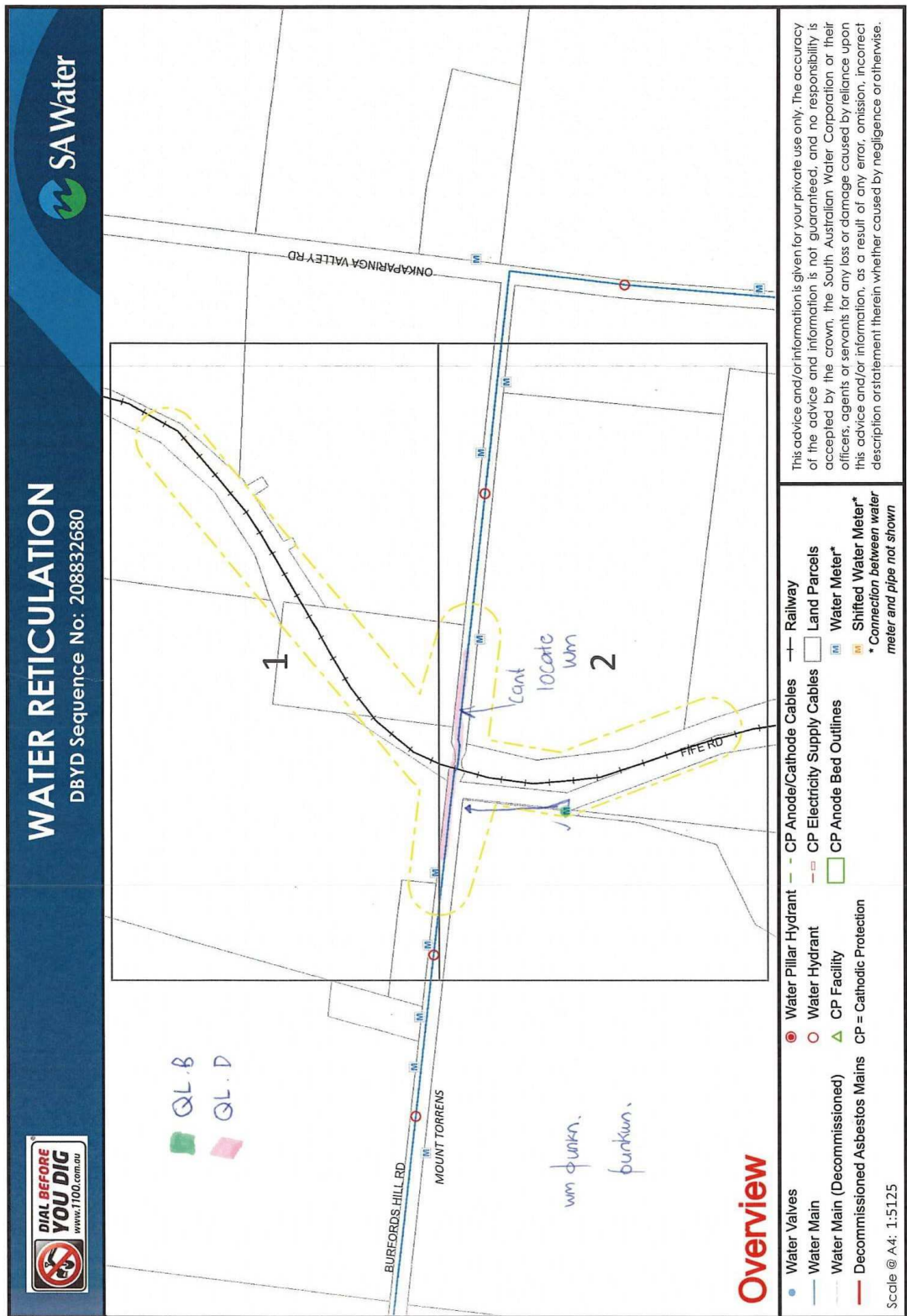


QL.B
 QL.D

Tile No: 2

- Water Valves
 - Water Main
 - Water Main (Decommissioned)
 - Decommissioned Asbestos Mains
 - Water Pillar Hydrant
 - Water Hydrant
 - CP Facility
 - CP = Cathodic Protection
 - CP Anode/Cathode Cables
 - CP Electricity Supply Cables
 - CP Anode Bed Outlines
 - Railway
 - Land Parcels
 - Water Meter*
 - Shifted Water Meter*
- * Connection between water meter and pipe not shown

This advice and/or information is given for your private use only. The accuracy of the advice and information is not guaranteed, and no responsibility is accepted by the crown, the South Australian Water Corporation or their officers, agents or servants for any loss or damage caused by reliance upon this advice and/or information, as a result of any error, omission, incorrect description or statement therein whether caused by negligence or otherwise.



Plans generated [04/03/2022] by Pellicancorp TicketAccess Software | www.pellicancorp.com. Plan valid to 01/04/2022

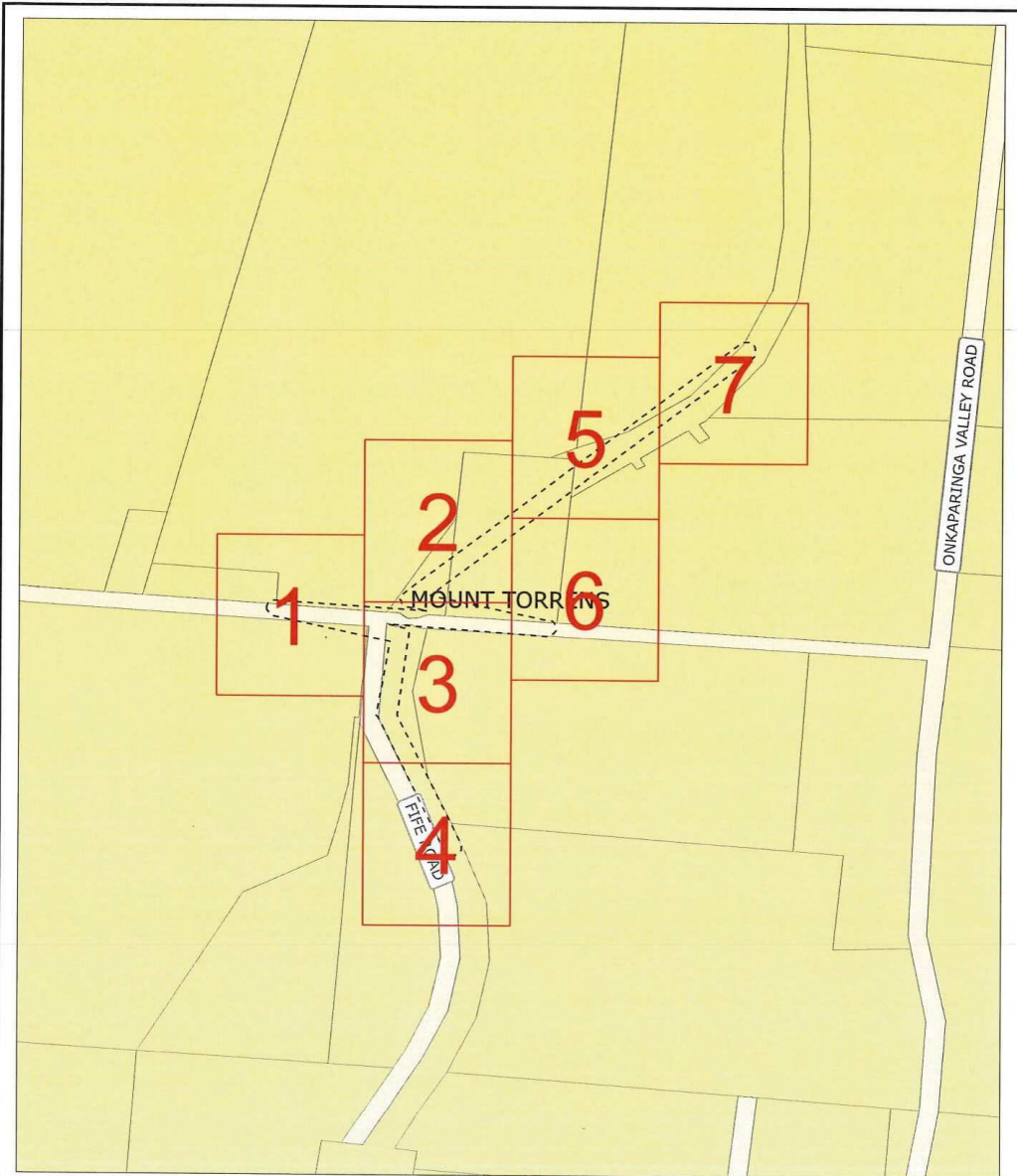
AU.SA Water - Response Plan (Water).docx (rev. 31 Mar 2020)



Overview Map

Sequence No: 208832681

Lot 1716 Burford Hill Road Mount Torrens



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

- 1 Detail Map
- DBYD Requested Area

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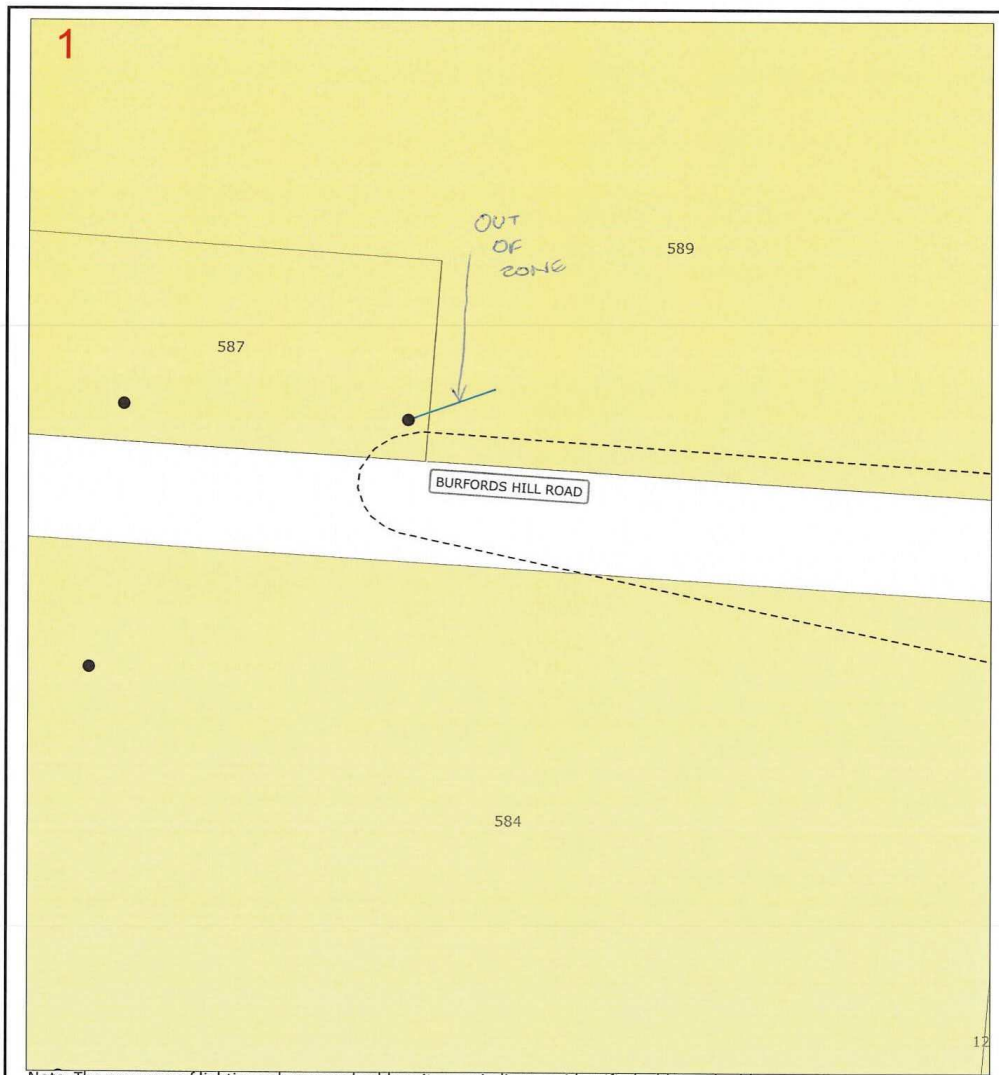
Date: 04/03/2022



Map 1

Sequence No: 208832681

Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

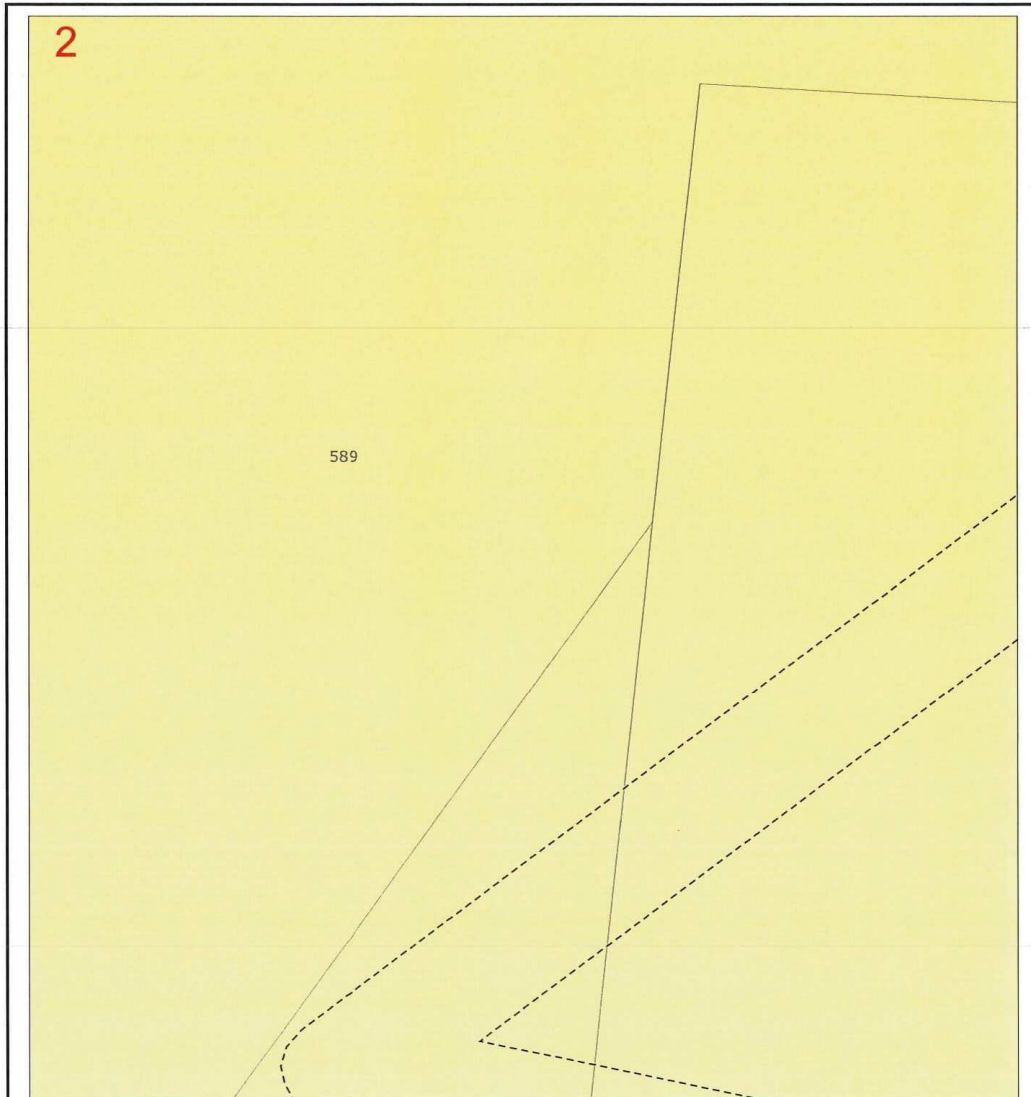
Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
▼ 66kV/132kV	▼ 33kV	▼ 66kV/132kV	▼ 33kV	■ HV Switching Cubicle	■ Transformer Cubicle	— Fibre Optic Cable/Duct	■ Fibre Manhole/Pit
▼ 19kV	▼ 11kV	▼ 19kV	▼ 11kV	■ Cable Joint Bay	■ LV Switching Cubicle/Pit	— Pilot Cable	□ Pilot Manhole/Pit
▼ 7.6kV	▼ Not In Service	▼ 7.6kV	▼ Not In Service	● Service Pit/Pillar	● Earthing Grid	■ Substation	● Electricity Pole
▼ Low Voltage	▼ Low Voltage	▼ Low Voltage	▼ Low Voltage				● Light Column

Powered by xinto dbyd



Map 2

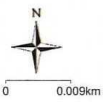
Sequence No: 208832681
 Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits	Cables		
66kV/132kV	66kV/132kV	DBYD Requested Area	Fibre Optic Cable/Duct
33kV	33kV	HV Switching Cubicle	Fibre Manhole/Pit
19kV	19kV	Transformer Cubicle	Pilot Cable
11kV	11kV	Cable Joint Bay	Pilot Manhole/Pit
7.6kV	7.6kV	LV Switching Cubicle/Pit	Substation
Not In Service	Not In Service	Service Pit/Pillar	Electricity Pole
Low Voltage	Low Voltage	Earthing Grid	Light Column

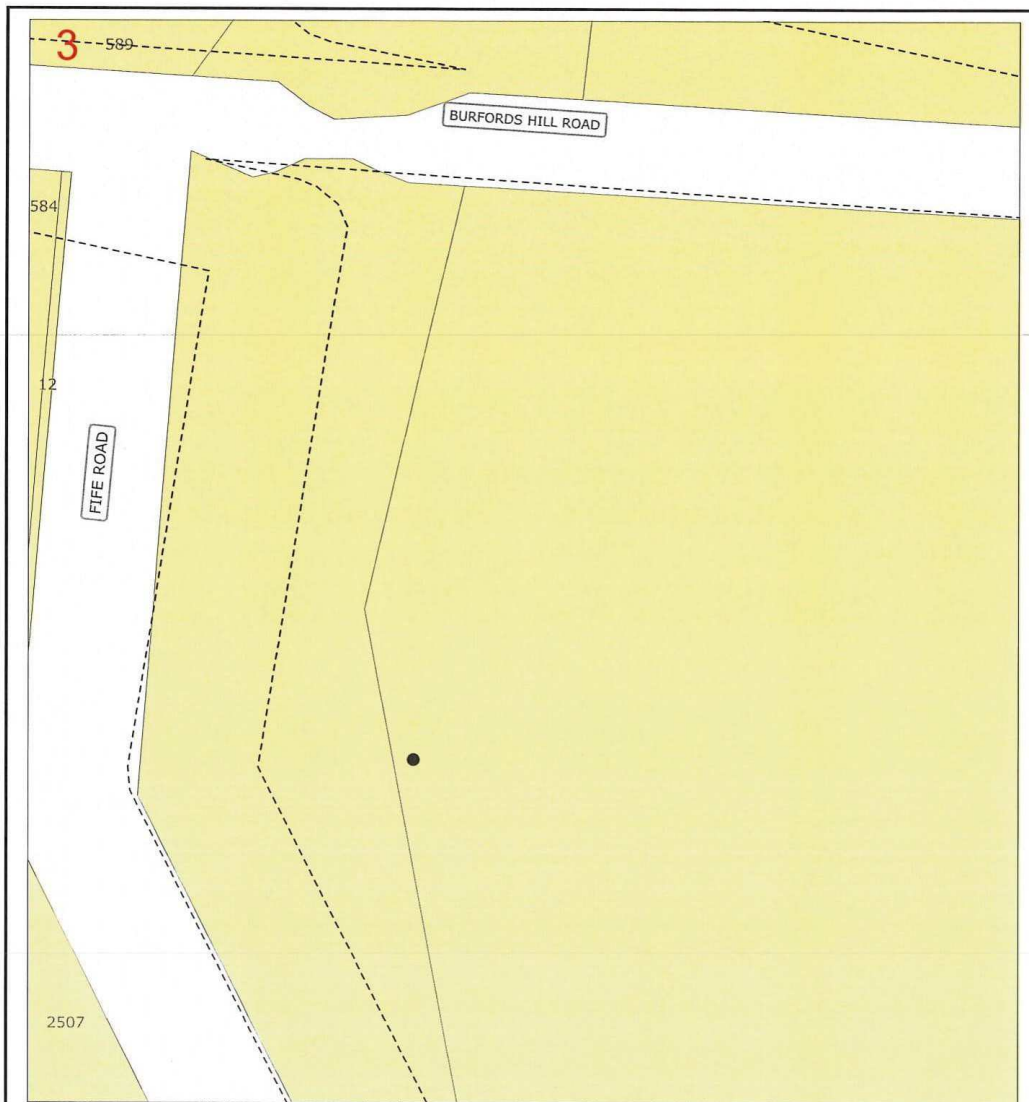




Map 3

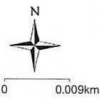
Sequence No: 208832681

Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		

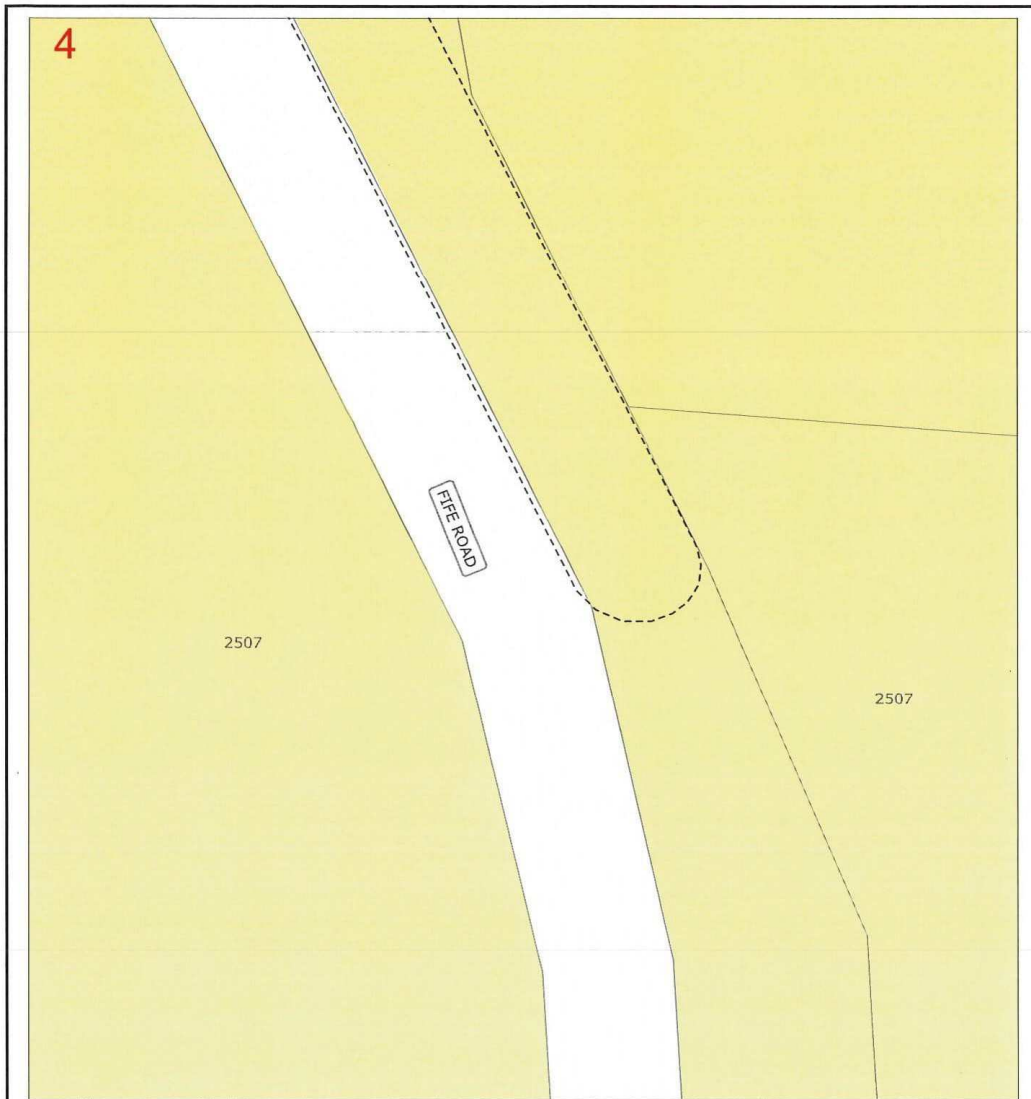




Map 4

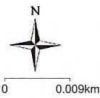
Sequence No: 208832681

Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		
			Earthing Grid		

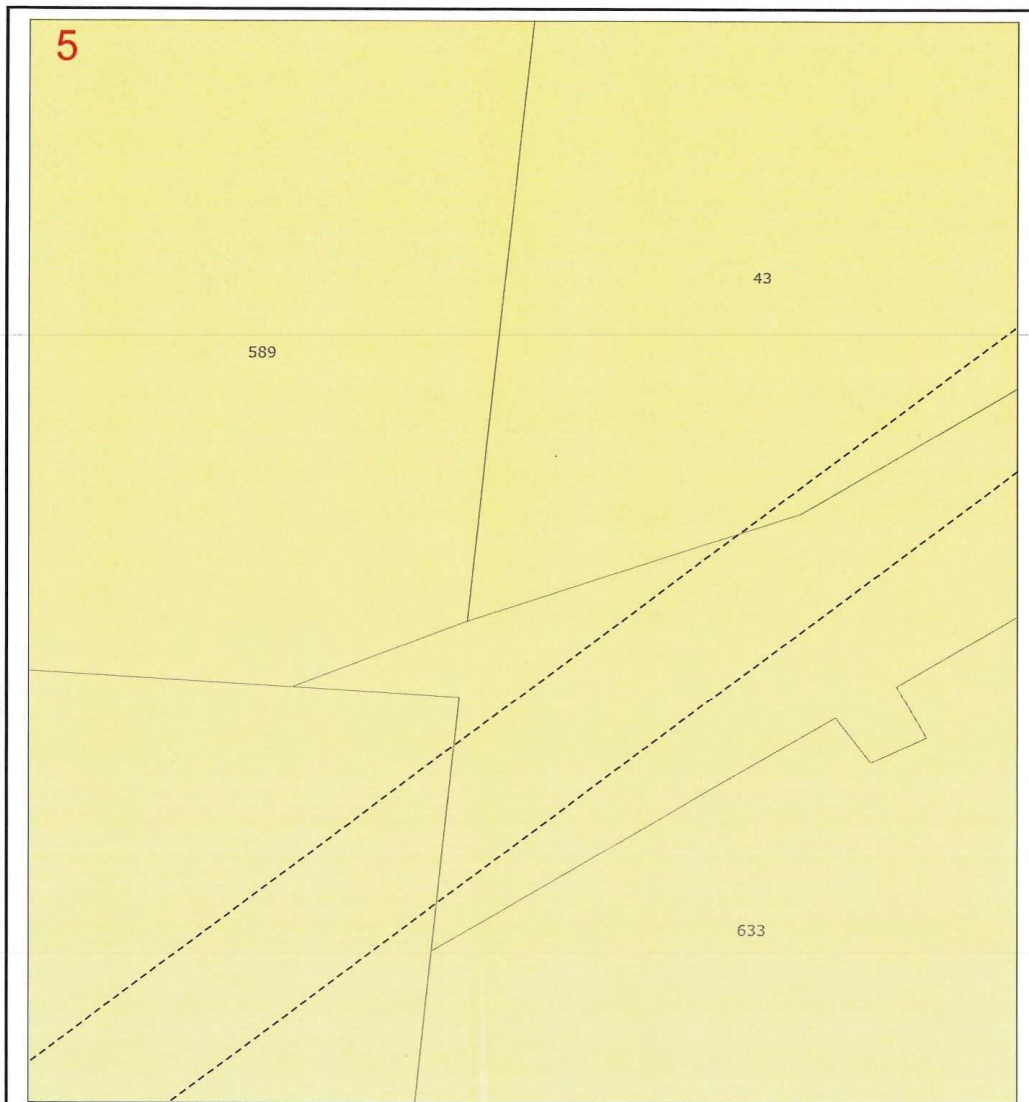




Map 5

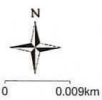
Sequence No: 208832681

Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column

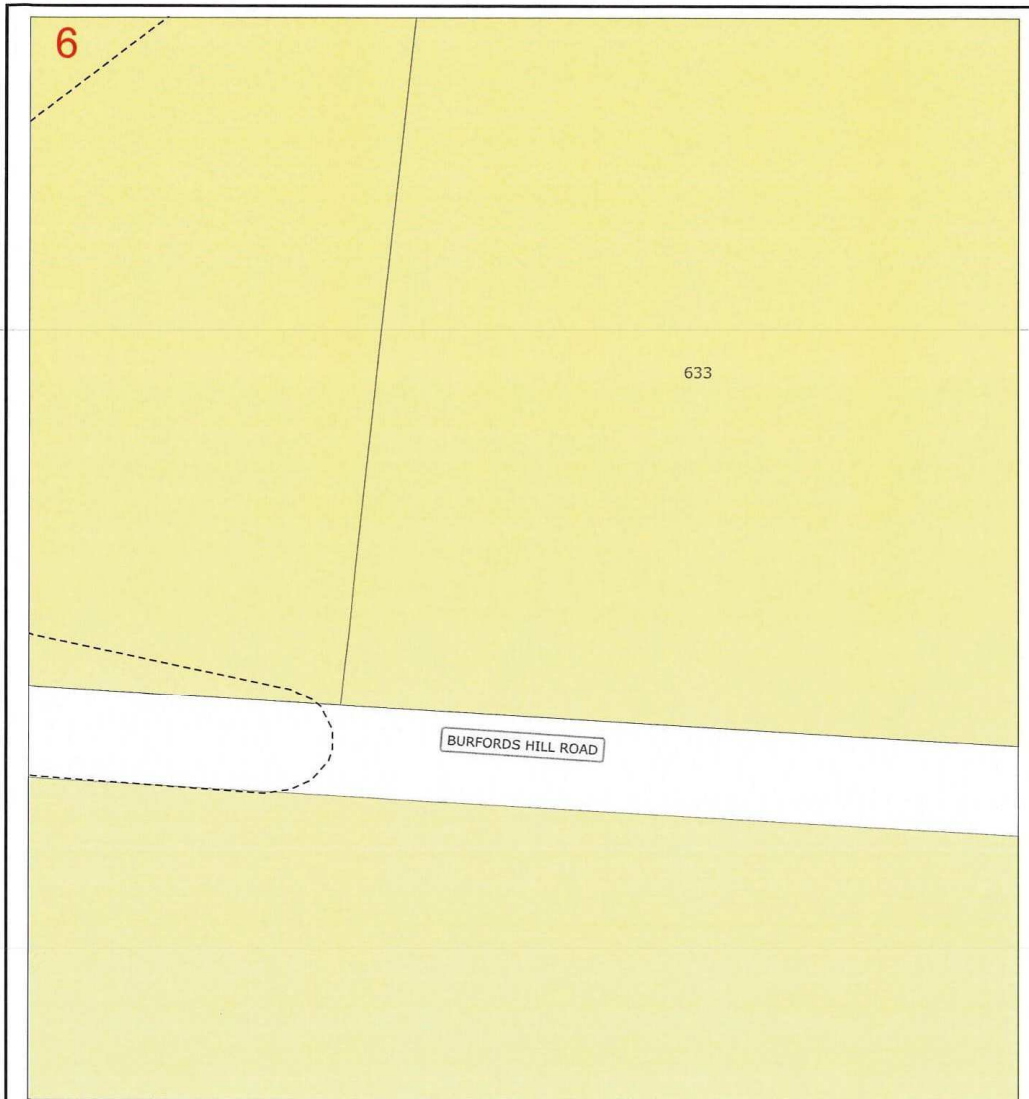




Map 6

Sequence No: 208832681

Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

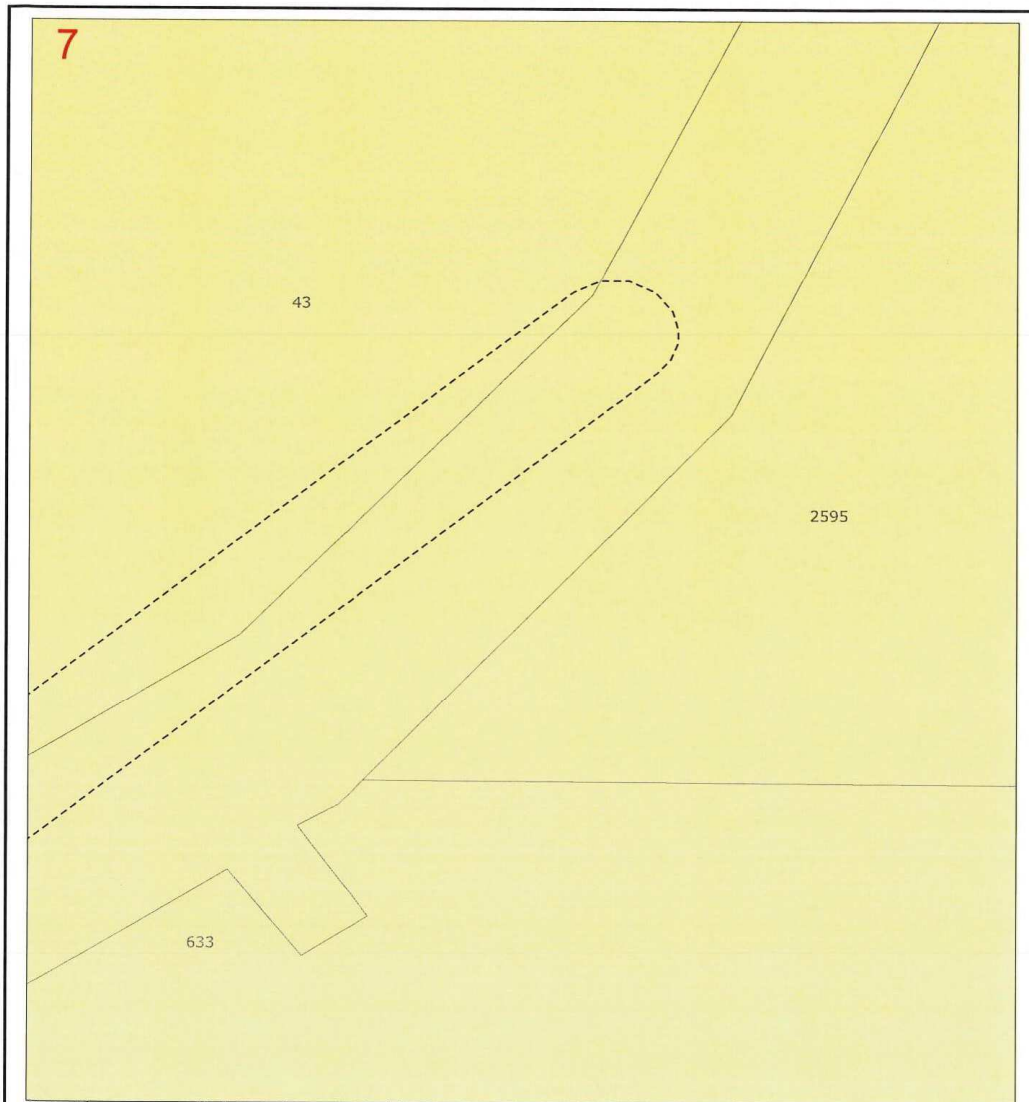
LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



Map 7

Sequence No: 208832681

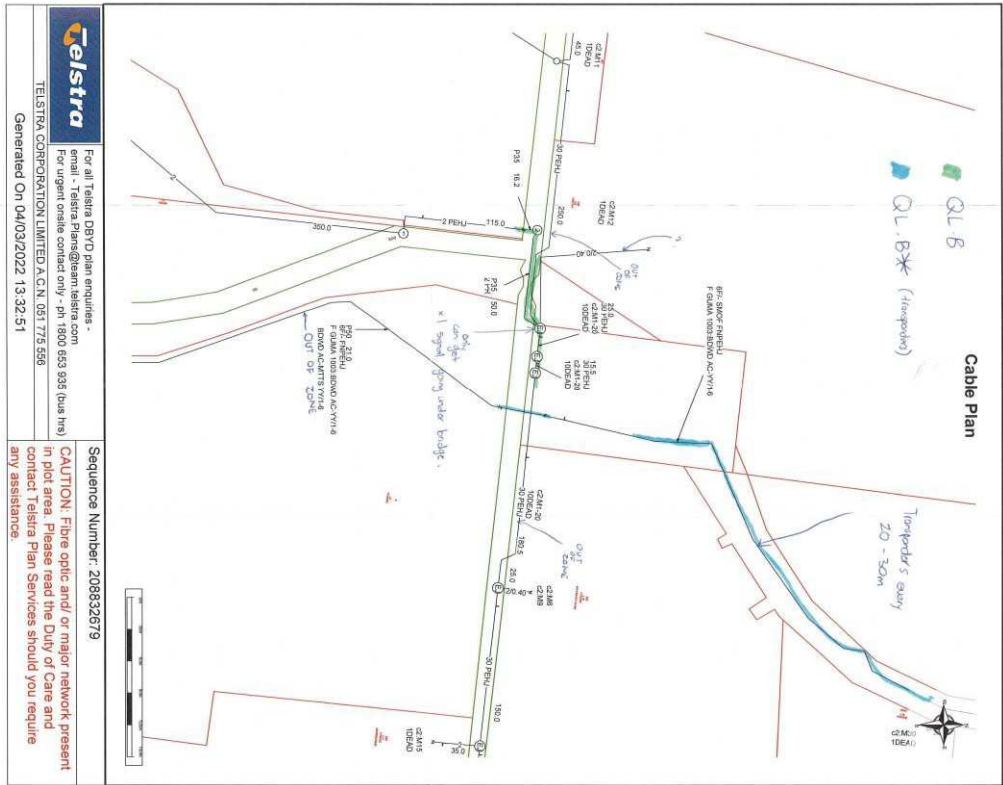
Lot 1 Burfords Hill Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		







#3 ✓

Job No 31512690

Phone: 1100
www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 3
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022
Address: 29 Hammer Road, Mount Torrens SA 5244
Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
 # Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
208832857	SA Power Networks	(08) 8292 0218	NOTIFIED
208832856	SA Water	(08) 7424 1117	NOTIFIED
208832855	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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



OVERVIEW ONLY
DB YD Sequence No: 208832856

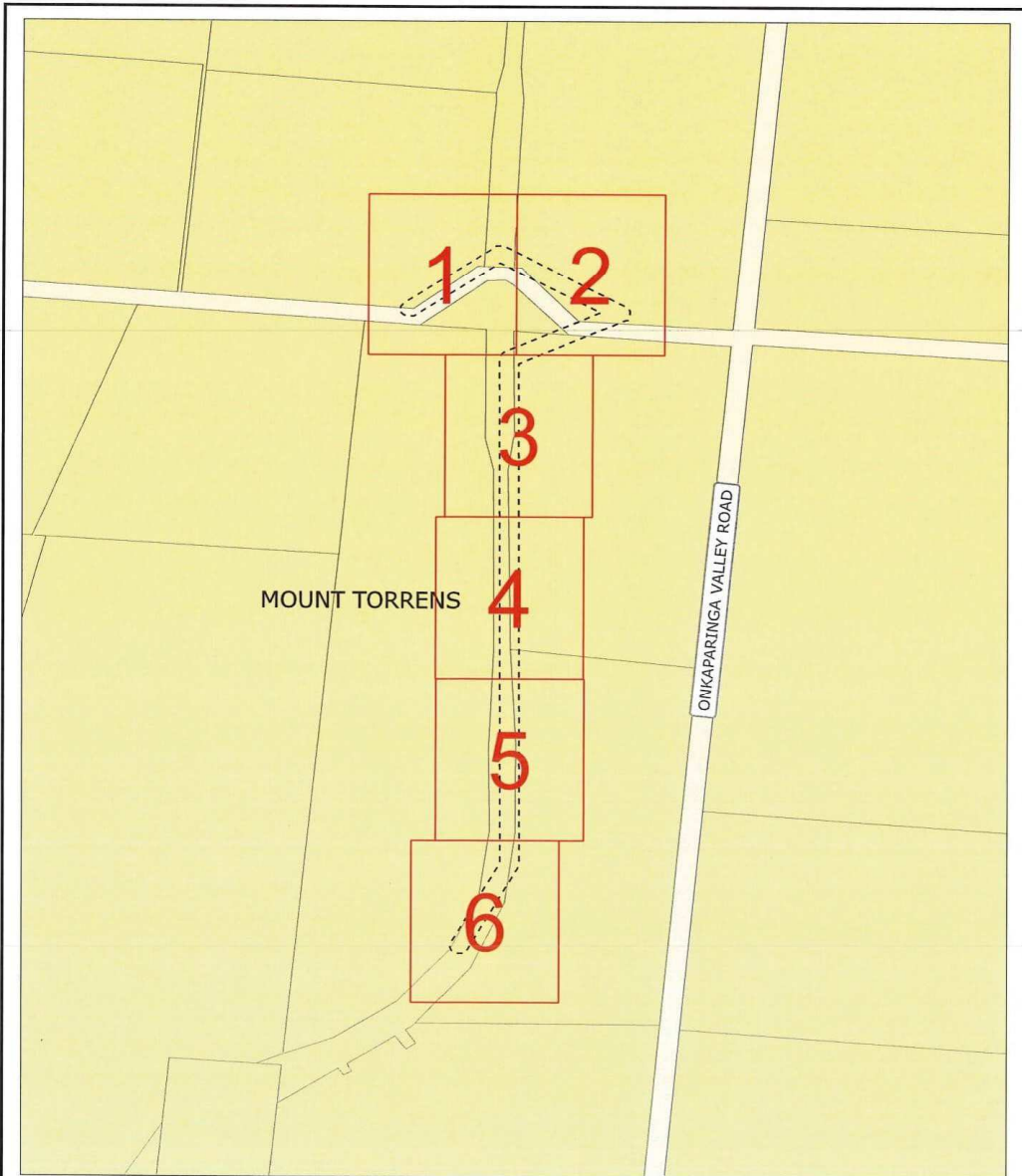




Overview Map

Sequence No: 208832857

29 Hallett Road Mount Torrens



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

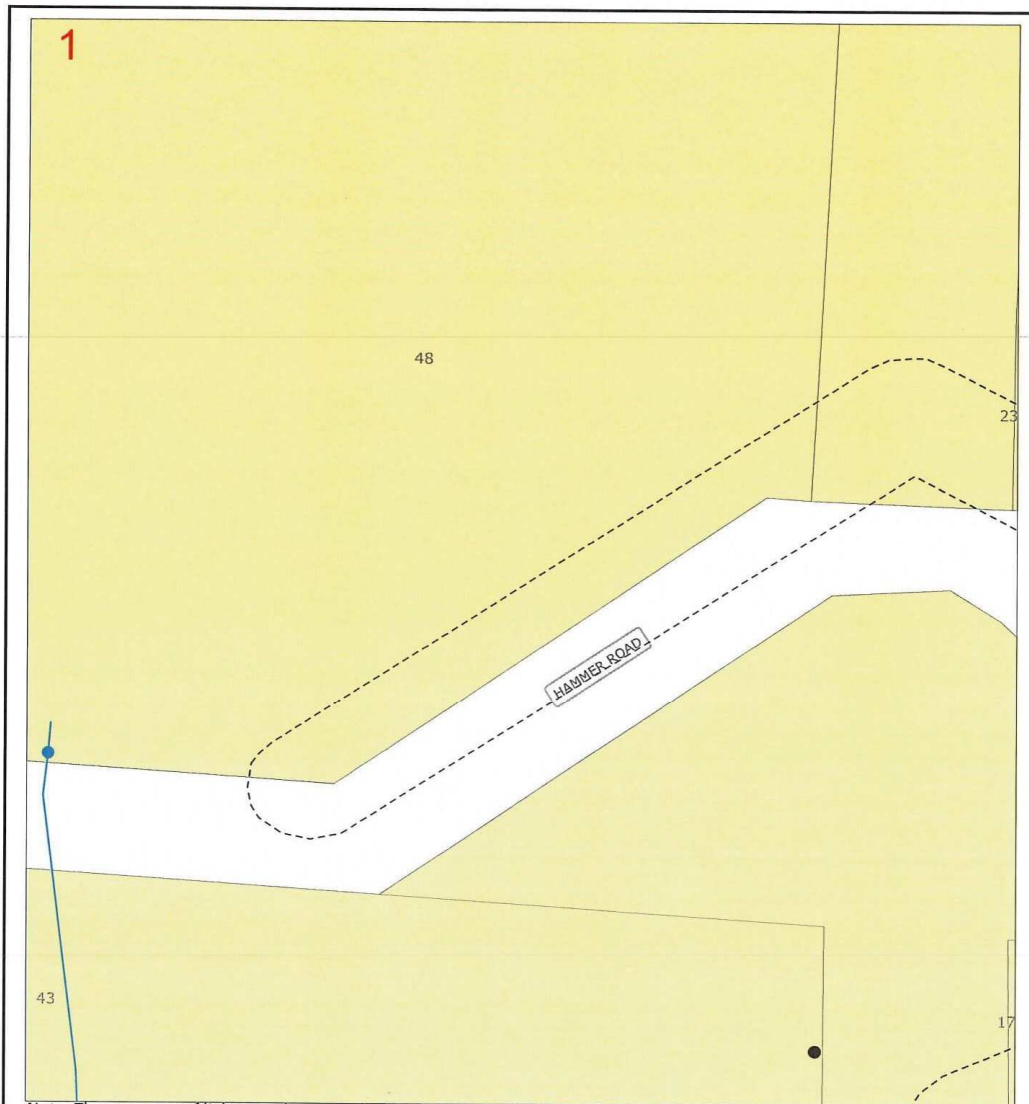
- 1 Detail Map
- DBYD Requested Area





Map 1

Sequence No: 208832857
29 Hammer Road Mount Torrens



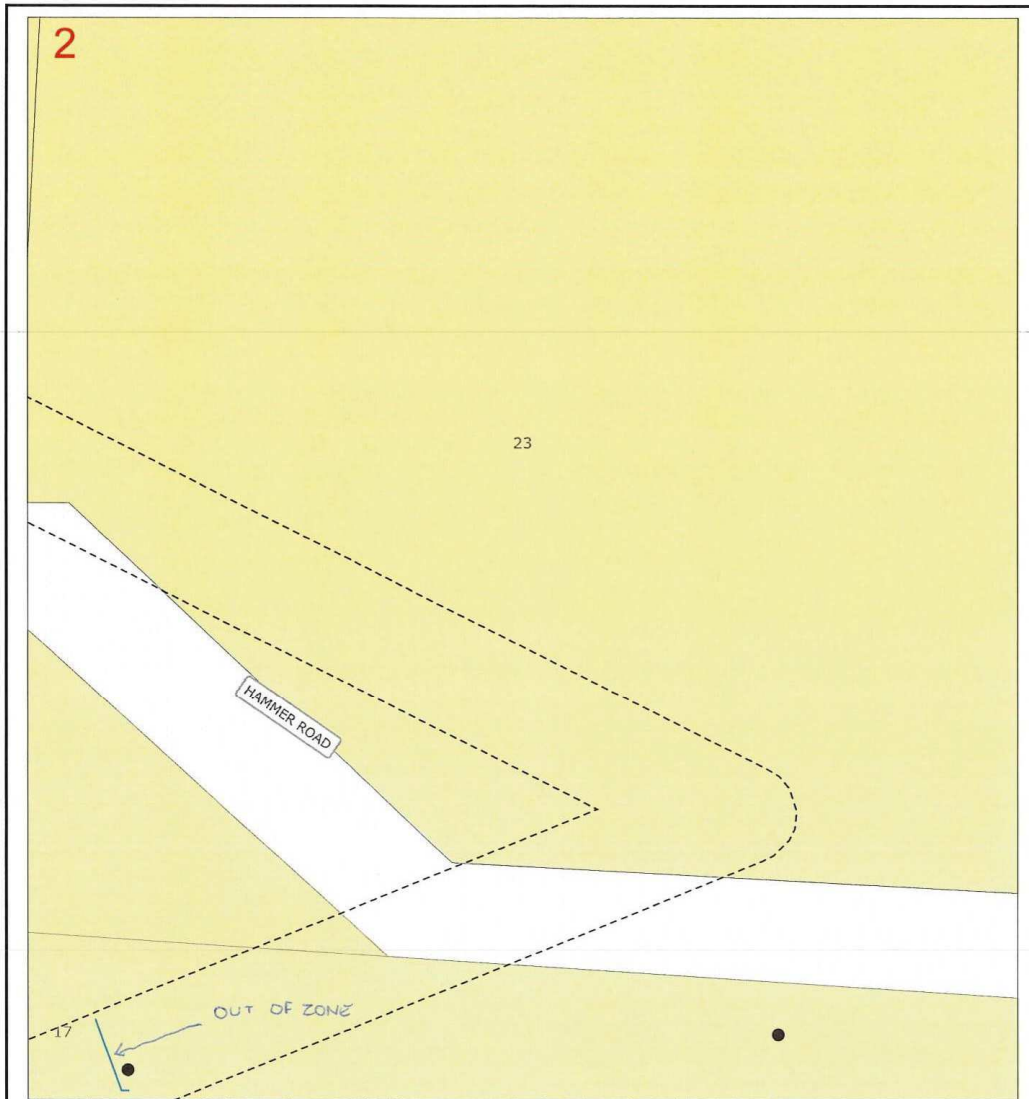
Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



Map 2

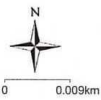
Sequence No: 208832857
29 Hammer Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column

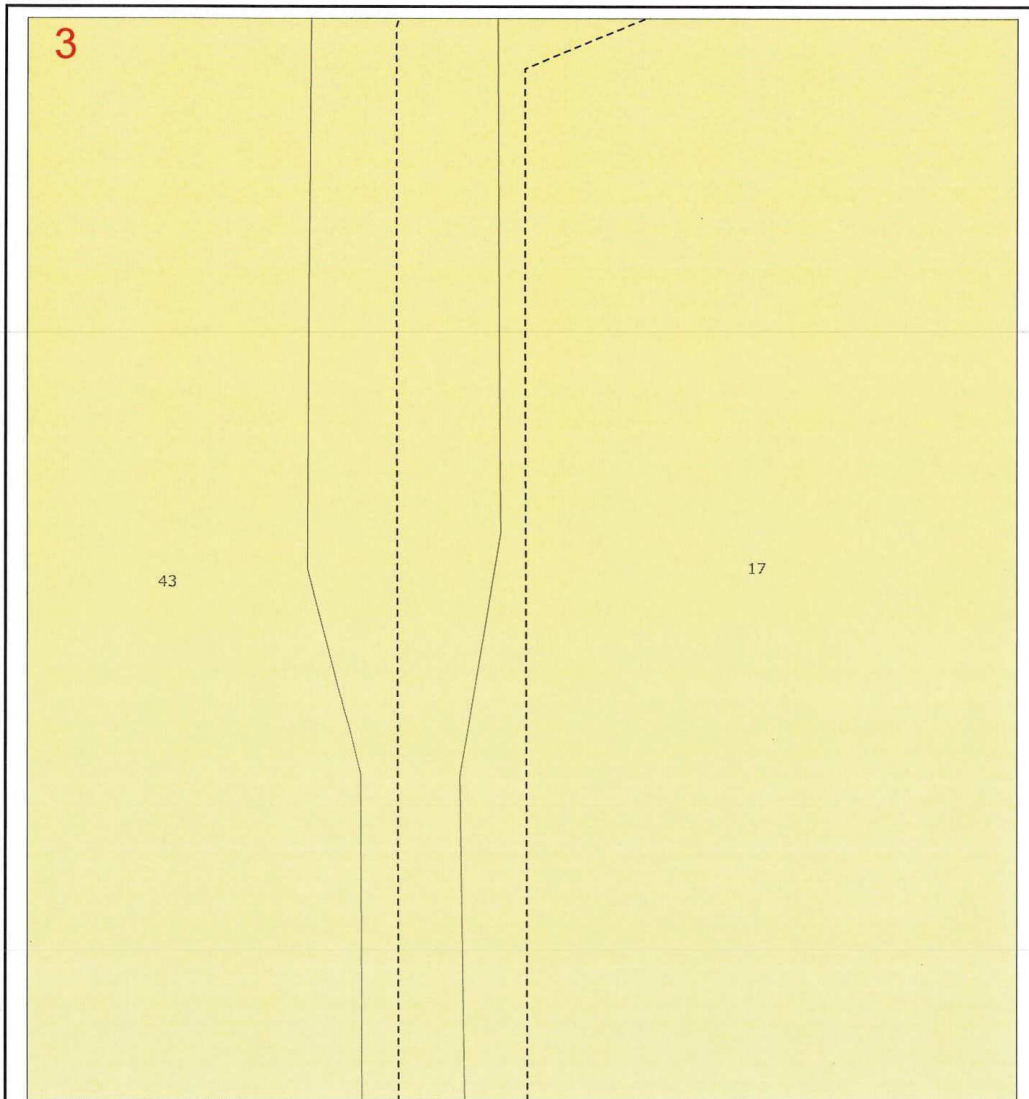


Powered by dbyd



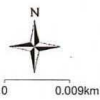
Map 3

Sequence No: 208832857
29 Hammer Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

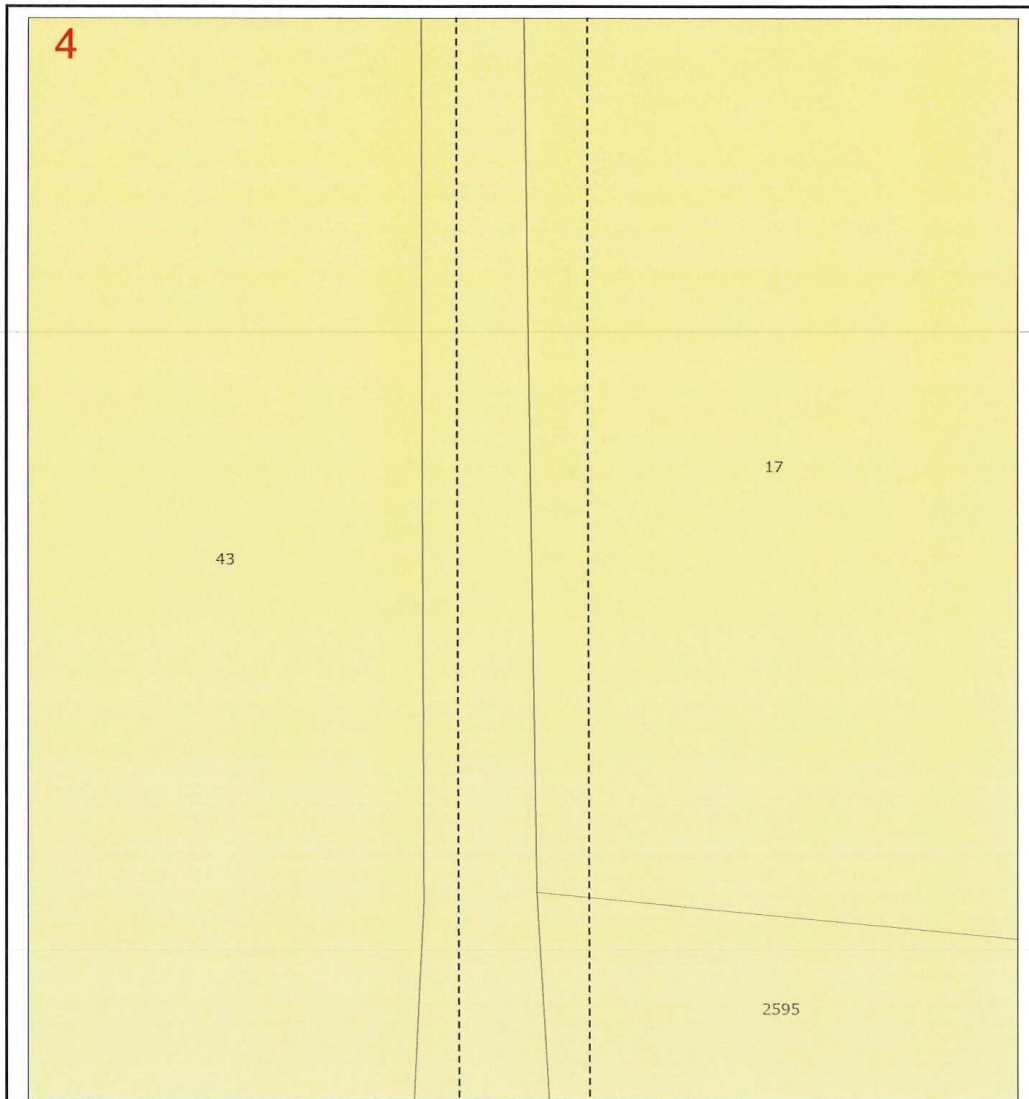
Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column





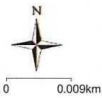
Map 4

Sequence No: 208832857
29 Hammer Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

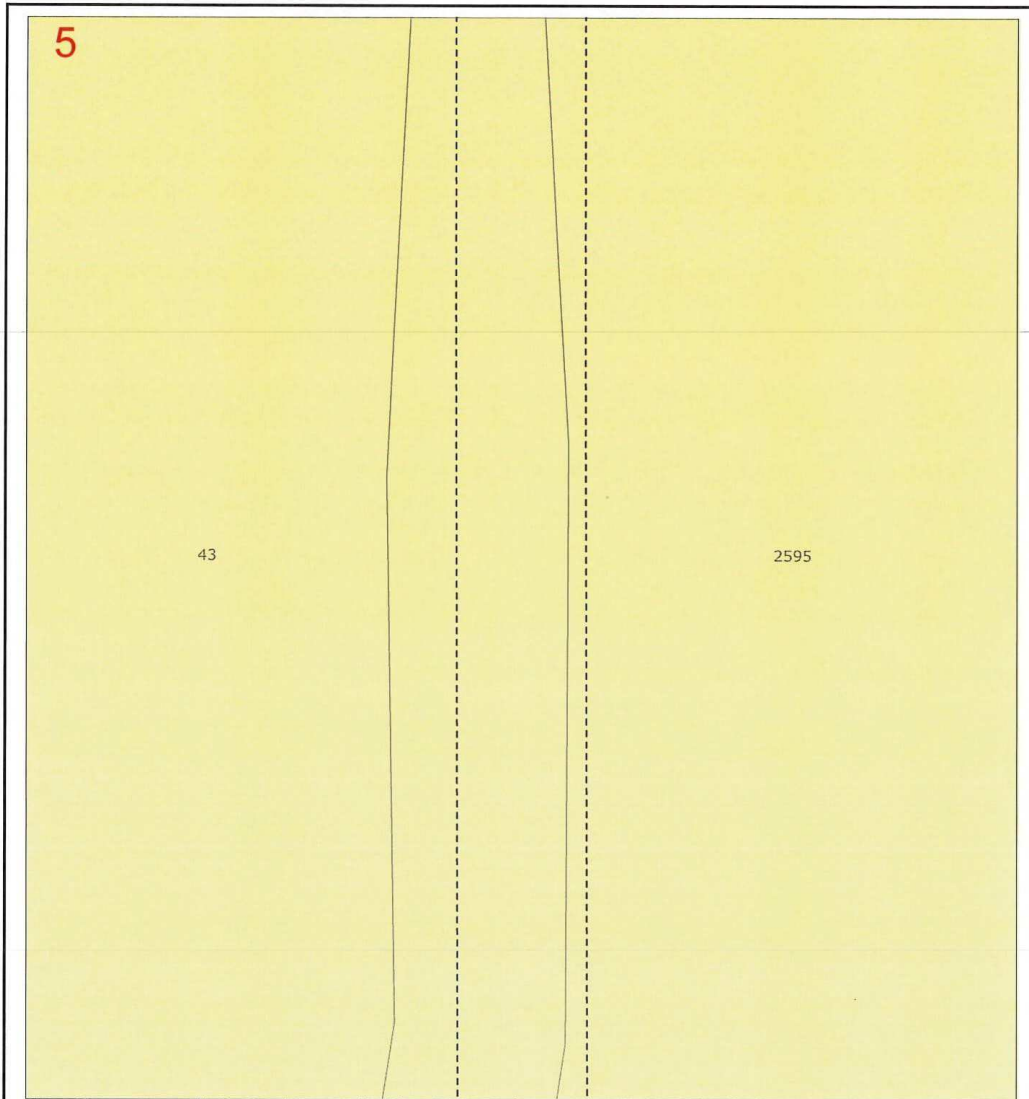
Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
					Fibre Optic Cable/Duct
					Fibre Manhole/Pit
					Pilot Cable
					Pilot Manhole/Pit
					Substation
					Electricity Pole
					Light Column





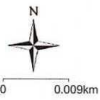
Map 5

Sequence No: 208832857
29 Hammer Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

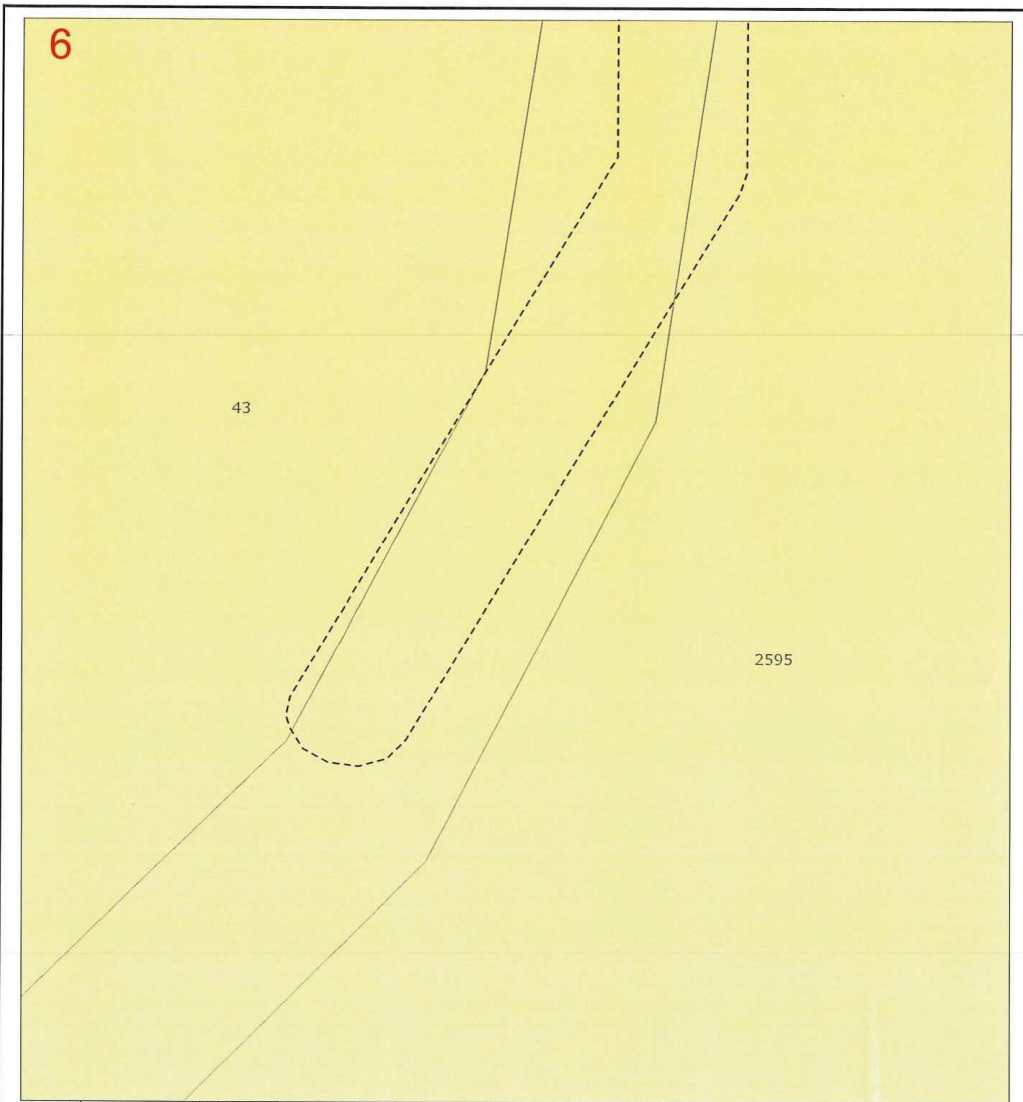
LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		





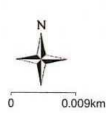
Map 6

Sequence No: 208832857
29 Hammer Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		





#4

Job No 31512711

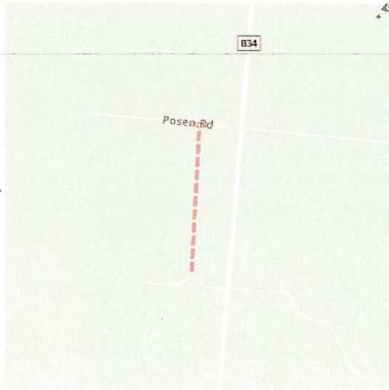
Phone: 1100
www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 4
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022

Address:
 Lot 2 Posen Road
 Mount Torrens SA 5244

Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

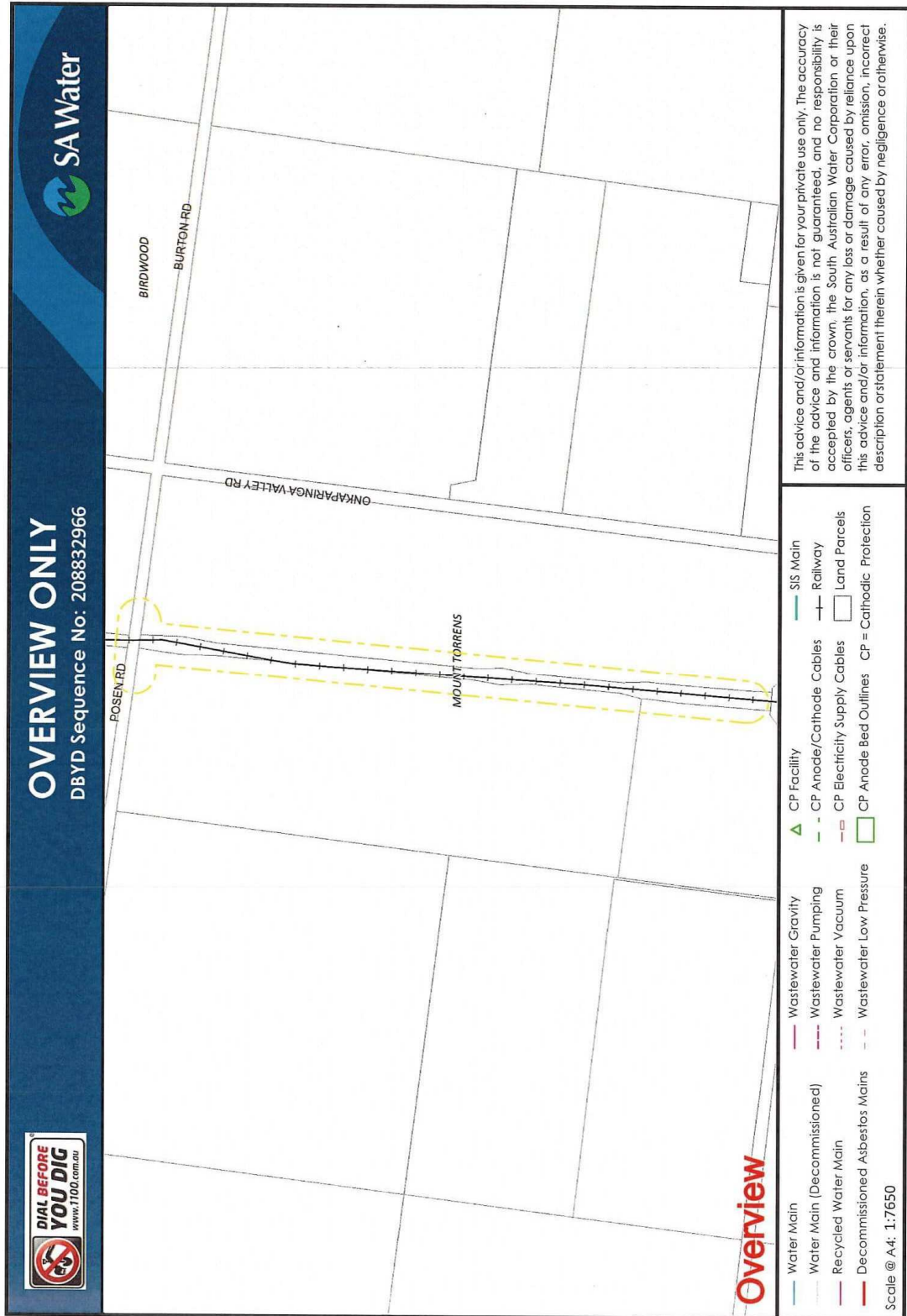
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.

Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
208832967	SA Power Networks	(08) 8292 0218	NOTIFIED
208832966	SA Water	(08) 7424 1117	NOTIFIED
208832965	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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



Plans generated [04/03/2022] by Pellicancorp TicketAccess Software | www.pellicancorp.com. Plan valid to 01/04/2022

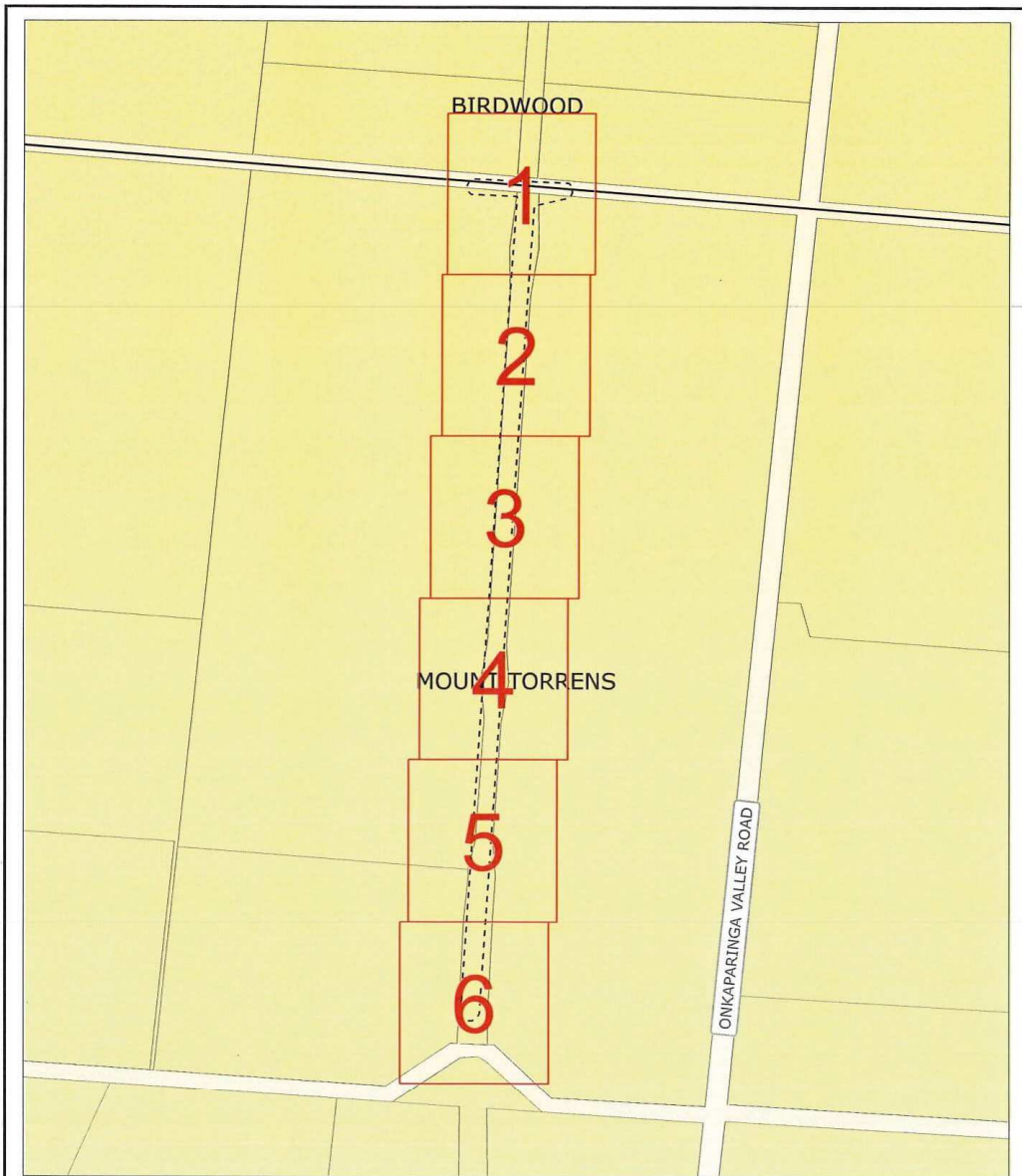
AU.SA Water - Response Plan.docx (rev. 31 Mar 2020)

Date: 04/03/2022



Overview Map

Sequence No: 208832967
Lot 2 Posen Road Mount Torrens



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

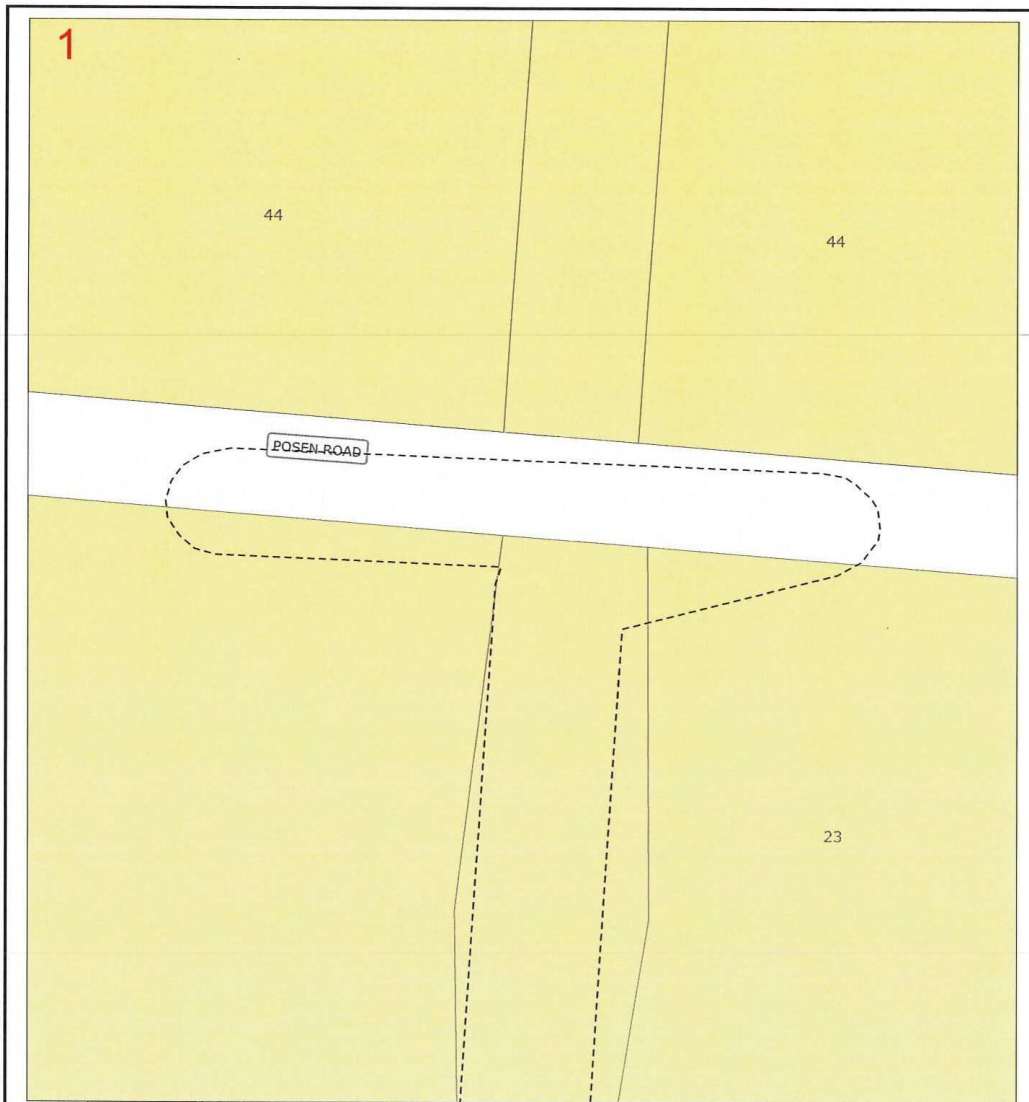
- 1 Detail Map
- DBYD Requested Area

Powered by



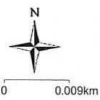
Map 1

Sequence No: 208832967
Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

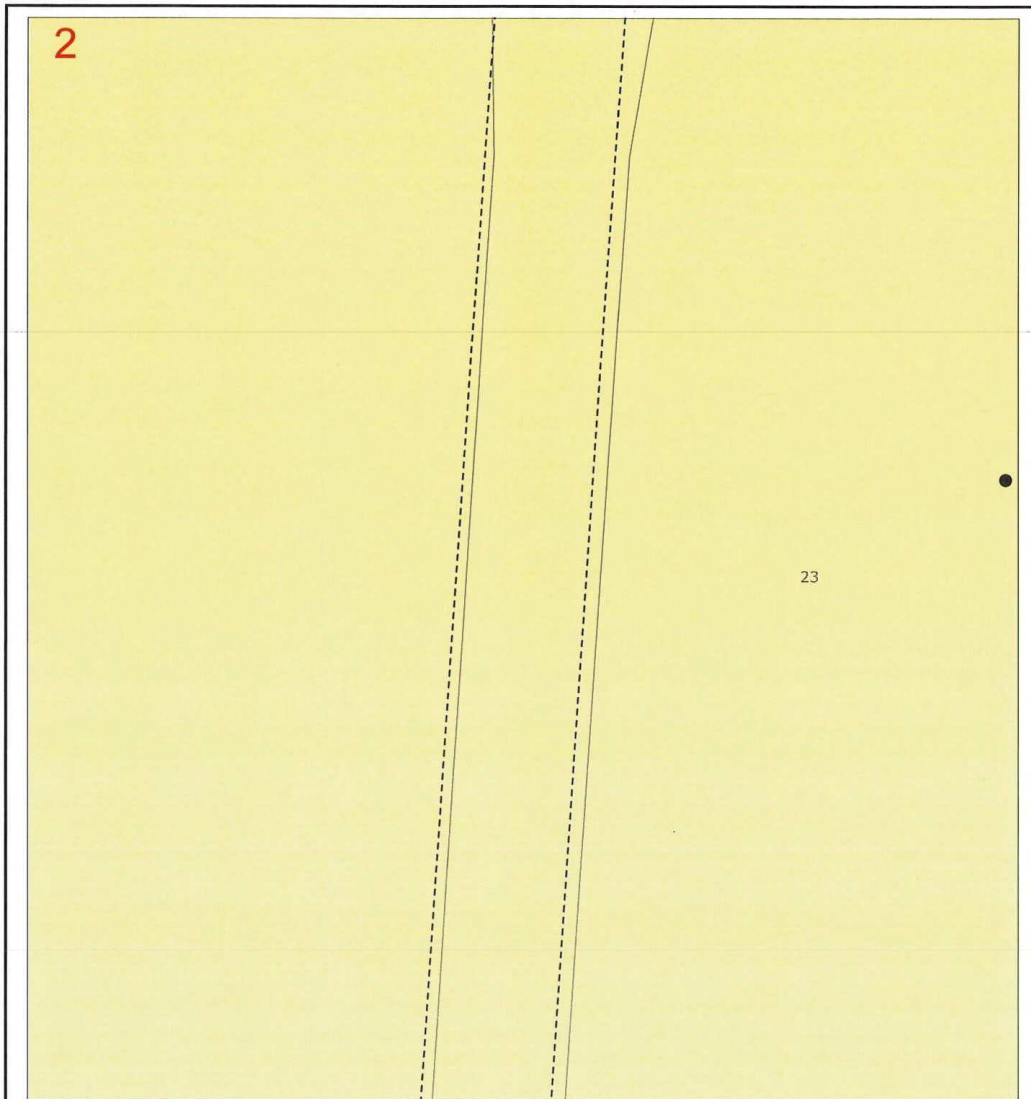
Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column





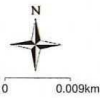
Map 2

Sequence No: 208832967
Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		
			Earthing Grid		

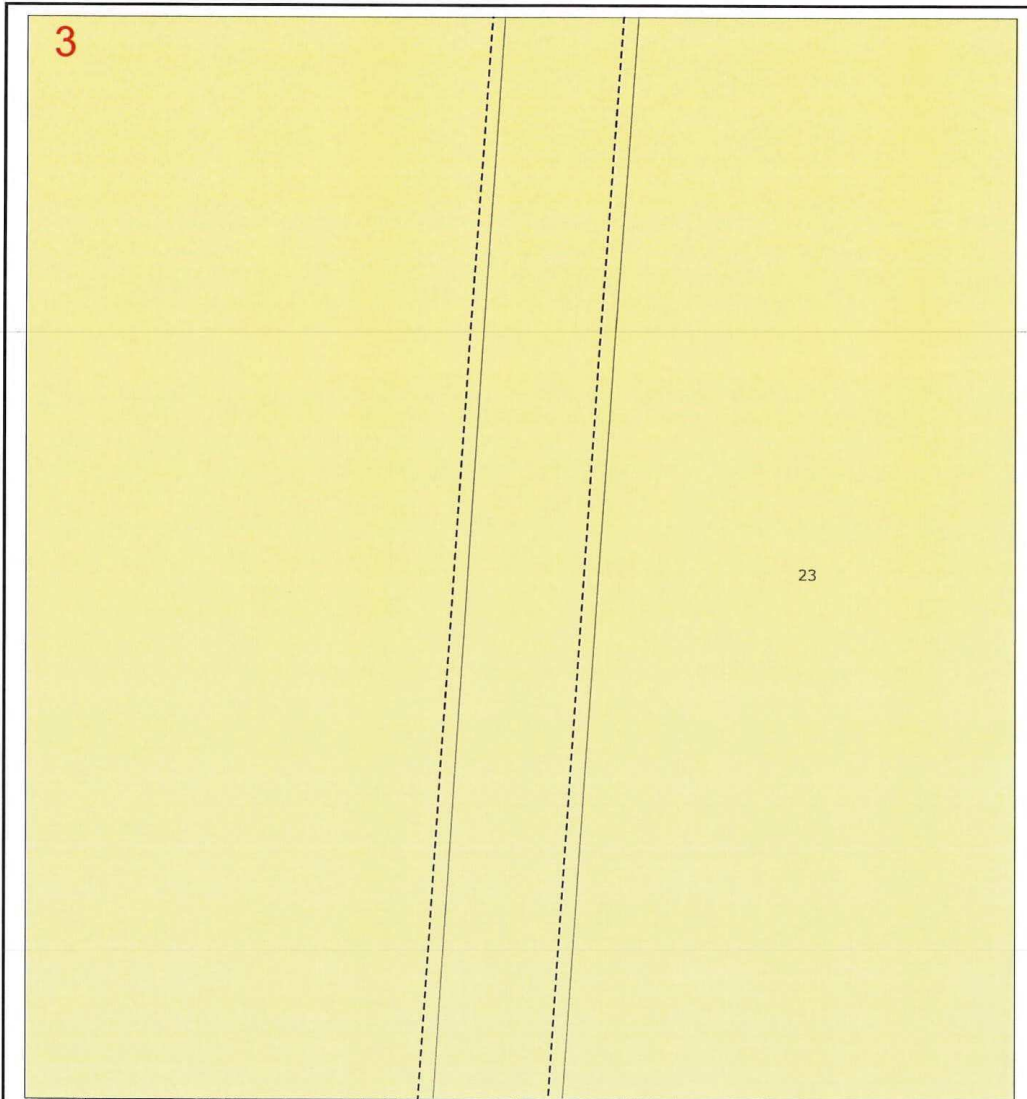


Date: 04/03/2022



Map 3

Sequence No: 208832967
Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		

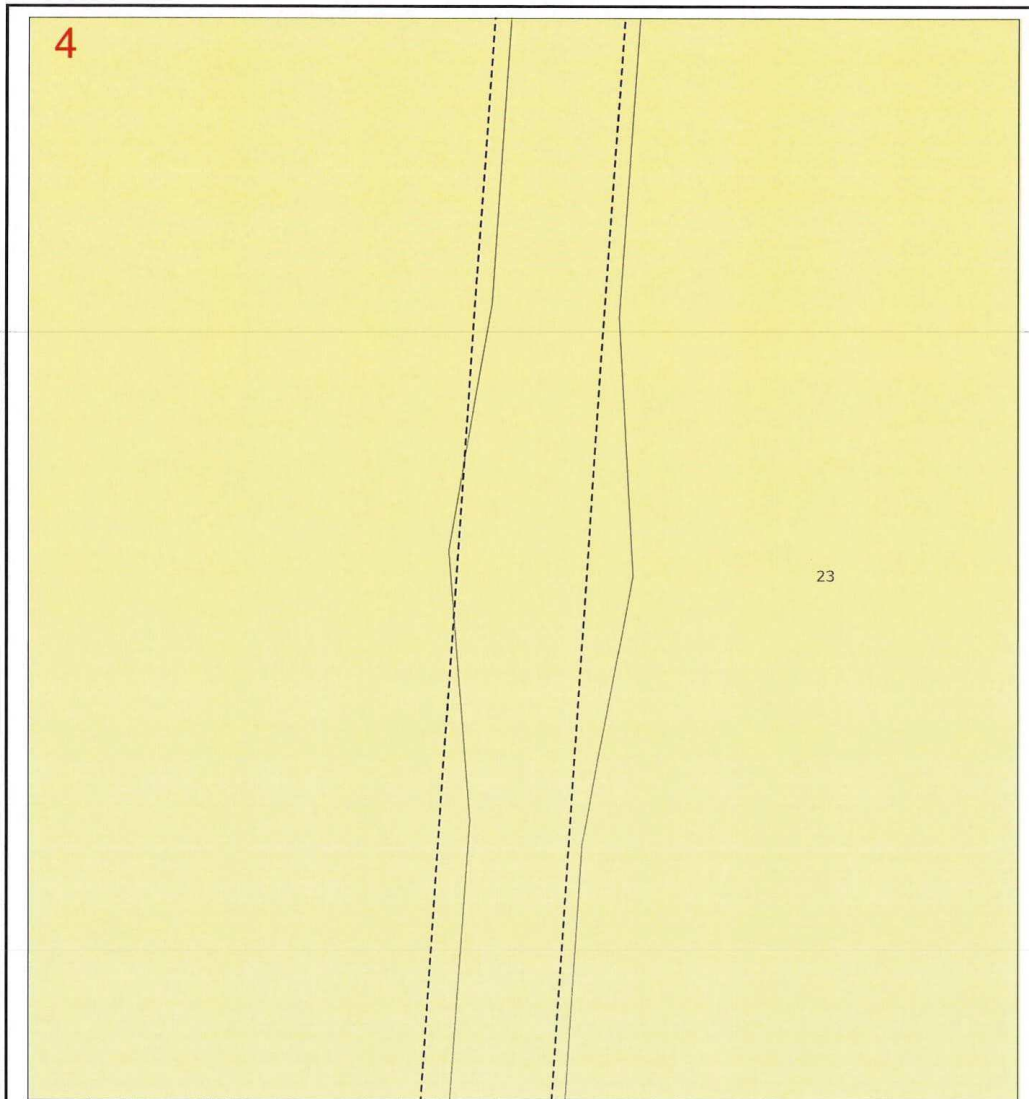


Powered by dbyd



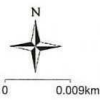
Map 4

Sequence No: 208832967
 Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column

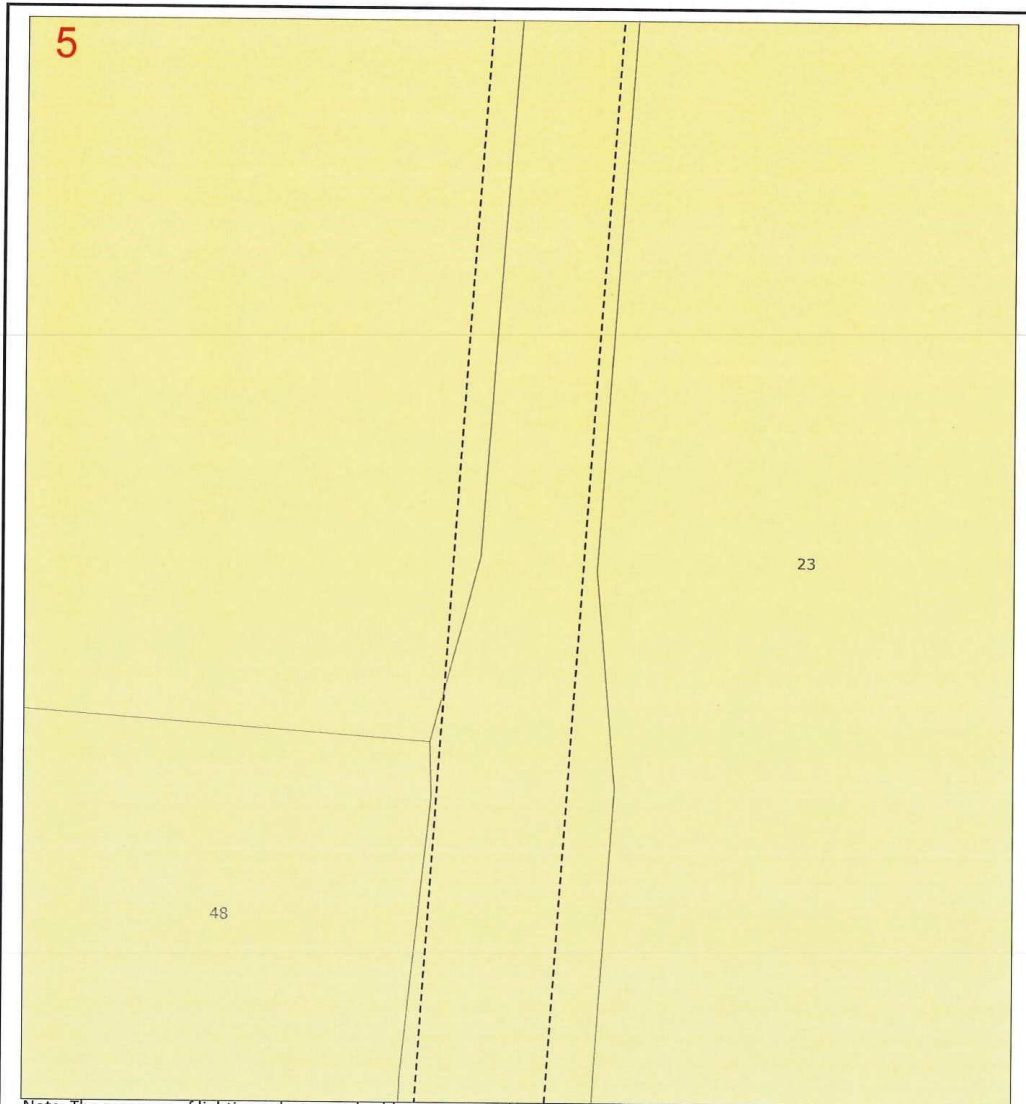


Date: 04/03/2022



Map 5

Sequence No: 208832967
Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



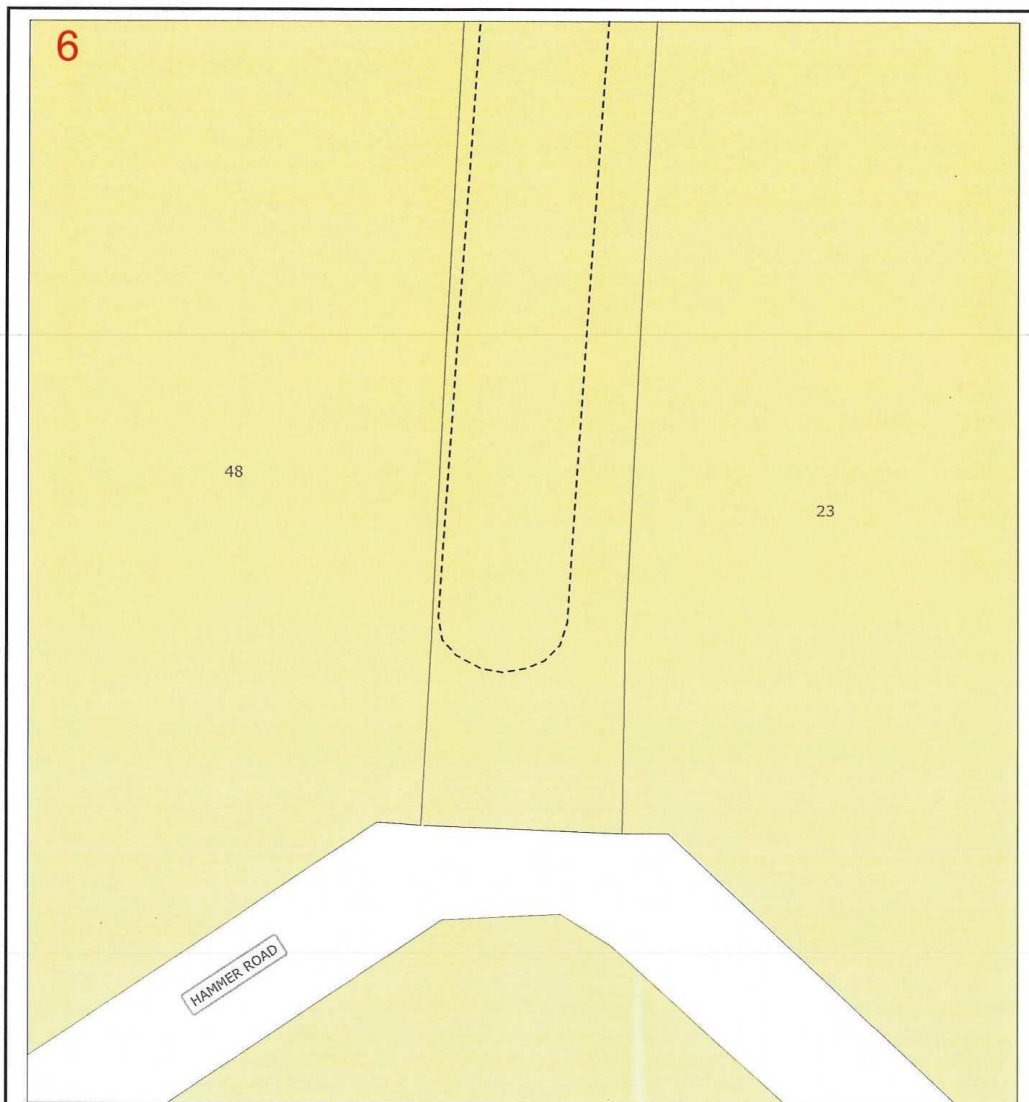
Powered by dbyd



Map 6

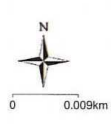
Sequence No: 208832967

Lot 2 Posen Road Mount Torrens



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		





✕5 ☑
Job No 31512726

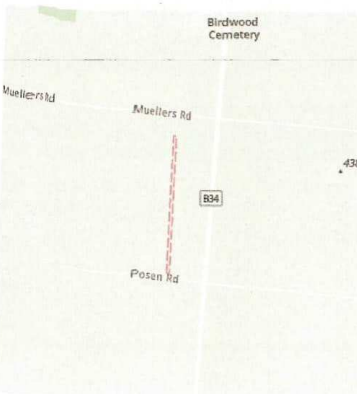
Phone: 1100
 www.1100.com.au

Caller Details

Contact: Megan McMaster Caller Id: 3004654 Phone: (08) 8376 5911
 Company: Not supplied
 Address: 42-46 Kinkaid Avenue Email: tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 5
 Working on Behalf of: Private
 Enquiry Date: 04/03/2022 Start Date: 14/03/2022 End Date: 14/04/2022

Address: Lot 3 Onkaparinga Valley Road
 Birdwood SA 5234

Job Purpose: Excavation Onsite Activities: Non-Destructive Digging
 Location of Workplace: Road Reserve Location in Road: Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

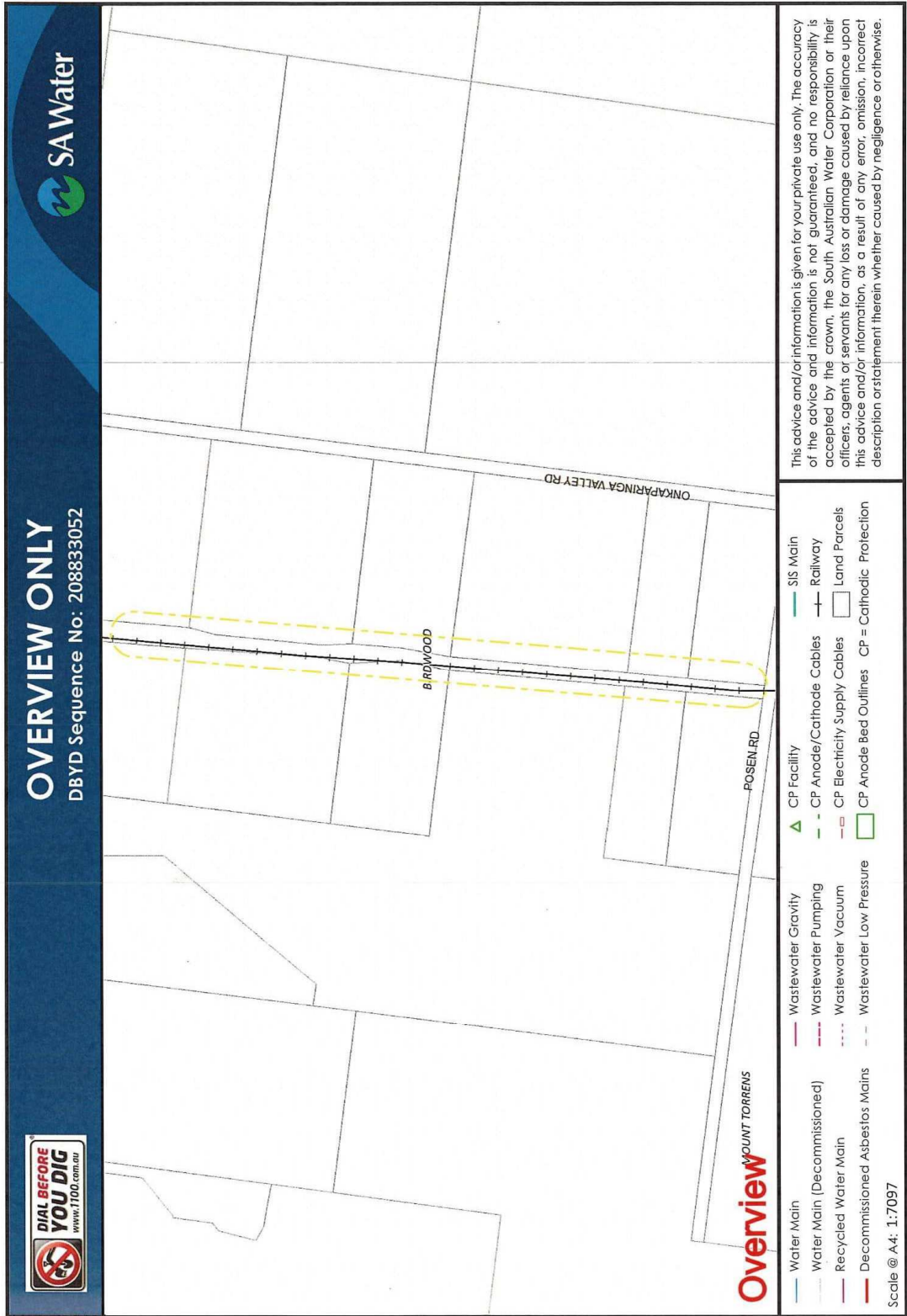
The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
 # Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
208833053	SA Power Networks	(08) 8292 0218	NOTIFIED
208833052	SA Water	NONE ✓ (08) 7424 1117	NOTIFIED
208833051	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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



Plans generated [04/03/2022] by Pellicancorp TicketAccess Software | www.pellicancorp.com. Plan valid to 01/04/2022

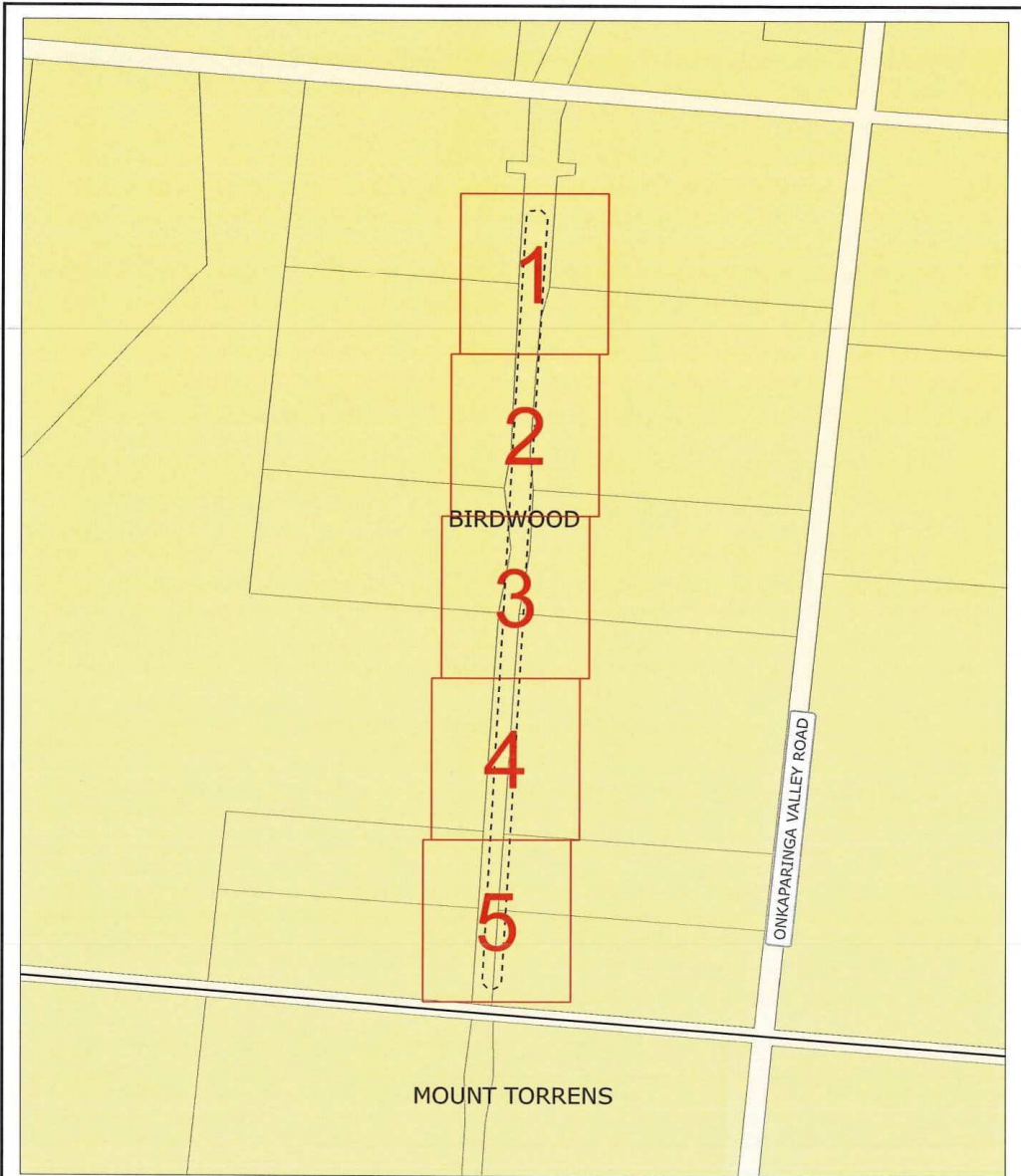
AU:SA Water - Response Plan.docx (rev. 31 Mar 2020)



Overview Map

Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

- 1** Detail Map
- DBYD Requested Area

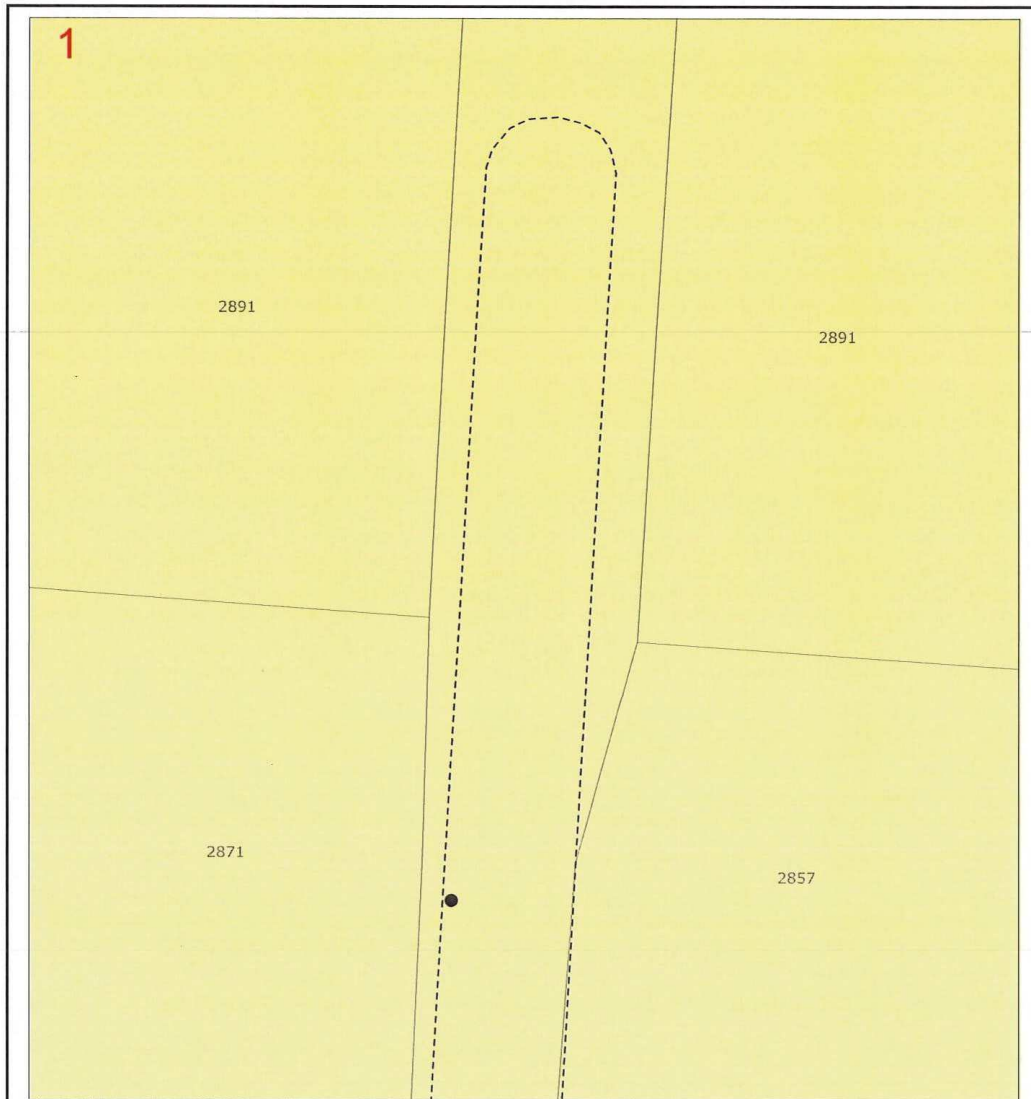
Powered by dbyd



Map 1

Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		Other Symbols	
▼ 66kV/132kV	↗ 66kV/132kV	⬜ DBYD Requested Area	⬜ HV Switching Cubicle	⌚ Fibre Optic Cable/Duct	⬜ Fibre Manhole/Pit
▼ 33kV	↘ 33kV	⬜ Transformer Cubicle	⬜ Cable Joint Bay	⌚ Pilot Cable	⬜ Pilot Manhole/Pit
▼ 19kV	↗ 19kV	⬜ LV Switching Cubicle/Pit	⬜ Service Pit/Pillar	⬜ Substation	● Electricity Pole
▼ 11kV	↘ 11kV	⬜ Earthing Grid		● Light Column	
▼ 7.6kV	↗ 7.6kV				
▼ Not In Service	↘ Not In Service				
▼ Low Voltage	↗ Low Voltage				



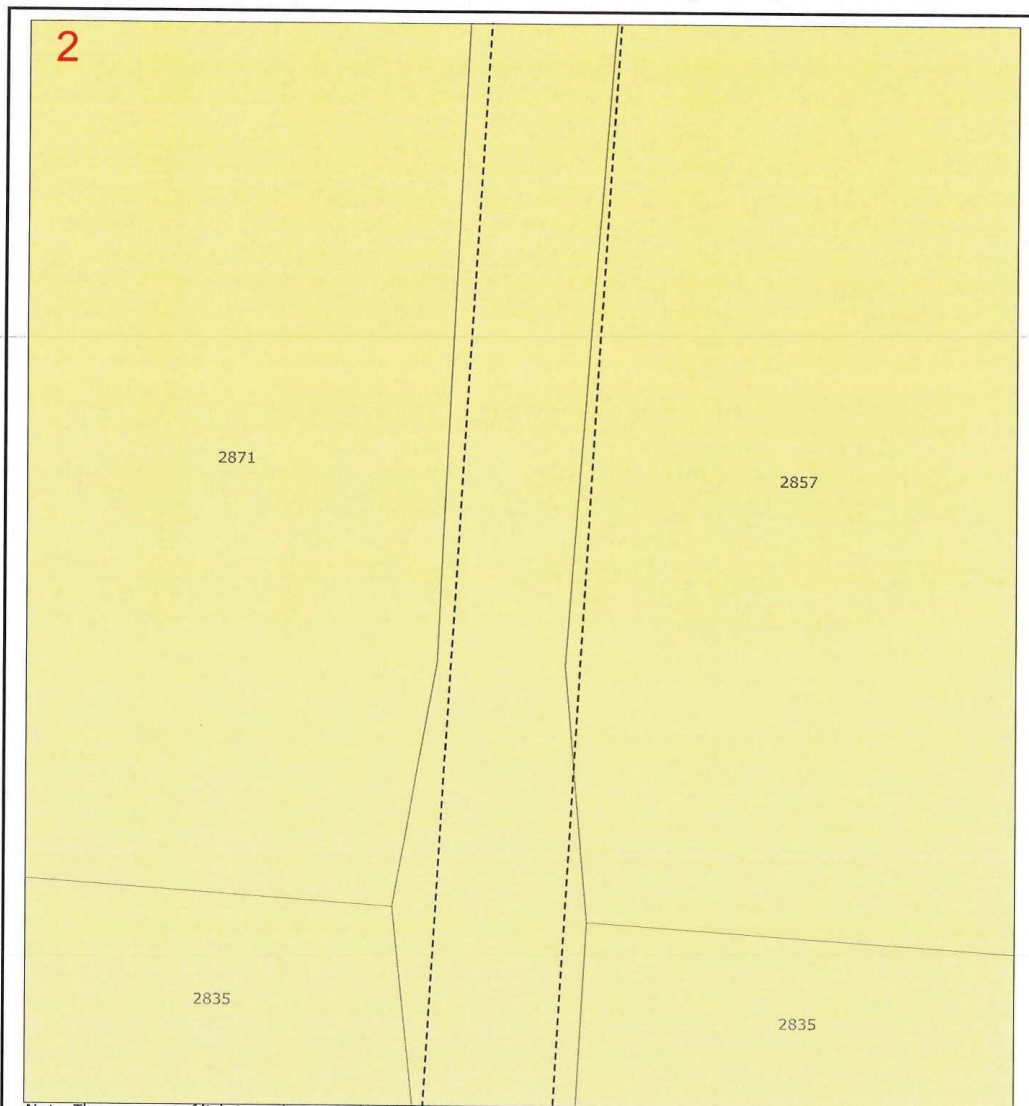
Date: 04/03/2022



Map 2

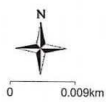
Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



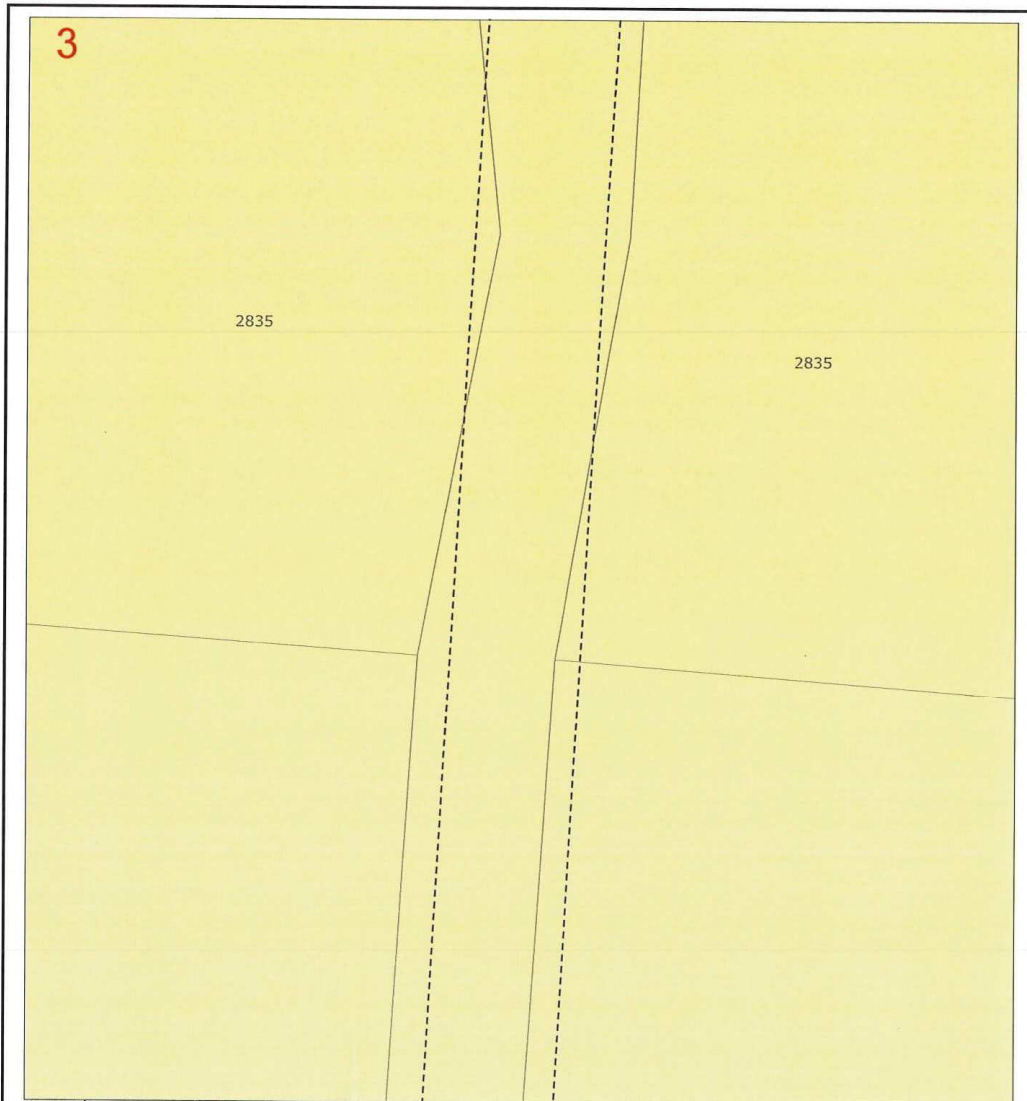
Powered by dbyd



Map 3

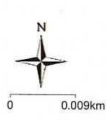
Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
					Fibre Optic Cable/Duct
					Fibre Manhole/Pit
					Pilot Cable
					Pilot Manhole/Pit
					Substation
					Electricity Pole
					Light Column



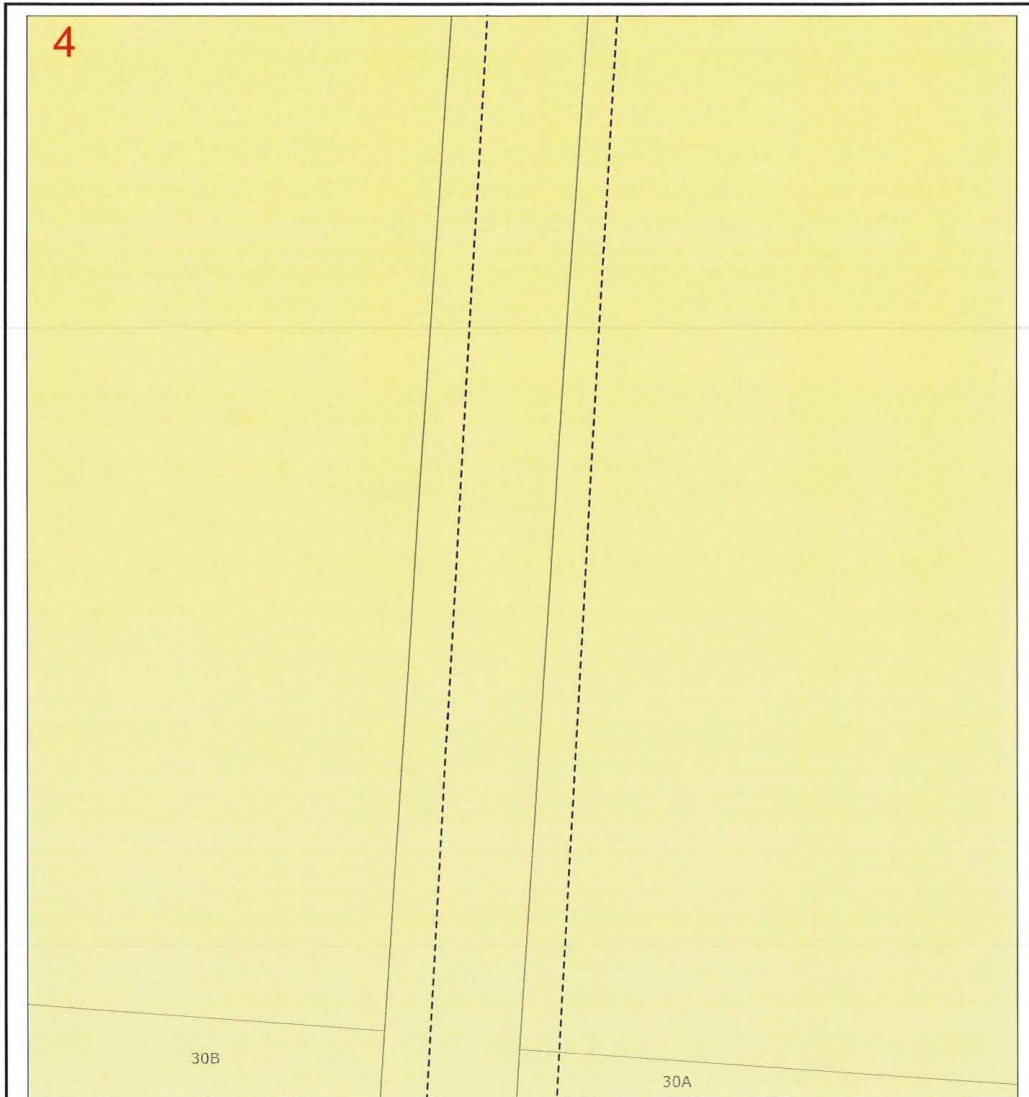
Date: 04/03/2022



Map 4

Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits

- ▼ 66kV/132kV
- ▼ 33kV
- ▼ 19kV
- ▼ 11kV
- ▼ 7.6kV
- ▼ Not In Service
- ▼ Low Voltage

Cables

- 66kV/132kV
- 33kV
- 19kV
- 11kV
- 7.6kV
- Not In Service
- Low Voltage

- DBYD Requested Area
- HV Switching Cubicle
- Transformer Cubicle
- Cable Joint Bay
- LV Switching Cubicle/Pit
- Service Pit/Pillar
- Earthing Grid

- Fibre Optic Cable/Duct
- Fibre Manhole/Pit
- Pilot Cable
- Pilot Manhole/Pit
- Substation
- Electricity Pole
- Light Column



0 0.009km

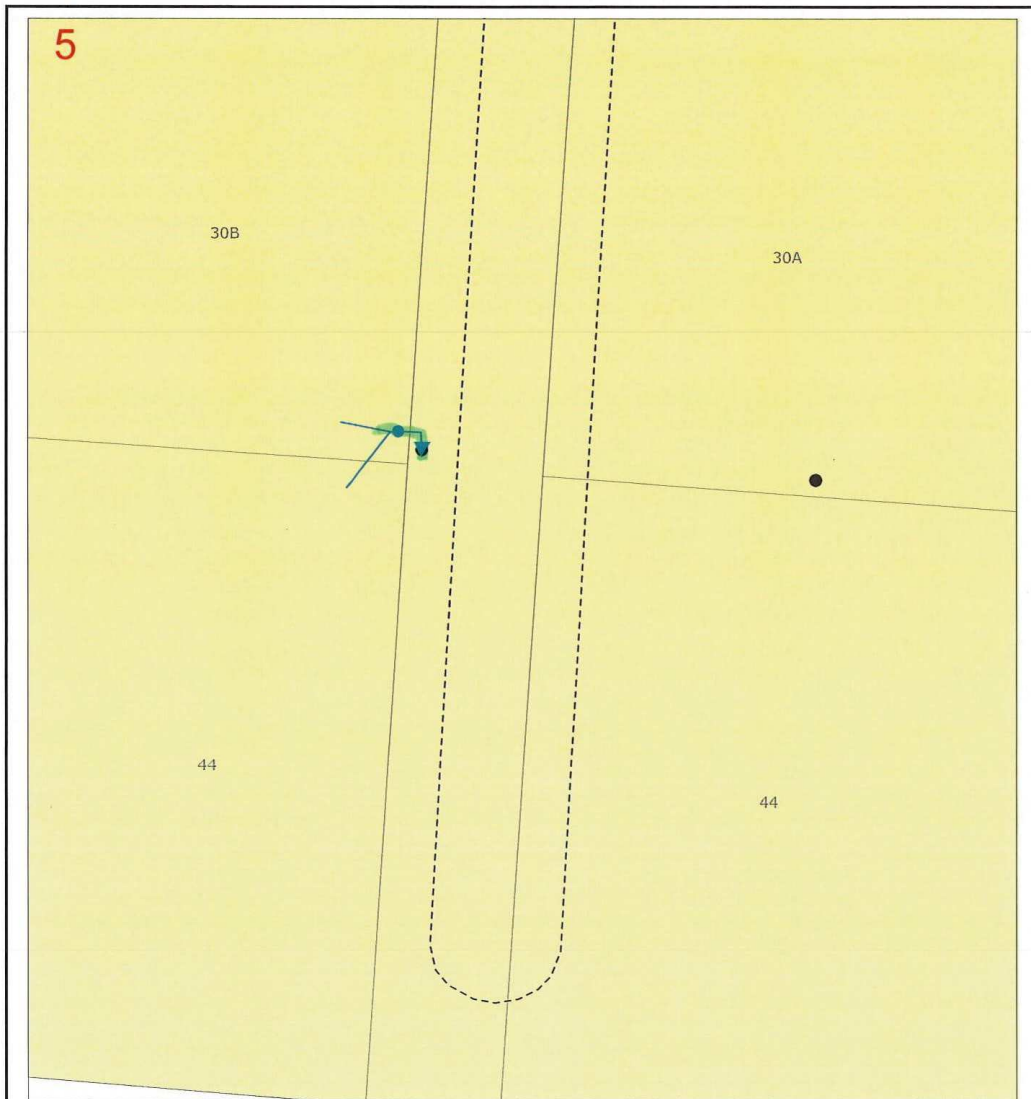
Powered by dbyd



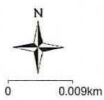
Map 5

Sequence No: 208833053

Lot 3 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.



Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column









#6

Job No 31512743

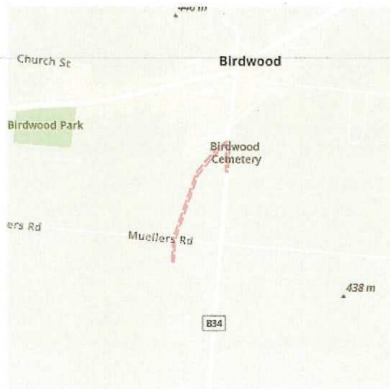
Phone: 1100
www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 6
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022

Address:
 Lot 16 Onkaparinga Valley Road
 Birdwood SA 5234

Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

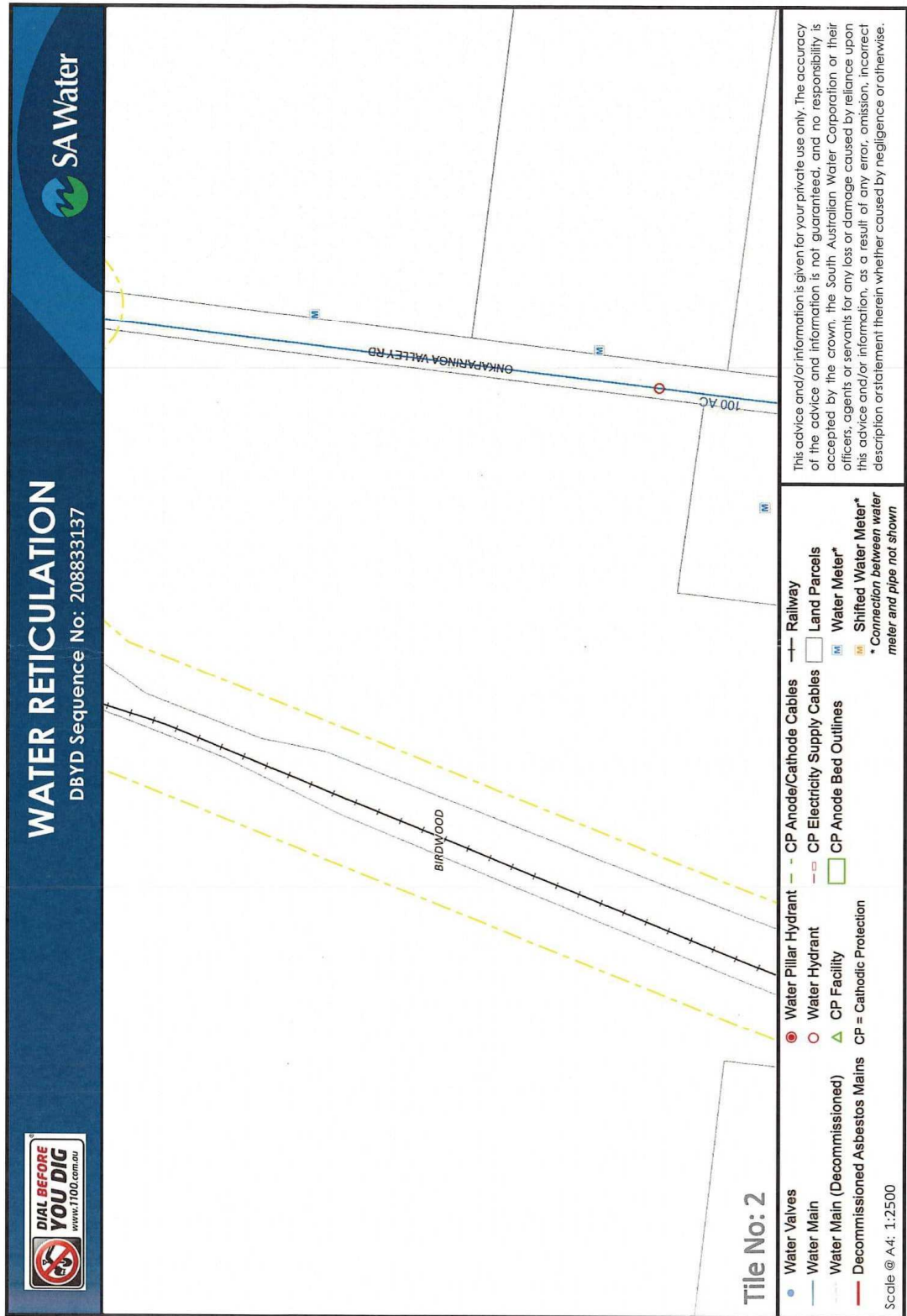
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.

Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

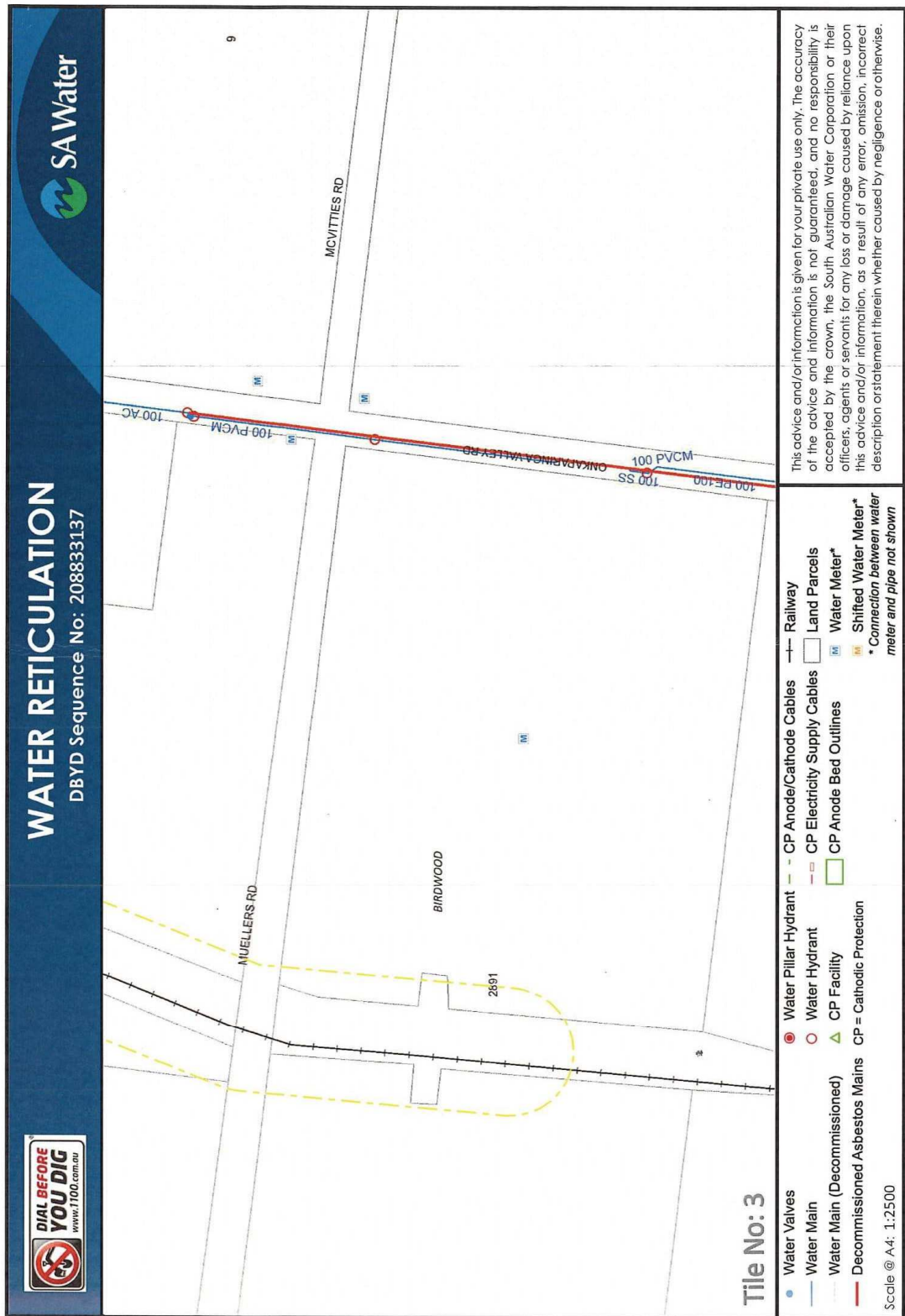
Seq. No.	Authority Name	Phone	Status
208833138	NBN Co SANT	1800 687 626	NOTIFIED
208833139	SA Power Networks	(08) 8292 0218	NOTIFIED
208833137	SA Water	(08) 7424 1117	NOTIFIED
208833136	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

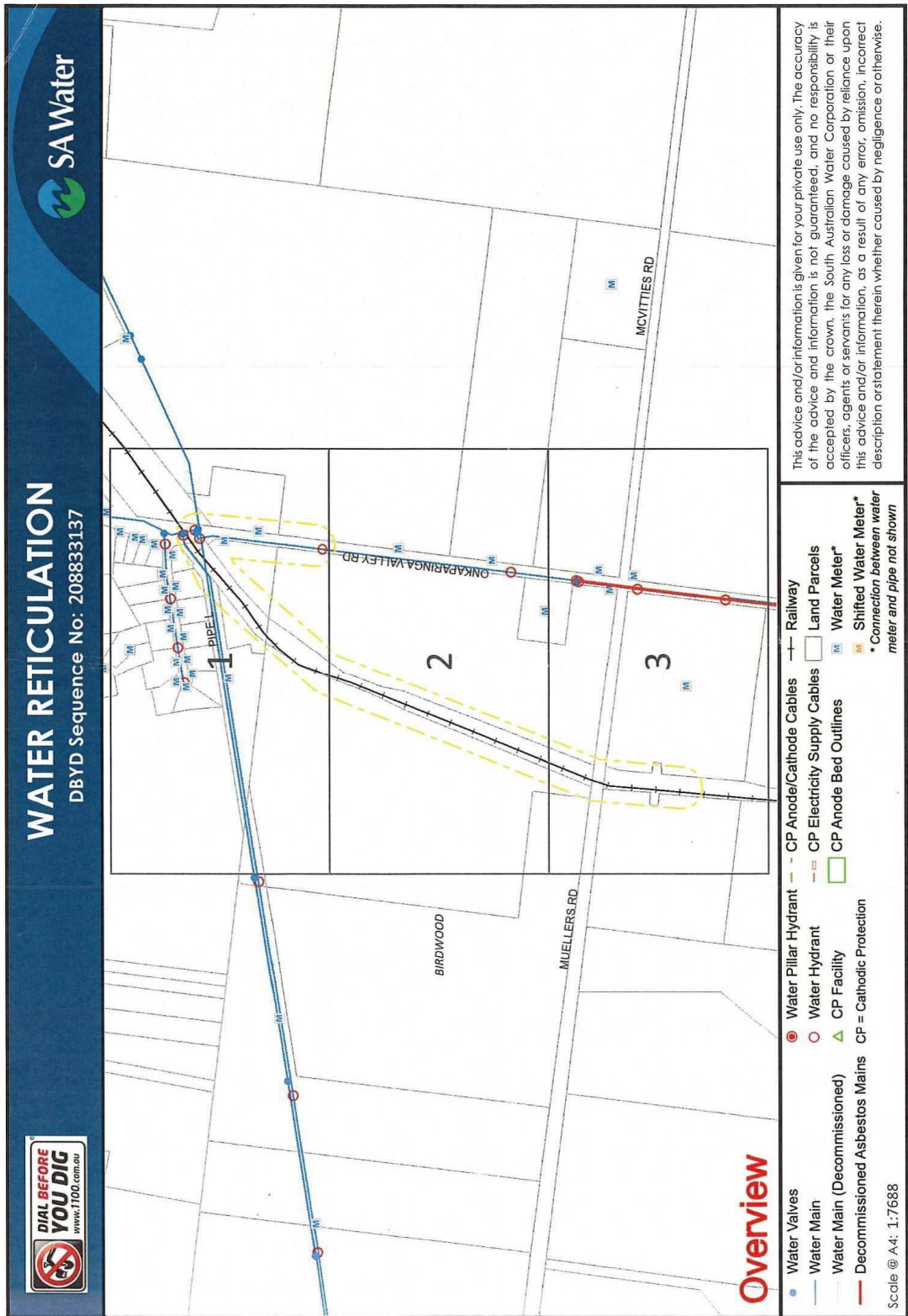
Lodge Your Free Enquiry Online – 24 Hours a Day, Seven Days a Week



AU-SA Water - Response Plan (Water).docx (rev. 31 Mar 2020)



Plans generated [04/03/2022] by PelicanCorp TicketAccess Software | www.pelicancorp.com. Plan valid to 01/04/2022.
 AU.SA Water - Response Plan [Water].docx (rev. 31 Mar 2020)

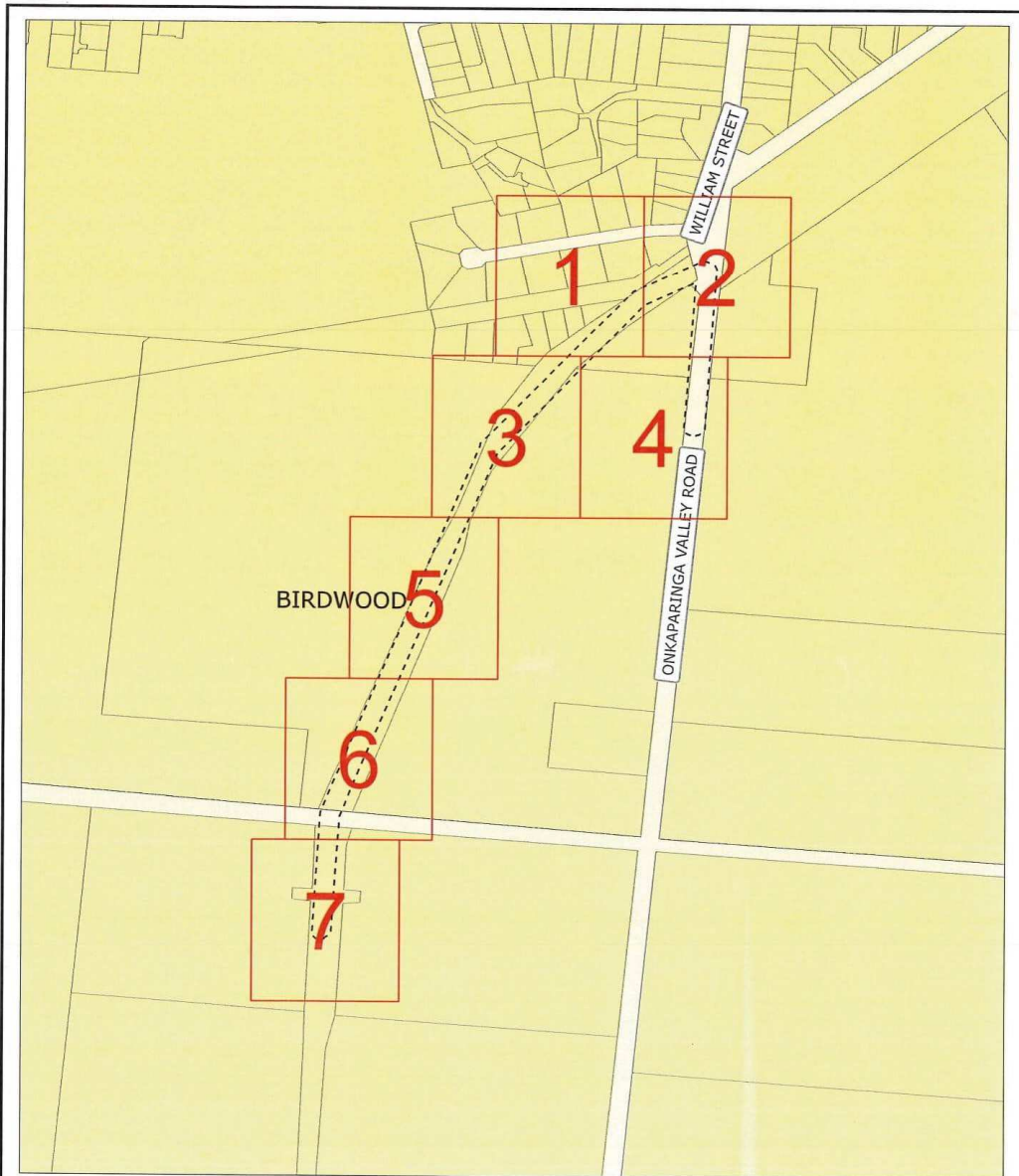




Overview Map

Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

- 1** Detail Map
- DBYD Requested Area

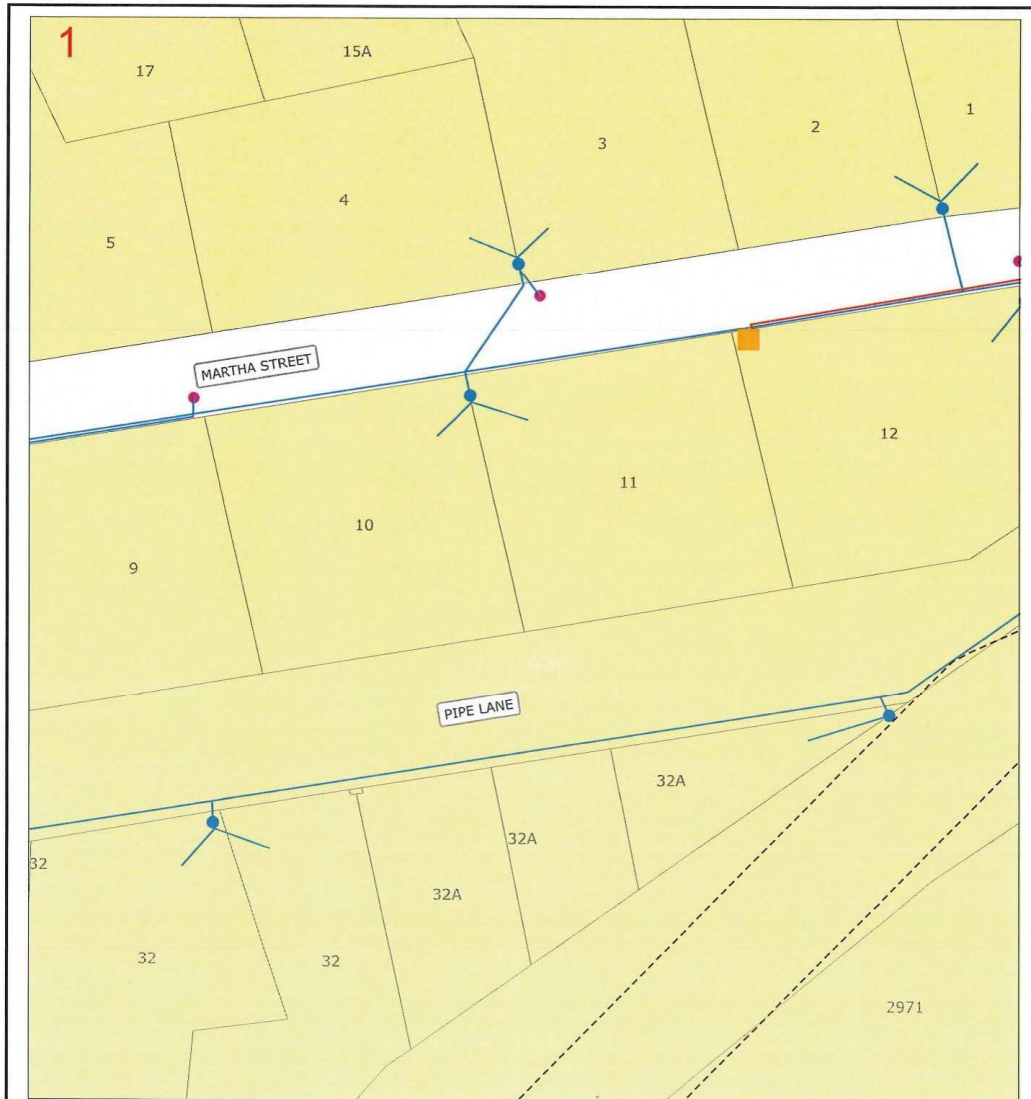
Powered by dbyd



Map 1

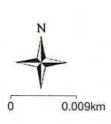
Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column

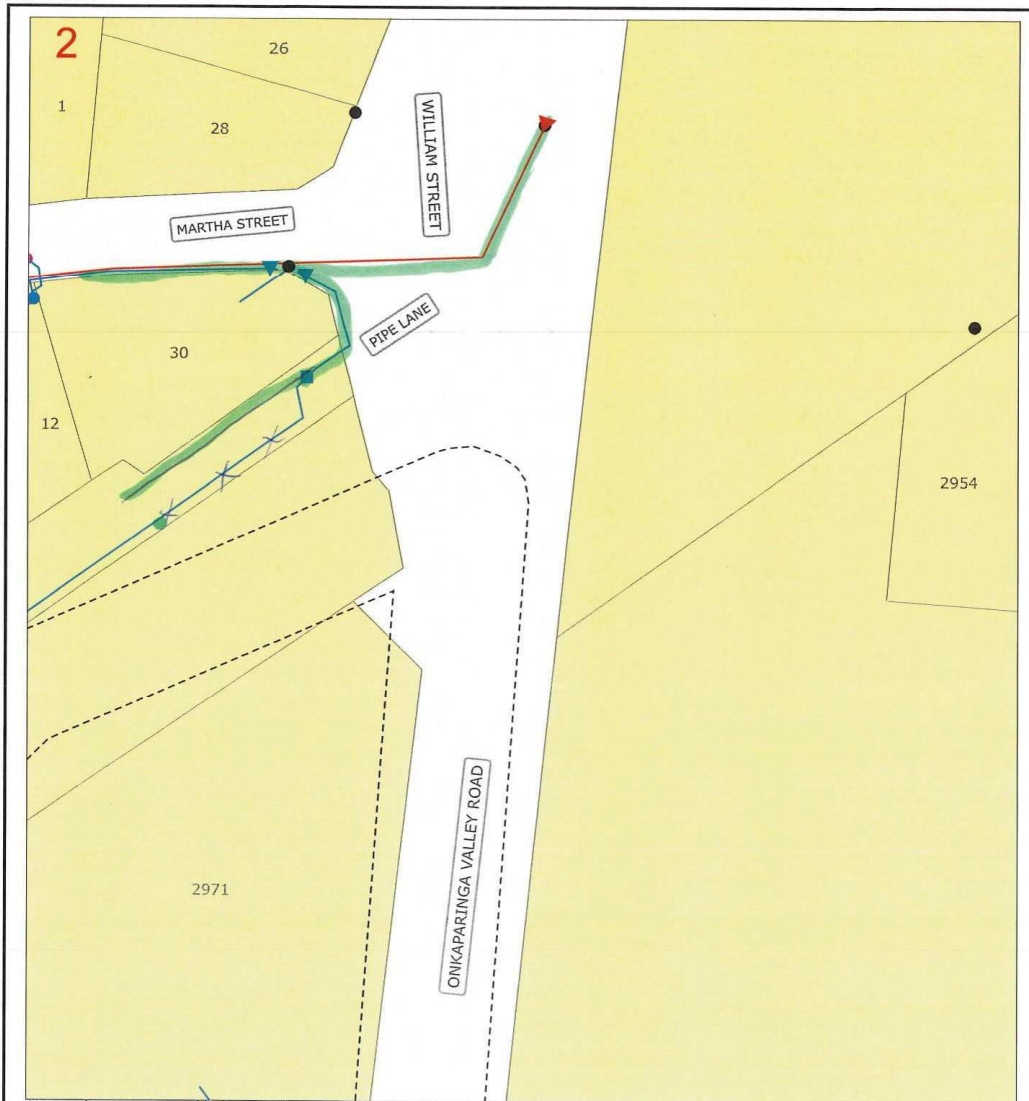




Map 2

Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.



LEGEND:

Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
	QL-B		Fibre Optic Cable/Duct		Fibre Manhole/Pit
			Pilot Cable		Pilot Manhole/Pit
			Substation		Electricity Pole
			Light Column		

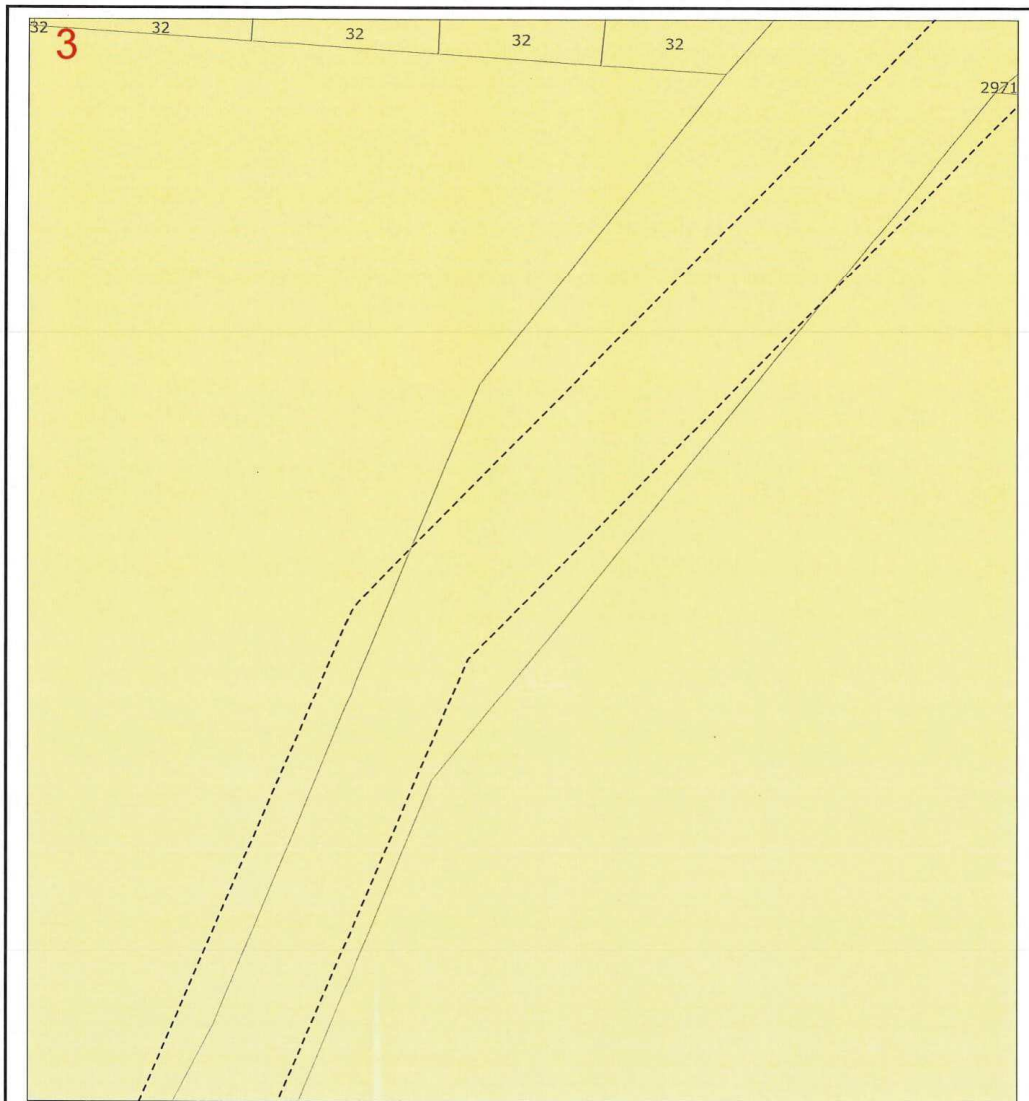
Date: 04/03/2022



Map 3

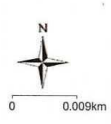
Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		Fibre Manhole/Pit
	33kV		33kV		Pilot Cable
	19kV		19kV		Pilot Manhole/Pit
	11kV		11kV		Substation
	7.6kV		7.6kV		Electricity Pole
	Not In Service		Not In Service		Light Column
	Low Voltage		Low Voltage		
					HV Switching Cubicle
					Transformer Cubicle
					Cable Joint Bay
					LV Switching Cubicle/Pit
					Service Pit/Pillar
					Earthing Grid



Powered by dbyd

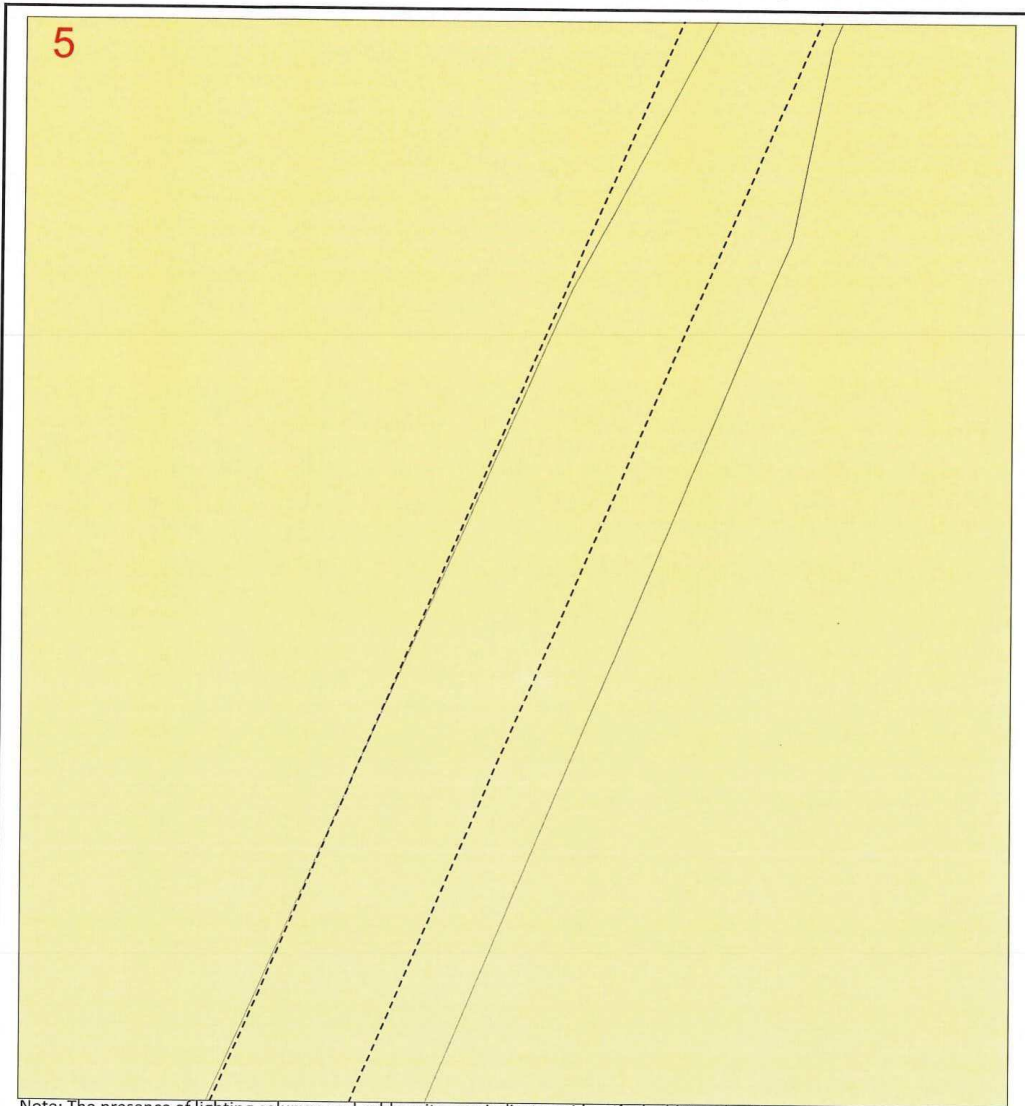
Date: 04/03/2022



Map 5

Sequence No: 208833139

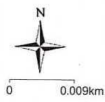
Lot 16 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
					Fibre Optic Cable/Duct
					Fibre Manhole/Pit
					Pilot Cable
					Pilot Manhole/Pit
					Substation
					Electricity Pole
					Light Column



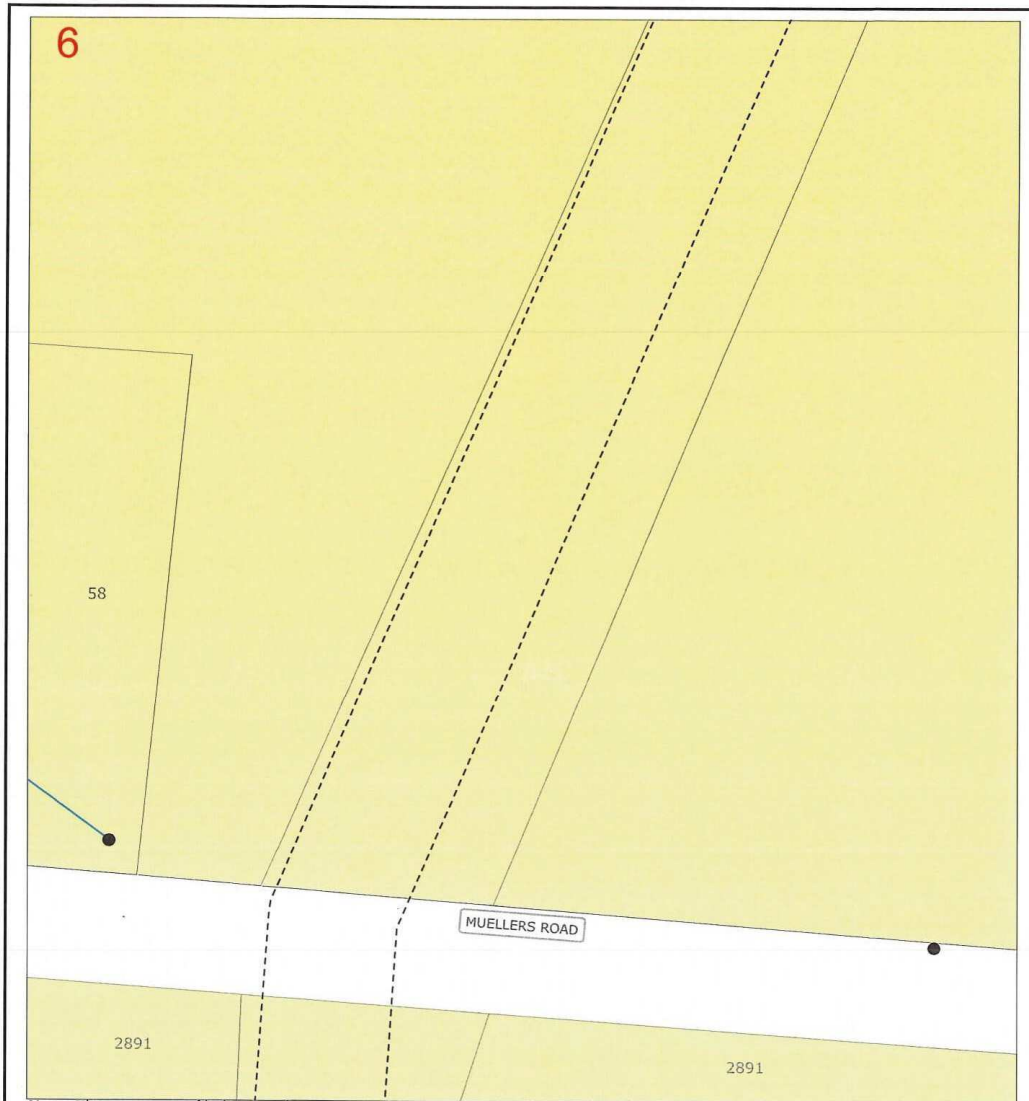
Powered by dbyd



Map 6

Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

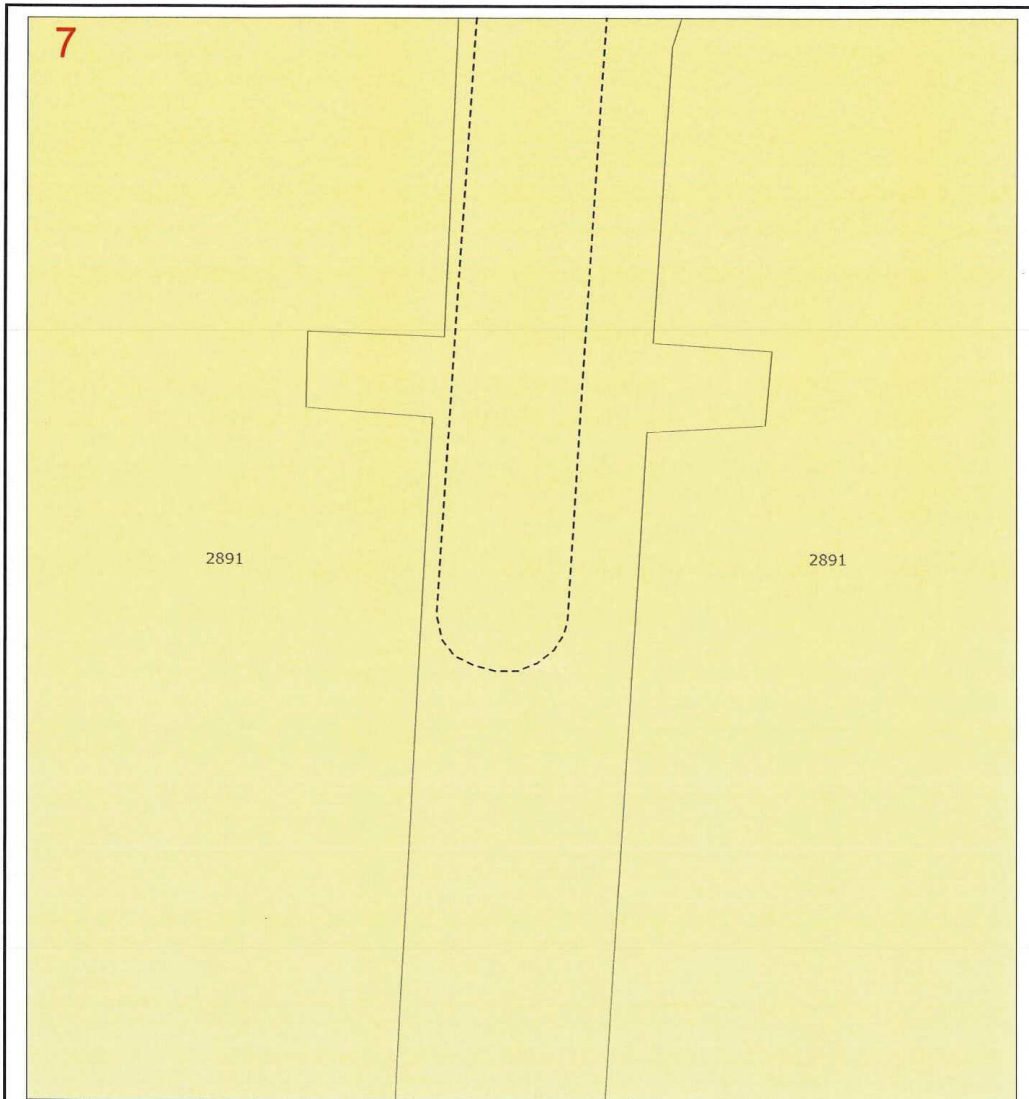
LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



Map 7

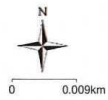
Sequence No: 208833139

Lot 16 Onkaparinga Valley Road Birdwood








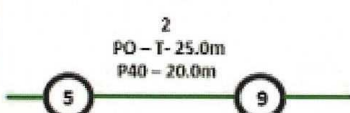
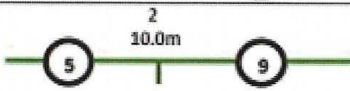







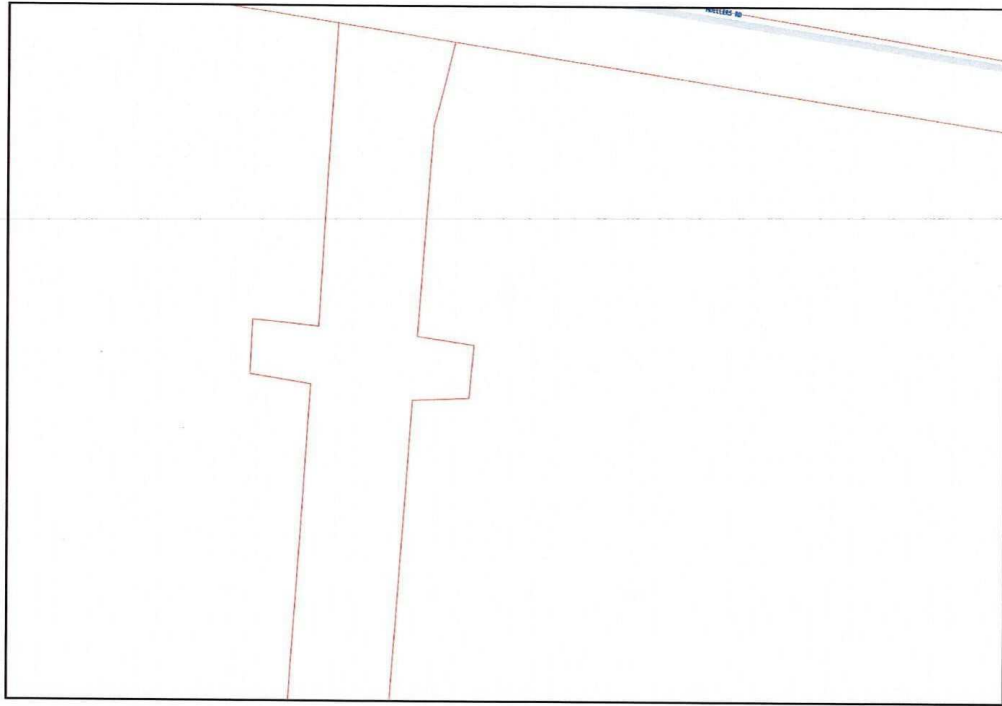
Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

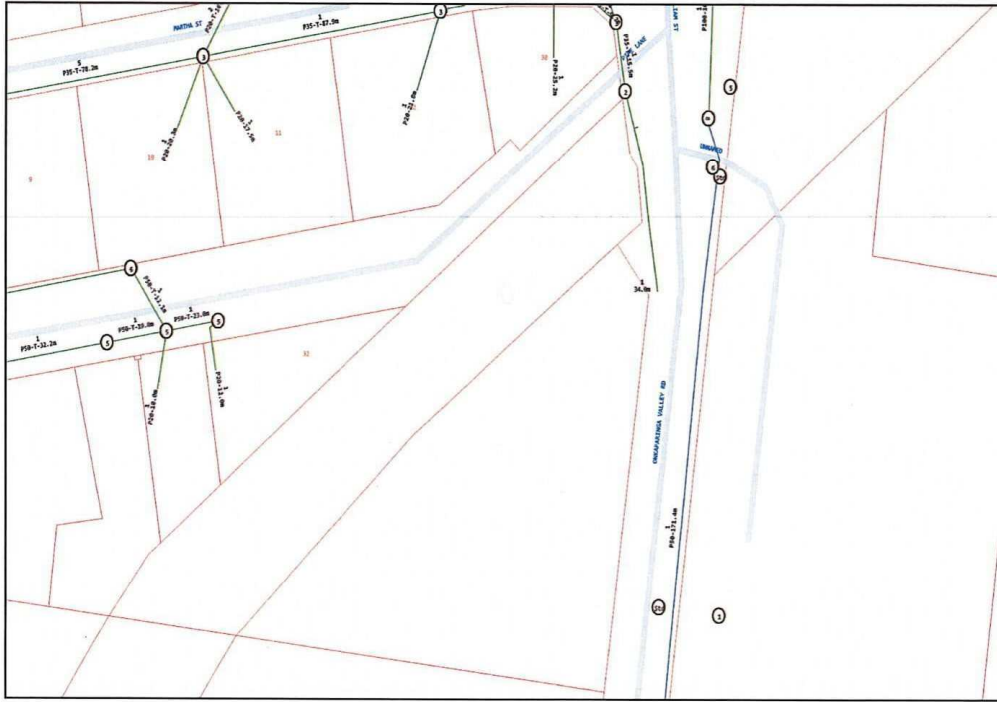
LEGEND:		Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	66kV/132kV		66kV/132kV		
	33kV		33kV		
	19kV		19kV		
	11kV		11kV		
	7.6kV		7.6kV		
	Not In Service		Not In Service		
	Low Voltage		Low Voltage		



Ⓟ unless highlighted

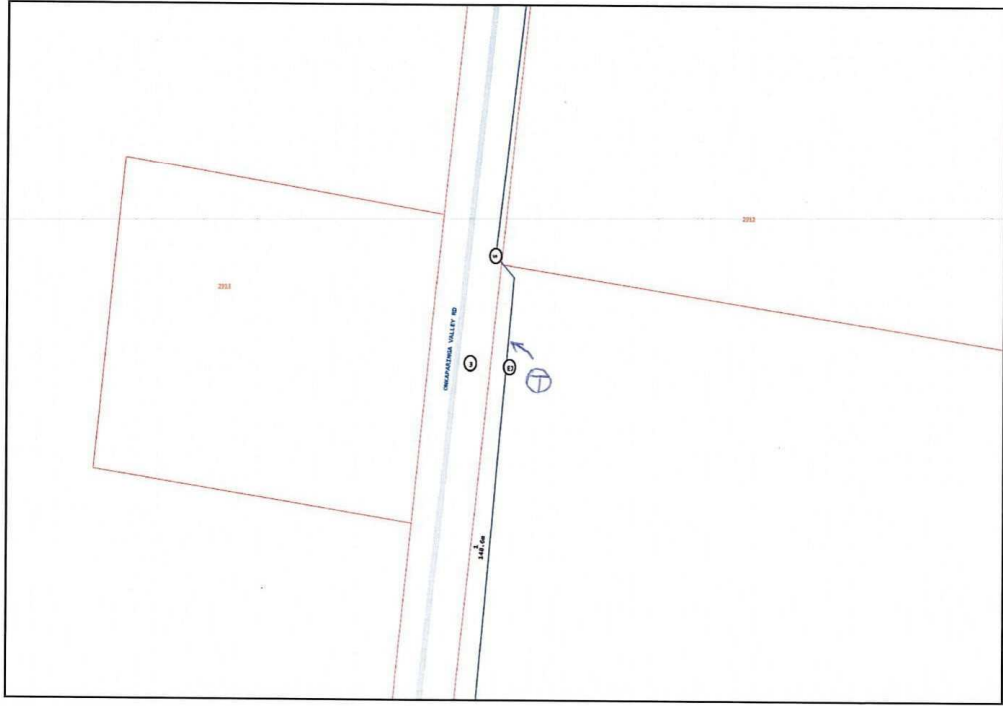
 nbnTM 	
LEGEND	
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
<p>2 PO – T- 25.0m P40 – 20.0m</p> 	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" 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.
<p>2 10.0m</p> 	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.
<p>BROADWAY ST</p> 	Road and the street name "Broadway ST"
<p>Scale</p>	<p>0 20 40 60 Meters</p> <p>1:2000</p> <p>1 cm equals 20 m</p> 

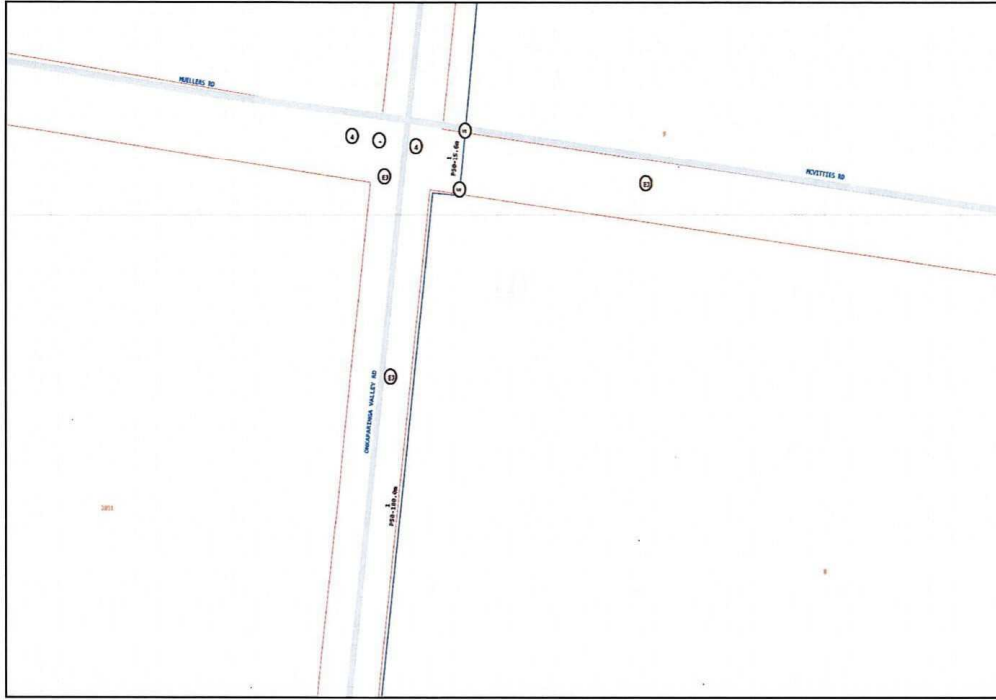






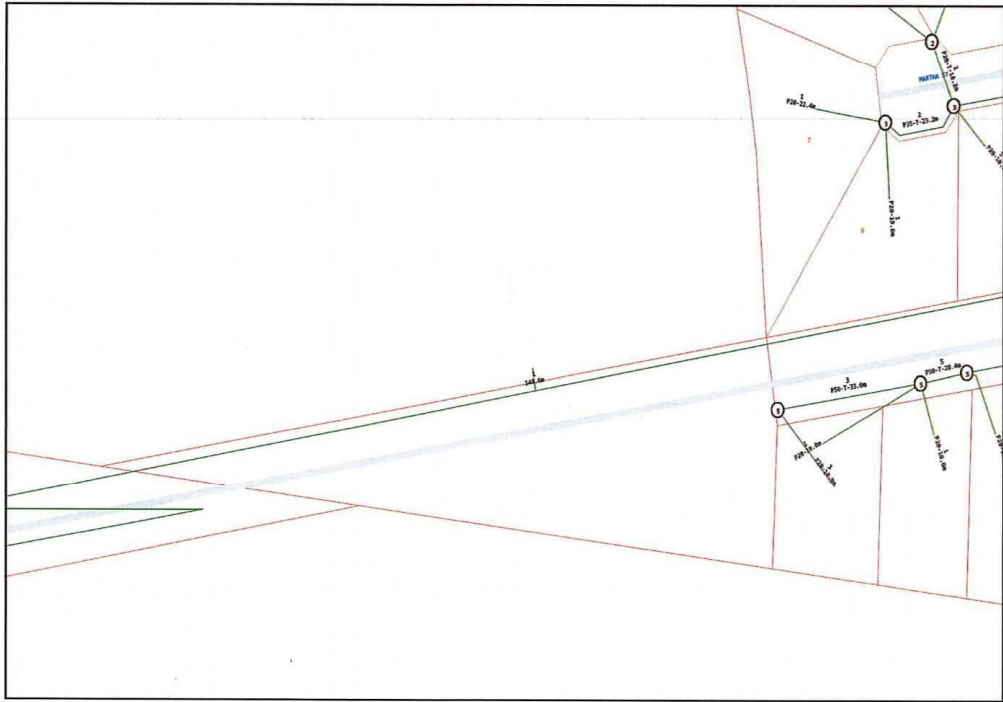


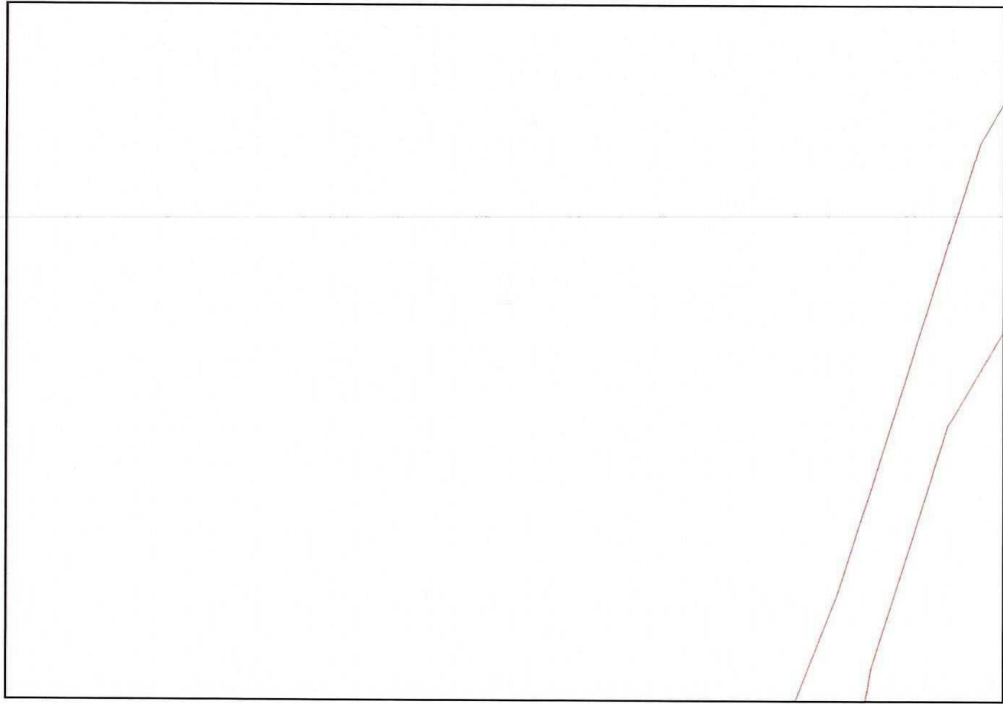


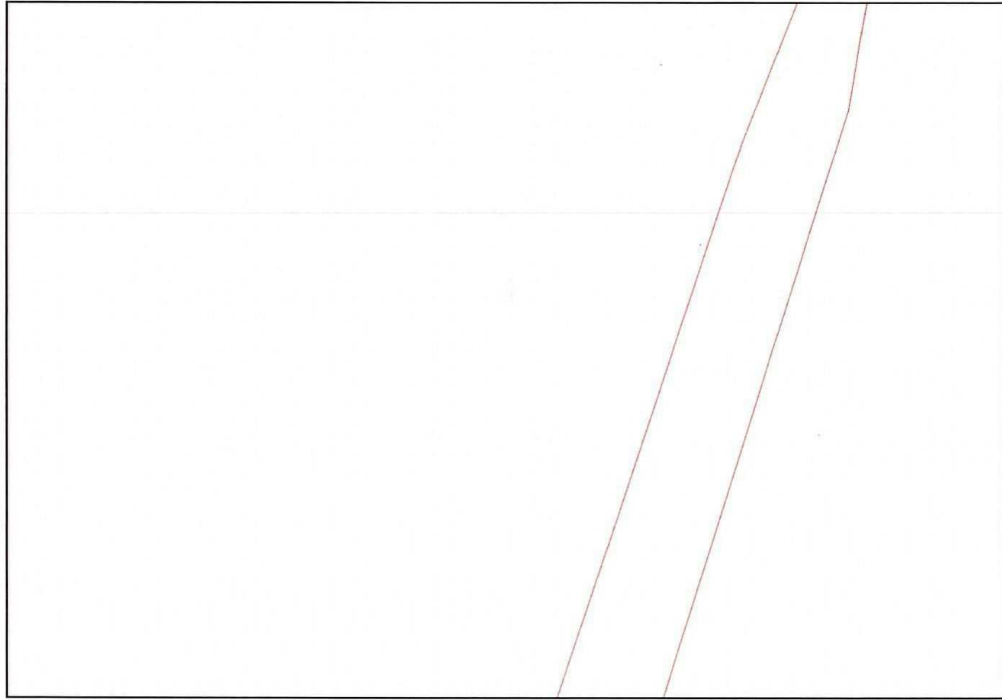


Emergency Contacts

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.









#7



Job No 31512785

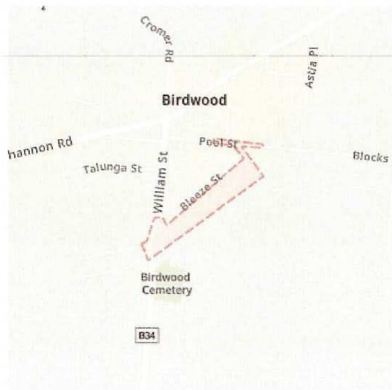
Phone: 1100
www.1100.com.au

Caller Details

Contact: Megan McMaster **Caller Id:** 3004654 **Phone:** (08) 8376 5911
Company: Not supplied
Address: 42-46 Kinkaid Avenue **Email:** tpc@trenchlesspipelaying.com.au
 North Plympton SA 5037

Dig Site and Enquiry Details

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



User Reference: RW 7
Working on Behalf of: Private
Enquiry Date: 04/03/2022 **Start Date:** 14/03/2022 **End Date:** 14/04/2022

Address:
 7 Bleeze Street
 Birdwood SA 5234

Job Purpose: Excavation **Onsite Activities:** Non-Destructive Digging
Location of Workplace: Road Reserve **Location in Road:** Road, Footpath

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

Notes/Description of Works:
 Not supplied

Your Responsibilities and Duty of Care

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

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

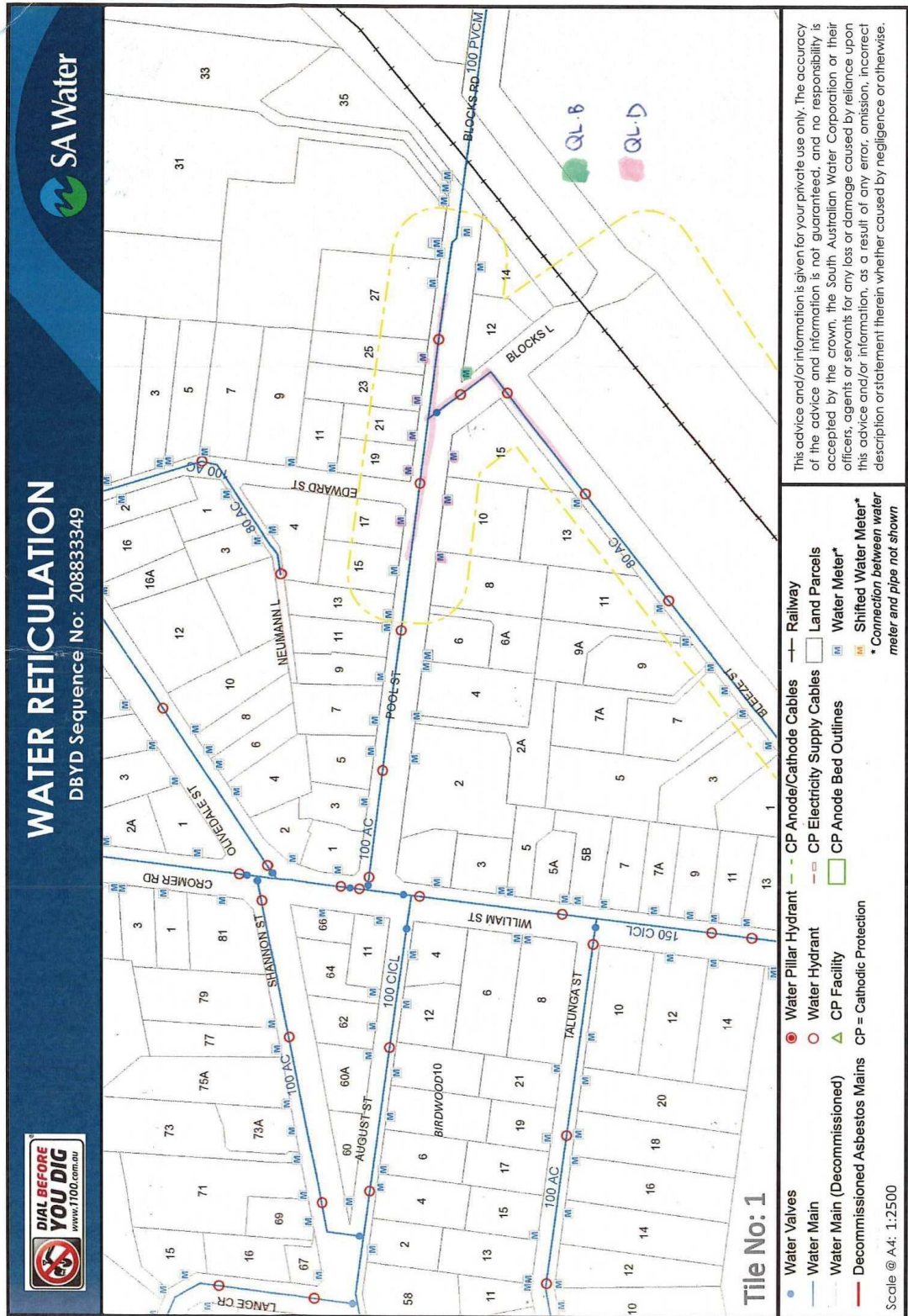
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.

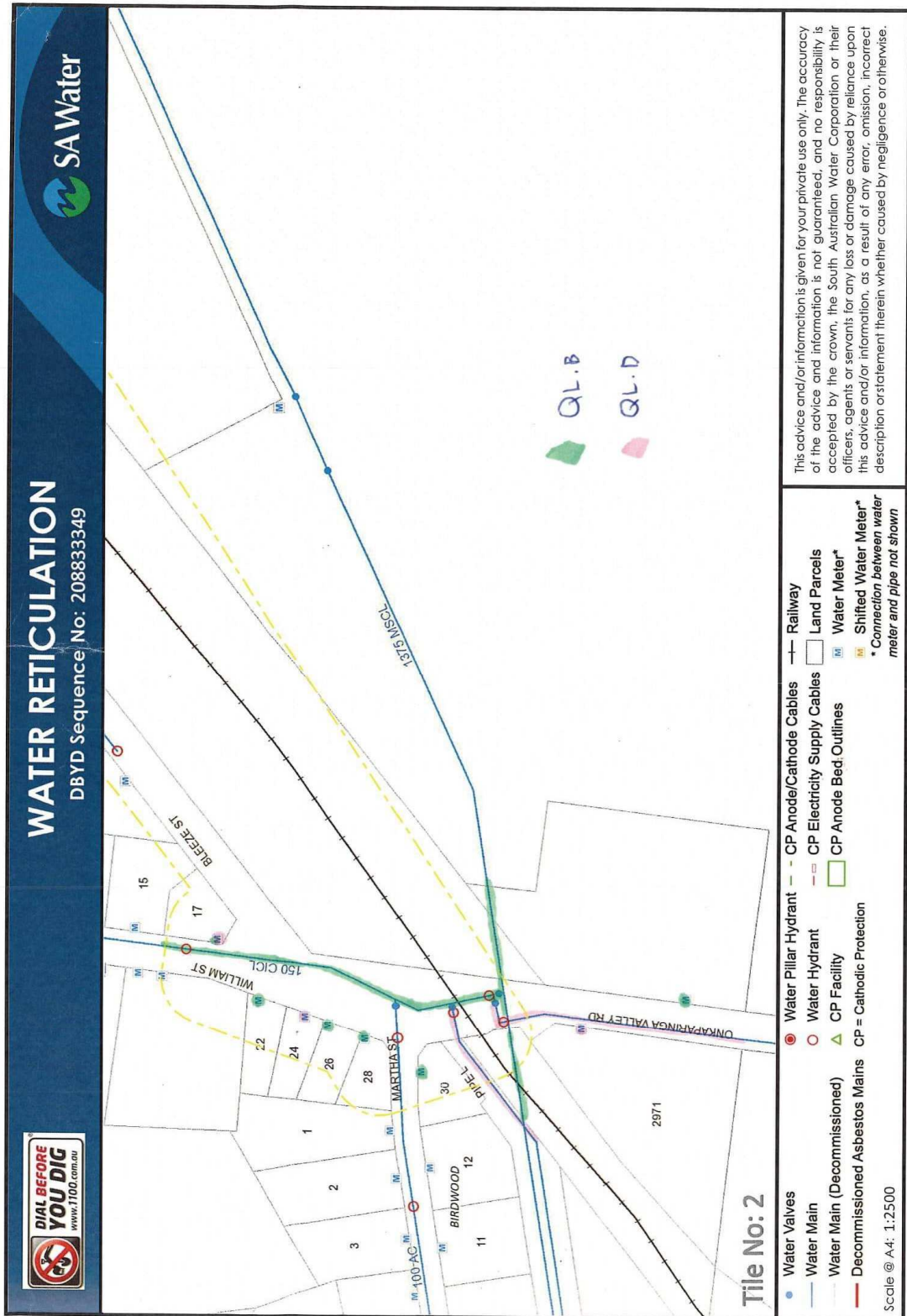
Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

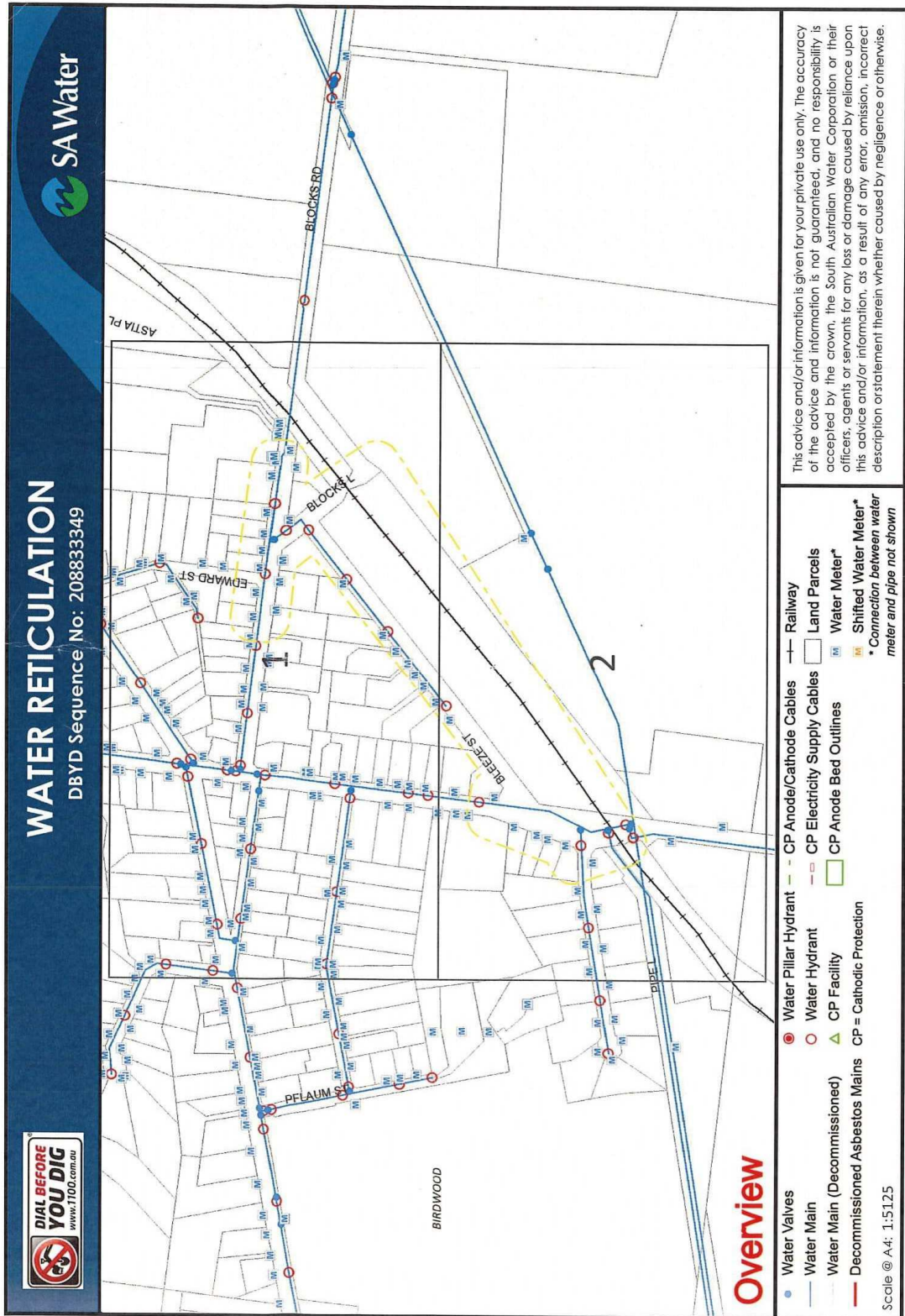
Seq. No.	Authority Name	Phone	Status
208833350	NBN Co SANT	1800 687 626	NOTIFIED
208833351	SA Power Networks	(08) 8292 0218	NOTIFIED
208833349	SA Water	(08) 7424 1117	NOTIFIED
208833348	Telstra SANT	1800 653 935	NOTIFIED

END OF UTILITIES LIST

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









Telstra
 For all Telstra DBVD plan enquiries - email - TelstraPlan@team.telstra.com
 For urgent onsite contact only - ph - 1800 659 635 (tus hrs)
 TELSTRA CORPORATION LIMITED A.C.N. 051 775 559
 Generated On 04/03/2022 13:43:21

Sequence Number: 208833348
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.

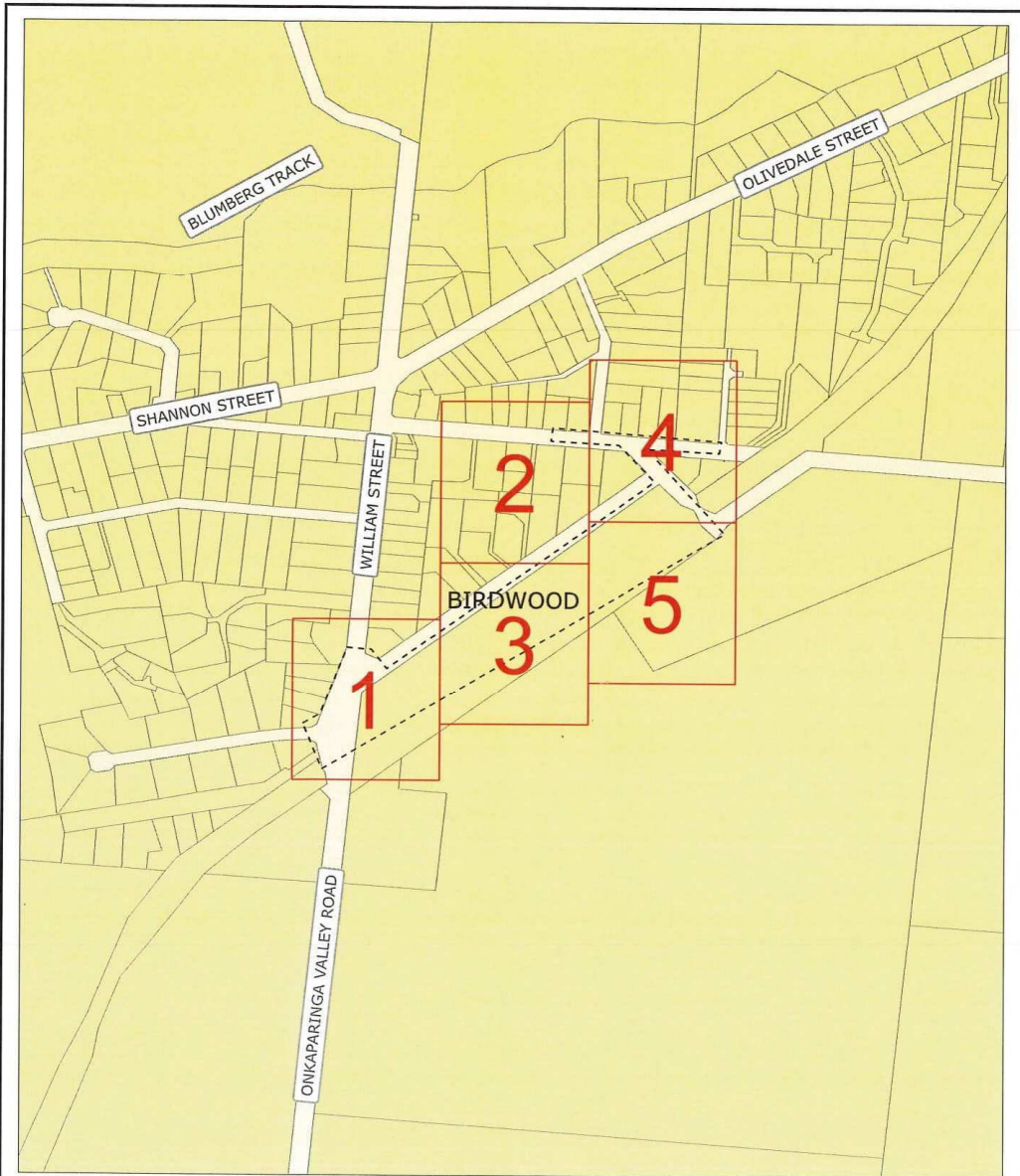
WARNING: Data to the nature of Telstra underground plant and the age of some cables and records. It is impossible to ascertain the precise location of all Telstra plant from Telstra plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths 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 accuracy shown on the plans. It is your responsibility to locate Telstra's underground plant by careful hand probing prior to any excavation in the vicinity and to exercise due care during the excavation. Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. **TELSTRA WILL SEEK COMPENSATION FOR LOSSES CAUSED BY DAMAGE TO ITS PLANT.** Telstra plans and information supplied are valid for 90 days from the date of issue. If the underground has changed, please notify for plans.



Overview Map

Sequence No: 208833351

7 Blumberg Street Birdwood



Disclaimer: The Plan/Sketch is supplied at your request and is subject to your agreement that SA Power Networks shall not be liable or responsible for the correctness or otherwise of any such information supplied pursuant to this request. Upon acceptance of this condition SA Power Networks grants you permission to use the Plan/Sketch as a guide to the location of SA Power Networks assets. The Plan/Sketch must be returned to SA Power Networks if you fail to accept the conditions of use.



LEGEND:

- 1 Detail Map
- DBYD Requested Area

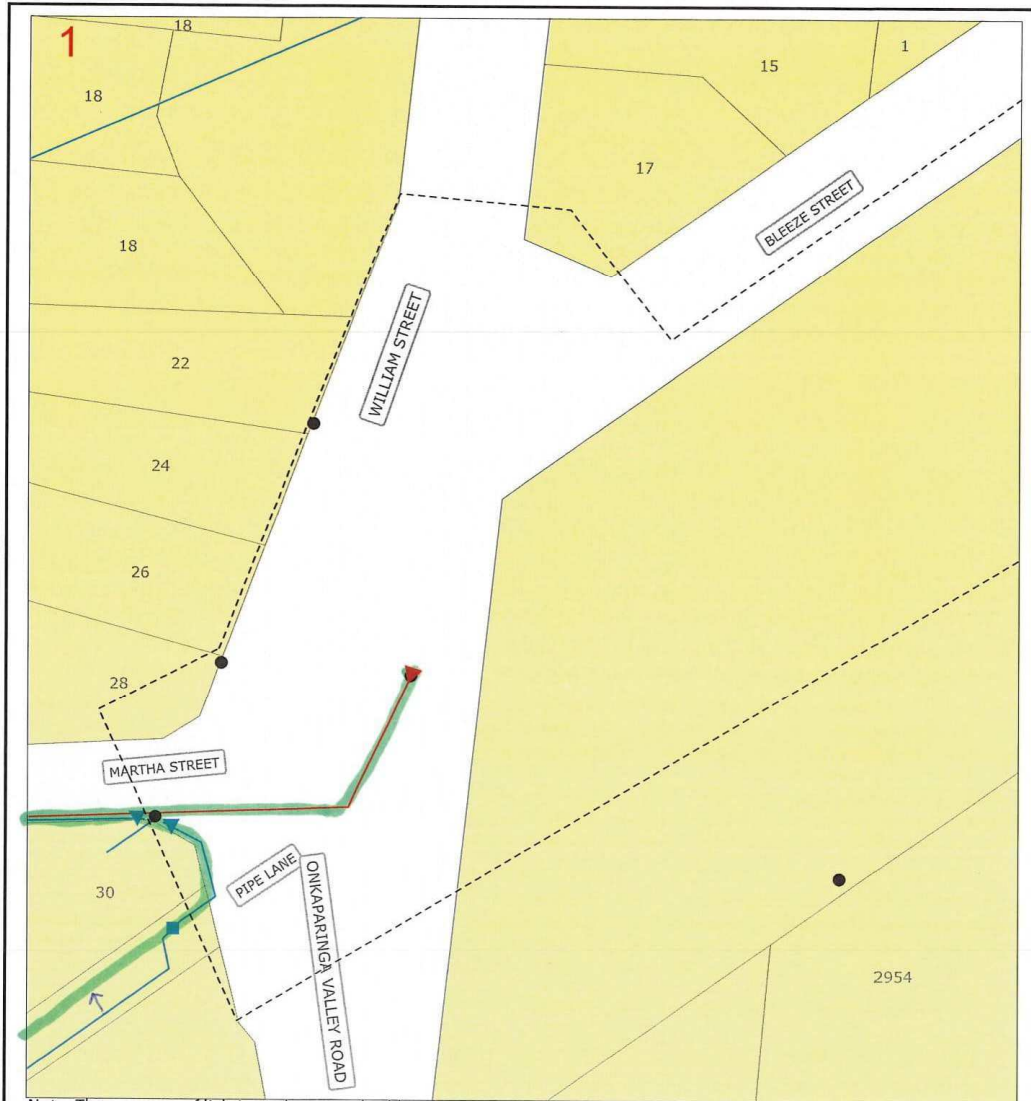




Map 1

Sequence No: 208833351

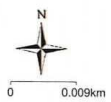
7 Bleeze Street Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

QL-B	Cable Exits	66kV/132kV	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
	33kV	33kV	33kV	HV Switching Cubicle	Fibre Manhole/Pit
	19kV	19kV	19kV	Transformer Cubicle	Pilot Cable
	11kV	11kV	11kV	Cable Joint Bay	Pilot Manhole/Pit
	7.6kV	7.6kV	7.6kV	LV Switching Cubicle/Pit	Substation
	Not In Service	Not In Service	Not In Service	Service Pit/Pillar	Electricity Pole
	Low Voltage	Low Voltage	Low Voltage	Earthing Grid	Light Column

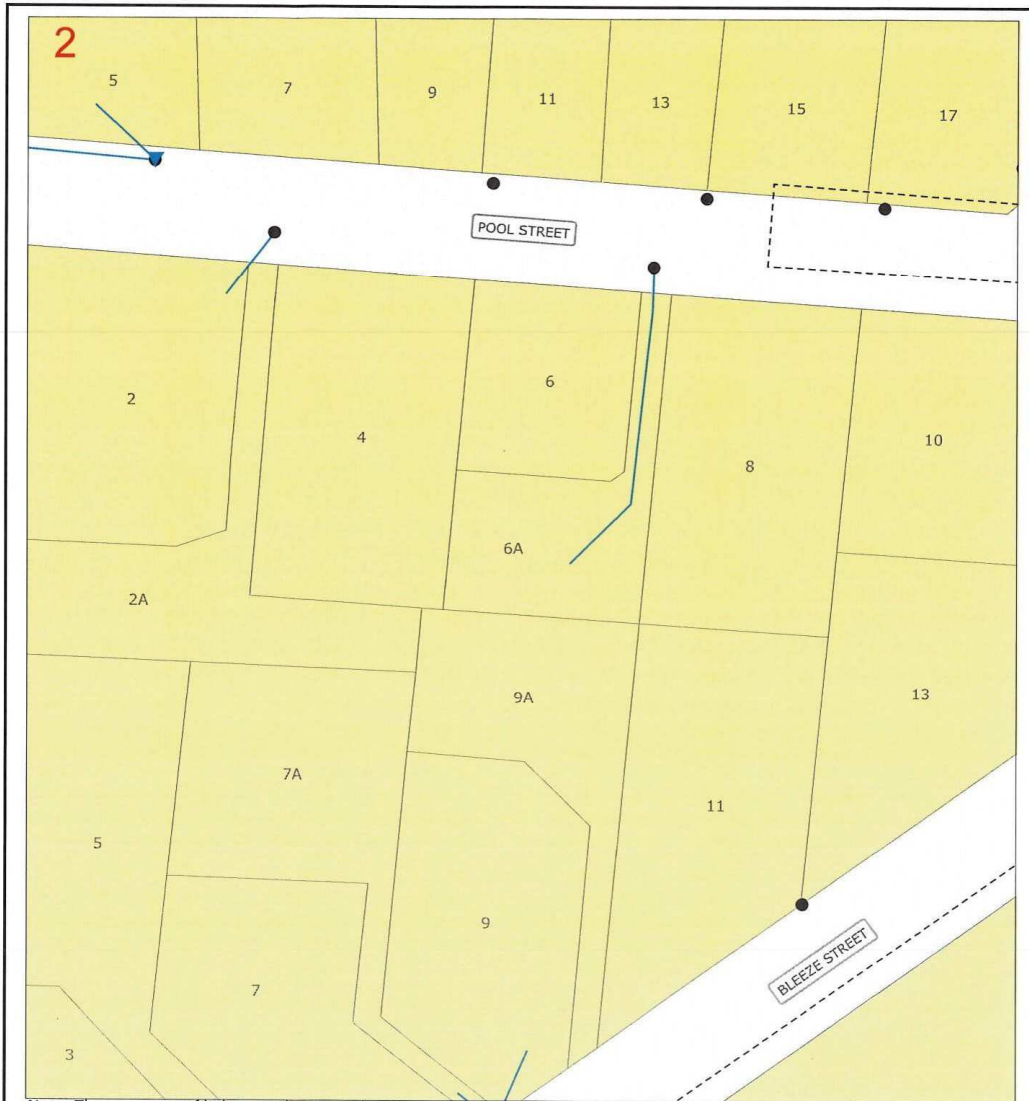




Map 2

Sequence No: 208833351

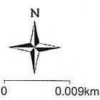
7 Bleeze Street Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

LEGEND:

Cable Exits		Cables		Other Symbols	
	66kV/132kV		66kV/132kV		DBYD Requested Area
	33kV		33kV		HV Switching Cubicle
	19kV		19kV		Transformer Cubicle
	11kV		11kV		Cable Joint Bay
	7.6kV		7.6kV		LV Switching Cubicle/Pit
	Not In Service		Not In Service		Service Pit/Pillar
	Low Voltage		Low Voltage		Earthing Grid
					Fibre Optic Cable/Duct
					Fibre Manhole/Pit
					Pilot Cable
					Pilot Manhole/Pit
					Substation
					Electricity Pole
					Light Column



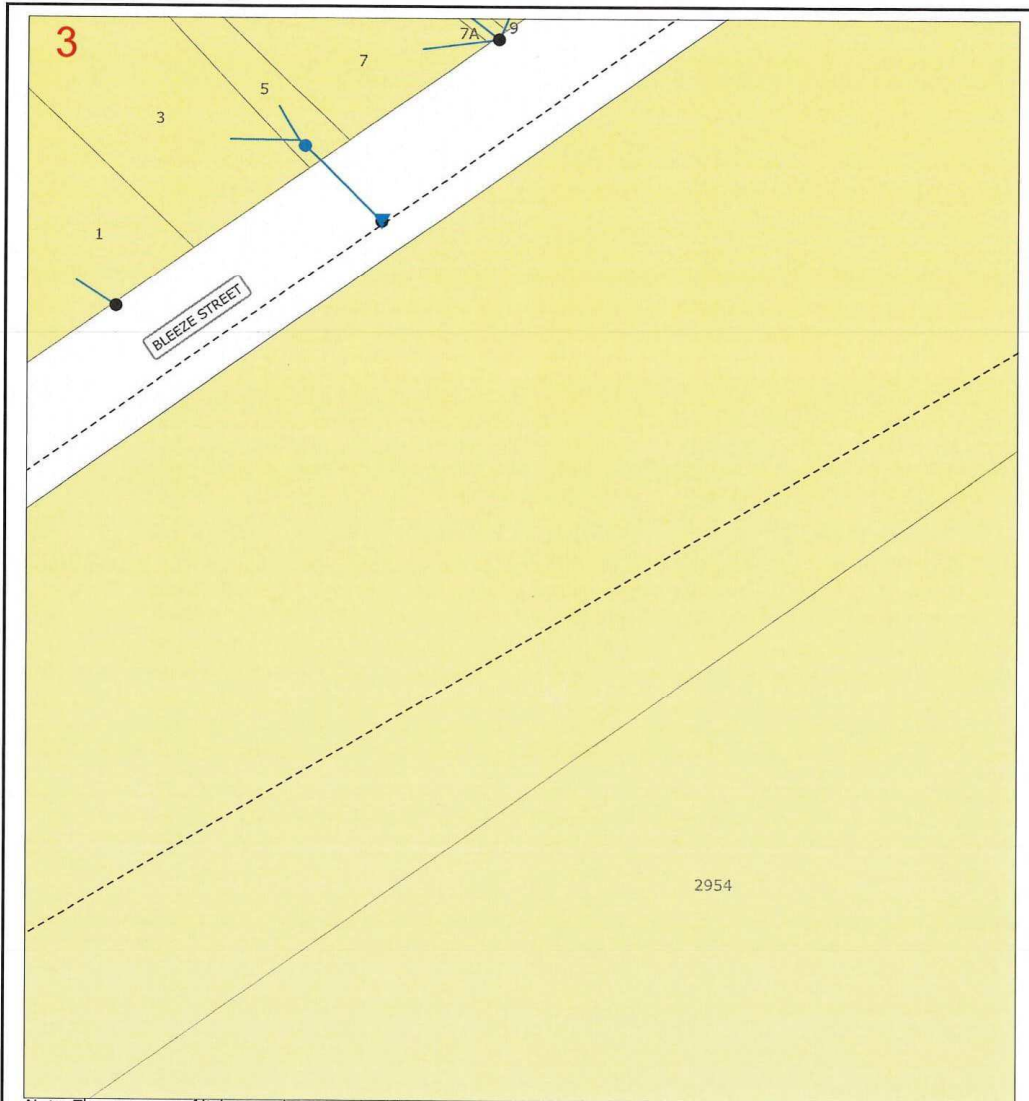
Date: 04/03/2022



Map 3

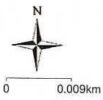
Sequence No: 208833351

7 Bleeze Street Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
▼	66kV/132kV	—	66kV/132kV	□	DBYD Requested Area	—	Fibre Optic Cable/Duct
▼	33kV	—	33kV	■	HV Switching Cubicle	■	Fibre Manhole/Pit
▼	19kV	—	19kV	■	Transformer Cubicle	—	Pilot Cable
▼	11kV	—	11kV	■	Cable Joint Bay	□	Pilot Manhole/Pit
▼	7.6kV	—	7.6kV	■	LV Switching Cubicle/Pit	■	Substation
▼	Not In Service	—	Not In Service	●	Service Pit/Pillar	●	Electricity Pole
▼	Low Voltage	—	Low Voltage	⊗	Earthing Grid	●	Light Column



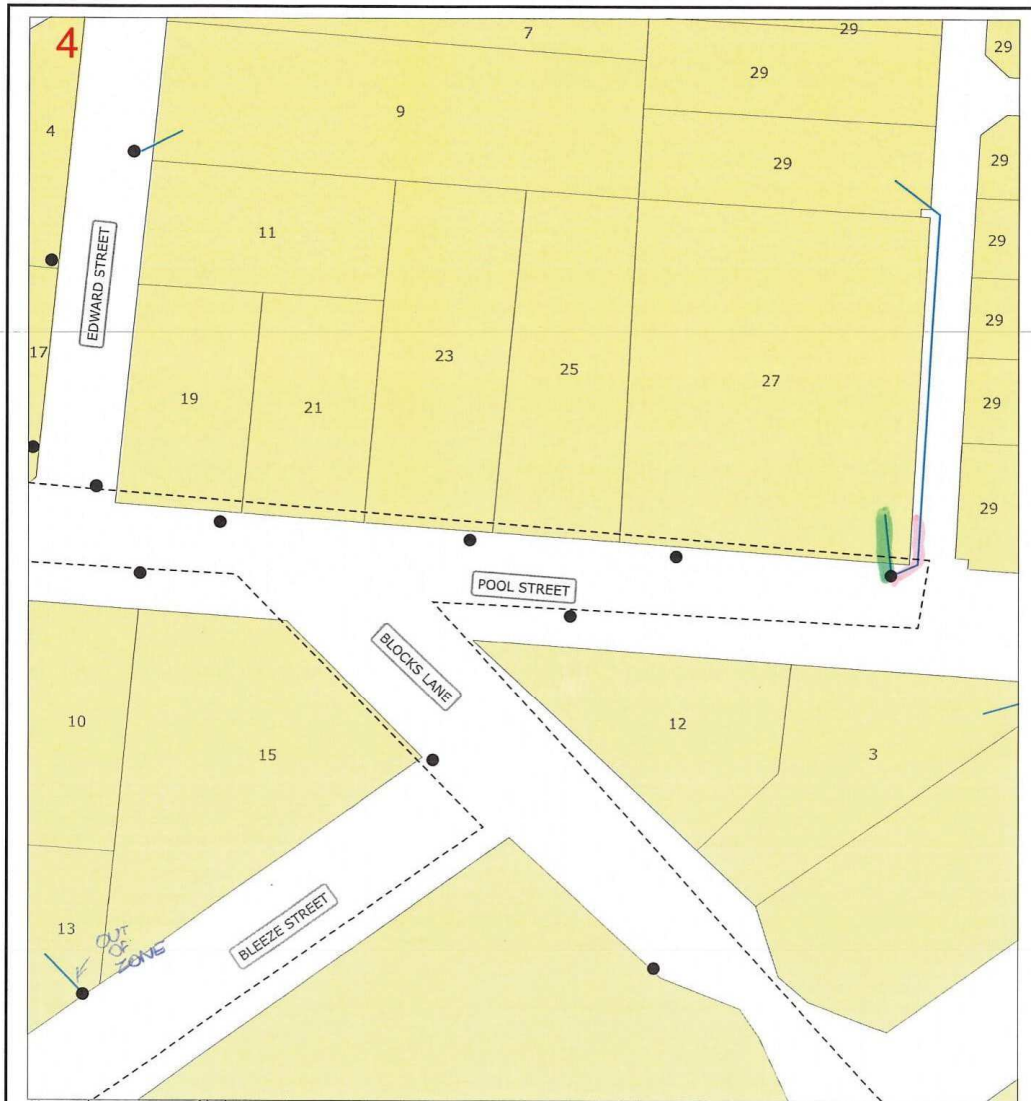
Powered by dbyd



Map 4

Sequence No: 208833351

7 Bleeze Street Birdwood



Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

QL.B

QL.D

0 0.009km

LEGEND:

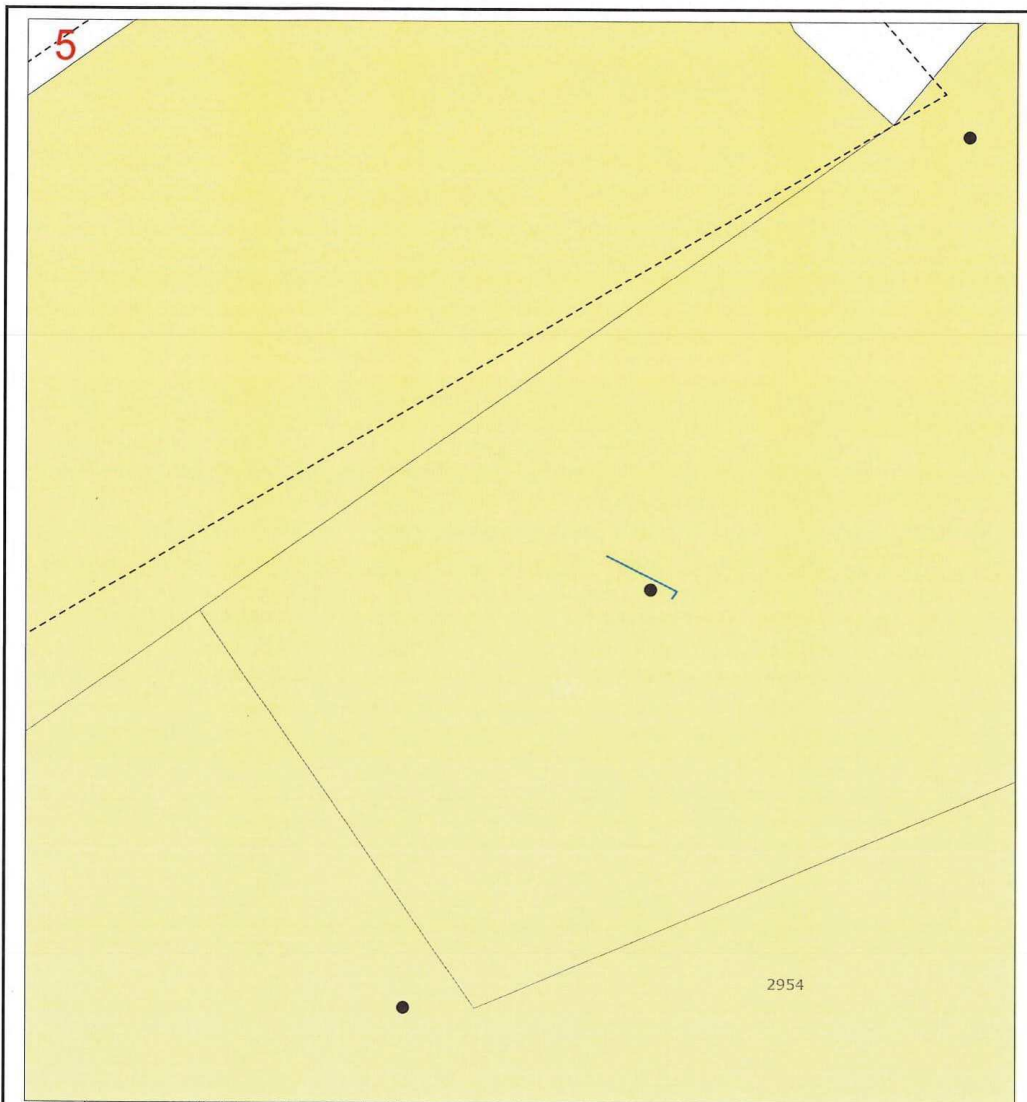
Cable Exits	Cables	DBYD Requested Area	Fibre Optic Cable/Duct
66kV/132kV	66kV/132kV	DBYD Requested Area	Fibre Optic Cable/Duct
33kV	33kV	HV Switching Cubicle	Fibre Manhole/Pit
19kV	19kV	Transformer Cubicle	Pilot Cable
11kV	11kV	Cable Joint Bay	Pilot Manhole/Pit
7.6kV	7.6kV	LV Switching Cubicle/Pit	Substation
Not In Service	Not In Service	Service Pit/Pillar	Electricity Pole
Low Voltage	Low Voltage	Earthing Grid	Light Column



Map 5

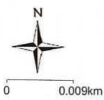
Sequence No: 208833351

7 Bleeze Street Birdwood

















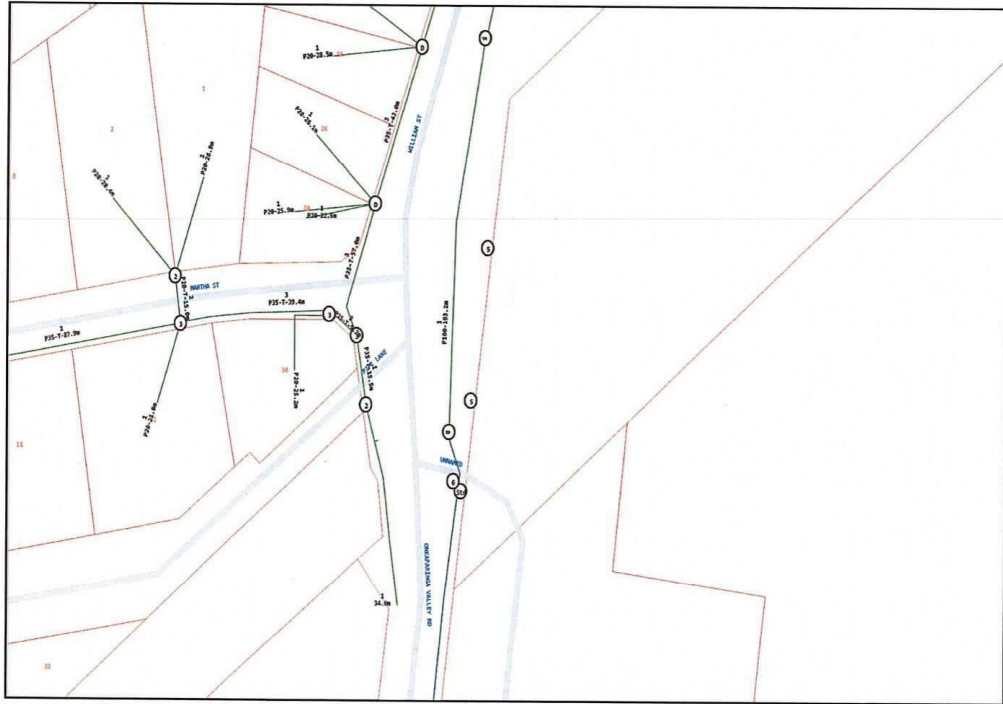
Note: The presence of lighting columns and cable exits may indicate unidentified additional cables.

Cable Exits		Cables		DBYD Requested Area		Fibre Optic Cable/Duct	
	66kV/132kV		66kV/132kV		DBYD Requested Area		Fibre Optic Cable/Duct
	33kV		33kV		HV Switching Cubicle		Fibre Manhole/Pit
	19kV		19kV		Transformer Cubicle		Pilot Cable
	11kV		11kV		Cable Joint Bay		Pilot Manhole/Pit
	7.6kV		7.6kV		LV Switching Cubicle/Pit		Substation
	Not In Service		Not In Service		Service Pit/Pillar		Electricity Pole
	Low Voltage		Low Voltage		Earthing Grid		Light Column

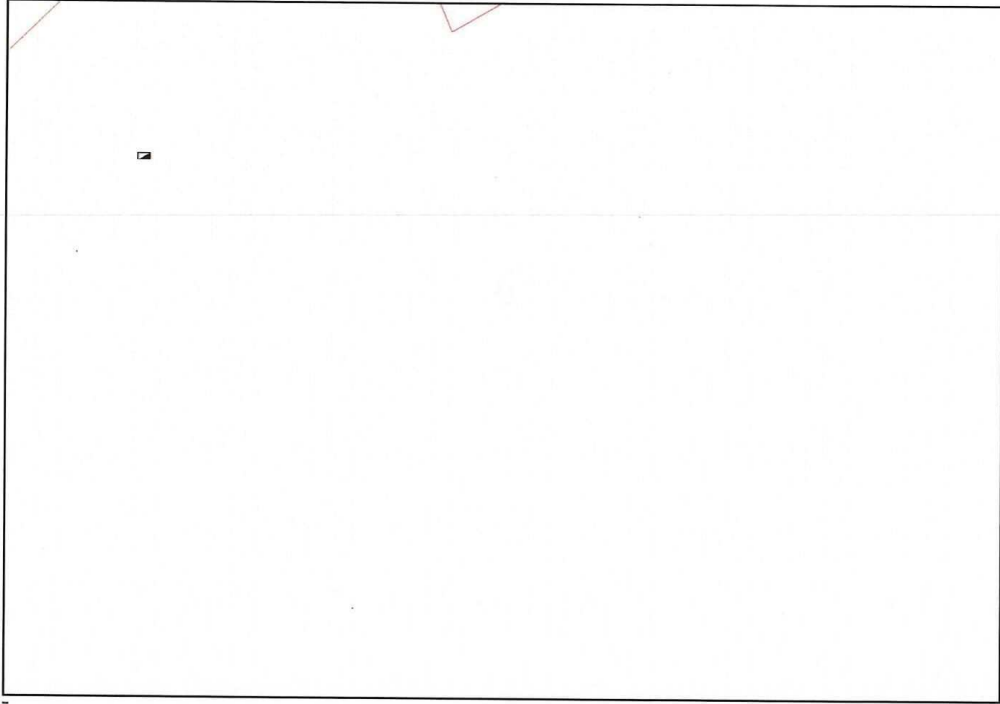




 nbnTM  <h2 style="text-align: center;">LEGEND</h2>	
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
<p>2 PO – T- 25.0m P40 – 20.0m</p> 	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-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.
<p>2 10.0m</p> 	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.
BROADWAY ST 	Road and the street name "Broadway ST"
Scale	<p>0 20 40 60 Meters</p> <p>1:2000</p> <p>1 cm equals 20 m</p> 



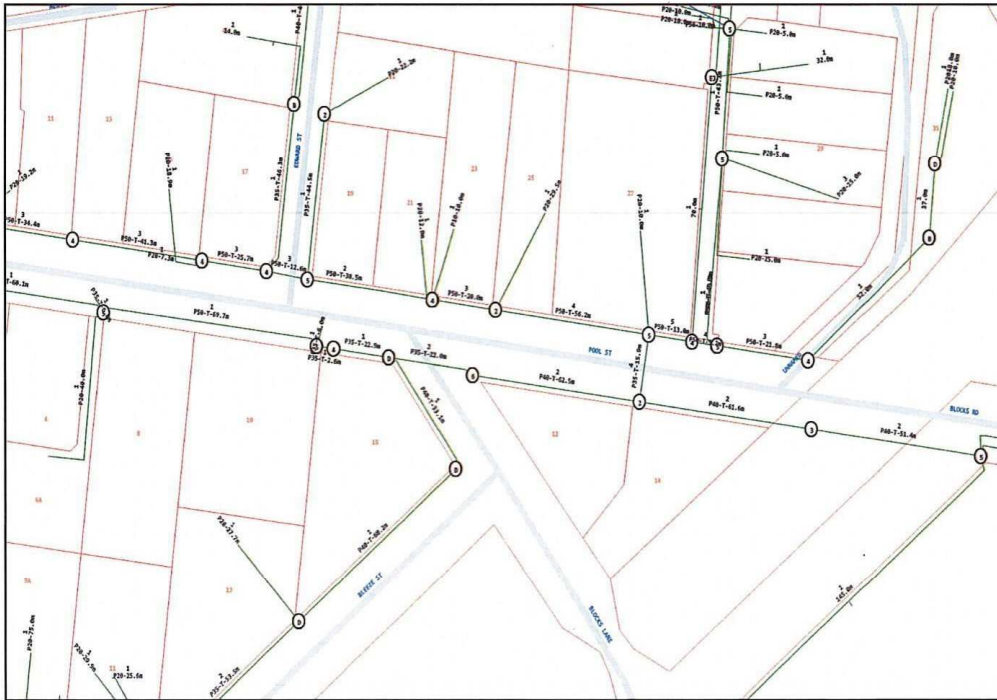


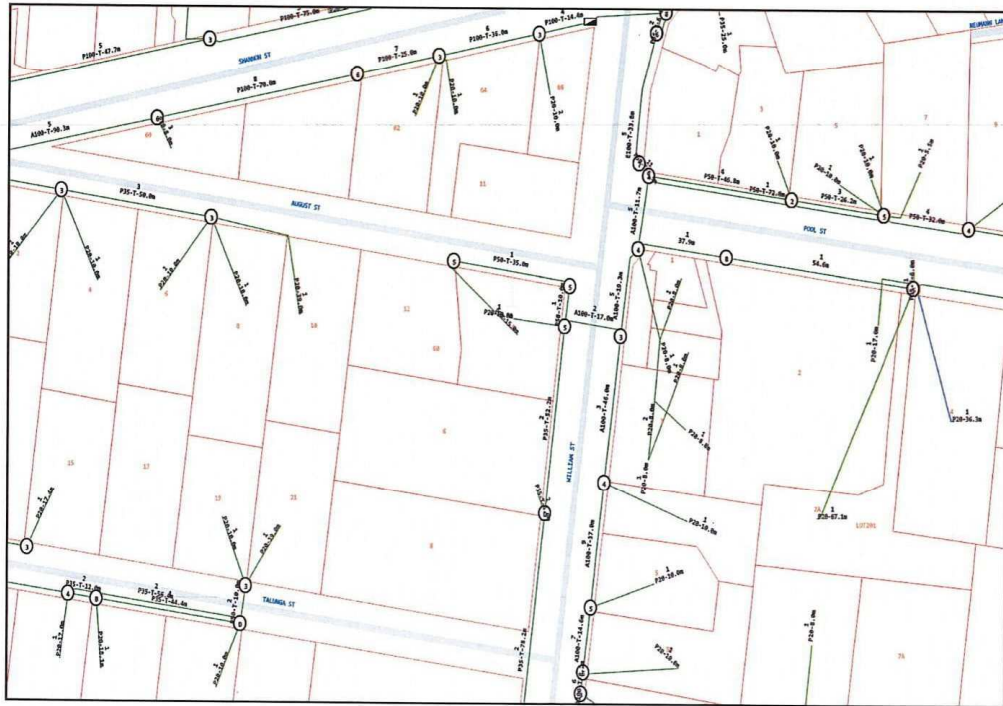


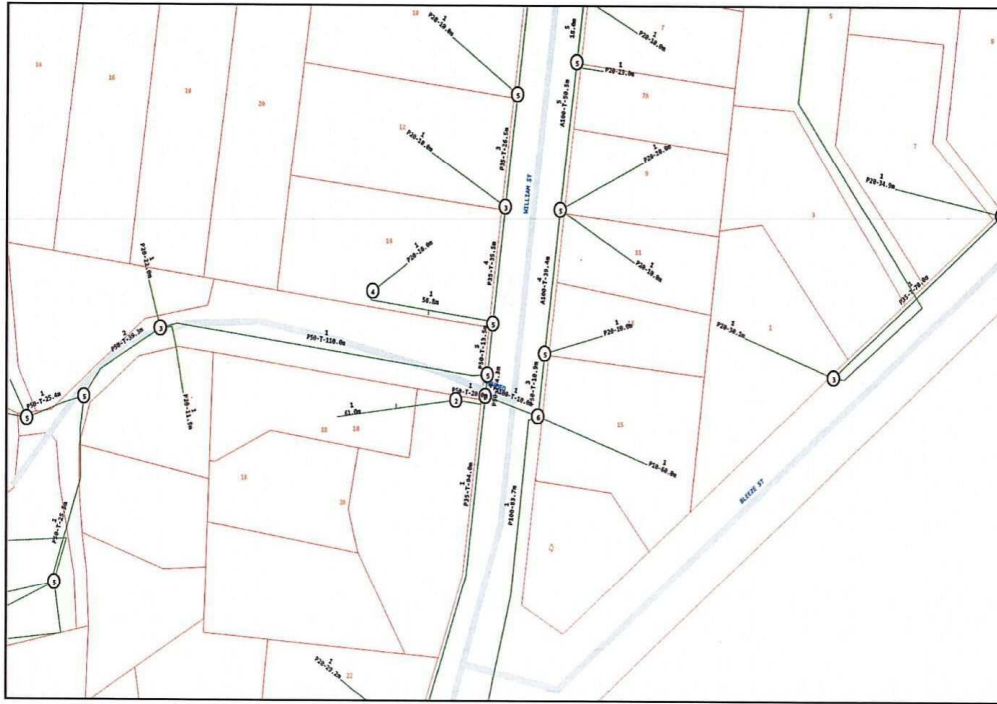
Emergency Contacts

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.

⊕ UNLESS HIGHLIGHTED









The Essential First Step.

BEST PRACTICE GUIDE

Preventing Damage to Underground Services

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1 The Dial Before You Dig Service

Dial Before You Dig is a Not for Profit organisation that delivers a vital national community service designed to assist in preventing damage and disruption to Australia's vast infrastructure networks which provide essential services we use every day.

Most of Australia's major infrastructure Asset Owners are Members of Dial Before You Dig. Our unique service offers a single point of contact to request information about the infrastructure networks at the planned project site without the need to contact utility organisations individually.

Dial Before You Dig is the Essential First Step in protecting Australia's vital infrastructure networks.

2 General Responsibilities and Duty of Care



The Dial Before You Dig service is the Essential First Step of safe site practices and is the preferred method for obtaining information regarding the location of infrastructure assets. Using the service is referred to as best practice in numerous industry publications.

Organisations or excavators representing an organisation have a Duty of Care to locate underground assets that are within the vicinity of any worksite prior to any project commencement.

Irrespective of size, any excavation work has the potential to damage assets located around the worksite, leading to service interruptions, delays to the project, costly repairs and in the worst-case scenario, injury or death.

In order to avoid these incidents, it is essential to recognise the Duty of Care to:

- Comply with local State and Territory Work or Occupational Health and Safety (WHS or OHS) legislation and regulations, particularly the regulations that relate to Excavation Work Codes of Practice;
- Comply with any legislative requirements regarding the protection of particular asset owners' licenced infrastructure such as gas pipelines and transmission infrastructure;

- Protect workers and the public from serious injury due to the rupture or strike of an underground asset such as a natural gas pipe, high voltage electricity cable, petroleum or industrial gas pipe. Any damage to these assets can cause very serious damage to structures and potential injury to many people; and
- Minimise the potential for damage and loss of service due to damage or rupture of the same assets. Extensive networks can be closed down for long periods with serious consequences of disruption and may incur penalties to the person causing the damage. The repair and replacement can be very costly.

Dial Before You Dig does not hold plans or detailed information regarding infrastructure assets. Enquiries are referred directly to our Asset Owner Members, who register and update their Area of Interest with Dial Before You Dig, who in turn respond directly to the excavator with the appropriate information.

To obtain more information about a particular infrastructure asset, refer to the Enquiry Confirmation Sheet or contact the Asset Owner Member directly.

Underground services and assets registered with the Dial Before You Dig service include:

- Services or assets within the road reserve that is from one property boundary line to another;
- Services or assets laid within public owned open space, or rights of way, or easements on public property; and / or
- Services or assets within an easement, and in some cases on private property.

Excavators should always use the Dial Before You Dig service before commencing any worksite activity. It is also prudent to investigate the site themselves for evidence of any surrounding infrastructure assets as information packs from Asset Owners may not take into account:

- The installation of a new main or service belonging to an asset owning Member of Dial Before You Dig that has not yet been included on the Asset Owner Member's database and registered with the Dial Before You Dig service;
- An existing service or asset that has been altered or modified recently and has not yet been updated on the Asset Owner Member's database;
- Construction plans that show the location of underground assets that may have been specified earlier by the project designer but are no longer applicable; and / or
- The chance that the owner of an asset may not be an Asset Owner Member of Dial Before You Dig, and will therefore, not have registered the asset with the Dial Before You Dig service.

Plans provided by the Asset Owner Member only indicate the presence of infrastructure assets within the vicinity of the project site and DO NOT pinpoint the exact location.

Unfortunately, not all of Australia's infrastructure asset owners are Members of Dial Before You Dig and assumptions SHOULD NOT be made that the plans received represent the only infrastructure assets affected by the project worksite. If any infrastructure asset found at the worksite is not listed on the Enquiry Confirmation Sheet, the asset owner should be contacted directly. Notification to Dial Before You Dig of the location, type and owner of this asset will enable the relevant State to contact the asset owner and assist them with Dial Before You Dig registration in order to protect their asset from future damage.

3 The 5Ps - Industry Best Practice to Prevent Damage

To minimise the risk of damage, injury and potential loss of life, it is recommended as best practice to undertake the 5Ps of safe excavation.



Plan

Lodge a free Dial Before You Dig enquiry (page 7) to:

- Receive an Enquiry Confirmation Sheet from Dial Before You Dig listing all the affected Asset Owner Member's assets for that area that are registered with Dial Before You Dig (includes their contact details).
- Receive plans and / or information from each of the listed Asset Owner Members. (Ensure you have all the responses listed on the Enquiry Confirmation Sheet prior to commencing any work, follow-up with any that have not responded).

Prepare

Prepare for your works by reviewing the utility plans and contacting the utility if you need assistance. Look for on site asset and infrastructure clues such as pit lids, marker posts and meters. These on site clues will assist you to identify the potential location of assets on site from the utility plans and also identify any other assets and infrastructure that may not be marked on utility plans or where the utility may not be a Dial Before You Dig Member.

It is then recommended, unless advised otherwise by the Asset Owner Member, to engage a DBYD Certified Locator (page 9). A DBYD Certified Locator can:

- Interpret plans;
- Identify and locate Dial Before You Dig Member assets;
- Where possible identify and locate any non-member or unrecorded assets existing on site (e.g. domestic gas /power lead-ins are generally not recorded on Dial Before You Dig utility plans even though the asset owner might be a Member);
- Provide results / maps / information on located services to AS5488 – 2013 specifications (page 11); and
- Provide locating assistance during potholing;

There may be a requirement to:

- Follow-up with any Asset Owner Members that have specific requirements e.g. No Go Zones or Exclusion Zones for high pressure gas and high voltage power; separate arrangements may have to be made in regard to those assets. (see No Go Zones and Exclusion Zones on page 11);
- Seek consent where required e.g. if planning to excavate in Road Reserves (page 14); or
- Follow-up with any Asset Owner Member and seek advice when the Dial Before You Dig information supplied for their asset is missing or inadequate for the purposes of locating.

There will be a requirement to:

- Comply with Safe Work Australia Codes of practice and any applicable state WHS or OHS Acts and Regulations applicable for undertaking excavation work.

This could include having:

- Traffic and / or pedestrian management plans
- SWMS (Safe Work Method Statements)
- JSA / JHA (Job Safety or Hazard Analysis)
- Work Permit Systems
- SOP (Safe Operating Procedures); and / or
- Work pre-start processes

Pothole

- Potholing (where permitted) must be carried out prior to excavation to validate the position of existing services.
- For design projects it is recommended to carry out potholing early to verify the position of services and to avoid potential conflicts and delays at construction stage.
- Follow any Asset Owner Member's specific requirements in regard to working or potholing on or around their assets.
- The use of a DBYD Certified Locator when potholing will:
 - minimise the amount of exploratory potholing and save costs
 - assist in validating the correct asset when exposed
- When potholing only utilise non-destructive methods. Methods can include careful hand digging and hydro vacuum excavation (more details on page 10).
- On completion of potholing the reinstatement and restoration must meet the requirements (if any) of the Asset Owner Member and / or local authority. The site

must be left in a condition such that no safety hazards associated with the locating work activities remain.

Protect

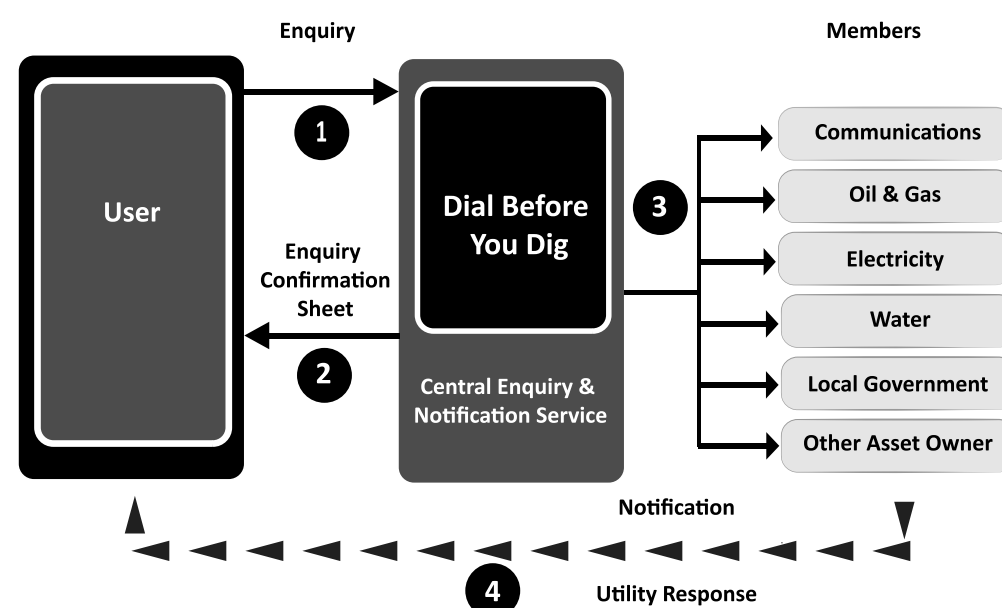
- Located asset information should be communicated to all on site, the assets be clearly marked or flagged and if necessary have protective barriers, supports erected or other methods in accordance with the Asset Owner's requirements.
- Any Asset Owner Member or industry regulated No Go Zones or Exclusion Zones must be adhered to and enforced on site.
- Utilise SWMS (Safe Work Method Statements) and /or JSA (Job Safety Analysis).
- All recorded information/measurements of any subsurface utilities (from locating, potholing etc.) should be recorded in accordance with AS5488 - 2013 and have the correct Quality Levels specified i.e. A, B, C or D (page 12) to prevent future damage.
- Isolate the work near underground assets from the public at all times.

Proceed

You should only proceed with your excavation work after:

- The first four steps above have been completed;
- You have verified that all the information in the preceding steps is still current. If the use by date of Dial Before You Dig plans have expired, you will need to obtain current plans and if necessary re-validate any changes that may have occurred;
- If requested by the Asset Owner Member advise them when works are to be undertaken near their asset or area of interest; and
- You have met all the requirements of Safe Work Australia Code of practice and any state WHS or OHS Acts and Regulations.

4 Guide to Lodging a Dial Before You Dig Enquiry



Lodging an enquiry is a simple process, which can be done in one of three ways:

- Online via the Dial Before You Dig website www.1100.com.au;
- Mobile website; or
- By phone call 1100 (toll free, during business hours).

To lodge an enquiry online is a simple process. If you are new to the Dial Before You Dig service, just register as a new User first.

You will then receive an email confirming your User name and password. Keep these details handy and use them each time you want to review past enquiries or lodge a new enquiry.

To lodge your enquiry online, follow these three simple steps:

1. Enquiry Details

- Provide details of your project, including start and expected completion date, type of work and the location of your project.
- Tell us if you are working on behalf of a utility, council or private entity. All information provided will help Dial Before You Dig Members provide you with the correct information to assist your project.

2. Map Screen

- Use the search tools to locate your project location.
- Use the mapping tools to draw your proposed project site.
- Describe the project in detail so utilities can provide an accurate set of plans.
- Submit enquiry.

3. Enquiry Summary

- Review and confirm the information submitted.
- View a list of Asset Owner Members and their contact details that Dial Before You Dig have informed.

Receiving Information

Plans are the most common form of information you will receive from infrastructure owners (generally within two business days) detailing the location of their assets.

Please note - these plans **DO NOT** come from Dial Before You Dig. Should you require further information or assistance, contact the Asset Owner Member directly.

It is important NOT to proceed until you have received the relevant information from ALL Asset Owner Members affected by your project.

5 DBYD Certified Locators



DBYD Certified Locators have a nationally recognised industry qualification that distinguishes them from 'DIY' or self-authorised locators. With DBYD certification there is no need to guess whether the locator you are hiring is competent. Hiring locators that are not DBYD certified may be putting your business and the community at risk.

To gain DBYD certification, locators must pass a comprehensive theory exam and practical field test conducted by an industry assessor. The assessment includes auditing equipment for compliance as well as the user's competence, workplace safety knowledge and compliance with safe WHS or OHS practices. The assessment also includes knowledge and understanding of AS5488 - 2013 (classification of subsurface utility information).

DBYD Certified Locators in many instances will have exclusive access to endorsed utilities for location purposes. For example, only Telstra Accredited Plant Locators with DBYD Certification have authorisation to access Telstra assets for location purposes.



A DBYD Certified Locator will engage best practice to:

- Interpret plans;
- Identify and locate Dial Before You Dig Member assets;
- Where possible identify and locate non-member or unrecorded assets (e.g. including any domestic gas /power lead-ins not normally shown on Dial Before You Dig utility plans);
- Provide results / maps / information on located services to AS5488 - 2013 specifications (page 11);
- Minimise the amount of exploratory potholing and save costs; and
- Assist in validating the correct asset when exposed.

DBYD Certified Locators in Australia can be identified in the industry by the distinctive DBYD Certified Locator branding and the DBYD Certified Locator ID card.

To find a DBYD Certified Locator near you visit www.dbydlocator.com.

6

Potholing

Potholing is the means to 'validate' buried assets by physically exposing them. All buried assets should be validated before commencing excavation. Validated assets (potholed and exposed) conform with AS5488 - 2013 Quality Level A in terms of location accuracy (See page 13 for details on quality levels).

Dial Before You Dig Member supplied plan information and assets located electronically (e.g. by a DBYD Certified Locator) need also to be potholed and exposed to meet Quality Level A accuracy which is required prior to any excavation. (In AS5488 - 2013 Dial Before You Dig Member plans are classified as Quality Level D, and electronically located assets are Quality Level B).

In all cases any work in the vicinity of a buried asset should be done in accordance with the Asset Owner's requirements and if applicable any relevant legislation.



When permitted, potholing needs to be undertaken with extreme care and by employing techniques least likely to damage assets. Remember if machinery is on site it can come into contact with overhead power. Refer to 'look up and live' on the following page.

Hand digging and hydro vacuum excavation methods are used in the industry for potholing, however both can cause damage if not done correctly. Mechanical aids such as backhoes should not be used for potholing.

Hand digging:

- For hand digging, use round edge spades and shovels (push, do not throw at ground);
- Do not use sharp pointed tools such as picks or crowbars;
- All tools used should be non-conductive for safety reasons;
- Dig adjacent to the asset to expose it from the side rather than digging down on top;
- Where possible dig parallel to the line rather than across it.

Hydro vacuum excavation:

Hydro Vacuum excavation is now widely used and is a very effective means of non-destructive digging. This method however should not be assumed to be 100% safe as it has been proven to cause damages. Asset Owner specific requirements and relevant State Guidelines and Codes of Practice should always be observed.

Factors contributing to damage by hydro vacuum excavation include:

- Pressure used
- Type of nozzle
- Proximity to the asset; and
- Duration of contact

Destructive water jet testing has been undertaken by Dial Before You Dig. The results can be viewed on YouTube - Dial Before You Dig Water Jetting Pressure Testing.

Using Locators when potholing:

The use of DBYD Certified Locators when potholing can help minimise the amount of exploratory potholing (save costs) and assist in validating that the correct asset has been found.

7 No Go Zones and Exclusion Zones

Guides and information are available from state-based authorities and asset owners that declare minimum clearance distances to a 'No Go Zone' or 'Exclusion Zone' around particular assets. These guides recommend the provision of a Safe Work Method instruction and excavation practices, be it hand or machinery, within the No Go Zone or Exclusion Zones. These can usually be found on the Duty of Care provided by Asset Owners.

It is critical that you assess the work requirements in the planning stages before beginning work and take necessary steps to minimise the risks involved with working near overhead powerlines. You are not necessarily protected from an electrical incident just because you are not touching powerlines. High voltage electricity can jump gaps. People, plant and vehicles can stray into Exclusion Zones so you must adopt suitable control methods.

For more information contact your local electricity utility or visit your relevant State Worksafe or State Energy Regulator website.



8 AS5488 - 2013 – Classification of Subsurface Utility Information (SUI)

Australian Standards and Australian/New Zealand Standards are developed by an independent organisation called Standards Australia. It prepares and publishes voluntary technical and commercial standards which are sometimes adopted by WHS or OHS legislation and regulations.

Where legislation or a regulation refers to a standard, workplace participants must comply with the standard.

AS5488 - 2013 Classification of Subsurface Utility Information (SUI) has been developed to provide utility owners, operators and locators with a framework for the consistent classification of information concerning subsurface utilities. The application of this Standard is intended to improve public safety and reduce costly property damage.

AS5488 - 2013 aims to help reduce damages by:

Providing a national standard format for recording subsurface utility information.

This includes codes, line types and colours. Having an industry standard will reduce confusion and misinterpretation by the end users of that information.

Examples of standard colours used to represent utilities:

Utility	Colour
Communications	White (or black when on white background)
Drainage	Green
Electricity	Orange
Fire Service	Red
Gas	Yellow
Water	Blue



AS5488 - 2013 further helps reducing damages by:

Applying an accuracy classification to measurements relating to subsurface assets.

Underground measurements can be obtained from different sources and subsequently can have different levels of accuracy. An un-classified or un-qualified subsurface measurement on its own does not indicate its accuracy. This can lead to damages and project delays if a wrong assumption is made.

By utilising accuracy classifications (Quality Levels), others using the information can recognise the accuracy (or inaccuracy) of the information when designing and constructing and avoid conflicts and damages.

AS5488 - 2013 Quality Levels

There are four accuracy levels which are defined as 'Quality Levels' in AS5488 - 2013. These range from 'D' being the lowest, to 'A' being the highest and most accurate.

To minimise the risk of damaging buried assets, all sub-surface measurements where shown in design or construction should have an AS5488 Quality Level defined and recorded. Any plans and information provided by DBYD Certified Locators following a location should indicate the Quality Level classification details of the asset locations undertaken. The default Quality Level for subsurface information without a Quality Level specified is 'D'. Many Dial Before You Dig Asset Owner Members do not specify an AS5488 - 2013 Quality Level, therefore the default value of QL-D should apply.

To avoid damaging buried assets when excavating the subsurface information relating to the location must be to Quality Level 'A'.

See below for a guide on interpreting the Quality Levels described in AS5488 - 2013. For full details refer to AS5488 - 2013, which is available for purchase from Standards Australia.

Quality Level D - (least accurate level and if used on its own has a high risk of damage)

QL-D information is generally obtained from existing records provided by utilities as a result of a Dial Before You Dig enquiry being lodged. In many cases the asset depicted on the plan is in a schematic format only and intended only to indicate its presence.

Quality Level C - (low accuracy and a high risk of damage)

Is described as a surface feature correlation or an interpretation of the approximate location and attributes of a subsurface utility asset using a combination of existing records and site survey of visible evidence – for example you can see the pit lids shown on the plan but the actual position of underground connection between pits is still assumed.

Quality Level B - (significant risk reduction)

Provides relative subsurface feature locations in three dimensions. The minimum requirement for QL-B is relative spatial position, this can be achieved via an electromagnetic frequency locating device. An electronic location provided by a DBYD Certified Locator to QL-B standard would have a maximum horizontal tolerance of plus or minus 300mm and a maximum vertical tolerance of plus or minus 500mm.

Quality Level A - (meets location accuracy standards for minimum risk when excavating)

Is the highest Quality Level accuracy and consists of positive identification of the attribute and location of a subsurface utility at a point to an absolute spatial position in three dimensions. It is the only quality level that defines a subsurface utility as 'Validated'.



9

Consent Requirements for Work within Road Reserves

Unless specifically exempt, excavations within the road reserve require the prior written consent of the coordinating road authority responsible for the particular road reserve. Consent may not be provided unless evidence that an enquiry has been made to the Dial Before You Dig service.

The road reserve is defined as the area between property boundary lines.

The organisation managing excavators and other entities responsible for undertaking the work must manage them in a manner that minimises damage to the road and surrounding road infrastructure, minimises disruption to road users and protects any significant roadside vegetation.

Further detail on the requirements when proposing to conduct excavations and other related work within the road reserve can be found by contacting the relevant state road authorities.

10

Locating Assets in Emergency Situations

Many utilities now provide fast automated responses which can be initiated on site using Dial Before You Dig phone apps. Responses can usually be delivered electronically on site within a very short time frame – often faster than a manual operator can achieve.

When automated responses are not available or are slow in responding there are alternative methods available. These include:

- Using the Enquiry Confirmation Sheet details to contact the Asset Owners while at the worksite;
- Utilising the Dial Before You Dig website to look up the relevant emergency contact details for Asset Owners in your area and contact them;
- Maintaining a contact list associated with the authorities that can be contacted for location and advice regarding infrastructure assets during out of hours periods; and
- Employing / engaging DBYD Certified Locators and have them available for emergencies.

11

What to do if an Infrastructure Asset is Damaged

Always have the correct procedures in place to act correctly, should a damage occur. This information should be included in the information that each Member sends out with their Dial Before You Dig plans including their contact details. Different asset types have different emergency procedures which, if not followed, may lead to serious injury or death.

Call 000

- Major incident
- Risk to life or property



Call the Asset Owner

- Potential for injury or death
- Damage to underground asset

For a major incident, where there is risk to life or property, and it is safe to do so, call 000.

In general:

- If any damage occurs to an infrastructure asset, immediately contact the relevant Asset Owner via the contact numbers provided on the Enquiry Confirmation Sheet, on the plans and information from the Asset Owner or via any other emergency contact details;
- Cease work immediately;
- Do not try to fix it yourself; and
- Damage to an infrastructure asset does not just mean rupturing a pipe or cable; it includes damage to tracer wires, marker tape or pipe coating; pipeline protection such as slabbing and casings; when you mistakenly bury valves; any street furnishings owned by an asset owner; manhole covers; removal of signage etc. Please report all damage however minor, as it may lead to catastrophic failure at a later date if not repaired.

If there is a potential for injury or death:

Always try to contact 000 or the Asset Owner if there is a potential for injury or death.

Gas damage

For urgent situations when contact cannot be immediately made with the Asset Owner or 000:

- Evacuate the area surrounding any gas escape without using a vehicle or any device that may create a spark including a mobile phone;
- Do not attempt to repair the damage;

- Do not use a naked flame or any other ignition source;
- Do not create sparks by using a vehicle, electronic device (mobile phones, tablets, cameras) matches or lighters or smoking;
- Warn others in the vicinity; and
- Do not attempt to re-enter the site until the relevant authorities have deemed the site safe to do so.

Electricity damage

Electricity will always find paths to earth including via equipment and through you. A fallen line or equipment (e.g. crane, excavator or vehicle) in contact with live powerlines will create a dangerous electric field of approximately ten metres from the contact point.

For urgent situations when contact cannot be immediately made with the Asset Owner or 000, the following actions should be taken:

- All work should cease immediately;
- If you are inside a vehicle all occupants should remain inside the vehicle until given the all clear to exit by the power authority;
- If it is essential to leave the vehicle due to fire or any other life-threatening reason, remember to jump clear of the vehicle landing with two feet together. Do not touch the vehicle and the ground at the same time;
- When moving away from the vehicle, you should shuffle or jump away from the vehicle (with feet together) until you are at least ten metres clear; and
- Do not enter a site where there has been an electrical incident if it has not been given the all clear by the power authority. You may end up as a victim.

For more information contact your local electricity supplier or visit your relevant State WorkSafe website.



12

Educational Training and Further Information

The Dial Before You Dig website has links to many additional references including:

- Codes of Practice
- National Legislation (Work or Occupational Health and Safety Acts)
- State based regulations and information
- Local Government Acts; and
- Australian Standards

Refer to <https://www.1100.com.au>.

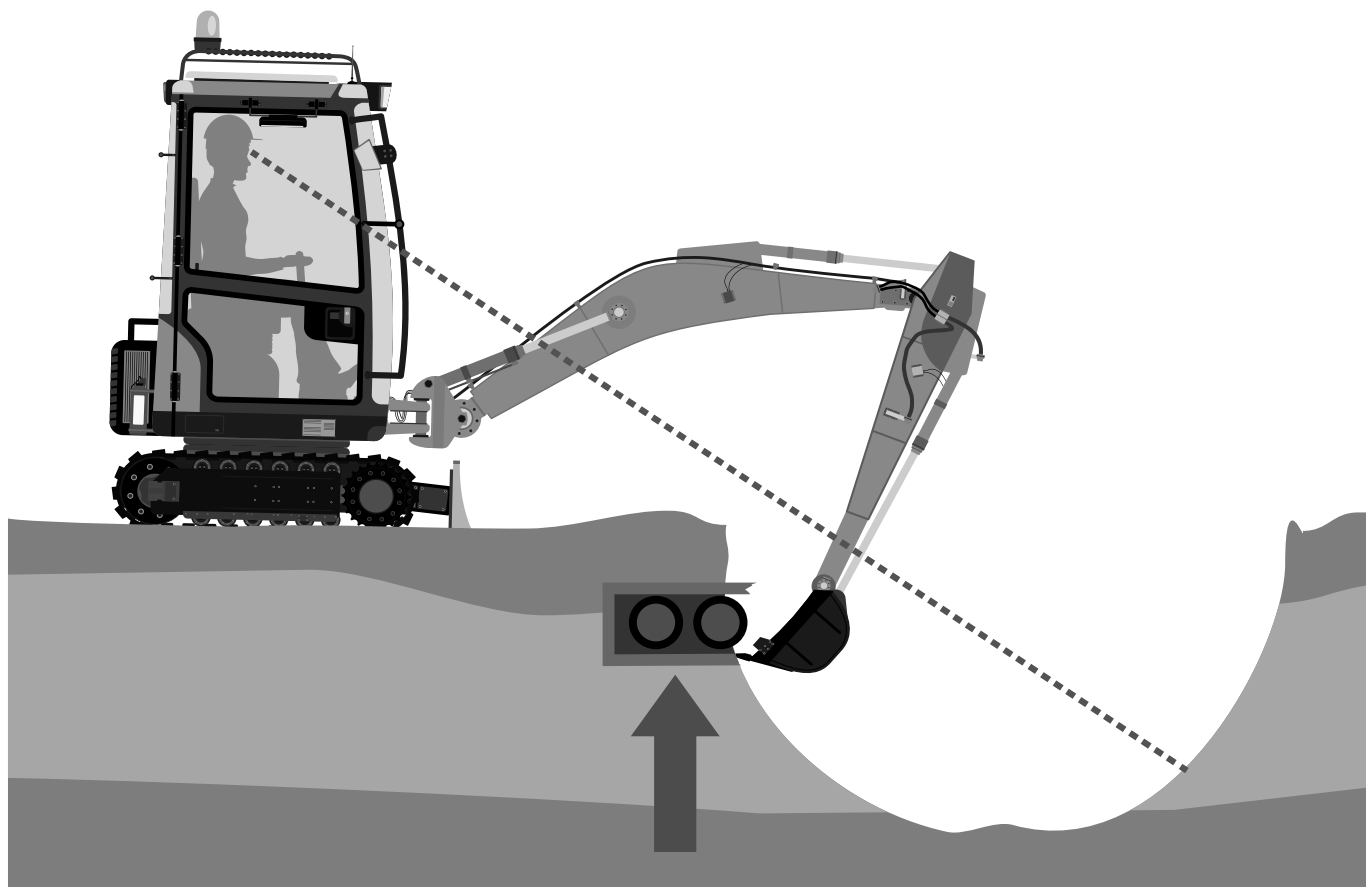
Dial Before You Dig Awareness Presentations (no cost)

Dial Before You Dig can provide awareness presentations to field and office workers. The content includes:

- How to use the Dial Before You Dig service (lodging an enquiry);
- Asset damage awareness
- Major causes of damages
- Obligations – liability and repercussions
- The 5Ps and Best Practice
- Case Studies

To request a presentation, go to <https://www.1100.com.au/training/request-for-an-awareness-presentation/>.

Contact your relevant Dial Before You Dig State for additional education and training options or go to the Dial Before You Dig website.



13

Reinstatement and Rectification

All infrastructure assets must be restored to the condition required by the registered Asset Owner. You will generally be required to replace all embedment material with the same material and provide compaction if the embedment material is disturbed.

Please note the bedding and backfill requirements may be different to the construction standards when the asset was originally installed.

Written consent issued by road and other relevant authorities provide details of the requirements for backfilling and reinstatement of any excavated areas of roadway, pathway or roadside. Organisations or excavators representing an organisation must satisfy all these consent requirements.

Records of the consent history of any work undertaken and the reinstatement completed, should be filed with the job file. The excavator should close out the consent by advising the relevant road authority once the work has been completed.

For information in relation to State specific guidelines and codes of practice refer to the Dial Before You Dig website.

Area of Interest: The geographical area in which an Asset Owning Member has underground infrastructure and registers it with Dial Before You Dig. If an enquirer intends to excavate within this geographical area, a referral will be sent to the Asset Owning Member, who in turn contacts the enquirer.

AS5488 - 2013: Classification of Subsurface Utility Information (SUI) is an Australian Standard. The Standard provides a framework for the classification of subsurface utility location and attributes information in terms of specified quality levels and is available from Standards Australia.

Asset Owner: Any person, utility, municipality, authority, political subdivision or other person or entity who owns, operates or controls the operation of an asset.

Asset Owner Member: Is an Asset Owner that is a Member of Dial Before You Dig, i.e. that has an Area of Interest covering their assets registered with Dial Before You Dig. It should be noted that not all asset owners are Asset Owner Members.

DBYD Certified Locator: A person who has passed all the requirements of a DBYD Certified Locator and has a current DBYD Locator Certificate and a current DBYD Certified Locator ID card.

Dial Before You Dig: The Dial Before You Dig referral service is for anyone to make an enquiry for plans and documentation from registered Asset Owner Members to enable location of all utility services prior to excavations.

Duty of Care: is an obligation to take responsibility to avoid injury to another person and to avoid damaging assets owned by others. A breach of Duty of Care exists where it is proven that the person who is negligent has not provided the appropriate standard of care. Asset Owner Members can stipulate a 'Duty of Care' required when working near their asset.

Enquiry Confirmation Sheet: A confirmation email sent by Dial Before You Dig to the User as a result of an enquiry to Dial Before You Dig, detailing the job number, registered Asset Owners and their contact details.

Exclusion Zone: or No Go Zones are specific restrictions that apply to a zone surrounding an asset. The restrictions including the extent of the zone are set by safety regulators and Asset Owners to prevent damage and injury. The restrictions can be partial (i.e. conditional) or total exclusion.

Excavate or Excavation: Any operation using non-mechanical or mechanical equipment or explosives used in the movement of earth, rock or other material below existing grade. This includes, but is not limited to: auguring, blasting, boring, digging, ditching, dredging, drilling, driving-in, grading, ploughing-in, pulling-in, ripping, scraping, trenching, and tunneling.

Five Ps: The five steps recommended by Dial Before You Dig to prevent damages to underground services; Plan, Prepare, Pothole, Protect and Proceed.

No Go Zone: or Exclusion Zones are specific restrictions that apply to a zone surrounding an asset. The restrictions including the extent of the zone are set by safety regulators and Asset Owners to prevent damage and injury. The restrictions can be partial (i.e. conditional) or total exclusion.

Not for Profit: Not for profit organisations are organisations that provide services to the community and do not operate to make a profit.

Pothole: Exposure of an asset by careful hand digging to locate the precise horizontal and vertical position of underground infrastructure.

Quality Level: A classification reflecting the precision and accuracy of utility location and attribute information. AS5488 - 2013 (Classification of Subsurface Utility Information), defines four Quality Levels – A, B, C and D. Quality Level A is the most accurate and Quality Level D being the least accurate.

Regulations and Industry Codes: Work Health and Safety (WHS) Regulations being enacted across Australia to harmonise work health and safety laws, coordinated by Safe Work Australia. Industry Codes (or Codes of Practice) provide practical guidance to Project Owners and people doing excavation and construction work on how to meet legal regulatory requirements.

Road Reserve: The road reserve is the land controlled by the local or state road authority that is located between one property boundary line and the property boundary line on the other side of the road reserve.

User: Anyone who makes an enquiry to Dial Before You Dig with the intent of receiving information from registered Dial Before You Dig Asset Owner Members.

Validate, Validated, Validation: As defined in AS5488 - 2013 - direct physical access and verification of the absolute spatial position and detailed attributes of the utility infrastructure. Potholing is a means to validate a subsurface asset.

Vacuum Excavation: Vacuum excavation is defined as a means of soil extraction through vacuum; water or air jet devices and are commonly used for breaking ground.



Disclaimer

The information in this guide has been provided in the interests of preventing damage and injury. In all cases Users should comply with relevant state and national legislation and advice from the individual asset owners. Any decision by the User to use the information supplied is purely at the discretion of the User.

The Association of Australian Dial Before You Dig Services Ltd, its associated Dial Before You Dig entities, servants and agents shall not be liable for any loss or damage caused or occasioned using the advice supplied to the User, its servants or agents.

Accordingly, the User of the information agrees to indemnify the Association of Australian Dial Before You Dig Services Ltd and its associated Dial Before You Dig entities against any claim or demand for such loss or damage.



The Essential First Step.



www.1100.com.au

Appendix D. Engineering logs

Project: Amy Gillett Bikeway Stage 4
Client: DIT

Location: Williams Creek North Railway Abutment

Page: 1 of 1
Project No: IW278200

Contractor: Beyond Drilling **Easting:** 313466.4 m **Elevation:** 380.80 m **Started:** 21/06/2022
Plant: MK/5 DRILL RIG **Northing:** 6143927.9 m **Datum:** AHD **Finished:** 21/06/2022
Logged By: TH **Checked By:** ST **Grid:** GDA94 **Inclination:** -90° **Orientation:**

DRILLING INFORMATION					MATERIAL SUBSTANCE																				
Method	Casing	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log	Material Description	Moisture	Consistency	Relative Density	Field Test Data & Other Observations													
AH			▼	SPT N=16 8,9,7	380	0.5		TOPSOIL (silty CLAY), low plasticity, dark yellow-brown; trace roots.	M <Wp	St		TOPSOIL													
								Silty CLAY, low plasticity, black; trace roots; trace sand.				ALLUVIUM													
								CLAY, medium to high plasticity, black.																	
								SPT N=6 2,3,3				379	2.0		Clayey SAND, fine to coarse grained, white/orange brown; low plasticity; with fine to coarse grained, sub-rounded to sub-angular gravel; calcareous	M	L								
															SPT N=17 5,8,9				377	4.0		Sandy GRAVEL, fine to coarse grained, sub-rounded to sub-angular, red-brown or transparent (quartz), rusty smell; sand is fine grained.	W	MD	
																						CLAY, high plasticity, light grey purple mottling and orange staining, mica content; with fine sand; trace fine-grained gravel.			
								SPT N=26 6,7,19				375	6.0		Clayey SAND, non-plastic, fine-grained, brown with orange staining, mica content.	M									
								SPT N=26 7,10,16				373	8.0		Extremely Weathered Schist (sandy SILT/CLAY), low plasticity, light grey with orange and green staining, mica content; fine to coarse grained sand.				M <Wp	H		EXTREMELY WEATHERED MATERIAL			
								U SPT N=45 9,13,32				372	9.0		White near-vertical veins, embeded in thin (<1mm) platy rock (schist)-like fabrics										
								SPT N=36 6,16,20				371	10.0												
								SPT N=33 7,13,20				369	12.0												
								SPT N=R 2, 52/140mm				368	12.5												
								SPT N=R				366	15.0												
								44, 0/0mm																	
								Exploratory hole terminated at 15.00 m Target depth																	

METHOD & SUPPORT	PENETRATION	GROUNDWATER	SAMPLES & FIELD TESTS		MOISTURE	DENSITY (N-value)	CONSISTENCY (SU) (N-value)
HA Hand Auger AS Auger ADV Auger - V-bit ADT Auger - TC-bit WB Washbore RR Rock Roller SNC Sonic Drilling AH Air Hammer C Casing PT Push Tube	No resistance ranging to refusal 	▼ = Water level (static) ► = Water inflow	D Disturbed Sample B Bulk Sample SPT SPT Sample U Undisturbed Sample E Enviro Sample W Water Sample	N SPT blows per 300mm HW SPT penetration by hammer weight RW SPT penetration by rod weight HP Hand Penetrometer HV Hand Vane Shear (P- Peak Su R: Residual Su)	D = Dry M = Moist W = Wet Wp = Plastic Limit Wl = Liquid Limit	VL Very Loose 0 - 4 L Loose 4 - 10 MD Medium Dense 10 - 30 D Dense 30 - 50 VD Very Dense 50 - 100	VS Very Soft < 12 kPa (0-2) S Soft 12 - 25 (2-4) F Firm 25 - 50 (4-8) St Stiff 50 - 100 (8-15) VSt Very Stiff 100 - 200 (15-30) H Hard > 200 kPa (>30)

This log was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT		Title: BH1 0.0 - 5.0 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 1/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT	
Project:	Amy Gillett Bikeway Stage 4	
Drawn:	TH	Checked: ST

Title:	BH1 5.0 - 10.0 m	
Scale:	NTS	Drawing Number: 2/3



Jacobs

Client: DIT

Project: Amy Gillett Bikeway Stage 4

Drawn: TH

Checked: ST

Title: BH1 10.0 - 15.0 m

Scale: NTS

Drawing Number: 3/3

Project: Amy Gillett Bikeway Stage 4
Client: DIT

Location: Williams Creek North Railway Abutment

Page: 1 of 1
Project No: IW278200

Contractor: Beyond Drilling **Easting:** 313458.5 m **Elevation:** 381.10 m **Started:** 22/06/2022
Plant: MK/5 DRILL RIG **Northing:** 6143904.3 m **Datum:** AHD **Finished:** 22/06/2022
Logged By: TH **Checked By:** ST **Grid:** GDA94 **Inclination:** -90° **Orientation:**

DRILLING INFORMATION				MATERIAL SUBSTANCE								
Method	Casing	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log	Material Description	Moisture	Consistency	Relative Density	Field Test Data & Other Observations
AH			▼	SPT N=12 3,4,8	381	0.5		TOPSOIL (CLAY), low plasticity, dark grey-brown, some roots; trace fine-grained sand.	M <Wp			TOPSOIL
					380	1.0		Silty SAND, fine grained, dark yellow-brown.	M	MD	ALLUVIUM	
					379	1.5						
					378	2.0						
					378	2.5						
					378	3.0						
					378	3.5						
					377	4.0						
					377	4.5						
					377	5.0						
					377	5.5						
					377	6.0						
					377	6.5						
					377	7.0						
					377	7.5						
				SPT N=26 4,11,15	375	6.0		Residual Soil (sandy CLAY/SILT), non-plastic, grey-brown; sand is fine grained; high mica content.		VSt		RESIDUAL SOIL
				SPT N=R 19,34,0/0mm	373	8.0		Extremely Weathered Schist (clayey sandy SILT), non-plastic, grey-brown; sand is fine grained; high mica content, foliations and rock-like fabric. 7.0 - 7.5 m: A band of fine SAND, orange				EXTREMELY WEATHERED MATERIAL
				SPT N=34 14,17,17	372	8.5		8.3 - 8.5 m: Increasing sand content, trace fine sub-rounded gravel				
				SPT N=47 11,21,26	371	10.0						
				SPT N=R 15,31,10/25m	369	12.0						
				SPT N=R 10/95mm	368	13.0		Extremely Weathered Schist (CLAY/SILT), non-plastic, grey-brown; sand is fine grained; high mica content, foliations and rock-like fabric.				
					368	13.5		Exploratory hole terminated at 13.50 m Machine Limit				

This log was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT		Title: BH2 0.0 - 5.0 m	
Project:	Amy Gillett Bikeway Stage 4		Scale:	NTS
Drawn:	TH	Checked:	ST	Drawing Number: 1/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



JACOBS

Client:	DIT	
Project:	Amy Gillett Bikeway Stage 4	
Drawn:	TH	Checked: ST

Title:	BH2 5.0 - 10.0 m	
Scale:	NTS	Drawing Number: 2/3

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Note: Borehole terminated at 13.5m, materials in the top two rows of the tray do not represent their true depths.

JACOBS

Client:	DIT	
Project:	Amy Gillett Bikeway Stage 4	
Drawn:	TH	Checked: ST

Title:	BH2 10.0 - 13.5 m	
Scale:	NTS	Drawing Number: 3/3

Project: Amy Gillett Bikeway Stage 4
Client: DIT

Location: Angas Creek North Railway Abutment

Page: 1 of 1
Project No: IW278200

Contractor: Beyond Drilling **Easting:** 313447.0 m **Elevation:** 380.90 m **Started:** 23/06/2022
Plant: MK/5 DRILL RIG **Northing:** 6143796.3 m **Datum:** AHD **Finished:** 23/06/2022
Logged By: TH **Checked By:** ST **Grid:** GDA94 **Inclination:** -90° **Orientation:**

DRILLING INFORMATION					MATERIAL SUBSTANCE							
Method	Casing	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log	Material Description	Moisture	Consistency	Relative Density	Field Test Data & Other Observations
						0.5		TOPSOIL (sandy SILT), non-plastic, dark-brown; sand is fine-grained; some roots.				TOPSOIL
				SPT N=16 6,8,8	380	1.0		Sandy CLAY, low plasticity, black; sand is fine grained.	M <Wp		VSt	ALLUVIUM
						1.5		1.3 m: Increasing mica content				
					379	2.0		Clayey SAND, fine to medium grained, orange-brown; low plasticity fines.	M			
				SPT N=6 4,1,5	378	2.5		Sandy CLAY, medium plasticity; sand is fine to medium grained.	M >Wp		F	
						3.0		SAND, medium-grained, grey-brown. NO RECOVERY, inferred as SAND as above.	W			
					377	3.5		Sandy CLAY, medium plasticity, grey; sand is fine grained.	M >Wp			
				SPT N=12 1,5,7	376	4.0		SAND, fine-grained, orange brown; with clay.			MD	4.25 : SPT rod Sunk 30mm after seating.
						4.5		Residual Soil (gravelly silty SAND), fine to coarse grained, sub-rounded to angular, dark grey-brown; non-plastic; gravel of schist and quartzite, fine to coarse grained, sub-rounded to angular; with mica.	W			RESIDUAL SOIL
					375	5.0		Residual Soil (SILT), low plasticity, dark grey-brown; with fine to coarse grained, sub-rounded to angular sand; with gravel of schist and quartzite, fine to coarse grained, sub-rounded to angular; with mica.	M >Wp		H	
				U	375	5.5		Residual Soil (gravelly silty SAND), fine to coarse grained, sub-rounded to angular, dark grey-brown; non-plastic; gravel of schist and quartzite, fine to coarse grained, sub-rounded to angular; with mica.	M		MD	
				SPT N=24 9,10,14	374	6.0		Residual Soil (sandy gravelly SILT), non-plastic, dark grey-brown; sand is fine to coarse grained; gravel is fine to coarse grained, sub-rounded to sub-angular.	M <Wp		VD	
				SPT N=R 30, 15/75mm	374	6.5		NO RECOVERY, inferred as Residual Soil (sandy gravelly SILT) as above.				
						7.0		Highly Weathered SANDSTONE, highly fractured, pale yellow, easily breakable into pieces of coarse grained gravel size, fractures are filled with orange-brown sandy clay with low plasticity.	D			WEATHERED ROCK
						7.5		SILT, non-plastic, light grey; trace fine gravel; high mica content.	M >Wp			RESIDUAL SOIL
					373	8.0		Clayey sandy GRAVEL, fine to medium grained, subangular to angular, grey-green; low plasticity clay.	W			
				SPT N=R 22,35,0/0mm	372	8.5		Highly Weathered SANDSTONE, fractured, bedded, light grey with dark-grey & orange mottling, readily breakable into pieces medium to coarse gravel size, sub-rounded to angular, fractures filled with fine to medium grained sand.				WEATHERED ROCK
						9.0			M			
				SPT N=R 37, 0/0mm	371	10.0		Clayey sandy GRAVEL, fine to medium grained, subangular to angular, grey-green; low plasticity clay.				RESIDUAL SOIL
						10.5						
					370	11.0			W		VD	
				SPT N-R 33/30mm	369	11.5						
						12.0		Exploratory hole terminated at 12.00 m Refusal				

METHOD & SUPPORT	PENETRATION	GROUNDWATER	SAMPLES & FIELD TESTS		MOISTURE	DENSITY (N-value)	CONSISTENCY (SU) (N-value)
HA Hand Auger AS Auger ADV Auger - V-bit ADT Auger - TC-bit WB Washbore RR Rock Roller SNC Sonic Drilling AH Air Hammer C Casing PT Push Tube	No resistance ranging to refusal 	 = Water level (static) = Water inflow	D Disturbed Sample B Bulk Sample SPT SPT Sample U Undisturbed Sample E Enviro Sample W Water Sample	N SPT blows per 300mm HW SPT penetration by hammer weight RW SPT penetration by rod weight HP Hand Penetrometer HV Hand Vane Shear (P- Peak Su R: Residual Su)	D = Dry M = Moist W = Wet Wp = Plastic Limit Wl = Liquid Limit	VL Very Loose 0 - 4 L Loose 4 - 10 MD Medium Dense 10 - 30 D Dense 30 - 50 VD Very Dense 50 - 100	VS Very Soft < 12 kPa (0-2) S Soft 12 - 25 (2-4) F Firm 25 - 50 (4-8) Stiff 50 - 100 (8-15) VSt Very Stiff 100 - 200 (15-30) H Hard > 200 kPa (>30)

This log was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT		Title: BH3 0.0 - 5.0 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 1/3

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JACOBS

Client:	DIT		Title: BH3 5.0 - 10.0 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 2/3

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JACOBS

Client:	DIT		Title: BH3 10.0 - 12.0 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 3/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.

Project: Amy Gillett Bikeway Stage 4
Client: DIT

Location: Angas Creek North Railway Abutment

Page: 1 of 1
Project No: IW278200

Contractor: Beyond Drilling	Easting: 313455.8 m	Elevation: 382.75 m	Started: 24/06/2022
Plant: MK/5 DRILL RIG	Northing: 6143768.4 m	Datum: AHD	Finished: 24/06/2022
Logged By: TH	Checked By: ST	Grid: GDA94	Inclination: -90°
Orientation:			

DRILLING INFORMATION				MATERIAL SUBSTANCE													
Method	Casing	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log	Material Description	Moisture	Consistency	Relative Density	Field Test Data & Other Observations					
AH				SPT N=11 6,6,5	382	0.5		FILL (gravelly COBBLES), dark brown, angular to sub-angular; gravel is fine to coarse grained, sub-angular to angular; with fine sand.	M			FILL 1.00 : Auger grinding, suspected to be boulders in fill. 1.50 : Auger grinding for 5 minutes, suspected to be boulders in fill.					
						382	1.0		FILL (gravelly silty SAND), fine grained, brown, non-plastic; gravel is fine to coarse grained, sub-angular to angular.	M	MD						
						381	1.5		FILL (gravelly sandy SILT), low plasticity, light grey with orange stains; fine to medium grained subangular sand; gravel is fine grained, subrounded to subangular.	M	St						
						381	2.0		FILL (clayey/silty SAND), fine to coarse grained, sub-angular, brown; with fine to coarse grained, angular to sub-angular gravel.	M							
						380	2.5		SPT N=13 6,6,7	380	3.0		clayey silty SAND, fine grained, sub-angular, dark grey; trace fine to medium grained, angular to subrounded gravel	M	MD	ALLUVIUM	
						379	3.5			379	4.0			M			
						378	4.5		SPT N=14 5,7,7	378	5.0		silty clayey SAND, fine to coarse grained, sub-angular, brown; low plasticity fines; trace fine to medium grained, sub-rounded to sub-angular gravel.				5.00 : Auger grinding.
						377	5.5		SPT N=16 2,10,6	377	6.0		Residual Soil (sandy silty GRAVEL), coarse grained, sub-angular to angular, breakable into platy pieces (~5mm), dark grey; high mica content; non-plastic; sand is fine grained.	W	MD	RESIDUAL SOIL	6.15 : Some gravels are porous and break into platy pieces when pressured, some have higher strength and cannot be broken by hand.
						376	6.5			376	7.0		Sandy gravelly SILT, non-plastic, yellow-brown with grey mottling; high mica content; sand is fine grained; gravel is coarse grained, sub-angular to angular.	M	<Wp		
						375	7.5		SPT N=R 7,20,20/90m	375	8.0		Gravelly silty SAND, fine grained, angular to sub-angular quartz, yellow-brown with grey mottling; gravel is coarse grained, sub-angular to angular.	M	VD		
						375	8.0			375	8.5		NO RECOVERY, inferred as gravelly silty SAND as above.				
						374	8.5		SPT N=R 35,35,0/0mm	374	9.0		Residual Soil (gravelly SILT), low plasticity, grey; fine to medium grained angular gravel.	M	>Wp		
						373	10.0		SPT N=R 17/125mm	373	9.5		Moderately to Highly Weathered SCHIST, discoloured and highly fractured, easily breakable into pieces of coarse grained gravel size, fractures are filled with orange-brown sandy CLAY with low plasticity.	D			WEATHERED ROCK
						373	10.5			373	10.0		Residual Soil (silty GRAVEL), fine to coarse grained, sub-rounded to angular, light yellow-brown with grey mottling; non-plastic.	M	VD		RESIDUAL SOIL
	372	11.0			372	10.5		SCHIST, recovered as GRAVEL, fine to coarse grained, sub-angular to angular; with sand and clay.	W			WEATHERED ROCK					
	372	11.5		SPT N-R 6/30mm	372	11.5		Exploratory hole terminated at 11.50 m Refusal									

METHOD & SUPPORT HA Hand Auger AS Auger ADV Auger - V-bit ADT Auger - TC-bit WB Washbore RR Rock Roller SNC Sonic Drilling AH Air Hammer C Casing PT Push Tube	PENETRATION No resistance ranging to refusal 	GROUNDWATER = Water level (static) = Water inflow	SAMPLES & FIELD TESTS D Disturbed Sample B Bulk Sample SPT SPT Sample U Undisturbed Sample E Enviro Sample W Water Sample N SPT blows per 300mm HW SPT penetration by hammer weight RW SPT penetration by rod weight HP Hand Penetrometer HV Hand Vane Shear (P: Peak Su R: Residual Su)	MOISTURE D = Dry M = Moist W = Wet Wp = Plastic Limit Wl = Liquid Limit	DENSITY (N-value) VL Very Loose L Loose MD Medium Dense D Dense VD Very Dense	CONSISTENCY (SU) (N-value) 0 - 4 4 - 10 10 - 30 30 - 50 50 - 100	VS Very Soft < 12 kPa (0-2) S Soft 12 - 25 (2-4) F Firm 25 - 50 (4-8) St Stiff 50 - 100 (8-15) VSt Very Stiff 100 - 200 (15-30) H Hard > 200 kPa (>30)
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This log was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT		Title: BH4 0.0 - 5.0 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 1/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



JACOBS

Client:	DIT		Title: BH4 5.0 - 10.0 m		
Project:	Amy Gillett Bikeway Stage 4				
Drawn:	TH	Checked:	ST	Scale: NTS	Drawing Number: 2/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.



Jacobs

Client:	DIT		Title: BH4 10.0 - 11.5 m	
Project:	Amy Gillett Bikeway Stage 4			
Drawn:	TH	Checked:	ST	Scale: NTS
				Drawing Number: 3/3

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.

Appendix E. Geotechnical laboratory results

CERTIFICATE OF ANALYSIS

Work Order : **EM2213090**
Client : **SMS GEOTECHNICAL**
Contact : SIMON NELSON
Address : UNIT 9 21 BEAFIELD ROAD
 PARA HILLS WEST SOUTH AUSTRALIA 5096
Telephone : +61 8258 7498
Project : SMS1.22358
Order number : ----
C-O-C number : ----
Sampler : client
Site : ----
Quote number : EN/222
No. of samples received : 8
No. of samples analysed : 8

Page : 1 of 4
Laboratory : Environmental Division Melbourne
Contact : Customer Services EM
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +61-3-8549 9600
Date Samples Received : 08-Jul-2022 10:55
Date Analysis Commenced : 08-Jul-2022
Issue Date : 15-Jul-2022 12:25



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Corrosion assessment for Concrete and Steel piles in soil per Australian Standard AS2159-2009 uses a combination of soil and groundwater data (Tables 6.4.2 C & 6.5.2 C). In the absence of groundwater data, assessment has been made against soil criteria only. Refer to AS2159-2009 section 6.4 for further interpretation of corrosion assessment. ALS is not NATA accredited for Corrosion Assessment comments
- EA167: Soil Condition A – High permeability soils (e.g. sands and gravels) which are in groundwater
- EA167: Soil Condition B – Low permeability soils (e.g. silts and clays) or all soils above groundwater
- ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				1-2216823 Williams Creek BH01 S02 Depth:2.0-2.5m (Work order- W122-3523)	1-2216825 Williams Creek BH01 S04 Depth:8.5-10.0m (Work order- W122-3523)	1-2216828 Williams Creek BH02 S03 Depth:3.0-3.5m (Work order- W122-3524)	1-2216829 Williams Creek BH02 S04 Depth:6.5-10.0m (Work order- W122-3524)	1-2216831 Angas Creek BH03 S02 Depth:1.5-3.0m (work order122-3525)
Sampling date / time				08-Jul-2022 00:00	08-Jul-2022 00:00	08-Jul-2022 00:00	08-Jul-2022 00:00	08-Jul-2022 00:00
Compound	CAS Number	LOR	Unit	EM2213090-001	EM2213090-002	EM2213090-003	EM2213090-004	EM2213090-005
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	9.3	9.1	8.5	9.1	8.5
EA010: Conductivity (1:5)								
Electrical Conductivity @ 25°C	----	1	µS/cm	302	149	606	254	672
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	18.9	15.5	28.2	19.6	20.1
EA080: Resistivity								
Resistivity at 25°C	----	1	ohm cm	3310	6710	1650	3940	1490
EA167: Corrosion Classification (per AS2159-2009)								
∅ Exposure Classification - Concrete Piles Soil Condition A	----	-	-	Mild	Mild	Mild	Mild	Mild
∅ Exposure Classification - Concrete Piles Soil Condition B	----	-	-	Non Aggressive	Non Aggressive	Non Aggressive	Non Aggressive	Non Aggressive
∅ Exposure Classification - Steel Piles Soil Condition A	----	-	-	Mild	Non Aggressive	Moderate	Mild	Moderate
∅ Exposure Classification - Steel Piles Soil Condition B	----	-	-	Non Aggressive	Non Aggressive	Mild	Non Aggressive	Mild
ED040S: Soluble Major Anions								
Sulfate as SO4 2-	14808-79-8	10	mg/kg	60	30	230	100	290
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	10	mg/kg	250	160	900	230	930



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)


Sample ID

				1-2216833 Angas Creek BH03 S04 Depth:4.5-6.5m (Work order- W122-3525)	1-2216836 Angas Creek BH04 S02 Depth: 2.5-4.0m (Work order W122-3526)	1-2216838 Angas Creek BH04 S04 Depth:8.5-10.0m (Work orderW122-3526)	----	----
Sampling date / time				08-Jul-2022 00:00	08-Jul-2022 00:00	08-Jul-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	EM2213090-006	EM2213090-007	EM2213090-008	-----	-----
				Result	Result	Result	----	----
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	6.8	5.2	8.6	----	----
EA010: Conductivity (1:5)								
Electrical Conductivity @ 25°C	----	1	µS/cm	423	130	95	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	17.5	8.5	17.4	----	----
EA080: Resistivity								
Resistivity at 25°C	----	1	ohm cm	2360	7690	10500	----	----
EA167: Corrosion Classification (per AS2159-2009)								
∅ Exposure Classification - Concrete Piles Soil Condition A	----	-	-	Mild	Mild	Mild	----	----
∅ Exposure Classification - Concrete Piles Soil Condition B	----	-	-	Non Aggressive	Non Aggressive	Non Aggressive	----	----
∅ Exposure Classification - Steel Piles Soil Condition A	----	-	-	Mild	Non Aggressive	Non Aggressive	----	----
∅ Exposure Classification - Steel Piles Soil Condition B	----	-	-	Non Aggressive	Non Aggressive	Non Aggressive	----	----
ED040S: Soluble Major Anions								
Sulfate as SO4 2-	14808-79-8	10	mg/kg	200	150	70	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	10	mg/kg	500	60	70	----	----

Report No: MAT:1-2216822

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillet Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>WORLD RECOGNISED ACCREDITATION</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager) Date of Issue: 15/07/2022</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216822
Sample Location	Williams Creek BH01 S01
Depth	1.50m - 1.70m
Sampling Method	Submitted by client
Specification	-
Material Description	Clayey SAND, brown, with gravel, with low plasticity fines

Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	14.2	
Date Tested		1/07/2022	
Sample History	AS 1289.1.1	Air-dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	1.5	
Mould Length (mm)		150	
Crumbling		No	
Curling		No	
Cracking		Yes	
Liquid Limit (%)	AS 1289.3.1.2	22	
Plastic Limit (%)	AS 1289.3.2.1	17	
Plasticity Index (%)	AS 1289.3.3.1	5	
Date Tested		8/07/2022	

Comments

N/A

Report No: MAT:1-2216823

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillet Bikeway - project no. IW278200



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Laboratory
Number: 19225

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Date of Issue: 15/07/2022

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Sample Details

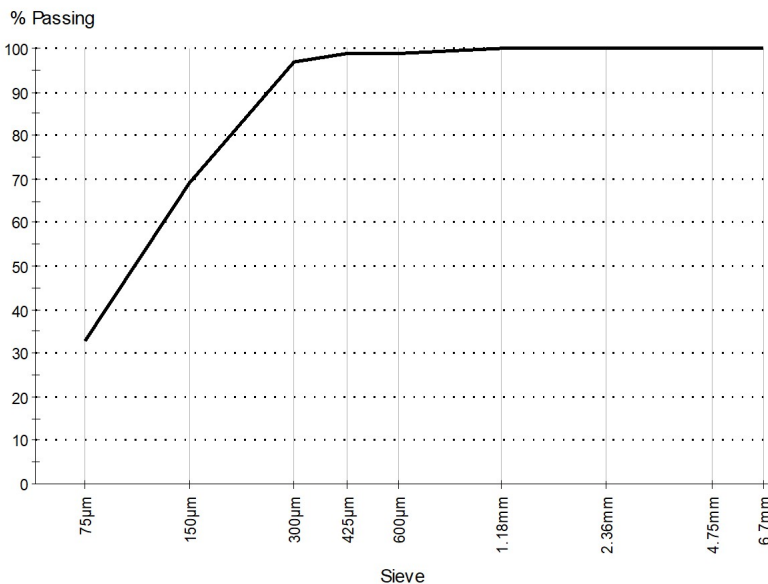
Sample ID 1-2216823
Sample Location Williams Creek
BH01 S02
Depth 2.00m - 2.50m
Sampling Method Submitted by client
Specification -
Material Description Clayey SAND, fine to coarse grained,
pale brown, approx. 35% fines

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 4/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
6.7mm	100	100
4.75mm	100	100
2.36mm	100	100
1.18mm	100	100
600µm	99	99
425µm	99	99
300µm	97	97
150µm	69	69
75µm	33	33

Comments

N/A

Report No: MAT:1-2216825

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillet Bikeway - project no. IW278200



Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.

NATA Accredited
Laboratory
Number: 19225

Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

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Sample Details

Sample ID 1-2216825

Sample Location Williams Creek
BH01 S04

Depth 8.00m - 10.00m

Sampling Method Submitted by client

Specification -

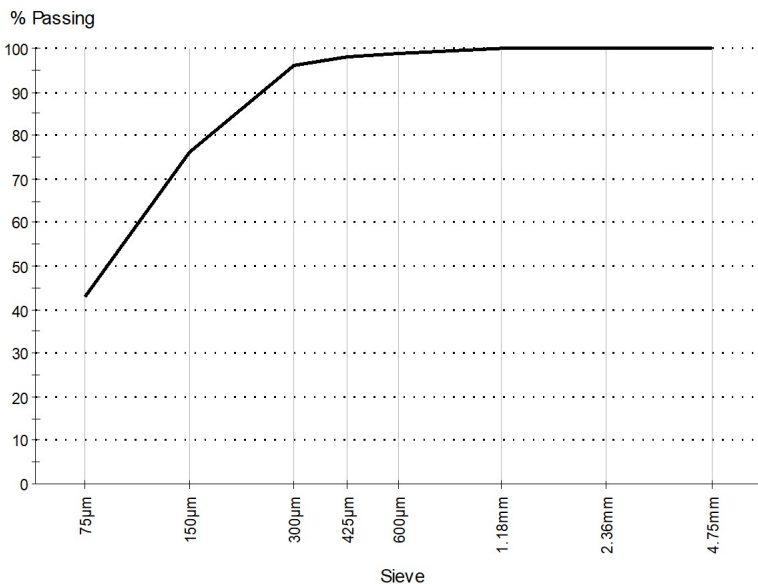
Material Description Sandy CLAY, grey, approx.
55% fine to coarse sand

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 4/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
4.75mm	100	100
2.36mm	100	100
1.18mm	100	100
600µm	99	99
425µm	98	98
300µm	96	96
150µm	76	76
75µm	43	43


Comments

N/A

Report No: MAT:1-2216826

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>NATA WORLD RECOGNISED ACCREDITATION</p> <p><i>(Signature)</i></p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager) Date of Issue: 15/07/2022</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216826
Sample Location	Williams Creek BH02 S01
Depth	1.00m - 1.50m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	Silty Sand, dark brown, with low liquid limit fines

Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	16.9	
Date Tested		1/07/2022	
Sample History	AS 1289.1.1	Air-dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	1.0	
Mould Length (mm)		251	
Crumbling		No	
Curling		No	
Cracking		Yes	
Liquid Limit (%)	AS 1289.3.1.2	19	
Plastic Limit (%)	AS 1289.3.2.1	16	
Plasticity Index (%)	AS 1289.3.3.1	3	
Date Tested		11/07/2022	

Comments

N/A

Report No: MAT:1-2216828

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>WORLD RECOGNISED ACCREDITATION</p> <p><i>[Signature]</i></p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager)</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>Date of Issue: 15/07/2022</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216828
Sample Location	Williams Creek BH02 S03
Depth	3.00m - 3.50m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	Clay, medium plasticity, grey

Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	32.2	
Date Tested		1/07/2022	
Sample History	AS 1289.1.1	Air-dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	10.0	
Mould Length (mm)		250	
Crumbling		No	
Curling		Yes	
Cracking		No	
Liquid Limit (%)	AS 1289.3.1.2	38	
Plastic Limit (%)	AS 1289.3.2.1	19	
Plasticity Index (%)	AS 1289.3.3.1	19	
Date Tested		11/07/2022	

Comments

N/A


Report No: MAT:1-2216829

Issue No: 1

Material Test Report

Client:	Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000
Project No:	SMS1.22358
Project:	Geotechnical Testing
Location:	Amy Gillett Bikeway - project no. IW278200

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 The results in this report relate only to the items/samples that were tested.



WORLD RECOGNISED ACCREDITATION

Simon Nelson

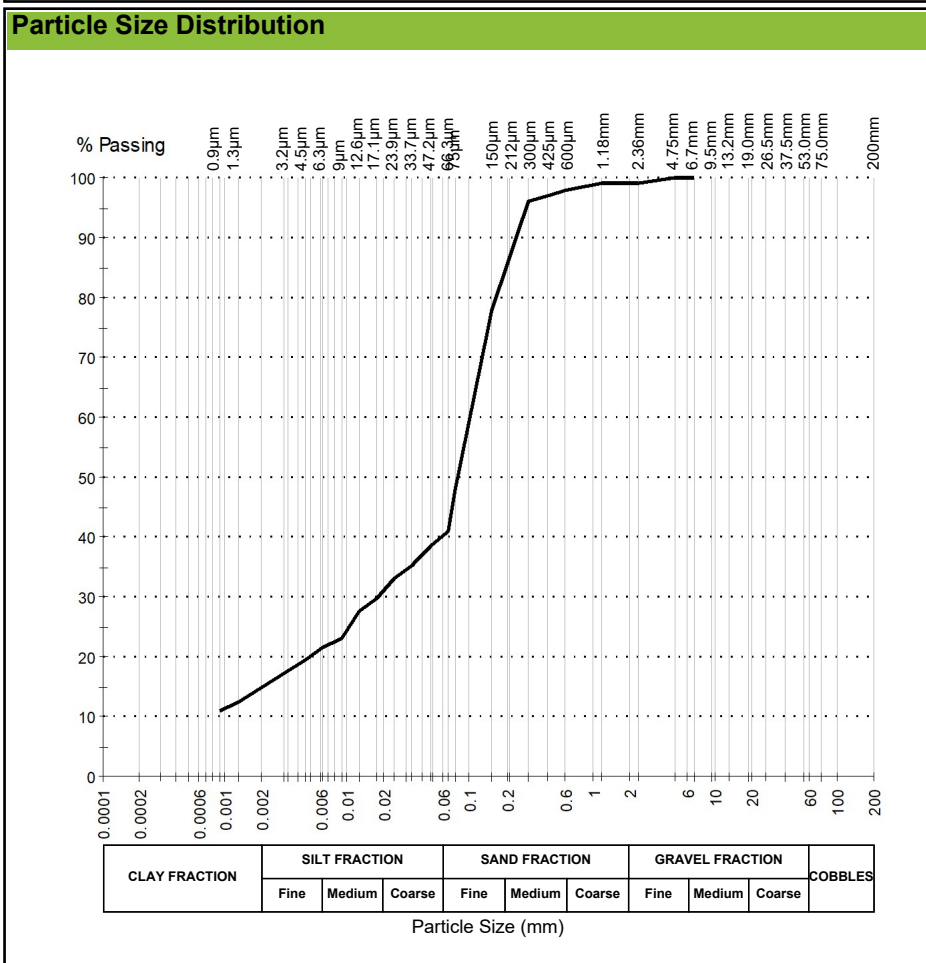
Approved Signatory: Simon Nelson
 (Specialty Testing Manager)
 Date of Issue: 15/07/2022

NATA Accredited Laboratory
 Number: 19225

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Sample Details	
Sample ID	1-2216829
Sample Location	Williams Creek BH02 S04
Depth	6.50m - 10.00m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	Clayey Sandy SILT, brown/grey, approx. 50% fine to coarse sand


Sample Description:	
Clayey Sandy SILT, brown/grey, approx. 50% fine to coarse sand	
Grading: AS 1289.3.6.1, AS 1289.3.6.3	
Date Tested:	5/07/2022



Report No: MAT:1-2216829

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>WORLD RECOGNISED ACCREDITATION</p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager)</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>Date of Issue: 15/07/2022</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216829
Sample Location	Williams Creek BH02 S04
Depth	6.50m - 10.00m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	Clayey Sandy SILT, brown/grey, approx. 50% fine to coarse sand

Other Test Results

Description	Method	Limits	Result
Hydrometer Type	AS 1289.3.6.1, AS 1289.3.6.3		g/L
Dispersion Method			Mechanical stirrer
Percent Loss On Pretreatment (%)			9

Comments

N/A


Report No: MAT:1-2216830

Issue No: 1

Material Test Report

Client:	Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000
Project No:	SMS1.22358
Project:	Geotechnical Testing
Location:	Amy Gillett Bikeway - project no. IW278200

Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.



WORLD RECOGNISED ACCREDITATION

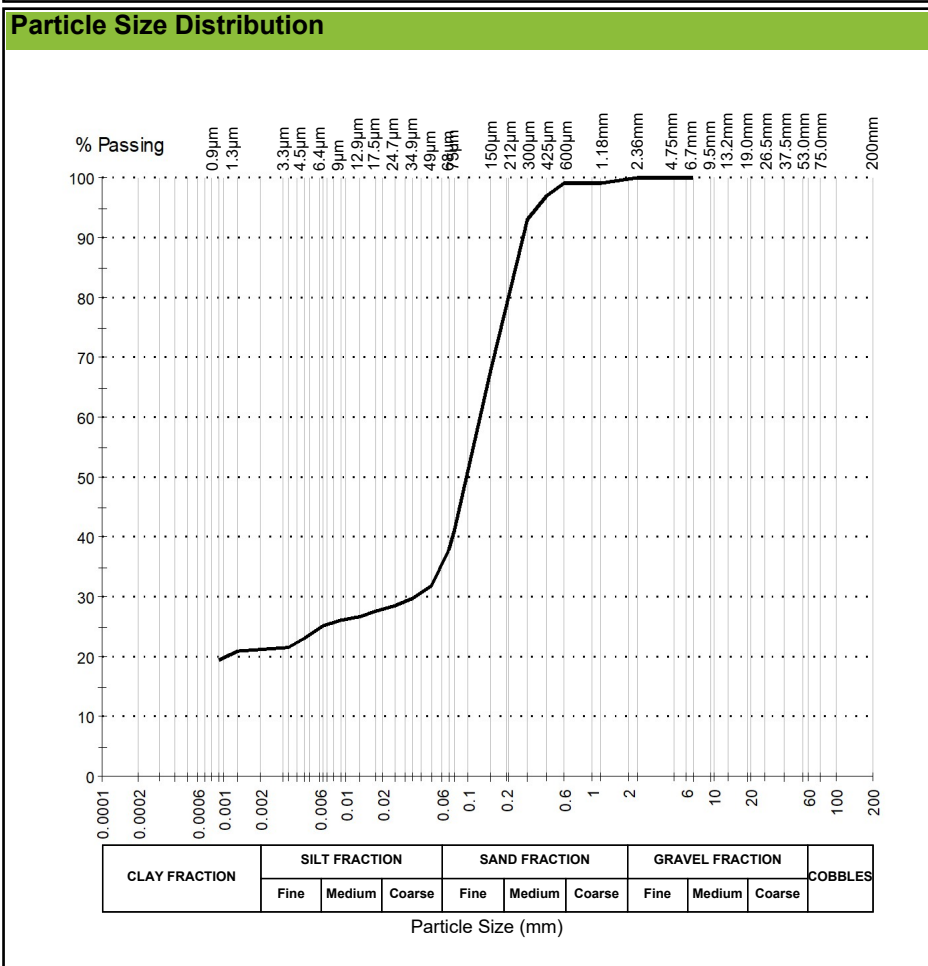
Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

NATA Accredited Laboratory
Number: 19225

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details	
Sample ID	1-2216830
Sample Location	Angas Creek BH03 S01
Depth	1.00m - 2.00m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	(CL) Silty Sand CLAY, low plasticity, brown, approx. 60% fine to coarse sand


Sample Description:	
(CL) Silty Sand CLAY, low plasticity, brown, approx. 60% fine to coarse sand	
Grading: AS 1289.3.6.1, AS 1289.3.6.3	
Date Tested:	5/07/2022



Report No: MAT:1-2216830

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>WORLD RECOGNISED ACCREDITATION</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager) Date of Issue: 15/07/2022</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216830
Sample Location	Angas Creek BH03 S01
Depth	1.00m - 2.00m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	(CL) Silty Sand CLAY, low plasticity, brown, approx. 60% fine to coarse sand

Other Test Results

Description	Method	Limits	Result
Moisture Content (%)	AS 1289.2.1.1		14.7
Date Tested			4/07/2022
Sample History	AS 1289.1.1		Air-dried
Preparation	AS 1289.1.1		Dry Sieved
Linear Shrinkage (%)	AS 1289.3.4.1		1.5
Mould Length (mm)			251
Crumbling			No
Curling			No
Cracking			Yes
Liquid Limit (%)	AS 1289.3.1.2		22
Plastic Limit (%)	AS 1289.3.2.1		15
Plasticity Index (%)	AS 1289.3.3.1		7
Date Tested			8/07/2022
Hydrometer Type	AS 1289.3.6.1, AS 1289.3.6.3		g/L
Dispersion Method			Mechanical stirrer
Percent Loss On Pretreatment (%)			4

Comments

N/A

Report No: MAT:1-2216831

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillett Bikeway - project no. IW278200



Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.

NATA Accredited
Laboratory
Number: 19225

Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

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Sample Details

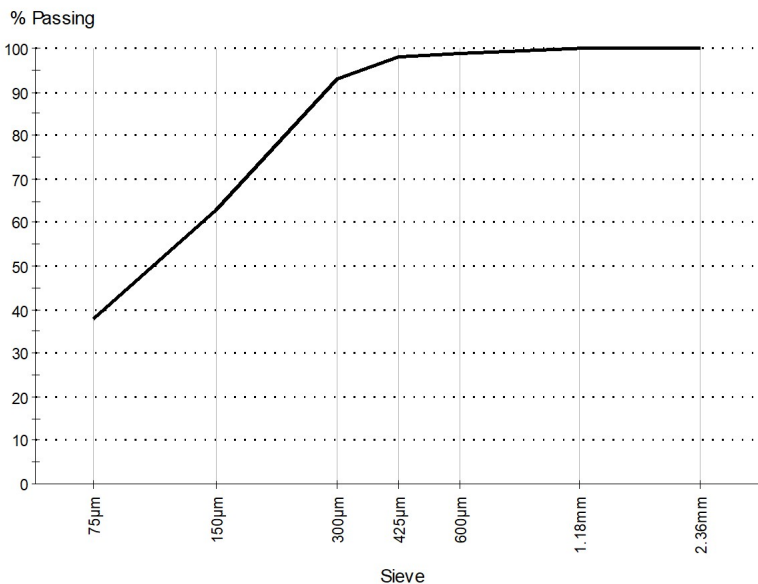
Sample ID 1-2216831
Sample Location Angas Creek
BH03 S02
Depth 1.50m - 3.00m
Sampling Method Samples tested as recieved
Specification -
Material Description Sandy CLAY, brown, approx.
60% fine to coarse sand

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 8/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
2.36mm	100	100
1.18mm	100	100
600µm	99	99
425µm	98	98
300µm	93	93
150µm	63	63
75µm	38	38

Comments

N/A

Report No: MAT:1-2216833

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillett Bikeway - project no. IW278200



Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.

NATA Accredited
Laboratory
Number:19225

Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Sample ID 1-2216833

Sample Location Angas Creek
BH03 S04

Depth 4.50m - 6.50m

Sampling Method Samples tested as recieved

Specification -

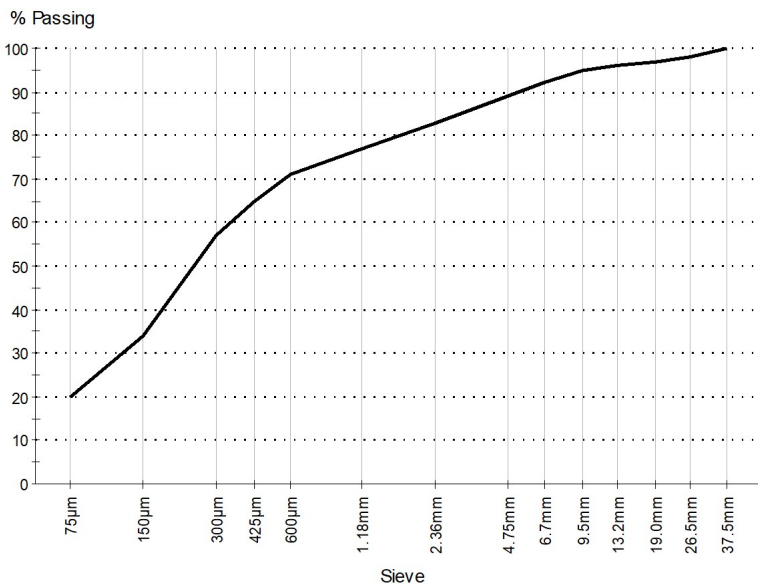
Material Description (SC/SM) Clayey/Silty SAND, fine to coarse grained,
brown, approx. 20% fines, with fine to coarse gravel

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 8/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
37.5mm	100	
26.5mm	98	
19.0mm	97	
13.2mm	96	
9.5mm	95	
6.7mm	92	
4.75mm	89	
2.36mm	83	
1.18mm	77	
600µm	71	
425µm	65	
300µm	57	
150µm	34	
75µm	20	

Comments

N/A

Report No: MAT:1-2216835

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillett Bikeway - project no. IW278200



Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.

NATA Accredited
Laboratory
Number:19225

Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

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Sample Details

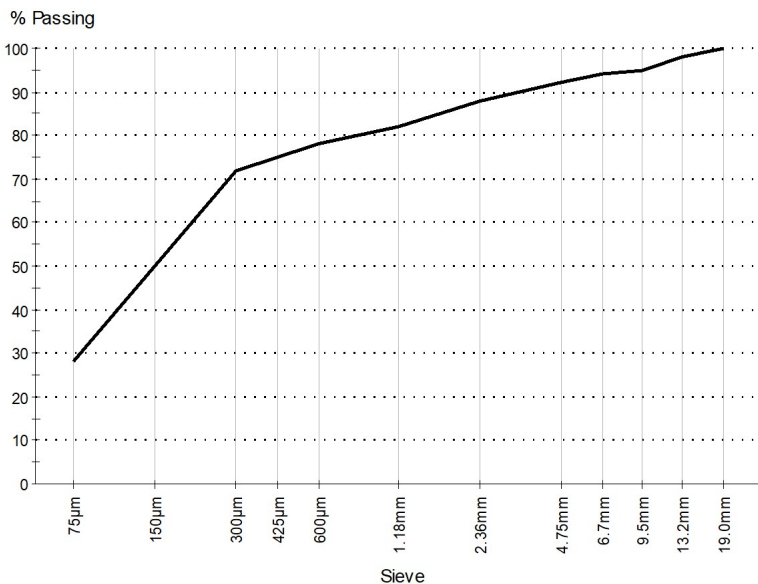
Sample ID 1-2216835
Sample Location Angas Creek
BH04 S01
Depth 1.50m - 2.20m
Sampling Method Samples tested as recieved
Specification -
Material Description (SC/SM) Clayey/Silty SAND, fine to coarse grained,
brown, approx. 30% fines, with fine to medium gravel

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 8/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
19.0mm	100	
13.2mm	98	
9.5mm	95	
6.7mm	94	
4.75mm	92	
2.36mm	88	
1.18mm	82	
600µm	78	
425µm	75	
300µm	72	
150µm	50	
75µm	28	

Comments

N/A


Report No: MAT:1-2216836

Issue No: 1

Material Test Report

Client:	Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000
Project No:	SMS1.22358
Project:	Geotechnical Testing
Location:	Amy Gillett Bikeway - project no. IW278200

Accredited for compliance with ISO/IEC 17025-Testing
The results in this report relate only to the items/samples that were tested.



WORLD RECOGNISED ACCREDITATION

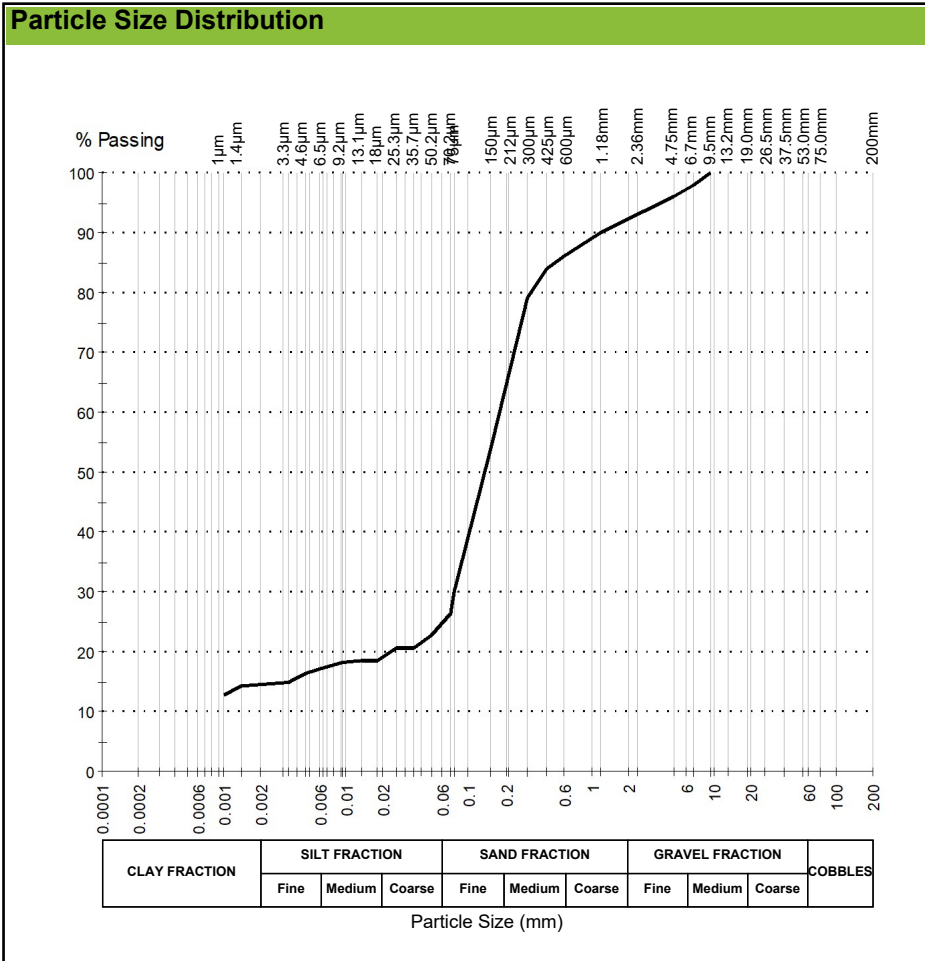
Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

NATA Accredited Laboratory
Number: 19225

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details	
Sample ID	1-2216836
Sample Location	Angas Creek BH04 S02
Depth	2.50m - 4.00m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	Clayey Silty SAND, fine to coarse, brown, approx. 30% fines, trace of fine to medium gravel

Sample Description:	
Clayey Silty SAND, fine to coarse, brown, approx. 30% fines, trace of fine to medium gravel	
Grading: AS 1289.3.6.1, AS 1289.3.6.3	
Date Tested:	5/07/2022




Particle Size	% Passing	Limits
9.5mm	100	
6.7mm	98	
4.75mm	96	
2.36mm	93	
1.18mm	90	
600µm	86	
425µm	84	
300µm	79	
150µm	54	
75µm	30	
70.2 µm	27	
50.2 µm	23	
35.7 µm	21	
25.3 µm	21	
18.0 µm	19	
13.1 µm	19	
9.2 µm	18	
6.5 µm	17	
4.6 µm	16	
3.3 µm	15	
1.4 µm	14	
1.0 µm	13	

Report No: MAT:1-2216836

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>NATA WORLD RECOGNISED ACCREDITATION</p> <p><i>(Signature)</i></p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager) Date of Issue: 15/07/2022</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID 1-2216836
Sample Location Angas Creek
 BH04 S02
Depth 2.50m - 4.00m
Sampling Method Samples tested as recieved
Specification -
Material Description Clayey Silty SAND, fine to coarse, brown, approx.
 30% fines, trace of fine to medium gravel

Other Test Results

Description	Method	Limits	Result
Hydrometer Type	AS 1289.3.6.1, AS 1289.3.6.3		g/L
Dispersion Method			Mechanical stirrer
Percent Loss On Pretreatment (%)			4


Comments

N/A

Report No: MAT:1-2216837

Issue No: 1

Material Test Report

<p>Client: Jacobs Group (Australia) Pty Ltd Level 6, 30 Flinders Street, Adelaide SA 5000</p> <p>Project No: SMS1.22358</p> <p>Project: Geotechnical Testing</p> <p>Location: Amy Gillett Bikeway - project no. IW278200</p>	<p>Accredited for compliance with ISO/IEC 17025-Testing The results in this report relate only to the items/samples that were tested.</p>  <p>NATA WORLD RECOGNISED ACCREDITATION</p> <p><i>(Signature)</i></p> <p>Approved Signatory: Simon Nelson (Specialty Testing Manager) Date of Issue: 15/07/2022</p> <p>NATA Accredited Laboratory Number: 19225</p> <p>THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL</p>
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Sample Details

Sample ID	1-2216837
Sample Location	Angas Creek BH04 S03
Depth	4.50m - 5.50m
Sampling Method	Samples tested as recieved
Specification	-
Material Description	(SC) Silty Clayey SAND, fine to coarse grained, brown, approx. 30% low plasticity fines, trace of fine to medium gravel

Other Test Results

Description	Method	Limits	Result
Moisture Content (%)	AS 1289.2.1.1		17.7
Date Tested			4/07/2022
Sample History	AS 1289.1.1		Air-dried
Preparation	AS 1289.1.1		Dry Sieved
Linear Shrinkage (%)	AS 1289.3.4.1		3.0
Mould Length (mm)			250
Crumbling			No
Curling			No
Cracking			Yes
Liquid Limit (%)	AS 1289.3.1.2		26
Plastic Limit (%)	AS 1289.3.2.1		14
Plasticity Index (%)	AS 1289.3.3.1		12
Date Tested			8/07/2022
Hydrometer Type	AS 1289.3.6.1, AS 1289.3.6.3		g/L
Dispersion Method			Mechanical stirrer
Percent Loss On Pretreatment (%)			5

Comments

N/A

Report No: MAT:1-2216838

Issue No: 1

Material Test Report

Client: Jacobs Group (Australia) Pty Ltd
Level 6, 30 Flinders Street, Adelaide SA 5000

Project No: SMS1.22358

Project: Geotechnical Testing

Location: Amy Gillett Bikeway - project no. IW278200



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NATA Accredited
Laboratory
Number:19225

Approved Signatory: Simon Nelson
(Specialty Testing Manager)
Date of Issue: 15/07/2022

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Sample Details

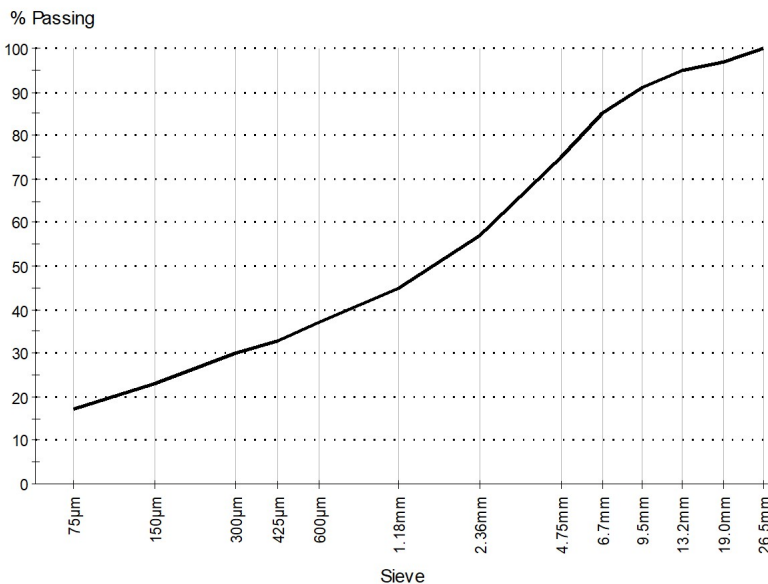
Sample ID 1-2216838
Sample Location Angas Creek
BH04 S04
Depth 8.50m - 10.00m
Sampling Method Samples tested as recieved
Specification -
Material Description Clayey/Silty Sandy GRAVEL, fine to coarse grained, light brown, approx. 40% fine to coarse sand, approx. 15% fines

Other Test Results

Description	Method	Result	Limits

Particle Size Distribution

AS 1289.3.6.1



Date Tested: 8/07/2022

Note: Sample Washed

Sieve Size	% Passing	Limits
26.5mm	100	
19.0mm	97	
13.2mm	95	
9.5mm	91	
6.7mm	85	
4.75mm	75	
2.36mm	57	
1.18mm	45	
600µm	37	
425µm	33	
300µm	30	
150µm	23	
75µm	17	

Comments

N/A



Particle Size Distribution & Hydrometer

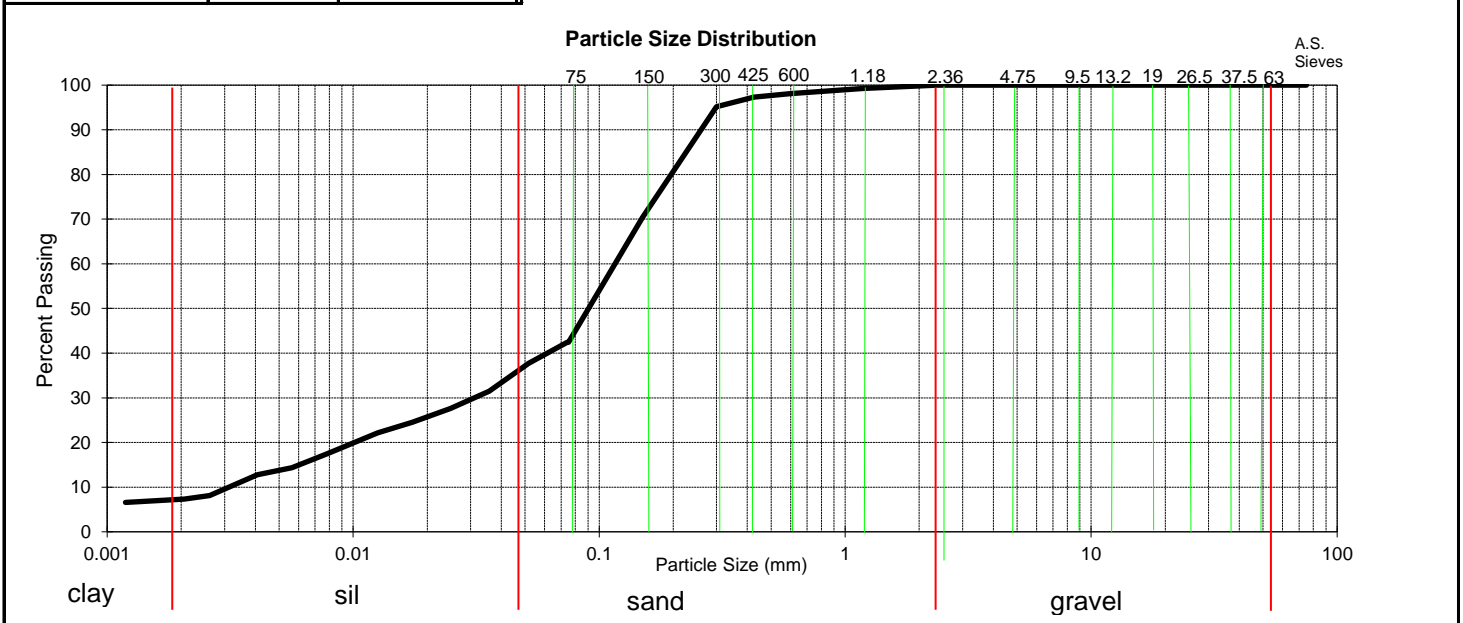
GroundScience

A C N 105 704 078

13 Brock Street Thomastown VIC 3074 P (03) 9464 4617 Email reception@groundscience.com.au

Client: SMS GEOTECHNICAL	Job No. GS6045/1
Project: GEOTECHNICAL TESTING	Date: 7-Jul-22
Location: -	Report No. AP
Lab Reference No. #S31	Sample Identification: WILLIAMS CREEK - BH01 S03 (1-2216824)
Laboratory Specimen Classification: sandy SILT, low plasticity, greyish brown, sand fine to coarse grained, with clay	

Particle Size Distribution AS 1289 3.6.3			Consistency Limits and Moisture Content			
Sieve Size	% Passing	Specification	Test	Method	Result	Spec.
19.0 mm	100		Liquid Limit	% AS1289 3.1.2	-	
13.2 mm	100		Plastic Limit	% AS1289 3.2.1	-	
9.5 mm	100		Plasticity Index	% AS1289 3.3.1	-	
6.7 mm	100		Linear Shrinkage	% AS1289 3.4.1	-	
4.75 mm	100		Moisture Content	% AS1289 2.1.1	14.3	
2.36 mm	100		Sample History: Air Dried			
1.18 mm	99		Preparation Method: Dry sieved			
600 um	98		Crumbling / Curling of linear shrinkage: -			
425 um	97		Linear shrinkage mould length: -			
300 um	95		ND = not determined NO = not obtainable NP = non plastic			
150 um	70		Notes Dispersion : mechanical / hydromter: g/l			
75 um	42		Material properties			
hydrometer values			GRAVEL CONTENT = 0 %			
52 um	38		SAND CONTENT = 58 %			
25 um	28		SILT CONTENT = 34 %			
17 um	24		CLAY CONTENT = 8 %			
13 um	22					
8 um	17					
1 um	7					



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Testing

Date: 15/07/2022

Pelin Atas Erden
Approved Signatory



Ground Science

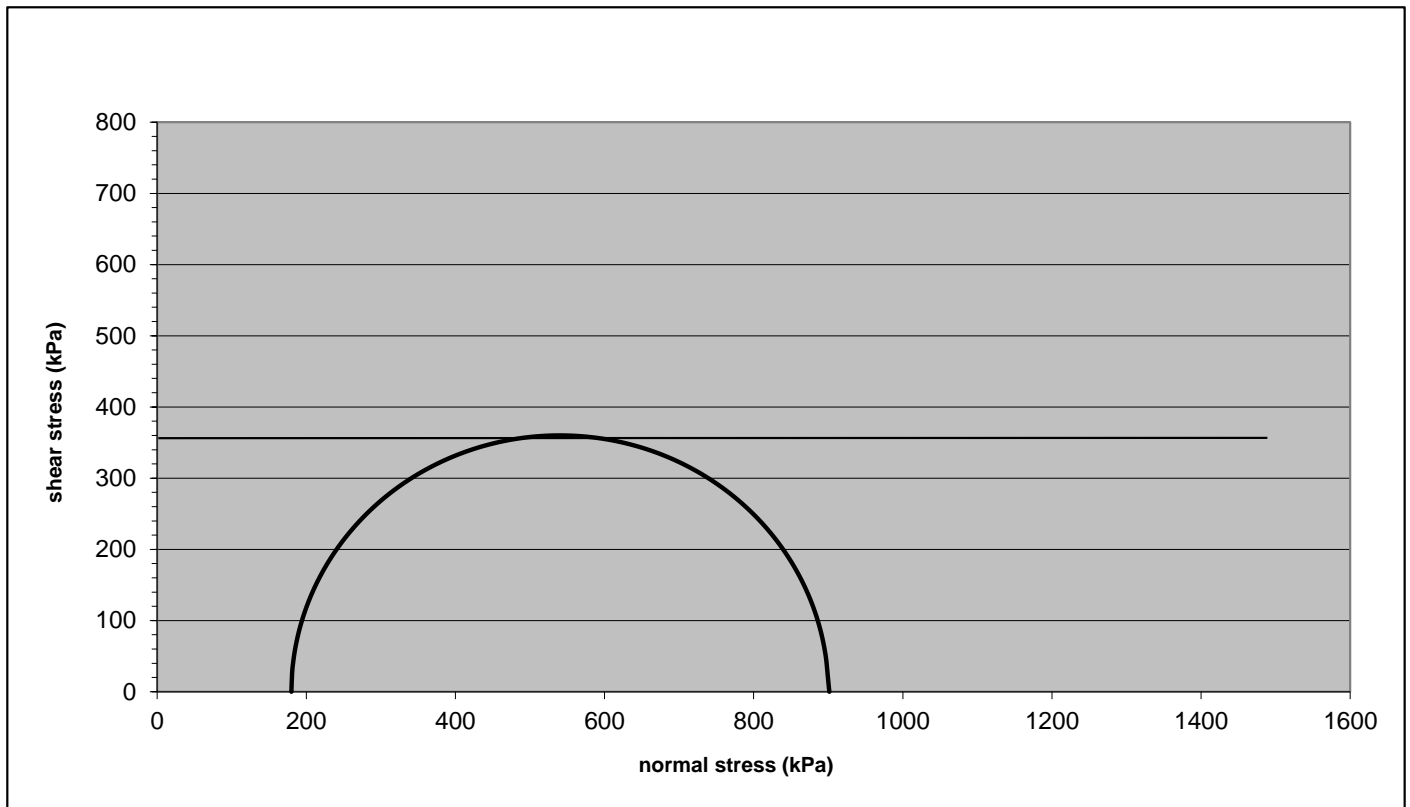
A C N 105 704 078

13 Brock Street Thomastown VIC, P 03 9464 4617 F 03 9464 4618

UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AM
project :	GEOTECHNICAL TESTING	test date :	7/07/2022
location :	-	Page :	1 of 2

borehole:	BH01 S03	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S31	client ref:	Williams Creek (1-2216824)	normal stress:	180		
depth (m):	8.5-9.0	sample size (mm):	99.98	x	50.98	date of sampling:	Sampled by client



Stage	Deviator Stress kPa ($\sigma_1 - \sigma_3$)	Peak lateral stress kPa (σ_3)	Peak axial stress kPa (σ_1)	Strain @ failure %
1	720	180	900	7.0

Undrained cohesion: **360 kPa**

failure criteria: maximum deviator stress

failure mode : Shear failure

sample description : sandy SILT, low plasticity, greyish brown, sand fine to coarse grained, with clay

Notes :

1. Mohr's circles are a graphical presentation of the results and are not to scale

2. Tested as received



NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing

Pelin Atas Erden
Approved Signatory

Date: 15-Jul-22



Ground Science

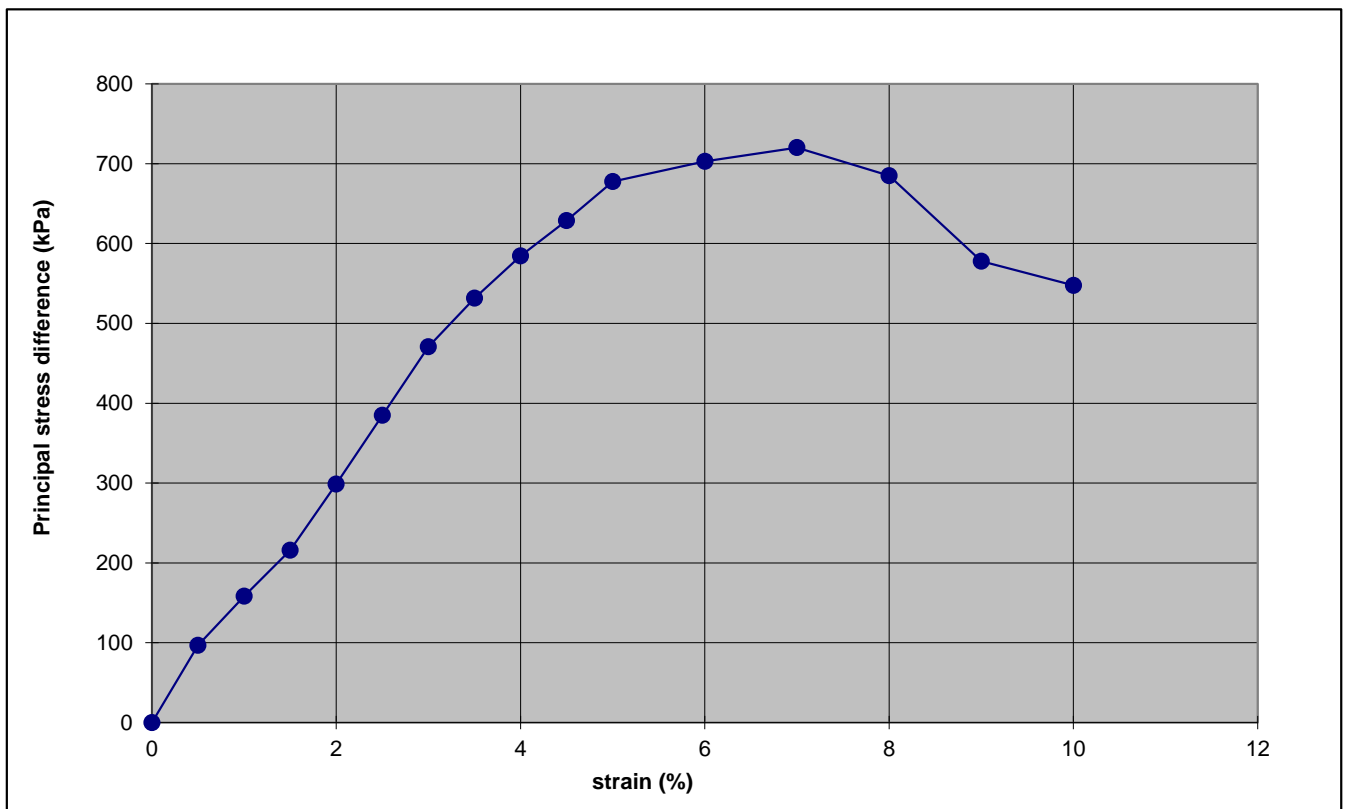
A C N 105 704 078

13 Brock Street Thomastown VIC, P 03 9464 4617 F 03 9464 4618

UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AM
project :	GEOTECHNICAL TESTING	test date :	7/07/2022
location :	-	page :	2 of 2

borehole:	BH01 S03	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S31	client ref:	Williams Creek (1-2)	normal stress:	180		
depth (m):	8.5-9.0	sample size (mm):	99.98	x	50.98	date of sampling:	Sampled by client



Stage	Strain rate %/min
1	1.000

Specimen after test



		Specific gravity	2.65 (assumed)
initial dry density :	1.84 t/m ³	Degree of Saturation	85.7 %
moisture content :	14.3 % (before test)		15.6 % (after test)



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Pelin Atas Erden
Approved Signatory

Date: 15-Jul-22



Ground Science

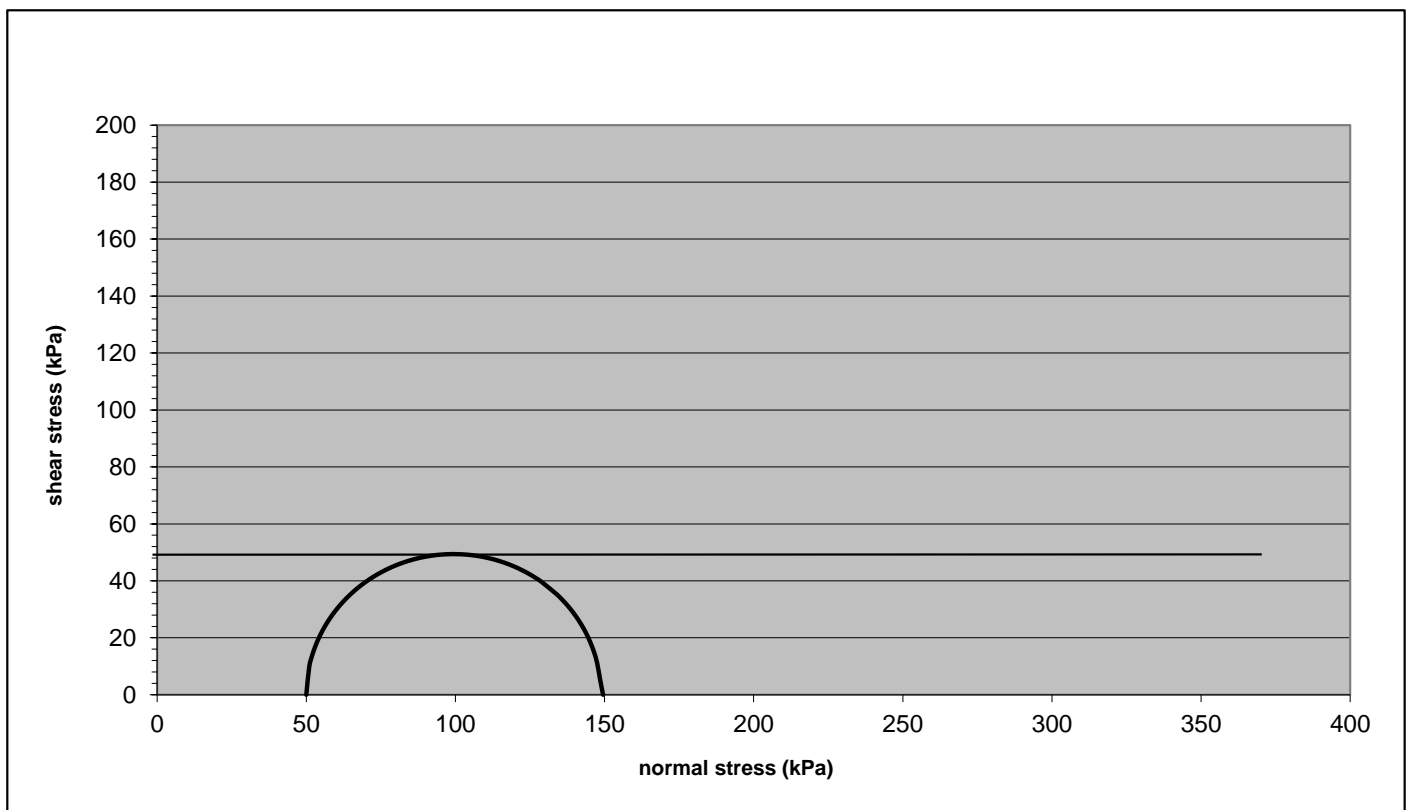
A C N 105 704 078

13 Brock Street Thomastown VIC, P 03 9464 4617 F 03 9464 4618

UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AN
project :	GEOTECHNICAL TESTING	test date :	7/07/2022
location :	-	Page :	1 of 2

borehole:	BH02 S02	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S32	client ref:	Williams Creek (1-2216827)	normal stress:	50		
depth (m):	2.0-2.5	sample size (mm):	100.22	x	50.54	date of sampling:	Sampled by client



Stage	Deviator Stress kPa ($\sigma_1 - \sigma_3$)	Peak lateral stress kPa (σ_3)	Peak axial stress kPa (σ_1)	Strain @ failure %
1	99	50	149	19.0

Undrained cohesion: **49 kPa** failure criteria: maximum deviator stress
 failure mode : Intermediate failure

sample description : CLAY, medium plasticity, brown, trace sand

Notes :
 1. Mohr's circles are a graphical presentation of the results and are not to scale
 2. Tested as received



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Approved Signatory

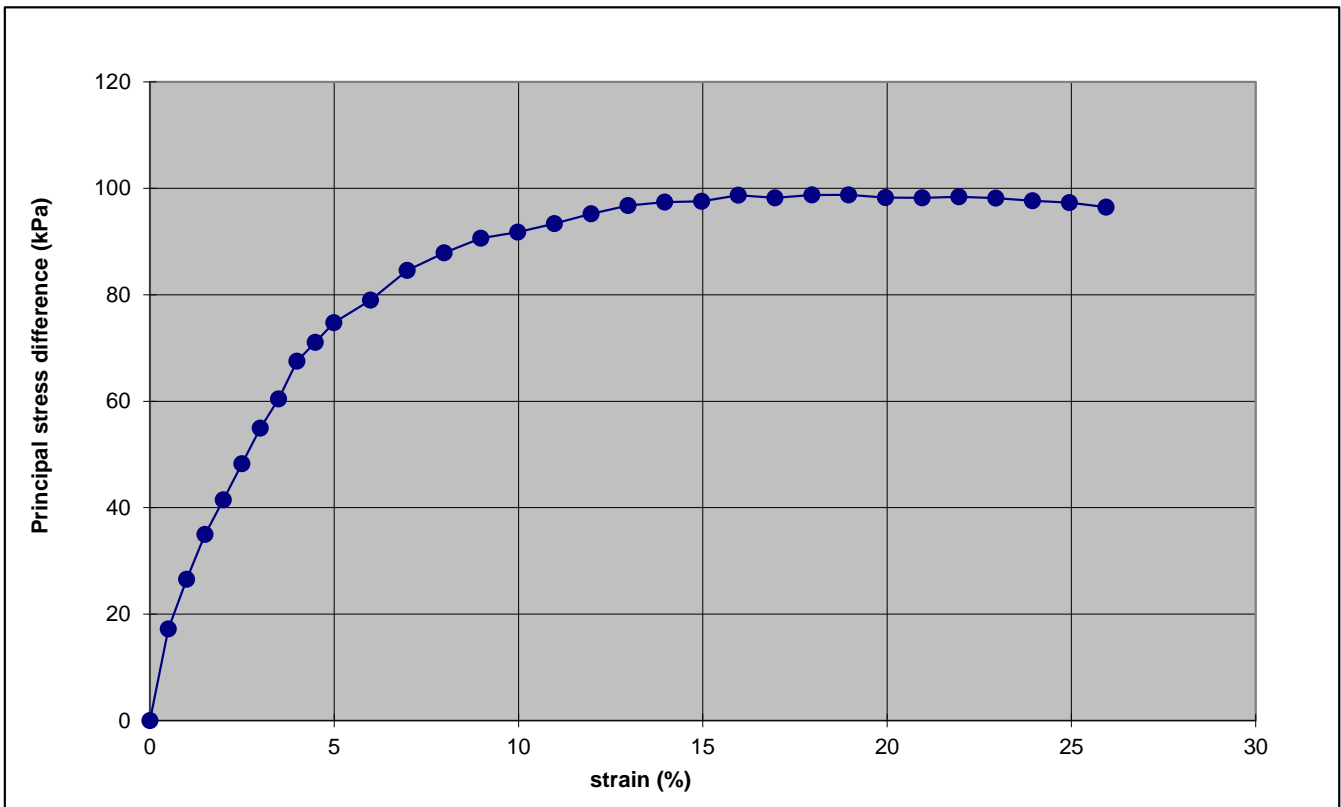
Date: 11-Jul-22



UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AN
project :	GEOTECHNICAL TESTING	test date :	7/07/2022
location :	-	page :	2 of 2

borehole:	BH02 S02	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S32	client ref:	Williams Creek (1-2)	normal stress:	50		
depth (m):	2.0-2.5	sample size (mm):	100.22	x	50.54	date of sampling:	Sampled by client



Stage	Strain rate %/min
1	1.000

Speciman after test



initial dry density :	1.46 t/m ³	Specific gravity	2.65 (assumed)
mositure content :	29.4 % (before test)	Degree of Saturation	96.3 %
			33.0 % (after test)



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Approved Signatory

Date: 11-Jul-22



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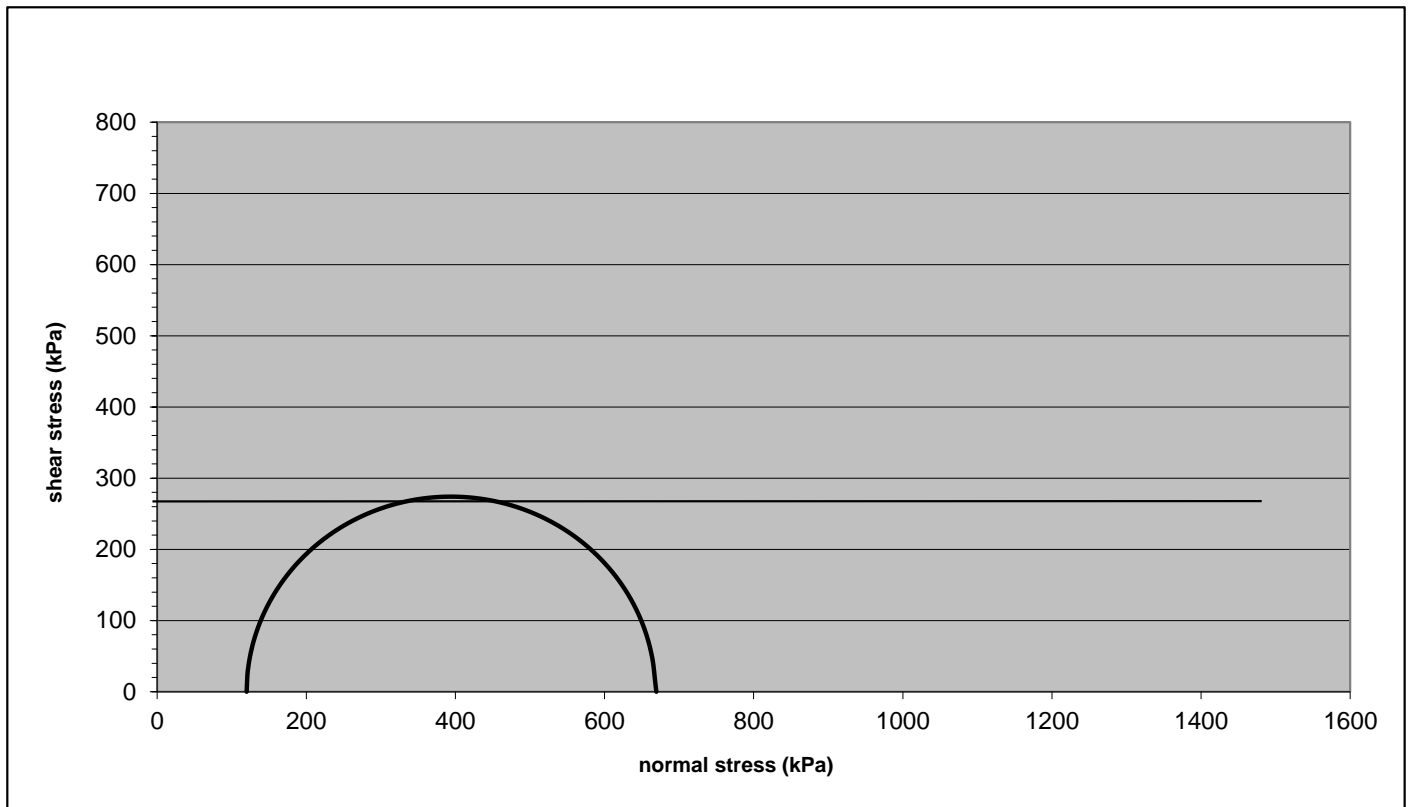
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13 Brock Street Thomastown VIC, P 03 9464 4617 F 03 9464 4618

UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AO
project :	GEOTECHNICAL TESTING	test date :	8/07/2022
location :	-	Page :	1 of 2

borehole:	BH03 S03	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S33	client ref:	Angas Creek (1-2216832)	normal stress:	120		
depth (m):	5.5-6.0	sample size (mm):	100.32	x	50.92	date of sampling:	Sampled by client



Stage	Deviator Stress kPa ($\sigma_1 - \sigma_3$)	Peak lateral stress kPa (σ_3)	Peak axial stress kPa (σ_1)	Strain @ failure %
1	548	120	668	7.0

Undrained cohesion: **274 kPa**

failure criteria: maximum deviator stress

failure mode : Shear failure

sample description : SILT, low plasticity, brown, with gravel, with sand

Notes :

1. Mohr's circles are a graphical presentation of the results and are not to scale

2. Tested as received



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TECHNICAL
COMPETENCE

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Approved Signatory

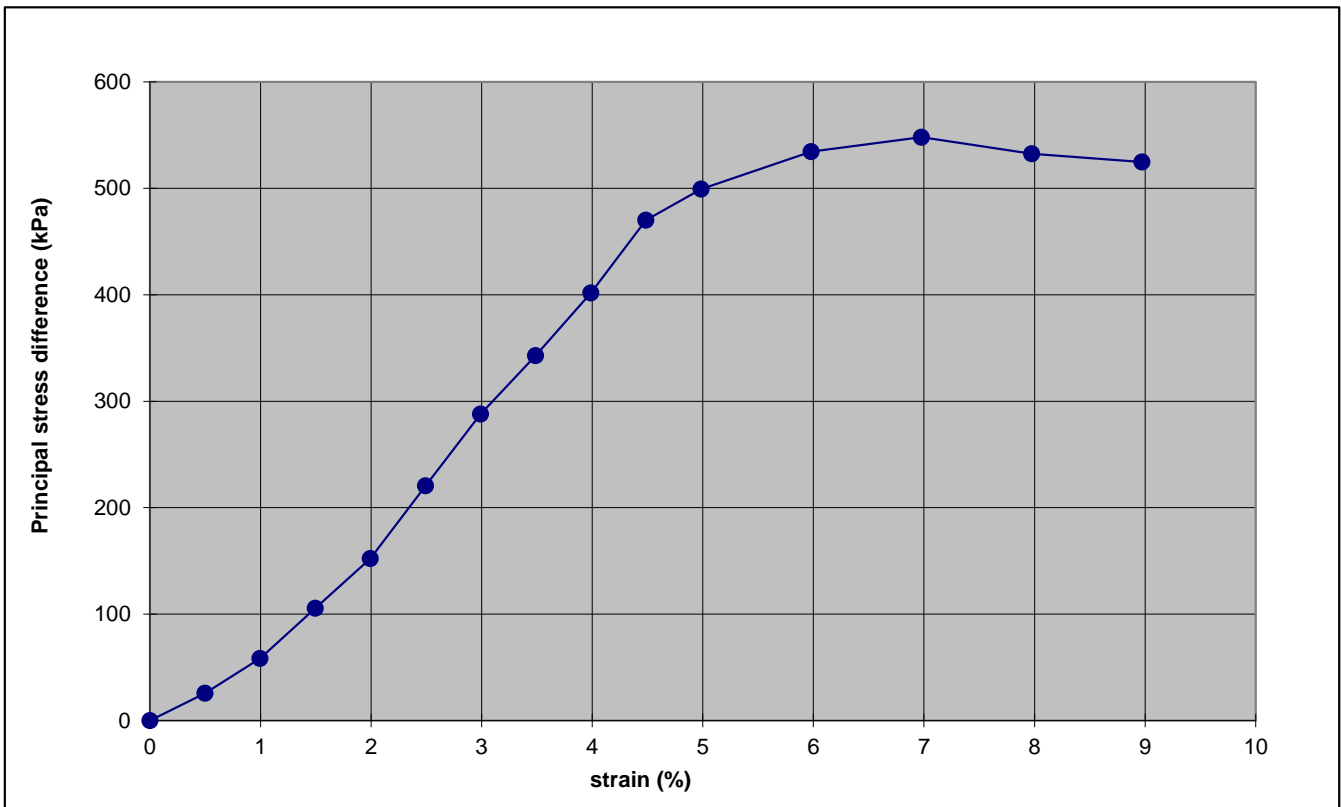
Date: 11-Jul-22



UU TRIAXIAL - Unconsolidated Undrained Single Stage

client :	SMS GEOTECHNICAL	job No. :	GS6045/1
principal :	-	report No :	AO
project :	GEOTECHNICAL TESTING	test date :	8/07/2022
location :	-	page :	2 of 2

borehole:	BH03 S03	sample type:	Undisturbed	test type:	UU	test procedure:	AS 1289 6.4.1
sample No.	#S33	client ref:	Angas Creek (1-2211 normal stress: 120				
depth (m):	5.5-6.0	sample size (mm):	100.32	x	50.92	date of sampling: Sampled by client	



Stage	Strain rate %/min
1	1.000

Speciman after test



initial dry density :	1.78 t/m ³	Specific gravity	2.65 (assumed)
mositure content :	18.6 % (before test)	Degree of Saturation	101.1 %
			16.5 % (after test)



NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing

Pelin Atas Erden
Approved Signatory

Date: 11-Jul-22

Burfords Hill Road Bridge Structural Assessment and Modification Concept Design

Date:	29 November 2022	Jacobs Australia Pty Ltd
Project name:	Amy Gillett Bikeway Stage 4	Level 3, 121 King William Street
Project no:	IW278200	Adelaide, SA 5000
Attention:	David Moya	Australia
Company:	DIT	T +61 8 8113 5400
Prepared by:	Larry Yang	F +61 8 8113 5440
Reviewed by:	Yasuto Nakamura, Vahid Bhaskaran	www.jacobs.com
Document no:	IW278200-0000-SB-TNE-0001	
Revision no:	01	

Project Background and Scope of Works

This Technical Memorandum summarises the key findings from the bridge inspection undertaken on Monday 14/11/22 to assess the existing condition of Burford Hill Road bridge, and a concept design of the structural modifications proposed to reuse the bridge as part of Amy Gillett Bikeway Stage 4 project.

DIT has advised previously that the existing Burfords Hill Road bridge was designed to carry rail traffic, and the bridge was in operation until approximately 60 years ago. Since then, the structure has been left in place without regular inspection or maintenance. DIT has proposed to reuse the bridge for the Amy Gillett Bikeway Stage 4, subject to a structural condition assessment and a modification design.

As no existing information (e.g. drawings, reinforcement schedule) is available for the structure, Jacob has initially proposed to undertake a Level 3 inspection, material testing and geotechnical investigation. However, DIT advised that concrete coring for material testing and geotechnical investigation were considered unnecessary, after a site inspection undertaken by Phil Molloy (DIT) dated 6 Sep 2022. Based on a meeting held between Jacobs and DIT on 13 Sep 2022 (refer to Appendix 3 for meeting minutes), it was agreed that DIT will be responsible for the following risks raised by Jacobs:

- Assuming the existing structure capacity is adequate for loadings from the proposed footbridge without detailed structural assessment based on tested material data;
- Assuming the existing bridge will have adequate design life by applying protective coating to exposed concrete surface and undertaking regular inspection and maintenance services, without assessing the existing condition of the concrete;
- Assuming the existing bridge concrete parapet sidewalls are unreinforced when determining the structural capacity in order to support new footbridge hand rails;
- Possible further movement of the cracked wingwall without any site investigation; and
- Assuming the existing abutment and wingwall are stable for use by the new footpath without any geotechnical investigation.

Jacobs was then engaged by DIT to conduct the following per agreed scope:

- to undertake a level 3 inspection to identify and record the existing Burfords Hill Road Bridge structure defects,
- to undertake existing structure condition assessment based on the findings from the level 3 inspection,
- to provide recommendation for existing bridge repair, and
- to provide concept (10%) design of existing structure modification for the new bikeway.

Field Work and Level 3 Inspection Findings

The level 3 inspection was undertaken on 14th November by Jacobs inspection team comprising Larry Yang and James Brown. Seychell Traffic was engaged by Jacobs to provide traffic management services and Lincon was engaged to supply and operate Elevated Working Platform (EWP) accessing the underside of the superstructure.

The major structural element geometries were measured manually with tape measure subject to accessibility, and the structural defects identified on site were recorded.

Existing Bridge Structure and Geometries

The existing bridge is a single span concrete arch girder structure supported on cast in place concrete abutments with integrated wingwalls as shown in Figure 1. The bridge is on a small skew of approximately 12.5 degrees and has a clear span of 7.6m over the Burfords Hill Road, which contains two traffic lanes. The vertical clearance at the mid-span is approximately 6m.

Figure 1 The Existing Burfords Hill Road Bridge



As shown in Figure 2, there is a short upstand wall above the southern abutment. A similar upstand appears to have been removed from the northern abutment with fill material also removed behind the abutment. It is believed that the deck was originally designed to hold ballast and support rail track and sleepers.

Figure 2 Bridge Deck and Approaches



(a) Southern approach (view from deck slab)



(b) Northern approach (view from deck slab)

The superstructure (refer to Figure 3) consists of 3 No. 300mm wide concrete arch girders with varying depth, spaced at approximately 1400mm centre to centre, and a concrete deck slab with a minimum thickness of 210mm. The girder depth is approximately 2.25m at the abutments and reduces to 1.25m at mid-span. The overall deck slab width is approximately 3960mm including the 220mm wide by 850mm tall concrete parapet. The top of the deck is sloped from both parapets to the centre and allows for surface drainage through 3 No. 55mm square scuppers, spaced at 2800mm, located between the eastern girder and central girder.

Figure 3 Typical Superstructure Section Near Mid-Span

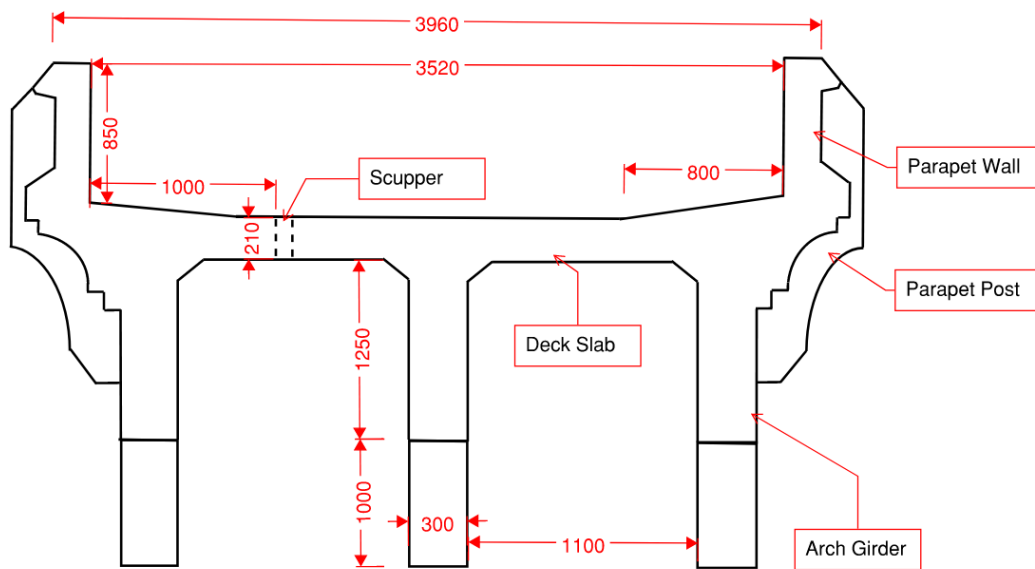
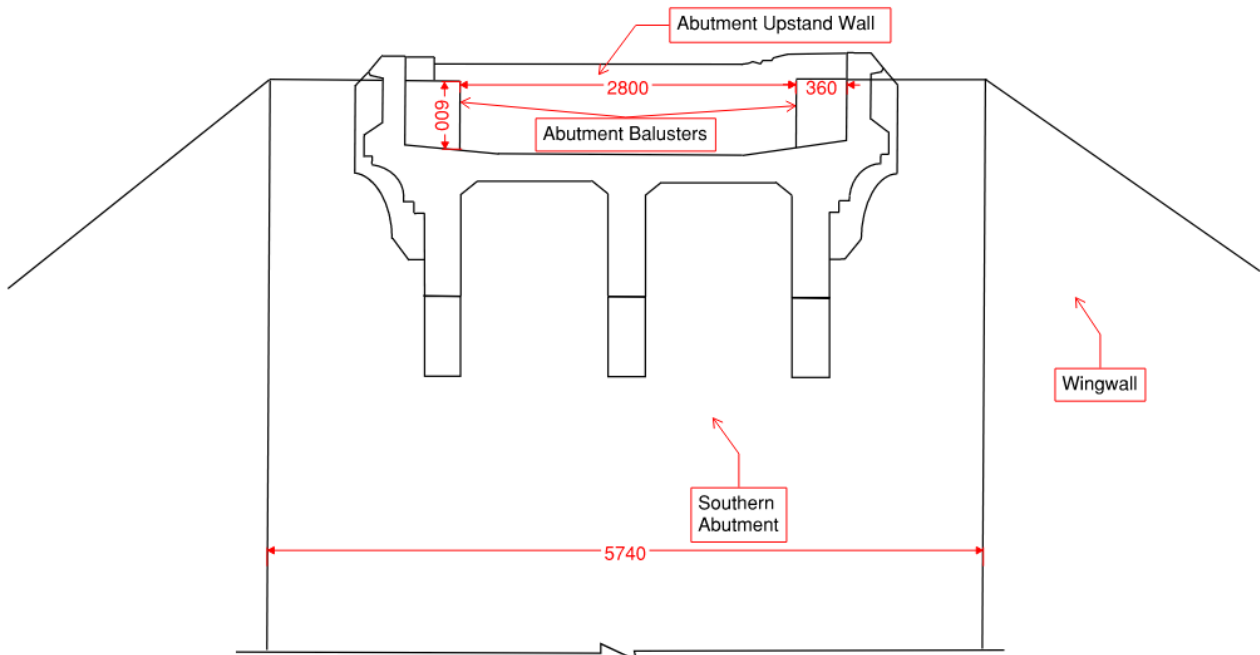


Figure 4 Typical Section at Southern Abutment



The typical cross section at southern abutment refers to Figure 4. The abutment is 5740mm wide with integrated wingwalls along both sides. The two balusters attached to the inside of the parapet forms a part of the abutment. The thickness of the baluster matches the abutment wall, and it extends 360mm inside the parapet wall and is 600mm tall.

Technical Memorandum

The clear distance between the balusters is approximately 2800mm. The abutment upstand wall retains the fill materials on the southern approach.

The typical abutment wall is 850mm thick and the typical wingwall is 480mm thick. The wingwall length varies from 11.2m to 13.5m.

The geometries of decorative element were not recorded. The connection between the girder and the abutment is unclear. The reinforcement size, layout and existing concrete grade is unknown.

Defects of the Existing Bridge Structure

Several defects have been identified during the inspection. The typical defects include,

- concrete surface fretting with exposed aggregates (refer to Figure 5),
- concrete surface efflorescence and water stain (refer to Figure 6),
- Figure 6),
- concrete cracking with crack width varies from 0.2mm to 4mm (refer to Figure 7),
- concrete spalling with reinforcing bars exposed (refer to Figure 8), and
- Wingwall cracking and rotation (refer to Figure 9).

Figure 5 Typical Concrete Surface Fretting with Exposed Aggregates



(a) Abutment concrete fretting



(b) Abutment and wingwall concrete fretting

Figure 6 Concrete Surface Efflorescence and Water Stain



(a) Deck soffit near northern end scupper

(b) central girder and abutment near scupper

Figure 7 Concrete Cracking



(a) Western girder soffit cracking

(b) Eastern girder base cracking

(c) Central girder end cracking



(d) Wingwall small cracking

(e) Wingwall large cracking

(f) Parapet cold joint cracking

Figure 8 Concrete Spalling with Reinforcing Bars Exposed and Rusted



(a) Eastern Parapet Wall



(b) Deck soffit near northern scupper

Figure 9 Southwestern Wingwall Cracking and Rotation



(a) Rotation of Southeastern Wingwall



(b) 70mm crack width

The locations of main defects are marked in the layout as per diagrams below with details provided in the summary table below. Photographs are provided in Appendix 1.

Table 1 Summary of Major Defects by Structural Elements

Element	Defect	Location	Length (m)	Percentage of element total area
Girder	Concrete cracking (small cracks 0.2-1mm)	1. Western girder soffit near southern abutment	2	
		2. Central girder mid-height near northern abutment	0.5	
		3. Eastern Girder base near northern abutment	0.3	
Deck	Concrete Spalling	near northern scupper	2.5	-
	Concrete cracking (small cracks 0.2-1mm)	Along west face of central girder near southern abutment	2.5	-
Parapet	Concrete spalling	Eastern parapet along the deck level	7	-
	Cold joint cracking	Western parapet	3	-
Northern Abutment	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red and yellow lines marked on the defects layout	17	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	15%
	Water Stain	As per light blue cloud marked on the defects layout	-	5%
Southern Abutment	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red and yellow lines marked on the defects layout	30	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	15%
	Water Stain	As per light blue cloud marked on the defects layout	-	1%
Northwestern Wingwall	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red lines marked on the defects layout	20	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	10%
Northeastern Wingwall	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red lines marked on the defects layout	18	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	10%
Southeastern Wingwall	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red lines marked on the defects layout	24	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	20%
Southwestern Wingwall	Concrete cracking (small to medium cracks 0.2-5mm)	As per the red lines marked on the defects layout	15	-
	Concrete fretting	As per dark blue cloud marked on the defects layout	-	15%
	Concrete cracking (large cracks 5mm above)	As per the red lines marked on the defects layout	4	-

Note: 1. Red lines shows concrete cracks and yellow lines shows concrete cracks along cold joints during construction.
 2. Solid red lines shows defects below the deck level and dashed lines show defects above the deck level for the superstructure plan only.
 3. Dark cloud indicates the concrete fretting areas and light cloud indicates the water stain areas.

Figure 10 Superstructure Defects Layout

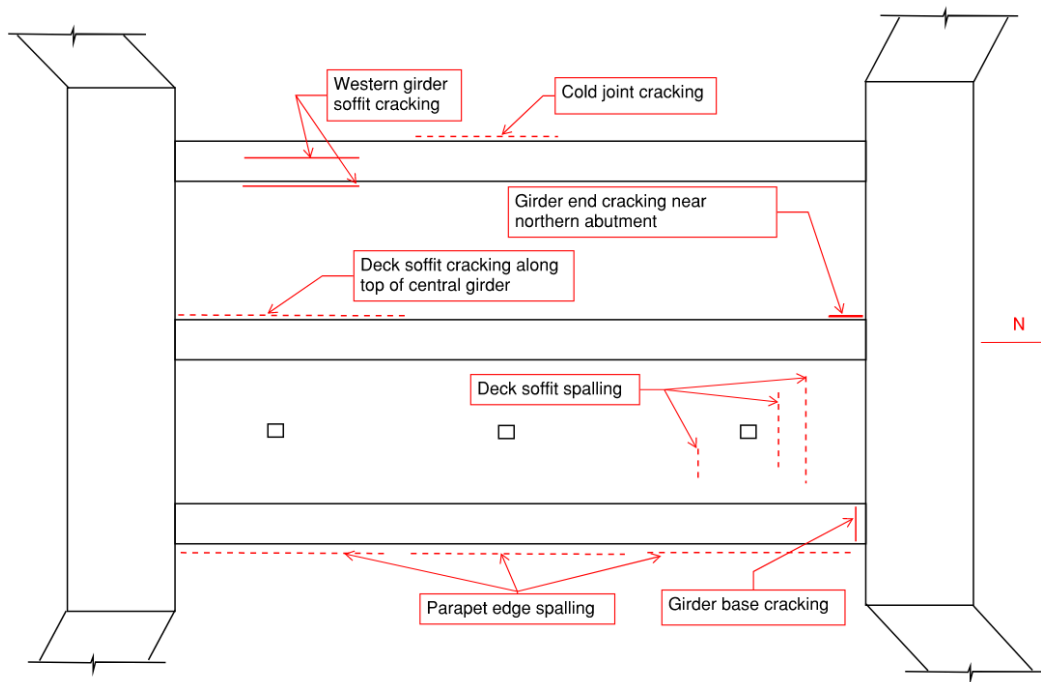


Figure 11 Northern Abutment Defects Layout

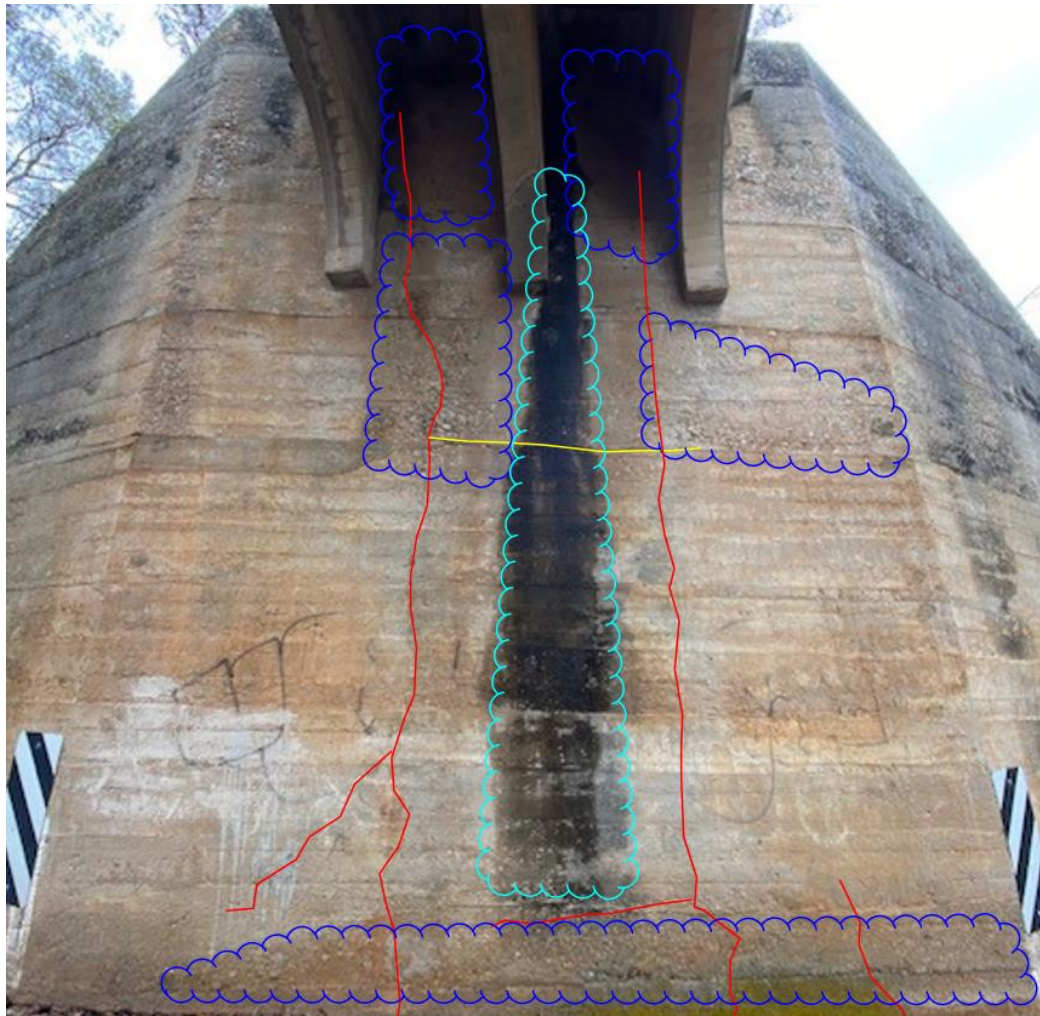


Figure 12 Southern Abutment

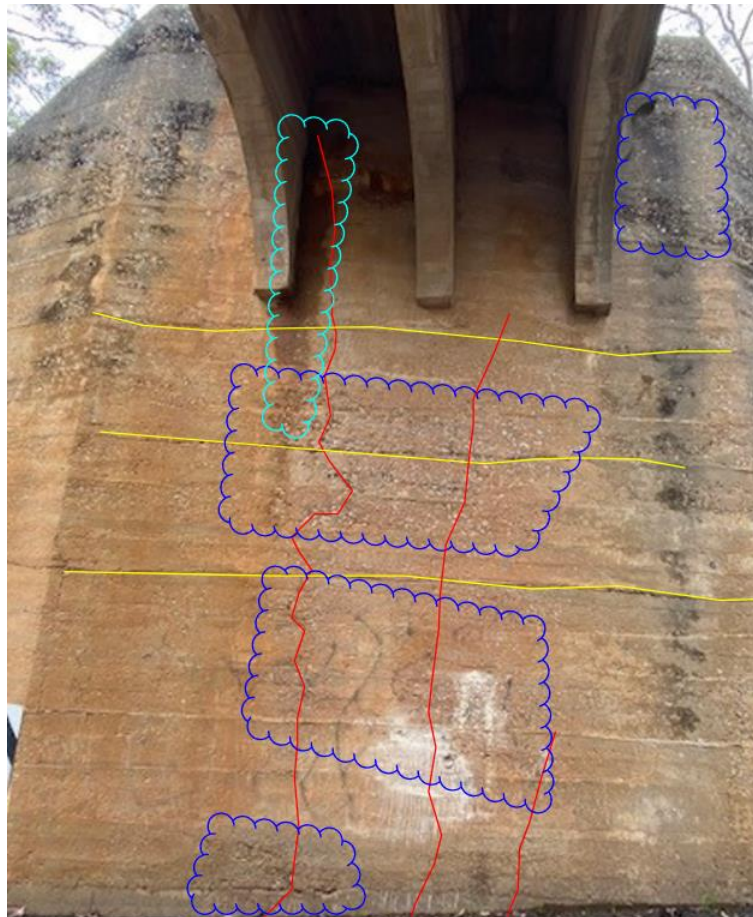


Figure 13 Northwestern Wingwall Defects Layout

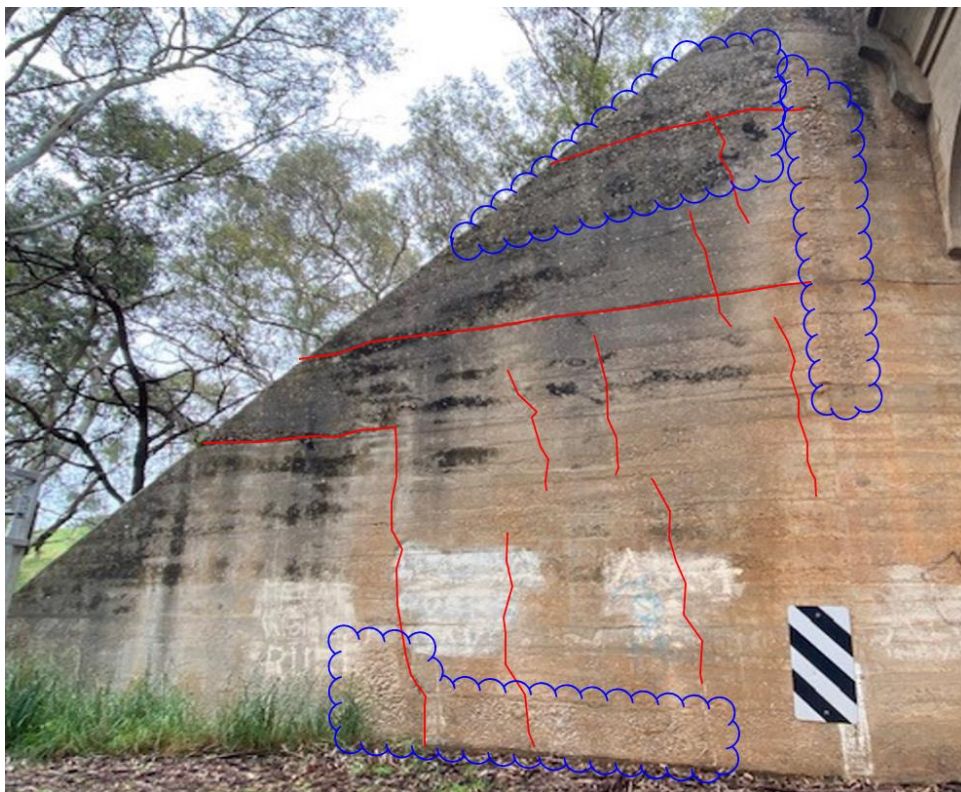


Figure 14 Northeastern Wingwall Defects Layout

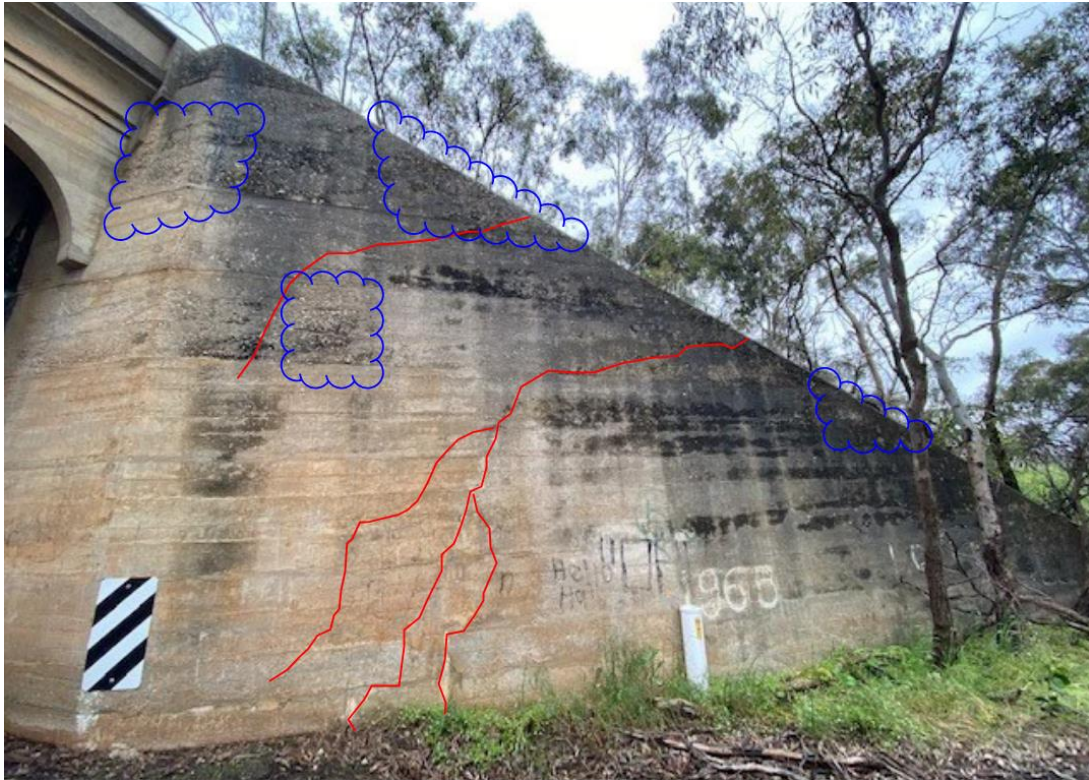


Figure 15 Southeastern wingwall



Figure 16 Southwestern wingwall



Condition Assessment and Recommendations for Defects Repair

Considering the age of the structure, the overall condition of the existing structure can be regarded as fair as per the rating specified in DIT master specification RSIM Part 3. Except for the major cracking and rotation in the southeast wingwall, the defects are not considered as significant, and therefore the impacts on the structural capacity are considered to be minor.

Based on the advice that the bridge was originally designed to carry trail traffic, Jacobs is of the opinion that the assertion made by DIT, that the existing structure capacity is adequate for loadings from the proposed footbridge without detailed structural assessment based on tested material data, is appropriate, provided:

- There are no other major defects covered in the structure, that could not be observed without destructive testing.
- The existing defects will be repaired to mitigate further deterioration.
- The repaired structure will be maintained with regular inspection and services.

It is noted, however, that a level of risk remains for reusing an existing structure without detailed structural assessment or material testing. This risk will need to be managed by DIT through regular inspection and maintenance to identify and address potential signs of distress to ensure safety of bridge users.

For typical defects identified in this condition assessment, the following repair methods are recommended.

Concrete spalling shall be repaired using SR01 in accordance with DIT Road Structures Inspection Manual Appendix D Bridge Repair Manual.

Concrete cracking up to 12mm wide by 25mm deep shall be repaired using SR05 in accordance with DIT Road Structures Inspection Manual Appendix D Bridge Repair Manual. The cracks shall be checked as either active or inactive, as some concrete cracking defects could potentially be caused by concrete spalling, which will make the cracks open and extend further, in which case, the defects shall be repaired as per concrete spalling.

Large and deep cracks shall be repaired with injection of cementitious grout, such as Bluey BluCem HS200 or approved equivalent and then seal the cracks using a suitable epoxy paste, such as MasterBrace 1446 or approved equivalent.

Concrete efflorescence and water stain repair shall identify the source and path of water leakage. Site observations indicated that the northern scupper appeared to be partially blocked, which may have caused the water to drain very slowly with moisture captured near the scupper and the areas it flows over. It is recommended to clean the scupper and extend the outlet of each scupper by providing a short extension protruded over the deck soffit to avoid water flow along the surface of deck concrete soffit.

Concrete fretting and other surface deterioration can be treated with concrete surface protective coating, such as MasterProtect 160, or approved equivalent, as an anti-carbonation coating to extend its life and minimize further deterioration.

DIT has advised that the rotated southwestern wingwall and the crack did not appear to be active. The inspection carried out by Jacobs could not confirm whether the crack was active or inactive. It is recommended to monitor the existing crack for any further movement and stabilize the wall with group anchor if movement is identified. The existing cracks shall be repaired as per large and deep crack repair method described above.

It is also recommended to render the structure surface with a minimum of 3mm thick mortar, such as MasterEmaco S5200CI, or approved equivalent, to cover all cracking and spalling repairs, fretted concrete surface, extend the structure life and to give the heritage listed structure a consistent color of finish.

Concept Design for Bridge Modifications

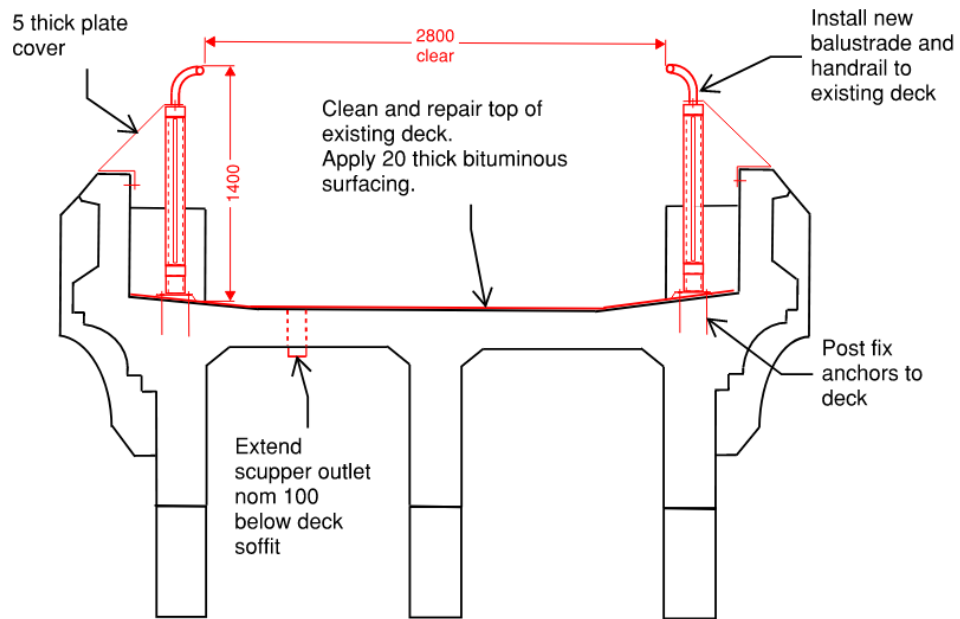
The intent of the proposed modification is to reuse the existing bridge based on the assumption that it has an adequate load-carrying capacity, with minor modifications as required. This is based on the assumption that the existing defects are repairs as per the recommendations provided above. New handrails are proposed to be fixed to the deck slab via post fixing instead of attached to the existing concrete parapet because the capacity of the existing concrete parapet walls can't be estimated without knowing the existing reinforcement.

The proposed concept design will include the modifications as listed below, which is subject to heritage review and approval,






- Southern approach embankment to be lowered by nominally 600mm to match the deck level, and the concrete abutment upstand wall between the balusters to be removed. As the balusters appear to be providing a structural connection between the abutment and the wingwall, they are to be retained unmodified.
- The top surface of concrete deck to be cleaned and repaired where required as per the recommendations provided for defects repair in this Technical Memorandum. A bituminous surfacing to be applied to provide the wearing course for the bikeway and to seal the deck face. The scupper opening is to be maintained.
- The scupper to be extended nominal 100mm below soffit of deck slab.
- Any damages to the existing parapet and abutment end walls are to be repaired as per the recommendations provided for defects repair in this Technical Memorandum.
- Northern approach to be backfilled to the required level.
- A 1400mm high pedestrian balustrade with handrail to be installed on the existing deck slab on both edges. A clear width of 2800mm is provided between the handrails. Connection to existing parapet to be avoided as there is no clear indication that the parapet is reinforced. *NB: DIT is procuring specialist heritage advice to understand any design requirements regarding these aspects.*
- Fencing on the approaches are to be provided, aligning with the pedestrian balustrade over the bridge at deck ends.
- An optional cover plate is proposed to cover the gap between the existing concrete parapet and the new fence, which can help to avoid tree branches falling into the gap and debris built up in the area.







The typical cross section is shown in the Figure 17. The concept design sketches are contained in Appendix 2.


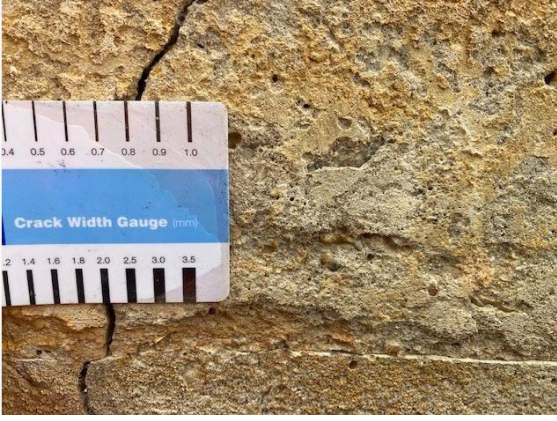




Figure 17 Typical Cross Section of the New Footbridge









Appendix 1 - Defects Photos

	
Western girder side cracking near southern abutment	Western Girder soffit cracking near southern abutment
	
Central girder end cracking near northern abutment	Eastern girder base cracking near northern abutment
	
Deck soffit spalling near northern scupper	Deck soffit cracking along central girder near southern abutment

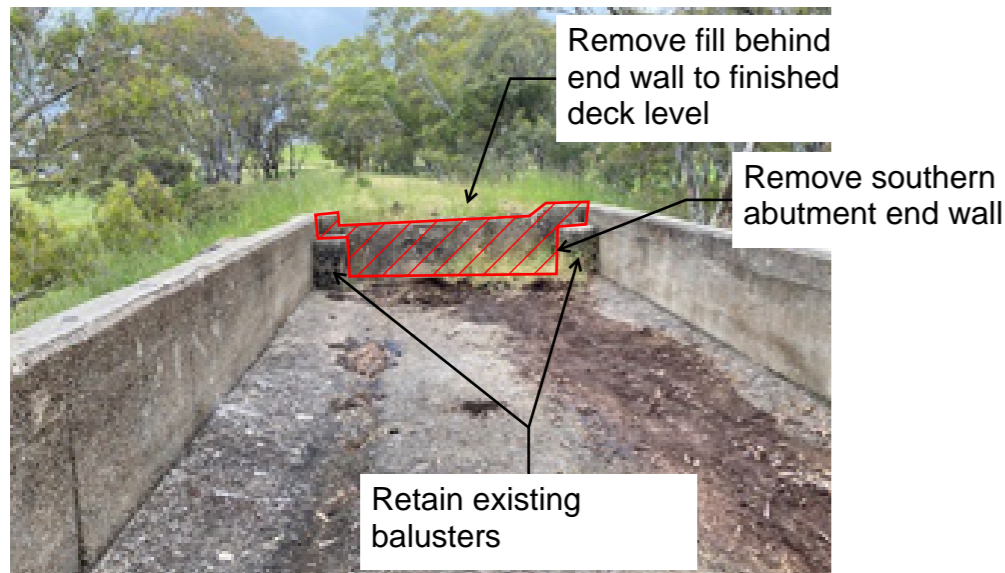
	
Eastern Parapet concrete spalling south section	Western Girder soffit cracking near southern abutment
	
Typical construction cold joint cracking western parapet	Northern abutment cracking and water stain
	
Typical concrete fretting northern abutment	Northern abutment concrete fretting and water stain

	
<p>Southern abutment cracking and water stain</p>	<p>Southern abutment typical crack</p>
	
<p>Northwestern wingwall cracking and fretting</p>	<p>Northwestern wingwall typical crack</p>
	
<p>Northeastern wingwall cracking and fretting</p>	<p>Northeastern wingwall typical crack</p>

	
<p>Southeastern wingwall cracking and fretting</p>	<p>Southeastern wingwall typical crack</p>
	
<p>Southwestern wingwall cracking and fretting</p>	<p>Southwestern wingwall cracking and rotation</p>
	
<p>Southwestern wingwall crack width (70mm) near top</p>	<p>Removed abutment upstand wall at northern approach</p>

Appendix 2 - New Footbridge Concept Design Sketches

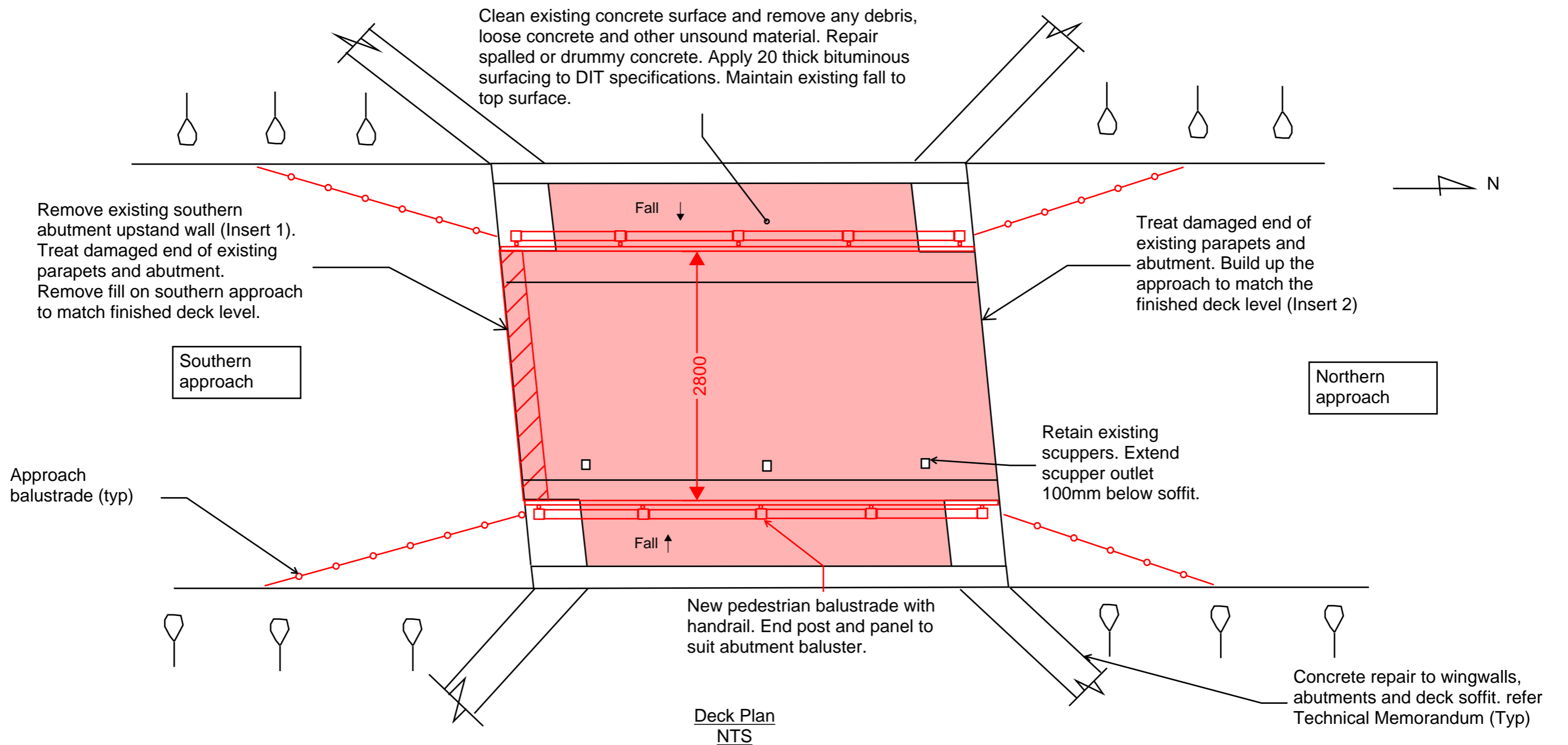
IW218200-V4-SK1-A
10% Concept Sketch

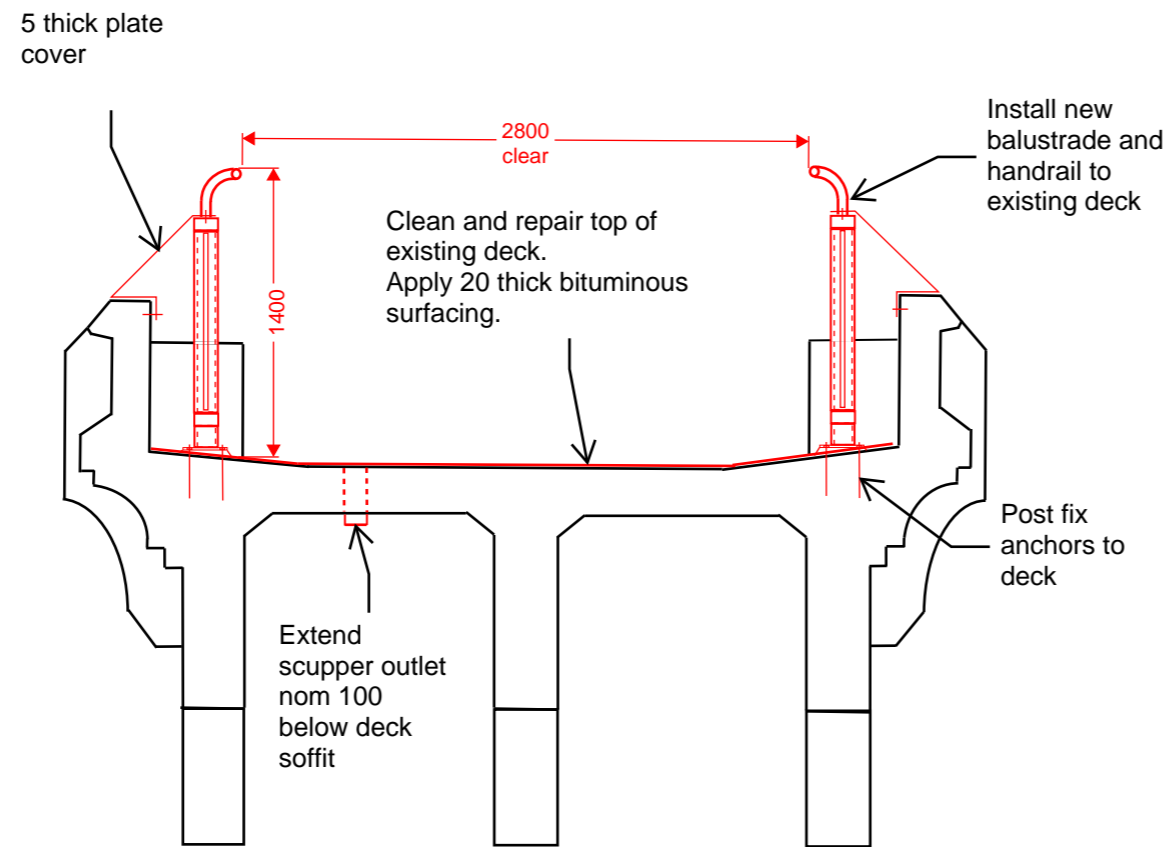


Insert 1. Looking towards southern approach

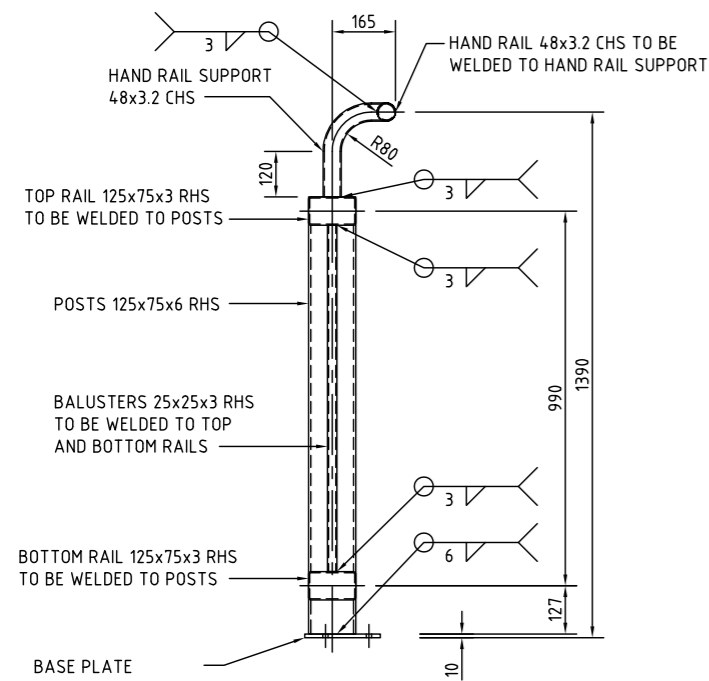


Insert 2. Looking towards northern approach

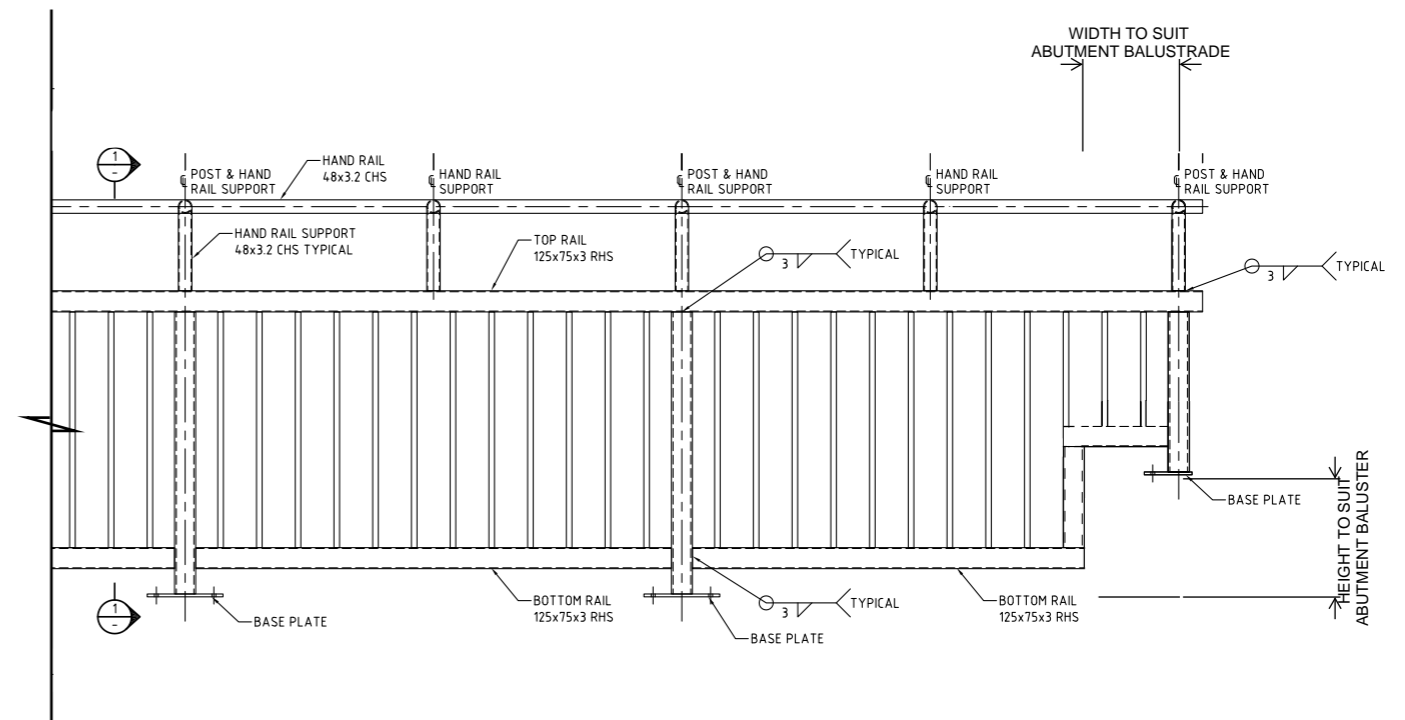




Typical Section
NTS



Typical Balustrade Section
NTS



Balustrade Elevation
NTS

Appendix 3 – Meeting Minutes

Level 3, 121 King William Street
 Adelaide SA 5000 Australia
 T +61 8 8113 5400
 F +61 8 8113 5440
 www.jacobs.com

Subject Project Meeting – VO#04 Structural Assessment of Bridges

Project Amy Gillett Bikeway Stage 4 22C126 (17C811)

Project No. IW278200 **File** IW278200-ZM-MIN-0012

Prepared by Vahid Bhaskaran **Phone No.** +61 468 335 919

Location MS Teams **Date/Time** September 13, 2022

Participants Dr Lexi Schwarz (DIT CM), David Moya (DIT PM), Eric Huynh (DIT), Phil Molloy (DIT), Ali Mohammadi (DIT), Ben Champion (Jacobs), Vahid Bhaskaran (Jacobs PM), Larry Yang (Jacobs)

Copies to Apologies Isaac Hoklas (Jacobs)

Notes	Action
<p>1. Welcome</p>	<p>None</p>
<p>2.0 Review of Jacobs VO#04 Structural Assessment</p>	
<p>2.1 Angas Creek & William Creek Bridges</p>	<p>Item 2.1 – Noted</p>
<ul style="list-style-type: none"> • DIT have confirmed that Level 3 inspection not required at the abutments of these bridges per email dated 09/09/22. • Material and Testing procedure is considered not required at these bridges. 	
<p>2.2 Burfords Hill Road Bridge</p>	
<ul style="list-style-type: none"> • Level 3 detailed inspection is required for the entire structure. 	<p>Item 2.2. dot point 1 – Jacobs</p>
<ul style="list-style-type: none"> • Material and Testing procedure is considered not required at this bridge. 	<p>Item 2.2 dot point 2 – noted</p>
<ul style="list-style-type: none"> • At this stage Geotech investigation is not required. Decision will be made after the completion of Level 3 inspection and findings presented to DIT. 	<p>Item 2.2 dot point 3 – DIT</p>
<ul style="list-style-type: none"> • Engineering survey is not required. 	<p>Item 2.2 dot point 4 – noted</p>
<ul style="list-style-type: none"> • Site investigation for existing wingwall cracks is not required. 	<p>Item 2.2 dot point 5 – noted</p>
<ul style="list-style-type: none"> • Removing debris etc. on the deck to be able to undertake a better visible inspection of the deck. 	<p>Item 2.2 dot point 6 – noted</p>

3.0 Risk Considerations

Referring to Jacobs email to DIT dated 08/09/22, Jacobs identified several risks for DIT's consideration based on Phil Molloy's (PM) recommendations on Burfords Hill Rd Bridge and these are listed below:

DIT

- Assuming the existing structure capacity is adequate for loadings from the proposed footbridge without detailed structural assessment based on tested material data;
- Assuming the existing bridge will have adequate design life by applying protective coating to exposed concrete surface and undertaking regular inspection and maintenance services, without assessing the existing condition of the concrete;
- Assuming the existing bridge concrete parapet sidewalls are unreinforced when determining the structural capacity in order to support new footbridge hand-rails;
- Possible further movement of the cracked wingwall without any site investigation; and
- Assuming the existing abutment and wingwall are stable for use by the new footpath without any geotechnical investigation.

Ben Champion (BC) re-iterated Jacobs' position that the above-mentioned risks will be borne by DIT based on PM's recommendations and Jacobs subsequent reduced VO#04 scope which is scheduled to be submitted to DIT by Friday 16/09/22. DIT have accepted the responsibility for the above risks.

4.0 Other Business

- Bridge FRP option – Following on from DIT / Jacobs informal discussion on Sustainable Infrastructure System (SIS) opening several weeks ago, Jacobs are keen to explore this design option for the bridges at the 30% design gate. DIT are very supportive of the idea. Jacobs to provide email feasibility advise to DIT for consideration and advise of any additional charges that can be captured as a new VO.

Jacobs

5.0 Meeting Close

Appendix 5

Summary Cost Estimation – DIT v AHC

PRELIMINARY CONCEPT ESTIMATE SUMMARY SHEET

EST 600-2

ESTIMATE NO: 3002 OE1 L3 R3
 PROJECT NAME: Amy Gillett Bike Path, Stage 4, Mount Torrens to Birdwood
 DATE PREPARED: 13/06/2023
 KNET NO: #20153352 (Version #7)

OPTION 2: - 150 mm rubble with 10/5 two coat spray seal				
ITEM	SECTION	ESTIMATED MOST LIKELY COST	% OF MOST LIKELY PROJECT COST	
1	SECTION 1 - CLIENT COSTS			
1.1	Scoping Phase - Project Management	11,016	0%	
1.2	Scoping Phase - Design and Investigation	11,016	0%	
1.3	Development Phase - Project Management	96,133	1%	
1.4	Development Phase - Design and Investigation	298,646	4%	
1.5	Delivery Phase - Project Management	123,098	2%	
1.6	Delivery Phase - Design and Investigation	44,065	1%	
1.7	Principal Arranged Insurance and Levies	11,677	0%	
1.8	Environmental Assessment	161,621	2%	
1.9	Other Client Costs	0	0%	
1.10	DIT Overhead Charge	554,051	7%	
Subtotal SECTION 1 - CLIENT COSTS		\$1,311,323	18%	
2	SECTION 2 - PROPERTY ACQUISITION			
2.1	Property Purchase Costs	0 m2	0%	
2.2	Transaction, Legal and Other Costs	0	0%	
2.3	Business Compensation	0	0%	
2.4	Property Modification	0	0%	
Subtotal SECTION 2 - PROPERTY ACQUISITION		\$0	0%	
3	SECTION 3 - SERVICES (BY DIT)			
3.1	Electricity	100,000	1%	
3.2	Communications	100,000	1%	
3.3	Gas	0	0%	
3.4	Water and Sewer	0	0%	
3.5	Other Services	13,033	0%	
Subtotal SECTION 3 - SERVICES (BY DIT)		\$213,033	3%	
<i>Total DIT Costs (Total of sections 1, 2 & 3)</i>		<i>1,524,356</i>	<i>21%</i>	
4	SECTION 4 - CONSTRUCTION COSTS			
4.1	Environmental Works	51,600	1%	
4.2	Traffic Management	257,084	3%	
4.3	Services (by Contractor)	76,516	1%	
4.4	Earthworks and Demolition	12,513 m3	10%	
4.5	Retaining Walls	0 m2	0%	
4.6	Drainage	106,120	1%	
4.7	Bridges	151 m2	21%	
4.8	Tunnels	0	0%	
4.9	Pavement	21,565 m2	9%	
4.10	Bituminous Surfacing / Asphalt	15,435 m2	5%	
4.11	Secondary Pavements	0	0%	
4.12	Pavement Marking	27,770	0%	
4.13	Road Furniture	243,580	3%	
4.14	Lighting	25,000	0%	
4.15	Landscaping and Urban Design	38,067	1%	
4.16	Traffic Signage, Signals and Controls	11,000	0%	
4.17	Rail	0	0%	
4.18	Other	20,000	0%	
Subtotal SECTION 4 - CONSTRUCTION COSTS		\$4,193,475	57%	
5	SECTION 5 - CONTRACTORS PRELIMINARIES & SUPERVISION			
5.1	Design (by Contractor)	0	0%	
5.2	Overheads (Onsite)	27% 1,131,121	15%	
5.3	Overheads (Offsite)	4% 212,984	3%	
5.4	Contractors Margin	6% 332,255	4%	
Subtotal SECTION 5 - CONTRACTORS PRELIMINARIES & SUPERVISION		\$1,676,360	23%	
<i>Total Contractor Costs (Total of sections 4 & 5)</i>		<i>5,869,835</i>	<i>79%</i>	
BASE ESTIMATE TOTAL		\$7,394,191	100.00%	
6	SECTION 6 - CONTINGENT RISKS			
NOTE: Contingent risks total represents the most likely cost of risk items used in deterministic risk modelling				
7	SECTION 7 - P50 and P90 RISK and CONTINGENCY			
7.1	P50 Inherent and Contingent Risk	823,766	11%	
7.2	P90 Inherent and Contingent Risk	1,874,313	25%	
PROJECT OPTIONS ESTIMATE TOTALS		P50 8,217,956		
		P90 9,268,504		
NOTE: These values exclude GST and escalation. Escalation is calculated using the Formal Estimate form. Formal estimate values are to be used when seeking project funding.				
INDICATIVE ANNUAL CASH FLOW				
YEAR	ASSUMED COMPONENTS	ESTIMATED ANNUAL BASE ESTIMATE CASHFLOW	ESTIMATED ANNUAL P50 CASHFLOW	ESTIMATED ANNUAL P90 CASHFLOW
Previous Years	-	0	0	0
Year 1	-	7,394,191	8,217,956	9,268,504
Year 2	-	0	0	0
Year 3	-	0	0	0
Year 4	-	0	0	0
TOTALS		7,394,191	8,217,956	9,268,504
ESTIMATED CONSTRUCTION COST VALUE (For use in contract procurement/Acquisition Plan)				
<i>Estimated Total Contractor Costs (Total of sections 4 & 5)</i>		<i>5,869,835 (Excluding GST)</i>		
<i>Estimated Contractor Risk (applied at half of the % applicable to the P50 Project Options Estimate)</i>		<i>326,971 (Excluding GST)</i>		
<i>Estimated Total Contractor Costs inclusive of Risk</i>		<i>6,196,806 (Excluding GST)</i>		
<i>Estimated Total Contractor Costs inclusive of Risk</i>		<i>6,816,486 (Including GST)</i>		

PRELIMINARY CONCEPT ESTIMATE SUMMARY SHEET

EST 600-2

ESTIMATE NO: 3002 OE1 L3 R3
 PROJECT NAME: Amy Gillett Bike Path, Stage 4, Mount Torrens to Birdwood
 DATE PREPARED: 13/06/2023
 KNET NO: #20153352 (Version #7)

OPTION 2: - 150 mm rubble with 10/5 two coat spray seal				
ITEM	SECTION	ESTIMATED MOST LIKELY COST	% OF MOST LIKELY PROJECT COST	
1	SECTION 1 - CLIENT COSTS			
1.1	Scoping Phase - Project Management	11,016	0%	
1.2	Scoping Phase - Design and Investigation	11,016	0%	
1.3	Development Phase - Project Management	96,133	2%	
1.4	Development Phase - Design and Investigation	149,323	3%	
1.5	Delivery Phase - Project Management	66,098	1%	
1.6	Delivery Phase - Design and Investigation	44,065	1%	
1.7	Principal Arranged Insurance and Levies	11,677	0%	
1.8	Environmental Assessment	732,034	15%	
1.9	Other Client Costs	0	0%	
1.10	DIT Overhead Charge	0	0%	
Subtotal SECTION 1 - CLIENT COSTS		\$1,121,362	23%	
2	SECTION 2 - PROPERTY ACQUISITION			
2.1	Property Purchase Costs	0 m2	0%	
2.2	Transaction, Legal and Other Costs	0	0%	
2.3	Business Compensation	0	0%	
2.4	Property Modification	0	0%	
Subtotal SECTION 2 - PROPERTY ACQUISITION		\$0	0%	
3	SECTION 3 - SERVICES (BY DIT)			
3.1	Electricity	100,000	2%	
3.2	Communications	100,000	2%	
3.3	Gas	0	0%	
3.4	Water and Sewer	0	0%	
3.5	Other Services	13,033	0%	
Subtotal SECTION 3 - SERVICES (BY DIT)		\$213,033	4%	
<i>Total DIT Costs (Total of sections 1, 2 & 3)</i>		<i>1,334,394</i>	<i>28%</i>	
4	SECTION 4 - CONSTRUCTION COSTS			
4.1	Environmental Works	51,600	1%	
4.2	Traffic Management	20,000	0%	
4.3	Services (by Contractor)	26,516	1%	
4.4	Earthworks and Demolition	12,513 m3	11%	
4.5	Retaining Walls	0 m2	0%	
4.6	Drainage	156,120	3%	
4.7	Bridges	151 m2	28%	
4.8	Tunnels	0	0%	
4.9	Pavement	21,565 m2	11%	
4.10	Bituminous Surfacing / Asphalt	15,435 m2	5%	
4.11	Secondary Pavements	0	0%	
4.12	Pavement Marking	27,770	1%	
4.13	Road Furniture	129,130	3%	
4.14	Lighting	25,000	1%	
4.15	Landscaping and Urban Design	38,067	1%	
4.16	Traffic Signage, Signals and Controls	11,000	0%	
4.17	Rail	0	0%	
4.18	Other	20,000	0%	
Subtotal SECTION 4 - CONSTRUCTION COSTS		\$3,160,974	66%	
5	SECTION 5 - CONTRACTORS PRELIMINARIES & SUPERVISION			
5.1	Design (by Contractor)	0	0%	
5.2	Overheads (Onsite)	0%	0%	
5.3	Overheads (Offsite)	0%	0%	
5.4	Contractors Margin	5%	6%	
Subtotal SECTION 5 - CONTRACTORS PRELIMINARIES & SUPERVISION		\$276,879	6%	
<i>Total Contractor Costs (Total of sections 4 & 5)</i>		<i>3,437,853</i>	<i>72%</i>	
BASE ESTIMATE TOTAL		\$4,772,248	100.00%	
6	SECTION 6 - CONTINGENT RISKS			
NOTE: Contingent risks total represents the most likely cost of risk items used in deterministic risk modelling				
7	SECTION 7 - P50 and P90 RISK and CONTINGENCY			
7.1	P50 Inherent and Contingent Risk	823,766	17%	
7.2	P90 Inherent and Contingent Risk	1,193,062	25%	
PROJECT OPTIONS ESTIMATE TOTALS		P50 5,596,013		
		P90 5,965,310		
NOTE: These values exclude GST and escalation. Escalation is calculated using the Formal Estimate form. Formal estimate values are to be used when seeking project funding.				
INDICATIVE ANNUAL CASH FLOW				
YEAR	ASSUMED COMPONENTS	ESTIMATED ANNUAL BASE ESTIMATE CASHFLOW	ESTIMATED ANNUAL P50 CASHFLOW	ESTIMATED ANNUAL P90 CASHFLOW
Previous Years	-	0	0	0
Year 1	-	7,394,191	8,217,956	9,268,504
Year 2	-	0	0	0
Year 3	-	0	0	0
Year 4	-	0	0	0
TOTALS		7,394,191	8,217,956	9,268,504
ESTIMATED CONSTRUCTION COST VALUE (For use in contract procurement/Acquisition Plan)				
<i>Estimated Total Contractor Costs (Total of sections 4 & 5)</i>		<i>3,437,853 (Excluding GST)</i>		
<i>Estimated Contractor Risk (applied at half of the % applicable to the P50 Project Options Estimate)</i>		<i>296,714 (Excluding GST)</i>		
<i>Estimated Total Contractor Costs inclusive of Risk</i>		<i>3,734,567 (Excluding GST)</i>		
<i>Estimated Total Contractor Costs inclusive of Risk</i>		<i>4,108,024 (Including GST)</i>		

3. Amy Gillett Bikeway Stage 4 – Construction Option – Duration of Confidentiality

Subject to the CEO, or his delegate, disclosing information or any document (in whole or in part) for the purpose of implementing Council’s decision(s) in this matter in the performance of the duties and responsibilities of office, Council, having considered Agenda Item 6.1 in confidence under sections 90(2) and 90(3)(j) of the *Local Government Act 1999*, resolves that an order be made under the provisions of sections 91(7) and (9) of the *Local Government Act 1999* to retain the Items in confidence as detailed in the Duration of Confidentiality Table below:

Item	Duration of Confidentiality NB: Item to be reviewed every 12 months if not released
Report	19 December 2024 or upon finalisation of all relevant agreements with the State and Federal Governments, whichever is the earlier.
Related Attachments	19 December 2024 or upon finalisation of all relevant agreements with the State and Federal Governments, whichever is the earlier.
Minutes	19 December 2024 or upon finalisation of all relevant agreements with the State and Federal Governments, whichever is the earlier.
Other	Nil

Notwithstanding, the fact that the Council is working with other levels of government to find a way to complete the Amy Gillett Bikeway extension within available funding levels shall not be subject to the confidentiality order.

Pursuant to section 91(9)(c) of the *Local Government Act 1999*, the Council delegates the power to revoke the confidentiality order either partially or in full to the Chief Executive Officer.