Preliminary and Limited Detailed Site Investigation

68, 70, 72, 74 Macquarie Street and 45A, 71 George Street Parramatta, Parramatta NSW

Prepared for: Delta Group Pty Ltd

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Abbreviations

ACM	Asbestos Containing Material
ADE	ADE Consulting Group Pty Ltd
AHD	Australian Height Datum
ALS	Australian Laboratory Services
ASS	Acid Sulfate Soils
BGL	Below ground level
BTEX	Benzene, toluene, ethylbenzene, xylene
BR	Blind Replicate
CoC	Chain of Custody
CoPC	Contaminants of Potential Concern
CRC CARE	Contamination Assessment and Remediation of the Environment
CRS	Chromium Reducible Sulfur
CSM	Conceptual Site Model
DBYD	Dial Before You Dig
DEC	Department of Environment and Conservation
DO	Dissolved Oxygen
DP	Deposited Plan
DQO	Data Quality Objectives
DSI	Detailed Site Investigation
EC	Electrical Conductivity
EILs	Ecological Investigation Levels
EPA	NSW Environment Protection Authority
ESLs	Ecological Screening Levels
HDPE	High-Density Polyethylene
HILs	Health Investigation Levels
HSLs	Health Screening Levels
LEP	Local Environmental Plan
LNAPL	Light Non-Aqueous Phase Liquid
m BGL	meters Below Ground Level
MW	Monitoring Well
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environmental Protection (Assessment of Site Contamination) Measure
NSW	New South Wales
OCP	Organophosphorus Pesticides
OEH	Office of Environment and Heritage
OPP	Organochlorine Pesticides
PACM	Potential Asbestos Containing Material
PAHs	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PID	Photo-ionisation Detector
PSI	Preliminary Site Investigation
QA/QC	Quality Assurance/Quality Control
RAP	Remedial Action Plan
RPD	Relative Percent Difference
SAC	Site Assessment Criteria
SEPP	State Environmental Planning Policy
SH&EWMS	Safety Health and Environmental Works Method Statement
SMF	Synthetic Mineral Fibres
SLS	Sydney Laboratory Services
SWL	Standing Water Level
TOC	Top of Casing
TRH	Total Recoverable Hydrocarbons
UCL	Upper Confidence Limit
USCS	Unified Soil Classification System
VOC	Volatile Organic Compounds

Executive Summary

ADE Consulting Group Pty Ltd (ADE) was engaged by Delta Group Pty Ltd (Delta) to undertake a combined Preliminary and Limited Detailed Site Investigation (PSI/DSI) at multiple properties located at 68, 70, 72, 74 Macquarie Street and 45A, 71 George Street, Parramatta, New South Wales (NSW) ('the site') refer to *Appendix I – Figures* for the site location plan and boreholes completed during the investigation.

The purpose of this report is to exclusively address the scope of works issued to Delta as outlined within the Critical State Significant Infrastructure (CSSI) planning approval documentation which outlines the scope as being limited to the early enabling works, demolition activities and archaeological clearance of soils down to 1.8 m below ground level (m BGL).Delta has advised ADE that the final architectural design plans have yet to be finalised and thus the investigation will relate to the scope of Delta's allocated works only.

The investigation also sought to evaluate the extent of contamination (if any) prior to the commencement of demolition works. ADE was also engaged to undertake a waste analysis and classification of the in-situ soils extending to a maximum of 3.0 m bgl. Delta has advised that approximately 14,000 m^3 of soil materials will be required for off-site disposal across the site during demolition works. ADE notes that the DSI was also prepared to assess the contamination risk of the site as outlined in the A1 documents, refer to Schedule 20 – Requirements of Authority Approvals (refer *Appendix XIII – Supporting Documentation*).

A combined PSI DSI was therefore undertaken to evaluate the potential and current contamination status of the site and to provide relevant conclusions/recommendations. To meet the purpose of the investigation, the following objectives were adopted:

- Identify past and present potentially contaminating activities
- Complete a preliminary CSM by identifying:
- Potential contamination sources, contaminants of potential concern (CoPCs) and Areas of Concern (AOCs)
- Contamination migration pathways
- Sensitive contamination receptors
- Contamination exposure pathways
- Visually assess the current site conditions with regards to potential sources of contamination
- Evaluate and discuss both historical and current site conditions
- Design and implement a systematic sampling regime for the assessment of soil within the site
- Assess and describe the source, type, extent and level of contamination present on site
- Determine the potential risk posed to human health and ecological receptors (if present)
- Develop a revised CSM based on the findings of the PSI/DSI, and
- Provide an assessment of site contamination and recommendations

The soil sampling works were undertaken across four separate mobilisations, with Delta's proposed borehole/sampling plan as follows:

- Mobilisation Event (ME) 1 - BH1 to BH9, BH13 and BH16;
- ME2 - BH14, BH15 and BH17;
- ME3 - TP10, TP11 and TP12; and
- ME4 - TP18, 19 and 20.

Of the 64 primary samples which were analysed (excluding QAQC samples and delineation samples), 63 samples demonstrated concentrations of heavy metals below the tier 1 screening levels for HIL/HSL-D as outlined within the NEPM (*NEPC, 2013*). Lead concentrations within one sample collected from TP20 at 0.2 m BGL returned concentrations above the prescribed land use criteria. However, following statistical assessment, the 95% UCL retuned a value of 535.1, which is below the prescribed land-use criteria (HIL/HSL-D).

For the purposes of this assessment, a presence/absence approach was adopted for the assessment of asbestos. A total of 64 soil samples and two suspected fibre cement samples (BH08.FC1_1.0 and TP20-FC1) were collected throughout the course of the investigation and analysed as per AS4964-2004. Chrysotile asbestos was detected within the one fibre cement sample that was analysed (BH08.FC1_1.0) and both chrysotile and crocidolite asbestos was detected within the fibre cement sample collected from TP20 at 0.2 m BGL.

Acid sulfate soils were identified typically exhibiting a sporadic distribution across the site and were typically limited to the deeper lithologies encountered across the site. Both exceedances identified at BH06 at 1.8 m BGL and TP12 at 1.8 m BGL exhibited characteristics of AASS rather than PASS due to the net acidity demonstrating a causal relationship with titratable actual acidity, whilst the reducible sulfur content was below the laboratory PQL. Based on the acquired data, a conservative liming rate of 4 CaCO3/t is considered appropriate to effectively neutralise known AASS across the site.

Due to the identification of sulfidic soils within the site, all suspected/confirmed PASS/AASS must be managed in accordance with the sites Acid Sulfate Soil Management Plan (ASSMP), which includes the application of agricultural lime and validation testing to confirm that the soils have been effectively neutralised and is suitable for the prescribed use.

In total, approximately 14,367m^3 of soil materials have been classified across the site in accordance with the *NSW EPA Waste Classification Guidelines 2014: Part 1 – Classifying Waste* and *Part 2: Acid Sulfate Soils* for off-site disposal purposes. Considering the type, level and variability associated with contamination identified across the site, different waste streams identified across the site were separated into distinct waste classification areas (WCAs). Individual waste analysis and classification reports have been provided for the various lots across the site with the exception of the switchboard excavation, which is included within the current report.

Considering the scope of work given to Delta, the following are considered to be limitations, assumptions or uncertainties within regards to this report:

- The assessment does not constitute a full site characterisation assessment as the investigation is limited to the top 1.8 m soil profile and does not comprise of a full site characterisation assessment;
- No asbestos quantification assessment has been completed within the scope of this investigation and therefore, any soil materials intended to be beneficially re-used within the site boundaries will need to be subject to a gravimetric asbestos assessment as per the NEPM (NEPC, 2013);
- The provided waste classification assessments are considered to be preliminary only and maybe subject to change depending on the conclusions of future investigations;
- No groundwater assessment was undertaken as part of Delta's scope. Further consideration and assessment maybe required to characterise the current hydrogeological conditions and contamination status of the underlying groundwater system; and
- No ecological risk assessment has been considered as the final design of the station is not finalised and was not included within Delta's scope of works for this project.

The following recommendations were made in response to the CSM and associated conclusions:

- A suitably qualified environmental consultant and a licensed asbestos removalist be engaged to complete asbestos removal works during removal of soils surrounding sample BH08_1.0, and
- Excavation works within the vicinity of BH06 should be undertaken under an acid sulfate soils management plan (ASSMP), with liming of impacted soils undertaken followed by PASS validation to ensure that neutralisation of the acidic conditions has occurred.
- An ecological risk assessment will need to be completed should the final design plan or development include landscaped areas, setbacks or public open spaces.

Considering the above and the vertical and lateral limitations of the investigation, ADE considers that there is a 'low risk' for residual contamination to occur within the assessed areas across the site and due to the implementation of existing environmental management systems e.g., Acid Sulfate Soil Management Plan (ASSMP).

Depending on the conclusions derived within future environmental investigations, additional investigations and further management practices maybe required to determine the land-use suitability of the site with regards to the proposed land use. Further consideration of Condition D72 under the Critical State Infrastructure (CSSI) planning approval documentation maybe required depending on the conclusions derived following future environmental investigations.

1 Introduction

1.1 Background and General Information

ADE was engaged by Delta Group Pty Ltd (Delta) to undertake a combined preliminary and detailed site investigation (PSI/DSI) at multiple properties located at 68, 70, 72, 74 Macquarie Street and 45A, 71 George Street Parramatta, Parramatta, New South Wales (NSW) ('the site').

The purpose of the investigation was to determine the extent of contamination (if any) prior to the commencement of demolition works. The investigation also sought to determine if the site is suitable for the proposed land use as a Sydney Metro Railway Station; noting that the consideration of landscaping areas with access to soil have not been assessed since the design of the station is not finalised and consideration of this has not been included within Delta's scope of works for this project.

Delta has informed ADE that all built structures on-site are to be demolished in conjunction with the development of the new Sydney Metro West Parramatta Station. As part of the assessment, ADE was requested to undertake a preliminary waste analysis and classification of the in-situ soils extending to varying depths in between 1.5 m below ground level (m BGL) and 3.0 metres BGL or the maximum depth of Delta's future demolition works. This was accomplished through the completion of a desktop study and preliminary site walkover, followed by a systematic intrusive soil investigation.

The first stage of the investigation was to conduct a PSI of the site through a comprehensive desktop study and site walkover which involved:

- Completion of a comprehensive desktop study including the appraisal of the site's history and the current site condition and surrounding environment; and
- Completion of a detailed site walkover and visual inspection to identify signs or indications of potential sources of contamination and the associated contaminants of potential concern (CoPCs).

The second stage of the investigation was to conduct a limited DSI via a systematic soil investigation to evaluate the current contamination status of the site in relation to the findings of the PSI. This report summarises the findings of the Stage I Preliminary and Stage II Limited Detailed Site Investigation works and discusses the outcomes of both investigations.

The sampling activities were undertaken in four separate mobilisation events (ME), with Delta's proposed borehole/sampling plan as follows (refer to *Appendix I – Figure 3* for the completed borehole locations):

- ME1 - BH1 to BH9, BH13 and BH16
- ME2 - BH14, BH15 and BH17
- ME3 - TP10, TP11 and TP12
- ME4 - TP18, 19 and 20

The DSI was also prepared to assess the potential contamination risk of the site within the adopted vertical and lateral investigation limits as outlined in the A1 documents, refer to Schedule 20 – Requirements of Authority Approvals (*Appendix XIII – Supporting Documentation*). The DSI was also designed to fulfill the requirements of condition D71, as described in Schedule 20 – Requirements of Authority Approvals.

1.2 Objectives

The specific objectives of the investigation were to:

- Identify past and present potentially contaminating activities
- Visually assess the current site conditions with regards to potential sources of contamination
- Evaluate and discuss both historical and current site conditions

- Design and implement a systematic sampling regime for the assessment of soil within the site
- Assess and describe the source, type, extent and level of contamination present on site
- Determine the potential risk posed to human health and ecological receptors (if present)
- Develop a CSM based on the findings of the PSI/DSI, and
- Provide a waste classification assessment, site contamination assessment and recommendations for further investigation or remediation (if required).

1.3 Scope of Work

The scope of work required to achieve the objectives of the investigation involved the following:

1.3.1 Phase One – Desktop Study (PSI)

- Preparation and completion of a site-specific safety, health & environment work method statement (SH&EWMS)
- Review of relevant NSW EPA and Government databases
- Review of past and current activities on the site
- Review of current activities on neighbouring sites and identification of any potential on-site/off-site sources of contamination
- Review of past aerial photographs of the site and its surroundings
- Review of local geology and hydrogeology (including groundwater bore search)
- Review of acid sulfate soil risk maps, and
- Completion of a detailed site inspection by an experienced environmental consultant.

1.3.2 Phase Two – Limited Field Investigation and Sampling (DSI)

- Review of underground service clearance report following utility locating conducted by the approved service locator (engaged by Delta);
- Mobilisation of drill rig and equipment to site during intrusive assessment;
- Advancement of 14 boreholes and six test pits across the site to varying depths;
- Logging of soils in accordance with Unified Soil Classification System (USCS) and observation of visual / olfactory indicators of contamination throughout the soil profile;
- Screening of samples using a calibrated photo-ionisation detector (PID) to assess the potential presence of ionisable volatile organic compounds (VOCs);
- Collection of representative soil samples based on visual observations, lithology, odours and staining;
- Completion of standard quality assurance/quality control (QA/QC) protocols;
- Analysis of soil samples for identified CoPCs at National Association of Testing Authorities (NATA) accredited laboratories under chain of custody conditions;
- Interpretation of analytical results and field observations in accordance with relevant guidelines and codes of conduct (as outlined in **Section 1.4**); and
- Preparation of a combined PSI/DSI report outlining the investigation, interpretation of results, including conclusions and recommendations with reference to the proposed land use.

1.4 Legislative Requirements

The legislative framework for the report is based on guidelines that have been issued and/or endorsed by the NSW EPA under the following Acts / Regulations:

- Contaminated Land Management Act 1997 (NSW) (CLM Act)
- Environmentally Hazardous Chemicals Act 1985 (NSW)
- National Environment Protection (Assessment of Site Contamination) Measure [NEPM], 1999 (as amended 2013) (NEPC, 2013)
- Protection of the Environment Operations Act 1997 (NSW) (POEO Act)
- State Environmental Planning Policy No.55 - Remediation of Land (NSW Government)
- Victorian EPA Industrial Waste Resource Guidelines 2009

- Waste Avoidance and Resource Recovery Act 2001
- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2017.

The relevant guidelines issued under the provisions of the aforementioned acts / regulations include:

- Friebel & Nadebaum. (2011). Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater, Part 1: Technical Development Document, Technical Report No. 10,
- Friebel & Nadebaum. (2011). Health Screening levels for Petroleum Hydrocarbons in Soil and Groundwater, Part 2: Application Document, Technical Report No. 10,
- Guidelines for the NSW Site Auditor Scheme (3rd Edition), NSW 2017,
- NSW EPA. (1995). Sampling Design Guidelines (NSW EPA, 1995),
- NSW EPA. (2014). Waste Classification Guidelines - Part 1: Classifying Waste (2014) (NSW EPA, 2014),
- NSW EPA. (2015). Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (NSW EPA, 2015),
- NSW EPA. (2020). Guidelines for Consultants Reporting on Contaminated Land (NSW EPA, 2020),
- NSW Safework. (2019). Model Code of Practice: How to Safely Remove Asbestos (NSW Safework, 2019),
- NSW Safework. (2019). Code of Practice: How to Manage and Control Asbestos in the Workplace (NSW Safework, 2019), and
- Western Australian Department of Health (WA DOH). (2009). Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia (WA DOH, 2009).

Australian Standards applied to this investigation:

- Standards Australia (1999). Australian Standard AS 4482.2 Guide to the sampling and investigation of potentially contaminated soil. Part 2: Volatile substances, (1999), and
- Standards Australia. (2005). Australian Standard AS 4482.1 Guide to the sampling and investigation of potentially contaminated soil. Part 1: Non-volatile and semi-volatile compounds, (2005).

The following local government plan has also been taken into consideration for preparation of this PSI/DSI:

- Parramatta Local Environmental Plan (LEP) (City of Parramatta, 2011a).
- Parramatta development Control Plan (City of Parramatta, 2011b).

2 Site Identification

2.1 Site Location

The site comprises of multiple properties located at 68, 70, 72, 74 Macquarie Street and 45A, 71 George Street within Parramatta, NSW. The site has an approximate area of 0.696 hectares (ha). The site is situated within the local government area of Parramatta Council and is currently zoned as B3 Commercial Core under Parramatta Local Environmental Plan (LEP) 2011. The site is legally defined as Lot 1 of Deposited Plan (DP) 711982, Lot E of DP 402852, Lot 3 of DP 218510, Lot H of DP 405846, Part of Lot 100 of DP 607789 and Part of Lot 2 of DP 701456. Refer to *Appendix I – Figures* and *Figure 1a* below for the location of the site.

The properties are currently subject to a wide range of land use scenarios including commercial/industrial applications such as construction material storage areas, public carparks and associated infrastructure and former commercial premises. At the time of the preliminary inspection, the properties located at 68, 70, 72 and 74 Macquarie Street and 71 George Street were observed to be vacant whereas the property located at 54A George Street was being used for site parking and storage of construction materials.



Figure 1a. Approximate boundary of the site (outlined in red) accessed from https://admin.nearmap.com on 04/07/2022.

2.2 Summary of Site Details

Table 1. Summary of Site Details and Information

Site Details	
Site Address	68, 70, 72, 74 Macquarie Street and 45A, 71 George Street, Parramatta NSW
Title Identification	Lot 1 of DP 711982, Lot E of DP 402852, Lot 3 of DP 218510, Lot H of DP 405846, Part of Lot 100 of DP 607789 and Part of Lot 2 of DP 701456.
Local Government Area (LGA)	Parramatta City Council
Current Land Use Zoning	B3 - Commercial Core
Subject Area	Approximately 0.696 ha
Current Site Owner(s) / Occupier(s)	Delta Group Pty Ltd
Former/Current Land Use	B3 - Commercial Core
Local Environmental Plan	Parramatta Local Environmental Plan 2011
Approximate Elevation	10 m Australian Height Datum (AHD)

3 Site History

The Site history has been compiled from information gathered from various sources including Delta, Lotsearch, Dial Before You Dig (DBYD), Safework NSW, NSW Government and Parramatta Council. Refer to *Appendix VIII – Lotsearch Report,* for the Lotsearch report compiled for the site.

3.1 Historical Photography

Historical aerial photographs were included in *Appendix VIII – Lotsearch Report*. An analysis of historical aerial photographs from the years 1930 to 2021 were examined and are summarised below in **Table 2**.

Table 2. Summary of Historical Aerial Photography for the Site.

Year	Type	Subject Site Description	Adjacent Site Description
1930	Black and White	The majority of the site is occupied by dense trees. Built structures exist in the north-western and south-eastern portions of the site.	The surrounding area is occupied by a mixture of commercial/ industrial premises and low-density residential dwellings.
1943	Black and White	Four residential dwellings have been constructed in the southern portion of the site. The backyard space of each of the dwellings comprised of the northern portion of Lot 100, DP607789.	No significant changes.
1951-1956	Black and White	No significant changes.	No significant changes.
1961	Black and White	The eastern and western areas of Lot 100, DP607789 have been levelled and are occupied by parked cars. No significant changes to the remainder of the site.	No significant changes.
1965	Black and White	Lot 100, DP607789 has been levelled and consists of vacant space.	No significant changes.

Year	Type	Subject Site Description	Adjacent Site Description
1970	Black and White	The residential dwellings occupying Lots' H/DP405846, 3/DP218510, 1/DP711982 and AY/DP400258 have been refurbished into a commercial/industrial premises. Lot 100, DP607789 has been resurfaced with hardstand and is being used as a large outdoor carpark.	Properties surrounding the site now consist predominantly of commercial/ industrial buildings. Road infrastructure surrounding the site has been resurfaced.
1978	Black and White	No significant changes.	No significant changes.
1982	Colour	A large, roofed carpark has been constructed at the northern portion of the site. No significant changes to the remainder of the site.	No significant changes.
1991	Colour	No significant changes.	The property immediately east of the site has been converted into an outdoor car park.
2000	Colour	No significant changes.	No significant changes.
2005	Colour	No significant changes.	All built structures within the property immediately east of the site have been demolished, and the area now appears vacant.
2011	Colour	No significant changes.	A commercial/industrial property has been developed immediately east of the site.
2016-2021	Colour	No significant changes.	No significant changes.

3.2 Heritage Items

A review of the Lotsearch Report (Lotsearch, 2021) identified over 300 heritage listings within a 1,000 m radius of the site under the Parramatta Local Environmental Plan (2011), refer to *Appendix VIII – Lotsearch Report.* ADE notes that the heritage items listed in **Table 3** below are located on-site or immediately adjacent to the site:

Table 3. Heritage Items located on or proximal to the site:

Name	Address	Type	Plan No.	Distance	Direction
Roxy Theatre/Cinema	65-69 George Street Parramatta	State Heritage Register - Curtilages	1762	1 m	North-east
Kia Ora (and potential archaeological site)	On-site	Environmental Planning Instrument – Heritage	-	0 m	On-site
Residence	On-site	Environmental Planning Instrument – Heritage	-	0 m	On-site

3.3 Contaminated Land Record Search

A review of the OEH *'Contaminated Land – Record of Notices'* listed by the NSW EPA under the *Contaminated Land Management Act 1997* (CLM) did not identify any notices within a 1 km radius of the site (refer to *Appendix VIII – Lotsearch Report*).

A review of the '*List of NSW Contaminated Sites Notified to the EPA*' listed by the NSW EPA under the *Contaminated Land Management Act 1997* (CLM) identified two sites notified to the NSW EPA within a 1 km radius of the site (refer to *Appendix VIII – Lotsearch Report*). Regulation under the *Contaminated Land Management Act 1997* is not required for each of the two sites.

3.4 Section 10.7 Certificate (Formerly Section 149)

The Site is currently zoned as B3 Commercial Core under the Parramatta Local Environmental Plan 2011. Planning certificates under Section 10.7 of the Environmental Planning and Assessment Act 1979 (NSW) *(*refer to *Appendix IX – Section 10.7 Certificate),* provides the state and local environmental planning instruments which affect the site.

Details of information on the site as contained in Clause 59(2) as amended in the CLM Act are listed below:

a) The land is not subject to a known contamination as per Section 10.7;
b) The land is not subject to a management order within the meaning of the Act;
c) The land is not subject to a voluntary management proposal within the meaning of the Act;
d) The land is not subject to an ongoing maintenance order; and
e) The land is not subject to a site audit statement within the meaning of the Act.

3.5 Dial Before you Dig

An online search for utilities located within the site was conducted and is summarised in **Table 4.** Asset owners were notified and provided information on their utilities (refer to *Appendix XII – Dial Before You Dig (DYBD)).*

Table 4. Summary of Utilities Located on or Adjacent to the Site.

Asset Owner	Utility Type	Utility Location
NBN	Fibre optic/Telecommunications/Power	One PVC conduit owned by NBN located in southern section of 70, 72 and 74 Macquarie Street.
Nextgen	Fibre optic/Telecommunications/Power	No services located within the site.
Optus	Fibre optic/Telecommunications/Power	One underground IOF cable identified running along the southern section of 70, 72 and 74 Macquarie Street and adjacent to Horwood Place.
Telstra	Fibre optic/Telecommunications/Power	PVC conduits identified in the southern section of 70 and 74 Macquarie Street and western portion of 71 Horwood Place. One main cable duct located in the southern section of 72 Macquarie Street
TPG	Fibre optic/Telecommunications/Power	No services located within the site.
Uecomm	Fibre optic/Telecommunications/Power	No services located within the site.
Verizon	Fibre optic/Telecommunications/Power	No services located within the site.

Asset Owner	Utility Type	Utility Location
Vocus	Fibre optic/Telecommunications/Power	No services located within the site.
Endeavour Energy	Electrical	Services located running along the northern portion of 70, 72 and 74 Macquarie Street and eastern section of 71 Horwood Place.
Nextgen	Electrical	Padamount substation, asbestos warnings and typical underbore sections identified along the eastern portion of 74 Macquarie Street, 71 Horwood Place and identified within Horwood Place. Typical underbore sections located along the southern section of 70 and 72 Macquarie Street.
AARNet	Fibre Optics	No services located within the site.
Jemena	Gas	Low pressure gas main located in the northern central portion of 71 Horwood Place.
Sydney Water	Water	Sewer main, sewer maintenance holes and sewer connection points located within Macquarie Lane and Horwood Place.

3.6 SafeWork NSW Hazardous Goods Search

A notification to SafeWork NSW for a site search of former and/or current storage of Schedule 11 hazardous chemicals was undertaken and submitted on the 14 November 2021. A response from SafeWork NSW was received on 06 December 2021 (refer to *Appendix XI*). A search of the records held by SafeWork NSW has not located any records of hazardous good at the site.

3.7 Groundwater Bore Search

A search for existing groundwater bores was conducted and outlined within the Lotsearch Report (Lotsearch, 2021) which identified 29 groundwater bores within a 2,000 m radius of the site. Only 1 groundwater bore (213004) was identified within a 500 m radius of the site. No known details are provided in Lotsearch (2021) regarding the intended use or data pertaining to borehole 213004, as shown in **Table 5**.

Table 5. Summary of Registered Groundwater Bores within a 2000 m radius of the site

GW No.	Authorised Purpose	Intended Purpose	Final Depth(m)	Drilled Depth(m)	SWL (m bgl)	Elevation (AHD)	Distance (m)	Direction
213004	Unknown	Unknown	Unknown	Unknown	Unknown	11.75	405	North West
GW108611	Domestic	Domestic	60.5	60.5	6.2	Unknown	629	North
GW110914	Monitoring Bore	Monitoring Bore	6	6	5	Unknown	888	North East
GW110913	Monitoring Bore	Monitoring Bore	10	10	7	Unknown	905	North East
GW110912	Monitoring Bore	Monitoring Bore	10	10	7	Unknown	922	North East
GW024667	Domestic	General Use	4.5	4.6	Unknown	Unknown	1025	East
GW110400	Monitoring Bore	Monitoring Bore	5.4	5.4	Unknown	Unknown	1371	South

Table 5 Continued

GW No.	Authorised Purpose	Intended Purpose	Final Depth(m)	Drilled Depth(m)	SWL (m bgl)	Elevation (AHD)	Distance (m)	Direction
GW110401	Monitoring Bore	Monitoring Bore	7	7	Unknown	Unknown	1383	South
GW110396	Monitoring Bore	Monitoring Bore	7	7	Unknown	Unknown	1403	South
GW110399	Monitoring Bore	Monitoring Bore	5.3	5.3	Unknown	Unknown	1438	South
GW110402	Monitoring Bore	Monitoring Bore	8	8	Unknown	Unknown	1452	South
GW114535	Monitoring Bore	Monitoring Bore	7	7	4.8	Unknown	1475	West
GW114536	Monitoring Bore	Monitoring Bore	6.5	6.5	Unknown	Unknown	1482	West
GW114534	Monitoring Bore	Monitoring Bore	6.9	6.9	5	Unknown	1499	West
GW110403	Monitoring Bore	Monitoring Bore	9	9	Unknown	Unknown	1508	South
GW110397	Monitoring Bore	Monitoring Bore	5	5	Unknown	Unknown	1529	South
GW110398	Monitoring Bore	Monitoring Bore	6	6	Unknown	Unknown	1547	South
GW110404	Monitoring Bore	Monitoring Bore	9	9	Unknown	Unknown	1563	South
GW114676	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1680	South
GW114677	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1680	South
GW114678	Monitoring Bore	Monitoring Bore	8.5	8.5	Unknown	Unknown	1687	South
GW114675	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1690	South
GW111324	Monitoring Bore	Monitoring Bore	8.1	8.1	Unknown	Unknown	1691	South
GW114679	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1691	South
GW114680	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1696	South
GW111323	Monitoring Bore	Monitoring Bore	4.1	4.1	Unknown	Unknown	1701	South
GW114681	Monitoring Bore	Monitoring Bore	7.5	7.5	Unknown	Unknown	1706	South
GW114682	Monitoring Bore	Monitoring Bore	8	8	Unknown	Unknown	1709	South
GW114683	Monitoring Bore	Monitoring Bore	3	3	Unknown	Unknown	1713	South
GW111322	Monitoring Bore	Monitoring Bore	3.6	3.6	Unknown	Unknown	1720	South
GW107978	Monitoring Bore	Monitoring Bore	6	6	3	Unknown	1755	South East

Table 5 Continued

GW No.	Authorised Purpose	Intended Purpose	Final Depth(m)	Drilled Depth(m)	SWL (m bgl)	Elevation (AHD)	Distance (m)	Direction
GW107979	Monitoring Bore	Monitoring Bore	6	6	3	Unknown	1759	South East
GW107983	Monitoring Bore	Monitoring Bore	6	6	3	Unknown	1763	South East
GW107981	Monitoring Bore	Monitoring Bore	6	6	3	Unknown	1764	South East
GW107980	Monitoring Bore	Monitoring Bore	6	Unknown	3	Unknown	1766	South East
GW107982	Monitoring Bore	Monitoring Bore	6	6	3	Unknown	1768	South East
GW062300	Industrial	Industrial	100	100	Unknown	Unknown	1862	North

Previous Investigation Reports
ADE has not been made aware of any previous investigation reports relating to the Site.

3.8 Assessment of Historical Information Integrity

The veracity of the information obtained as part of the site history is considered to be moderate to high. The site history assessment is generally considered to be of moderate to high integrity.

4 Conceptual Site Model

The NEPM (NEPC, 2013) identifies a Conceptual Site Model (CSM) as a representation of information regarding contamination sources, exposure pathways and the potential receptors. The essential elements of a CSM include:

- Known (and potential) contamination sources and contaminants of concern
- Impacted media (e.g., soil, groundwater, surface water, soil vapour etc.)
- Human/ecological receptors and
- Potential/complete exposure pathways.

The CSM developed for the site was based on the initial site walkover and soil analytical results reported in this investigation. This provided an understanding of the CoPC and their likely pathways. For the purposes of this report, the following qualitative risk assessment has been applied:

- Low Risk – the activities and related CoPC are likely to pose no or a low potential human health/environmental impact. Any impact is likely localised to a specific area of the Site;
- Moderate Risk – the activities and related CoPC are likely to pose potential for moderate human health/environmental impact. Any impact is likely localised to a specific area of the Site; and
- High Risk – the activities and related CoPC could pose a significant environmental impact. There is potential for impacts of the immediate local area of the site or off-site migration impacting surrounding human and/or environmental receptors.

The findings of the combined PSI/ DSI have been used to assess the potential for exposure to site personnel and associated impacts on the proposed construction and long-term future land use exposure scenarios at the site, as shown below.

4.1 Sources of Contamination and Contaminants of Potential Concern

The investigation identified the following contaminants in soils materials across the site:

- Bonded asbestos;
- Elevated concentrations of lead, nickel and mercury were encountered at several borehole locations across the site, and
- Presence of PASS/AASS across the site.

4.2 Model

Primary sources of contamination may include the following:

- Historical use of the site as a car park and commercial/ industrial land uses
- Historical importation of soil materials
- Historical/current surrounding land uses, and
- Poor construction and demolition practices of previous and current dwellings and structures on-site.

Receptors of the contamination include:

- Construction workers and intrusive site workers
- Members of the public
- Neighbouring residents, members of the public and businesses
- Future owners/users of the site, and
- Nearby Ecological Communities.

Potential exposure pathways to the receptors include:

- Exposure of construction workers and personnel on-site to contaminated site soils is possible. The risk is assessed as low due to the ability to manage the work site and implement appropriate controls, and
- Exposure of the public to contaminated soils is unlikely. The site is inaccessible to the public, and as such the risk is assessed to be low.

5 Site Condition and Surrounding Environment

5.1 Site Inspection Details

An experienced environmental consultant representing ADE undertook a site inspection on 17 November 2021 to complete a visual preliminary assessment of the site and provide contextual information on potential contamination issues, including the following:

- Surrounding land uses and potential contamination sources
- Presence of any hazardous or dangerous goods storage
- Presence of any underground storage tank/s (USTs) or above ground storage tank/s (ASTs) and/or associated fuel transfer systems i.e., fuel lines
- Condition of current structures, vegetation and soil
- Visible and/or olfactory evidence of contamination
- Presence of any industrial/commercial activities
- Evidence of former spill incidents/accidents
- Current ground conditions, vegetation type and cover, topography, elevation, direction of surface run-off and evidence of potential drainage lines
- Evidence of soil loss/deposition/erosion, stockpiled materials, and potentially contaminating infrastructure i.e., electrical substations
- Proximity to sensitive environmental areas/features/habitats including water bodies/courses
- Evidence of naturally occurring contaminants, and
- Assessment of the current site condition with its history.

5.2 Topography

Based on a review of available desktop information and on-site observation, the site slopes gently from north to the south, with an elevation of approximately 10 m Australian Height Datum (AHD) (refer to *Appendix VIII – Lotsearch Report*).

5.3 Surrounding Land Uses

Based on a desktop search of the site and visual observations made during the site inspection, the surrounding land uses which currently surround the site are as follows:

- **North:** Industrial and commercial properties immediately north of the site, followed by Parramatta River. Further north of Paramatta River are low-density residential properties
- **East:** Industrial and commercial properties immediately east of the site, followed by Arthur Phillip High School. Further east of the school is Robin Thomas Reserve followed by low-density residential properties
- **West:** Industrial and commercial properties immediately west of the site, followed by Parramatta High School with low-density residential properties found further west, and
- **South:** Industrial and commercial properties immediately south of the site, followed by Parramatta Road.

5.4 Surface Cover and Conditions

Prior to demolition activities, the site was primarily covered with asphalt and concrete hardstand which was noted to be in 'good condition', with minimal signs of significant deterioration, cracks or slumps. Following demolition activities, the surface cover was noted to be barren, atypical of recent site activities associated with Delta's scope of work.

5.5 Local Geology

The regional and local geology is outlined within the Sydney 1:100,000 Geological Map. The underlying geology of the site comprises Wianamatta Group – Ashfield Shale, consisting of laminite and dark grey siltstone and Bringelly Shale (refer to *Appendix VIII – Lotsearch Report).* The site is located within Blacktown (Bt) Soil Landscape as defined by the NSW Office of Environment and Heritage eSpade GIS tool. The specific depths of dominant soil materials are characterised by their location in relation to the local topography but generally consist of the following:

bt1–Friable brownish-black loam. This is a clayey loam with moderately pedal sub-angular blocky structure and rough-faced porous ped fabric. This material occurs as topsoil (A1 horizon). Peds are well defined sub-angular and range in size from 2–20 mm. Surface condition is friable. Colour is commonly brownish-black but can range from dark reddish-brown to dark yellowish-brown. The pH ranges from slightly acid (pH 5.5) to neutral (pH 7.0).

bt2–Hardsetting brown clay loam. This is a hard setting brown clayey loam to silty clay loam with apedal massive to weakly pedal structure and slowly porous earthy fabric. It commonly occurs as an A2 horizon. Peds when present are weakly developed, sub-angular blocky and are rough faced and porous. They range in size between 20–50 mm. Colour is commonly dark brown but can range from dark reddish-brown to dark brown. The pH ranges from moderately acid (pH 5.0) to slightly acid (pH 6.5). Platy ironstone gravel-sized shale fragments are common. Charcoal fragments and roots are rarely present.

bt3–Strongly pedal, mottled brown light clay. This is a brown, light to medium clay with strongly pedal polyhedral or subangular-blocky structure and smooth-faced dense ped fabric. This material usually occurs as subsoil (B horizon). Texture often increases with depth. Peds range in size from 5–20 mm. Colour is usually brown but may range from reddish-brown to brown. Red, yellow or grey mottles are commonly present and often become more numerous with depth. The pH ranges from strongly acid (pH 4.5) to slightly acid (pH 6.5). Fine to coarse gravel-sized shale fragments are common and widespread and often occur in stratified bands. Both roots and charcoal fragments are rare.

bt4–Light grey plastic mottled clay. This is plastic light grey silty clay to heavy clay with moderately pedal polyhedral to sub-angular blocky structure and smooth-faced dense ped fabric. This material usually occurs as deep subsoil above shale bedrock (B3 or C horizon). Peds range in size from 2–20 mm. Colour is usually light grey (10YR 7/1) or, less commonly, greyish yellow (2.5Y 6/2). Red, yellow or grey mottles are common. The pH ranges from strongly acid (pH 4.0) to moderately acid (pH 5.5). Strongly weathered ironstone concretions and rock fragments are common. Gravel-sized shale fragments and roots are occasionally present. Charcoal fragments are rare.

5.6 Hydrogeology and hydrology

Before the commencement of demolition activities, the site was sealed by a mixture of concrete hardstand and asphalt paved surfaces. Surface water is presumed to flow into drainage retention systems scattered throughout the site. Surface water run-off is expected to flow north overland toward Parramatta River.

Some water may percolate into the subsurface profile. Any perched groundwater (if present) would be typically localised within residual clay materials. Due to a low hydraulic gradient characteristic of clays, groundwater is expected to proceed relatively slowly with a northerly direction towards Parramatta River.

5.7 Current Site Condition / Site Observations

A summary of observations made during ADE's inspection is provided in **Table 6** and *Appendix II – Photographs.*

Table 6. Key Site Observations.

Item	Key Observations
Site Use	The site has been used for mixed industrial/commercial operations and also comprises of a covered multi-storey a car park.
Existing Buildings/Structures	• The site contains built structures that were observed during the site inspection. Information regarding the structures is summarised below: • 71 George Street Parramatta: Multi-storey car park. The car park was observed to be sealed with concrete hardstand in good condition. Delta personnel were currently using the car park for on-site parking and storage of construction materials; • 68, 70, 72, 74 Macquarie Street and 54A George Street: Single storey garages, sealed with concrete hardstand observed to be in good condition. Garages appeared to be vacant.
Sumps/Drains	Multiple surface water drains were noted to be scattered through the lots, predominantly within artificial drainage lines or along the boundary of the site.
Presence of stockpiled materials	No stockpiles were observed at the site.
Industrial Liquid Waste Disposal	No industrial liquid waste disposal facilities were observed at the site.
Domestic Waste Disposal	Domestic waste bins were observed at the site.
Existing Services	The site is serviced by power supply from on-wall power lines.
Vegetation Type, Cover and Condition	No vegetation was observed on the site.
Hazardous Building Materials	No hazardous building materials were observed on the site.
Fuel Storage Tanks (USTs/ASTs)	No USTs or ASTs were observed during the inspection.
Dangerous Goods	No dangerous goods were identified during the preliminary site inspection. A SafeWork NSW Hazardous Goods Search (Schedule 11) has been requested from SafeWork NSW and has not identified any records within the site boundaries (refer to *Appendix XI – Safework Hazardous Good Search).*

6 Sampling Plan, Methodology and Investigation Pattern

6.1 Pre-work Procedure

Before each mobilisation to site, a job-specific safety, health & environmental work method statement (SH&EWMS) was developed, presented in a pre-start meeting before the commencement of works and signed on to by ADE staff and contractors, as required.

During the DSI, an experienced environmental consultant undertook a detailed site walkover to identify potential sources of contamination or areas of notable concern. Upon completion, the proposed borehole locations were marked out across the site based on accessibility and observations noted during the walkover. Before the commencement of intrusive activities, each proposed borehole location was 'cleared' for underground services by a qualified service locator and following consultation and approval by a third-party heritage representative.

6.2 Sampling Design Plan Strategy and Rationale

The site investigation and soil sampling procedures were developed in consultation with the NSW EPA Sampling Design Guidelines (NSW EPA, 1995) sampling design guidelines and Victorian EPA Industrial Waste Resource Guidelines (VIC EPA, 2009). A systematic regime was designed to collect representative samples from across the site based on site observations, site limitations such as accessibility and pre-existing infrastructure.

As specified in Section 1 of this report, soil sampling works were undertaken in four separate mobilisations, with Delta's proposed borehole/sampling plan as follows (refer to *Appendix I – Figure 3* for the completed borehole locations):

- ME1 - BH1 to BH9, BH13 and BH16;
- ME2 - BH14, BH15 and BH17;
- ME3 - TP10, TP11 and TP12; and
- ME4 - TP18, 19 and 20.

Upon cessation of all site mobilisations, a total of 14 boreholes and six test pits were completed across the site using a systematic sampling pattern.

6.3 Soil Sampling Methodology

The soil sampling methodology varied dependent on the type of sampling completed and the restrictions on site accessibility. All sampling has been developed in consideration of the NSW EPA Sampling Design Guidelines (NSW EPA, 1995) and the Victorian EPA Industrial Waste Resource Guidelines (VIC EPA, 2009). The following summarises the individual methodology completed across all mobilisation events.

6.3.1 Mobilisation Events 1 and 2

From 17 to 19 November 2021 (ME 1), a total of 11 borehole locations were completed across the site (BH1 to BH9, BH13 and BH16). On the 25th of January 2022 (ME2), a further three additional boreholes (BH14, BH15 and BH17) were completed within previously inaccessible areas. The boreholes were advanced using a hand auger and a multi-purpose track-mounted drill rig. Drilling works comprised of push-tube drilling techniques.

Hand augers were utilised for sampling the upper soil profile extending from 0 - 1.0 m bgl. The multi-purpose track-mounted drill rig was used to collect samples extending from 1.0 – 3.0 m bgl. Soil samples were collected at various depths, representative of the soil strata. Fill samples were generally collected at the soil surface and/or directly beneath the hardstand, followed by every metre thereafter or if a change in lithology was encountered until the proposed target depth was reached.

A total of 46 primary soil samples and three delineation samples were collected across the course of the investigation (excluding QA/QC samples). An additional three soil samples from delineation boreholes were collected at BH08. All samples were submitted to NATA accredited laboratories for analysis as per the recommended holding times on a standard (5-day) turnaround time (refer to **Table 7** for the adopted sampling and analytical program).

6.3.2 Mobilisation Event 3 and 4

Follow-up intrusive investigations (ME3 and ME4) were undertaken on the 12 April 2022 and the 9 June 2022, in which the remaining six test pits were advanced within 54A George Street and 68 Macquarie Street, Macquarie NSW. The test pits were completed using an excavator provided to ADE by the client to maximum termination depth of 1.5 m BGL. Samples were collected from the soil surface followed by every metre thereafter until termination depth or a new lithology was encountered. All samples were collected directly from the centre of the excavator bucket as to minimise potential cross-contamination between samples.

A total of 18 primary soil samples were collected across course of ME3 and ME4 (excluding QA/QC samples). All samples were submitted to a NATA accredited laboratory for analysis as per the recommended holding times on a specific turnaround illustrated by the client (refer to **Table 7** for the adopted sampling and analytical program).

6.3.3 Sample Collection

All soil samples were collected using dedicated nitrile gloves and placed in laboratory prepared, suitable analyte containers involving sterile glass jars lined with Teflon lids for chemical analysis and small zip lock bags for asbestos analysis. Each sample collected for chemical analysis was placed within a pre-chilled esky or cooler box with ice packs or equivalent to maintain samples at approximately 4^0C. Asbestos samples were stored in polyethylene zip lock bags and stored within a large resin bag for storage. The original chain of custody (CoC) form was enclosed with the samples and dispatched to NATA accredited analytical laboratories.

6.3.4 Field PID Screening

Following collection of each sample, a PID with a 10.6 eV lamp, pre-calibrated with isobutylene gas at 100 ppm was used to screen the headspace gases of the collected samples to assess for the presence of volatile organic compounds (VOCs). The PID headspace screening was conducted using a resealable zip-lock plastic bag, and the soil sample was agitated as the PID reading was taken inside the zip-lock plastic bag (the bag was appropriately sealed when inserting the PID).

6.4 Equipment Decontamination

Dedicated disposable materials (such as nitrile gloves) were changed between each sampling point. All disposable sampling equipment/materials were collected and removed before leaving the site. All non-disposable sampling equipment were decontaminated by a three-stage decontamination process which included rinsing the piece of equipment with deionised water, followed by a rinse of a detergent (Liquinox) and a final rinse using deionised water.

6.5 Documentation

A field observation log was kept by sampling personnel during all phases of soil and groundwater sampling. Details recorded in the log included:

- Borehole sample number
- Soil profile notes
- Sampling method
- Sample identification
- Sample description, and
- Sample point measurements.

A comprehensive master sample register was maintained. As samples were received, they were given a unique sequential number from the sample register into which details from the labels were entered. Before packing and dispatch of samples for analysis, a CoC form was completed (refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation*). This form recorded details of the individual samples being dispatched and the type of analysis required for each sample.

6.6 Laboratory Submission

The following outlines the NATA accredited laboratories used for analytical testing:

- Sydney Laboratory Services (SLS), Silverwater NSW - NATA Accreditation No. 14664
- Eurofins, Lane Cove West NSW - NATA Accreditation No. 1261, and
- Envirolab Services, Chatswood NSW - NATA Accreditation No. 2901.

Table 7 outlines the sampling and analytical program for analysis of soil and QAQC samples collected across the course of the investigation. Refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation* for the analytical methods used by the respective laboratories.

Table 7. Sampling and Analytical Program.

Sample I.D.	Depth (m BGL)	Matrix	Date	Sample Type	Analysis										
					Standard Suite[1]	pH/pH FOX	Asbestos (Presence/Absence)	CRS	VOCs/SVOCs[2]	Phenols[2]	BTEX Only	TCLP - Heavy Metals (Pb)[3]	TCLP - Heavy Metals (Ni)[3]	TCLP – Heavy Metals (Hg)[3]	PID Field Screening
Mobilisation Event 1 and 2															
BH01_0.5	0.5	Soil	17/11/21	Primary	X	X	X						X		X
BH01_1.0	1.0	Soil	17/11/21	Primary	X	X	X	x				X			X
BH1_1.8	1.8	Soil	18/11/21	Primary	X	X	X								X
BH02_0.5	0.5	Soil	17/11/21	Primary	X	X	X		X	X					X
BH02_1.0	1.0	Soil	17/11/21	Primary	X	X	X		X	X					X
BH02_1.8	1.8	Soil	18/11/21	Primary	X	X	X		X	X		X			X
BH03_0.5	0.5	Soil	17/11/21	Primary	X	X	X	x							X
BH03_1.0	1.0	Soil	17/11/21	Primary	X	X	X								X
BH03_2.0	2.0	Soil	18/11/21	Primary	X	X	X								X
BH03_3.0	3.0	Soil	18/11/21	Primary	X	X	X								X
BH04_0.5	0.5	Soil	17/11/21	Primary	X	X	X								X
BH04_1.0	1.0	Soil	17/11/21	Primary	X	X	X						X		X
BH04_2.0	2.0	Soil	18/11/21	Primary	X	X	X	X							X
BH04_3.0	3.0	Soil	17/11/21	Primary	X	X	X								X
BH05_0.2	0.2	Soil	17/11/21	Primary	X	X	X	x				X			X
BH05_0.5	0.5	Soil	17/11/21	Primary	X	X	X						X		X
BH05_1.0	1.0	Soil	17/11/21	Primary	X	X	X					X			X
BH06_0.5	0.5	Soil	17/11/21	Primary	X	X	X	X	X	X					X
BH06_1.0	1.0	Soil	17/11/21	Primary	X	X	X		X	X					X
BH06_1.8	1.8	Soil	18/11/21	Primary	X	X	X	X	X	X					X
BH07_0.5	0.5	Soil	17/11/21	Primary	X	X	X								X
BH07_1.0	1.0	Soil	17/11/21	Primary	X	X	X	x							X
BH07_1.8	1.8	Soil	18/11/21	Primary	X	X	X								X
BH08_0.5	0.5	Soil	17/11/21	Primary	X	X	X		X	X		X			X
BH08_1.0	1.0	Soil	17/11/21	Primary	X	X	X		X	X					X
BH08.FC1_1.0	1.0	Fibre Cement	17/11/21	Bulk			X								
BH08_1.8	1.8	Soil	18/11/21	Primary	X	X	X	x	X	X					X
BH08_DEL1_1.0	1.0	Soil	19/11/21	Primary			X								
BH08_DEL2_1.0	1.0	Soil	19/11/21	Primary			X								
BH08_DEL3_1.0	1.0	Soil	19/11/21	Primary			X								
BH09_0.5	0.5	Soil	17/11/21	Primary	X	X	X						X		X
BH09_1.0	1.0	Soil	17/11/21	Primary	X	X	X						X		X
BH09_2.0	2.0	Soil	18/11/21	Primary	X	X	X								X
BH09_3.0	3.0	Soil	18/11/21	Primary	X	X	X	x							X
BH13_0.5	0.5	Soil	19/11/21	Primary	X	X	X								X
BH13_1.0	1.0	Soil	19/11/21	Primary	X	X	X								X
BH13_1.8	1.8	Soil	19/11/21	Primary	X	X	X	x							X
BH14_0.5	0.5	Soil	25/01/2022	Primary	X	X	X					x		x	X
BH14_1.0	1.0	Soil	25/01/2022	Primary	X	X	X								X
BH14_2.0	2.0	Soil	25/01/2022	Primary	X	X	X								X
BH15_0.5	0.5	Soil	25/01/2022	Primary	X	X	X								X
BH15_1.0	1.0	Soil	25/01/2022	Primary	X	X	X					x			X
BH15_2.0	2.0	Soil	25/01/2022	Primary	X	X	X								X
BH15_3.0	3.0	Soil	25/01/2022	Primary	X	X	X	X							X
BH16_0.5	0.5	Soil	19/11/21	Primary	X	X	X		X	X		X			X

Sample I.D.	Depth (m BGL)	Matrix	Date	Sample Type	Analysis										
					Standard Suite[1]	pH/pH FOX	Asbestos (Presence/Absence)	CRS	VOCs/SVOCs[2]	Phenols[2]	BTEX Only	TCLP - Heavy Metals (Pb)[3]	TCLP - Heavy Metals (Ni)[3]	TCLP – Heavy Metals (Hg)[3]	PID Field Screening
BH16_1.0	1.0	Soil	19/11/21	Primary	X	X	X		X	X					X
BH16_1.8	1.8	Soil	19/11/21	Primary	X	X	X	x	X	X					X
BH17_0.5	0.5	Soil	25/01/2022	Primary	X	X	X					x			X
BH17_1.0	1.0	Soil	25/01/2022	Primary	X	X	X					x			X
BH17_1.8	1.8	Soil	25/01/2022	Primary	X	X	X								X
QAQC Samples - ME1 and ME2															
BR1	1.0	Soil	17/11/21	Field Duplicate	X							X			
BR2	0.5	Soil	17/11/21	Field Duplicate	X										
BR3	1.8	Soil	19/11/21	Field Duplicate	X										
SR1	1.0	Soil	17/11/21	Inter-lab Duplicate	X										
SR2	1.8	Soil	18/11/21	Inter-lab Duplicate	X										
SR3	1.8	Soil	19/11/21	Inter-lab Duplicate	X										
TB1	-	Water	17/11/21	Trip Blank							X				
TS1	-	Water	17/11/21	Trip Spike							X				
TB2	-	Water	18/11/21	Trip Blank							X				
TS2	-	Water	18/11/21	Trip Spike							X				
TB3	-	Water	19/11/21	Trip Blank							X				
TS3	-	Water	19/11/21	Trip Spike							X				
RINSATE1	-	Water	17/11/21	Rinsate	X										
RINSATE2	-	Water	25/01/2022	Rinsate	X										
Mobilsation Event 3 and 4															
TP10_0.0-0.1	0.0-0.1	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP10_0.5	0.5	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP10_1.0	1.0	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP10_1.5	1.5	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP11_0.0-0.1	0.0-0.1	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP11_0.5	0.5	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP11_1.0	1.0	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP11_1.5	1.5	Soil	09/06/2022	Primary	X	X	X		X	X					X
TP12_0.0-0.01	0.0-0.1	Soil	12/04/2022	Primary	X	X	X		X	X					X
TP12_0.5	0.5	Soil	12/04/2022	Primary	X	X	X		X	X					X
TP12_1.0	1.0	Soil	12/04/2022	Primary	X	X	X		X	X					X
TP12_1.8	1.8	Soil	12/04/2022	Primary	X	X	X	X	X	X					X
TP18-0.2	0.2	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP18-0.8	0.8	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP19-0.2	0.2	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP19-0.8	0.8	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP20-0.2	0.2	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP20-0.8	0.8	Soil	11/03/2022	Primary	X	X	X		X	X					X
TP20-FC1	-	Fibre cement	11/03/2022	Bulk			X								

Sample I.D.	Depth (m BGL)	Matrix	Date	Sample Type	Analysis										
					Standard Suite[1]	pH/pH FOX	Asbestos (Presence/Absence)	CRS	VOCs/SVOCs[2]	Phenols[2]	BTEX Only	TCLP - Heavy Metals (Pb)[3]	TCLP - Heavy Metals (Ni)[3]	TCLP – Heavy Metals (Hg)[3]	PID Field Screening
QAQC Samples – ME3 and ME4															
BR1	-	Soil	09/06/2022	Field Duplicate	X				X						
SR1	-	Soil	09/06/2022	Inter-lab Duplicate	X										
TB	-	Water	09/06/2022	Trip Blank							X				
TS		Water	09/06/2022	Trip Spike							X				
BR1	-	Soil	12/04/2022	Field Duplicate	X				X						
SR1	-	Soil	12/04/2022	Inter-lab Duplicate	X										
TB	-	Water	12/04/2022	Trip Blank							X				
TS	-	Water	12/04/2022	Trip Spike							X				
TP18-BR	-	Soil	11/03/2022	Field Duplicate	X				X						
SR	-	Soil	11/03/2022	Inter-lab Duplicate	X										
TB1	-	Water	11/03/2022	Trip Blank							X				
TS1	-	Water	11/03/2022	Trip Spike							X				

Notes To Table 7

1 - Standard suite includes; heavy metals (M8), TRHs, BTEX, PAHs, OCPs/OPPs and PCBs.

2 – Based on ADE's desktop review (associated with the historical land use of the site) as specified in Section 3, a limited analysis of Phenols, SVOCs and VOCs was included within this investigation.

3 – TCLP analysis was undertaken on samples that exceeded CT1 criteria for the preliminary waste classification (in accordance with NSW EPA, 2014 guidelines).

7 Site Assessment Criteria

7.1 Soil Assessment Criteria

The soil assessment criteria specified in the following publications were employed for this PSI/DSI:

- Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background Ranges (ANZECC, 1992)
- Assessment of Site Contamination, National Environment Protection (Assessment of Site Contamination) Measure [NEPM], 2013 (NEPC, 2013)
- D.A Berkman. (1989) Field Geologist's Manual (D.A. Berkman, 1989)
- Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater. Part 1: Technical Development Document, CRC CARE Technical Report No. 10, CRC for Contamination Assessment and Remediation of the Environment, 2011 (CRC CARE, 2011)
- New South Wales Environmental Protection Authority [NSW EPA]. (2014). Waste Classification Guidelines - Part 1: Classifying Waste (NSW EPA, 2014)

7.1.1 Health Investigation Levels (HILs)

The NEPM (2013) guidelines describes four broad land-use settings to assess potential human health risks for a broad range of metals and organic substances. These four HIL categories are used to assess human health risk via all relevant pathways of exposure for the following broad land use categories:

- HIL-A - Residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake, no poultry, also includes children's day-care centres, preschools and primary schools)
- HIL-B - Residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high-rise buildings and flats
- HIL-C - Public open space such as parks, playgrounds, playing fields (e.g., ovals), secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves), which should be subject to a Site-specific assessment where appropriate, and
- HIL-D - Commercial/industrial such as shops, offices, factories and industrial sites.

Based on the available information, which includes the current land use as commercial/industrial land, the HIL-D criterion has been adopted for screening purposes. A summary of the applicable HILs for soil is presented within **Table 10.**

7.1.2 Health Screening Levels (HSLs)

The Health Screening Levels (HSLs) for selected petroleum compounds and fractions applicable to this investigation refer to human health risks via vapour intrusion, inhalation and direct contact pathways. The HSLs depend on specific soil physicochemical properties, land use scenarios and the characteristics of the proposed building structures. The most conservative HSL for medium-density residential and commercial/industrial tier 1 screening criteria has been adopted for hydrocarbon vapour intrusion. The adopted HSLs from Table 1A (3) of Schedule B1 of the NEPM (2013) guideline are summarised in **Table 10.**

7.1.3 Ecological investigation levels and Ecological Screening Levels (EILs/ESLs)

Due to the uncertainty surrounding the final design plans which include the location or number of landscaping areas or setbacks, an ecological risk assessment has not been included within the scope of the proposed development being undertaken by the client. As such, ADE does not consider EIL/ESLs relevant for this investigation.

7.1.4 Management Limits

'Petroleum hydrocarbon management limits' ('management limits') are a set of assessment criteria outlined in NEPM 2013 applicable to petroleum hydrocarbon compounds which aim to avoid or minimise the potential effects of:

- Formation of observable light non-aqueous phase liquids (LNAPL)
- Fire and explosive hazards, and
- Effects on buried infrastructure, e.g., penetration of, or damage to, in-ground services by hydrocarbons.

The adopted Management Limits from Table 1B (7), Schedule B1 of NEPM (2013) are shown in **Table 10.**

7.1.5 Asbestos

For the purpose of this investigation, ADE has adopted a presence/absence screening for assessment of asbestos materials with analysis of soils per clause(s) 8.2.3 or 8.2.4 of the Australian Standard, Method for the qualitative identification of asbestos in bulk samples, Standards Australia (AS4964-2004).

Upon cessation of the proposed development, all fill materials within the lateral and vertical limits of this report will be removed, disposed of at a licenced receiving facility and replaced with suitable engineered materials. As such, ADE did not consider that a gravimetric asbestos assessment as prescribed within the NEPM (NEPC, 2013) was warranted for the purposes of this investigation.

Should any soil materials be beneficially re-used within the site boundaries or excavation activities proceed below the prescribed vertical investigation limits, a gravimetric asbestos assessment as prescribed within the NEPM (NEPC, 2013) and the WA DOH, 2009 will be required to validate that the site is suitable for the prescribed land-use in relation to asbestos.

7.1.6 Acid Sulfate Soils Assessment Criteria

A review of the *Parramatta/Prospect Acid Sulfate Soil Map* (Department of Land and Water Conservation, 1997) was undertaken to determine the potential for Acid Sulfate Soil (ASS) at the Site. The source Site was identified as Class B regarding Acid Sulfate Soils, which is defined by a low probability (6-70%). As such, initial screening of pH and pH following oxidation (pH/pH_{OX}) was undertaken with select samples submitted for reducible sulfur (S_{CR}) analysis, based on the results of the initial pH/pH_{OX} screening.

Initial pH/pH_{FOX} screening was used to determine if initial pH values were indicative of high acidity (pH <5.5), or if following oxidation, the soil material become highly acidic (pH <4.5) with pH declines of >1 being noted as potentially indicative. To assess the potential risk of ASS, ADE has adopted the most conservative criteria outlined in the ASSMAC, with the criteria outlined in **Table 8**.

Table 8. Screening and Site Assessment Criteria – ASS.

Type of Material	Action Criteria > 1000 tonnes disturbed	
	Sulfur Trail (% S)	Acid Trail (mol H^+/tonne)
Fine, medium and coarse texture	0.03	18

7.1.7 Waste Classification Guidelines - Part 1: Classifying Waste (NSW EPA, 2014)

To provide a waste classification assessment for the in-situ soil materials within the site, ADE has compared the analytical data collected during the investigation against the NSW EPA Waste Classification Guidelines - Part 1: Classifying Waste (*NSW EPA, 2014*).

To classify the fill materials across the site, ADE adopted the contaminant threshold (CT), specific contaminant concentration (SCC) and toxicity leaching procedure (TCLP) criteria assigned to General Solid Waste (CT1/SCC1/TCLP1) and Restricted Solid Waste (CT2/SCC2/TCLP2). A summary of the adopted waste classification criteria is provided in **Table 9.**

Table 9. Site Assessment Criteria - Waste Classification of Soil Materials.

Analytes	Maximum Values of Total Concentration Assigned for General Solid Waste CT1/CT2 (mg/kg)	Maximum Values of Total Concentration Assigned for General Solid Waste TCLP1 (mg/L) / SCC1 (mg/kg)	Maximum Values of Total Concentration Assigned for General Solid Waste TCLP2 (mg/L) / SCC2 (mg/kg)
PAHs			
Total PAHs	200/800	NA/200	NA/800
Benzo(a)pyrene	0.8/3.2	0.04/10	0.16/23
OCPs			
Endosulfan[1]	60/240	3/108	12/432
OPPs			
Chlorpyrifos	4/16	0.2/7.5	0.8/30
TRH			
C_6 –C_9 Petroleum Hydrocarbons	650/2,600	NA/650	NA/2600
C_{10} –C_{36} Petroleum Hydrocarbons	10,000/40,000	NA/10,000	NA/40,000
PCB			
Total PCB	<50/<50	NA	NA
BTEX			
Benzene	10/40	0.5/18	2/72
Toluene	288/1,152	14.4/518	57.6/2073
Ethylbenzene	600/2,400	30/1,080	120/4320
Xylenes (Total)	1,000/4,000	50/1,800	200/7200
Metals			
Arsenic	100/400	5.0/500	20/2000
Cadmium	20/80	1.0/100	4/400
Chromium[2]	100/400	5/1,900	20/7600
Copper	NA	NA	NA
Lead	100/400	5.0/1,500	20/6000
Mercury	4.0/16	0.2/50	0.8/200
Nickel	40/160	2.0/1,050	8/4200
Zinc	NA	NA	NA

Notes to Table 9

1- Endosulfan (CAS Registry Number 115-29-7) means the total of Endosulfan I (CAS Registry Number 959-98-8), Endosulfan II (CAS Registry Number 891-86-1) and Endosulfan sulfate (CAS Registry Number 1031-07-8).

2- Chromium (Total).

*ND. Not detected/below Practical Quantitation Limit (PQL); NA – Not Applicable

7.1.8 Aesthetics

NEPM 2013 requires that the aesthetic quality of accessible soils be considered even if analytical testing demonstrates that concentrations of COPCs are within the Site assessment criteria (SAC). It should be noted that there are no quantifiable guidelines in determining if soils are appropriately aesthetic.
However, the NEPM 2013 does indicate that professional judgement concerning the quantity, type and distribution of foreign materials and odours concerning the specific land use should be employed.

The following scenarios (including but not limited to the following) would trigger further aesthetic assessment:

- Hydrocarbon sheen on surface water
- Anthropogenic soil staining, and
- Odorous soils, i.e., petroleum hydrocarbon odours or hydrogen sulfide in soil.

7.1.9 Statistical Assessment

Analytical results from the soil sampling program are statistically analysed to determine their applicability to the assessment and recommendation of remedial actions in the event of Site assessment criteria exceedances.

A contaminant concentration in soil will be deemed a non-exceedance if:

- The maximum concentration of all samples meets the specified acceptance criteria; or
- The 95% Upper Control Limit (UCL) is below the acceptance criteria with the following criteria:
  - The standard deviation of the results should be less than 50% of the relevant investigation or screening level; and
  - No individual exceedance should exceed 250% of the relevant investigation or screening level.

If the 95% UCL of the arithmetic mean of a contaminant concentration is above the acceptance criteria, then the soil will be classified as contaminated and will require further assessment, remediation, removal or management. If the 95% UCL of the arithmetic average concentrations is below the acceptance criteria, and no concentrations are at a hotspot level, slight elevations above the acceptance criteria may be considered to pose insignificant human health or environmental risk. The location will hence be considered a non-exceedance requiring no further assessment, remediation, removal or management. The statistical analysis for the assessment of ACM is not considered appropriate.

7.2 Groundwater Assessment Criteria

ADE's scope of works included a shallow intrusive assessment, since only soils up to 3.0 m (maximum depth of Delta's proposed demolition works) were required for assessment. ADE notes that no groundwater was encountered up to 3.0 m BGL. Additionally, no nearby water receptors and drinking water boreholes were observed. As such, no groundwater assessment was undertaken as part of this investigation.

Table 10. Site Assessment Criteria for soil contamination, mg/kg.

Analyte	Health Investigation Levels (HILs)[1]	Health Screening Levels (HSLs)[3]			Management Limits
	Commercial / Industrial (HIL- D) (mg/kg)	Vapour Intrusion – HSL-D (mg/kg)	Intrusive Maintenance Worker (Shallow Trench) for Vapour and Direct Contact, 0m to <2m[4] (mg/kg)	Direct Contact – HSL-D (mg/kg)	Commercial / Industrial (mg/kg)
Arsenic (total)	3,000	-	-	-	-
Cadmium	900	-	-	-	-
Chromium (Total)	3,600	-	-	-	-
Copper	240,000	-	-	-	-
Lead	1,500	-	-	-	-
Mercury (inorganic)	730	-	-	-	-
Nickel	6,000	-	-	-	-
Zinc	400,000	-	-	-	-
Polycyclic aromatic hydrocarbons (PAHs)	4,000	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-
Carcinogenic PAHs (as BaP TEQ)[2]	40	-	-	-	-
DDT+DDE+DDD	3,600	-	-	-	-
Aldrin and Dieldrin	45	-	-	-	-
Chlordane	530	-	-	-	-
Endosulfan	2,000	-	-	-	-
Endrin	100	-	-	-	-
Heptachlor	50	-	-	-	-
Methoxychlor	2,500	-	-	-	-
Chlorpyrifos	2,000	-	-	-	-
PCBs (Total)	7	-	-	-	-
Phenols (Total)		-	-	-	-
VOCs		-	-	-	-
Benzene		4	1,100	430	-
Toluene	-	-	120,000	99,000	-
Ethyl Benzene	-	-	85,000	27,000	-
Xylene	-	-	130,000	81,000	-
Naphthalene	-	-	29,000	11,000	-
TRH: $C_6 – C_{10}$ (F1)[5]	-	310	82,000	26,000	800[11]
TRH: C_{10}-C_{16} (F2)	-	-	62,000	20,000	1,000[11]
TRH: C_{16}- C_{34} (F3)	-	-	85,000	27,000	5,000
TRH: $C_{34} – C_{40}$ (F4)	-	-	120,000	38,000	10,000

Notes to Table 10

1- Human exposure settings based on land use have been established for HILs (see Taylor and Langley 1998).
2- Carcinogenic PAHs: HIL is based on the 8 carcinogenic PAHs and their Toxic Equivalency Factor (TEFs) (potency relative to B(a)P). The B(a)P TEQ (Toxic Equivalency Quantity) is calculated by multiplying the concentration of each carcinogenic PAH in the sample by its B(a)P TEF.
3- Health Screening Levels (HSL) for surface soils 0 m to <1 m where applicable.
4- Most conservative criteria adopted outlined for vapour risk and direct contact.
5- To obtain F1, subtract the sum of BTEX from the C_6-C_{10} fraction.
6- Calculated as per the Assessment of Site Contamination, National Environment Protection (Assessment of Site Contamination) Measure (1999), 2013 Amendment.
7- Laboratory detection limit adopted for screening purpose.
8- Values for fine-grained soil texture adopted for conservative purposes.
9- Generic ESLs for TPH fractions, F1-F4, BTEX and benzo(a)pyrene.
10- Generic ESL values.
11- Separate management limits for BTEX and naphthalene are not available hence these should not be subtracted from the relevant fractions to obtain F1 and F2.

8 Results and Discussion

8.1 Field Observations

Across all mobilisation events the site has undergone significant changes which are attributed to the conversion of the former sites into a new Sydney Metro Railway Station. During the first two mobilisation events, the majority of the site had yet to be subject to large scale demolition activities and thus the former infrastructure remained largely intact. Since then, the site has been subject to strategically targeted demolition activities in which upon completion allowed for access within previously inaccessible areas.

The following field observations provide a summary as to the atypical site conditions encountered across the course of all mobilisation events.

8.1.1 Site Soil and Sub-soil Geology

The typical soil stratigraphy encountered during the field investigation is detailed in **Table 11** (refer to *Appendix II – Photographs* and *Appendix VI – Borehole Logs*). The upper soil profile on-site is inconsistent with the regional soil landscape, likely due to the historical use of uncontrolled fill.

Table 11. Encountered sub-surface lithology.

Layer	Material Description	Depth of the Layer (m BGL)
Hardstand	Concrete Slab / Asphalt	0.0 to 0.2 m (Prior to demolition)
Fill	Sandy GRAVEL/ Gravelly CLAY / CLAY / Silty CLAY / Silty SAND / Sandy CLAY	Directly beneath the hardstand and/or soil surface to a maximum depth of 3.0 m bgl or termination depth.

8.1.2 PID Field Screening

Each soil sample was screened for the presence of VOCs using a PID. The PID readings reported concentrations ranging from 0.0 ppm to 4.8 ppm. As the maximum recorded concentration was below the actionable criteria (15-20ppm), a total of 33 samples were submitted for VOC analysis and 30 samples were submitted for standard phenol analysis . All analysed samples returned concentrations below the adopted laboratory PQL (refer to *Appendix IV – Analytical Results Table).*

8.2 Summary of Soil Analytical Results

Based on the analytical results collected from soil samples analysed across the site, the sample collected from TP20 at 0.2m BGL returned concentrations of lead above that of the prescribed land-use criteria. Following statistical analysis treatment, the 95% UCL concentration returned a value of 535.1 mg/kg, which is below the land-use criteria. All remaining samples exhibited concentrations below that of the prescribed land-use criteria (HIL/HSL-D) (refer to *Appendix IV – Analytical Results Tables* for individual sample results). The following sub-sections provide a brief discussion for each key analyte group.

8.2.1 Heavy Metals

Of the 64 primary samples which were analysed (excluding delineation and QAQC samples), 63 samples demonstrated concentrations of heavy metals below the tier 1 screening levels for HIL/HSL-D as outlined within the NEPM (*NEPC, 2013*). One sample collected from TP20-0.2 returned concentrations of lead (1880.8 mg/kg) above the prescribed land-use criteria (1,500 mg/kg). Following statistical analysis of all samples collected from the top 0.5 metre sub-surface lithology which exhibited a consistent soil matrix, the 95% UCL returned concentration returned a value of 535.1, which is below the land-use criteria for commercial/industrial land use (HIL/HSL-D).

Other heavy metals such as lead, nickel, zinc and mercury returned concentrations which were slightly elevated within specific areas across the site, however, were typically confined to the fill profile. For example, the maximum lead, nickel, zinc and mercury concentrations reported were in BH16_0.5 (Pb 924.5 mg/kg and Zn 1114 mg/kg), BH01_0.5 (Ni 132.1 mg/kg) and BH14_0.5 (Hg 14.09 mg/kg). The elevated lead, nickel, zinc and mercury concentrations may be attributed to the historical importation of uncontrolled fill into the site and/ or the historical use of the site as a car park (commercial/ industrial land use).

8.2.2 Organics (BTEXN, TPHs, PAHs, OCP/OPPs, PCBs, VOCs and Phenols)

All samples demonstrated concentrations of organic analytes below the laboratory PQL with the exception of some minor detections of PAHs within BH05_0.2, BH08_0.5, BH13_0.5, BH14_0.5, BH15_1.0, BH16_0.5 and BH17_1.0. The maximum total concentration for the sum of PAHS was 1.53 mg/kg in BH05_0.2. All detections were noted to be below that of the adopted HSL, vapour intrusion and direct-contact screening criteria (NEPM 2013, CRC Care 2011).

8.2.3 Asbestos

A total of 64 soil samples and two suspected fibre cement samples (BH08.FC1_1.0 and TP20-FC1) were collected throughout the course of the investigation and analysed as per AS4964-2004. Chrysotile asbestos was detected within the one fibre cement sample that was analysed (BH08.FC1_1.0) and both chrysotile and crocidolite asbestos was detected within the fibre cement sample collected from TP20 (refer to *Appendix IV – Analytical Results Tables and Appendix VII – Analytical Reports and Chain of Custody Documentation*).

Three delineation boreholes (BH8_DEL1_1.0, BH8_DEL2_1.0 and BH8_DEL3_1.0) were completed around BH08.FC1_1.0 to limit the footprint of asbestos on-site (refer to *Appendix I – Figure 3*). All delineation test pits did not report any asbestos within the samples submitted. As such, the asbestos contamination is considered to be constrained within the vicinity of delineation test pits BH8_DEL1_1.0, BH8_DEL2_1.0 and BH8_DEL3_1.0 (refer to *Appendix I – Figures*).

At the time of writing this report, no asbestos delineation activities have been undertaken within the proximity of TP20 and thus all fill soil materials within the top 0.3 m sub-surface fill profile within the switching station excavation footprint, is considered to be pre-classified as *'Special Waste – Asbestos'* under Step 1 of the NSW EPA 2014, should the soils warrant off-site disposal. No asbestos has been identified within any of the representative 65g soil samples analysed collected across the course of the investigation (AS4964-2004).

Should the client intend to beneficially re-use the fill materials, an additional asbestos quantification assessment will need to be undertaken to determine the suitability of the fill with regards to asbestos. If the soil materials within the site located at within the switching station excavation footprint are intended to be beneficially re-used within the site boundaries or remain in-situ, a gravimetric asbestos assessment is required to validate that the asbestos concentrations are below the prescribed land-use (HIL/HSL-D). All asbestos quantification assessment must conform with the Western Australian Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia (WA DOH, 2009) and the NEPM (NEPC,2013).

8.2.4 Acid Sulfate Soils

Based on the initial screening of pH and pH_{ox} field screening a total of 13 samples were submitted for confirmatory chromium reducible sulfur (S_{CR}) analysis to validate the presence of PASS or AASS under the Acid Sulfate Soils Assessment Guidelines (ASSMAC, 1998).

Of the 13 samples analysed, the samples collected from BH06 at 1.8 m BGL and TP12 at 1.8 m BGL, reported a sulfur and acid trail above that of the adopted ASSMAC trigger criteria. Considering chromium reducible sulfur content (%w/w) and the titratable actual acidity (%S), the acid sulfate soils present on-site are considered to be AASS due to the net acidity (%S) and titratable actual acidity (%S) exhibiting a close causal relationship. The maximum liming rate recorded across the investigation was determined to be 4 kg $CaCO_3$/t .

Due to the confirmed presence of AASS within specific locations across the site, all acid sulfate soils must be managed under the acid sulfate soils management plan, with liming of impacted soils undertaken followed by PASS validation to ensure that neutralisation of the acidic conditions has occurred.

8.3 Soil Chemical Characterisation – Waste Classification

At the cessation of the investigation, the in-situ soils materials across the site were typically characterised into distinct waste classification areas (WCA's) based on both chemical and asbestos results supported with ongoing supervision made by an occupational hygienist during excavation activities. The following summarises the various WCA's implemented across the site.

8.3.1 Encountered Waste Matrix

Across the course of the investigation, the in-situ soil materials typically consisted of the following:

- FILL: Sandy GRAVEL: poorly sorted, dark grey and black;
- FILL: Silty SAND: coarse grained, dark brown with trace angular cobbles and angular gravels;
- FILL: Clayey SAND: fine grained, brownish orange, with trace sub-angular gravels, dense, dry;
- FILL: Gravelly SILT: poorly graded, dark grey, with large angular gravels and cobbles;
- FILL: Silty CLAY: medium plasticity, red and brown;
- FILL: CLAY: high plasticity, light brown, dark brown and dark red with grey mottling, trace/with angular gravels/cobbles; and
- FILL: Sandy CLAY: low plasticity, reddish brown and light grey with red mottling, with trace angular gravels and shale fragments, firm, dry.

Foreign materials including but not limited to ACM, bricks, concrete, tiles, plastic, metal, glass and asphalt where typically observed within the fill matrix encountered across the site. No hydrocarbon odours/staining, paint chips were typically observed within the in-situ soil matrix encountered.

8.3.2 Summary of Previous Waste Analysis and Classification Reports.

Table 12 represents a summary of previous waste analysis and classification reports undertaken across the site (excluding 45A George Street, Parramatta). Upon review of the previous reports, all waste classifications are considered complaint with the NSW EPA Waste Classification Guidelines Part 1: Classifying Waste (NSW EPA, 2014a) and Part 4: Acid sulfate soils (NSW EPA, 2014b), relevant legislative framework and industrial best practice requirements.

Table 12. Summary of Waste Analysis and Classification Assessments completed across the site.

Report Reference	Lot Number	WCA	Approximate Area/Waste Volume[2,3]	Waste Classification
21.1587.WAC4.v2f	• Lot E of DP 402952 • Lot 3 of DP218510 • Lot H of DP405846 • Part of Lot 100 of DP607789	WCA1	5,779m^2 to 1.8 m BGL / 10,042.2 m^3	General Solid Waste (non-putrescible)
		WCA2	4.5 m^2 to 1.0 m GBL/ 4.5 m^3	Special Waste – Asbestos (as General Solid Waste)
		WCA3	1,336 m^2 to 1.8 m BGL / 1,068.80m^3	Acid Sulfate Soils (as General Solid Waste) – pending treatment and verification under the ASSMP
		WCA4A	401 m^2 to 1.0 m BGL / 401m^2	Special Waste – Asbestos (as General Solid Waste)

Report Reference	Lot Number	WCA	Approximate Area/Waste Volume[2,3]	Waste Classification
		WCA4B	401m^2 from 1.0 to 1.8 m BGL / 200.5 m^2	Acid Sulfate Soils (as General Solid Waste) – pending treatment and verification under the ASSMP
21.1587.WAC4a_v1f	• Lot E of DP 402952	Amendment to WCA1	1,500 m^2 to 1.0 m BGL / 1,500m^3	Special Waste – Asbestos (as General Solid Waste)
21.1587.WAC5_v1f	• Lot 1 of DP 711982	WCA5A	700m^2 to 1.0 m BGL / 700m^3	Special Waste – Asbestos (as General Solid Waste)
		WCA5B	700m^2 from 1.0 to 1.5 m BGL / 350m^3	General Solid Waste (non-putrescible)

Notes to Table 12
1- Refer to *Appendix 1 – Figures* for a map showing the individual waste classification areas which have been applied across the site.
2- Provided waste volumes are approximate only and maybe subject to change depending on the final bulk excavation level completed across the site.
3 – All details provided within Table 12 have been taken from the respective waste classification assessment reports

All former waste analysis and classifications prior to WAC4 were completed within a sequential order and were commissioned to facilitate the progress of the demolition and excavation activities across the site or upon the identified of unexpected asbestos finds. The fourth waste analysis and classification assessment has incorporated all previous data collated and is considered to be an overarching assessment for the majority of the site.

Upon review of available previous waste classification assessments, all waste classifications are considered complaint with the NSW EPA Waste Classification Guidelines Part 1: Classifying Waste (NSW EPA, 2014a) and Part 4: Acid sulfate soils (NSW EPA, 2014b).

8.3.3 Waste Analysis and Classification Assessment – Switching Station Footprint, 45A George Street, Parramatta NSW

The following waste analysis and classification assessment is considered to apply to the Switching Station Excavation Footprint located at 45A George Street, Parramatta NSW.

Table 13. Site Identification and Detail Summary.

Physical Address:	45A George Street, Parramatta NSW
Lot Number:	Lot 2 of DP701456
Current Land Use:	B3 – Commercial Core (Parramatta Local Environmental Plan 2011)
Subject Area	45A George Street, Switching Station Excavation footprint, in-situ soil materials from the soil surface to a maximum depth of 1.0 m BGL (refer to *Appendix I – Figures*).
Approximate Area of Subject Area:	100 m^2
Estimated Waste Volume:	100 m^3 (assuming a maximum excavation depth of 1.0 m BGL)

Table 14. Step 1 to Step 7 of Waste Classification Guidelines Part 1: Classifying Waste 2014.

Step 1: Is the waste special waste? (Clinical and related waste, asbestos waste, waste tyres, and anything classified as special waste under an EPA gazettal notice)	**WCA6A –** The one fibre cement fragment (TP20-FC1) which was collected from TP20 at 0.3 m BGL, returned positive for both chrysotile and crocidolite asbestos within the top 0.3 m sub-surface profile. No asbestos was detected within any of 65g representative soil samples analysed from WCA6A (refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation*). **WCA6B** - No asbestos was observed during the current environmental investigation or detected within any of the representative soil samples collected and analysed from sampling completed below the top 0.3 metre sub-surface profile (refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation*).	
Step 2: Is the waste liquid waste?	☐ Yes ☒ No	
Step 3: Is the waste pre-classified?	☐ Yes ☒ No	
Step 4: Does the waste possess hazardous characteristics?	☐ Yes ☒ No	
Step 5: Chemical characterisation of the soil materials	A full set of analytical results and regulatory guidelines screening criteria is shown in *Appendix C – Results Table.* For individual laboratory reports relating to the previously collected datasets, please refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation*. **WCA6A** Based on the analytical data collected from WCA6A, the sample collected from TP20 at 0.2 m BGL recorded a maximum concentration of lead (1,880.8 mg/kg) which is above the specific contaminant concentration (SCC1) assigned for 'General Solid Waste'. All TCLP values retuned below the laboratory PQL. Therefore, the in-situ soil materials within WCA6A are considered to chemically classified as '*Restricted Soil Waste'.* **WCA6B** Based on the analytical data collected from WCA6B, all analytes returned concentrations below the respective criteria assigned for 'General Solid Waste' (CT1/SCC1/TCLP1). Therefore, the in-situ soil materials within WCA6B are considered to chemically classified as '*General Solid Waste'.*	
Step 6: Is the waste putrescible or non-putrescible?	☐ Putrescible ☒ Non-putrescible	Non-putrescible materials typically do not: • readily decay under standard conditions • emit offensive odours • attract vermin or other vectors (such as flies, birds and rodents).

Summary	Based on the analytical data collected from the subject area and the field observations, it is the opinion of ADE that: **WCA6A (0.0 – 0.3 m BGL)** • Asbestos has been identified within the first 0.3 metre sub-surface profile (WCA6A) in the form of bonded asbestos containing fibre cement fragments, henceforth WCA6A is considered to be classified as **'Special Waste – Asbestos'** under Step 1 of the NSW EPA 2014; • The in-situ soil materials are not considered to contain PASS/AASS; • No paint chips, hydrocarbon odours or staining were observed within the in-situ soil materials inspected; and • The concentrations of contaminants of potential concern in the samples collected from the subject area meet the NSW EPA (2014) criteria assigned for '**Restricted Solid Waste'.** **WCA6B (0.3-1.0 m BGL)** • No asbestos was observed within the in-situ soil materials inspected or detected within any of the representative soil samples analysed; • The in-situ soil materials are not considered to contain PASS/AASS; • No paint chips, hydrocarbon odours or staining were observed within the in-situ soil materials inspected; and • The concentrations of contaminants of potential concern in the samples collected from the subject area meet the NSW EPA (2014) criteria assigned for '**General Solid Waste'.** Due to the possibility of further unexpected finds during excavation works at the site, ADE recommends on site hygienist supervision to ensure additional excavations are assessed for the presence of asbestos and additional waste classifications are prepared for subsequent areas/stockpiles based on site observations.

Table 15. Classification Summary for the Switching Station Excavation Footprint located at 45A George Street, Parramatta NSW.

Area:	WCA6A (0.0-0.3 m BGL)	WCA6B (0.3-1.0 m BGL)
Waste Matrix:	The in-situ soil matrix was primarily observed to consist of: • FILL: Silty SAND: medium grained, dark brown, with angular gravels, dry to wet. Foreign materials including but not limited to ACM and engineered material (DGB) were observed within the in-situ soils present. No indications of PASS, paint chips, hydrocarbon odours or staining was observed within the in-situ soil materials present within WCA6A.	The in-situ soil matrix was primarily observed to consist of: • FILL: Silty SAND: medium grained, dark brown with angular gravels, moist; • FILL: Clayey SAND: medium grained, brown, with poorly sorted gravels and clay fragments exhibiting medium plasticity, moist. Foreign materials including but not limited engineered material (DGB) was observed within the in-situ soil matrix. No paint chips, indicators of PASS, hydrocarbon odours or staining was observed within any of the in-situ soil materials present within WCA6B.
Area and Classification Depth:	100 m^2 - 0.0 to 0.3 m BGL	100 m^2 – 0.3 to 1.0 m BGL
Volume estimation:	30 m^3	70 m^3
Classification:	**'Special Waste – Asbestos (as Restricted Solid Waste)'**	**'General Solid Waste (Non-Putrescible)'**
Additional comments:	Due to the possibility of further unexpected finds during excavation works at the site, ADE recommends on site hygienist supervision to be present to ensure all excavations are assessed for the presence of asbestos and additional waste classifications are prepared for subsequent areas/stockpiles based on site observations. All unexpected asbestos finds are currently being managed by a third-party occupational hygienist. ADE must be notified immediately upon identification of asbestos.	

8.4 The Duty to Report Contamination

For the purposes of section 60(3)(b) of the CLM Act, notification of contamination in, or on, soil on the land is required where:

- The 95 % UCL on the average arithmetic concentration of a contaminant in or on soil is equal to or above the HIL and/or HSL for that contaminant for the current or approved use of the respective on-site land, as specified in Section 6, Schedule B1 of the NEPM (2013); or
- The concentration of a contaminant in an individual soil sample is equal to or more than 250% of the HIL and/or HSL for that contaminant for the current or approved use of the respective on-site land, as specified in Section 6, Schedule B1 of the NEPM (NEPC, 2013); and
- The contaminant has entered, or will foreseeably enter, neighbouring land, the atmosphere, groundwater or surface water which is above that of the assessment criteria outlined in the Section 6, Schedule B1 NEPM (NEPC, 2013) or other approved guidelines and will foreseeably remain equal to or above the recorded level.

ADE considers that Delta does not have a duty to report contamination to the NSW EPA regarding on-site contamination of soils due to concentrations of the analysed analytes being below that of the adopted SAC.

9 Data Quality Assessment

In order to carry out the assessment of the data acquired in the course of the investigation, the US EPA Guidelines including, but not limited to, the *'Guidance on Assessing Quality Systems'* (2003) and *'Guidance on Systematic Planning Using the Data Quality Objectives Process'* (2006) were used.

The guidelines provide a general strategy for assessing data quality criteria and performance specifications for decision making. The following is the output from most of the steps of the data quality assessment (DQA) process provided in the guidelines. Quality control reports from the laboratories for sample analyses were reviewed. The review included an assessment of blank, duplicate, control and spiked samples. The review of the QA/QC program was conducted in accordance with NSW EPA recommendations.

In order to carry out the data quality assessment for the lab analytical results acquired in the course of this investigation, the US EPA Guidelines were used. The Guidelines provide a general strategy for assessing data quality criteria and performance specifications as part of decision making. The following assessment methodology addresses most of the steps of the data quality assessment (DQA) process provided in the guidelines.

9.1 Data Review

Quality control reports from the laboratories subcontracted for sample analyses were reviewed. Laboratory blank samples, duplicate samples, control samples, spiked samples and method blanks were evaluated.

This review was conducted as per the items recommended by the NSW EPA for inclusion in the consultants' reports. Some additional recommendations from the US EPA methodology, as referred to by AS 4482.1, were also followed.

Following the QA/QC assessment, the validity of the results is determined based on the assessment criteria adopted with the results expressed as either valid or invalid data (acceptable or unacceptable). An overall summary of the QA/QC assessment can be found in *Appendix V – QA/QC* Output.

9.2 COC

Australian Standard AS 4482.1 defines the chain-of-custody (COC) documentation as the link in the transfer of samples between the time of collection and arrival at the laboratory.

The COC utilised by ADE included the items recommended by the Standard:

- The person transferred the samples
- The person who received the samples
- Date the samples were collected
- Date the samples were received at the laboratory, and
- Contact name and details for the client.

Copies of the COCs completed during the course of this investigation are provided in *Appendix VII – Analytical Reports and Chain of Custody Documentation.*

9.3 Field Equipment Calibration

Field equipment requiring calibration included the use of a photo-ionisation detector (PID). The PID was calibrated by an external qualified technician before the sampling events and further calibrated onsite i.e., bump tested (as required) by a suitably qualified environmental consultant (refer to *Appendix X – Equipment Calibration Certificates* for the attached calibration certificate).

9.4 Record of Holding Times

The objective is to ascertain the validity of the analytical results based on meeting the holding time for the samples from the time of collection to the time of analysis. The technical holding time criteria for soil and groundwater samples are summarised in **Table 16**.

Table 16. Recommended Storage, Preservation and Maximum Holding Times.

Analyte	Container	Recommended Preservation	Maximum Recommended Holding Time	Reference
Metals (excluding Hg & Cr VI)	P (MF)	HNO_3, C	6 months	APHA Table 1060:I
Metals (Cr VI)	P (MF)	NaOH, C	28 days	USEPA 1669
Metals (Hg)	P (MF)	$HN0_3$	28 days	APHA Table 1060:I
Leachable Metals	G	H_2SO_4	28 days	AS 4439.3
VOCs	G	Nil, C	14 days	USEPA SW-846-8260B
Phenols	G	Nil, C	14 days	USEPA SW 846-8015A
PAHs	G	Nil, C	14 days	
PCBs	G	Nil, C	14 days	
TRHs	G	Nil, C	14 days	USEPA 8260D
OCPs/OPPs	G	Nil, C	14 days	USEPA3510/8270
E.coli	P	PET, C	24 hours	AS 4276:21-2005
Total Coliforms	P	PET, C	24 hours	AS 4276.5-2007

Notes to Table 16
*Recommended Preservation: ZH - Zero Headspace; C - Chilled; PET- Polyterepthalate
*Containers: G - Glass; P (MF) - Plastic (Metal Free); P - Plastic (Polyethylene)

All samples collected throughout the investigation were submitted within two days of the initial soil sampling. As such, the holding times of the soil samples submitted to their elected laboratories (SLS, Envirolab and Eurofins) meet the recommended criteria (refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation*).

9.5 Laboratory Analytical Methodology and Accreditation

All chemical analysis was undertaken by NATA accredited laboratories using US EPA approved methodology. Refer to *Appendix VII – Analytical Reports and Chain of Custody Documentation* for the details of the adopted laboratory analytical methods and their respective accreditations. The laboratory methodologies and the respective accreditations of SLS, Envirolab and Eurofins were deemed suitable for the required analyses.

9.6 Detection Limits / Practical Quantification Limits

The smallest amount of a substance that can be detected by the laboratories used – ALS and Eurofins, above the background method noise in a procedure and within a stated confidence level is referred as detection limit.

Current practice identifies several detection limits including the following: (1) the instrument detection limit (IDL), (2) the lower-level detection limit (LLD), the method detection limit (MDL) and the practical quantitation limit (LOR).

The relationship among these levels is approximately IDL: LLD: MDL: LOR = 1: 2: 4: 10. Refer to SLS, ALS and Eurofins for the list of LORs provided by their respective laboratories. When dilution of a sample is involved in the sample preparation, the method detection limit is adjusted by the dilution factor.

9.7 Field QA/QC

A summary of the QA/QC samples collected during field works is provided in **Table 17.**

Table 17. Summary of Field QA/QC Samples.

Field QA/QC	Frequency	Sample Details	Field QA/QC Frequency Achieved?
Blind replicate samples	1 per 20 samples	**ME1 and ME2** • BR1 is an intra-laboratory replicate of the primary sample of BH1_1.0 • BR2 is an intra-laboratory replicate of the primary sample BH6_0.5 • BR3 is an intra-laboratory replicate of the primary sample BH13_1.0. **ME3 and ME4** • BR1 is an intra-laboratory replicate of the primary sample of TP12_0.0-0.1. • TP18_BR is an intra-laboratory replicate of the primary sample TP18 - 0.2. • BR1 is an intra-laboratory replicate of the primary sample TP10_0.0-0.1.	Yes
Split Replicate samples	1 per 20 samples	**ME1 and ME2** • SR1 is an inter-laboratory replicate of the primary sample of BH1_1.0 • SR2 is an inter-laboratory replicate of the primary sample BH6_0.5 • SR3 is an inter-laboratory replicate of the primary sample BH13_1.0. **ME3 and ME4** • SR1 is an inter-laboratory replicate of the primary sample of TP12_0.0-0.1. • SR1 is an inter-laboratory replicate of the primary sample TP18 - 0.2. • SR1 is an inter-laboratory replicate of the primary sample TP10_0.0-0.1.	
Rinsate Sample	1 per sampling event	• One rinsate sample (Rinsate1) was collected after decontamination and use of the hand auger at BH1 on 17/11/2021 • One rinsate sample (Rinsate2) was collected after decontamination and use of the hand auger at BH14 on 25/01/2022.	
Trip Blank	1 per sampling event	• A total of six trip blanks samples were utilised across the course of the investigation.	
Trip Spike	1 per sampling event	• A total of six trip spike (spiked BTEX) samples were utilised across the course of the investigation.	

9.7.1 Blind and Split Replicate Samples

Australian Standard 4428.1 and the NEPM (2013) specifies the typical Relative Percentage Data (RPD) values for replicate samples to be below 30%. If both samples' values are less than the practical quantification limit (PQL), the RPD is not calculated. Valid values are sample concentrations that fall within the control limits of 0-30% described above. Invalid values are concentrations that are outside of the control limits.

- A total of six intra-laboratory replicate samples were collected to determine the variability of the sampling process. The replicate sample was collected simultaneously from the same source and under identical conditions as the primary samples.
- The blind replicate samples showed 475 valid values and six invalid values.
- A total of six inter-laboratory split replicate samples were collected to measure the variability between the laboratory analysis process.
- The variability assessment showed 397 valid values and 17 invalid values.

9.7.2 Rinsate Samples

- Two rinsate water samples were analysed to check on the decontamination procedures undertaken on the site.
- The analysis of the rinsate samples showed 220 valid values and nil invalid values.

9.7.3 Trip Blank Samples

- Six trip blank samples were prepared for the field investigation. The samples were stored with the collected samples throughout the sampling event.
- The trip blank samples were then packaged for shipment with the other representative samples and submitted for analysis. Trip blanks are used to determine if samples were contaminated during storage and/or transportation back to the laboratory (a measure of sample handling variability resulting in positive bias in contaminant concentration).
- The trip blank samples analysed returned results below the detection limit, resulting in 30 valid values and nil invalid values.

9.7.4 Trip Spike Samples

- Six trip spike (spiked BTEX) samples were analysed in order to estimate the loss of volatile compounds during the storage, handling and transportation of the investigation samples.
- The trip spike samples analysed returned results within the adopted criteria being 60 to 140% of the original concentration, resulting in 30 valid values and nil invalid values.

9.8 Laboratory QA/QC

9.8.1 Laboratory Duplicates

- Duplicate sample determinations were provided by the laboratories to demonstrate acceptable method precision at the time of analysis.
- Duplicates are generally analysed at a frequency of 1 for every 10 samples. Australian Standard 4482.1 provides an acceptable range of the RPD values up to 50% for quality control samples, depending on the magnitude of results in comparison to the LOR.
- Analysis of laboratory duplicates showed 1208 valid values and nil invalid values.

9.8.2 Laboratory Blanks

- The assessment of blank analysis results was conducted to determine the existence and magnitude of contamination resulting from laboratory activities.

- No contaminants were found within any of the blanks analysed by the laboratory resulting in 1431 valid values and nil invalid values.

9.8.3 Laboratory Spikes and Surrogates

- Laboratory limits of approximately 70-130% for inorganics/metals and 60-140% for organics were used to validate matrix spikes and laboratory surrogate samples.
- Analysis of spikes and surrogates showed 765 valid values and 38 invalid values.

9.8.4 Laboratory Control Samples

- Laboratory limit of approximately 70-130% for inorganics/metals and 60-140% for organics were used to validate laboratory control samples.
- Analysis of the laboratory control samples showed 613 valid values and 26 invalid values.

9.9 QA / QC Data Evaluation

The qualitative and quantitative descriptors, DQIs were used in interpreting the degree of acceptability of the data acquired during the course of the investigation. The principle DQIs are precision, accuracy, representativeness, comparability, and completeness referred to by the acronym PARCC. Precision and accuracy are quantitative measures, representativeness and comparability are qualitative, and completeness is a combination of both quantitative and qualitative measures. **Table 18** summarises the DQO reconciliation.

Table 18. Summary of DQO Reconciliation.

QA/QC Item	DQO Criteria	Valid Data	Invalid Data	Completeness	Conclusion
Laboratory duplicate samples	95%	1208	0	100.00%	Acceptable
Laboratory blank samples	100%	1431	0	100.00%	Acceptable
Laboratory spike/surrogate recoveries	95%	765	38	95.27%	Acceptable
Laboratory Control samples	95%	613	26	95.93%	Acceptable
Blind Replicate Samples	75%	475	6	98.75%	Acceptable
Split Replicate Samples	75%	397	17	95.89%	Acceptable
Rinsate Samples	<LOR	214	0	100.00%	Acceptable
Trip Blank Samples	95%	30	0	100.00%	Acceptable
Trip Spike (BTEX) Samples	75%	30	0	100.00%	Acceptable
Overall Completeness:	**95%**	**5343**	**61**	**98.87%**	**Acceptable**

Notes to Table 18
*LOR – Limits of Reporting

Following a review of the data, the recorded 'invalid' results can be attributed to the difficulties in obtaining a homogeneous sample from heterogeneous matrices. The ratio of the valid data to the total number of the analyses conducted in the QA/QC program yielded 99.50%, thereby meeting the DQO criteria of 95% completeness. ADE considers that the laboratorial QA/QC is appropriate, and the data collected is directly usable for the purposes of the assessment.

10 Conclusions and Recommendations

Based on the findings of the site investigations the following conclusions and recommendations were reached:

10.1 Phase 1 - Preliminary Site Investigation

- Historically the site has been used for commercial/ industrial land use
- The site is currently zoned as 'B3 Commercial Core under the Parramatta LEP 2011 (LEP, 2011) and is currently surrounded by a mixture of commercial/industrial properties
- The site is situated within the Blacktown soil landscape and characteristically features a 'porous aquifer of low to moderate productivity'
- During the inspection, the site was primarily vacant with portions of the site being utilised by Delta personnel for storage of construction materials, and
- Potential types and sources of contamination noted during the site walkover included, but was not limited to, the following:
    - Exposure to potential historical un-controlled fill practices, and
    - Potentially contaminating historical land-use activities i.e., use of the site as a car park and commercial/industrial land use.

10.2 Phase 2 - Detailed Site Investigation

The detailed site investigation was undertaken with a pre-defined scope and lateral and vertical investigation limits which are vary across the site. The following conclusions were derived using the data collated across all mobilisation events.

10.2.1 Soil Chemical Assessment

Of the 64 primary samples analysed (excluding delineation and QAQC samples), 63 samples demonstrated concentrations of heavy metals below the tier 1 screening levels for HIL/HSL-D as outlined within the NEPM (*NEPC, 2013*). Lead concentrations within one sample collected from TP20 at 0.2 m BGL returned concentrations above the prescribed land use criteria. However, following statistical treatment, the 95% UCL retuned a value of 535.1, which is below the prescribed land-use criteria.

All remaining analytes in the samples analysed returned concentrations below the prescribed land-use criteria for commercial/industrial land (HIL/HSL-D). Due to the uncertainty surrounding the final design plans and the presence of landscaping areas or setbacks, an ecological risk assessment by comparing EIL/ESLs was not undertaken.

10.2.2 Asbestos Assessment

A total of 64 soil samples and two suspected fibre cement samples (BH08.FC1_1.0 and TP20-FC1) were collected throughout the course of the investigation and analysed as per AS4964-2004. Chrysotile asbestos was detected within the one fibre cement sample that was analysed (BH08.FC1_1.0) and both chrysotile and crocidolite asbestos was detected within the fibre cement sample collected from TP20 at 0.2 m BGL. Additional delineation sampling was undertaken within the vicinity of BH08 to laterally and vertically reduce the extent of bonded asbestos within BH08. Delineation activities were successful, with all validation samples returning negative for asbestos.

Should the client intend to beneficially re-use any fill material within the site boundaries or keep any residual fill materials in-situ, an additional asbestos quantification assessment will need to be completed to assess the suitability of the material for the prescribed land use in relation to asbestos in accordance with the NEPM (NEPC, 2013) and the WA DOH (2009) guidelines.

10.2.3 Acid Sulfate Soils Assessment

Acid sulfate soils were identified typically exhibiting a sporadic distribution across the site and were typically limited to the deeper lithologies encountered across the site. Both exceedances identified at BH06 at 1.8 m BGL and TP12 at 1.8 m BGL exhibited characteristics of AASS rather than PASS due to the net acidity demonstrating a causal relationship with titratable actual acidity, whilst the reducible sulfur content was below the laboratory PQL. Based on the acquired data, a conservative liming rate of 4 CaCO3/t is considered appropriate to effectively neutralise known AASS across the site.

All acid sulfate soils identified within the site and identified during future excavation works must be managed in accordance with the sites ASSMP which include both treatment with agricultural lime followed by verification testing and validation to ensure that all suspected/known PASS/AASS within the site has been effectively neutralised.

10.2.4 Waste Classification Assessment

Considering the type, level and variability associated with contamination identified across the site, the site was separated into the following WCAs:

Lot E of DP 402952; Lot 3 of DP218510; Lot H of DP405846 and Part of Lot 100 of DP607789

- WCA1 – Classified as 'General Solid Waste' and features an estimated waste volume of 10,042.2 m^3;
- WCA2 – Classified as 'Special Waste (as General Solid Waste) and includes an estimated waste volume of 4.5m^3
- WCA3 – Classified as 'Acid Sulfate Soils (as General Solid Waste) – pending treatment and verification under the ASSMP and includes an estimated waste volume of 1,068.80m^3;
- WCA4A – Classified as 'Special Waste (as General Solid Waste) and includes an estimated waste volume of 401m^3;
- WCA4B – Classified as 'Acid Sulfate Soils (as General Solid Waste) – pending treatment and verification under the ASSMP and includes an estimated waste volume of 200.5 m^3;
- Amendment to WCA1 – Classified as 'Special Waste – Asbestos (as General Solid Waste) and includes an estimated waste volume of 1,500m^3.

Lot 1 of DP 711982

- WCA5A – Classified as 'Special Waste – Asbestos (as General Solid Waste) and includes an estimated waste volume of 700m^3;
- WCA5B – Classified as 'General Solid Waste (non-putrescible) and includes an estimated waste volume of 350m^3.

Lot 2 of DP701456

- WCA6A – Classified as 'Special Waste – Asbestos (as Restricted Solid Waste) and includes an estimated waste volume of 30m^3;
- WCA6B – Classified as 'General Solid Waste (non-putrescible) and includes an estimated waste volume of 70 m^3.

In total, approximately 14,367m^3 of soil materials have been classified across the site in accordance with the NSW EPA Waste Classification Guidelines 2014 for off-site disposal purposes.

10.3 Assumptions, Limitations and Uncertainties

The following are considered to uncertainties and limitations associated with the current investigation:

- The assessment does not constitute a full site characterisation assessment as the investigation is limited to the top 1.8 m soil profile and does not comprise of a full site characterisation assessment;
- No asbestos quantification assessment has been completed within the scope of this investigation and therefore, any soil materials intended to be beneficially re-used within the site boundaries will need to be subject to a gravimetric asbestos assessment as per the NEPM (NEPC, 2013);
- The provided waste classification assessments are considered to be preliminary only and maybe subject to change depending on the conclusions of future investigations;
- No groundwater assessment was undertaken as part of Delta's scope. Further consideration and assessment maybe required to characterise the current hydrogeological conditions and contamination status of the underlying groundwater system; and
- No ecological risk assessment has been considered as the final design of the station is not finalised and was not included within Delta's scope of works for this project.

10.4 Recommendations

Based on the conclusions and limitations outlined above, ADE recommends the following:

- A suitably qualified environmental consultant and a licensed asbestos removalist be engaged to complete asbestos removal works during removal of soils surrounding sample BH08_1.0;
- Excavation works within the vicinity of BH06 should be undertaken under an acid sulfate soils management plan (ASSMP), with liming of impacted soils undertaken followed by PASS validation to ensure that neutralisation of the acidic conditions has occurred; and
- An ecological risk assessment will need to be completed should the final design plan or development include landscaped areas, setbacks or public open spaces.

10.5 Conclusion

Considering the above and the vertical and lateral limitations of the investigation, ADE considers that there is a 'low risk' for residual contamination to occur within the assessed areas across the site and due to the implementation of existing environmental management systems and plans e.g., ASSMP.

Depending on the conclusions derived within future environmental investigations, additional investigations and further management practices maybe required to determine the land-use suitability of the site with regards to the proposed land use. Further consideration of Condition D72 under the CSSI planning approval documentation maybe required depending on the conclusions derived following future environmental investigations.

11 Limitations and Disclaimer

This report has been prepared for the exclusive use of the client and is limited to the scope of the work agreed in the terms and conditions of contract (including assumptions, limitations and qualifications, circumstances, and constraints). ADE has relied upon the accuracy of information and data provided to it by the client and others.

ADE has used a degree of care and skill ordinarily exercised in similar investigations by reputable members of the environmental industry in Australia. No other warranty, expressed or implied, is made or intended. No one section or part of a section, of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including its appendixes and attachments. The report is an integral document and must be read in its entirety.

To the fullest extent permitted by law, ADE does not accept or assume responsibility to any third party (other than the client) for the investigative work, the report or the opinions given.

The scope of work conducted, and report herein may not meet the specific needs (of which ADE is not aware) of third parties. ADE cannot be held liable for third party reliance on this document. Any third party who relies upon this report does so at its own risk.

The subsurface environment can present substantial uncertainty due to it complex heterogeneity. The conclusions presented in this report are based on limited investigation of conditions at specific sampling locations chosen to be as representative as possible under the given circumstances. However, it is possible that this investigation may not have encountered all areas of contamination at the site due to the limited sampling and testing program undertaken.

The material subject to classification pertains only to the site and subject area outlined within the report and must be consistent with the waste description reported. If there are any unexpected finds that are not consistent with this classification, ADE must be notified immediately.

ADE does not verify the accuracy or completeness of, or adopt as its own, the information or data supplied by others and excludes all liability with respect to such information and data. To the extent that conditions differ from assumptions set out in the report, and to the extent that information provided to ADE is inaccurate or incomplete or has changed since it was provided to ADE, the opinions expressed in this report may not be valid and should be reviewed.

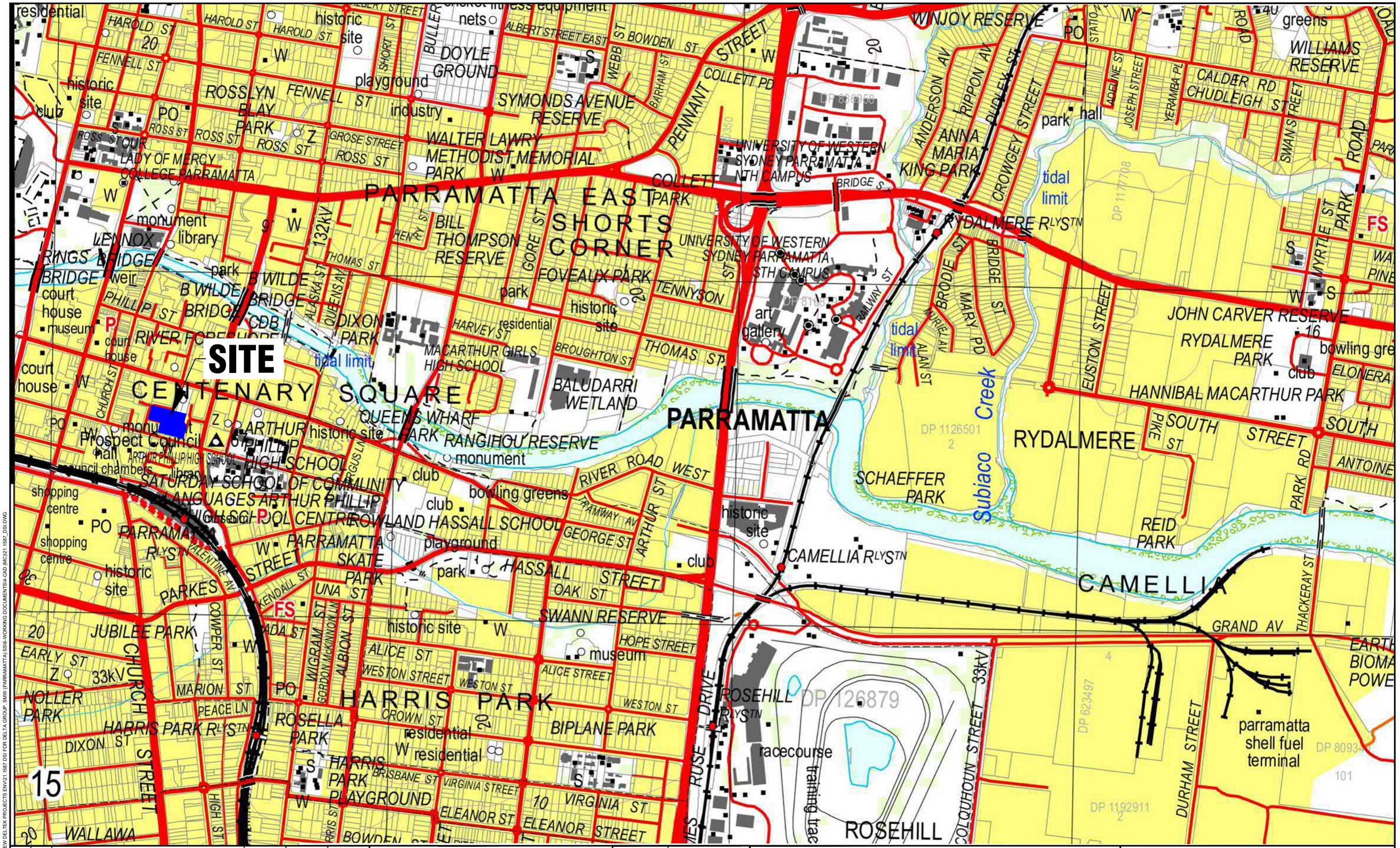
ADE's professional opinions are based upon its professional judgement, experience, training, and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. ADE has limited its investigation to the scope agreed upon with its client.

This Limitation and Disclaimer must accompany every copy of this report.

12 References

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Appendix I – Figures


SITE
CENTENARY SQUARE
PARRAMATTA
PARRAMATTA EAST
SHORTS CORNER
HARRIS PARK
ROSEHILL
RYDALMERE
CAMELLIA
Subiaco
Creek
WINJOY RESERVE
ANNA MARIA KING PARK
WILLIAMS RESERVE
JOHN CARVER RESERVE
RYDALMERE PARK
HANNIBAL MACARTHUR PARK
SCHAEFFER PARK
REID PARK
DOYLE GROUND
SYMONDS AVENUE RESERVE
WALTER LAWRY METHODIST MEMORIAL PARK
BILL THOMPSON RESERVE
FOVEAUX PARK
COLLETT PARK
DIXON PARK
QUEENS WHARF PARK
RANGIHOU RESERVE
BALUDARRI WETLAND
ROWLAND HASSALL SCHOOL
PARRAMATTA SKATE PARK
HARRIS PARK PLAYGROUND
SWANN RESERVE
JUBILEE PARK
NOLLER PARK
ROSELLA PARK
BIPLANE PARK
HARRIS PARK RLYSTN
CAMELLIA RLYSTN
ROSEHILL RLYSTN
RYDALMERE RLYSTN
PARRAMATTA RLYSTN
WILLIAM STREET
PENNANT STREET
COLLETT PD
HASSALL STREET
GEORGE ST
RIVER ROAD WEST
ALBERT STREET EAST
HAROLD ST
FENNELL ST
ROSS ST
GROSE STREET
BOWDEN ST
WEBB ST
BARHAM ST
BULLER STREET
SHORT ST
HENRY ST
GORE ST
TENNYSON
BROUGHTON ST
THOMAS ST
HARVEY ST
ALASKA ST
QUEENSAN
PHILLIP ST
CHURCH ST
CHURCH STREET
MACARTHUR GIRLS HIGH SCHOOL
ARTHUR PHILLIP HIGH SCHOOL
SATURDAY SCHOOL OF COMMUNITY LANGUAGES ARTHUR PHILLIP HIGH SCHOOL CENTRE
LADY OF MERCY COLLEGE PARRAMATTA
UNIVERSITY OF WESTERN SYDNEY PARRAMATTA NTH CAMPUS
UNIVERSITY OF WESTERN SYDNEY PARRAMATTA STH CAMPUS
BRIDGE ST
RAILWAY ST
ANDERSON AV
RIPPON AV
CROWGEY STREET
BRODIE ST
MARY PD
MURIEL AV
ALAN ST
BRIDGE ST
EUSTON STREET
MYRTLE ST
JOSEPH STREET
YERAMBA PL
CALDER RD
CHUDLEIGH ST
SWAN STREET
PARK ROAD
PARK RD
PIKE ST
SOUTH STREET
ANTOINE
ELONERA
GRAND AV
THACKERAY ST
DURHAM STREET
COLQUHOUN STREET
33kV
132kV
racecourse
training track
parramatta shell fuel terminal
tidal limit
tidal limit
historic site
historic site
historic site
historic site
historic site
playground
playground
industry
club
club
club
club
club
bowling greens
bowling greens
museum
art gallery
residential
residential
residential
park
park
park
park
hall
hall
PO
PO
PO
shopping centre
shopping centre
monument
monument
monument
library
court house
court house
court house
museum
weir
B WILDE BRIDGE
B WILDE BRIDGE
CDB
RINGS BRIDGE
LENNOX BRIDGE
Prospect Council
council chambers
library
DP 1177708
DP 8163
DP 126879
DP 623497
DP 1126501
DP 1192911
DP 809346
FS
FS
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P
P



revision	no.	description	drawn	approved	date
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drawn	MC
approved	SS
date	09/06/2022
scale	AS SHOWN
original size	A3

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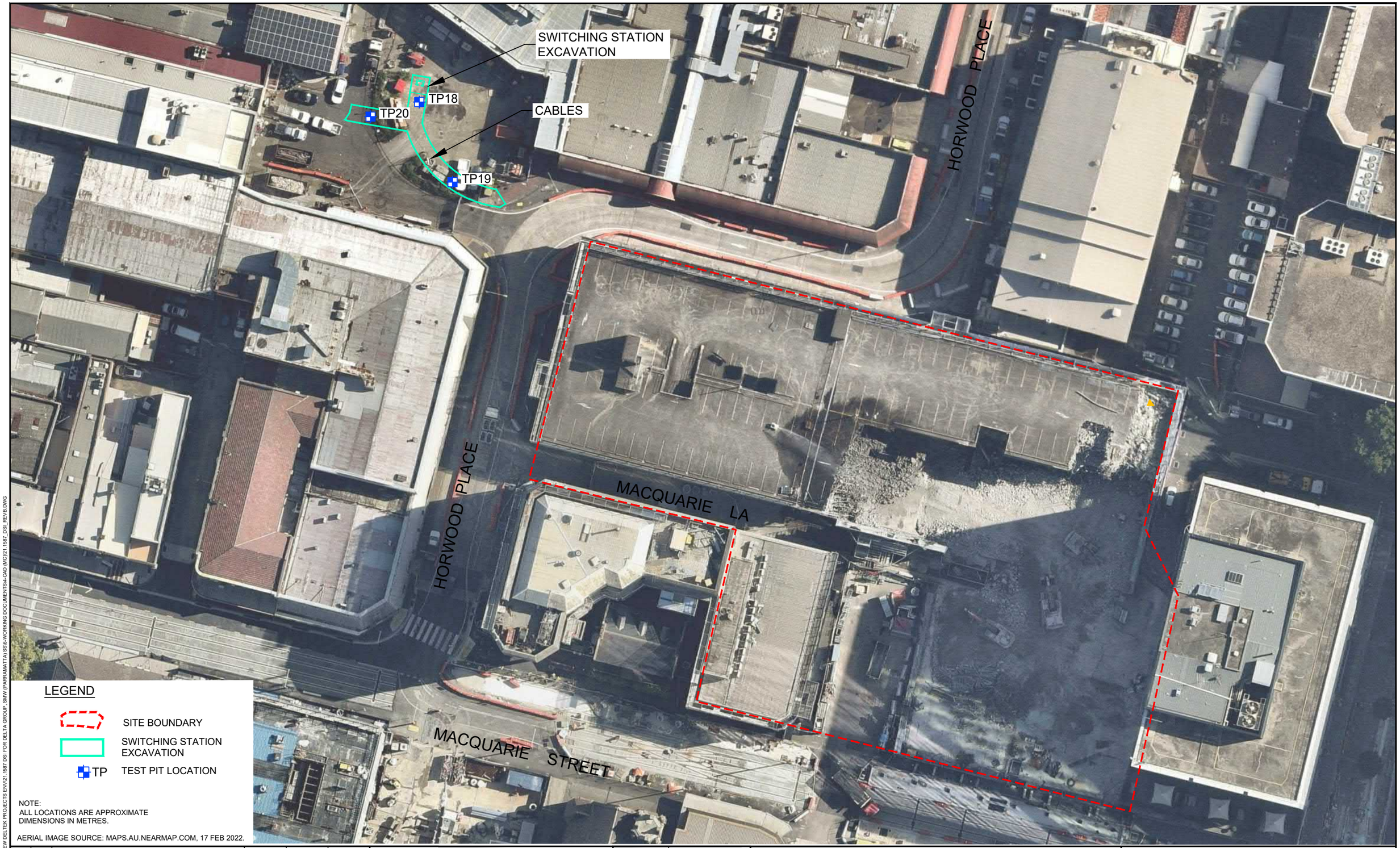
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68, 70, 72, 74 MACQUARIE STREET & 71 GEORGE STREET, PARRAMATTA, NSW

title: SAMPLE LOCATION, SITE LOCATION PLAN

project no: 21.1587_PSI_DSI | figure no: FIGURE 3 | rev: A

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LEGEND

- SITE BOUNDARY
- SWITCHING STATION EXCAVATION
- TP — TEST PIT LOCATION

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 17 FEB 2022.

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	B	ADDITIONAL SWITHCHING STATION	MC	MT	09/03/22

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drawn	MC
approved	TN
date	22/02/2022
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original size	A3

client: DELTA GROUP PTY LTD

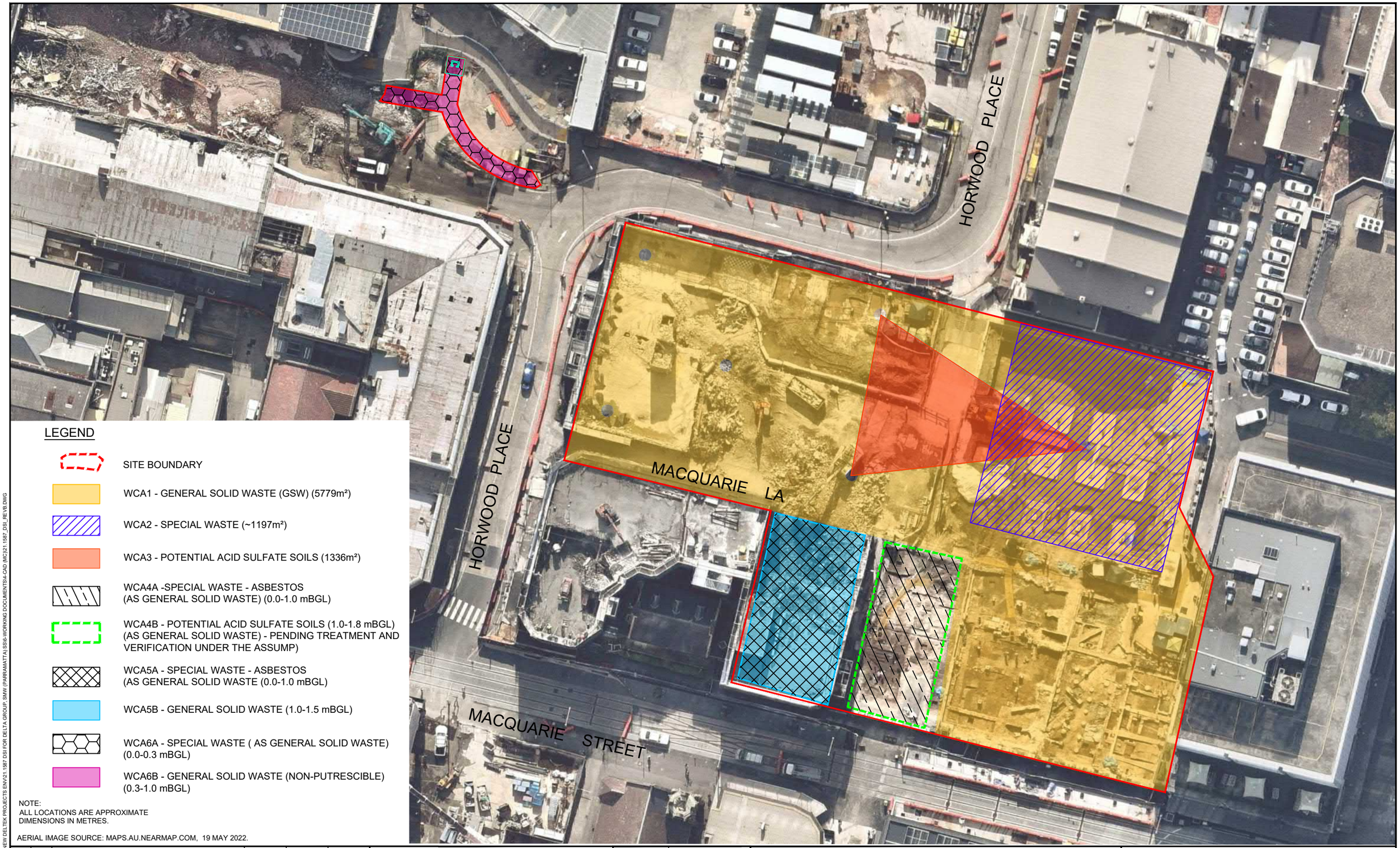
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68, 70, 72, 74 MACQUARIE STREET & 71 GEORGE STREET, PARRAMATTA, NSW

title: SAMPLE LOCATION - SWITCHING STATION EXCAVATION

project no: 21.1587_DSI_REVB | figure no: FIGURE 4 | rev: B

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LEGEND

- SITE BOUNDARY
- WCA1 - GENERAL SOLID WASTE (GSW) (5779m²)
- WCA2 - SPECIAL WASTE (~1197m²)
- WCA3 - POTENTIAL ACID SULFATE SOILS (1336m²)
- WCA4A -SPECIAL WASTE - ASBESTOS (AS GENERAL SOLID WASTE) (0.0-1.0 mBGL)
- WCA4B - POTENTIAL ACID SULFATE SOILS (1.0-1.8 mBGL) (AS GENERAL SOLID WASTE) - PENDING TREATMENT AND VERIFICATION UNDER THE ASSUMP)
- WCA5A - SPECIAL WASTE - ASBESTOS (AS GENERAL SOLID WASTE (0.0-1.0 mBGL)
- WCA5B - GENERAL SOLID WASTE (1.0-1.5 mBGL)
- WCA6A - SPECIAL WASTE (AS GENERAL SOLID WASTE) (0.0-0.3 mBGL)
- WCA6B - GENERAL SOLID WASTE (NON-PUTRESCIBLE) (0.3-1.0 mBGL)

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 19 MAY 2022.

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approved	TN
date	22/02/2022
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original size	A3

client: DELTA GROUP PTY LTD

project: DETAILED SITE INVESTIGATION
68, 70, 72, 74 MACQUARIE STREET & 71 GEORGE STREET, PARRAMATTA, NSW

title: PROPOSED WCA BOUNDARY LIMITS

project no: 21.1587_DSI_REVB | figure no: FIGURE 5 | rev: B

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Appendix II – Photographs



Photograph 1. Car park, located at 71 Horwood Place (facing east), as observed on 17.11.2021.



Photograph 2. Car park, located at 71 Horwood Place (facing west), as observed on 17.11.2021.



Photograph 3. Car park, located at 71 Horwood Place (facing west), as observed on 17.11.2021.



Photograph 4. Sandy GRAVEL soil materials observed in the upper fill profile across the site. Date: 17.11.2021



Photograph 5. Silty CLAY soil materials observed in the fill profile across the site. Date: 17.11.2021



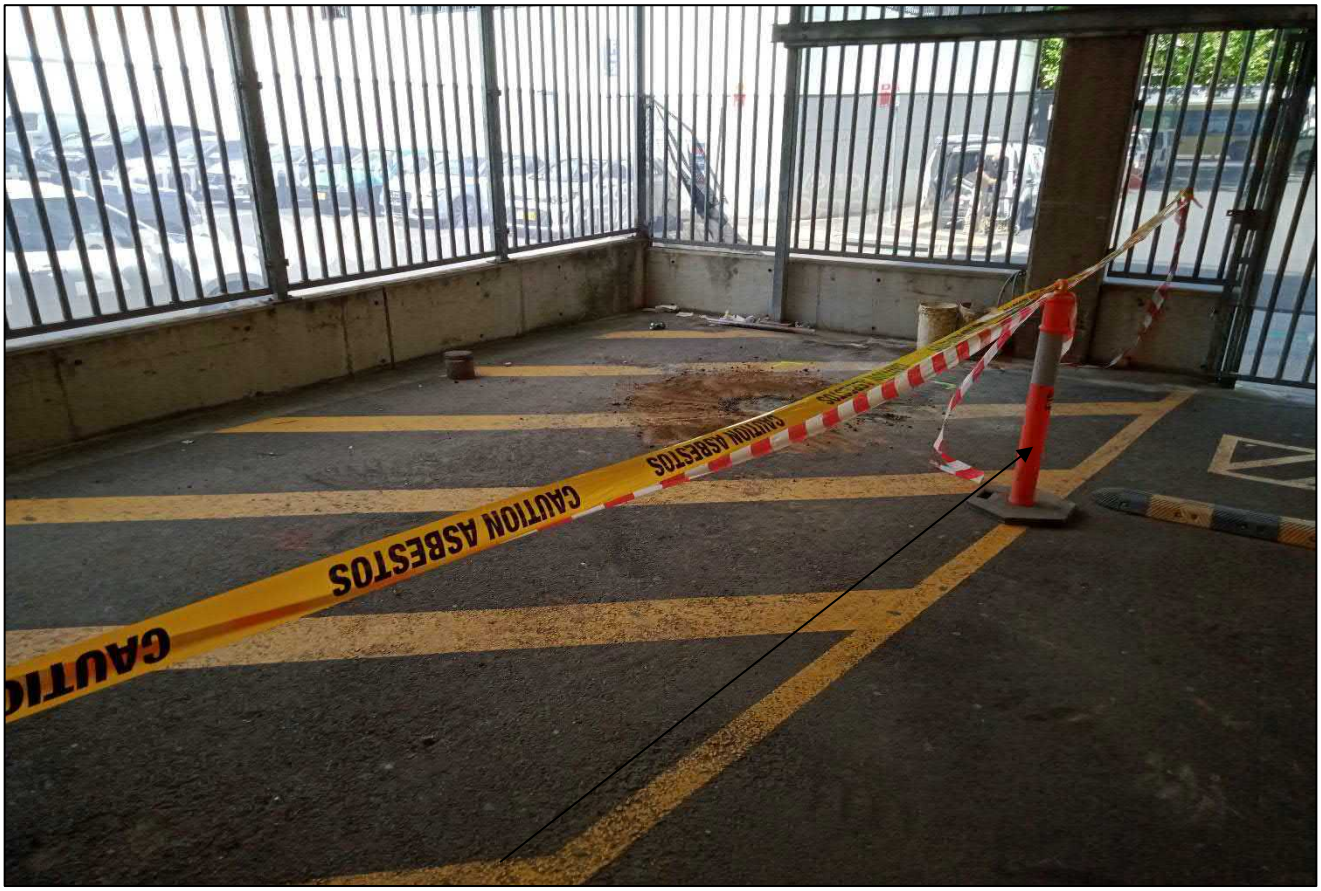
Photograph 6. Sandy GRAVEL and sandy CLAY observed in the fill profile across the site. Date: 17.11.2021



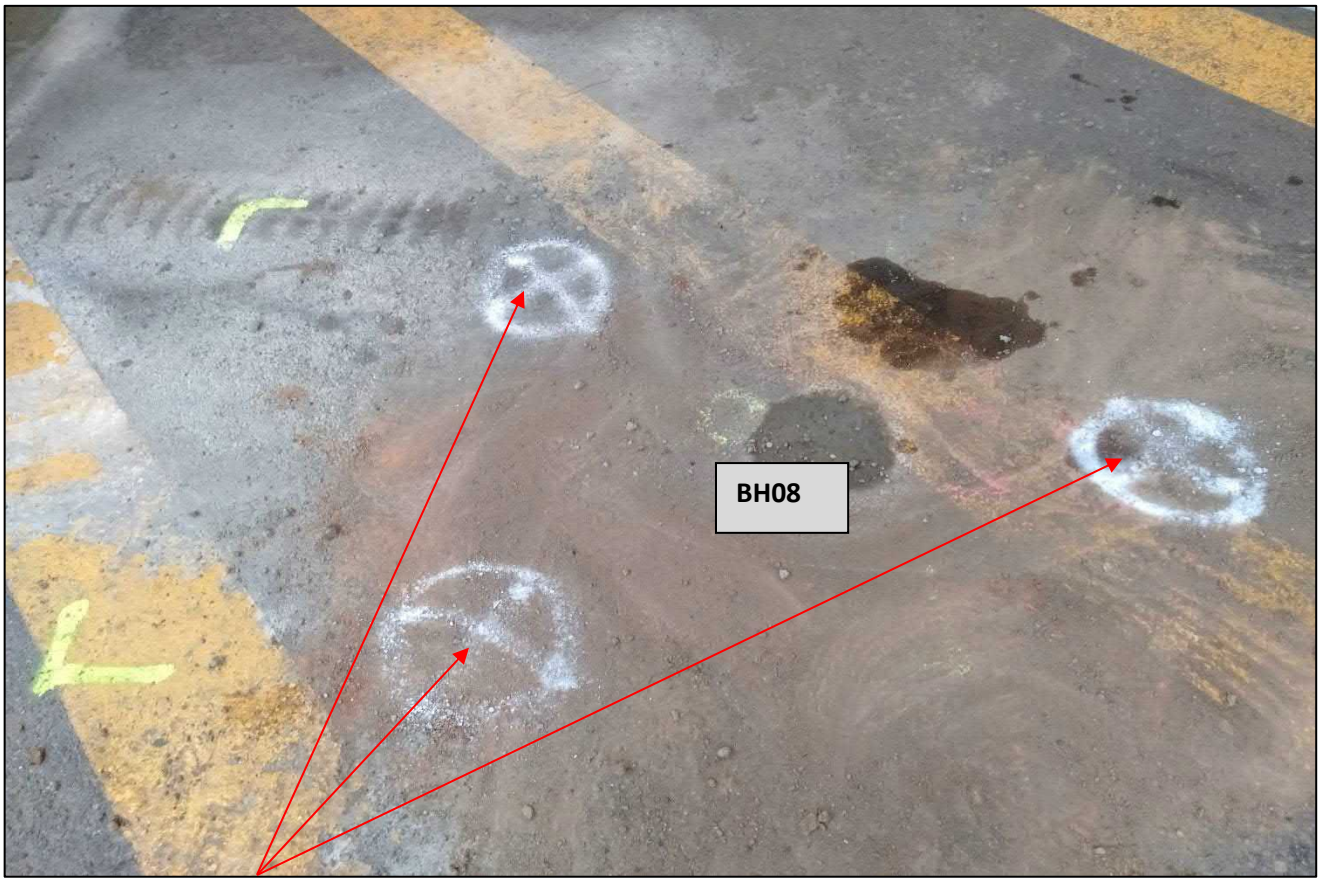
Photograph 7. Concrete core removed prior to drilling works on-site at 71 Horwood Place, as observed on 17.11.2021.



Photograph 8. Fragment of fibre cement (BH08.FC1_1.0) containing bonded chrysotile asbestos within BH08_1.0, as observed on 17.11.2021



Photograph 9. BH08 exclusion zone following identification of bonded asbestos borehole, as observed on 18.11.2021.



Photograph 10. Three delineation boreholes surrounding BH08, as observed on 18.11.2021.



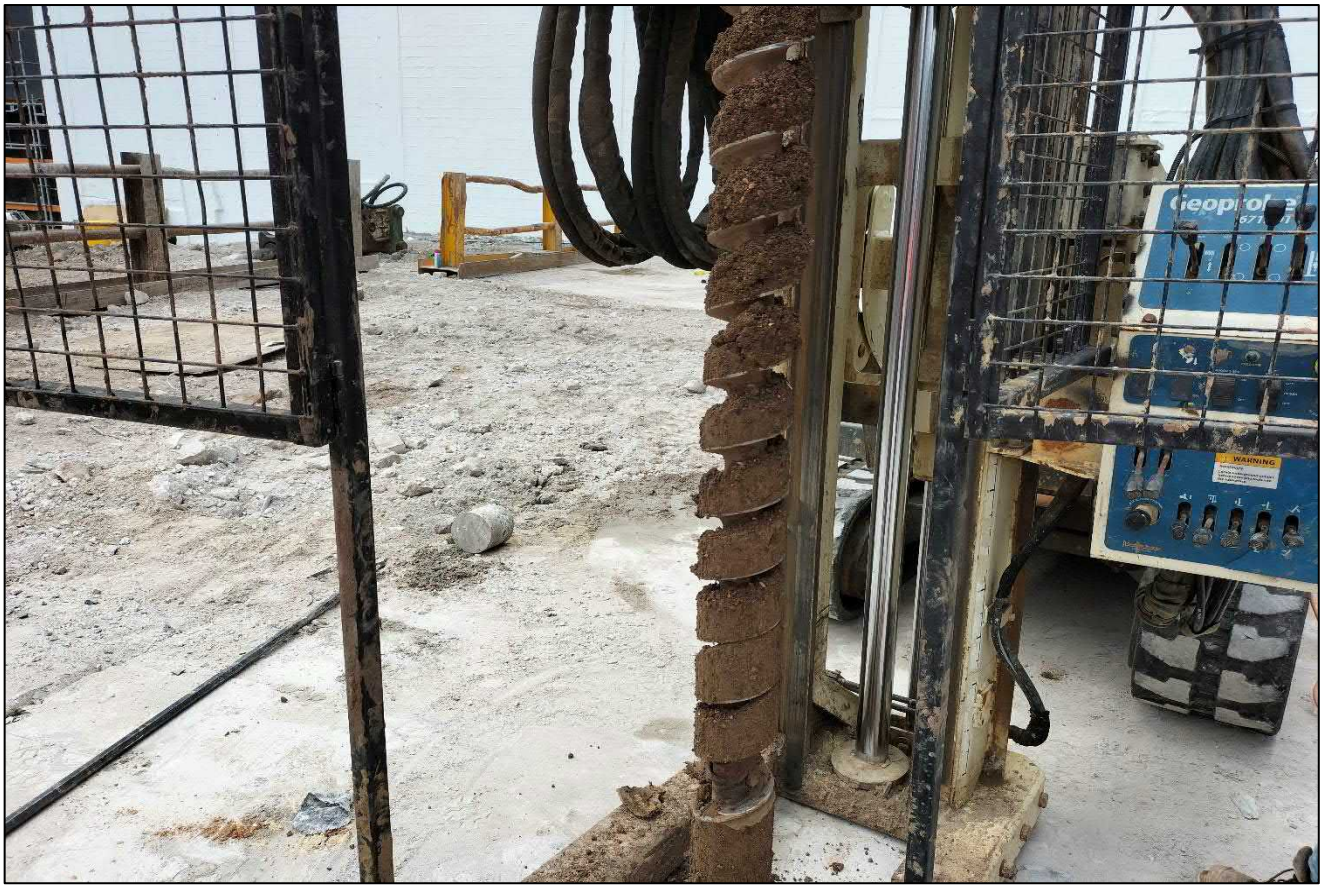
Photograph 11. No asbestos fragments identified within any of the delineation samples collected. Date: 18.11.2021.



Photograph 12. 70 Macquarie Street, containing vacant garage space. Date 19.11.2021



Photograph 13. 74 Macquarie Street, containing vacant garage space. Date 19.11.2021.



Photograph 14. 74 Macquarie Street, representative materials at BH15. Date 25.01.2021



Photograph 15. Encountered sub-surface lithology within TP18. Date: 13/03/2022.



Photograph 16. Encountered soil matrix observed within TP18. Date: 13/03/2022.



Photograph 17. Encountered sub-surface lithology within TP20. Date: 13/03/2022.



Photograph 17. Encountered soil matrix observed within TP20. Date: 13/03/2022.



Photograph 18. Chrysotile and crocidolite asbestos containing fibre cement fragment observed within TP20 at 0.3 m BGL. Date: 13/03/2022.



Photograph 19. Encountered sub-surface lithology within TP10. Date: 09/06/2022.



Photograph 20. Encountered soil matrix observed within TP10. Date: 13/03/2022.



Photograph 21. Encountered sub-surface lithology within TP11. Date: 13/03/2022.



Photograph 22. Encountered soil matrix observed within TP11. Date: 13/03/2022.



Photograph 23. Encountered sub-surface lithology within TP12. Date: 13/03/2022.



Photograph 24. Encountered soil matrix observed within TP12 at 0.3 m BGL. Date: 13/03/2022.



Photograph 25. Encountered soil matrix observed within TP12 at 1.0 m BGL. Date: 13/03/2022.

Appendix III – Data Quality Objectives

Data Quality Objectives

The investigation was designed using the data quality objectives (DQO) as defined by the US EPA and the NSW EPA in the "Guidelines for the NSW DEC Site Auditor Scheme" (3rd Edition), (NSW EPA, 2017) and Australian Standard AS 4482.1 2005 (AS, 2005).

The DQO process consists of a seven-step planning approach to facilitate the development of qualitative and quantitative statements that specify the quality of the data required to support decision making within the scope of the investigation. This process utilises systematic planning and statistical hypothesis testing to differentiate between two or more clearly defined alternatives.

Step 1 – State the Problem

A review of available historical information and previous environmental investigations have inferred that the site has a medium potential for contamination resulting from past and present land uses. Potential sources of contamination were identified to include: potentially contaminating historical land uses.

A systematic environmental investigation was therefore undertaken to assess soil conditions within the site. The following data collected was then used to evaluate and characterise the soil conditions across the site to inform the need for remediation and further management (if required).

Step 2 – Identify the Decision

The purpose of the investigation is to focus on current and future human health and environmental risks associated with potential contamination. The decisions that need to be made on the contamination status of the site include:

- The extent of contamination (if present) in soil at or adjacent to the site that would preclude the current land use of the site;
- The extent of contamination (if present) in soil at the site that has the potential to:
    - Impact upon a possible future land use of the site
    - Create a human or environmental risk within the site
    - Migrate to surrounding receptors
- If contamination above the adopted criteria is identified, then a further assessment would be undertaken to assess feasible remediation/management options.

The contamination would be considered not to pose a risk if analytical results for the media sampled and analysed are less than the adopted SAC presented in **Section 7** or are determined by a site-specific risk assessment not to represent an unacceptable risk to human health and/or the environment. Where an unacceptable risk is indicated, remediation and/or management options will need to be considered to address the risk and meet the site objectives.

Step 3 – Identify Inputs to the Decision

The CoPCs selected were determined through on-site observations following the completion a comprehensive desktop study. To address the decision questions outlined in Step 2 of the DQOs above, the following inputs to the decision have been identified:

- A review of previous environmental investigations undertaken at the site
- A review of the historical and current use of the site
- Investigation of the existing soil conditions at the site
- Comparison with the site assessment criteria as outlined in **Section 7.**

Step 4 – Define the Boundaries of the Study

This step provides a detailed description of the spatial and temporal boundaries of the study area. These characteristics define the population of interest and any practical considerations for the study area (refer to **Table 19.**

Table 19. Summary of the Study Boundaries.

Spatial Boundaries	The works performed for this report were restricted to the physical site boundaries, as shown in *Appendix I – Figures.* The vertical boundaries of the proposed investigations are limited to a maximum depth of investigation, being an approximate 3.0 m BGL.
Temporal Boundaries	The investigation works were undertaken on the following dates: • ME1 and ME 2 - 17.11.2021 to 19.11.2021 and 25.01.2022 • ME3 and ME4 – 12.04.2022 and 09.06.2022.
Investigation Limit	The limit of the investigation has been undertaken to provide information as to the level and type of contamination within the site based on the clients maximum excavation level.
Constraints	Time, cost, redesign, remediation and inaccessible areas across the site were considered constraints to the investigation.
Receptors of Concern	The potential receptors of concern are outlined in **Section 9.**

Step 5 – Develop a Decision Rule

The purpose of this step is to define the parameters of interest, specify the action level and combine the outputs of the previous DQO steps into an "if…then…" decision rule that defines the conditions that would cause the decision-maker to choose alternative actions. The types of data quality required during the fieldwork, the laboratory components of the investigation and the acceptable limits for this data are specified in **Section 8.** A summary of the decision rules is included in **Table 20.**

Table 20. Summary of the Decision Rules.

Decision Rules	Based on the data quality types and limits the following decision rules applied: • If CoPCs are detected in the Rinsate blanks, then the field decontamination process may not have been adequate and cross-contamination may potentially have occurred. Before assuming that this was the case, the environmental scientist will check the rinsate blank result with the testing laboratory and compare the result with a check blank sample that used the same water source. Detections in Rinsate blanks may reflect background concentrations in laboratory-supplied water or analytical error. Suppose it is concluded that decontamination procedures were inadequate. In that case, the project environmental scientist will assess the implications of the cross-contamination and subsequent influence on the ability to resolve the decision question • If the relative percent difference (RPD) values for blind replicates or split samples are outside the acceptable limits, then there may have been errors in a laboratory analysis process. When assessing duplicate pairs with elevated RPD values, the project Environmental Scientist will check the laboratory results and examine the nature of the sample being evaluated since heterogeneous samples can often provide high RPD values. If it is believed that irreversible errors had occurred during the laboratory process, then an additional investigation may be deemed to be required to resolve the decision question

	• Should greater than 5% of the laboratory QA / QC data fail to meet the acceptable limits outlined in this report, the laboratory may be requested to re-analyse samples or justify the analytical results • For the analysis of investigation samples, if the absolute value of the measured concentration of a parameter or compound is above the nominated SAC • 95% UCL data will only be considered where the standard deviation of the data set is less than 50% of the SAC, and the maximum concentration is less than 250% of the SAC. Samples exceeding these criteria will be excluded from the dataset and treated as a hotspot.

Step 6 – Specify Acceptable Limits on Decision Errors

This step is to establish the specific limits on decision errors, which were used to determine the targets for limiting uncertainty in the data. Data generated during the environmental investigation needs to be appropriate to allow decisions to be made with confidence.

The specific limits for this investigation were based on appropriate guidance from the NSW EPA, NEPC (2013), AS 2005 and appropriate indicators of DQIs used to assess QA / QC for field sampling and handling.

To assess the suitability of the analytical data obtained prior to making decisions, the data was assessed against pre-determined Data Quality Indicators (DQIs) to assess precision, accuracy, representativeness, comparability and completeness (PARCC parameters), as outlined in AS 2005. The acceptable limit on decision error was 95% compliance with the DQIs.

The pre-determined DQIs specified for the investigation works are discussed below in relation to the PARCC parameters as summarised in **Table 21.**

Table 21. Summary of Acceptable Limits on Decision Errors.

Precision	• Sampling and analysis of field blind duplicates and split replicates to be undertaken at a minimum rate of 1 per every 10 samples. • Laboratory duplicate analysis to be undertaken by the testing laboratory at a minimum rate of 1 per 20 samples. • Field and laboratory RPD values to be less than 30% for analytical results greater than (>) 30 times the laboratory LOR, less than (<) 50 % for analytical results between 10 and 30 times the laboratory LOR and a control limit of ± the LOR if either the sample or duplicate value is less than 10 times the laboratory LOR.
Accuracy	• Laboratory surrogate spike recoveries were to be within 70 – 130% for all organic analyses (if applicable). • Laboratory control sample (LCS) recoveries to be assessed at a rate of one (1) sample per laboratory batch. LCS recoveries were to be within 70 – 130% (if applicable). • Matrix spike (MS) recoveries are to be assessed at a rate of one sample per laboratory batch. LCS recoveries were to be within 70 – 130% (if applicable).

Representativeness	• Appropriate sampling methods undertaken for all samples. • All samples were extracted and analysed within holding times. • One laboratory blank was collected per laboratory batch. All laboratory blank analytical results were below the laboratory LOR. • One trip spike is to be submitted with each sampling batch. Trip spike recoveries are to be within 70 – 130% (if applicable). • One trip blank is to be submitted with each sampling batch. Trip spike recoveries are to be within 70 – 130% (if applicable). • One rinsate sample is to be submitted with each sampling batch or where rinsate is required during field QA/QC procedures. All target analytes within the rinsate sample are to be below the prescribed laboratory LOR.
Comparability	• Sampling was completed in accordance with the recommended methods outlined within Section 5, Systematic planning for the collection of environmental data, in Schedule B2 of NEPM (2013), AS 2005 and ADE Standard Operating Procedures (SOPs). • Standard analytical methodologies were used by laboratories that were NATA accredited for the requested analyses.
Completeness	• Field documentation complete and appropriate for all samples to meet the objectives of the validation assessment. • Sample description and COC documentation complete and appropriate for all samples to meet the objectives of the validation assessment. • The sampling frequency and findings of the QA/QC sample review valid for >95% of samples.

Step 7 – Optimise the Design for Obtaining Data

The organisation of the data collection and analysis design for optimising the generation of data to satisfy the DQOs and the objective of the investigation has been achieved via the following procedures outlined in **Table 22.**

Table 22. Summary of Procedures to be Undertaken to Optimize the Design for Obtaining Data.

Pre-approved Work Plan	The sampling plan for the investigation at the site has been developed to assess the concentrations of contaminants present in soils at the site through the implementation of the components outlined within NEPM (2013), AS 4482.1 (2005) and AS/NZS 5667.1 (1998).
Compliance with EPA Guidelines	• Use of appropriate techniques for the sampling, storage and transportation of samples. • Implementation of NATA certified laboratory using analytical procedures as outlined in NEPM (2013). • Use of a secondary laboratory for split samples which is NATA certified for the required analyses.

Appendix IV – Analytical Results Table

21.1587.DSI

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulphate Soils		Leaching Preparation		NA	Particle Size	BTEX								TRH					
						Reaction Rate	s-Net Acidity without ANCE	pH (initial)	TCLP Fluid	2-Methyl-4,6-dinitrophenol	% Clay*	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)
						-	% S	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							0.005			2	1	0.5	0.1	0.1	0.1	0.2	0.1	0.3	1	20	20	50	50	100	100
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand													3 | 3 | 3 | 3				230			260 | 370 | 630				
CRC Care HSL-D Commercial / Industrial												11,000	430	99,000	27,000			81,000		26,000		20,000		27,000	38,000
CRC Intrusive Maintenance Worker												29,000	1,100	120,000	85,000			130,000		82,000		62,000		85,000	120,000
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																				700		1,000		3,500	10,000
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																				700		1,000		3,500	10,000
Mobilisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	9.7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	6.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	9.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	9.5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	0.0070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	9.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	9.5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	9.2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	0.0070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	0.0080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	9.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	9.6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	9.6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulphate Soils		Leaching Preparation		NA	Particle Size	BTEX								TRH					
						Reaction Rate	s-Net Acidity without ANCE	pH (initial)	TCLP Fluid	2-Methyl-4,6-dinitrophenol	% Clay*	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)
						-	% S	-	-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	0.0050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	10.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	9.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	0.0090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	8.1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	9.4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	9.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	146	<100
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	0.078	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	10.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	9.7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	9.5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	8.8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	8.8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	-	-	-	<2.0	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	8.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
-	-	BR1	-	9/06/2022	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
-	-	BR1	-	18/11/2021	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
-	-	BR1	-	29/11/2021	Field_D	-	-	6.4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
-	-	BR3	-	19/11/2021	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35	<50	-	<100	<100
-	-	TP18-BR	-	14/03/2022	Field_D	-	-	-	-	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50	-	<100	<100
-	-	SR1	-	17/11/2021	Interlab_D	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20	<50	<50	<100	<100
-	-	SR1	-	11/03/2022	Interlab_D	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20	<50	<50	<100	<100
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	-	-	-	-	-	<1	<0.2	<0.5	<1	<2	<1	<1	-	-	-	<50	<50	<100	<100
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20	<50	<50	<100	<100
-	-	SR3	-	19/11/2021	Interlab_D	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20	<50	<50	120	<100

Statistics

Number of Results						**52**	**13**	**23**	**23**	**30**	**3**	**5**	**75**	**75**	**75**	**75**	**75**	**75**	**70**	**74**	**74**	**75**	**5**	**75**	**75**
Number of Detects						**52**	**10**	**23**	**23**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
Minimum Concentration						**1**	**0.005**	**6.3**	**1**	**<2**	**<1**	**<0.5**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.3**	**<1**	**<20**	**<20**	**<50**	**<50**	**<100**	**<100**
Maximum Concentration						**4**	**0.078**	**10**	**1**	**<2**	**15**	**<1**	**<0.5**	**<0.5**	**<1**	**<2**	**<1**	**<2**	**<2**	**<35**	**<35**	**<50**	**<50**	**146**	**<100**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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						Acid Sulpl		Phenols																	
						Reaction Rate	>C10-C40 Fraction (Sum)	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-o-Cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Cresol Total	Pentachlorophenol	Phenol
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							50	0.1	0.1	0.1	0.05	0.05	0.05	0.2	4	0.05	0.1	0.2	0.2	5	0.2	4	0.4	0.2	0.2
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																							25,000	660	240,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Analytical Results Table_NEPM 2013

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						Acid Sulpl		Phenols																	
						Reaction Rate	>C10-C40 Fraction (Sum)	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-o-Cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Cresol Total	Pentachlorophenol	Phenol
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	146	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	9/06/2022	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	18/11/2021	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR3	-	19/11/2021	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	17/11/2021	Interlab_D	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	11/03/2022	Interlab_D	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR3	-	19/11/2021	Interlab_D	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results		**52**	**75**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**
Number of Detects		**52**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**1**	**<50**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<4**	**<0.05**	**<0.1**	**<0.2**	**<0.2**	**<5**	**<0.2**	**<4**	**<0.4**	**<0.2**	**<0.2**				
Maximum Concentration		**4**	**146**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<4**	**<0.05**	**<0.1**	**<0.2**	**<0.2**	**<5**	**<0.2**	**<4**	**<0.4**	**<0.2**	**<0.2**				
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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						Acid Sulpl		Chlorinated Hydrocarbons																		
						Reaction Rate	Phenols	Other chlorinated hydrocarbons EPAVic	Total Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2-dichloroethane	Bromochloromethane	Carbon tetrachloride	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Hexachlorobutadiene	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	Vinyl chloride
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
CRC Care HSL-D Commercial / Industrial																										
CRC Intrusive Maintenance Worker																										
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																										
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																										
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																					
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulpl		Chlorinated Hydrocarbons																		
						Reaction Rate	Phenols	Other chlorinated hydrocarbons EPAVic	Total Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2-dichloroethane	Bromochloromethane	Carbon tetrachloride	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Hexachlorobutadiene	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	Vinyl chloride
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.050	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
-	-	BR1	-	9/06/2022	Field_D	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
-	-	BR1	-	18/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR3	-	19/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
-	-	SR1	-	17/11/2021	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	11/03/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR3	-	19/11/2021	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																										
Number of Results						**52**	**12**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**
Number of Detects						**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration						**1**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration						**4**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
95% UCL (Chebyshev [Mean,Sd])*																										

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulp	Halogenated Benzenes					Herbicides	Inorganics						MAH						
						Reaction Rate	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Dinoseb	Conductivity (1:5 aqueous extract)	Moisture Content	Cation Exchange Capacity	Moisture Content (dried @ 103°C)	pH (Lab)	pH (after HCL)	Monocylic aromatic hydrocarbons EPAVic	Styrene	Iron (%)	Arsenic	Arsenic (filtered)	Cadmium	Cadmium (filtered)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µS/cm	%	meq/100g	%	-	-	mg/kg	mg/kg	%	mg/kg	mg/L	mg/kg	mg/L
EQL							0.5	0.5	0.5	0.5	0.05	5	10	0.1	0.05	1	0.1		1	0.5	0.01	2	0.5	0.3	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil											80											3,000		900	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	7.8	-	-	9.6	-	-	-	-	6.0	-	<0.30	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	<0.5	-	<0.05
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	14.6	-	-	5.9	-	-	-	-	<5.0	-	<0.30	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	-	-	-	<0.5	-	<0.05
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	-	-	-	-	<0.10	-	-	15.8	-	-	6.3	-	-	-	-	8.3	-	<0.30	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	15.4	-	-	8.2	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.0	-	-	8.3	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	15.2	-	-	8.4	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	<0.5	-	<0.05
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	-	-	-	-	<0.10	-	-	18.8	-	-	8	-	-	-	-	<5.0	-	<0.30	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	-	-	-	-	<0.10	-	-	20.0	-	-	7.8	-	-	-	-	5.5	-	<0.30	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	16.4	-	-	6.4	-	-	-	-	6.6	-	<0.30	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	14.5	-	-	6.8	-	-	-	-	7.4	-	<0.30	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	5.7	-	-	9.4	-	-	-	-	<5.0	-	<0.30	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	9.9	-	-	9.2	-	-	-	-	7.3	-	<0.30	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	17.5	-	-	6.3	-	-	-	-	13.8	-	<0.30	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	9.1	-	-	6.7	-	-	-	-	<5.0	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	15.9	-	-	8.7	-	-	-	-	5.2	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	<0.5	-	<0.05
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	95	-	27	7.1	8.6	-	-	-	3.4	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	8.4	-	-	9.1	-	-	-	-	<5.0	-	<0.30	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	<0.5	-	<0.05
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	160	-	37	4.1	8.2	-	-	-	2.1	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	16.1	-	-	8.6	-	-	-	-	<5.0	-	<0.30	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	<0.5	-	<0.05
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	14.6	-	-	7.2	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	20.4	-	-	6.2	-	<1.0	<0.50	-	6.9	-	<0.30	-
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.5	-	-	5.3	-	<1.0	<0.50	-	6.3	-	<0.30	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	72	-	16	6.1	5	-	-	-	0.90	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	18.3	-	-	8.3	-	-	-	-	<5.0	-	<0.30	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	19.0	-	-	8.1	-	-	-	-	6.9	-	<0.30	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	21.5	-	-	6	-	-	-	-	8.4	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.0	-	-	8.6	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	<0.5	-	<0.05
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	14.4	-	-	8.5	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.7	-	-	7.9	-	<1.0	<0.50	-	7.2	-	<0.30	-
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	7.0	-	-	9.1	-	-	-	-	<5.0	-	<0.30	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	-	-	-	-	<0.10	-	-	5.6	-	-	9.3	-	-	-	-	<5.0	-	<0.30	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	20.8	-	-	6.2	-	-	-	-	8.7	-	<0.30	-

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulp	Halogenated Benzenes					Herbicides	Inorganics						MAH						
						Reaction Rate	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Dinoseb	Conductivity (1:5 aqueous extract)	Moisture Content	Cation Exchange Capacity	Moisture Content (dried @ 103°C)	pH (Lab)	pH (after HCL)	Monocylic aromatic hydrocarbons EPAVic	Styrene	Iron (%)	Arsenic	Arsenic (filtered)	Cadmium	Cadmium (filtered)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µS/cm	%	meq/100g	%	-	-	mg/kg	mg/kg	%	mg/kg	mg/L	mg/kg	mg/L
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	-	-	-	<0.10	-	-	19.2	-	-	6.4	-	-	-	-	7.2	-	<0.30	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	-	-	-	<0.10	-	-	13.7	-	-	8.9	-	-	-	-	<5.0	-	<0.30	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	-	-	-	<0.10	-	-	17.4	-	-	8.1	-	-	-	-	<5.0	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<0.10	-	-	24.7	-	-	7.3	-	-	-	-	9.3	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	12.3	-	-	10.5	-	-	-	-	<5.0	-	<0.30	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	<0.5	-	<0.05
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	13.7	-	-	8.1	-	-	-	-	<5.0	-	<0.30	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	17.7	-	-	8.9	-	-	-	-	<5.0	-	<0.30	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	14.8	-	-	8.1	-	-	-	-	<5.0	-	<0.30	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	13.5	-	-	8.1	-	-	-	-	<5.0	-	<0.30	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	<0.5	-	<0.05
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	-	-	-	<0.10	-	-	18.2	-	-	8.3	-	-	-	-	13.9	-	<0.30	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	-	-	-	<0.10	-	-	17.4	-	-	6.2	-	-	-	-	5.8	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	24.8	-	-	7.4	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.1	-	-	7.4	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	20.2	-	-	7	-	<1.0	<0.50	-	10.5	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	11.6	-	-	9.1	-	-	-	-	<5.0	-	<0.30	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	-	<0.5	-	<0.05
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	11.6	-	-	8.9	-	-	-	-	<5.0	-	<0.30	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	<0.5	-	<0.05
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	-	-	-	<0.10	-	-	15.3	-	-	8.1	-	-	-	-	<5.0	-	<0.30	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	14.7	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	26.2	-	-	-	-	<1.0	<0.50	-	7.5	-	<0.30	-
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	25.0	-	-	-	-	<1.0	<0.50	-	10.4	-	<0.30	-
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	15.5	-	-	-	-	<1.0	<0.50	-	8.4	-	<0.30	-
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	15.4	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	23.6	-	-	-	-	<1.0	<0.50	-	9.6	-	<0.30	-
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	18.5	-	-	-	-	<1.0	<0.50	-	6.9	-	<0.30	-
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	15.3	-	-	-	-	<1.0	<0.50	-	8.4	-	<0.30	-
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	9.4	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	4.9	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	25.1	-	-	-	-	<1.0	<0.50	-	12.1	-	<0.30	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	16.3	-	-	-	-	<1.0	<0.50	-	5.3	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	12.2	-	-	10.6	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	13.6	-	-	10.7	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	<0.5	-	<0.05
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	9.9	-	-	10.1	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	-	<0.5	-	<0.05
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	14.9	-	-	9.4	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	<0.5	-	<0.05
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	11.9	-	-	8.7	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	-	-	-	<0.5	-	<0.05
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	-	12.4	-	-	8.5	-	<1.0	<0.50	-	<5.0	-	<0.30	-
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	<0.5	-	<0.05
-	-	BR1	-	12/04/2022	Field_D	-	<0.50	<0.50	<0.50	<0.50	<0.10	-	-	12.0	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
-	-	BR1	-	9/06/2022	Field_D	-	<0.50	<0.50	<0.50	<0.50	<0.10	-	-	9.1	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
-	-	BR1	-	18/11/2021	Field_D	-	-	-	-	-	<0.10	-	-	15.4	-	-	-	-	-	-	-	<5.0	-	<0.30	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	-	-	-	<0.5	-	<0.05
-	-	BR2	-	18/11/2021	Field_D	-	-	-	-	-	<0.10	-	-	15.4	-	-	-	-	-	-	-	<5.0	-	<0.30	-
-	-	BR3	-	19/11/2021	Field_D	-	-	-	-	-	<0.10	-	-	17.4	-	-	-	-	-	-	-	<5.0	-	<0.30	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	<0.50	<0.50	<0.50	<0.50	<0.10	-	-	14.7	-	-	-	-	<1.0	<0.50	-	<5.0	-	<0.30	-
-	-	SR1	-	17/11/2021	Interlab_D	-	-	-	-	-	<0.05	-	-	-	-	13	-	-	-	-	-	2.5	-	<0.4	-
-	-	SR1	-	11/03/2022	Interlab_D	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	<2	-	<0.4	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	2.6	-	<0.4	-
-	-	SR1	-	9/06/2022	Interlab_D	-	-	-	-	-	<0.1	-	-	8.8	-	-	-	-	-	-	-	<4	-	<0.4	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<4	-	<0.4	-
-	-	SR2	-	17/11/2021	Interlab_D	-	-	-	-	-	<0.05	-	-	-	-	3.1	-	-	-	-	-	<2	-	<0.4	-
-	-	SR3	-	19/11/2021	Interlab_D	-	-	-	-	-	<0.05	-	-	-	-	16	-	-	-	-	-	2.9	-	<0.4	-

Statistics

Number of Results						**52**	**33**	**33**	**33**	**33**	**75**	**30**	**3**	**71**	**3**	**7**	**55**	**23**	**33**	**33**	**3**	**77**	**23**	**77**	**23**
Number of Detects						**52**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**71**	**3**	**7**	**55**	**23**	**0**	**0**	**3**	**30**	**0**	**0**	**0**
Minimum Concentration						**1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<5**	**72**	**4.9**	**16**	**3.1**	**5**	**1.4**	**<1**	**<0.5**	**0.9**	**<2**	**<0.5**	**<0.3**	**<0.05**
Maximum Concentration						**4**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<5**	**160**	**26.2**	**37**	**16**	**10.7**	**2**	**<1**	**<0.5**	**3.4**	**13.9**	**<0.5**	**<0.4**	**<0.05**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

26.6666667 8.01818182

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

21.1587.DSI

Analytical Results Table_NEPM 2013

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						Acid Sulpl	Metals												Organic						
						Reaction Rate	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Lead	Lead (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Total Organic Carbon	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin
						-	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							1	0.2	1	0.05	20	1	0.5	0.1	0.01	1	0.2	1	0.05		0.1	0.1	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									240,000			1,500		730		6,000		400,000							
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	**BH01**	**BH01_0.5**	**0.5**	**18/11/2021**	**Normal**	4	14.6	-	65.5	-	-	42.6	-	<0.20	-	132.1	-	95.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH01**	**BH01_0.5**	**0.5**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH01**	**BH01_1.0**	**1**	**18/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH01**	**BH01_1.0**	**1**	**18/11/2021**	**Normal**	4	11.1	-	26.3	-	-	131.0	-	0.43	-	<10.0	-	13.5	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH01**	**BH01_1.0**	**1**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH01**	**BH1_1.8**	**1.8**	**19/11/2021**	**Normal**	4	16.2	-	<5.0	-	-	12.8	-	<0.20	-	<10.0	-	8.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH02**	**BH02_0.5**	**0.5**	**18/11/2021**	**Normal**	4	22.6	-	13.2	-	-	54.4	-	0.38	-	23.5	-	52.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH02**	**BH02_1.0**	**1**	**18/11/2021**	**Normal**	4	16.3	-	13.3	-	-	29.6	-	0.31	-	24.0	-	46.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH02**	**BH2_1.8**	**1.8**	**19/11/2021**	**Normal**	4	19.7	-	23.5	-	-	189.9	-	2.23	-	18.9	-	180.1	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH02**	**BH2_1.8**	**1.8**	**20/12/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH03**	**BH03_0.5**	**0.5**	**18/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH03**	**BH03_0.5**	**0.5**	**18/11/2021**	**Normal**	2	12.9	-	5.7	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH03**	**BH03_1.0**	**1**	**18/11/2021**	**Normal**	1	13.0	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH03**	**BH3_2.0**	**2**	**19/11/2021**	**Normal**	1	8.7	-	6.8	-	-	<10.0	-	<0.20	-	<10.0	-	9.6	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH03**	**BH3_3.0**	**3**	**19/11/2021**	**Normal**	1	9.4	-	6.2	-	-	<10.0	-	<0.20	-	<10.0	-	11.5	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH04**	**BH04_0.5**	**0.5**	**18/11/2021**	**Normal**	4	<5.0	-	50.6	-	-	<10.0	-	<0.20	-	26.8	-	28.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH04**	**BH04_1.0**	**1**	**18/11/2021**	**Normal**	4	8.5	-	64.8	-	-	<10.0	-	<0.20	-	53.4	-	52.8	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH04**	**BH04_1.0**	**1**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH04**	**BH4_2.0**	**2**	**19/11/2021**	**Normal**	1	14.9	-	9.1	-	-	12.5	-	<0.20	-	<10.0	-	10.2	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH04**	**BH04_2.0**	**2**	**17/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH04**	**BH4_3.0**	**3**	**19/11/2021**	**Normal**	1	<5.0	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH05**	**BH05_0.2**	**0.2**	**18/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH05**	**BH05_0.2**	**0.2**	**18/11/2021**	**Normal**	4	24.6	-	16.9	-	-	198.1	-	0.27	-	25.0	-	122.1	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH05**	**BH05_0.2**	**0.2**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH05**	**BH05_0.5**	**0.5**	**17/11/2021**	**Normal**	-	-	-	-	-	34,000	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-
ME1	**BH05**	**BH05_0.5**	**0.5**	**18/11/2021**	**Normal**	4	12.3	-	42.5	-	-	13.1	-	<0.20	-	62.8	-	43.4	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH05**	**BH05_0.5**	**0.5**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH05**	**BH05_1.0**	**1**	**17/11/2021**	**Normal**	-	-	-	-	-	21,000	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-
ME1	**BH05**	**BH05_1.0**	**1**	**18/11/2021**	**Normal**	4	22.2	-	17.0	-	-	122.9	-	0.22	-	23.8	-	90.5	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH05**	**BH05_1.0**	**1**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH06**	**BH06_0.5**	**0.5**	**17/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH06**	**BH06_0.5**	**0.5**	**18/11/2021**	**Normal**	3	6.6	-	30.4	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH06**	**BH06_1.0**	**1**	**18/11/2021**	**Normal**	2	15.3	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH06**	**BH6_1.8**	**1.8**	**19/11/2021**	**Normal**	1	12.7	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	5.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH06**	**BH06_1.8**	**1.8**	**17/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH06**	**BH06_1.8**	**1.8**	**17/11/2021**	**Normal**	-	-	-	-	-	9,000	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-
ME1	**BH07**	**BH07_0.5**	**0.5**	**18/11/2021**	**Normal**	4	9.7	-	8.7	-	-	36.4	-	<0.20	-	<10.0	-	575.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH07**	**BH07_1.0**	**1**	**18/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH07**	**BH07_1.0**	**1**	**18/11/2021**	**Normal**	4	10.7	-	9.3	-	-	17.7	-	<0.20	-	<10.0	-	149.1	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH07**	**BH7_1.8**	**1.8**	**19/11/2021**	**Normal**	1	9.9	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	5.7	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH08**	**BH08_0.5**	**0.5**	**18/11/2021**	**Normal**	4	9.6	-	27.4	-	-	166.5	-	0.47	-	18.3	-	148.6	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH08**	**BH08_0.5**	**0.5**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH08**	**BH08_1.0**	**1**	**18/11/2021**	**Normal**	4	16.6	-	13.2	-	-	50.6	-	<0.20	-	14.4	-	51.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH08**	**BH8_1.8**	**1.8**	**19/11/2021**	**Normal**	1	13.6	-	<5.0	-	-	14.4	-	<0.20	-	<10.0	-	5.9	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH08**	**BH08_1.8**	**1.8**	**19/11/2021**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	**BH09**	**BH09_0.5**	**0.5**	**18/11/2021**	**Normal**	4	64.4	-	15.5	-	-	<10.0	-	<0.20	-	60.3	-	30.5	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH09**	**BH09_0.5**	**0.5**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH09**	**BH09_1.0**	**1**	**18/11/2021**	**Normal**	4	94.5	-	20.9	-	-	<10.0	-	<0.20	-	93.0	-	46.9	-	-	-	-	<0.10	<0.10	<0.10
ME1	**BH09**	**BH09_1.0**	**1**	**29/11/2021**	**Normal**	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME1	**BH09**	**BH9_2.0**	**2**	**19/11/2021**	**Normal**	1	15.7	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	6.1	-	-	-	-	<0.10	<0.10	<0.10

Analytical Results Table_NEPM 2013

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						Acid Sulpl	Metals													Organic						
						Reaction Rate	Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron	Lead	Lead (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Total Organic Carbon	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin
						-	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	11.6	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	22.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	5.1	-	19.5	-	-	88.4	-	0.22	-	<10.0	-	49.6	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	7.9	-	6.5	-	-	19.1	-	<0.20	-	<10.0	-	5.3	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	20.2	-	<5.0	-	-	13.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	14.7	-	18.6	-	-	136.5	-	14.09	-	<10.0	-	180.5	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	14.8	-	5.2	-	-	71.1	-	0.61	-	<10.0	-	8.9	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	14.0	-	<5.0	-	-	<10.0	-	1.88	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	6.2	-	<5.0	-	-	22.9	-	0.24	-	<10.0	-	15.5	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	14.0	-	19.2	-	-	136.0	-	0.36	-	<10.0	-	53.3	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	12.6	-	<5.0	-	-	19.8	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	10.8	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	22.2	-	80.9	-	-	924.5	-	1.00	-	21.8	-	1,114.4	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	1.98	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	9.3	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	8.8	-	5.0	-	-	<10.0	-	<0.20	-	<10.0	-	5.4	-	-	-	-	<0.10	<0.10	<0.10
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	9.5	-	26.1	-	-	155.7	-	0.39	-	<10.0	-	127.8	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	9.5	-	20.7	-	-	201.2	-	0.43	-	<10.0	-	138.2	-	-	-	-	<0.10	<0.10	<0.10
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	5.2	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	9.6	-	30.6	-	-	93.0	-	<0.20	-	11.7	-	97.3	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	18.8	-	<5.0	-	-	13.1	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	19.1	-	6.4	-	-	10.3	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	14.3	-	7.2	-	-	13.0	-	<0.20	-	<10.0	-	5.6	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	11.5	-	<5.0	-	-	37.6	-	<0.20	-	<10.0	-	6.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	18.6	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	12.8	-	5.9	-	-	10.2	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	11.8	-	9.1	-	-	11.2	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	12.9	-	9.2	-	-	10.5	-	<0.20	-	10.8	-	31.1	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	11.7	-	32.1	-	-	94.7	-	0.22	-	13.1	-	85.3	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	24.8	-	7.3	-	-	15.4	-	<0.20	-	<10.0	-	6.1	-	-	-	-	<0.10	<0.10	<0.10
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	9.1	-	9.4	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	24.5	-	84.8	-	-	40.9	-	<0.20	-	136.4	-	73.3	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	27.0	-	102.2	-	-	36.3	-	<0.20	-	115.4	-	55.2	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	22.6	-	93.5	-	-	64.3	-	<0.20	-	103.0	-	76.0	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	12.6	-	48.7	-	-	74.7	-	<0.20	-	41.8	-	98.0	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	28.0	-	178.1	-	-	1,880.8	-	1.74	-	39.4	-	1,624.3	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	2.30	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	13.2	-	47.0	-	-	309.9	-	2.12	-	22.7	-	173.9	-	-	-	-	<0.10	<0.10	<0.10
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	24.7	-	34.0	-	-	16.3	-	<0.20	-	<10.0	-	43.2	-	-	-	-	<0.10	<0.10	<0.10
-	-	BR1	-	9/06/2022	Field_D	-	9.9	-	34.3	-	-	49.4	-	<0.20	-	16.8	-	89.9	-	-	-	-	<0.10	<0.10	<0.10
-	-	BR1	-	18/11/2021	Field_D	-	9.9	-	12.9	-	-	131.7	-	0.36	-	<10.0	-	12.6	-	-	-	-	<0.10	<0.10	<0.10
-	-	BR1	-	29/11/2021	Field_D	-	-	<0.2	-	<0.05	-	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	6.7	-	<5.0	-	-	<10.0	-	<0.20	-	<10.0	-	<5.0	-	-	-	-	<0.10	<0.10	<0.10
-	-	BR3	-	19/11/2021	Field_D	-	6.7	-	10.2	-	-	63.6	-	0.22	-	<10.0	-	6.5	-	-	-	-	<0.10	<0.10	<0.10
-	-	TP18-BR	-	14/03/2022	Field_D	-	35.1	-	117.1	-	-	43.0	-	<0.20	-	146.3	-	71.8	-	-	-	-	<0.10	<0.10	<0.10
-	-	SR1	-	17/11/2021	Interlab_D	-	12	-	22	-	-	97	-	0.3	-	<5	-	18	-	-	<0.1	<0.1	<0.05	<0.05	<0.05
-	-	SR1	-	11/03/2022	Interlab_D	-	27	-	47	-	-	17	-	<0.1	-	85	-	63	-	-	<0.1	<0.1	<0.05	<0.05	<0.05
-	-	SR1	-	12/04/2022	Interlab_D	-	84	-	7.3	-	-	8.6	-	<0.1	-	<5	-	30	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	13	-	42	-	-	89	-	0.2	-	18	-	74	-	-	-	-	<0.1	<0.1	<0.1
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	8	-	27	-	-	120	-	<0.1	-	15	-	61	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	11	-	<5	-	-	8.5	-	<0.1	-	<5	-	7.3	-	-	<0.1	<0.1	<0.05	<0.05	<0.05
-	-	SR3	-	19/11/2021	Interlab_D	-	14	-	13	-	-	53	-	0.1	-	6.5	-	24	-	-	<0.1	<0.1	<0.05	<0.05	<0.05

Statistics

Number of Results	52	77	23	77	23	3	77	23	77	23	77	23	77	23	3	4	4	75	75	75
Number of Detects	52	75	0	56	0	3	54	0	24	0	29	0	59	2	3	0	0	0	0	0
Minimum Concentration	1	<5	<0.2	5	<0.05	9,000	8.5	<0.5	0.1	<0.01	<5	<0.2	<5	<0.05	0.3	<0.1	<0.1	<0.05	<0.05	<0.05
Maximum Concentration	4	94.5	<0.2	178.1	<0.05	34,000	1,880.8	<0.5	14.09	<0.01	146.3	<0.2	1,624.3	2.3	0.7	<0.1	<0.1	<0.1	<0.1	<0.1
95% UCL (Chebyshev [Mean,Sd])*							535.1													

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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						Acid Sulpl	Organochlorine Pesticides															
						Reaction Rate	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							0.05	0.05	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil							45		530						3,600					100				50	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulpl	Organochlorine Pesticides																
						Reaction Rate	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	BR1	-	9/06/2022	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	BR1	-	18/11/2021	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	BR3	-	19/11/2021	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	TP18-BR	-	14/03/2022	Field_D	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
-	-	SR3	-	19/11/2021	Interlab_D	-	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Statistics

Number of Results	**52**	**4**	**75**	**4**	**71**	**71**	**75**	**75**	**75**	**5**	**75**	**75**	**75**	**75**	**75**	**75**	**74**	**75**	**75**	**75**
Number of Detects	**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**1**	**<0.05**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**
Maximum Concentration	**4**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
95% UCL (Chebyshev [Mean,Sd])*																				

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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SOLUTIONS THROUGH INNOVATION

						Acid Sulpl																			Organophosphorous F	
						Reaction Rate	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							0.05	0.5	0.2	0.1	0.2	0.1	0.2	0.1	0.1	2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil							2,500	160						2,000											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-

Analytical Results Table_NEPM 2013

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						Acid Sulpl			Organophosphorous P																	
						Reaction Rate	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	2.03	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	0.26	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	BR1	-	9/06/2022	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	BR1	-	18/11/2021	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	BR3	-	19/11/2021	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	<0.10	-	-	-	-	-	-	<0.10	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.05	<0.5	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.05	<0.5	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	<0.1	-	-	<0.1	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	<0.1
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.05	<0.5	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
-	-	SR3	-	19/11/2021	Interlab_D	-	<0.05	<0.5	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Statistics

Number of Results	**52**	**75**	**4**	**4**	**5**	**4**	**1**	**4**	**75**	**75**	**4**	**4**	**4**	**75**	**5**	**5**	**4**	**5**	**74**	**5**
Number of Detects	**52**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**1**	**<0.05**	**<0.5**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<2**	**<0.2**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**
Maximum Concentration	**4**	**2.03**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**
95% UCL (Chebyshev [Mean,Sd])*																				

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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							Acid Sulplesticides																		
							Reaction Rate	Fensulfothion	Fenthion	EPN	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthene (filtered)
							-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L
EQL								0.2	0.2	0.2	0.1	0.2	0.1	0.2	2	0.2	2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
CRC Care HSL-D Commercial / Industrial																										
CRC Intrusive Maintenance Worker																										
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																										
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																										
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																					
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH02	BH02_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal		2	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal		3	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH06	BH06_1.0	1	18/11/2021	Normal		2	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal		4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal		1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-

Analytical Results Table_NEPM 2013

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						Acid Sulplesticides																				
						Reaction Rate	Fensulfothion	Fenthion	EPN	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthene (filtered)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	BR1	-	9/06/2022	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	BR1	-	18/11/2021	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	BR3	-	19/11/2021	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	-	<0.30	-
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.5	-
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.5	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.2	<0.1	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.5	-
-	-	SR3	-	19/11/2021	Interlab_D	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	0.6	-
Statistics																									
Number of Results						**52**	**4**	**4**	**4**	**5**	**4**	**74**	**4**	**4**	**4**	**4**	**4**	**4**	**75**	**4**	**4**	**4**	**1**	**75**	**1**
Number of Detects						**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Minimum Concentration						**1**	**<0.2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.2**	**<2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.1**	**<5**
Maximum Concentration						**4**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**0.6**	**<5**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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						Acid Sulpl	PAH																
						Reaction Rate	Acenaphthylene	Acenaphthylene (filtered)	Anthracene	Anthracene (filtered)	Benzo(a)anthracene	Benzo(a)anthracene (filtered)	Benzo(a) pyrene	Benzo(a) pyrene (filtered)	Benzo(b)fluoranthene	Benzo(b)fluoranthene (filtered)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(g,h,i)perylene (filtered)	Benzo(k)fluoranthene	Benzo(k)fluoranthene (filtered)	Chrysene	Chrysene (filtered)	Dibenz(a,h)anthracene	Dibenz(a,h)anthracene (filtered)
						-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL							0.1	5	0.1	5	0.1	5	0.05	5	0.3	5	0.5	0.1	5	0.3	5	0.1	5	0.1	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	<0.30	-	<0.30	-	0.58	-	0.54	-	0.60	-	-	<0.30	-	0.35	-	0.55	-	<0.30	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulpl	PAH																			
						Reaction Rate	Acenaphthylene	Acenaphthylene (filtered)	Anthracene	Anthracene (filtered)	Benzo(a)anthracene	Benzo(a)anthracene (filtered)	Benzo(a) pyrene	Benzo(a) pyrene (filtered)	Benzo(b)fluoranthene	Benzo(b)fluoranthene (filtered)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(g,h,i)perylene (filtered)	Benzo(k)fluoranthene	Benzo(k)fluoranthene (filtered)	Chrysene	Chrysene (filtered)	Dibenz(a,h)anthracene	Dibenz(a,h)anthracene (filtered)
						-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	<0.30	-	<0.30	-	0.33	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	<0.30	-	<0.30	-	0.42	-	0.57	-	0.94	-	-	0.31	-	0.94	-	0.59	-	<0.30	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	<0.30	-	<0.30	-	0.37	-	0.47	-	0.54	-	-	<0.30	-	<0.30	-	0.41	-	<0.30	-
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	0.32	-	0.34	-	1.87	-	1.87	-	1.81	-	-	1.16	-	0.86	-	1.42	-	<0.30	-
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	<5	-	<5	-	<5	-	<5	-	<5	-	-	<5	-	<5	-	<5	-	<5
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	<0.30	-	<0.30	-	<0.30	-	0.34	-	0.37	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	BR1	-	9/06/2022	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	BR1	-	18/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	BR3	-	19/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	-
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	<0.1	-	<0.1	-	<0.1	-	0.1	-	-	-	-	0.1	-	-	-	<0.1	-	<0.1	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-	<0.5	-	<0.5	-	<0.5	-
-	-	SR3	-	19/11/2021	Interlab_D	-	<0.5	-	0.8	-	1.5	-	1.6	-	-	-	1.1	1.0	-	1.2	-	1.7	-	<0.5	-
Statistics																									
Number of Results						**52**	**75**	**1**	**75**	**1**	**75**	**1**	**75**	**1**	**70**	**1**	**4**	**75**	**1**	**74**	**1**	**75**	**1**	**75**	**1**
Number of Detects						**52**	**1**	**0**	**2**	**0**	**6**	**0**	**7**	**0**	**6**	**0**	**1**	**4**	**0**	**4**	**0**	**5**	**0**	**0**	**0**
Minimum Concentration						**1**	**<0.1**	**<5**	**<0.1**	**<5**	**<0.1**	**<5**	**0.1**	**<5**	**0.3**	**<5**	**<0.5**	**0.1**	**<5**	**<0.3**	**<5**	**<0.1**	**<5**	**<0.1**	**<5**
Maximum Concentration						**4**	**<0.5**	**<5**	**0.8**	**<5**	**1.87**	**<5**	**1.87**	**<5**	**1.81**	**<5**	**1.1**	**1.16**	**<5**	**1.2**	**<5**	**1.7**	**<5**	**<0.5**	**<5**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

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						Acid Sulpl																		PC
						Reaction Rate	Fluoranthene	Fluoranthene (filtered)	Fluorene	Fluorene (filtered)	Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene (filtered)	Naphthalene	Naphthalene (filtered)	Phenanthrene	Phenanthrene (filtered)	Pyrene	Pyrene (filtered)	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242
						-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							0.1	5	0.1	5	0.1	5	0.1	5	0.1	5	0.1	5	0.3	0.5	0.05	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																			40	4,000					
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial													11,000												
CRC Intrusive Maintenance Worker													29,000												
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																									
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	1.56	-	<0.30	-	<0.30	-	<0.30	-	0.59	-	1.53	-	0.87	-	6.30	<0.50	<0.50	<0.50	<0.50
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.30	-	0.36	-	0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50

Analytical Results Table_NEPM 2013

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						Acid Sulpl																	PC			
						Reaction Rate	Fluoranthene	Fluoranthene (filtered)	Fluorene	Fluorene (filtered)	Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene (filtered)	Naphthalene	Naphthalene (filtered)	Phenanthrene	Phenanthrene (filtered)	Pyrene	Pyrene (filtered)	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242
						-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	0.72	-	<0.30	-	<0.30	-	<0.30	-	0.41	-	0.80	-	0.38	-	2.26	<0.50	<0.50	<0.50	<0.50
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	0.37	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.40	-	0.36	-	0.77	<0.50	<0.50	<0.50	<0.50
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	1.19	-	<0.30	-	<0.30	-	<0.30	-	0.53	-	1.21	-	0.97	-	6.70	<0.50	<0.50	<0.50	<0.50
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	0.55	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.62	-	0.36	-	1.17	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	0.39	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.39	-	0.36	-	0.78	<0.50	<0.50	<0.50	<0.50
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.30	-	0.38	-	0.60	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	0.95	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	1.05	-	0.75	-	3.79	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	3.01	-	<0.30	-	1.05	-	<0.30	-	1.23	-	3.19	-	2.60	-	18.13	<0.50	<0.50	<0.50	<0.50
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	0.34	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.38	-	0.36	-	0.72	<0.50	<0.50	<0.50	<0.50
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	0.56	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.62	-	0.58	-	1.89	<0.50	<0.50	<0.50	<0.50
-	-	BR1	-	9/06/2022	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
-	-	BR1	-	18/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
-	-	BR3	-	19/11/2021	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
-	-	TP18-BR	-	14/03/2022	Field_D	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	0.36	-	<0.30	<0.50	<0.50	<0.50	<0.50
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	0.6	<0.5	-	<0.1	<0.1	<0.1	<0.1
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	0.6	<0.5	-	<0.1	<0.1	<0.1	<0.1
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	0.1	-	<0.5	-	0.52	<0.1	<0.1	<0.1	<0.1
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	0.6	<0.5	-	<0.1	<0.1	<0.1	<0.1
-	-	SR3	-	19/11/2021	Interlab_D	-	3.5	-	<0.5	-	0.9	-	<0.5	-	3.0	-	4.0	-	2.3	20.9	-	<0.1	<0.1	<0.1	<0.1
Statistics																									
Number of Results						**52**	**75**	**1**	**75**	**1**	**75**	**1**	**75**	**1**	**75**	**1**	**75**	**1**	**75**	**4**	**71**	**75**	**75**	**75**	**75**
Number of Detects						**52**	**12**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**14**	**0**	**74**	**1**	**13**	**0**	**0**	**0**	**0**
Minimum Concentration						**1**	**0.1**	**<5**	**<0.1**	**<5**	**<0.1**	**<5**	**<0.1**	**<5**	**<0.1**	**<5**	**0.1**	**<5**	**0.36**	**<0.5**	**0.3**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Maximum Concentration						**4**	**3.5**	**<5**	**<0.5**	**<5**	**1.05**	**<5**	**<0.5**	**<5**	**3**	**<5**	**4**	**<5**	**2.6**	**20.9**	**18.13**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

21.1587.DSI

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulph	Bs				Pesticides			Acid Sulphate Soils - Acid Base Accounting			Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC		Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - pH		Acid Sulph Potentia
						Reaction Rate	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	DEF	Parathion	Pirimiphos-methyl	a-Net Acidity without ANCE	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	pH-OX	pHKCl	Chromium Reducible Sulphur (acidity units)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	moles H+/t	mole H+/t	%S	%S	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	-	-	mole H+/t
EQL							0.1	0.1	0.1	0.1	0.1	0.1	0.2	5	5	0.005	0.01	5	0.05	0.05	0.75	0.75			3
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil										7															
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
CRC Care HSL-D Commercial / Industrial																									
CRC Intrusive Maintenance Worker																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)																	0.03	18					≤4.5		18
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																				
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	9.4	-	-
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	7.0	7.0	0.011	0.01	7	-	-	<0.75	<0.75	-	5.3	<3
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.3	-	-
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.4	-	-
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.9	-	-
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	<0.005	<0.01	<5	0.45	0.14	<0.75	<0.75	-	6.9	<3
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.8	-	-
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.9	-	-
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.9	-	-
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.5	-	-
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.2	-	-
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	-	-	-	-	-	-	-	9.8	9.8	0.016	0.02	10	-	-	<0.75	<0.75	-	4.9	<3
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.4	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	<0.005	<0.01	<5	1.2	0.38	<0.75	<0.75	-	8.7	4
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.4	-	-
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.4	-	-
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.9	-	-
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	0.0070	<0.01	<5	-	-	<0.75	<0.75	-	5.0	<3
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.0	-	-
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	38	38	0.062	0.06	38	-	-	3	2.9	-	4.2	<3
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.8	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	-	-	-	-	-	-	-	5.3	<5	<0.005	<0.01	<5	0.45	0.14	<0.75	<0.75	-	7.9	5
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.4	-	-
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.7	-	-
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.9	-	-
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.3	-	-
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	<0.005	<0.01	<5	0.15	<0.05	<0.75	<0.75	-	7.0	<3
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.9	-	-
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.8	-	-
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.9	-	-

Analytical Results Table_NEPM 2013

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Acid Sulph	Bs				Pesticides			Acid Sulphate Soils - Acid Base Accounting			Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC		Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - pH		Acid Sulph Potentia
						Reaction Rate	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	DEF	Parathion	Pirimiphos-methyl	a-Net Acidity without ANCE	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	pH-OX	pHKCl	Chromium Reducible Sulphur (acidity units)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	moles H+/t	mole H+/t	%S	%S	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	-	-	mole H+/t
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	0.0050	<0.01	<5	-	-	<0.75	<0.75	-	6.3	<3
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.2	-	-
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.9	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.6	-	-
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	<5	<5	<0.005	<0.01	<5	-	-	<0.75	<0.75	-	6.1	<3
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	9.9	-	-
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.0	-	-
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.7	-	-
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.8	-	-
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.3	-	-
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	-	-	-	-	-	-	-	5.8	5.8	0.0090	<0.01	6	-	-	<0.75	<0.75	-	5.0	<3
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.6	-	-
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.7	-	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	5.2	-	-
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	-	-	-	-	-	-	-	6.0	6.0	0.010	0.01	6	-	-	<0.75	<0.75	-	5.3	<3
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.1	-	-
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.8	-	-
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.5	-	-
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	-	-	-	49	49	0.078	0.08	47	-	-	4	3.7	-	4.3	<3
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	10.8	-	-
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	10.8	-	-
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	9.4	-	-
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	8.9	-	-
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	7.0	-	-
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	9/06/2022	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	18/11/2021	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	BR3	-	19/11/2021	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	TP18-BR	-	14/03/2022	Field_D	-	<0.50	<0.50	<0.50	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	17/11/2021	Interlab_D	-	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	11/03/2022	Interlab_D	-	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1	-	9/06/2022	Interlab_D	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
-	-	SR3	-	19/11/2021	Interlab_D	-	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																									
Number of Results						**52**	**75**	**75**	**75**	**5**	**70**	**5**	**4**	**13**	**13**	**13**	**13**	**13**	**4**	**4**	**13**	**13**	**52**	**13**	**13**
Number of Detects						**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**6**	**8**	**5**	**6**	**4**	**3**	**2**	**2**	**52**	**13**	**2**
Minimum Concentration						**1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<5**	**<5**	**0.005**	**0.01**	**<5**	**0.15**	**<0.05**	**<0.75**	**<0.75**	**4**	**4.2**	**<3**
Maximum Concentration						**4**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.1**	**<0.2**	**<0.2**	**49**	**49**	**0.078**	**0.08**	**47**	**1.2**	**0.38**	**4**	**3.7**	**10.8**	**8.7**	**5**
95% UCL (Chebyshev [Mean,Sd])*																									

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

Analytical Results Table_NEPM 2013

						Acid Sulphate Soils - Acid Sulphate Acidity		Acid Sulphate Soils - Retained Acidity		Acid Sulphate Soils - Sulfur Trail	TPH				
						Reaction Rate	Chromium Reducible Sulfur	HCl Extractable Sulfur	Net Acid Soluble Sulfur	KCl Extractable Sulfur	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
						-	%w/w	%S	%S	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.005	0.005	0.005	20	20	50	50	50
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil															
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand															
CRC Care HSL-D Commercial / Industrial															
CRC Intrusive Maintenance Worker															
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil															
Acid Sulfate Soils Trigger Criteria (>1000 tonnes disturbed)															
Mobillisation Event	**Sampling Location**	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**										
ME1	BH01	BH01_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH01	BH01_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH01	BH01_1.0	1	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH01	BH01_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH01	BH1_1.8	1.8	19/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH02	BH02_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH02	BH02_1.0	1	18/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH02	BH2_1.8	1.8	19/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH02	BH2_1.8	1.8	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH03	BH03_0.5	0.5	18/11/2021	Normal	2	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH03	BH03_1.0	1	18/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH03	BH3_2.0	2	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH03	BH3_3.0	3	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH04	BH04_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH04	BH04_1.0	1	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH04	BH04_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH04	BH4_2.0	2	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH04	BH04_2.0	2	17/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH04	BH4_3.0	3	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	-	0.007	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.2	0.2	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH05	BH05_0.2	0.2	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH05	BH05_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH05	BH05_1.0	1	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH05	BH05_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	17/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH06	BH06_0.5	0.5	18/11/2021	Normal	3	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH06	BH06_1.0	1	18/11/2021	Normal	2	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH06	BH6_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	<0.005	0.023	<0.005	0.025	-	-	-	-	-
ME1	BH06	BH06_1.8	1.8	17/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH07	BH07_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	-	0.008	-	-	-	-	-	-	-	-
ME1	BH07	BH07_1.0	1	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH07	BH7_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH08	BH08_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH08	BH08_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH08	BH08_1.0	1	18/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH08	BH8_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH08	BH08_1.8	1.8	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH09	BH09_0.5	0.5	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH09	BH09_0.5	0.5	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH09_1.0	1	18/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH09	BH09_1.0	1	29/11/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH09	BH9_2.0	2	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50

Analytical Results Table_NEPM 2013

						Acid Sulphate Soils - Acid Sulphate Acidity		Acid Sulphate Soils - Retained Acidity		Acid Sulphate Soils - Sulfur Trail	TPH				
						Reaction Rate	Chromium Reducible Sulfur	HCl Extractable Sulfur	Net Acid Soluble Sulfur	KCl Extractable Sulfur	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
						-	%w/w	%S	%S	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ME1	BH09	BH9_3.0	3	19/11/2021	Normal	2	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH09	BH09_3.0	3	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME1	BH13	BH13_0.5	0.5	19/11/2021	Normal	3	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH13	BH13_1.0	1	19/11/2021	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH13	BH13_1.8	1.8	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME2	BH14	BH14_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH14	BH14_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME2	BH14	BH14_1.0	1	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH14	BH14_2.0	2	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH15	BH15_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH15	BH15_1.0	1	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH15	BH15_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME2	BH15	BH15_2.0	2	27/01/2022	Normal	2	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH15	BH15_3.0	3	25/01/2022	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME2	BH15	BH15_3.0	3	27/01/2022	Normal	1	-	-	-	-	<25	<50	<100	<100	<50
ME1	BH16	BH16_0.5	0.5	19/11/2021	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH16	BH16_0.5	0.5	20/12/2021	Normal	-	-	-	-	-	-	-	-	-	-
ME1	BH16	BH16_1.0	1	19/11/2021	Normal	1	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	1	-	-	-	-	<35	<50	<100	<100	<50
ME1	BH16	BH16_1.8	1.8	19/11/2021	Normal	-	<0.005	-	-	-	-	-	-	-	-
ME2	BH17	BH17_0.5	0.5	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH17	BH17_0.5	0.5	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.0	1	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME2	BH17	BH17_1.0	1	31/01/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME2	BH17	BH17_1.8	1.8	27/01/2022	Normal	4	-	-	-	-	<25	<50	<100	<100	<50
ME3	TP10	TP10_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	161	161
ME3	TP10	TP10_0.5	0.5	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP10	TP10_1.0	1	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP10	TP10_1.5	1.5	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP11	TP11_0.0-0.1	0 - 0.1	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP11	TP11_0.5	0.5	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP11	TP11_1.0	1	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP11	TP11_1.5	1.5	9/06/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP12	TP12_0.0-0.1	0 - 0.1	12/04/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP12	TP12_0.5	0.5	12/04/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP12	TP12_1.0	1	12/04/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	<0.005	0.038	<0.005	0.039	-	-	-	-	-
ME3	TP12	TP12_1.8	1.8	12/04/2022	Normal	-	-	-	-	-	<35	<50	<100	<100	<50
ME4	TP18	TP18-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME4	TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME4	TP18	TP18-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME4	TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME4	TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME4	TP19	TP19-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	104	104
ME4	TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.2	0.2	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	102	102
ME4	TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
ME4	TP20	TP20-0.8	0.8	14/03/2022	Normal	4	-	-	-	-	<35	<50	<100	<100	<50
ME4	TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
-	-	BR1	-	12/04/2022	Field_D	-	-	-	-	-	<35	<50	<100	<100	<50
-	-	BR1	-	9/06/2022	Field_D	-	-	-	-	-	<35	<50	<100	<100	<50
-	-	BR1	-	18/11/2021	Field_D	-	-	-	-	-	<25	<50	<100	<100	<50
-	-	BR1	-	29/11/2021	Field_D	-	-	-	-	-	-	-	-	-	-
-	-	BR2	-	18/11/2021	Field_D	-	-	-	-	-	<25	<50	<100	<100	<50
-	-	BR3	-	19/11/2021	Field_D	-	-	-	-	-	<25	<50	<100	<100	<50
-	-	TP18-BR	-	14/03/2022	Field_D	-	-	-	-	-	<35	<50	<100	101	101
-	-	SR1	-	17/11/2021	Interlab_D	-	-	-	-	-	<20	<20	<50	<50	<50
-	-	SR1	-	11/03/2022	Interlab_D	-	-	-	-	-	<20	<20	<50	<50	<50
-	-	SR1	-	12/04/2022	Interlab_D	-	-	-	-	-	-	-	-	-	<0
-	-	SR1	-	9/06/2022	Interlab_D	-	-	-	-	-	-	<50	<100	<100	<50
-	-	SR1 - [TRIPLICATE]	-	9/06/2022	Interlab_D	-	-	-	-	-	-	-	-	-	-
-	-	SR2	-	17/11/2021	Interlab_D	-	-	-	-	-	<20	<20	<50	<50	<50
-	-	SR3	-	19/11/2021	Interlab_D	-	-	-	-	-	<20	<20	92	<50	92

Statistics

Number of Results	52	13	2	2	2	74	75	75	75	76
Number of Detects	52	2	2	0	2	0	0	1	4	5
Minimum Concentration	1	<0.005	0.023	<0.005	0.025	<20	<20	<50	<50	<0
Maximum Concentration	4	0.008	0.038	<0.005	0.039	<35	<50	<100	161	161
95% UCL (Chebyshev [Mean,Sd])*										

* UCL derived from all samples collected from the top 0.5 m fill lithology with a consistent soil matrix.

Environmental Standards

2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
CRC Care, 2011, CRC Care HSL-D Commercial / Industrial
CRC Care, 2011, CRC Intrusive Maintenance Worker
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil
ASSMAC, 1998

21.1587.DSI

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

				Acid Sulphate Soils	Leaching Preparation		NA	BTEX										
				Reaction Rate	pH (Initial)	TCLP Fluid	2-Methyl-4,6-dinitrophenol	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)
				-	-	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							2	0.5	0.1	0.1	0.1	0.2	0.1	0.3	1	20	20	50
NSW 2014 General Solid Waste CT1 (No Leaching)									10	288	600			1,000				
NSW 2014 General Solid Waste SCC1 (with leached)																		
NSW 2014 General Solid Waste TCLP1 (leached)																		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)									40	1,152	2,400			4,000				
NSW 2014 Restricted Solid Waste SCC2 (with leached)																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																		
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**														
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20	<50
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	10.0	1	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	9.7	1	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	9.5	1	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	8.8	1	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	8.8	1	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	8.3	1	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**7**	**7**	**6**	**1**	**8**	**8**	**8**	**8**	**8**	**8**	**7**	**8**	**8**	**8**
Number of Detects	**6**	**7**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**8.3**	**1**	**<2**	**<0.5**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.3**	**<1**	**<20**	**<20**	**<50**
Maximum Concentration	**4**	**10**	**1**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<1**	**<1**	**<35**	**<35**	**<50**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

				Acid Sulphate Soils	TRH				Phenols										
				Reaction Rate	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol
				-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					50	100	100	50	0.1	0.1	0.1	0.05	0.05	0.05	0.2	4	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)												8,000	40					
NSW 2014 General Solid Waste SCC1 (with leached)																		
NSW 2014 General Solid Waste TCLP1 (leached)																		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)												32,000	160					
NSW 2014 Restricted Solid Waste SCC2 (with leached)																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																		
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**														
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<50	<100	<100	<100	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	<100	<100	<50	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0	<0.050	<0.10
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**1**	**8**	**8**	**8**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<50**	**<100**	**<100**	**<50**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<4**	**<0.05**	**<0.1**		
Maximum Concentration	**4**	**<50**	**<100**	**<100**	**<100**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<4**	**<0.05**	**<0.1**		

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

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SOLUTIONS THROUGH INNOVATION

				Acid Sulphate Soils													
				Reaction Rate	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Cresol Total	Pentachlorophenol	Phenol	Other chlorinated hydrocarbons EPAVic	Total Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane
				-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.2	0.2	5	0.2	4	0.4	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)					4,000					4,000					200	600	26	24
NSW 2014 General Solid Waste SCC1 (with leached)																		
NSW 2014 General Solid Waste TCLP1 (leached)																		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					16,000					16,000					800	2,400	104	96
NSW 2014 Restricted Solid Waste SCC2 (with leached)																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																		
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**														
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	-	-	-	-	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.2**	**<0.2**	**<5**	**<0.2**	**<4**	**<0.4**	**<0.2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration	**4**	**<0.2**	**<0.2**	**<5**	**<0.2**	**<4**	**<0.4**	**<0.2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

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SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils	Chlorinated Hydrocarbons												Halo	
		Reaction Rate	1,1-dichloroethene	1,2-dichloroethane	Bromochloromethane	Carbon tetrachloride	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Hexachlorobutadiene	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	Vinyl chloride	1,2,4-trichlorobenzene	1,2-dichlorobenzene
		-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			14	10		10	120		172		10	14		4		86
NSW 2014 General Solid Waste SCC1 (with leached)																
NSW 2014 General Solid Waste TCLP1 (leached)																
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			56	40		40	480		688		40	56		16		344
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)																
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**														
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																		
Number of Results		**6**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Number of Detects		**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**4**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration		**4**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

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SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils	genated Benzenes			Herbicides	Inorganics			MAH							
		Reaction Rate	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Dinoseb	Moisture Content	pH (Lab)	pH (after HCL)	Monocylic aromatic hydrocarbons EPAVic	Styrene	Arsenic	Arsenic (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)
		-	mg/kg	mg/kg	mg/kg	mg/kg	%	-	-	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL			0.5	0.5	0.05	5				1	0.5	2	0.5	0.3	0.05	5
NSW 2014 General Solid Waste CT1 (No Leaching)			150	2,000							60	100		20		
NSW 2014 General Solid Waste SCC1 (with leached)																
NSW 2014 General Solid Waste TCLP1 (leached)													5		1	
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			600	8,000							240	400		80		
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)													20		4	
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**													
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	-	<0.05	-	-	-	-	-	-	<2	-	<0.4	-	27
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	12.2	10.6	-	<1.0	<0.50	<5.0	-	<0.30	-	24.5
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	1.9	-	-	-	<0.5	-	<0.05	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	13.6	10.7	-	<1.0	<0.50	<5.0	-	<0.30	-	27.0
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	1.9	-	-	-	<0.5	-	<0.05	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.50	<0.50	<0.10	-	14.7	-	-	<1.0	<0.50	<5.0	-	<0.30	-	35.1
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	9.9	10.1	-	<1.0	<0.50	<5.0	-	<0.30	-	22.6
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	2.0	-	-	-	<0.5	-	<0.05	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	14.9	9.4	-	<1.0	<0.50	<5.0	-	<0.30	-	12.6
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	1.6	-	-	-	<0.5	-	<0.05	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	11.9	8.7	-	<1.0	<0.50	<5.0	-	<0.30	-	28.0
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	1.7	-	-	-	<0.5	-	<0.05	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.50	<0.50	<0.10	<5.0	12.4	8.5	-	<1.0	<0.50	<5.0	-	<0.30	-	13.2
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	1.6	-	-	-	<0.5	-	<0.05	-

Statistics

Number of Results	**6**	**7**	**7**	**8**	**6**	**7**	**6**	**7**	**7**	**7**	**8**	**7**	**8**	**7**	**8**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**7**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Minimum Concentration	**4**	**<0.5**	**<0.5**	**<0.05**	**<5**	**9.9**	**8.5**	**1.6**	**<1**	**<0.5**	**<2**	**<0.5**	**<0.3**	**<0.05**	**12.6**
Maximum Concentration	**4**	**<0.5**	**<0.5**	**<0.1**	**<5**	**14.9**	**10.7**	**2**	**<1**	**<0.5**	**<5**	**<0.5**	**<0.4**	**<0.05**	**35.1**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils	Metals													
		Reaction Rate	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Lead	Lead (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Zinc	Zinc (filtered)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE
		-	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg
EQL			0.2	5	0.05	5	0.5	0.1	0.01	5	0.2	5	0.05	0.1	0.1	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)						100		4		40						
NSW 2014 General Solid Waste SCC1 (with leached)						1,500										
NSW 2014 General Solid Waste TCLP1 (leached)							5		0.2		2					
NSW 2014 Restricted Solid Waste CT2 (No Leaching)						400		16		160						
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)							20		0.8		8					
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**												
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	47	-	17	-	<0.1	-	85	-	63	-	<0.1	<0.1	<0.05
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	84.8	-	40.9	-	<0.20	-	136.4	-	73.3	-	-	-	<0.10
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	102.2	-	36.3	-	<0.20	-	115.4	-	55.2	-	-	-	<0.10
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	117.1	-	43.0	-	<0.20	-	146.3	-	71.8	-	-	-	<0.10
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	93.5	-	64.3	-	<0.20	-	103.0	-	76.0	-	-	-	<0.10
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	48.7	-	74.7	-	<0.20	-	41.8	-	98.0	-	-	-	<0.10
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	178.1	-	1,880.8	-	1.74	-	39.4	-	1,624.3	-	-	-	<0.10
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	2.30	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	47.0	-	309.9	-	2.12	-	22.7	-	173.9	-	-	-	<0.10
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	<0.2	-	<0.05	-	<0.5	-	<0.01	-	<0.2	-	<0.05	-	-	-

Statistics

Number of Results	**6**	**7**	**8**	**7**	**8**	**7**	**8**	**7**	**8**	**7**	**8**	**7**	**1**	**1**	**8**
Number of Detects	**6**	**0**	**8**	**0**	**8**	**0**	**2**	**0**	**8**	**0**	**8**	**1**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.2**	**47**	**<0.05**	**17**	**<0.5**	**<0.1**	**<0.01**	**22.7**	**<0.2**	**55.2**	**<0.05**	**<0.1**	**<0.1**	**<0.05**
Maximum Concentration	**4**	**<0.2**	**178.1**	**<0.05**	**1,880.8**	**<0.5**	**2.12**	**<0.01**	**146.3**	**<0.2**	**1,624.3**	**2.3**	**<0.1**	**<0.1**	**<0.1**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

					Acid Sulphate Soils	Organochlorine Pesticides													
					Reaction Rate	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II
					-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)																			
NSW 2014 General Solid Waste SCC1 (with leached)																			
NSW 2014 General Solid Waste TCLP1 (leached)																			
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			
NSW 2014 Restricted Solid Waste SCC2 (with leached)																			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																			
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**															
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**8**	**8**	**1**	**8**	**1**	**7**	**7**	**8**	**8**	**8**	**1**	**8**	**8**	**8**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**
Maximum Concentration	**4**	**<0.1**	**<0.1**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.1**	**<0.2**	**<0.2**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

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SOLUTIONS THROUGH INNOVATION

				Acid Sulphate Soils													
				Reaction Rate	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos
				-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.2	0.2	0.2	0.2	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)																		4
NSW 2014 General Solid Waste SCC1 (with leached)																		
NSW 2014 General Solid Waste TCLP1 (leached)																		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																		16
NSW 2014 Restricted Solid Waste SCC2 (with leached)																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																		
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**														
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-	<0.10
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-	<0.10
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-	<0.10
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-	<0.10
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-	<0.10
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	2.03	-	-	-	-	-	<0.10
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	-	-	-	-	-	<0.10
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**1**	**1**	**1**	**1**	**1**	**1**	**8**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.1**
Maximum Concentration	**4**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**2.03**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

					Acid Sulphate Soils	Organophosphorous Pesticides													
					Reaction Rate	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	EPN
					-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.1	2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
NSW 2014 General Solid Waste CT1 (No Leaching)																			
NSW 2014 General Solid Waste SCC1 (with leached)																			
NSW 2014 General Solid Waste TCLP1 (leached)																			
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			
NSW 2014 Restricted Solid Waste SCC2 (with leached)																			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																			
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**															
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.10	-	-	-	<0.10	-	-	-	-	<0.10	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**8**	**1**	**1**	**1**	**8**	**1**	**1**	**1**	**1**	**8**	**1**	**1**	**1**	**1**
Number of Detects	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.1**	**<2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.2**	**<0.2**	**<0.2**
Maximum Concentration	**4**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

					Acid Sulphate Soils															
					Reaction Rate	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	Acenaphthene
					-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.2	0.2	0.1	0.2	2	0.2	2	0.2	0.2	0.1	0.2	0.2	0.2	0.3
NSW 2014 General Solid Waste CT1 (No Leaching)																			
NSW 2014 General Solid Waste SCC1 (with leached)																			
NSW 2014 General Solid Waste TCLP1 (leached)																			
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			
NSW 2014 Restricted Solid Waste SCC2 (with leached)																			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																			
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**																
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	-	<0.10	-	-	-	-	-	-	<0.10	-	-	-	<0.30
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																				
Number of Results					**6**	**1**	**1**	**8**	**1**	**1**	**1**	**1**	**1**	**1**	**8**	**1**	**1**	**1**	**8**
Number of Detects					**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration					**4**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.2**	**<0.2**	**<0.3**
Maximum Concentration					**4**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

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SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils														
		Reaction Rate	Acenaphthene (filtered)	Acenaphthylene	Acenaphthylene (filtered)	Anthracene	Anthracene (filtered)	Benzo(a)anthracene	Benzo(a)anthracene (filtered)	Benzo(a) pyrene	Benzo(a) pyrene (filtered)	Benzo(b)fluoranthene	Benzo(b)fluoranthene (filtered)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(g,h,i)perylene (filtered)
		-	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L
EQL			5	0.3	5	0.3	5	0.3	5	0.3	5	0.3	5	0.5	0.3	5
NSW 2014 General Solid Waste CT1 (No Leaching)										0.8						
NSW 2014 General Solid Waste SCC1 (with leached)																
NSW 2014 General Solid Waste TCLP1 (leached)											40					
NSW 2014 Restricted Solid Waste CT2 (No Leaching)										3.2						
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)											160					
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**												
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	<0.5	-
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	-	0.32	-	0.34	-	1.87	-	1.87	-	1.81	-	-	1.16	-
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-	-	<5
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	-	<0.30	-
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**7**	**1**	**1**	**8**	**1**
Number of Detects	**6**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**
Minimum Concentration	**4**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.5**	**<0.3**	**<5**
Maximum Concentration	**4**	**<5**	**<0.5**	**<5**	**<0.5**	**<5**	**1.87**	**<5**	**1.87**	**<5**	**1.81**	**<5**	**<0.5**	**<5**	**<0.5**	**1.16**	**<5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils	PAH													
		Reaction Rate	Benzo(k)fluoranthene	Benzo(k)fluoranthene (filtered)	Chrysene	Chrysene (filtered)	Dibenz(a,h)anthracene	Dibenz(a,h)anthracene (filtered)	Fluoranthene	Fluoranthene (filtered)	Fluorene	Fluorene (filtered)	Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene (filtered)	Naphthalene	Naphthalene (filtered)
		-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L
EQL			0.3	5	0.3	5	0.3	5	0.3	5	0.3	5	0.3	5	0.3	5
NSW 2014 General Solid Waste CT1 (No Leaching)																
NSW 2014 General Solid Waste SCC1 (with leached)																
NSW 2014 General Solid Waste TCLP1 (leached)																
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)																
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**													
TP18	**SR1**	**-**	**11/03/2022**	**Interlab_D**	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
TP18	**TP18-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
TP18	**TP18-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
TP18	**TP18-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	**TP18-BR**	**-**	**14/03/2022**	**Field_D**	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
TP19	**TP19-0.2**	**0.2**	**14/03/2022**	**Normal**	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
TP19	**TP19-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	**TP19-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<0.30	-
TP19	**TP19-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	**TP20-0.2**	**0.2**	**14/03/2022**	**Normal**	4	0.86	-	1.42	-	<0.30	-	3.01	-	<0.30	-	1.05	-	<0.30	-
TP20	**TP20-0.2**	**0.2**	**4/04/2022**	**Normal**	-	-	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-	<5
TP20	**TP20-0.8**	**0.8**	**14/03/2022**	**Normal**	4	<0.30	-	<0.30	-	<0.30	-	0.34	-	<0.30	-	<0.30	-	<0.30	-
TP20	**TP20-0.8**	**0.8**	**4/04/2022**	**Normal**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**	**8**	**1**
Number of Detects	**6**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**4**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**	**<0.3**	**<5**
Maximum Concentration	**4**	**0.86**	**<5**	**1.42**	**<5**	**<0.5**	**<5**	**3.01**	**<5**	**<0.5**	**<5**	**1.05**	**<5**	**<0.5**	**<5**	**<0.5**	**<5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

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Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

		Acid Sulphate Soils							PCBs								
		Reaction Rate	Phenanthrene	Phenanthrene (filtered)	Pyrene	Pyrene (filtered)	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)
		-	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.3	5	0.3	5	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)							200									50
NSW 2014 General Solid Waste SCC1 (with leached)																
NSW 2014 General Solid Waste TCLP1 (leached)																
NSW 2014 Restricted Solid Waste CT2 (No Leaching)							800									50
NSW 2014 Restricted Solid Waste SCC2 (with leached)																
NSW 2014 Restricted Solid Waste TCLP2 (leached)																
Sampling Location	**Field ID**	**Depth (m BGL)**	**Date**	**Sample Type**													
TP18	SR1	-	11/03/2022	Interlab_D	-	<0.5	-	<0.5	-	<0.5	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	-	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	-	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP18	TP18-BR	-	14/03/2022	Field_D	-	<0.30	-	<0.30	-	-	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.30	-	<0.30	-	-	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.30	-	<0.30	-	-	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP20	TP20-0.2	0.2	14/03/2022	Normal	4	1.23	-	3.19	-	-	18.13	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	<5	-	<5	-	-	-	-	-	-	-	-	-	-
TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<0.30	-	0.38	-	-	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-
TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	8	1	8	1	1	7	8	8	8	8	8	8	8	8	1
Number of Detects	6	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0
Minimum Concentration	4	<0.3	<5	<0.3	<5	<0.5	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Maximum Concentration	4	1.23	<5	3.19	<5	<0.5	18.13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Analytical Results Table (45A George Street Excavation)_ NSW EPA 2014

	Acid Sulphate Soils	Pesticides			Acid Sulphate Soils - pH	TPH				
	Reaction Rate	DEF	Parathion	Pirimiphos-methyl	pH-OX	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
	-	mg/kg	mg/kg	mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.2	0.2		20	20	50	50	50
NSW 2014 General Solid Waste CT1 (No Leaching)						650				10,000
NSW 2014 General Solid Waste SCC1 (with leached)										
NSW 2014 General Solid Waste TCLP1 (leached)										
NSW 2014 Restricted Solid Waste CT2 (No Leaching)						2,600				40,000
NSW 2014 Restricted Solid Waste SCC2 (with leached)										
NSW 2014 Restricted Solid Waste TCLP2 (leached)										

Sampling Location	Field ID	Depth (m BGL)	Date	Sample Type										
TP18	SR1	-	11/03/2022	Interlab_D	-	-	<0.2	<0.2	-	<20	<20	<50	<50	<50
TP18	TP18-0.2	0.2	14/03/2022	Normal	4	<0.10	-	-	10.8	<35	<50	<100	<100	<50
TP18	TP18-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
TP18	TP18-0.8	0.8	14/03/2022	Normal	4	<0.10	-	-	10.8	<35	<50	<100	<100	<50
TP18	TP18-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
TP18	TP18-BR	-	14/03/2022	Field_D	-	<0.10	-	-	-	<35	<50	<100	101	101
TP19	TP19-0.2	0.2	14/03/2022	Normal	4	<0.10	-	-	9.4	<35	<50	<100	<100	<50
TP19	TP19-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
TP19	TP19-0.8	0.8	14/03/2022	Normal	4	<0.10	-	-	8.9	<35	<50	<100	104	104
TP19	TP19-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
TP20	TP20-0.2	0.2	14/03/2022	Normal	4	<0.10	-	-	7.0	<35	<50	<100	102	102
TP20	TP20-0.2	0.2	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-
TP20	TP20-0.8	0.8	14/03/2022	Normal	4	<0.10	-	-	6.9	<35	<50	<100	<100	<50
TP20	TP20-0.8	0.8	4/04/2022	Normal	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	7	1	1	6	8	8	8	8	8
Number of Detects	6	0	0	0	6	0	0	0	3	3
Minimum Concentration	4	<0.1	<0.2	<0.2	6.9	<20	<20	<50	<50	<50
Maximum Concentration	4	<0.1	<0.2	<0.2	10.8	<35	<50	<100	104	104

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.14/07/2022 3:12:48 PM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Pb_UCL

General Statistics

Total Number of Observations	24	Number of Distinct Observations	19
		Number of Missing Observations	14
Minimum	10	Mean	171.8
Maximum	1881	Median	41.75
SD	408.3	Std. Error of Mean	83.34
Coefficient of Variation	2.376	Skewness	3.741

Normal GOF Test

Shapiro Wilk Test Statistic	0.425	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.916	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.391	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.177	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	314.7	95% Adjusted-CLT UCL (Chen-1995)	376.9
		95% Modified-t UCL (Johnson-1978)	325.3

Gamma GOF Test

A-D Test Statistic	1.967	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.806	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.209	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.188	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.504	k star (bias corrected MLE)	0.469
Theta hat (MLE)	341.1	Theta star (bias corrected MLE)	366.8
nu hat (MLE)	24.18	nu star (bias corrected)	22.49
MLE Mean (bias corrected)	171.8	MLE Sd (bias corrected)	251
		Approximate Chi Square Value (0.05)	12.71
Adjusted Level of Significance	0.0392	Adjusted Chi Square Value	12.19

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	304.1	95% Adjusted Gamma UCL (use when n<50)	317

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.9	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.916	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.151	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.177	Data appear Lognormal at 5% Significance Level

56	**Data appear Approximate Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59						Minimum of Logged Data	2.303			Mean of logged Data		3.887
60						Maximum of Logged Data	7.539			SD of logged Data		1.449
61												
62	**Assuming Lognormal Distribution**											
63						95% H-UCL	366.1			90% Chebyshev (MVUE) UCL		267.7
64						95% Chebyshev (MVUE) UCL	330.7			97.5% Chebyshev (MVUE) UCL		418.1
65						99% Chebyshev (MVUE) UCL	589.9					
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
69												
70	**Nonparametric Distribution Free UCLs**											
71						95% CLT UCL	308.9			95% Jackknife UCL		314.7
72						95% Standard Bootstrap UCL	306.5			95% Bootstrap-t UCL		1019
73						95% Hall's Bootstrap UCL	956.6			95% Percentile Bootstrap UCL		321.1
74						95% BCA Bootstrap UCL	423.1					
75						90% Chebyshev(Mean, Sd) UCL	421.8			95% Chebyshev(Mean, Sd) UCL		535.1
76						97.5% Chebyshev(Mean, Sd) UCL	692.3			99% Chebyshev(Mean, Sd) UCL		1001
77												
78	**Suggested UCL to Use**											
79						95% Chebyshev (Mean, Sd) UCL	535.1					
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

Appendix V – QA/QC Output

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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SOLUTIONS THROUGH INNOVATION

						Acid Sulphate Soils	NA	BTEX									
						Reaction Rate	2-Methyl-4,6-dinitrophenol	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)
						-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL							2	0.5	0.1	0.1	0.1	0.2	0.1	0.3	1	20	20
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**												
21.1587 (663-683)	**BH01_1.0**	**18/11/2021**	**Soil**	**Normal**		4	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
21.1587 (663-683)	**BR1**	**18/11/2021**	**Soil**	**Field_D**	**2021037664**	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		3	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
21.1587 (663-683)	**BR2**	**18/11/2021**	**Soil**	**Field_D**	**2021037674**	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		3	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
843595	**SR2**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037674**	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20
RPD						-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		4	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
21.1587 (883-900)	**BR3**	**19/11/2021**	**Soil**	**Field_D**	**2021037895_21.1587 (883-**	-	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		4	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
843611	**SR3**	**19/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20
RPD						-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		4	-	-	<0.50	<0.50	<1.0	<2.0	<1.0	<2.0	<2.00	<35	<35
843595	**SR1**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20
RPD						-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		4	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
21.1587 (385-391)	**TP18-BR**	**14/03/2022**	**Soil**	**Field_D**	**2022007385**	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		4	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
870714	**SR1**	**11/03/2022**	**Soil**	**Interlab_D**	**2022007385**	-	-	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	-	<20	<20
RPD						-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
21.1587 (268-272)	**BR1**	**12/04/2022**	**Soil**	**Field_D**	**2022011268**	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
879610	**SR1**	**12/04/2022**	**Soil**	**Interlab_D**	**2022011268**	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
21.1587 (560-568)	**BR1**	**9/06/2022**	**Soil**	**Field_D**	**2022019560**	-	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
RPD						-	-	-	0	0	0	0	0	0	0	0	0
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
297627	**SR1 - [TRIPLICATE]**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		-	<2.0	-	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35
297627	**SR1**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	-	<1	<0.2	<0.5	<1	<2	<1	<1	-	-	-
RPD						-	-	-	0	0	0	0	0	0	-	-	-

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL))**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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						TRH												
						>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						50	50	100	100	50	0.1	0.1	0.1	0.05	0.05	0.05	0.2	4
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	**BH01_1.0**	**18/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
21.1587 (663-683)	**BR1**	**18/11/2021**	**Soil**	**Field_D**	**2021037664**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
21.1587 (663-683)	**BR2**	**18/11/2021**	**Soil**	**Field_D**	**2021037674**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
843595	**SR2**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037674**	<50	<50	<100	<100	<100	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
21.1587 (883-900)	**BR3**	**19/11/2021**	**Soil**	**Field_D**	**2021037895_21.1587 (883-**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
843611	**SR3**	**19/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	<50	<50	120	<100	120	-	-	-	-	-	-	-	-
RPD						0	-	18	0	82	-	-	-	-	-	-	-	-
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
843595	**SR1**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	<50	<50	<100	<100	<100	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
21.1587 (385-391)	**TP18-BR**	**14/03/2022**	**Soil**	**Field_D**	**2022007385**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
870714	**SR1**	**11/03/2022**	**Soil**	**Interlab_D**	**2022007385**	<50	<50	<100	<100	<100	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
21.1587 (268-272)	**BR1**	**12/04/2022**	**Soil**	**Field_D**	**2022011268**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	0	0	0	-	-	-	-	-	-	-	-
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<50	-	<100	<100	<50	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
879610	**SR1**	**12/04/2022**	**Soil**	**Interlab_D**	**2022011268**	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<50	-	146	<100	146	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
21.1587 (560-568)	**BR1**	**9/06/2022**	**Soil**	**Field_D**	**2022019560**	<50	-	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	37	0	98	-	-	-	-	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<50	-	146	<100	146	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
297627	**SR1 - [TRIPLICATE]**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<50	-	146	<100	146	<0.10	<0.10	<0.10	<0.050	<0.050	<0.050	<0.20	<4.0
297627	**SR1**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	<50	<50	<100	<100	<50	-	-	-	-	-	-	-	-
RPD						0	-	37	0	98	-	-	-	-	-	-	-	-

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim**

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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						Phenols												
						2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Cresol Total	Pentachlorophenol	Phenol	Phenols	Other chlorinated hydrocarbons EPAVic	Total Chlorinated Hydrocarbons
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.05	0.1	0.2	0.2	5	0.2	4	0.4	0.2	0.2	0.05	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.050	<0.50	<0.50
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	<0.050	<0.50	<0.50
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	-	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50
RPD						-	-	-	-	-	-	-	-	-	-	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50
RPD						-	-	-	-	-	-	-	-	-	-	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50
RPD						-	-	-	-	-	-	-	-	-	-	-	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.050	<0.10	<0.20	<0.20	<5.0	<0.20	<4.0	<0.40	<0.20	<0.20	-	<0.50	<0.50
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

						Chlorinated Hydrocarbons												
						1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2-dichloroethane	Bromochloromethane	Carbon tetrachloride	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Hexachlorobutadiene	Trichloroethene
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	-	-	-	-	-	-
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	0	0	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	0	0	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	0	0	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

						Halogenated Benzenes								Herbicides	Inorganics			M	
						Tetrachloroethene	trans-1,2-dichloroethene	Vinyl chloride	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene	Dinoseb	Moisture Content	Moisture Content (dried @ 103°C)	pH (Lab)	Monocylic aromatic hydrocarbons EPAVic	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	-	mg/kg	
EQL						0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	5	0.1	1		1	
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**														
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		-	-	-	-	-	-	-	<0.10	-	14.6	-	5.9	-	
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	-	-	-	-	-	-	-	<0.10	-	15.4	-	-	-	
RPD						-	-	-	-	-	-	-	0	-	5	-	-	-	
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	14.6	-	7.2	<1.0	
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	-	-	-	-	-	-	-	<0.10	-	15.4	-	-	-	
RPD						-	-	-	-	-	-	-	0	-	5	-	-	-	
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	14.6	-	7.2	<1.0	
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	-	-	-	-	-	-	-	<0.05	-	-	3.1	-	-	
RPD						-	-	-	-	-	-	-	0	-	-	-	-	-	
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	<0.10	-	17.4	-	8.1	-	
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	<0.10	-	17.4	-	-	-	
RPD						-	-	-	-	-	-	-	0	-	0	-	-	-	
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	<0.10	-	17.4	-	8.1	-	
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	<0.05	-	-	16	-	-	
RPD						-	-	-	-	-	-	-	0	-	-	-	-	-	
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	-	-	<0.10	-	17.4	-	8.1	-	
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	-	-	-	-	-	-	-	<0.05	-	-	13	-	-	
RPD						-	-	-	-	-	-	-	0	-	-	-	-	-	
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	12.2	-	10.6	<1.0	
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	12.2	-	10.6	<1.0	
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	-	14.7	-	-	<1.0	
RPD						0	0	0	0	0	0	0	0	-	19	-	-	0	
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	12.2	-	10.6	<1.0	
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	
RPD						-	-	-	-	-	-	-	0	-	-	-	-	-	
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	9.4	-	-	<1.0	
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	-	12	-	-	<1.0	
RPD						0	0	0	0	0	0	0	0	-	24	-	-	0	
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	9.4	-	-	<1.0	
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	9.1	-	-	
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-	
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	14.7	-	-	<1.0	
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	-	9.1	-	-	<1.0	
RPD						0	0	0	0	0	0	0	0	-	47	-	-	0	
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	14.7	-	-	<1.0	
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-	
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-	
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<5.0	14.7	-	-	<1.0	
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	<0.1	-	8.8	-	-	-	
RPD						-	-	-	-	-	-	-	0	-	50	-	-	-	

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim**

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

						AH	Metals												
						Styrene	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.5	2	0.3	1	1	1	0.1	1	1	0.1	0.1	0.05	0.05
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	**BH01_1.0**	**18/11/2021**	**Soil**	**Normal**		-	<5.0	<0.30	11.1	26.3	131.0	0.43	<10.0	13.5	-	-	<0.10	<0.10
21.1587 (663-683)	**BR1**	**18/11/2021**	**Soil**	**Field_D**	**2021037664**	-	<5.0	<0.30	9.9	12.9	131.7	0.36	<10.0	12.6	-	-	<0.10	<0.10
RPD						-	0	0	11	68	1	18	0	7	-	-	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<0.50	<5.0	<0.30	6.6	30.4	<10.0	<0.20	<10.0	<5.0	-	-	<0.10	<0.10
21.1587 (663-683)	**BR2**	**18/11/2021**	**Soil**	**Field_D**	**2021037674**	-	<5.0	<0.30	6.7	<5.0	<10.0	<0.20	<10.0	<5.0	-	-	<0.10	<0.10
RPD						-	0	0	2	144	0	0	0	0	-	-	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<0.50	<5.0	<0.30	6.6	30.4	<10.0	<0.20	<10.0	<5.0	-	-	<0.10	<0.10
843595	**SR2**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037674**	-	<2	<0.4	11	<5	8.5	<0.1	<5	7.3	<0.1	<0.1	<0.05	<0.05
RPD						-	0	0	50	144	0	0	0	37	-	-	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		-	<5.0	<0.30	7.9	6.5	19.1	<0.20	<10.0	5.3	-	-	<0.10	<0.10
21.1587 (883-900)	**BR3**	**19/11/2021**	**Soil**	**Field_D**	**2021037895_21.1587 (883-**	-	<5.0	<0.30	6.7	10.2	63.6	0.22	<10.0	6.5	-	-	<0.10	<0.10
RPD						-	0	0	16	44	108	10	0	20	-	-	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		-	<5.0	<0.30	7.9	6.5	19.1	<0.20	<10.0	5.3	-	-	<0.10	<0.10
843611	**SR3**	**19/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	-	2.9	<0.4	14	13	53	0.1	6.5	24	<0.1	<0.1	<0.05	<0.05
RPD						-	0	0	56	67	94	0	0	128	-	-	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		-	<5.0	<0.30	7.9	6.5	19.1	<0.20	<10.0	5.3	-	-	<0.10	<0.10
843595	**SR1**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	-	2.5	<0.4	12	22	97	0.3	<5	18	<0.1	<0.1	<0.05	<0.05
RPD						-	0	0	41	109	134	40	0	109	-	-	0	0
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	24.5	84.8	40.9	<0.20	136.4	73.3	-	-	<0.10	<0.10
21.1587 (385-391)	**TP18-BR**	**14/03/2022**	**Soil**	**Field_D**	**2022007385**	<0.50	<5.0	<0.30	35.1	117.1	43	<0.20	146.3	71.8	-	-	<0.10	<0.10
RPD						0	0	0	36	32	5	0	7	2	-	-	0	0
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	24.5	84.8	40.9	<0.20	136.4	73.3	-	-	<0.10	<0.10
870714	**SR1**	**11/03/2022**	**Soil**	**Interlab_D**	**2022007385**	-	<2	<0.4	27	47	17	<0.1	85	63	<0.1	<0.1	<0.05	<0.05
RPD						-	0	0	10	57	83	0	46	15	-	-	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	12.9	9.2	10.5	<0.20	10.8	31.1	-	-	<0.10	<0.10
21.1587 (268-272)	**BR1**	**12/04/2022**	**Soil**	**Field_D**	**2022011268**	<0.50	<5.0	<0.30	24.7	34	16.3	<0.20	<10.0	43.2	-	-	<0.10	<0.10
RPD						0	0	0	63	115	43	0	8	33	-	-	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	12.9	9.2	10.5	<0.20	10.8	31.1	-	-	<0.10	<0.10
879610	**SR1**	**12/04/2022**	**Soil**	**Interlab_D**	**2022011268**	-	2.6	<0.4	84	7.3	8.6	<0.1	<5	30	-	-	-	-
RPD						-	0	0	147	23	20	0	73	4	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	9.6	30.6	93	<0.20	11.7	97.3	-	-	<0.10	<0.10
21.1587 (560-568)	**BR1**	**9/06/2022**	**Soil**	**Field_D**	**2022019560**	<0.50	<5.0	<0.30	9.9	34.3	49.4	<0.20	16.8	89.9	-	-	<0.10	<0.10
RPD						0	0	0	3	11	61	0	36	8	-	-	0	0
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	9.6	30.6	93	<0.20	11.7	97.3	-	-	<0.10	<0.10
297627	**SR1 - [TRIPLICATE]**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	<4	<0.4	8	27	120	<0.1	15	61	-	-	-	-
RPD						-	0	0	18	13	25	0	25	46	-	-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<0.50	<5.0	<0.30	9.6	30.6	93	<0.20	11.7	97.3	-	-	<0.10	<0.10
297627	**SR1**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	<4	<0.4	13	42	89	0.2	18	74	-	-	<0.1	<0.1
RPD						-	0	0	30	31	4	0	42	27	-	-	0	0

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim**

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

						Organochlorine Pesticides											
						Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.05	0.05	0.05	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD						0	-	0	-	-	-	0	0	0	-	0	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD						0	-	0	-	-	-	0	0	0	-	0	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD						0	-	0	-	-	-	0	0	0	-	0	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD						0	-	0	-	-	-	0	0	0	-	0	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.20	<0.20
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	<0.1	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD						0	-	0	-	0	0	0	0	0	-	0	0	0

**RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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						Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.2	0.1	0.2	0.1
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.2	<0.2	<0.2	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.2	<0.2	<0.2	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.2	<0.2	<0.2	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.2	<0.2	<0.2	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
RPD						0	0	0	0	0	0	0	0	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	-
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
RPD						0	0	0	-	0	0	0	0	-	-	-	-	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

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						esticides											
						Fensulfothion	Fenthion	EPN	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.2	0.2	0.2	0.1	0.2	0.1	0.2	2	0.2	2	0.2	0.2	0.1
Lab Report Number	Field ID	Date	Matrix Type	Sample Type	Parent Sample													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
RPD						-	-	-	-	-	0	-	-	-	-	-	-	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.10
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1
RPD						-	-	-	-	-	-	-	-	-	-	-	-	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

Lab Report Number	Field ID	Date	Matrix Type	Sample Type	Parent Sample	Terbufos	Trichloronate	Tetrachlorvinphos	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.05	0.3	0.5	0.1	0.3
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.2	<0.2	<0.2	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
RPD						-	-	-	-	0	0	0	0	0	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.2	<0.2	<0.2	-	0.6	<0.5	0.8	1.5	1.6	-	1.1	1	1.2
RPD						-	-	-	-	67	0	91	133	137	-	-	108	120
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.2	<0.2	<0.2	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
RPD						-	-	-	-	0	0	0	0	0	-	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.2	<0.2	<0.2	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
RPD						-	-	-	-	0	0	0	0	0	-	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	0.37	0.47	0.54	-	<0.30	<0.30
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	-	-	-	-	<0.30	<0.30	<0.30	<0.30	0.34	0.37	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	21	32	37	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	0.37	0.47	0.54	-	<0.30	<0.30
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	-	<0.30	<0.30
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30
RPD						-	-	-	-	0	0	0	0	0	0	-	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	-	<0.30	<0.30
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		-	-	-	-	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	-	<0.30	<0.30
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	<0.2	<0.1	<0.1	<0.1	<0.1	0.1	-	-	0.1	-
RPD						-	-	-	-	0	0	0	0	0	-	-	0	-

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

	Valid	Not Valid
BR		
SR		

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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						PAH												
						Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.05	0.1	0.1
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**													
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	-	0	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
RPD						0	0	0	0	0	0	V13,EQ14:EY	0	0	-	0	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	-	<0.1	<0.1
RPD						0	0	0	0	0	0	0	0	50	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	-	0	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	1.7	<0.5	3.5	<0.5	0.9	<0.5	3	4	2.3	20.9	-	<0.1	<0.1
RPD						140	0	168	0	100	0	164	172	146	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	-	<0.1	<0.1
RPD						0	0	0	0	0	0	0	0	50	-	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	0	-	0	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	-	<0.1	<0.1
RPD						0	0	0	0	0	0	0	0	50	-	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		0.41	<0.30	0.95	<0.30	<0.30	<0.30	<0.30	1.05	0.75	-	3.79	<0.50	<0.50
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.30	<0.30	0.56	<0.30	<0.30	<0.30	<0.30	0.62	0.58	-	1.89	<0.50	<0.50
RPD						31	0	52	0	0	0	0	51	26	-	67	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		0.41	<0.30	0.95	<0.30	<0.30	<0.30	<0.30	1.05	0.75	-	3.79	<0.50	<0.50
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	0.38	-	0.6	<0.50	<0.50
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	-	<0.30	<0.50	<0.50
RPD						0	0	0	0	0	0	0	0	5	-	67	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	0.38	-	0.6	<0.50	<0.50
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.3	0.38	-	0.6	<0.50	<0.50
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.5	-	0.52	<0.1	<0.1
RPD						0	0	0	0	0	0	0	100	0	-	14	0	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

						PCBs						Pesticides			Acid Sulphate Soils - pH		
						Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	DEF	Parathion	Pirimiphos-methyl	pH-OX	C6-C9 Fraction	C10-C14 Fraction
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	mg/kg	mg/kg
EQL						0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		20	20
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**												
21.1587 (663-683)	BH01_1.0	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	4.3	<25	<50
21.1587 (663-683)	BR1	18/11/2021	Soil	Field_D	2021037664	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<25	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	4	<35	<50
21.1587 (663-683)	BR2	18/11/2021	Soil	Field_D	2021037674	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<25	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (663-683)	BH06_0.5	18/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	4	<35	<50
843595	SR2	17/11/2021	Soil	Interlab_D	2021037674	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	<20	<20
RPD						0	0	0	0	0	-	-	-	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	7.9	<25	<50
21.1587 (883-900)	BR3	19/11/2021	Soil	Field_D	2021037895_21.1587 (883-	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<25	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	7.9	<25	<50
843611	SR3	19/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	<20	<20
RPD						0	0	0	0	0	-	-	-	-	-	0	0
21.1587 (883-900)	BH13_1.0	19/11/2021	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	7.9	<25	<50
843595	SR1	17/11/2021	Soil	Interlab_D	2021037895_21.1587 (883-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	<20	<20
RPD						0	0	0	0	0	-	-	-	-	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	10.8	<35	<50
21.1587 (385-391)	TP18-BR	14/03/2022	Soil	Field_D	2022007385	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (385-391)	TP18-0.2	14/03/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	10.8	<35	<50
870714	SR1	11/03/2022	Soil	Interlab_D	2022007385	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	-	<20	<20
RPD						0	0	0	0	0	-	-	-	-	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
21.1587 (268-272)	BR1	12/04/2022	Soil	Field_D	2022011268	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (268-272)	TP12_0.0-0.1	12/04/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
879610	SR1	12/04/2022	Soil	Interlab_D	2022011268	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
21.1587 (560-568)	BR1	9/06/2022	Soil	Field_D	2022019560	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
RPD						0	0	0	0	0	-	0	-	-	-	0	0
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
297627	SR1 - [TRIPLICATE]	9/06/2022	Soil	Interlab_D	2022019560	-	-	-	-	-	-	-	-	-	-	-	-
RPD						-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (560-568)	TP10_0.0-0.1	9/06/2022	Soil	Normal		<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.10	-	-	-	<35	<50
297627	SR1	9/06/2022	Soil	Interlab_D	2022019560	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<50
RPD						0	0	0	0	0	-	-	-	-	-	-	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prim

QAQC Output - Inter-and Intra-Laboratory Duplicate Calculations

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						TPH		
						C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
						mg/kg	mg/kg	mg/kg
EQL						50	50	50
Lab Report Number	**Field ID**	**Date**	**Matrix Type**	**Sample Type**	**Parent Sample**			
21.1587 (663-683)	**BH01_1.0**	**18/11/2021**	**Soil**	**Normal**		<100	<100	<50
21.1587 (663-683)	**BR1**	**18/11/2021**	**Soil**	**Field_D**	**2021037664**	<100	<100	<50
RPD						0	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<100	<100	<50
21.1587 (663-683)	**BR2**	**18/11/2021**	**Soil**	**Field_D**	**2021037674**	<100	<100	<50
RPD						0	0	0
21.1587 (663-683)	**BH06_0.5**	**18/11/2021**	**Soil**	**Normal**		<100	<100	<50
843595	**SR2**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037674**	<50	<50	<50
RPD						0	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<100	<100	<50
21.1587 (883-900)	**BR3**	**19/11/2021**	**Soil**	**Field_D**	**2021037895_21.1587 (883-**	<100	<100	<50
RPD						0	0	0
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<100	<100	<50
843611	**SR3**	**19/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	92	<50	92
RPD						0	0	59
21.1587 (883-900)	**BH13_1.0**	**19/11/2021**	**Soil**	**Normal**		<100	<100	<50
843595	**SR1**	**17/11/2021**	**Soil**	**Interlab_D**	**2021037895_21.1587 (883-**	<50	<50	<50
RPD						0	0	0
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<100	<100	<50
21.1587 (385-391)	**TP18-BR**	**14/03/2022**	**Soil**	**Field_D**	**2022007385**	<100	101	101
RPD						0	1	68
21.1587 (385-391)	**TP18-0.2**	**14/03/2022**	**Soil**	**Normal**		<100	<100	<50
870714	**SR1**	**11/03/2022**	**Soil**	**Interlab_D**	**2022007385**	<50	<50	<50
RPD						0	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<100	<100	<50
21.1587 (268-272)	**BR1**	**12/04/2022**	**Soil**	**Field_D**	**2022011268**	<100	<100	<50
RPD						0	0	0
21.1587 (268-272)	**TP12_0.0-0.1**	**12/04/2022**	**Soil**	**Normal**		<100	<100	<50
879610	**SR1**	**12/04/2022**	**Soil**	**Interlab_D**	**2022011268**	-	-	<0
RPD						-	-	0
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<100	161	161
21.1587 (560-568)	**BR1**	**9/06/2022**	**Soil**	**Field_D**	**2022019560**	<100	<100	<50
RPD						0	47	105
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<100	161	161
297627	**SR1 - [TRIPLICATE]**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	-	-	-
RPD						-	-	-
21.1587 (560-568)	**TP10_0.0-0.1**	**9/06/2022**	**Soil**	**Normal**		<100	161	161
297627	**SR1**	**9/06/2022**	**Soil**	**Interlab_D**	**2022019560**	<100	<100	<50
RPD						0	47	105

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 20 x EQL); 30 (> 20 x EQL**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the prin**

21.1587/PSI_DSI

QAQC Output - Field Blank Analytical Results

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SOLUTIONS THROUGH INNOVATION

				BTEX							TRH								Halogenated Benzenes	
				Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	Hexachlorobenzene	Arsenic
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
EQL				0.01	1	1	1	2	1	3	20	20	50	50	100	100	100	0.2	0.001
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	<1	<1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<0.01	<1	<1	<1	<2	<1	<3	<20	<20	<50	<50	<100	<100	<100	<0.2	<0.001
858317	**25/01/2022**	**Water**	**Rinsate**	<0.01	<1	<1	<1	<2	<1	<3	<20	<20	<50	<50	<100	<100	<100	<0.2	<0.001

QAQC Output - Field Blank Analytical Results

				Metals																	
				Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.0002	0.001	0.001	0.001	0.0001	0.001	0.005	2	2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<0.0002	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.005	<2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2
858317	**25/01/2022**	**Water**	**Rinsate**	<0.0002	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.005	<2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2

QAQC Output - Field Blank Analytical Results

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

				Organochlorine Pesticides																	
				DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L
EQL				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.005	0.002	2	2
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.005	<0.002	<2	<2
858317	**25/01/2022**	**Water**	**Rinsate**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.005	<0.002	<2	<2

QAQC Output - Field Blank Analytical Results

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

				Organophosphorous Pesticides																
				Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	EPN	Malathion
				µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				20	2	0.002	20	2	2	2	2	2	2	2	2	2	2	2	2	2
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<20	<2	<0.002	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
858317	**25/01/2022**	**Water**	**Rinsate**	<20	<2	<0.002	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

QAQC Output - Field Blank Analytical Results

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SOLUTIONS THROUGH INNOVATION

				Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.002	2	2	2	2	20	2	2	2	2	2	0.002	1	1	1	1	1
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<1	<1
858317	**25/01/2022**	**Water**	**Rinsate**	<0.002	<2	<2	<2	<2	<20	<2	<2	<2	<2	<2	<0.002	<1	<1	<1	<1	<1

QAQC Output - Field Blank Analytical Results

ADE CONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

				PAH												PCBs				
				Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.001	1	1	1	1	1	1	1	1	1	1	1	5	5	5	5	5
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**																	
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5
858317	**25/01/2022**	**Water**	**Rinsate**	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-

QAQC Output - Field Blank Analytical Results

						Pesticides		TPH				
				Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Parathion	Pirimiphos-methyl	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
				µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				5	5	5	2	0.02	20	50	100	100	100
Lab Report Number	**Date**	**Matrix Type**	**Sample Type**										
21.1587 (299-300)	**13/04/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
21.1587 (407-408)	**14/03/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
21.1587 (576-577)	**9/06/2022**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
21.1587 (920-921)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
21.1587 (923-926)	**19/11/2021**	**Water**	**Trip_B**	-	-	-	-	-	-	-	-	-	-
843595	**17/11/2021**	**Water**	**Rinsate**	<5	<5	<5	<2	<0.02	<20	<50	<100	<100	<100
858317	**25/01/2022**	**Water**	**Rinsate**	-	-	-	<2	<0.02	<20	<50	<100	<100	<100

QAQC Output - Trip Spike Recovery Calculations

Trip Spikes

Lab Report Number	Matrix Type	Analysis Batch	Field ID	Sampled Date/Time	Chem Group	Chem Name	Trip Spike Result	Trip Spike Control	Result Units	Spike Recovery %	LCL	UCL	Method Name	Lab Sample ID	Sample Type
21.1587 (299-300)	Water	2022-04-13	TS	13/04/2022		Ethylbenzene	NA	NA	NA	110			ESA-P-ORG08 & ORG10	2022011300	Trip_S
21.1587 (299-300)	Water	2022-04-13	TS	13/04/2022		Xylene (m & p)	NA	NA	NA	89			ESA-P-ORG08 & ORG10	2022011300	Trip_S
21.1587 (299-300)	Water	2022-04-13	TS	13/04/2022		Toluene	NA	NA	NA	106			ESA-P-ORG08 & ORG10	2022011300	Trip_S
21.1587 (299-300)	Water	2022-04-13	TS	13/04/2022		Benzene	NA	NA	NA	87			ESA-P-ORG08 & ORG10	2022011300	Trip_S
21.1587 (299-300)	Water	2022-04-13	TS	13/04/2022		Xylene (o)	NA	NA	NA	105			ESA-P-ORG08 & ORG10	2022011300	Trip_S
21.1587 (407-408)	Water	2022-03-14	TS2	14/03/2022		Ethylbenzene	NA	NA	NA	121			ESA-P-ORG08 & ORG10	2022007408	Trip_S
21.1587 (407-408)	Water	2022-03-14	TS2	14/03/2022		Xylene (m & p)	NA	NA	NA	101			ESA-P-ORG08 & ORG10	2022007408	Trip_S
21.1587 (407-408)	Water	2022-03-14	TS2	14/03/2022		Toluene	NA	NA	NA	112			ESA-P-ORG08 & ORG10	2022007408	Trip_S
21.1587 (407-408)	Water	2022-03-14	TS2	14/03/2022		Benzene	NA	NA	NA	103			ESA-P-ORG08 & ORG10	2022007408	Trip_S
21.1587 (407-408)	Water	2022-03-14	TS2	14/03/2022		Xylene (o)	NA	NA	NA	119			ESA-P-ORG08 & ORG10	2022007408	Trip_S
21.1587 (576-577)	Water	2022-06-09	TS	9/06/2022		Ethylbenzene	NA	NA	NA	116			ESA-P-ORG08 & ORG10	2022019577	Trip_S
21.1587 (576-577)	Water	2022-06-09	TS	9/06/2022		Xylene (m & p)	NA	NA	NA	94			ESA-P-ORG08 & ORG10	2022019577	Trip_S
21.1587 (576-577)	Water	2022-06-09	TS	9/06/2022		Toluene	NA	NA	NA	110			ESA-P-ORG08 & ORG10	2022019577	Trip_S
21.1587 (576-577)	Water	2022-06-09	TS	9/06/2022		Benzene	NA	NA	NA	75			ESA-P-ORG08 & ORG10	2022019577	Trip_S
21.1587 (576-577)	Water	2022-06-09	TS	9/06/2022		Xylene (o)	NA	NA	NA	113			ESA-P-ORG08 & ORG10	2022019577	Trip_S
21.1587 (920-921)	Water	2021-11-18	TS1	19/11/2021		Ethylbenzene	NA	NA	NA	90			ESA-P-ORG08 & ORG10	2021037921	Trip_S
21.1587 (920-921)	Water	2021-11-18	TS1	19/11/2021		Xylene (m & p)	NA	NA	NA	81			ESA-P-ORG08 & ORG10	2021037921	Trip_S
21.1587 (920-921)	Water	2021-11-18	TS1	19/11/2021		Toluene	NA	NA	NA	88			ESA-P-ORG08 & ORG10	2021037921	Trip_S
21.1587 (920-921)	Water	2021-11-18	TS1	19/11/2021		Benzene	NA	NA	NA	86			ESA-P-ORG08 & ORG10	2021037921	Trip_S
21.1587 (920-921)	Water	2021-11-18	TS1	19/11/2021		Xylene (o)	NA	NA	NA	88			ESA-P-ORG08 & ORG10	2021037921	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS2	19/11/2021		Ethylbenzene	NA	NA	NA	85			ESA-P-ORG08 & ORG10	2021037924	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS2	19/11/2021		Xylene (m & p)	NA	NA	NA	75			ESA-P-ORG08 & ORG10	2021037924	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS2	19/11/2021		Toluene	NA	NA	NA	84			ESA-P-ORG08 & ORG10	2021037924	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS2	19/11/2021		Benzene	NA	NA	NA	78			ESA-P-ORG08 & ORG10	2021037924	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS2	19/11/2021		Xylene (o)	NA	NA	NA	83			ESA-P-ORG08 & ORG10	2021037924	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS3	19/11/2021		Ethylbenzene	NA	NA	NA	101			ESA-P-ORG08 & ORG10	2021037926	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS3	19/11/2021		Xylene (m & p)	NA	NA	NA	87			ESA-P-ORG08 & ORG10	2021037926	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS3	19/11/2021		Toluene	NA	NA	NA	98			ESA-P-ORG08 & ORG10	2021037926	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS3	19/11/2021		Benzene	NA	NA	NA	93			ESA-P-ORG08 & ORG10	2021037926	Trip_S
21.1587 (923-926)	Water	2021-11-19	TS3	19/11/2021		Xylene (o)	NA	NA	NA	100			ESA-P-ORG08 & ORG10	2021037926	Trip_S

Trip Spike Recoveries. Where no lab LCL and UCL is available, user defined limits between 30% and 150% have been adopted for non-compliance.

Appendix VI – Borehole Logs

ADE CONSULTING GROUP
6/7 MILLENNIUM COURT SILVERWATER
NSW 2128
Telephone: 1300796922

BOREHOLE NUMBER BH1

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** --- **DATUM** ---

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315301.342 N 6256602.107

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA			0.0			Concrete					
						FILL: Sandy GRAVEL: poorly sorted angular gravels, fine grained sand dark grey and black	M	L			FM: terracotta pipe, concrete and tiles
			0.5				M	S	4.8	BH1 0.5	
						FILL: Silty CLAY: medium plasticity, red and brown					
DT			1.0						1.2	BH1 1.0	BR1/SR1/RINSATE1 collected at 1.0 m BGL
			1.5						0	BH1 1.8	
						BH1 terminated at 1.8m					
			2.0								
			2.5								
			3.0								
			3.5								

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Telephone: 1300796922

BOREHOLE NUMBER BH2

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315299.003 N 6256574.659

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Sandy GRAVEL (GW): poorly sorted angular gravels, fine grained sand, dark grey and black	M	L			
			0.5			**FILL**:CLAY: low plasticity, dark brown, with angular gravels and cobbles	M	S	4.2	BH2 0.5	FM: conduit
DT			1.0						4.8	BH2 1.0	
			1.5						0.2	BH2 1.8	
			2.0			BH2 terminated at 1.8m					
			2.5								
			3.0								
			3.5								

ADE_BOREHOLE / TESTPIT 21.1587_DSI_MOB1.GPJ STC-2209-19098-AREA A.GPJ 21/2/22

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NSW 2128
Telephone: 1300796922

BOREHOLE NUMBER BH3

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315319.907 N 6256585.492

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA			0.0			Concrete					
						FILL: CLAY: high plasticity, light brown. trace angular gravels	M	Vs			
			0.5						1.2	BH3 0.5	
						FILL: CLAY: moderate plasticity, dark red with trace angular gravels	M	F			
DT			1.0						1.1	BH3 1.0	
			1.5								
			2.0						0.4	BH3 2.0	
			2.5								
			3.0						0.2	BH3 3.0	
						BH3 terminated at 3m					
			3.5								

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NSW 2128
Telephone: 1300796922

BOREHOLE NUMBER BH4

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315340.664 N 6256589.556

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Silty SAND: coarse grained, dark brown with trace angular cobbles and angular gravels	M	St	1.1	BH4 0.5	
			0.5								
DT			1.0						1	BH4 1.0	
			1.5			**FILL**:CLAY: low plasticity, dark red with grey mottles with trace angular gravels	D	L			
			2.0						0	BH4 2.0	
			2.5								
			3.0						0.5	BH4 3.0	
						BH4 terminated at 3m					
			3.5								

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Telephone: 1300796922

BOREHOLE NUMBER BH5

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315328.666 N 6256568.355

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Gravelly SILT: poorly graded, dark grey, with large angular gravels and cobbles	M	Vst	4.1	BH5 0.2	DGB roadbase
			0.5			**FILL**: Gravelly CLAY: low plasticity, medium brown, with large cobbles and angular gravels	M	L	4	BH5 0.5	FM: terracotta, concrete
			1.0						3.1	BH5 1.0	
DT						BH5 terminated at 1m					BH terminated due to auger refusal
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH6

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315361.608 N 6256574.43

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Silty CLAY: medium plasticity, light brown	M	S			BR2/SR2 collected at 0.5 m BGL
			0.5						2.4	BH6 0.5	
						FILL: Silty Clay: medium plasticity, light red	M	L		BR2/SR2	
DT			1.0						1.2	BH6 1.0	
			1.5						1		
						BH6 terminated at 1.8m				BH6 1.8	
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH7

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** --- **DATUM** ---

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315379.876 N 6256568.35

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA			0.0			Concrete	M	S			FM: terracotta, concrete
						FILL: Silty CLAY: low plasticity, medium brown, with large cobbles and angular gravels			1.2	BH7 0.5	
DT			1.0						1	BH7 1.0	
			1.5						0	BH7 1.8	
						BH7 terminated at 1.8m					
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH8

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315394.926 N 6256580.179

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Sandy GRAVEL: poorly sorted angular gravels, fine grained sand dark grey and black	M	L	3.9	BH8 0.5	
			0.5								
DT			1.0						3.1	BH8 1.0	FC collected at 1 m BGL
			1.5						1	BH8 1.8	
						BH8 terminated at 1.8m					
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH8_DEL1

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315394.926 N 6256580.179

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
			0.5			**FILL**: Sandy GRAVEL: poorly sorted angular gravels, fine grained sand dark grey and black	M	L			
			1.0						0.1	BH8_DEL1 1.0	
			1.5			BH8_DEL1 terminated at 1m					
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH8_DEL2

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315394.926 N 6256580.179

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
			0.5			**FILL**: Sandy GRAVEL: poorly sorted angular gravels, fine grained sand dark grey and black	M	L			
			1.0						0.1	BH8_DEL2 1.0	
			1.5			BH8_DEL2 terminated at 1m					
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH8_DEL3

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315394.926 N 6256580.179

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
			0.5			**FILL**: Sandy GRAVEL: poorly sorted angular gravels, fine grained sand dark grey and black	M	L			
			1.0						0.2	BH8_DEL3 1.0	
			1.5			BH8_DEL3 terminated at 1m					
			2.0								
			2.5								
			3.0								
			3.5								

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NSW 2128
Telephone: 1300796922

BOREHOLE NUMBER BH9

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 17/11/2021 **COMPLETED** 18/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315388.482 N 6256554.316

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA			0.0			Concrete					
						FILL: Gravelly SILT: poorly sorted, dark grey with large angular gravels and cobbles	M	L			
			0.5						0.2	BH9 0.5	
						<B>>FILL: **CLAY: low plasticity, dark red with grey mottles, trace angular gravels**	D	Vst			
DT			1.0						0.2	BH9 1.0	
			1.5								
			2.0						0.1	BH9 2.0	
			2.5								
			3.0						0.1	BH9 3.0	
						BH9 terminated at 3m					
			3.5								

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BOREHOLE NUMBER BH13

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 19/11/2021 **COMPLETED** 19/11/2021 **R.L. SURFACE** --- **DATUM** ---

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315353.291 N 6256546.652

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Silty CLAY: low plasticity, dark brown, some angular gravels	M	Vs	0.2	BH13 0.5	
			0.5								
DT			1.0			**FILL**:CLAY: low plasticity, dark red with grey mottles, with trace angular gravels	M	Vst	0.2	BH13 1.0	BR3/SR3 collected at 1 m BGL
			1.5						0	BH13 1.8	
						BH13 terminated at 1.8m					
			2.0								
			2.5								
			3.0								
			3.5								

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BOREHOLE NUMBER BH16

CLIENT Delta group **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 19/11/2021 **COMPLETED** 19/11/2021 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR BG Drilling **SLOPE** -90° **BEARING** ---

EQUIPMENT Christie **CO-ORDINATES** E 315396.3 N 6256542.007

HOLE SIZE 150mm **LOGGED BY** EC **CHECKED BY** TN

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA			0.5			Concrete **FILL:** Silty CLAY: low plasticity, dark brown with some angular gravels	M	Vs	0.1	BH16 0.5	FM: plastic, terracotta pipe
DT			1.0 1.5			**FILL:**CLAY: medium plasticity, light brown with trace angular gravels	M	Vs	0	BH16 1.0	FM: plastic, terracotta pipe
						FILL:CLAY: low plasticity, dark red with grey mottles, trace angular gravels	M	Vst	0	BH16 1.8	
			2.0 2.5 3.0 3.5			BH16 terminated at 1.8m					

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Telephone: 1300796922

BOREHOLE NUMBER BH14

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 25/1/2022 **COMPLETED** 25/1/2022 **R.L. SURFACE** _____ **DATUM** _____

DRILLING CONTRACTOR Stratacore **SLOPE** -90° **BEARING** ---

EQUIPMENT Geoprobe 6712DT **CO-ORDINATES** E 315370.38 N 6256511.9

HOLE SIZE 120mm **LOGGED BY** GT **CHECKED BY** EC

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
ASV			0.5			**FILL**: Sandy CLAY, medium plasticity, dark brown with small angular gravels	M	S	0	BH14 0.5	FM: Terracotta pipe, glass
			1.0			**FILL**: Sandy CLAY, medium plasticity, dark brown with red, with small angular gravels			0	BH14 1.0	
			1.5					F			
			2.0						0	BH14 2.0	
			2.5			**FILL**: CLAY, high plasticity, brown with trace angular gravels					
			3.0			**FILL**: CLAY, high plasticity, light brown with red, with trace angular gravels			0	BH14 3.0	
			3.5			BH14 terminated at 3m					

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BOREHOLE NUMBER BH15

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 25/1/2022 **COMPLETED** 25/1/2022 **R.L. SURFACE** --- **DATUM** ---

DRILLING CONTRACTOR Stratacore **SLOPE** -90° **BEARING** ---

EQUIPMENT Geoprobe 6712DT **CO-ORDINATES** E 315370.95 N 6256503.72

HOLE SIZE 120mm **LOGGED BY** GT **CHECKED BY** EC

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Sandy CLAY, medium plasticity, brown with black, with small angular gravels	M	S			FM: Terracotta pipe, glass
			0.5						0	BH15 0.5	
ASV										RINSATE2	RINSATE2 collected at 0.5m BGL
			1.0						0	BH15 1.0	
			1.5					F			
						FILL: CLAY, high plasticity, light brown with trace angular gravels					
			2.0						0	BH15 2.0	
			2.5								
						FILL: CLAY, high plasticity, light brown with red and black, with trace angular gravels		St			
			3.0						0	BH15 3.0	
						BH15 terminated at 3m					
			3.5								

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Telephone: 1300796922

BOREHOLE NUMBER BH17

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 25/1/2022 **COMPLETED** 25/1/2022 **R.L. SURFACE** --- **DATUM** ---

DRILLING CONTRACTOR Stratacore **SLOPE** -90° **BEARING** ---

EQUIPMENT Geoprobe 6712DT **CO-ORDINATES** E 315339.92 N 6256521.61

HOLE SIZE 120mm **LOGGED BY** GT **CHECKED BY** EC

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA						Concrete					
						FILL: Sandy CLAY, medium plasticity, brown with black, with small angular gravels	M	S			FM: Terracotta pipe, glass
ASV			0.5						0.1	BH17 0.5	
						FILL: Sandy CLAY, medium plasticity, brown yellow mottles, with small angular gravels			0		
			1.0							BH17 1.0	
			1.5			**FILL**: CLAY, high plasticity, light brown with red and black, with trace angular gravels		S			
									0	BH17 1.8	
						BH17 terminated at 1.8m					
			2.0								
			2.5								
			3.0								
			3.5								

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TEST PIT NUMBER TP12

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 12/4/22 **COMPLETED** 12/4/22 **R.L. SURFACE** 0 **DATUM** m AHD

EXCAVATION CONTRACTOR Client **SLOPE** --- **BEARING** n.a

EQUIPMENT Excavator **COORDINATES** E 315348.13 m N 6256525.15 m

TEST PIT DIAMETER 2.7m x 2.3m **LOGGED BY** MH **CHECKED BY** JR

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E						**ASPHALT**	D		0.4	TP12_0.0-0.1	
					SC	**FILL**: Gravely, clayey SAND, brown/white/orange with agregate and shale, forign material including, but not limited to, tile and building material.	D		0.4		
					SC	**FILL**: Clayey SAND, orange	D		0.4		
		-0.5	0.5								
					SW-SM	**FILL**: SAND, fine grained, brown with orange clayey sand and occasional fine grained gravel. Forigen material incuding, but not limited to, building material.	D		0.4	TP12_0.5	
		-1.0	1.0								
					CL	**CLAY**: Sl. Sandy CLAY, low plasticity, reddish brown with occasional fine grained sand and fine grained angular gravels	D		2.6	TP12_1.0	
		-1.5	1.5								
					CL	**CLAY**: Sl. Sandy CLAY, low plasticity, grey with red mottle with shale fragments	D		0.1		
						TP12 terminated at 1.8m				TP12_1.8	
		-2.0	2.0								
		-2.5	2.5								
		-3.0	3.0								
		-3.5	3.5								

ADE_BOREHOLE / TESTPIT 21.1587_DSI_MOB2.GPJ GINT STD AUSTRALIA.GDT 20/5/22

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Telephone: 1300976922

TEST PIT NUMBER TP18

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 11/3/22 **COMPLETED** 11/3/22 **R.L. SURFACE** 0 **DATUM** m AHD

EXCAVATION CONTRACTOR Client **SLOPE** --- **BEARING** n.a

EQUIPMENT Excavator **COORDINATES** E 315266.00 m N 6256627.00 m

TEST PIT DIAMETER 1m x 2m **LOGGED BY** SM **CHECKED BY** JR

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E					SM	**FILL**Silty SAND, poorly graded, dark brown, with coarse angular gravels	M				
					SM	**FILL**Silty SAND, poorly graded, dark brown, with coarse angular gravels	W			TP18-0.2	
		-0.5	0.5								
					SM	**FILL**Silty SAND, poorly graded, dark brown, with coarse angular gravels					
		-1.0	1.0			TP18 terminated at 1m					
		-1.5	1.5								
		-2.0	2.0								
		-2.5	2.5								
		-3.0	3.0								
		-3.5	3.5								

ADE_BOREHOLE / TESTPIT 21.1587_DSI_MOB2.GPJ GINT STD AUSTRALIA.GDT 20/5/22

ADE CONSULTING GROUP
UNIT 6 / 7 MILLENNIUM COURT
SILVERWATER NSW 2128
Telephone: 1300976922

TEST PIT NUMBER TP19

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 11/3/22 **COMPLETED** 11/3/22 **R.L. SURFACE** 0 **DATUM** m AHD

EXCAVATION CONTRACTOR Client **SLOPE** --- **BEARING** n.a

EQUIPMENT Excavator **COORDINATES** E 315273.00 m N 6256619.00 m

TEST PIT DIAMETER 1m x 2m **LOGGED BY** SM **CHECKED BY** JR

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E					SM	**FILL**Silty SAND, poorly graded, dark brown, with coarse angular gravels	W-M				
					SC	**FILL**Clayed SAND, poorly grade, medium plasticity, brown, with soft gravels	W-M			TP19-0.2	
		-0.5	0.5								
					SC	**FILL**Clayed SAND, poorly grade, medium plasticity, brown, with soft gravels	W			TP18-0.8	
		-1.0	1.0			TP19 terminated at 1m					
		-1.5	1.5								
		-2.0	2.0								
		-2.5	2.5								
		-3.0	3.0								
		-3.5	3.5								

ADE_BOREHOLE / TESTPIT 21.1587_DSI_MOB2.GPJ GINT STD AUSTRALIA.GDT 20/5/22

ADE CONSULTING GROUP
UNIT 6 / 7 MILLENNIUM COURT
SILVERWATER NSW 2128
Telephone: 1300976922

TEST PIT NUMBER TP20

CLIENT Delta **PROJECT NAME** Environmental Site Assessment

PROJECT NUMBER 21.1587 **PROJECT LOCATION** 71 Horwood Place, Parramatta, NSW

DATE STARTED 11/3/22 **COMPLETED** 11/3/22 **R.L. SURFACE** 0 **DATUM** m AHD

EXCAVATION CONTRACTOR Client **SLOPE** --- **BEARING** n.a

EQUIPMENT Excavator **COORDINATES**

TEST PIT DIAMETER 1m x 2m **LOGGED BY** SM **CHECKED BY** JR

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E					SM	**FILL**Silty SAND, well-poorly graded, low plasticity, brown, dty, with fine grain gravel	D				
					SM	**FILL**Silty SAND, well-poorly graded, low plasticity, brown, dty, with fine grain gravel	D			TP20-0.2	
					SM	**FILL**Silty SAND, well-poorly graded, low plasticity, brown, dty, with fine grain gravel	D			TP20-FC1	
		-0.5	0.5		SM	**FILL**Silty SAND, well-poorly graded, low plasticity, brown, dty, with fine grain gravel	D			TP20-0.8	
		-1.0	1.0			TP20 terminated at 0.9m					
		-1.5	1.5								
		-2.0	2.0								
		-2.5	2.5								
		-3.0	3.0								
		-3.5	3.5								

ADE_BOREHOLE / TESTPIT 21.1587_DSI_MOB2.GPJ GINT STD AUSTRALIA.GDT 20/5/22

Appendix VII – Analytical Reports and Chain of Custody Documentation

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo
Project name: 21.1587
Number of samples: 2
COC number: 21.1587
Turn around time: STD
Date: 18.11.2021
Time received: 2:00 PM
SLS Reference: 2105668
Estimated Report Delivery Date: 25.11.2021

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

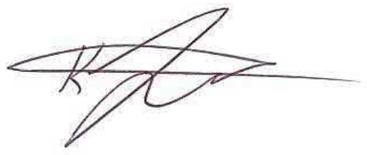
Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Sydney Laboratory Services

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Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	VOC	pH/pH fox	Phenols	Bulk	Dust	Dust Swab	Soil 65 grams	SOIl 500 g NEPM	AAM
2021037920	TB1			X														
2021037921	TS1			X														

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADECONSULTINGGROUP

PROJECT:		LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: IKS	SIGNATURE:
SAMPLERS:	elisha cassidy	SAMPLES: 2 CHILLED: ☐ PRESERVED: ☒	PRESERVATION METHOD: X CUSTODY SEAL INTACT: X ☒
TURNAROUND:	24h: ☐ 48h: 72h: ☐ **5 WORKING DAYS:**	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☒
SAMPLING DATE:	17.11.21	DATE: 18-11-21 TIME: 2:00	TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO. 2105668	LIMS/EXCEL SIGNATURE:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		COMMENTS:
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																	NOTES
						Chem Lab										Asbestos						Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	Standard suite	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	☒ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
2021037 920	TB1	W	17.11.21	WATER	1			X																LAB PLEASE *EMAIL COC RECEIPT: ☒
921	TS1	W	17.11.21	WATER	2			X																Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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Sydney Laboratory Services

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A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2021037920	2021037921
	Sample Name	TB1	TS1
Parameter	Units	PQL	
ESA-P-ORG08 & ORG10			
Benzene		1	<1 ug/L	86%
Toluene		1	<1 ug/L	88%
Ethylbenzene		1	<1 ug/L	90%
m,p Xylene		2	<2 ug/L	81%
o Xylene		1	<1 ug/L	88%
Fluorobenzene (Surr.)	%		85	87

Sydney Laboratory Services
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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

		Sample ID:	**Q2021009841**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		109
Toluene	%		107
Ethylbenzene	%		114
m.p Xylene	%		116
o Xylene	%		115
Fluorobenzene (Surr.)	%		95

		Sample ID:	**D202103871301**
		Sample Name	**TP2.21_0.8**
Parameter	***Units***	***PQL***	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		109

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Sample ID:	**D202103870401**
Sample Name	**NBP137-TP2**

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		110

Sample ID:	**S202103870301**
Sample Name	**NBP137-TP1**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
Benzene	%		112
Toluene	%		112
Ethylbenzene	%		115
m.p Xylene	%		115
o Xylene	%		113
Fluorobenzene (Surr.)	%		100

Sample ID:	**Q2021009840**
Sample Name	

Parameter	*Units*	*PQL*	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP

PROJECT:	DSI PARRAMATTA
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	elisha cassidy
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS:
SAMPLING DATE:	17.11.21
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587		
RECEIVED BY:	KS	SIGNATURE:	
SAMPLES: 22 CHILLED: ☒	PRESERVED: ☒	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: ☒
MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐		
DATE: 18.11.21	TIME: 2:00	TEMPERATURE UPON RECEIPT:	°C
LIMS LOT NO. 210564O	LIMS/EXCEL SIGNATURE:	COMMENTS:	

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab											Asbestos						Mould
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould
2021037																							
663	BH01_0.5				1		X	X	X	X	X		X			X				X			
664	BH01_1.0				2		X	X	X	X	X		X			X				X			
665	BH02_0.5				3		X	X	X	X	X		X	X	X	X				X			
666	BH02_1.0				4		X	X	X	X	X		X	X	X	X				X			
667	BH03_0.5				5		X	X	X	X	X		X			X				X			
668	BH03_1.0				6		X	X	X	X	X		X			X				X			
669	BH04_0.5				7		X	X	X	X	X		X			X				X			
670	BH04_1.0				8		X	X	X	X	X		X			X				X			
671	BH05_0.2				9		X	X	X	X	X		X			X				X			
672	BH05_0.5				10		X	X	X	X	X		X			X				X			
673	BH05_1.0				11		X	X	X	X	X		X			X				X			
674	BH06_0.5	SOIL	17/11/2021	B&G	12		X	X	X	X	X		X	X	X	X				X			
675	BH06_1.0				13		X	X	X	X	X		X	X	X	X				X			
676	BH07_0.5				14		X	X	X	X	X		X			X				X			
677	BH07_1.0				15		X	X	X	X	X		X			X				X			
678	BH08_0.5				16		X	X	X	X	X		X	X	X	X				X			
679	BH08_1.0				17		X	X	X	X	X		X	X	X	X				X			
680	BH09_0.5				18		X	X	X	X	X		X			X				X			
681	BH09_1.0				19		X	X	X	X	X		X			X				X			
684	BH08.FC1_1.0				20												X						
682	BR1				21		X	X	X	X	X		X										
683	BR2				22		X	X	X	X	X		X										

NOTES

POTENTIAL HAZARDOUS CONTAMINANTS:

☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____

LAB PLEASE *EMAIL COC RECEIPT: ☐

Sample Comments

PLEASE DO 48HR TAT FOR PH/PHFOX ANALYSIS ON ALL SAMPLES ON THIS COC - ON COMPLETION, PLEASE STORE THESE SAMPLES IN THE FREEZER FOR POTENTIAL CRS ANALYSIS LATER!

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

pH/pH Dox - 22/11/21

Rest - 25/11/21

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact:	Thesan Naidoo
Project name:	21.1587
Number of samples:	22
COC number:	21.1587
Turn around time:	STD
Date:	18.11.2021
Time received:	2:00 PM
SLS Reference:	2105640
Estimated Report Delivery Date:	22.11.2021 - Bulk + pHpH fox 25.11.2021

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

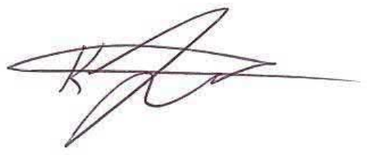
Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

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Sydney Laboratory Services

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	VOC	pH/pH fox	Phenols	Bulk	Dust	Dust Swab	Soil 65 grams	SOIl 500 g NEPM	AAM
2021037663	BH01_0.5		X	X	X	X	X		X		X					X		
2021037664	BH01_1.0		X	X	X	X	X		X		X					X		
2021037665	BH02_0.5		X	X	X	X	X		X	X	X	X				X		
2021037666	BH02_1.0		X	X	X	X	X		X	X	X	X				X		
2021037667	BH03_0.5		X	X	X	X	X		X		X					X		
2021037668	BH03_1.0		X	X	X	X	X		X		X					X		
2021037669	BH04_0.5		X	X	X	X	X		X		X					X		
2021037670	BH04_1.0		X	X	X	X	X		X		X					X		
2021037671	BH05_0.2		X	X	X	X	X		X		X					X		
2021037672	BH05_0.5		X	X	X	X	X		X		X					X		
2021037673	BH05_1.0		X	X	X	X	X		X		X					X		
2021037674	BH06_0.5		X	X	X	X	X		X	X	X	X				X		
2021037675	BH06_1.0		X	X	X	X	X		X	X	X	X				X		
2021037676	BH07_0.5		X	X	X	X	X		X		X					X		
2021037677	BH07_1.0		X	X	X	X	X		X		X					X		
2021037678	BH08_0.5		X	X	X	X	X		X	X	X	X				X		
2021037679	BH08_1.0		X	X	X	X	X		X	X	X	X				X		
2021037680	BH09_0.5		X	X	X	X	X		X		X					X		
2021037681	BH09_1.0		X	X	X	X	X		X		X					X		
2021037684	BH08.FC1_1.0												X					
2021037682	BR1		X	X	X	X	X		X									
2021037683	BR2		X	X	X	X	X		X									

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	21
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	18/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2021037663	2021037664	2021037665	2021037666	2021037667	2021037668	2021037669	2021037670	2021037671	2021037672	2021037673
	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	*Units*	*PQL*										
ESA-P-ORG7 & ORG8												
Benzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m.p Xylene	mg/kg	2	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
o Xylene	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sum of BTEX	mg/kg	2	<2.00	<2.00	-	-	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Total Xylenes	mg/kg	2	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Fluorobenzene (Surr.)	%		114	96	-	-	103	104	115	109	135	117	126
ESA-MP-01,ICP-01												
Arsenic	mg/kg	5	6.0	<5.0	<5.0	<5.0	<5.0	5.5	<5.0	7.3	5.2	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	14.6	11.1	22.6	16.3	12.9	13.0	<5.0	8.5	24.6	12.3	22.2
Copper	mg/kg	5	65.5	26.3	13.2	13.3	5.7	<5.0	50.6	64.8	16.9	42.5	17.0
Lead	mg/kg	10	42.6	131.0	54.4	29.6	<10.0	<10.0	<10.0	<10.0	198.1	13.1	122.9
Mercury	mg/kg	0.2	<0.20	0.43	0.38	0.31	<0.20	<0.20	<0.20	<0.20	0.27	<0.20	0.22
Nickel	mg/kg	10	132.1	<10.0	23.5	24.0	<10.0	<10.0	26.8	53.4	25.0	62.8	23.8
Zinc	mg/kg	5	95.3	13.5	52.0	46.0	<5.0	<5.0	28.0	52.8	122.1	43.4	90.5
ESA-P-12												
% Moisture Content	%		7.8	14.6	15.4	16.0	18.8	20.0	5.7	9.9	15.9	8.4	16.1
ESA-P-ORG(12 - 15)												
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.58	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.54	<0.30	<0.30

Certificate of Analysis

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	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	Units	PQL										
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.35	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.55	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	1.56	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.59	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	1.53	<0.30	<0.30
Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	6.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.70	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.87	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	1.03	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		71	132	68	63	74	86	69	66	85	94	125
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	Units	PQL										
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		106	124	102	93	114	126	118	104	106	139	140
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Certificate of Analysis

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	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	*Units*	*PQL*										
2-fluorobiphenyl (Surr.)	%		93	125	90	89	101	113	106	99	92	127	120
***ESA-P-19**													
pH	-		9.6	5.9	8.2	8.3	8.0	7.8	9.4	9.2	8.7	9.1	8.6
pHox	-		9.4	4.3	8.3	8.4	5.8	5.9	8.5	8.2	7.4	8.4	7.9
Reaction Rate	-		4	4	4	4	2	1	4	4	4	4	4

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	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	Units	PQL										
ESA-P-ORG17												
Phenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	-	-	<0.10	<0.10	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
3/4-Methylephenol	mg/kg	0.4	-	-	<0.40	<0.40	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.05	-	-	<0.050	<0.050	-	-	-	-	-	-	-
2,6-Dichlorophenol	mg/kg	0.05	-	-	<0.050	<0.050	-	-	-	-	-	-	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.05	-	-	<0.050	<0.050	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	-	-	<0.050	<0.050	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	4	-	-	<4.0	<4.0	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	4	-	-	<4.0	<4.0	-	-	-	-	-	-	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	-	-	<0.10	<0.10	-	-	-	-	-	-	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	-	-	<0.10	<0.10	-	-	-	-	-	-	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	-	-	<0.10	<0.10	-	-	-	-	-	-	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	-	-	<2.0	<2.0	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.2	-	-	<0.20	<0.20	-	-	-	-	-	-	-
Dinoseb	mg/kg	5	-	-	<5.0	<5.0	-	-	-	-	-	-	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	-	-	<5.0	<5.0	-	-	-	-	-	-	-
Sum of Positive Phenols	mg/kg	0.05	-	-	<0.050	<0.050	-	-	-	-	-	-	-
Phenol-d6 (Surr.)	%		-	-	77	67	-	-	-	-	-	-	-
2-Chlorophenol-d4 (Surr.)	%		-	-	89	78	-	-	-	-	-	-	-

Certificate of Analysis

	Sample ID:	2021037663	2021037664	2021037665	2021037666	2021037667	2021037668	2021037669	2021037670	2021037671	2021037672	2021037673
	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	*Units*	*PQL*										
ESA-P-ORG(3,5,6,8)												
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08												
Benzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Toluene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
m.p Xylene	mg/kg	1	-	-	<1.0	<1.0	-	-	-	-	-	-
o Xylene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Sum of BTEX	mg/kg	1	-	-	<1.0	<1.0	-	-	-	-	-	-
Total Xylenes	mg/kg	1	-	-	<1.0	<1.0	-	-	-	-	-	-
Styrene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Sum of MAHs	mg/kg	1	-	-	<1.0	<1.0	-	-	-	-	-	-
vNaphthalene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Vinyl Chloride	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Methylene chloride	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-
Chloroform	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-

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Certificate of Analysis

	Sample ID:	2021037663	2021037664	2021037665	2021037666	2021037667	2021037668	2021037669	2021037670	2021037671	2021037672	2021037673
	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	Units	PQL										
1,1,1-Trichloroethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,2-Dichloroethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
1,1-Dichloroethene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Trichloroethene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	-	-	<0.50	<0.50	-	-	-	-	-	-	-
Toluene-d8 (Surr.)	%		-	-	126	136	-	-	-	-	-	-	-
1,2-Dichloroethane-d4 (Surr.)	%		-	-	137	139	-	-	-	-	-	-	-
4-Bromofluorobenzene (BFB) (Surr.)	%		-	-	124	124	-	-	-	-	-	-	-
Trifluorotoluene (Surr.)	%		-	-	118	128	-	-	-	-	-	-	-

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Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	*Units*	*PQL*									
ESA-P-ORG7 & ORG8											
Benzene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	-	-	<0.50	<0.50	-	-	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	1	-	-	<1.0	<1.0	-	-	<1.0	<1.0	<1.0	<1.0
m.p Xylene	mg/kg	2	-	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0
o Xylene	mg/kg	1	-	-	<1.0	<1.0	-	-	<1.0	<1.0	<1.0	<1.0
Sum of BTEX	mg/kg	2	-	-	<2.00	<2.00	-	-	<2.00	<2.00	<2.00	<2.00
Total Xylenes	mg/kg	2	-	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0
Fluorobenzene (Surr.)	%		-	-	133	129	-	-	128	125	120	117
ESA-MP-01,ICP-01											
Arsenic	mg/kg	5	<5.0	6.9	<5.0	6.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	6.6	15.3	9.7	10.7	9.6	16.6	64.4	94.5	9.9	6.7
Copper	mg/kg	5	30.4	<5.0	8.7	9.3	27.4	13.2	15.5	20.9	12.9	<5.0
Lead	mg/kg	10	<10.0	<10.0	36.4	17.7	166.5	50.6	<10.0	<10.0	131.7	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	0.47	<0.20	<0.20	<0.20	0.36	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0	18.3	14.4	60.3	93.0	<10.0	<10.0
Zinc	mg/kg	5	<5.0	<5.0	575.3	149.1	148.6	51.3	30.5	46.9	12.6	<5.0
ESA-P-12											
% Moisture Content	%		14.6	20.4	18.3	19.0	16.0	14.4	7.0	5.6	15.4	15.4
ESA-P-ORG(12 - 15)											
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

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	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	Units	PQL									
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		71	73	83	74	68	80	89	67	90	80
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	Units	PQL									
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		100	112	106	110	92	92	132	105	130	124
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	*Units*	*PQL*									
2-fluorobiphenyl (Surr.)	%		93	118	92	103	84	81	121	93	119	114
***ESA-P-19**												
pH	-		7.2	6.2	8.3	8.1	8.6	8.5	9.1	9.3	-	-
pHox	-		4.0	4.5	7.8	6.4	7.6	7.9	8.9	8.8	-	-
Reaction Rate	-		3	2	4	4	4	4	4	4	-	-

Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	Units	PQL									
ESA-P-ORG17											
Phenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
2-Chlorophenol	mg/kg	0.1	<0.10	<0.10	-	-	<0.10	<0.10	-	-	-	-
2-Methylphenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
3/4-Methylephenol	mg/kg	0.4	<0.40	<0.40	-	-	<0.40	<0.40	-	-	-	-
2-Nitrophenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	-	-	<0.050	<0.050	-	-	-	-
2,6-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	-	-	<0.050	<0.050	-	-	-	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	-	-	<0.050	<0.050	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	-	-	<0.050	<0.050	-	-	-	-
2,4-Dinitrophenol	mg/kg	4	<4.0	<4.0	-	-	<4.0	<4.0	-	-	-	-
4-Nitrophenol	mg/kg	4	<4.0	<4.0	-	-	<4.0	<4.0	-	-	-	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	-	-	<0.10	<0.10	-	-	-	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	-	-	<0.10	<0.10	-	-	-	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	-	-	<0.10	<0.10	-	-	-	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0	<2.0	-	-	<2.0	<2.0	-	-	-	-
Pentachlorophenol	mg/kg	0.2	<0.20	<0.20	-	-	<0.20	<0.20	-	-	-	-
Dinoseb	mg/kg	5	<5.0	<5.0	-	-	<5.0	<5.0	-	-	-	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0	<5.0	-	-	<5.0	<5.0	-	-	-	-
Sum of Positive Phenols	mg/kg	0.05	<0.050	<0.050	-	-	<0.050	<0.050	-	-	-	-
Phenol-d6 (Surr.)	%		77	79	-	-	76	77	-	-	-	-
2-Chlorophenol-d4 (Surr.)	%		89	92	-	-	89	87	-	-	-	-

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Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	*Units*	*PQL*									
ESA-P-ORG(3,5,6,8)											
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08											
Benzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Toluene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
m.p Xylene	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	-	-	-	-
o Xylene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Sum of BTEX	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	-	-	-	-
Total Xylenes	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	-	-	-	-
Styrene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Sum of MAHs	mg/kg	1	<1.0	<1.0	-	-	<1.0	<1.0	-	-	-	-
vNaphthalene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Vinyl Chloride	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Methylene chloride	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Bromochloromethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Chloroform	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-

Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681	2021037682	2021037683
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0	BR1	BR2
Parameter	Units	PQL									
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Carbon tetrachloride	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Tetrachloroethene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Trichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Chlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	<0.50	-	-	<0.50	<0.50	-	-	-	-
Toluene-d8 (Surr.)	%		117	130	-	-	118	116	-	-	-	-
1,2-Dichloroethane-d4 (Surr.)	%		118	132	-	-	118	118	-	-	-	-
4-Bromofluorobenzene (BFB) (Surr.)	%		107	120	-	-	106	105	-	-	-	-
Trifluorotoluene (Surr.)	%		111	134	-	-	116	111	-	-	-	-

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Silverwater 2128
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Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	47
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	18/11/2021
		Date of Analysis:	19/11/2021
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

Sample ID:	**Q2021009612**
Sample Name	

Parameter	*Units*	*PQL*	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50
Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

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	Sample ID:	D202103766601	D202103789801
	Sample Name	BH02_1.0	BH16_1.0

Parameter	Units	PQL		
ESA-P-ORG7 & ORG8				
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Styrene			Pass	Pass
vNaphthalene			Pass	Pass
Vinyl Chloride			Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass
Methylene chloride			Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass
Bromochloromethane			Pass	Pass
Chloroform			Pass	Pass
1,1,1-Trichloroethane			Pass	Pass
1,2-Dichloroethane			Pass	Pass
Carbon tetrachloride			Pass	Pass
1,1,2-Trichloroethane			Pass	Pass
Tetrachloroethene			Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass
1,2-Dichlorobenzene			Pass	Pass
1,4-Dichlorobenzene			Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass
Hexachlorobutadiene			Pass	Pass
1,1-Dichloroethene			Pass	Pass
Trichloroethene			Pass	Pass
Chlorobenzene			Pass	Pass
Toluene-d8	%		133	104
1,2-Dichloroethane-d4	%		134	103
4-Bromofluorobenzene (BFB)	%		120	88
Trifluorotoluene (Surr.)	%		133	96

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	Sample ID:	D202103766602	D202103789802
	Sample Name	BH02_1.0	BH16_1.0

Parameter	Units	PQL		
ESA-P-ORG17				
Phenol			Pass	Pass
2-Chlorophenol			Pass	Pass
2-Methylphenol			Pass	Pass
3/4-Methylephenol			Pass	Pass
2-Nitrophenol			Pass	Pass
2,4-Dimethylphenol			Pass	Pass
2,4-Dichlorophenol			Pass	Pass
2,6-Dichlorophenol			Pass	Pass
3-Methyl,4-Chlorophenol			Pass	Pass
2,4,6-Trichlorophenol			Pass	Pass
2,4,5-Trichlorophenol			Pass	Pass
2,4-Dinitrophenol			Pass	Pass
4-Nitrophenol			Pass	Pass
2,3,5,6-Tetrachlorophenol			Pass	Pass
2,3,4,5-Tetrachlorophenol			Pass	Pass
2,3,4,6-Tetrachlorophenol			Pass	Pass
2-Methyl-4,6-dinitrophenol			Pass	Pass
Pentachlorophenol			Pass	Pass
Dinoseb			Pass	Pass
2-Cyclohexyl-4,6-dinitrophenol			Pass	Pass
Phenol-d6	%		90	71
2-Chlorophenol-d4	%		104	80

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Sample ID:	Q2021009616	Q2021009622
Sample Name		

Parameter	*Units*	*PQL*	PCB Blank - Soil	PCB Blank - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	mg/kg	0.3	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30
aldrin	mg/kg	0.1	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10

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endrin	mg/kg	0.2	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10
chlorpyrifos	mg/kg	0.1	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50

Sample ID:	**D202103766402**	**D202103766603**	**D202103767702**	**D202103789803**	
Sample Name	**BH01_1.0**	**BH02_1.0**	**BH07_1.0**	**BH16_1.0**	
Parameter	***Units***	***PQL***			
ESA-P-ORG(12 - 15)					
Acenaphthene			Pass	Pass	Pass	Pass
Acenaphthylene			Pass	Pass	Pass	Pass
Anthracene			Pass	Pass	Pass	Pass
Benzo[a]anthracene			Pass	Pass	Pass	Pass
Benzo[a]pyrene			Pass	Pass	Pass	Pass
Benzo[b]fluoranthene			Pass	Pass	Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass	Pass	Pass
Benzo[k]fluoranthene			Pass	Pass	Pass	Pass
Chrysene			Pass	Pass	Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass	Pass	Pass

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Fluoranthene			Pass	Pass	Pass	Pass
Fluorene			Pass	Pass	Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass	Pass	Pass
Naphthalene			Pass	Pass	Pass	Pass
Phenanthrene			Pass	Pass	Pass	Pass
Pyrene			Pass	Pass	Pass	Pass
p-Terphenyl-d14 (Surr.)	%		119	90	83	65
aldrin			Pass	Pass	Pass	Pass
a-BHC			Pass	Pass	Pass	Pass
b-BHC			Pass	Pass	Pass	Pass
d-BHC			Pass	Pass	Pass	Pass
g-BHC (lindane)			Pass	Pass	Pass	Pass
cis-chlordane			Pass	Pass	Pass	Pass
trans-chlordane			Pass	Pass	Pass	Pass
4,4'-DDD			Pass	Pass	Pass	Pass
4,4'-DDE			Pass	Pass	Pass	Pass
4,4'-DDT			Pass	Pass	Pass	Pass
dieldrin			Pass	Pass	Pass	Pass
endosulfan I			Pass	Pass	Pass	Pass
endosulfan II			Pass	Pass	Pass	Pass
endosulfan sulfate			Pass	Pass	Pass	Pass
endrin			Pass	Pass	Pass	Pass
endrin aldehyde			Pass	Pass	Pass	Pass
endrin ketone			Pass	Pass	Pass	Pass
heptachlor			Pass	Pass	Pass	Pass
heptachlor epoxide			Pass	Pass	Pass	Pass
hexachlorobenzene			Pass	Pass	Pass	Pass
methoxychlor			Pass	Pass	Pass	Pass
TCMX (Surr.)	%		130	107	125	107
chlorpyrifos			Pass	Pass	Pass	Pass
chlorpyrifos methyl			Pass	Pass	Pass	Pass
diazinon			Pass	Pass	Pass	Pass
fenchlorphos			Pass	Pass	Pass	Pass
methyl parathion			Pass	Pass	Pass	Pass
prophos			Pass	Pass	Pass	Pass

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tributylphosphorotrithioite			Pass	Pass	Pass	Pass
Aroclor 1016			Pass	Pass	Pass	Pass
Aroclor 1221			Pass	Pass	Pass	Pass
Aroclor 1232			Pass	Pass	Pass	Pass
Aroclor 1242			Pass	Pass	Pass	Pass
Aroclor 1248			Pass	Pass	Pass	Pass
Aroclor 1254			Pass	Pass	Pass	Pass
Aroclor 1260			Pass	Pass	Pass	Pass
2-fluorobiphenyl (Surr.)	%		129	103	114	96

Sample ID: **Q2021009614**

Sample Name

Parameter	***Units***	***PQL***	Phenols Blank - Soil
ESA-P-ORG17			
Phenol	mg/kg	0.2	<0.20
2-Chlorophenol	mg/kg	0.1	<0.10
2-Methylphenol	mg/kg	0.2	<0.20
3/4-Methylephenol	mg/kg	0.4	<0.40
2-Nitrophenol	mg/kg	0.2	<0.20
2,4-Dimethylphenol	mg/kg	0.2	<0.20
2,4-Dichlorophenol	mg/kg	0.05	<0.050
2,6-Dichlorophenol	mg/kg	0.05	<0.050
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050
2,4-Dinitrophenol	mg/kg	4	<4.0
4-Nitrophenol	mg/kg	4	<4.0
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0
Pentachlorophenol	mg/kg	0.2	<0.20
Dinoseb	mg/kg	5	<5.0
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0

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	Sample ID:	S202103766302	S202103766503
	Sample Name	BH01_0.5	BH02_0.5
Parameter	Units	PQL		
ESA-P-ORG(12 - 15)				
Acenaphthene	%		124	132
Anthracene	%		139	84
Fluoranthene	%		112	72
Naphthalene	%		122	95
Phenanthrene	%		113	77
Pyrene	%		114	76
p-Terphenyl-d14 (Surr.)	%		86	68
aldrin	%		105	77
endrin	%		110	96
hexachlorobenzene	%		126	80
TCMX (Surr.)	%		109	81
chlorpyrifos	%		92	64
diazinon	%		97	68
Aroclor 1016	%		100	70
2-fluorobiphenyl (Surr.)	%		116	75

	Sample ID:	D202103766404	D202103767301
	Sample Name	BH01_1.0	BH05_1.0
Parameter	Units	PQL		
ESA-MP-01,ICP-01				
Arsenic			Pass	Pass
Cadmium			Pass	Pass
Chromium			Pass	Pass
Copper			Pass	Pass
Lead			Pass	Pass
Mercury			Pass	Pass
Nickel			Pass	Pass
Zinc			Pass	Pass

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Sample ID:	Q2021009519	Q2021009677
Sample Name		

Parameter	*Units*	*PQL*	Metals Blank Sp-Soil	Metals Blank Sp-Soil
ESA-MP-01,ICP-01				
Arsenic	%		93	85
Cadmium	%		98	94
Chromium	%		93	89
Copper	%		91	88
Lead	%		100	94
Mercury	%		104	102
Nickel	%		96	91
Zinc	%		97	91

Sample ID:	D202103738701	D202103765301
Sample Name	WAC15-TP2	SCA2.TP11

Parameter	*Units*	*PQL*		
ESA-MP-01,ICP-01				
Arsenic			Pass	Pass
Cadmium			Pass	Pass
Chromium			Pass	Pass
Copper			Pass	Pass
Lead			Pass	Pass
Mercury			Pass	Pass
Nickel			Pass	Pass
Zinc			Pass	Pass

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Sample ID:	Q2021009618	Q2021009624
Sample Name		

Parameter	Units	PQL	TRH Blank-Soil	TRH Blank-Soil
ESA-P-ORG(3,5,6,8)				
>C10-C16	mg/kg	50	<50	<50
>C16-C34	mg/kg	100	<100	<100
>C34-C40	mg/kg	100	<100	<100
>C10-C14	mg/kg	50	<50	<50
>C15-C28	mg/kg	100	<100	<100
>C29-C36	mg/kg	100	<100	<100

Sample ID:	S202103766502
Sample Name	BH02_0.5

Parameter	Units	PQL	
ESA-P-ORG17			
2-Chlorophenol	%		101
2-Methylphenol	%		81
3/4-Methylephenol	%		103
2,6-Dichlorophenol	%		110
Dinoseb	%		108
Phenol-d6 (Surr.)	%		91
2-Chlorophenol-d4 (Surr.)	%		106

Sample ID:	Q2021009613
Sample Name	

Parameter	Units	PQL	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		135
Benzene	%		111
Trichloroethene	%		93
Toluene	%		112
Chlorobenzene	%		105
Toluene-d8 (Surr.)	%		114
1,2-Dichloroethane-d4 (Surr.)	%		109

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4-Bromofluorobenzene (BFB) (Surr.)	%		98	
Trifluorotoluene (Surr.)	%		113	

		Sample ID:	**Q2021009617**	**Q2021009623**
		Sample Name		
Parameter	***Units***	***PQL***	PCB Blank Sp - Soil	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	%		105	134
Anthracene	%		77	95
Fluoranthene	%		75	73
Naphthalene	%		107	85
Phenanthrene	%		86	78
Pyrene	%		80	75
p-Terphenyl-d14 (Surr.)	%		84	61
aldrin	%		93	73
endrin	%		85	96
hexachlorobenzene	%		92	87
TCMX (Surr.)	%		98	76
chlorpyrifos	%		73	63
diazinon	%		75	65
2-fluorobiphenyl (Surr.)	%		101	79
Aroclor 1016	%		90	71

		Sample ID:	**Q2021009518**	**Q2021009676**
		Sample Name		
Parameter	***Units***	***PQL***	Metals Blank - Soil	Metals Blank - Soil
ESA-MP-01,ICP-01				
Arsenic	mg/kg	5	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30
Chromium	mg/kg	5	<5.0	<5.0
Copper	mg/kg	5	<5.0	<5.0
Lead	mg/kg	10	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0
Zinc	mg/kg	5	<5.0	<5.0

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Sample ID:	Q2021009619	Q2021009625
Sample Name		

Parameter	Units	PQL	TRH Blank Spike-Soil	TRH Blank Spike-Soil
ESA-P-ORG(3,5,6,8)				
>C10-C16	%		99	102
>C10-C14	%		95	97

Sample ID:	D202103766401	D202103767701
Sample Name	BH01_1.0	BH07_1.0

Parameter	Units	PQL		
ESA-P-ORG7 & ORG8				
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Fluorobenzene (Surr.)	%		92	132

Sample ID:	S202103766501
Sample Name	BH02_0.5

Parameter	Units	PQL	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		139
Benzene	%		111
Trichloroethene	%		93
Toluene	%		114
Chlorobenzene	%		107
Toluene-d8 (Surr.)	%		113
1,2-Dichloroethane-d4 (Surr.)	%		109
4-Bromofluorobenzene (Surr.)	%		97
Trifluorotoluene (Surr.)	%		114

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	Sample ID:	S202103766303	S202103766504
	Sample Name	BH01_0.5	BH02_0.5
Parameter	Units	PQL		
ESA-P-ORG(3,5,6,8)				
>C10-C16	%		106	129
>C10-C14	%		106	127

	Sample ID:	Q2021009615
	Sample Name	
Parameter	Units	PQL	Phenols BlankSp-Soil
ESA-P-ORG17			
2-Chlorophenol	%		71
2-Methylphenol	%		72
3/4-Methylephenol	%		67
2,6-Dichlorophenol	%		77
Dinoseb	%		101
Phenol-d6 (Surr.)	%		64
2-Chlorophenol-d4 (Surr.)	%		72

	Sample ID:	S202103750402	S202103759303
	Sample Name		
Parameter	Units	PQL		
ESA-MP-01,ICP-01				
Arsenic	%		93	-
Nickel	%		-	92

	Sample ID:	S202103766301
	Sample Name	BH01_0.5
Parameter	Units	PQL	
ESA-P-ORG-07 & 08			
Benzene	%		114
Toluene	%		106
Ethylbenzene	%		108
m.p Xylene	%		89
o Xylene	%		107
Fluorobenzene (Surr.)	%		107

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Sample ID:	D202103766403	D202103766604	D202103767703	D202103789804
Sample Name	BH01_1.0	BH02_1.0	BH07_1.0	BH16_1.0

Parameter	Units	PQL				
ESA-P-ORG(3,5,6,8)						
>C10-C16			Pass	Pass	Pass	Pass
>C16-C34			Pass	Pass	Pass	Pass
>C34-C40			Pass	Pass	Pass	Pass
>C10-C14			Pass	Pass	Pass	Pass
>C15-C28			Pass	Pass	Pass	Pass
>C29-C36			Pass	Pass	Pass	Pass

Sample ID:	Q2021009620
Sample Name	

Parameter	Units	PQL	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

Sample ID:	S202103766304
Sample Name	BH01_0.5

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Arsenic	%		80
Cadmium	%		96
Chromium	%		86
Copper	%		83
Lead	%		85
Mercury	%		112
Zinc	%		75

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Sample ID:	**S202103738601**
Sample Name	**WAC15-TP1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Cadmium	%		100
Chromium	%		105
Copper	%		82
Lead	%		112
Mercury	%		101
Nickel	%		91
Zinc	%		87

Sample ID:	**Q2021009621**
Sample Name	

Parameter	*Units*	*PQL*	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		115
Toluene	%		109
Ethylbenzene	%		110
m.p Xylene	%		89
o Xylene	%		108
Fluorobenzene (Surr.)	%		109

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	22/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	19
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	18/11/2021
		Date of Analysis:	18/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2021037663	2021037664	2021037665	2021037666	2021037667	2021037668	2021037669	2021037670	2021037671	2021037672	2021037673
	Sample Name	BH01_0.5	BH01_1.0	BH02_0.5	BH02_1.0	BH03_0.5	BH03_1.0	BH04_0.5	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0
Parameter	*Units*	*PQL*										
***ESA-P-19**												
pH	-		9.6	5.9	8.2	8.3	8.0	7.8	9.4	9.2	8.7	9.1	8.6
pHox	-		9.4	4.3	8.3	8.4	5.8	5.9	8.5	8.2	7.4	8.4	7.9
Reaction Rate	-		4	4	4	4	2	1	4	4	4	4	4

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Certificate of Analysis

	Sample ID:	2021037674	2021037675	2021037676	2021037677	2021037678	2021037679	2021037680	2021037681
	Sample Name	BH06_0.5	BH06_1.0	BH07_0.5	BH07_1.0	BH08_0.5	BH08_1.0	BH09_0.5	BH09_1.0
Parameter	Units	PQL							
*ESA-P-19									
pH	-		7.2	6.2	8.3	8.1	8.6	8.5	9.1	9.3
pHox	-		4.0	4.5	7.8	6.4	7.6	7.9	8.9	8.8
Reaction Rate	-		3	2	4	4	4	4	4	4

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General Comments

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However surrogate standards are added to samples, results are not corrected for standards recoveries.

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All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	30/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	10
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/11/2021
		Date of Analysis:	30/11/2021
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2021039154	2021039155	2021039156	2021039157	2021039158	2021039159	2021039160	2021039161	2021039162	2021039163
	Sample Name	BH01_0.5	BH01_1.0	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0	BH08_0.5	BH09_0.5	BH09_1.0	BR1
Parameter	Units	PQL									
ESA-MP-01,ICP-01											
Lead	mg/L	0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	-	<0.5
Nickel	mg/L	0.2	<0.2	-	<0.2	-	<0.2	-	-	<0.2	<0.2	-
ESA-P-21											
pH A	-		9.7	6.3	9.5	9.3	9.5	9.2	9.0	9.6	9.6	6.4
pH B	-		1.8	1.7	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.7
Extraction Fluid	-		1	1	1	1	1	1	1	1	1	1

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Batch Number : 2105856

Report Number : 21.1587 (154-163)
TCLP

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Unit 4/10-11 Millennium Court,
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This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

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General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	30/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/11/2021
		Date of Analysis:	30/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

Sample ID: **Q2021009979**

Sample Name

Parameter	*Units*	*PQL*	Metals Blank Sp-TCLP
ESA-MP-01,ICP-01			
Lead	%		110
Nickel	%		105

Sample ID: **D202103915801** **D202103926202**

Sample Name **BH05_0.5** **WAC4-TP2**

Parameter	*Units*	*PQL*		
ESA-MP-01,ICP-01				
Lead			Pass	Pass
Nickel			Pass	Pass

Sample ID: **S202103926102**

Sample Name **WAC4-TP1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Lead	%		115
Nickel	%		108

Sample ID: **Q2021009978**

Sample Name

Parameter	*Units*	*PQL*	Metals Blank - TCLP
ESA-MP-01,ICP-01			
Lead	mg/L	0.5	<0.5
Nickel	mg/L	0.2	<0.2

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2105640

Date Received: 18.11.2021
Date Analysed: 22.11.2021
Report Date: 22.11.2021
Client: ADE Consulting Group
Job Location: DSI Parramatta
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Sifan Xu
Approved asbestos identifier

Results Authorised By:

Sifan Xu
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH08.FC1_1.0	2021037684	Fibre Cement	3.3 x 1.8 x 0.5	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2105640

Date Received: 18.11.2021
Date Analysed: 25.11.2021
Report Date: 25.11.2021
Client: ADE Consulting Group
Job Location: DSI Parramatta
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:



Kim Foley
Approved asbestos identifier

Results Authorised By:



Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH01_0.5	2021037663	Soil	76 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH01_1.0	2021037664	Soil	55 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH02_0.5	2021037665	Soil	99 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH02_1.0	2021037666	Soil	79 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH03_0.5	2021037667	Soil	86 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH03_1.0	2021037668	Soil	100 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH04_0.5	2021037669	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH04_1.0	2021037670	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH05_0.2	2021037671	Soil	103 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH05_0.5	2021037672	Soil	123 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH05_1.0	2021037673	Soil	88 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH06_0.5	2021037674	Soil	128 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH06_1.0	2021037675	Soil	88 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH07_0.5	2021037676	Soil	112 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH07_1.0	2021037677	Soil	81 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH08_0.5	2021037678	Soil	74 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH08_1.0	2021037679	Soil	114 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH09_0.5	2021037680	Soil	49 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH09_1.0	2021037681	Soil	46 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (EUROFINS)

ADE CONSULTING GROUP

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	# 843595
PROJECT NUMBER - INVOICE NUMBER	**21.1587**		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: Nick	SIGNATURE:
SAMPLERS:	elisha cassidy	SAMPLES: CHILLED: ☐ PRESERVED: ☐	PRESERVATION METHOD: CUSTODY SEAL INTACT: ☐
TURNAROUND:	24h: ☐ 48h: 72h: ☐ **5 WORKING DAYS:**	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	17.11.21	DATE: 18/11	TIME: 3:10pm TEMPERATURE UPON RECEIPT: 23.1 °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																NOTES
						Chem Lab										Asbestos						Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	NEPM Screen/Soil Classification suite: Fe, CEC, pH(CaCl2), TOC, Clay Content + pH(1:5) & EC(1:5)]	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
	SR1	S	17.11.21	G	1		X	X	X	X	X		X										LAB PLEASE *EMAIL COC RECEIPT: ☐
	SR2	S	17.11.21	G	2		X	X	X	X	X		X										Sample Comments
	BH05_0.5	S	17.11.21	G	3											X							
	BH05_1.0	S	17.11.21	G	4											X							
	BH06_1.8	S	18.11.21	G	5											X							
	RINSATE1	W	17.11.21	V	6		X	X	X	X	X		X										

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

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43 Detroit Drive
Rolleston, Christchurch 7675
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IANZ # 1290

Sample Receipt Advice

Company name:	ADE Consulting Group Pty Ltd
Contact name:	Thesan Naidoo
Project name:	DSI PARRAMATTA
Project ID:	21.1587
Turnaround time:	5 Day
Date/Time received	Nov 18, 2021 3:10 PM
Eurofins reference	843595

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 23.1 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Asim Khan on phone : or by email: AsimKhan@eurofins.com

Results will be delivered electronically via email to Thesan Naidoo - Thesan.Naidoo@ade.group.

Note: A copy of these results will also be delivered to the general ADE Consulting Group Pty Ltd email address.

eurofins | Environment Testing

web: www.eurofins.com.au
email: EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

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Phone : 0800 856 450
IANZ # 1290

Company Name: ADE Consulting Group Pty Ltd
Address: Unit 6/7 Millennium Court
Silverwater
NSW 2128

Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 843595
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Nov 18, 2021 3:10 PM
Due: Nov 25, 2021
Priority: 5 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Eurofins Suite B15	Moisture Set	NEPM Screen for Soil Classification	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254								X	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								X	
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SR1	Nov 17, 2021		Soil	S21-No55845	X	X		X
2	SR2	Nov 17, 2021		Soil	S21-No55846	X	X		X
3	BH05_0.5	Nov 17, 2021		Soil	S21-No55847		X	X	
4	BH05_1.0	Nov 17, 2021		Soil	S21-No55848		X	X	
5	BH06_1.8	Nov 17, 2021		Soil	S21-No55849		X	X	
6	RINSATE1	Nov 17, 2021		Water	S21-No55850	X			X
Test Counts						3	5	3	3

ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Thesan Naidoo**

Report **843595-S**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Nov 18, 2021

Client Sample ID			**SR1**	**SR2**	**BH05_0.5**	**BH05_1.0**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S21-No55845**	**S21-No55846**	**S21-No55847**	**S21-No55848**
Date Sampled			**Nov 17, 2021**	**Nov 17, 2021**	**Nov 17, 2021**	**Nov 17, 2021**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	-	-
TRH C10-C14	20	mg/kg	< 20	< 20	-	-
TRH C15-C28	50	mg/kg	< 50	< 50	-	-
TRH C29-C36	50	mg/kg	< 50	< 50	-	-
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	-	-
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	-	-
TRH C6-C10	20	mg/kg	< 20	< 20	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	-	-
TRH >C10-C16	50	mg/kg	< 50	< 50	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	-	-
TRH >C16-C34	100	mg/kg	< 100	< 100	-	-
TRH >C34-C40	100	mg/kg	< 100	< 100	-	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	-
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	121	112	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	-	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-

Client Sample ID			SR1	SR2	BH05_0.5	BH05_1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S21-No55845	S21-No55846	S21-No55847	S21-No55848
Date Sampled			Nov 17, 2021	Nov 17, 2021	Nov 17, 2021	Nov 17, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	105	90	-	-
p-Terphenyl-d14 (surr.)	1	%	112	98	-	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	-
a-HCH	0.05	mg/kg	< 0.05	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
b-HCH	0.05	mg/kg	< 0.05	< 0.05	-	-
d-HCH	0.05	mg/kg	< 0.05	< 0.05	-	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	-
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	-
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	95	77	-	-
Tetrachloro-m-xylene (surr.)	1	%	105	91	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Coumaphos	2	mg/kg	< 2	< 2	-	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	-

Client Sample ID			SR1	SR2	BH05_0.5	BH05_1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S21-No55845	S21-No55846	S21-No55847	S21-No55848
Date Sampled			Nov 17, 2021	Nov 17, 2021	Nov 17, 2021	Nov 17, 2021
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	-
EPN	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Monocrotophos	2	mg/kg	< 2	< 2	-	-
Naled	0.2	mg/kg	< 0.2	< 0.2	-	-
Omethoate	2	mg/kg	< 2	< 2	-	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	106	82	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	-	-
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	95	77	-	-
Tetrachloro-m-xylene (surr.)	1	%	105	91	-	-
Heavy Metals						
Arsenic	2	mg/kg	2.5	< 2	-	-
Cadmium	0.4	mg/kg	< 0.4	< 0.4	-	-
Chromium	5	mg/kg	12	11	-	-
Copper	5	mg/kg	22	< 5	-	-
Iron	20	mg/kg	-	-	34000	21000
Lead	5	mg/kg	97	8.5	-	-
Mercury	0.1	mg/kg	0.3	< 0.1	-	-
Nickel	5	mg/kg	< 5	< 5	-	-
Zinc	5	mg/kg	18	7.3	-	-

Client Sample ID			SR1	SR2	BH05_0.5	BH05_1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S21-No55845	S21-No55846	S21-No55847	S21-No55848
Date Sampled			Nov 17, 2021	Nov 17, 2021	Nov 17, 2021	Nov 17, 2021
Test/Reference	LOR	Unit				
% Moisture	1	%	13	3.1	7.1	4.1
% Clay	1	%	-	-	< 1	5.0
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	-	95	160
pH (units)(1:5 soil:CaCl2 extract at 25°C as rec.)	0.1	pH Units	-	-	8.6	8.2
Total Organic Carbon	0.1	%	-	-	0.3	0.7
Heavy Metals						
Iron (%)	0.01	%	-	-	3.4	2.1
Cation Exchange Capacity						
Cation Exchange Capacity	0.05	meq/100g	-	-	27	37

Client Sample ID			BH06_1.8
Sample Matrix			Soil
Eurofins Sample No.			S21-No55849
Date Sampled			Nov 17, 2021
Test/Reference	LOR	Unit	
Heavy Metals			
Iron	20	mg/kg	9000
% Moisture	1	%	6.1
% Clay	1	%	15
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	72
pH (units)(1:5 soil:CaCl2 extract at 25°C as rec.)	0.1	pH Units	5.0
Total Organic Carbon	0.1	%	0.5
Heavy Metals			
Iron (%)	0.01	%	0.90
Cation Exchange Capacity			
Cation Exchange Capacity	0.05	meq/100g	16

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Nov 25, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Nov 25, 2021	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Nov 25, 2021	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
NEPM Screen for Soil Classification			
Heavy Metals	Sydney	Nov 25, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Clay	Brisbane	Nov 30, 2021	14 Days
- Method: LTM-GEN-7040			
Conductivity (1:5 aqueous extract at 25°C as rec.)	Sydney	Nov 25, 2021	7 Days
- Method: LTM-INO-4030 Conductivity			
pH (units)(1:5 soil:CaCl2 extract at 25°C as rec.)	Sydney	Nov 25, 2021	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Total Organic Carbon	Melbourne	Nov 26, 2021	28 Days
- Method: LTM-INO-4060 Total Organic Carbon in water and soil			
Cation Exchange Capacity	Melbourne	Nov 26, 2021	28 Days
- Method: LTM-MET-3060 Cation Exchange Capacity by bases & Exchangeable Sodium Percentage			
% Moisture	Sydney	Nov 24, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 843595
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Nov 18, 2021 3:10 PM
Due: Nov 25, 2021
Priority: 5 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Eurofins Suite B15	Moisture Set	NEPM Screen for Soil Classification	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254								X	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								X	
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SR1	Nov 17, 2021		Soil	S21-No55845	X	X		X
2	SR2	Nov 17, 2021		Soil	S21-No55846	X	X		X
3	BH05_0.5	Nov 17, 2021		Soil	S21-No55847		X	X	
4	BH05_1.0	Nov 17, 2021		Soil	S21-No55848		X	X	
5	BH06_1.8	Nov 17, 2021		Soil	S21-No55849		X	X	
6	RINSATE1	Nov 17, 2021		Water	S21-No55850	X			X
Test Counts						3	5	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Iron	mg/kg	< 20			20	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Conductivity (1:5 aqueous extract at 25°C as rec.)	uS/cm	< 10			10	Pass	
Total Organic Carbon	%	< 0.1			0.1	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	95			70-130	Pass	
Naphthalene	%	100			70-130	Pass	
TRH C6-C10	%	96			70-130	Pass	
TRH >C10-C16	%	112			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	100			70-130	Pass	
Toluene	%	97			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	101			70-130	Pass	
o-Xylene	%	115			70-130	Pass	
Xylenes - Total*	%	106			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	85			70-130	Pass	
Benz(a)anthracene	%	98			70-130	Pass	
Benzo(a)pyrene	%	94			70-130	Pass	
Benzo(b&j)fluoranthene	%	109			70-130	Pass	
Benzo(g.h.i)perylene	%	84			70-130	Pass	
Benzo(k)fluoranthene	%	87			70-130	Pass	
Chrysene	%	78			70-130	Pass	
Dibenz(a.h)anthracene	%	85			70-130	Pass	
Fluoranthene	%	89			70-130	Pass	
Fluorene	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	88			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	108			70-130	Pass	
Pyrene	%	90			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	83			70-130	Pass	
4.4'-DDD	%	85			70-130	Pass	
4.4'-DDE	%	91			70-130	Pass	
4.4'-DDT	%	92			70-130	Pass	
a-HCH	%	80			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aldrin	%	87			70-130	Pass	
b-HCH	%	81			70-130	Pass	
d-HCH	%	79			70-130	Pass	
Dieldrin	%	81			70-130	Pass	
Endosulfan I	%	80			70-130	Pass	
Endosulfan II	%	72			70-130	Pass	
Endosulfan sulphate	%	74			70-130	Pass	
Endrin	%	103			70-130	Pass	
Endrin aldehyde	%	77			70-130	Pass	
Endrin ketone	%	72			70-130	Pass	
g-HCH (Lindane)	%	87			70-130	Pass	
Heptachlor	%	101			70-130	Pass	
Heptachlor epoxide	%	89			70-130	Pass	
Hexachlorobenzene	%	86			70-130	Pass	
Methoxychlor	%	85			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	90			70-130	Pass	
Dimethoate	%	83			70-130	Pass	
Ethion	%	85			70-130	Pass	
Fenitrothion	%	87			70-130	Pass	
Methyl parathion	%	105			70-130	Pass	
Mevinphos	%	98			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	98			70-130	Pass	
Aroclor-1260	%	107			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	93			80-120	Pass	
Cadmium	%	95			80-120	Pass	
Chromium	%	95			80-120	Pass	
Copper	%	95			80-120	Pass	
Iron	%	94			80-120	Pass	
Lead	%	96			80-120	Pass	
Mercury	%	95			80-120	Pass	
Nickel	%	94			80-120	Pass	
Zinc	%	94			80-120	Pass	
LCS - % Recovery							
Conductivity (1:5 aqueous extract at 25°C as rec.)	%	102			70-130	Pass	
Total Organic Carbon	%	104			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S21-No57360	NCP	%	86			70-130	Pass	
TRH C10-C14	S21-No53213	NCP	%	120			70-130	Pass	
Naphthalene	S21-No57360	NCP	%	95			70-130	Pass	
TRH C6-C10	S21-No57360	NCP	%	87			70-130	Pass	
TRH >C10-C16	S21-No53213	NCP	%	120			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S21-No57360	NCP	%	87			70-130	Pass	
Toluene	S21-No57360	NCP	%	89			70-130	Pass	
Ethylbenzene	S21-No57360	NCP	%	93			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	S21-No57360	NCP	%	95			70-130	Pass	
o-Xylene	S21-No57360	NCP	%	97			70-130	Pass	
Xylenes - Total*	S21-No57360	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	W21-No38499	NCP	%	112			70-130	Pass	
Acenaphthylene	W21-No38499	NCP	%	120			70-130	Pass	
Anthracene	W21-No38499	NCP	%	114			70-130	Pass	
Benz(a)anthracene	W21-No38499	NCP	%	106			70-130	Pass	
Benzo(a)pyrene	W21-No38499	NCP	%	110			70-130	Pass	
Benzo(b&j)fluoranthene	W21-No38499	NCP	%	126			70-130	Pass	
Benzo(g.h.i)perylene	W21-No38499	NCP	%	100			70-130	Pass	
Benzo(k)fluoranthene	S21-No66710	NCP	%	95			70-130	Pass	
Chrysene	W21-No38499	NCP	%	104			70-130	Pass	
Dibenz(a.h)anthracene	W21-No38499	NCP	%	105			70-130	Pass	
Fluoranthene	W21-No38499	NCP	%	112			70-130	Pass	
Fluorene	W21-No38499	NCP	%	117			70-130	Pass	
Indeno(1.2.3-cd)pyrene	W21-No38499	NCP	%	108			70-130	Pass	
Naphthalene	W21-No38499	NCP	%	112			70-130	Pass	
Phenanthrene	W21-No38499	NCP	%	114			70-130	Pass	
Pyrene	W21-No38499	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	W21-No38499	NCP	%	105			70-130	Pass	
4.4'-DDD	W21-No38499	NCP	%	99			70-130	Pass	
4.4'-DDE	W21-No38499	NCP	%	111			70-130	Pass	
4.4'-DDT	W21-No38499	NCP	%	102			70-130	Pass	
a-HCH	W21-No38499	NCP	%	97			70-130	Pass	
Aldrin	W21-No38499	NCP	%	107			70-130	Pass	
b-HCH	W21-No38499	NCP	%	100			70-130	Pass	
d-HCH	W21-No38499	NCP	%	100			70-130	Pass	
Dieldrin	W21-No38499	NCP	%	100			70-130	Pass	
Endosulfan I	W21-No38499	NCP	%	104			70-130	Pass	
Endosulfan II	W21-No38499	NCP	%	100			70-130	Pass	
Endosulfan sulphate	W21-No38499	NCP	%	99			70-130	Pass	
Endrin	S21-No66710	NCP	%	110			70-130	Pass	
Endrin aldehyde	W21-No38499	NCP	%	77			70-130	Pass	
Endrin ketone	W21-No38499	NCP	%	93			70-130	Pass	
g-HCH (Lindane)	W21-No38499	NCP	%	106			70-130	Pass	
Heptachlor	W21-No38499	NCP	%	116			70-130	Pass	
Heptachlor epoxide	W21-No38499	NCP	%	109			70-130	Pass	
Hexachlorobenzene	W21-No38499	NCP	%	102			70-130	Pass	
Methoxychlor	W21-No38499	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S21-No66710	NCP	%	87			70-130	Pass	
Dimethoate	S21-No66710	NCP	%	77			70-130	Pass	
Ethion	S21-No66710	NCP	%	91			70-130	Pass	
Fenitrothion	S21-No66710	NCP	%	82			70-130	Pass	
Methyl parathion	S21-No66710	NCP	%	91			70-130	Pass	
Mevinphos	S21-No66710	NCP	%	83			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W21-No38499	NCP	%	118			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S21-No62577	NCP	%	89			75-125	Pass	
Cadmium	S21-No62577	NCP	%	91			75-125	Pass	
Chromium	S21-No62577	NCP	%	92			75-125	Pass	
Copper	S21-No62577	NCP	%	99			75-125	Pass	
Lead	S21-No61541	NCP	%	85			75-125	Pass	
Mercury	S21-No62577	NCP	%	94			75-125	Pass	
Nickel	S21-No62577	NCP	%	87			75-125	Pass	
Zinc	S21-No62577	NCP	%	106			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Iron	M21-No51974	NCP	%	81			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S21-No57361	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S21-No59701	NCP	mg/kg	< 20	26	58	30%	Fail	Q15
TRH C15-C28	S21-No59701	NCP	mg/kg	110	120	10	30%	Pass	
TRH C29-C36	S21-No59701	NCP	mg/kg	64	73	13	30%	Pass	
Naphthalene	S21-No57361	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S21-No57361	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S21-No59701	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S21-No59701	NCP	mg/kg	190	210	11	30%	Pass	
TRH >C34-C40	S21-No59701	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S21-No57361	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S21-No57361	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S21-No57361	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S21-No57361	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S21-No57361	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S21-No57361	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S21-No59576	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S21-No59576	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S21-No69864	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S21-No59576	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S21-No59576	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S21-No59576	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Tetrachlorvinphos	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S21-No59576	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S21-No59576	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S21-No41038	NCP	mg/kg	5.3	3.9	32	30%	Fail	Q15
Cadmium	S21-No41038	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S21-No41038	NCP	mg/kg	15	12	25	30%	Pass	
Copper	S21-No41038	NCP	mg/kg	8.9	8.0	10	30%	Pass	
Lead	S21-No41038	NCP	mg/kg	15	12	18	30%	Pass	
Mercury	S21-No41038	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S21-No41038	NCP	mg/kg	6.6	5.5	18	30%	Pass	
Zinc	S21-No41038	NCP	mg/kg	31	27	13	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Iron	M21-No51974	NCP	mg/kg	**	< 20	3.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S21-No55847	CP	%	7.1	6.0	16	30%	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)	N21-No50806	NCP	uS/cm	50	48	4.3	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Organic Carbon	S21-No55849	CP	%	0.5	0.6	11	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Charl Du Preez	Senior Analyst-Inorganic (NSW)
Emily Rosenberg	Senior Analyst-Metal (VIC)
John Nguyen	Senior Analyst-Metal (NSW)
Jonathon Angell	Senior Analyst-Inorganic (QLD)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)
Scott Beddoes	Senior Analyst-Inorganic (VIC)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Thesan Naidoo**

Report **843595-W**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Nov 18, 2021

Client Sample ID			**RINSATE1**
Sample Matrix			**Water**
Eurofins Sample No.			**S21-No55850**
Date Sampled			**Nov 17, 2021**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1
Naphthalene[N02]	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	99
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001

Client Sample ID			RINSATE1
Sample Matrix			Water
Eurofins Sample No.			S21-No55850
Date Sampled			Nov 17, 2021
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	78
p-Terphenyl-d14 (surr.)	1	%	INT
Organochlorine Pesticides			
Chlordanes - Total	0.002	mg/L	< 0.002
4.4'-DDD	0.0002	mg/L	< 0.0002
4.4'-DDE	0.0002	mg/L	< 0.0002
4.4'-DDT	0.0002	mg/L	< 0.0002
a-HCH	0.0002	mg/L	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002
b-HCH	0.0002	mg/L	< 0.0002
d-HCH	0.0002	mg/L	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002
Endrin	0.0002	mg/L	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002
Endrin ketone	0.0002	mg/L	< 0.0002
g-HCH (Lindane)	0.0002	mg/L	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002
Toxaphene	0.005	mg/L	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002
Dibutylchlorendate (surr.)	1	%	INT
Tetrachloro-m-xylene (surr.)	1	%	INT
Organophosphorus Pesticides			
Azinphos-methyl	0.002	mg/L	< 0.002
Bolstar	0.002	mg/L	< 0.002
Chlorfenvinphos	0.02	mg/L	< 0.02
Chlorpyrifos	0.002	mg/L	< 0.002
Chlorpyrifos-methyl	0.002	mg/L	< 0.002
Coumaphos	0.02	mg/L	< 0.02
Demeton-S	0.002	mg/L	< 0.002
Demeton-O	0.002	mg/L	< 0.002
Diazinon	0.002	mg/L	< 0.002
Dichlorvos	0.002	mg/L	< 0.002
Dimethoate	0.002	mg/L	< 0.002
Disulfoton	0.002	mg/L	< 0.002
EPN	0.002	mg/L	< 0.002
Ethion	0.002	mg/L	< 0.002

Client Sample ID			RINSATE1
Sample Matrix			Water
Eurofins Sample No.			S21-No55850
Date Sampled			Nov 17, 2021
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Ethoprop	0.002	mg/L	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002
Fenitrothion	0.002	mg/L	< 0.002
Fensulfothion	0.002	mg/L	< 0.002
Fenthion	0.002	mg/L	< 0.002
Malathion	0.002	mg/L	< 0.002
Merphos	0.002	mg/L	< 0.002
Methyl parathion	0.002	mg/L	< 0.002
Mevinphos	0.002	mg/L	< 0.002
Monocrotophos	0.002	mg/L	< 0.002
Naled	0.002	mg/L	< 0.002
Omethoate	0.02	mg/L	< 0.02
Phorate	0.002	mg/L	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02
Pyrazophos	0.002	mg/L	< 0.002
Ronnel	0.002	mg/L	< 0.002
Terbufos	0.002	mg/L	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002
Tokuthion	0.002	mg/L	< 0.002
Trichloronate	0.002	mg/L	< 0.002
Triphenylphosphate (surr.)	1	%	INT
Polychlorinated Biphenyls			
Aroclor-1016	0.005	mg/L	< 0.005
Aroclor-1221	0.005	mg/L	< 0.005
Aroclor-1232	0.005	mg/L	< 0.005
Aroclor-1242	0.005	mg/L	< 0.005
Aroclor-1248	0.005	mg/L	< 0.005
Aroclor-1254	0.005	mg/L	< 0.005
Aroclor-1260	0.005	mg/L	< 0.005
Total PCB*	0.005	mg/L	< 0.005
Dibutylchlorendate (surr.)	1	%	INT
Tetrachloro-m-xylene (surr.)	1	%	INT
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	< 0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 24, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Nov 24, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Nov 24, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Nov 26, 2021	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			

eurofins | Environment Testing

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Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 843595
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Nov 18, 2021 3:10 PM
Due: Nov 25, 2021
Priority: 5 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Eurofins Suite B15	Moisture Set	NEPM Screen for Soil Classification	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254								X	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								X	
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SR1	Nov 17, 2021		Soil	S21-No55845	X	X		X
2	SR2	Nov 17, 2021		Soil	S21-No55846	X	X		X
3	BH05_0.5	Nov 17, 2021		Soil	S21-No55847		X	X	
4	BH05_1.0	Nov 17, 2021		Soil	S21-No55848		X	X	
5	BH06_1.8	Nov 17, 2021		Soil	S21-No55849		X	X	
6	RINSATE1	Nov 17, 2021		Water	S21-No55850	X			X
Test Counts						3	5	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.002			0.002	Pass	
4.4'-DDD	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDE	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDT	mg/L	< 0.0002			0.0002	Pass	
a-HCH	mg/L	< 0.0002			0.0002	Pass	
Aldrin	mg/L	< 0.0002			0.0002	Pass	
b-HCH	mg/L	< 0.0002			0.0002	Pass	
d-HCH	mg/L	< 0.0002			0.0002	Pass	
Dieldrin	mg/L	< 0.0002			0.0002	Pass	
Endosulfan I	mg/L	< 0.0002			0.0002	Pass	
Endosulfan II	mg/L	< 0.0002			0.0002	Pass	
Endosulfan sulphate	mg/L	< 0.0002			0.0002	Pass	
Endrin	mg/L	< 0.0002			0.0002	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/L	< 0.0002			0.0002	Pass	
Endrin ketone	mg/L	< 0.0002			0.0002	Pass	
g-HCH (Lindane)	mg/L	< 0.0002			0.0002	Pass	
Heptachlor	mg/L	< 0.0002			0.0002	Pass	
Heptachlor epoxide	mg/L	< 0.0002			0.0002	Pass	
Hexachlorobenzene	mg/L	< 0.0002			0.0002	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.005			0.005	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/L	< 0.002			0.002	Pass	
Bolstar	mg/L	< 0.002			0.002	Pass	
Chlorfenvinphos	mg/L	< 0.02			0.02	Pass	
Chlorpyrifos	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos-methyl	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.02			0.02	Pass	
Demeton-S	mg/L	< 0.002			0.002	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
EPN	mg/L	< 0.002			0.002	Pass	
Ethion	mg/L	< 0.002			0.002	Pass	
Ethoprop	mg/L	< 0.002			0.002	Pass	
Ethyl parathion	mg/L	< 0.002			0.002	Pass	
Fenitrothion	mg/L	< 0.002			0.002	Pass	
Fensulfothion	mg/L	< 0.002			0.002	Pass	
Fenthion	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Merphos	mg/L	< 0.002			0.002	Pass	
Methyl parathion	mg/L	< 0.002			0.002	Pass	
Mevinphos	mg/L	< 0.002			0.002	Pass	
Monocrotophos	mg/L	< 0.002			0.002	Pass	
Naled	mg/L	< 0.002			0.002	Pass	
Omethoate	mg/L	< 0.02			0.02	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Pirimiphos-methyl	mg/L	< 0.02			0.02	Pass	
Pyrazophos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Terbufos	mg/L	< 0.002			0.002	Pass	
Tetrachlorvinphos	mg/L	< 0.002			0.002	Pass	
Tokuthion	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.005			0.005	Pass	
Aroclor-1221	mg/L	< 0.005			0.005	Pass	
Aroclor-1232	mg/L	< 0.005			0.005	Pass	
Aroclor-1242	mg/L	< 0.005			0.005	Pass	
Aroclor-1248	mg/L	< 0.005			0.005	Pass	
Aroclor-1254	mg/L	< 0.005			0.005	Pass	
Aroclor-1260	mg/L	< 0.005			0.005	Pass	
Total PCB*	mg/L	< 0.005			0.005	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	120			70-130	Pass	
TRH C10-C14	%	91			70-130	Pass	
Naphthalene	%	90			70-130	Pass	
TRH C6-C10	%	97			70-130	Pass	
TRH >C10-C16	%	89			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	97			70-130	Pass	
Toluene	%	96			70-130	Pass	
Ethylbenzene	%	93			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	95			70-130	Pass	
Xylenes - Total*	%	98			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	88			70-130	Pass	
Acenaphthylene	%	90			70-130	Pass	
Anthracene	%	100			70-130	Pass	
Benz(a)anthracene	%	101			70-130	Pass	
Benzo(a)pyrene	%	101			70-130	Pass	
Benzo(b&j)fluoranthene	%	116			70-130	Pass	
Benzo(g.h.i)perylene	%	107			70-130	Pass	
Benzo(k)fluoranthene	%	98			70-130	Pass	
Chrysene	%	98			70-130	Pass	
Dibenz(a.h)anthracene	%	108			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	104			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	109			70-130	Pass	
Naphthalene	%	79			70-130	Pass	
Phenanthrene	%	102			70-130	Pass	
Pyrene	%	104			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	114			70-130	Pass	
4.4'-DDD	%	112			70-130	Pass	
4.4'-DDE	%	116			70-130	Pass	
4.4'-DDT	%	110			70-130	Pass	
a-HCH	%	107			70-130	Pass	
Aldrin	%	114			70-130	Pass	
b-HCH	%	111			70-130	Pass	
d-HCH	%	114			70-130	Pass	
Dieldrin	%	111			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	%	114			70-130	Pass	
Endosulfan II	%	107			70-130	Pass	
Endosulfan sulphate	%	109			70-130	Pass	
Endrin	%	120			70-130	Pass	
Endrin aldehyde	%	117			70-130	Pass	
Endrin ketone	%	106			70-130	Pass	
g-HCH (Lindane)	%	118			70-130	Pass	
Heptachlor	%	114			70-130	Pass	
Heptachlor epoxide	%	114			70-130	Pass	
Hexachlorobenzene	%	108			70-130	Pass	
Methoxychlor	%	107			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	118			70-130	Pass	
Dimethoate	%	96			70-130	Pass	
Ethion	%	107			70-130	Pass	
Fenitrothion	%	120			70-130	Pass	
Methyl parathion	%	122			70-130	Pass	
Mevinphos	%	111			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	102			70-130	Pass	
Aroclor-1260	%	110			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	94			80-120	Pass	
Cadmium	%	98			80-120	Pass	
Chromium	%	94			80-120	Pass	
Copper	%	92			80-120	Pass	
Lead	%	89			80-120	Pass	
Mercury	%	86			80-120	Pass	
Nickel	%	93			80-120	Pass	
Zinc	%	97			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S21-No54269	NCP	%	82			70-130	Pass	
TRH C10-C14	S21-No63989	NCP	%	100			70-130	Pass	
Naphthalene	S21-No54269	NCP	%	75			70-130	Pass	
TRH C6-C10	S21-No54269	NCP	%	85			70-130	Pass	
TRH >C10-C16	S21-No63989	NCP	%	112			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S21-No54269	NCP	%	81			70-130	Pass	
Toluene	S21-No54269	NCP	%	83			70-130	Pass	
Ethylbenzene	S21-No54269	NCP	%	81			70-130	Pass	
m&p-Xylenes	S21-No54269	NCP	%	85			70-130	Pass	
o-Xylene	S21-No54269	NCP	%	84			70-130	Pass	
Xylenes - Total*	S21-No54269	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S21-No39246	NCP	%	124			70-130	Pass	
Acenaphthylene	S21-No39246	NCP	%	125			70-130	Pass	
Anthracene	S21-No39246	NCP	%	125			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S21-No39246	NCP	%	119			70-130	Pass	
Benzo(a)pyrene	S21-No39246	NCP	%	126			70-130	Pass	
Benzo(g.h.i)perylene	S21-No39246	NCP	%	128			70-130	Pass	
Chrysene	S21-No39246	NCP	%	121			70-130	Pass	
Dibenz(a.h)anthracene	S21-No39246	NCP	%	127			70-130	Pass	
Fluoranthene	S21-No39246	NCP	%	123			70-130	Pass	
Naphthalene	S21-No39246	NCP	%	129			70-130	Pass	
Phenanthrene	S21-No39246	NCP	%	125			70-130	Pass	
Pyrene	S21-No39246	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S21-No54324	NCP	%	92			75-125	Pass	
Cadmium	S21-No54324	NCP	%	96			75-125	Pass	
Chromium	S21-No54324	NCP	%	87			75-125	Pass	
Copper	S21-No54324	NCP	%	85			75-125	Pass	
Lead	S21-No54324	NCP	%	83			75-125	Pass	
Mercury	S21-No54324	NCP	%	80			75-125	Pass	
Nickel	S21-No54324	NCP	%	86			75-125	Pass	
Zinc	S21-No54324	NCP	%	89			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S21-No54268	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	S21-No63985	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	S21-No63985	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	S21-No63985	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Naphthalene	S21-No54268	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S21-No54268	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	S21-No63985	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	S21-No63985	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S21-No63985	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S21-No54268	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S21-No54268	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S21-No54268	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S21-No54268	NCP	mg/L	0.003	0.003	2.0	30%	Pass	
o-Xylene	S21-No54268	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	S21-No54268	NCP	mg/L	0.003	0.003	2.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S21-No50295	NCP	mg/L	0.004	0.005	37	30%	Fail	Q15
Cadmium	S21-No50295	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	S21-No50295	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper	S21-No50295	NCP	mg/L	0.002	0.003	29	30%	Pass	
Lead	S21-No50295	NCP	mg/L	0.002	0.002	12	30%	Pass	
Mercury	S21-No50295	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	S21-No50295	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Zinc	S21-No50295	NCP	mg/L	0.056	0.061	8.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (ENVIROLAB)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY:	SIGNATURE:
SAMPLERS:	elisha cassidy	SAMPLES: CHILLED: ☐	PRESERVED: ☐ PRESERVATION METHOD: CUSTODY SEAL INTACT: ☐
TURNAROUND:	24h: ☐ 48h: 72h: XXX 5 WORKING DAYS:	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	17.11.21	DATE: TIME:	TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER:☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X	ANALYSES REQUIRED	NOTES
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		Chem Lab									Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Chromium Reducible Sulfur									Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
1	BH04_2.0	S	17.11.21	G	1	X																LAB PLEASE *EMAIL COC RECEIPT: ☐
2	BH06_0.5	S	17.11.21	G	2	X																Sample Comments
3	BH06_1.8	S	17.11.21	G	3	X																

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 283642
Date Received: 23.11.2021
Time Received: 1545
Received By: TIFAN
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

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Envirolab Services Pty Ltd
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ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 283642

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Elisha Cassidy
Address	Unit 6, 7 Millenium Court, Silverwater, NSW, 2128

Sample Details

Your Reference	**21.1587, DSI Parramatta**
Number of Samples	3 Soil
Date samples received	23/11/2021
Date completed instructions received	23/11/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	26/11/2021
Date of Issue	26/11/2021

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Jenny He, Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Chromium Suite				
Our Reference	UNITS	283642-1	283642-2	283642-3
Your Reference		BH04_2.0	BH06_0.5	BH06_1.8
Date Sampled		17/11/2021	17/11/2021	17/11/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	24/11/2021	24/11/2021	24/11/2021
Date analysed	-	24/11/2021	24/11/2021	24/11/2021
pH $_{kcl}$	pH units	4.9	5.0	4.2
s-TAA pH 6.5	%w/w S	0.02	<0.01	0.06
TAA pH 6.5	moles H^+ /t	10	<5	38
Chromium Reducible Sulfur	%w/w	<0.005	<0.005	<0.005
a-Chromium Reducible Sulfur	moles H^+ /t	<3	<3	<3
S_{HCl}	%w/w S	[NT]	[NT]	0.023
S_{KCl}	%w/w S	[NT]	[NT]	0.025
S_{NAS}	%w/w S	[NT]	[NT]	<0.005
ANC_{BT}	% $CaCO_3$	[NT]	[NT]	[NT]
s-ANC_{BT}	%w/w S	[NT]	[NT]	[NT]
s-Net Acidity	%w/w S	0.016	0.0070	0.062
a-Net Acidity	moles H^+ /t	9.8	<5	38
Liming rate	kg $CaCO_3$ /t	<0.75	<0.75	3
a-Net Acidity without ANCE	moles H^+ /t	9.8	<5	38
Liming rate without ANCE	kg $CaCO_3$ /t	<0.75	<0.75	2.9
s-Net Acidity without ANCE	%w/w S	0.016	0.0070	0.062

Method ID	Methodology Summary
Inorg-068	Chromium Reducible Sulfur - Hydrogen Sulfide is quantified by iodometric titration after distillation to determine potential acidity. Net acidity including ANC has a safety factor of 1.5 applied. Neutralising value (NV) of 100% is assumed for liming rate. Based National acid sulfate soils identification and laboratory methods manual June 2018

QUALITY CONTROL: Chromium Suite						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			24/11/2021	[NT]	[NT]	[NT]	[NT]	24/11/2021	[NT]
Date analysed	-			24/11/2021	[NT]	[NT]	[NT]	[NT]	24/11/2021	[NT]
pH $_{kcl}$	pH units		Inorg-068	[NT]	[NT]	[NT]	[NT]	[NT]	95	[NT]
s-TAA pH 6.5	%w/w S	0.01	Inorg-068	<0.01	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
TAA pH 6.5	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	93	[NT]
Chromium Reducible Sulfur	%w/w	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Chromium Reducible Sulfur	moles H^+ /t	3	Inorg-068	<3	[NT]	[NT]	[NT]	[NT]	124	[NT]
S_{HCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{KCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{NAS}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
ANC_{BT}	% $CaCO_3$	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-ANC_{BT}	%w/w S	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity without ANCE	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate without ANCE	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity without ANCE	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

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Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (ENVIROLAB)

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY:	SIGNATURE:
SAMPLERS:	elisha cassidy	SAMPLES: CHILLED: ☐	PRESERVED: ☐ PRESERVATION METHOD: CUSTODY SEAL INTACT: ☐
TURNAROUND:	24h: ☐ 48h: 72h: XXX 5 WORKING DAYS:	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	18-19.11.21	DATE:	TIME: TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: FREEZER:X >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X	ANALYSES REQUIRED	NOTES
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		Chem Lab										Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Chromium Reducible Sulfur										Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☐ Sample Comments
1	BH01_1.0	S	18.11.21	B	1	X																	
2	BH03_0.5	S	18.11.21	B	2	X																	
3	BH05_0.2	S	18.11.21	B	3	X																	
4	BH07_1.0	S	18.11.21	B	4	X																	
5	BH08_1.8	S	19.11.21	B	5	X																	
6	BH09_3.0	S	19.11.21	B	6	X																	
7	BH13_1.8	S	19.11.21	B	7	X																	
8	BH16_1.8	S	19.11.21	B	8	X																	

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Page 1 of 1

Lab Services
Chatswood
Ph: (02) 9910

Job No: 284476
Date Received: 3/12/21
Time Received: 1140
Received By: TJ HAW
Temp: Cool/Ambient
Cooling: Ice/Pack

©Copyright ADE Consulting Group Pty Ltd

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 284476

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Thesan Naidoo
Address	Unit 6, 7 Millenium Court, Silverwater, NSW, 2128

Sample Details

Your Reference	**21.1587, DSI Parramatta**
Number of Samples	8 Soil
Date samples received	03/12/2021
Date completed instructions received	03/12/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

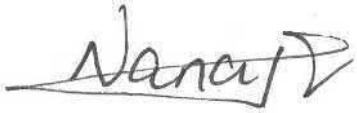
Date results requested by	08/12/2021
Date of Issue	08/12/2021

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Nick Sarlamis, Assistant Operation Manager

Authorised By



Nancy Zhang, Laboratory Manager

Chromium Suite						
Our Reference		284476-1	284476-2	284476-3	284476-4	284476-5
Your Reference	UNITS	BH01_1.0	BH03_0.5	BH05_0.2	BH07_1.0	BH08_1.8
Date Sampled		18/11/2021	18/11/2021	18/11/2021	18/11/2021	19/11/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	07/12/2021	07/12/2021	07/12/2021	07/12/2021	07/12/2021
Date analysed	-	07/12/2021	07/12/2021	07/12/2021	07/12/2021	07/12/2021
pH $_{kcl}$	pH units	5.3	6.9	8.7	7.9	7.0
s-TAA pH 6.5	%w/w S	0.01	<0.01	<0.01	<0.01	<0.01
TAA pH 6.5	moles H^+ /t	7	<5	<5	<5	<5
Chromium Reducible Sulfur	%w/w	<0.005	<0.005	0.007	0.008	<0.005
a-Chromium Reducible Sulfur	moles H^+ /t	<3	<3	4	5	<3
S_{HCl}	%w/w S	[NT]	[NT]	[NT]	[NT]	[NT]
S_{KCl}	%w/w S	[NT]	[NT]	[NT]	[NT]	[NT]
S_{NAS}	%w/w S	[NT]	[NT]	[NT]	[NT]	[NT]
ANC_{BT}	% $CaCO_3$	[NT]	0.45	1.2	0.45	0.15
s-ANC_{BT}	%w/w S	[NT]	0.14	0.38	0.14	<0.05
s-Net Acidity	%w/w S	0.011	<0.005	<0.005	<0.005	<0.005
a-Net Acidity	moles H^+ /t	7.0	<5	<5	<5	<5
Liming rate	kg $CaCO_3$ /t	<0.75	<0.75	<0.75	<0.75	<0.75
a-Net Acidity without ANCE	moles H^+ /t	7.0	<5	<5	5.3	<5
Liming rate without ANCE	kg $CaCO_3$ /t	<0.75	<0.75	<0.75	<0.75	<0.75
s-Net Acidity without ANCE	%w/w S	0.011	<0.005	0.0070	0.0080	<0.005

Chromium Suite				
Our Reference	UNITS	284476-6	284476-7	284476-8
Your Reference		BH09_3.0	BH13_1.8	BH16_1.8
Date Sampled		19/11/2021	19/11/2021	19/11/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	07/12/2021	07/12/2021	07/12/2021
Date analysed	-	07/12/2021	07/12/2021	07/12/2021
pH $_{kcl}$	pH units	6.3	6.1	5.3
s-TAA pH 6.5	%w/w S	<0.01	<0.01	0.01
TAA pH 6.5	moles H^+ /t	<5	<5	6
Chromium Reducible Sulfur	%w/w	<0.005	<0.005	<0.005
a-Chromium Reducible Sulfur	moles H^+ /t	<3	<3	<3
S_{HCl}	%w/w S	[NT]	[NT]	[NT]
S_{KCl}	%w/w S	[NT]	[NT]	[NT]
S_{NAS}	%w/w S	[NT]	[NT]	[NT]
ANC_{BT}	% $CaCO_3$	[NT]	[NT]	[NT]
s-ANC_{BT}	%w/w S	[NT]	[NT]	[NT]
s-Net Acidity	%w/w S	0.0050	<0.005	0.010
a-Net Acidity	moles H^+ /t	<5	<5	6.0
Liming rate	kg $CaCO_3$ /t	<0.75	<0.75	<0.75
a-Net Acidity without ANCE	moles H^+ /t	<5	<5	6.0
Liming rate without ANCE	kg $CaCO_3$ /t	<0.75	<0.75	<0.75
s-Net Acidity without ANCE	%w/w S	0.0050	<0.005	0.010

Method ID	Methodology Summary
Inorg-068	Chromium Reducible Sulfur - Hydrogen Sulfide is quantified by iodometric titration after distillation to determine potential acidity. Net acidity including ANC has a safety factor of 1.5 applied. Neutralising value (NV) of 100% is assumed for liming rate. Based on National acid sulfate soils identification and laboratory methods manual June 2018. The recommendation that the SHCL concentration be multiplied by a factor of 2 to ensure retained acidity is not underestimated, has not been applied in the SHCL results reported.

QUALITY CONTROL: Chromium Suite						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			07/12/2021	1	07/12/2021	07/12/2021		07/12/2021	[NT]
Date analysed	-			07/12/2021	1	07/12/2021	07/12/2021		07/12/2021	[NT]
pH $_{kcl}$	pH units		Inorg-068	[NT]	1	5.3	5.4	2	97	[NT]
s-TAA pH 6.5	%w/w S	0.01	Inorg-068	<0.01	1	0.01	0.01	0	[NT]	[NT]
TAA pH 6.5	moles H^+ /t	5	Inorg-068	<5	1	7	7	0	98	[NT]
Chromium Reducible Sulfur	%w/w	0.005	Inorg-068	<0.005	1	<0.005	<0.005	0	[NT]	[NT]
a-Chromium Reducible Sulfur	moles H^+ /t	3	Inorg-068	<3	1	<3	<3	0	120	[NT]
S_{HCl}	%w/w S	0.005	Inorg-068	<0.005	1	[NT]	[NT]		[NT]	[NT]
S_{KCl}	%w/w S	0.005	Inorg-068	<0.005	1	[NT]	[NT]		[NT]	[NT]
S_{NAS}	%w/w S	0.005	Inorg-068	<0.005	1	[NT]	[NT]		[NT]	[NT]
ANC_{BT}	% $CaCO_3$	0.05	Inorg-068	<0.05	1	[NT]	[NT]		[NT]	[NT]
s-ANC_{BT}	%w/w S	0.05	Inorg-068	<0.05	1	[NT]	[NT]		[NT]	[NT]
s-Net Acidity	%w/w S	0.005	Inorg-068	<0.005	1	0.011	0.011	0	[NT]	[NT]
a-Net Acidity	moles H^+ /t	5	Inorg-068	<5	1	7.0	7.0	0	[NT]	[NT]
Liming rate	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	1	<0.75	<0.75	0	[NT]	[NT]
a-Net Acidity without ANCE	moles H^+ /t	5	Inorg-068	<5	1	7.0	7.0	0	[NT]	[NT]
Liming rate without ANCE	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	1	<0.75	<0.75	0	[NT]	[NT]
s-Net Acidity without ANCE	%w/w S	0.005	Inorg-068	<0.005	1	0.011	0.011	0	[NT]	[NT]

Result Definitions

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PQL	Practical Quantitation Limit
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Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

$100

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	elisha cassidy
TURNAROUND:	24h: ☐ 48h: ☐ 72h: ☐ 5 WORKING DAYS:
SAMPLING DATE:	18.11.21 ; 19.11.21 ?
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ > >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587		
RECEIVED BY: VS	SIGNATURE:		
SAMPLES: 4 CHILLED: ☐	PRESERVED: X	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: X
MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐		
DATE: 19.11.21	TIME: 12:30	TEMPERATURE UPON RECEIPT: °C	
LIMS LOT NO. 2105669	LIMS/EXCEL SIGNATURE:	COMMENTS:	

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab																Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	Standard suite	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
2105669-23	TB2	W	18.11.21	WATER	1			X																☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:
24	TS2	W	18.11.21 (UPDATE!)	WATER	2			X																LAB PLEASE *EMAIL COC RECEIPT: ☐
25	TB3	W	19.11.21	WATER	3			X																Sample Comments
26	TS3	W	19.11.21	WATER	4			X																

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo
Project name: 21.1587
Number of samples: 4
COC number: 21.1587
Turn around time: STD
Date: 19.11.2021
Time received: 2:00 PM
SLS Reference: 2105669
Estimated Report Delivery Date: 26.11.2021

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly...).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	VOC	pH/pH fox	Phenols	Bulk	Dust	Dust Swab	Soil 6S grams	SOIL 500 g NEPM	AAM
2021037923	TB2			X														
2021037924	TS2			X														
2021037925	TB3			X														
2021037926	TS3			X														

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

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All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	4
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2021037923	2021037924	2021037925	2021037926
	Sample Name	TB2	TS2	TB3	TS3
Parameter	Units	PQL				
ESA-P-ORG08 & ORG10						
Benzene		1	<1 ug/L	78%	<1 ug/L	93%
Toluene		1	<1 ug/L	84%	<1 ug/L	98%
Ethylbenzene		1	<1 ug/L	85%	<1 ug/L	101%
m,p Xylene		2	<2 ug/L	75%	<2 ug/L	87%
o Xylene		1	<1 ug/L	83%	<1 ug/L	100%
Fluorobenzene (Surr.)	%		104	80	118	92

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This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

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This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

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Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	25/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

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NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

		Sample ID:	**Q2021009680**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

		Sample ID:	**S202103788301**
		Sample Name	**BH1_1.8**
Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
Benzene	%		116
Toluene	%		120
Ethylbenzene	%		120
m.p Xylene	%		98
o Xylene	%		118
Fluorobenzene (Surr.)	%		118

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	Sample ID:	D202103788501	D202103789601
	Sample Name	BH3_2.0	BH13_1.8
Parameter	Units	PQL	
ESA-P-ORG7 & ORG8			
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Fluorobenzene (Surr.)	%		113	101

	Sample ID:	Q2021009681
	Sample Name	
Parameter	Units	PQL	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		100
Toluene	%		100
Ethylbenzene	%		101
m.p Xylene	%		81
o Xylene	%		98
Fluorobenzene (Surr.)	%		100

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ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

ESA-F-02
Chain of Custody (Internal)

Date Printed: 19/11/2021

*100

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	
PROJECT NUMBER - INVOICE NUMBER	21-1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	elisha cassidy
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS: xxxxx
SAMPLING DATE:	18.11.21; 19.11.21
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ > >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; matthew.lynch@ade.group; shane.metcalfe@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21-1587		
RECEIVED BY:	VS	SIGNATURE:	
SAMPLES: 21 CHILLED: X	PRESERVED: X	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: ☐
MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐		
DATE: 19-11-21	TIME: 12:30	TEMPERATURE UPON RECEIPT:	°C
LIMS LOT NO. 2105665	LIMS/EXCEL SIGNATURE:	COMMENTS:	

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab												Asbestos						Mould
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	VOCs/SVOCs	pH/pH fox	phenols	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	
2105637																								
813	BH1_1.8	S	18.11.21	B+G	1		X	X	X	X	X		X		X					X				
814	BH2_1.8	S	18.11.21	B+G	2		X	X	X	X	X		X	X	X	X				X				
815	BH3_2.0	S	18.11.21	B+G	3		X	X	X	X	X		X		X					X				
816	BH3_3.0	S	18.11.21	B+G	4		X	X	X	X	X		X		X					X				
817	BH4_2.0	S	18.11.21	B+G	5		X	X	X	X	X		X		X					X				
818	BH4_3.0	S	18.11.21	B+G	6		X	X	X	X	X		X		X					X				
819	BH6_1.8	S	18.11.21	B+G	7		X	X	X	X	X		X	X	X	X				X				
820	BH7_1.8	S	18.11.21	B+G	8		X	X	X	X	X		X		X					X				
821	BH8_1.8	S	18.11.21	B+G	9		X	X	X	X	X		X	X	X	X				X				
822	BH9_2.0	S	18.11.21	B+G	10		X	X	X	X	X		X		X					X				
823	BH9_3.0	S	18.11.21	B+G	11		X	X	X	X	X		X		X					X				
824	BH13_0.5	S	18.11.21	B+G	12		X	X	X	X	X		X		X					X				
825	BH13_1.0	S	18.11.21	B+G	13		X	X	X	X	X		X		X					X				
826	BH13_1.8	S	18.11.21	B+G	14		X	X	X	X	X		X		X					X				
827	BH16_0.5	S	19.11.21	B+G	15		X	X	X	X	X		X	X	X	X				X				
828	BH16_1.0	S	19.11.21	B+G	16		X	X	X	X	X		X	X	X	X				X				
829	BH16_1.8	S	19.11.21	B+G	17		X	X	X	X	X		X	X	X	X				X				
901	BH8_DEL1_1.0	S	19.11.21	B	18															X				
902	BH8_DEL2_1.0	S	19.11.21	B	19															X				
903	BH8_DEL3_1.0	S	19.11.21	B	20															X				
900	BR3	s	18.11.21	B+G	21	X	X	X	X	X	X		X							X				

NOTES

POTENTIAL HAZARDOUS CONTAMINANTS:

☑ ASBESTOS ☐ HYDROCARBONS
☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION
☐ OTHER:_____

LAB PLEASE *EMAIL COC RECEIPT: ☐

Sample Comments

24HR

PLEASE DO 48HR TAT FOR PH/PHFOX ANALYSIS ON ALL SAMPLES ON THIS COC - ON COMPLETION, PLEASE STORE THESE SAMPLES IN THE FREEZER FOR POTENTIAL CRS ANALYSIS LATER!

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

phphfox - 22/11/21
rest - 25/11/21

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Sydney Laboratory Services

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A.C.N. 093 452 950
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Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact:	Thesan Naidoo
Project name:	21.1587
Number of samples:	21
COC number:	21.1587
Turn around time:	STD
Date:	19.11.2021
Time received:	12:30 PM
SLS Reference:	2105665
Estimated Report Delivery Date:	22.11.2021 - pHpH fox 26.11.2021

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly...).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	VOC	pH/pH fox	Phenols	Bulk	Dust	Dust Swab	Soil 6S grams	SOIL 500 g NEPM	AAM
2021037883	BH1_1.8		X	X	X	X	X		X		X					X		
2021037884	BH1_1.8		X	X	X	X	X		X	X	X	X				X		
2021037885	BH3_2.0		X	X	X	X	X		X		X					X		
2021037886	BH3_3.0		X	X	X	X	X		X		X					X		
2021037887	BH4_2.0		X	X	X	X	X		X		X					X		
2021037888	BH4_3.0		X	X	X	X	X		X		X					X		
2021037889	BH6_1.8		X	X	X	X	X		X	X	X	X				X		
2021037890	BH7_1.8		X	X	X	X	X		X		X					X		
2021037891	BH8_1.8		X	X	X	X	X		X	X	X	X				X		
2021037892	BH9_2.0		X	X	X	X	X		X		X					X		
2021037893	BH9_3.0		X	X	X	X	X		X		X					X		
2021037894	BH13_0.5		X	X	X	X	X		X		X					X		
2021037895	BH13_1.0		X	X	X	X	X		X		X					X		
2021037896	BH13_1.8		X	X	X	X	X		X		X					X		
2021037897	BH16_0.5		X	X	X	X	X		X	X	X	X				X		
2021037898	BH16_1.0		X	X	X	X	X		X	X	X	X				X		
2021037899	BH16_1.8		X	X	X	X	X		X	X	X	X				X		
2021037901	BH8_DEL1-1.0															X		
2021037902	BH8_DEL2-1.0															X		
2021037903	BH8_DEL3-1.0															X		
2021037900	BR3		X	X	X	X	X		X									

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Kaiyu Li

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Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	29/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	18
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

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Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	*Units*	*PQL*										
ESA-P-ORG7 & ORG8												
Benzene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	<0.50
Ethylbenzene	mg/kg	1	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	<1.0
m.p Xylene	mg/kg	2	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	-	<2.0	<2.0
o Xylene	mg/kg	1	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	<1.0
Sum of BTEX	mg/kg	2	<2.00	-	<2.00	<2.00	<2.00	<2.00	-	<2.00	-	<2.00	<2.00
Total Xylenes	mg/kg	2	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	-	<2.0	<2.0
Fluorobenzene (Surr.)	%		105	-	102	115	107	108	-	111	-	98	109
ESA-MP-01,ICP-01													
Arsenic	mg/kg	5	8.3	<5.0	6.6	7.4	13.8	<5.0	6.3	8.4	7.2	8.7	7.2
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	16.2	19.7	8.7	9.4	14.9	<5.0	12.7	9.9	13.6	15.7	11.6
Copper	mg/kg	5	<5.0	23.5	6.8	6.2	9.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Lead	mg/kg	10	12.8	189.9	<10.0	<10.0	12.5	<10.0	<10.0	<10.0	14.4	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	2.23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	<10.0	18.9	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	8.3	180.1	9.6	11.5	10.2	<5.0	5.3	5.7	5.9	6.1	22.3
ESA-P-12													
% Moisture Content	%		15.8	15.2	16.4	14.5	17.5	9.1	16.5	21.5	16.7	20.8	19.2
ESA-P-ORG(12 - 15)													
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	Units	PQL										
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		123	63	104	99	98	105	80	108	69	107	109
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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Unit 4/10-11 Millennium Court
Silverwater 2128
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Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	Units	PQL										
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		106	104	96	87	91	95	108	98	91	102	96
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Unit 4/10-11 Millennium Court
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Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	*Units*	*PQL*										
2-fluorobiphenyl (Surr.)	%		94	90	86	75	82	85	98	86	80	95	87
***ESA-P-19**													
pH	-		6.3	8.4	6.4	6.8	6.3	6.7	5.3	6.0	7.9	6.2	6.4
pHox	-		6.7	7.9	4.5	4.9	4.3	5.4	4.1	4.7	6.3	4.9	4.5
Reaction Rate	-		4	4	1	1	1	1	1	1	1	1	2

Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	*Units*	*PQL*										
ESA-P-ORG17												
Phenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
2-Chlorophenol	mg/kg	0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	-
2-Methylphenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
3/4-Methylephenol	mg/kg	0.4	-	<0.40	-	-	-	-	<0.40	-	<0.40	-	-
2-Nitrophenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
2,4-Dimethylphenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
2,4-Dichlorophenol	mg/kg	0.05	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-
2,6-Dichlorophenol	mg/kg	0.05	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
2,4,6-Trichlorophenol	mg/kg	0.05	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-
2,4-Dinitrophenol	mg/kg	4	-	<4.0	-	-	-	-	<4.0	-	<4.0	-	-
4-Nitrophenol	mg/kg	4	-	<4.0	-	-	-	-	<4.0	-	<4.0	-	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	-	<2.0	-	-	-	-	<2.0	-	<2.0	-	-
Pentachlorophenol	mg/kg	0.2	-	<0.20	-	-	-	-	<0.20	-	<0.20	-	-
Dinoseb	mg/kg	5	-	<5.0	-	-	-	-	<5.0	-	<5.0	-	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	-	<5.0	-	-	-	-	<5.0	-	<5.0	-	-
Sum of Positive Phenols	mg/kg	0.05	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-
Phenol-d6 (Surr.)	%		-	70	-	-	-	-	85	-	81	-	-
2-Chlorophenol-d4 (Surr.)	%		-	81	-	-	-	-	100	-	97	-	-

Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	*Units*	*PQL*										
ESA-P-ORG(3,5,6,8)												
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08												
Benzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Toluene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Ethylbenzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
m.p Xylene	mg/kg	1	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-
o Xylene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Sum of BTEX	mg/kg	1	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-
Total Xylenes	mg/kg	1	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-
Styrene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Sum of MAHs	mg/kg	1	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-
vNaphthalene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Vinyl Chloride	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Methylene chloride	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Bromochloromethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Chloroform	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-

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Certificate of Analysis

	Sample ID:	2021037883	2021037884	2021037885	2021037886	2021037887	2021037888	2021037889	2021037890	2021037891	2021037892	2021037893
	Sample Name	BH1_1.8	BH2_1.8	BH3_2.0	BH3_3.0	BH4_2.0	BH4_3.0	BH6_1.8	BH7_1.8	BH8_1.8	BH9_2.0	BH9_3.0
Parameter	*Units*	*PQL*										
1,1,1-Trichloroethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,2-Dichloroethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Carbon tetrachloride	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,1,2-Trichloroethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Tetrachloroethene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,2-Dichlorobenzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,4-Dichlorobenzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Hexachlorobutadiene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
1,1-Dichloroethene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Trichloroethene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Chlorobenzene	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-
Toluene-d8 (Surr.)	%		-	129	-	-	-	-	120	-	114	-	-
1,2-Dichloroethane-d4 (Surr.)	%		-	126	-	-	-	-	119	-	110	-	-
4-Bromofluorobenzene (BFB) (Surr.)	%		-	110	-	-	-	-	105	-	98	-	-
Trifluorotoluene (Surr.)	%		-	133	-	-	-	-	119	-	109	-	-

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	*Units*	*PQL*						
ESA-P-ORG7 & ORG8								
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	-	-	-	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	-	-	-	<0.50
Ethylbenzene	mg/kg	1	<1.0	<1.0	<1.0	-	-	-	<1.0
m.p Xylene	mg/kg	2	<2.0	<2.0	<2.0	-	-	-	<2.0
o Xylene	mg/kg	1	<1.0	<1.0	<1.0	-	-	-	<1.0
Sum of BTEX	mg/kg	2	<2.00	<2.00	<2.00	-	-	-	<2.00
Total Xylenes	mg/kg	2	<2.0	<2.0	<2.0	-	-	-	<2.0
Fluorobenzene (Surr.)	%		116	115	107	-	-	-	99
ESA-MP-01,ICP-01								
Arsenic	mg/kg	5	<5.0	<5.0	9.3	<5.0	<5.0	10.5	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	5.1	7.9	20.2	22.2	9.3	8.8	6.7
Copper	mg/kg	5	19.5	6.5	<5.0	80.9	<5.0	5.0	10.2
Lead	mg/kg	10	88.4	19.1	13.0	924.5	<10.0	<10.0	63.6
Mercury	mg/kg	0.2	0.22	<0.20	<0.20	1.00	<0.20	<0.20	0.22
Nickel	mg/kg	10	<10.0	<10.0	<10.0	21.8	<10.0	<10.0	<10.0
Zinc	mg/kg	5	49.6	5.3	<5.0	1114.4	<5.0	5.4	6.5
ESA-P-12								
% Moisture Content	%		13.7	17.4	24.7	24.8	16.1	20.2	17.4
ESA-P-ORG(12 - 15)								
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	0.33	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	Units	PQL						
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	0.72	<0.30	<0.30	0.55	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	0.41	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	0.80	<0.30	<0.30	0.62	<0.30	<0.30	<0.30
Sum of Positive PAHs	mg/kg	0.3	2.26	<0.30	<0.30	1.17	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.38	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		127	109	109	78	70	82	118
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

Sydney Laboratory Services
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Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	Units	PQL						
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		127	97	101	103	109	133	131
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Unit 4/10-11 Millennium Court
Silverwater 2128
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Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	*Units*	*PQL*						
2-fluorobiphenyl (Surr.)	%		117	87	88	94	105	121	118
***ESA-P-19**									
pH	-		8.9	8.1	7.3	7.4	7.4	7.0	-
pHox	-		8.2	7.9	5.6	5.6	5.7	5.2	-
Reaction Rate	-		3	4	1	4	1	1	-

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	Units	PQL						
ESA-P-ORG17								
Phenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
2-Chlorophenol	mg/kg	0.1	-	-	-	<0.10	<0.10	<0.10	-
2-Methylphenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
3/4-Methylephenol	mg/kg	0.4	-	-	-	<0.40	<0.40	<0.40	-
2-Nitrophenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
2,4-Dimethylphenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
2,4-Dichlorophenol	mg/kg	0.05	-	-	-	<0.050	<0.050	<0.050	-
2,6-Dichlorophenol	mg/kg	0.05	-	-	-	<0.050	<0.050	<0.050	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
2,4,6-Trichlorophenol	mg/kg	0.05	-	-	-	<0.050	<0.050	<0.050	-
2,4,5-Trichlorophenol	mg/kg	0.05	-	-	-	<0.050	<0.050	<0.050	-
2,4-Dinitrophenol	mg/kg	4	-	-	-	<4.0	<4.0	<4.0	-
4-Nitrophenol	mg/kg	4	-	-	-	<4.0	<4.0	<4.0	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	-	-	-	<0.10	<0.10	<0.10	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	-	-	-	<0.10	<0.10	<0.10	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	-	-	-	<0.10	<0.10	<0.10	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	-	-	-	<2.0	<2.0	<2.0	-
Pentachlorophenol	mg/kg	0.2	-	-	-	<0.20	<0.20	<0.20	-
Dinoseb	mg/kg	5	-	-	-	<5.0	<5.0	<5.0	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	-	-	-	<5.0	<5.0	<5.0	-
Sum of Positive Phenols	mg/kg	0.05	-	-	-	<0.050	<0.050	<0.050	-
Phenol-d6 (Surr.)	%		-	-	-	72	70	83	-
2-Chlorophenol-d4 (Surr.)	%		-	-	-	84	79	96	-

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	*Units*	*PQL*						
ESA-P-ORG(3,5,6,8)								
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08								
Benzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Toluene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Ethylbenzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
m.p Xylene	mg/kg	1	-	-	-	<1.0	<1.0	<1.0	-
o Xylene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Sum of BTEX	mg/kg	1	-	-	-	<1.0	<1.0	<1.0	-
Total Xylenes	mg/kg	1	-	-	-	<1.0	<1.0	<1.0	-
Styrene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Sum of MAHs	mg/kg	1	-	-	-	<1.0	<1.0	<1.0	-
vNaphthalene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Vinyl Chloride	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
trans-1,2-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Methylene chloride	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
cis-1,2-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Bromochloromethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Chloroform	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-

Certificate of Analysis

	Sample ID:	2021037894	2021037895	2021037896	2021037897	2021037898	2021037899	2021037900
	Sample Name	BH13_0.5	BH13_1.0	BH13_1.8	BH16_0.5	BH16_1.0	BH16_1.8	BR3
Parameter	Units	PQL						
1,1,1-Trichloroethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,2-Dichloroethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Carbon tetrachloride	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,1,2-Trichloroethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Tetrachloroethene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,2-Dichlorobenzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,4-Dichlorobenzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,2,4-Trichlorobenzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
1,1-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Trichloroethene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Chlorobenzene	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	-	-	-	<0.50	<0.50	<0.50	-
Toluene-d8 (Surr.)	%		-	-	-	121	111	112	-
1,2-Dichloroethane-d4 (Surr.)	%		-	-	-	117	109	108	-
4-Bromofluorobenzene (BFB) (Surr.)	%		-	-	-	103	95	94	-
Trifluorotoluene (Surr.)	%		-	-	-	116	106	106	-

Sydney Laboratory Services

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
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Unit 4/10-11 Millennium Court
Silverwater 2128
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Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	29/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	40
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	19/11/2021
		Date of Analysis:	19/11/2021

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Silverwater 2128
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Quality Control Report

	Sample ID:	D202103766601	D202103789801
	Sample Name	BH02_1.0	BH16_1.0
Parameter	Units	PQL		
ESA-P-ORG7 & ORG8				
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Styrene			Pass	Pass
vNaphthalene			Pass	Pass
Vinyl Chloride			Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass
Methylene chloride			Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass
Bromochloromethane			Pass	Pass
Chloroform			Pass	Pass
1,1,1-Trichloroethane			Pass	Pass
1,2-Dichloroethane			Pass	Pass
Carbon tetrachloride			Pass	Pass
1,1,2-Trichloroethane			Pass	Pass
Tetrachloroethene			Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass
1,2-Dichlorobenzene			Pass	Pass
1,4-Dichlorobenzene			Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass
Hexachlorobutadiene			Pass	Pass
1,1-Dichloroethene			Pass	Pass
Trichloroethene			Pass	Pass
Chlorobenzene			Pass	Pass

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Toluene-d8	%		133	104
1,2-Dichloroethane-d4	%		134	103
4-Bromofluorobenzene (BFB)	%		120	88
Trifluorotoluene (Surr.)	%		133	96
		Sample ID:	**Q2021009616**	**Q2021009682**
		Sample Name		
Parameter	***Units***	***PQL***	PCB Blank - Soil	PCB Blank - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	mg/kg	0.3	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30
aldrin	mg/kg	0.1	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10

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4,4'-DDT	mg/kg	0.1	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10
chlorpyrifos	mg/kg	0.1	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50

		Sample ID:	**D202103766602**	**D202103789802**
		Sample Name	**BH02_1.0**	**BH16_1.0**
Parameter	***Units***	***PQL***		
ESA-P-ORG17				
Phenol			Pass	Pass
2-Chlorophenol			Pass	Pass
2-Methylphenol			Pass	Pass

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3/4-Methylephenol			Pass	Pass
2-Nitrophenol			Pass	Pass
2,4-Dimethylphenol			Pass	Pass
2,4-Dichlorophenol			Pass	Pass
2,6-Dichlorophenol			Pass	Pass
3-Methyl,4-Chlorophenol			Pass	Pass
2,4,6-Trichlorophenol			Pass	Pass
2,4,5-Trichlorophenol			Pass	Pass
2,4-Dinitrophenol			Pass	Pass
4-Nitrophenol			Pass	Pass
2,3,5,6-Tetrachlorophenol			Pass	Pass
2,3,4,5-Tetrachlorophenol			Pass	Pass
2,3,4,6-Tetrachlorophenol			Pass	Pass
2-Methyl-4,6-dinitrophenol			Pass	Pass
Pentachlorophenol			Pass	Pass
Dinoseb			Pass	Pass
2-Cyclohexyl-4,6-dinitrophenol			Pass	Pass
Phenol-d6	%		90	71
2-Chlorophenol-d4	%		104	80

Sample ID: **S202103788304**

Sample Name **BH1_1.8**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		75
Cadmium	%		86
Chromium	%		85
Copper	%		87
Lead	%		89
Mercury	%		99
Nickel	%		88
Zinc	%		89

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	Sample ID:	Q2021009614
	Sample Name	

Parameter	Units	PQL	Phenols Blank - Soil
ESA-P-ORG17			
Phenol	mg/kg	0.2	<0.20
2-Chlorophenol	mg/kg	0.1	<0.10
2-Methylphenol	mg/kg	0.2	<0.20
3/4-Methylephenol	mg/kg	0.4	<0.40
2-Nitrophenol	mg/kg	0.2	<0.20
2,4-Dimethylphenol	mg/kg	0.2	<0.20
2,4-Dichlorophenol	mg/kg	0.05	<0.050
2,6-Dichlorophenol	mg/kg	0.05	<0.050
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050
2,4-Dinitrophenol	mg/kg	4	<4.0
4-Nitrophenol	mg/kg	4	<4.0
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0
Pentachlorophenol	mg/kg	0.2	<0.20
Dinoseb	mg/kg	5	<5.0
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0

	Sample ID:	D202103766603	D202103788502	D202103789602	D202103789803
	Sample Name	BH02_1.0	BH3_2.0	BH13_1.8	BH16_1.0

Parameter	Units	PQL				
ESA-P-ORG(12 - 15)						
Acenaphthene			Pass	Pass	Pass	Pass
Acenaphthylene			Pass	Pass	Pass	Pass
Anthracene			Pass	Pass	Pass	Pass
Benzo[a]anthracene			Pass	Pass	Pass	Pass
Benzo[a]pyrene			Pass	Pass	Pass	Pass

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Benzo[b]fluoranthene			Pass	Pass	Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass	Pass	Pass
Benzo[k]fluoranthene			Pass	Pass	Pass	Pass
Chrysene			Pass	Pass	Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass	Pass	Pass
Fluoranthene			Pass	Pass	Pass	Pass
Fluorene			Pass	Pass	Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass	Pass	Pass
Naphthalene			Pass	Pass	Pass	Pass
Phenanthrene			Pass	Pass	Pass	Pass
Pyrene			Pass	Pass	Pass	Pass
p-Terphenyl-d14 (Surr.)	%		90	106	118	65
aldrin			Pass	Pass	Pass	Pass
a-BHC			Pass	Pass	Pass	Pass
b-BHC			Pass	Pass	Pass	Pass
d-BHC			Pass	Pass	Pass	Pass
g-BHC (lindane)			Pass	Pass	Pass	Pass
cis-chlordane			Pass	Pass	Pass	Pass
trans-chlordane			Pass	Pass	Pass	Pass
4,4'-DDD			Pass	Pass	Pass	Pass
4,4'-DDE			Pass	Pass	Pass	Pass
4,4'-DDT			Pass	Pass	Pass	Pass
dieldrin			Pass	Pass	Pass	Pass
endosulfan I			Pass	Pass	Pass	Pass
endosulfan II			Pass	Pass	Pass	Pass
endosulfan sulfate			Pass	Pass	Pass	Pass
endrin			Pass	Pass	Pass	Pass
endrin aldehyde			Pass	Pass	Pass	Pass
endrin ketone			Pass	Pass	Pass	Pass
heptachlor			Pass	Pass	Pass	Pass
heptachlor epoxide			Pass	Pass	Pass	Pass
hexachlorobenzene			Pass	Pass	Pass	Pass
methoxychlor			Pass	Pass	Pass	Pass

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TCMX (Surr.)	%		107	94	104	107
chlorpyrifos			Pass	Pass	Pass	Pass
chlorpyrifos methyl			Pass	Pass	Pass	Pass
diazinon			Pass	Pass	Pass	Pass
fenchlorphos			Pass	Pass	Pass	Pass
methyl parathion			Pass	Pass	Pass	Pass
prophos			Pass	Pass	Pass	Pass
tributylphosphorotrithioite			Pass	Pass	Pass	Pass
Aroclor 1016			Pass	Pass	Pass	Pass
Aroclor 1221			Pass	Pass	Pass	Pass
Aroclor 1232			Pass	Pass	Pass	Pass
Aroclor 1242			Pass	Pass	Pass	Pass
Aroclor 1248			Pass	Pass	Pass	Pass
Aroclor 1254			Pass	Pass	Pass	Pass
Aroclor 1260			Pass	Pass	Pass	Pass
2-fluorobiphenyl (Surr.)	%		103	85	95	96

		Sample ID:	**S202103766503**	**S202103788302**
		Sample Name	**BH02_0.5**	**BH1_1.8**
Parameter	***Units***	***PQL***		
ESA-P-ORG(12 - 15)				
Acenaphthene	%		132	132
Anthracene	%		84	126
Fluoranthene	%		72	120
Naphthalene	%		95	121
Phenanthrene	%		77	126
Pyrene	%		76	131
p-Terphenyl-d14 (Surr.)	%		68	120
aldrin	%		77	131
endrin	%		96	115
hexachlorobenzene	%		80	133
TCMX (Surr.)	%		81	108
chlorpyrifos	%		64	128

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diazinon	%		68	130
Aroclor 1016	%		70	98
2-fluorobiphenyl (Surr.)	%		75	84

		Sample ID:	**Q2021009618**	**Q2021009684**
		Sample Name		
Parameter	***Units***	***PQL***	TRH Blank-Soil	TRH Blank-Soil
ESA-P-ORG(3,5,6,8)				
>C10-C16	mg/kg	50	<50	<50
>C16-C34	mg/kg	100	<100	<100
>C34-C40	mg/kg	100	<100	<100
>C10-C14	mg/kg	50	<50	<50
>C15-C28	mg/kg	100	<100	<100
>C29-C36	mg/kg	100	<100	<100

		Sample ID:	**S202103766502**
		Sample Name	**BH02_0.5**
Parameter	***Units***	***PQL***	
ESA-P-ORG17			
2-Chlorophenol	%		101
2-Methylphenol	%		81
3/4-Methylephenol	%		103
2,6-Dichlorophenol	%		110
Dinoseb	%		108
Phenol-d6 (Surr.)	%		91
2-Chlorophenol-d4 (Surr.)	%		106

		Sample ID:	**Q2021009713**
		Sample Name	
Parameter	***Units***	***PQL***	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		84
Cadmium	%		82
Chromium	%		87
Copper	%		86

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Lead	%		93
Mercury	%		88
Nickel	%		88
Zinc	%		90

Sample ID: **Q2021009612**

Sample Name

Parameter	***Units***	***PQL***	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50
Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50

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1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

Sample ID:	**Q2021009680**
Sample Name	

Parameter	***Units***	***PQL***	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

Sample ID:	**Q2021009613**
Sample Name	

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		135
Benzene	%		111
Trichloroethene	%		93
Toluene	%		112
Chlorobenzene	%		105
Toluene-d8 (Surr.)	%		114
1,2-Dichloroethane-d4 (Surr.)	%		109
4-Bromofluorobenzene (BFB) (Surr.)	%		98
Trifluorotoluene (Surr.)	%		113

Sample ID:	**Q2021009617**	**Q2021009683**
Sample Name		

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	%		105	110
Anthracene	%		77	140
Fluoranthene	%		75	129
Naphthalene	%		107	111

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Phenanthrene	%		86	135
Pyrene	%		80	90
p-Terphenyl-d14 (Surr.)	%		84	127
aldrin	%		93	125
endrin	%		85	98
hexachlorobenzene	%		92	118
TCMX (Surr.)	%		98	115
chlorpyrifos	%		73	132
diazinon	%		75	118
2-fluorobiphenyl (Surr.)	%		101	91
Aroclor 1016	%		90	122

Sample ID: **S202103788301**

Sample Name **BH1_1.8**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
Benzene	%		116
Toluene	%		120
Ethylbenzene	%		120
m.p Xylene	%		98
o Xylene	%		118
Fluorobenzene (Surr.)	%		118

Sample ID: **S202103766501**

Sample Name **BH02_0.5**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		139
Benzene	%		111
Trichloroethene	%		93
Toluene	%		114
Chlorobenzene	%		107
Toluene-d8 (Surr.)	%		113
1,2-Dichloroethane-d4 (Surr.)	%		109

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4-Bromofluorobenzene (Surr.)	%		97	
Trifluorotoluene (Surr.)	%		114	
		Sample ID:	**D202103788401**	**D202103789301**
		Sample Name	**BH2_1.8**	**BH4_3.0**
Parameter	***Units***	***PQL***		
ESA-MP-01,ICP-01				
Arsenic			Pass	Pass
Cadmium			Pass	Pass
Chromium			Pass	Pass
Copper			Pass	Pass
Lead			Pass	Pass
Mercury			Pass	Pass
Nickel			Pass	Pass
Zinc			Pass	Pass
		Sample ID:	**S202103766504**	**S202103788303**
		Sample Name	**BH02_0.5**	**BH1_1.8**
Parameter	***Units***	***PQL***		
ESA-P-ORG(3,5,6,8)				
>C10-C16	%		129	81
>C10-C14	%		127	79
		Sample ID:	**Q2021009615**	
		Sample Name		
Parameter	***Units***	***PQL***	Phenols BlankSp-Soil	
ESA-P-ORG17				
2-Chlorophenol	%		71	
2-Methylphenol	%		72	
3/4-Methylephenol	%		67	
2,6-Dichlorophenol	%		77	
Dinoseb	%		101	
Phenol-d6 (Surr.)	%		64	
2-Chlorophenol-d4 (Surr.)	%		72	

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	Sample ID:	D202103788501	D202103789601
	Sample Name	BH3_2.0	BH13_1.8
Parameter	Units	PQL	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		113

	Sample ID:	D202103766604	D202103788503	D202103789603	D202103789804
	Sample Name	BH02_1.0	BH3_2.0	BH13_1.8	BH16_1.0
Parameter	Units	PQL			
ESA-P-ORG(3,5,6,8)					
>C10-C16			Pass	Pass	Pass
>C16-C34			Pass	Pass	Pass
>C34-C40			Pass	Pass	Pass
>C10-C14			Pass	Pass	Pass
>C15-C28			Pass	Pass	Pass
>C29-C36			Pass	Pass	Pass

	Sample ID:	Q2021009619	Q2021009685
	Sample Name		
Parameter	Units	PQL	TRH Blank Spike-Soil
ESA-P-ORG(3,5,6,8)			
>C10-C16	%		99
>C10-C14	%		95

	Sample ID:	Q2021009681
	Sample Name	
Parameter	Units	PQL
ESA-P-ORG7 & ORG8		
Benzene	%	
Toluene	%	

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Ethylbenzene	%		101
m.p Xylene	%		81
o Xylene	%		98
Fluorobenzene (Surr.)	%		100

Sample ID: **Q2021009712**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30
Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

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A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2105665

Date Received:	19.11.2021
Date Analysed:	26.11.2021
Report Date:	26.11.2021
Client:	ADE Consulting Group
Job Location:	-
Analytical method:	AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

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Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH1_1.8	2021037883	Soil	99 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH2_1.8	2021037884	Soil	96 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH3_2.0	2021037885	Soil	114 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH3_3.0	2021037886	Soil	118 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH4_2.0	2021037887	Soil	119 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH4_3.0	2021037888	Soil	129 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH6_1.8	2021037889	Soil	117 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH7_1.8	2021037890	Soil	130 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH8_1.8	2021037891	Soil	97 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH9_2.0	2021037892	Soil	81 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH9_3.0	2021037893	Soil	108 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH13_0.5	2021037894	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH13_1.0	2021037895	Soil	90 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH13_1.8	2021037896	Soil	94 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH16_0.5	2021037897	Soil	89 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH16_1.0	2021037898	Soil	90 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH16_1.8	2021037899	Soil	111 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH8_DEL1_1.0	2021037901	Soil	91 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH8_DEL2_1.0	2021037902	Soil	95 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH8_DEL3_1.0	2021037903	Soil	143 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (EUROFINS)

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY:	SIGNATURE:
SAMPLERS:	elisha cassidy	SAMPLES: CHILLED: ☑ PRESERVED: ☑	PRESERVATION METHOD: / CUSTODY SEAL INTACT: ☑
TURNAROUND:	24h: ☑ 48h: 72h: ☑ 5 WORKING DAYS:	MINIMAL HEADSPACE : ☑	WITHIN HOLDING TIME: ☑
SAMPLING DATE:	19.11.21	DATE:	TIME: / TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☑ FRIDGE: X FREEZER: ☑ >>4 WEEKS: ☑ OTHER: ☑	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: / COMMENTS:
REPORT FORMAT:	HARD COPY: ☑ E-MAIL: X	ANALYSES REQUIRED	NOTES
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		Chem Lab										Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	NEPM Screen/Soil Classification suite: Fe, CEC, pH($CaCl_2$), TOC, Clay Content + pH(1:5) & EC(1:5)]	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbestos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☑ Sample Comments
	SR3	S	19.11.21	G	1		X	X	X	X	X		X										

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

843611

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Sample Receipt Advice

Company name:	ADE Consulting Group Pty Ltd
Contact name:	Thesan Naidoo
Project name:	DSI PARRAMATTA
Project ID:	21.1587
Turnaround time:	5 Day
Date/Time received	Nov 19, 2021 3:18 PM
Eurofins reference	843611

Sample Information

- ✓ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ✓ Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 11.5 degrees Celsius.
- ✓ All samples have been received as described on the above COC.
- ✓ COC has been completed correctly.
- ✓ Attempt to chill was evident.
- ✓ Appropriately preserved sample containers have been used.
- ✓ All samples were received in good condition.
- ✓ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ✓ Appropriate sample containers have been used.
- ✓ Sample containers for volatile analysis received with zero headspace.
- × Split sample sent to requested external lab.
- × Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Asim Khan on phone : or by email: AsimKhan@eurofins.com

Results will be delivered electronically via email to Thesan Naidoo - Thesan.Naidoo@ade.group.

Note: A copy of these results will also be delivered to the general ADE Consulting Group Pty Ltd email address.

Global Leader - Results you can trust

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web: www.eurofins.com.au
email: EnviroSales@eurofins.com

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Rolleston, Christchurch 7675
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IANZ # 1290

Company Name: ADE Consulting Group Pty Ltd
Address: Unit 6/7 Millennium Court
Silverwater
NSW 2128

Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 843611
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Nov 19, 2021 3:18 PM
Due: Nov 26, 2021
Priority: 5 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Moisture Set	Suite B10E:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254							
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
Brisbane Laboratory - NATA # 1261 Site # 20794							
Mayfield Laboratory - NATA # 1261 Site # 25079							
Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	SR3	Nov 19, 2021		Soil	S21-No55963	X	X
Test Counts						1	1

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ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Thesan Naidoo**

Report **843611-S**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Nov 19, 2021

Client Sample ID			**SR3**
Sample Matrix			**Soil**
Eurofins Sample No.			**S21-No55963**
Date Sampled			**Nov 19, 2021**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	92
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	92
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	120
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	120
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	90
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	2.1
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.3
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	2.6
Acenaphthene	0.5	mg/kg	0.6
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	0.8
Benz(a)anthracene	0.5	mg/kg	1.5
Benzo(a)pyrene	0.5	mg/kg	1.6
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	1.1
Benzo(g.h.i)perylene	0.5	mg/kg	1.0
Benzo(k)fluoranthene	0.5	mg/kg	1.2
Chrysene	0.5	mg/kg	1.7
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

Client Sample ID			SR3
Sample Matrix			Soil
Eurofins Sample No.			S21-No55963
Date Sampled			Nov 19, 2021
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	3.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	0.9
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	3.0
Pyrene	0.5	mg/kg	4.0
Total PAH*	0.5	mg/kg	20.9
2-Fluorobiphenyl (surr.)	1	%	107
p-Terphenyl-d14 (surr.)	1	%	97
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	109
Tetrachloro-m-xylene (surr.)	1	%	105
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

Client Sample ID			SR3
Sample Matrix			Soil
Eurofins Sample No.			S21-No55963
Date Sampled			Nov 19, 2021
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	107
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	109
Tetrachloro-m-xylene (surr.)	1	%	105
Heavy Metals			
Arsenic	2	mg/kg	2.9
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	14
Copper	5	mg/kg	13
Lead	5	mg/kg	53
Mercury	0.1	mg/kg	0.1
Nickel	5	mg/kg	6.5
Zinc	5	mg/kg	24
% Moisture	1	%	16

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Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Nov 26, 2021	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Nov 30, 2021	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Nov 26, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Nov 24, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			

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Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
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Received: Nov 19, 2021 3:18 PM
Due: Nov 26, 2021
Priority: 5 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Moisture Set	Suite B10E:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254							
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
Brisbane Laboratory - NATA # 1261 Site # 20794							
Mayfield Laboratory - NATA # 1261 Site # 25079							
Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	SR3	Nov 19, 2021		Soil	S21-No55963	X	X
Test Counts						1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	87			70-130	Pass	
TRH C10-C14	%	123			70-130	Pass	
Naphthalene	%	98			70-130	Pass	
TRH C6-C10	%	86			70-130	Pass	
TRH >C10-C16	%	118			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	99			70-130	Pass	
Toluene	%	95			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
o-Xylene	%	102			70-130	Pass	
Xylenes - Total*	%	99			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	76			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	74			70-130	Pass	
Benz(a)anthracene	%	83			70-130	Pass	
Benzo(a)pyrene	%	84			70-130	Pass	
Benzo(b&j)fluoranthene	%	99			70-130	Pass	
Benzo(g.h.i)perylene	%	82			70-130	Pass	
Benzo(k)fluoranthene	%	78			70-130	Pass	
Chrysene	%	70			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	76			70-130	Pass	
Fluorene	%	77			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	81			70-130	Pass	
Naphthalene	%	77			70-130	Pass	
Phenanthrene	%	75			70-130	Pass	
Pyrene	%	77			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	72			70-130	Pass	
4.4'-DDD	%	86			70-130	Pass	
4.4'-DDE	%	76			70-130	Pass	
4.4'-DDT	%	88			70-130	Pass	
a-HCH	%	76			70-130	Pass	
Aldrin	%	74			70-130	Pass	
b-HCH	%	74			70-130	Pass	
d-HCH	%	71			70-130	Pass	
Dieldrin	%	81			70-130	Pass	
Endosulfan I	%	85			70-130	Pass	
Endosulfan II	%	75			70-130	Pass	
Endosulfan sulphate	%	79			70-130	Pass	
Endrin	%	101			70-130	Pass	
Endrin aldehyde	%	78			70-130	Pass	
Endrin ketone	%	80			70-130	Pass	
g-HCH (Lindane)	%	72			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	71			70-130	Pass	
Hexachlorobenzene	%	75			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor	%	88			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	81			70-130	Pass	
Dimethoate	%	76			70-130	Pass	
Ethion	%	116			70-130	Pass	
Fenitrothion	%	102			70-130	Pass	
Methyl parathion	%	123			70-130	Pass	
Mevinphos	%	91			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	84			80-120	Pass	
Cadmium	%	87			80-120	Pass	
Chromium	%	88			80-120	Pass	
Copper	%	88			80-120	Pass	
Lead	%	87			80-120	Pass	
Mercury	%	93			80-120	Pass	
Nickel	%	88			80-120	Pass	
Zinc	%	87			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	N21-No43998	NCP	%	101			70-130	Pass	
TRH >C10-C16	N21-No43998	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S21-No60064	NCP	%	81			70-130	Pass	
Acenaphthylene	S21-No60064	NCP	%	88			70-130	Pass	
Anthracene	S21-No60064	NCP	%	82			70-130	Pass	
Benz(a)anthracene	S21-No60064	NCP	%	84			70-130	Pass	
Benzo(a)pyrene	S21-No60064	NCP	%	87			70-130	Pass	
Benzo(b&j)fluoranthene	S21-No60064	NCP	%	89			70-130	Pass	
Benzo(g.h.i)perylene	S21-No60064	NCP	%	81			70-130	Pass	
Benzo(k)fluoranthene	S21-No60064	NCP	%	85			70-130	Pass	
Chrysene	S21-No60064	NCP	%	80			70-130	Pass	
Dibenz(a.h)anthracene	S21-No60064	NCP	%	87			70-130	Pass	
Fluoranthene	S21-No60064	NCP	%	84			70-130	Pass	
Fluorene	S21-No60064	NCP	%	84			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S21-No60064	NCP	%	84			70-130	Pass	
Naphthalene	S21-No60064	NCP	%	82			70-130	Pass	
Phenanthrene	S21-No60064	NCP	%	81			70-130	Pass	
Pyrene	S21-No60064	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S21-No60064	NCP	%	85			70-130	Pass	
4.4'-DDD	S21-No60064	NCP	%	96			70-130	Pass	
4.4'-DDE	S21-No60064	NCP	%	88			70-130	Pass	
4.4'-DDT	S21-No60064	NCP	%	90			70-130	Pass	
a-HCH	S21-No60064	NCP	%	88			70-130	Pass	
Aldrin	S21-No60064	NCP	%	87			70-130	Pass	
b-HCH	S21-No60064	NCP	%	84			70-130	Pass	
d-HCH	S21-No60064	NCP	%	82			70-130	Pass	
Dieldrin	S21-No60064	NCP	%	96			70-130	Pass	
Endosulfan I	S21-No60064	NCP	%	100			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan II	S21-No60064	NCP	%	80			70-130	Pass	
Endosulfan sulphate	S21-No60064	NCP	%	74			70-130	Pass	
Endrin	S21-No60064	NCP	%	115			70-130	Pass	
Endrin aldehyde	S21-No60064	NCP	%	88			70-130	Pass	
Endrin ketone	S21-No60064	NCP	%	75			70-130	Pass	
g-HCH (Lindane)	S21-No60064	NCP	%	82			70-130	Pass	
Heptachlor	S21-No60064	NCP	%	99			70-130	Pass	
Heptachlor epoxide	S21-No60064	NCP	%	81			70-130	Pass	
Hexachlorobenzene	S21-No60064	NCP	%	86			70-130	Pass	
Methoxychlor	S21-No41864	NCP	%	126			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S21-No60064	NCP	%	84			70-130	Pass	
Dimethoate	S21-No60064	NCP	%	76			70-130	Pass	
Ethion	S21-No41864	NCP	%	105			70-130	Pass	
Fenitrothion	S21-No60064	NCP	%	113			70-130	Pass	
Methyl parathion	S21-No41864	NCP	%	118			70-130	Pass	
Mevinphos	S21-No60064	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S21-No57455	NCP	%	124			75-125	Pass	
Cadmium	S21-No57455	NCP	%	116			75-125	Pass	
Chromium	S21-No57455	NCP	%	118			75-125	Pass	
Copper	S21-No57455	NCP	%	112			75-125	Pass	
Lead	S21-No57455	NCP	%	118			75-125	Pass	
Mercury	S21-No57455	NCP	%	125			75-125	Pass	
Nickel	S21-No57455	NCP	%	110			75-125	Pass	
Zinc	S21-No57455	NCP	%	117			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S21-No55963	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S21-No63805	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S21-No63805	NCP	mg/kg	83	82	1.0	30%	Pass	
TRH C29-C36	S21-No63805	NCP	mg/kg	66	63	5.0	30%	Pass	
Naphthalene	S21-No55963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S21-No55963	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S21-No63805	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S21-No63805	NCP	mg/kg	120	120	5.0	30%	Pass	
TRH >C34-C40	S21-No63805	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S21-No55963	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S21-No55963	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S21-No55963	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S21-No55963	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S21-No55963	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S21-No55963	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Benzo(a)pyrene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S21-No63805	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S21-No63805	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S21-No63805	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S21-No63805	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Fensulfothion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S21-No63805	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S21-No63805	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S21-No63805	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S21-No55963	CP	mg/kg	2.9	3.8	29	30%	Pass	
Cadmium	S21-No55963	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S21-No55963	CP	mg/kg	14	16	12	30%	Pass	
Copper	S21-No55963	CP	mg/kg	13	18	33	30%	Fail	Q15
Lead	S21-No55963	CP	mg/kg	53	140	90	30%	Fail	Q02
Mercury	S21-No55963	CP	mg/kg	0.1	0.4	100	30%	Fail	Q15
Nickel	S21-No55963	CP	mg/kg	6.5	8.5	26	30%	Pass	
Zinc	S21-No55963	CP	mg/kg	24	58	85	30%	Fail	Q02
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S21-No55963	CP	%	16	13	19	30%	Pass	

Comments

Sample Integrity

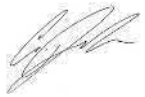
Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Document Revision Date: 27.03.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP

PROJECT:	Delta Group Pty Ltd	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: K	SIGNATURE:
SAMPLERS:	Mathew Lynch	SAMPLES: 10 CHILLED: ~~X~~	PRESERVED: ~~X~~ PRESERVATION METHOD: X CUSTODY SEAL INTACT: X
TURNAROUND:	24h: X 48h: 72h: 5 WORKING DAYS:	MINIMAL HEADSPACE : ~~X~~	WITHIN HOLDING TIME: X
SAMPLING DATE:	17.11.2021	DATE: 29.11.21	TIME: 8:53 TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO. 2105856	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X	ANALYSES REQUIRED	NOTES
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: mathew.lynch@ade.group		POTENTIAL HAZARDOUS CONTAMINANTS:
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: mathew.lynch@ade.group, theesan.naidoo@ade.group		☐ ~~ASBESTOS~~ ☐ ~~HYDROCARBONS~~ ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____

| SAMPLE DATA | | | | | CONTAINER DATA | | | | |

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo
Project name: 21.1587
Number of samples: 10
COC number: 21.1587
Turn around time: 1 Day
Date: 29.11.2021
Time received: 8:53 AM
SLS Reference: 2105856
Estimated Report Delivery Date: 30.11.2021

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP PAH B(a)P PQL<0.2 ug/L	TCLP PAH B(a)P PQL<5.0 ug/L	TCLP Metals	TCLP PFAS
2021039154	BH01_0.5			X	
2021039155	BH01_1.0			X	
2021039156	BH04_1.0			X	
2021039157	BH05_0.2			X	
2021039158	BH05_0.5			X	
2021039159	BH05_1.0			X	
2021039160	BH08_0.5			X	
2021039161	BH09_0.5			X	
2021039162	BH09_1.0			X	
2021039163	BR1			X	

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Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	30/11/2021
Customer:	ADE Consulting Group	**No. of Samples:**	10
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/11/2021
		Date of Analysis:	30/11/2021
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Sydney Laboratory Services
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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2021039154	2021039155	2021039156	2021039157	2021039158	2021039159	2021039160	2021039161	2021039162	2021039163
	Sample Name	BH01_0.5	BH01_1.0	BH04_1.0	BH05_0.2	BH05_0.5	BH05_1.0	BH08_0.5	BH09_0.5	BH09_1.0	BR1
Parameter	*Units*	*PQL*									
ESA-MP-01,ICP-01											
Lead	mg/L	0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	-	-	<0.5
Nickel	mg/L	0.2	<0.2	-	<0.2	-	<0.2	-	-	<0.2	<0.2	-
ESA-P-21											
pH A	-		9.7	6.3	9.5	9.3	9.5	9.2	9.0	9.6	9.6	6.4
pH B	-		1.8	1.7	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.7
Extraction Fluid	-		1	1	1	1	1	1	1	1	1	1

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

ESA-F-02
Chain of Custody (Internal)

Date Printed: 27/01/2022

*37

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADECONSULTINGGROUP

PROJECT:	DSI Parramatta (Mob 2)	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587	RECEIVED BY:	SIGNATURE:
SAMPLES DELIVERED BY:	ADE Consulting Group	SAMPLES: 10 CHILLED: ☒ PRESERVED: ☒	PRESERVATION METHOD: X CUSTODY SEAL INTACT: ☒
SAMPLERS:	6/7 Millennium Ct, Silverwater NSW 2128	MINIMAL HEADSPACE: ☒	WITHIN HOLDING TIME: ☒
TURNAROUND:	Mathew Lynch/Grace Tuckwell	DATE: 27.01.22	TIME: 9:00 TEMPERATURE UPON RECEIPT: °C
SAMPLING DATE:	24h: 48h: X 72h: 5 WORKING DAYS: 25/01/2022	LIMS LOT NO. 2200288	LIMS/EXCEL SIGNATURE: COMMENTS:
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐		
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: grace.tuckwell@ade.group, elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED				NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Standard Suite (8 Metal Suite, BTEX, PAH, OCP/OPP, PCB, vTRH (C6-C10) & TRH (C10-C40)	Asbestos (65g)	pH/pHfox	BTEX	POTENTIAL HAZARDOUS CONTAMINANTS: ☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
2022001										LAB PLEASE *EMAIL COC RECEIPT: ☐
794	BH14_0.5	S	25/01/2022	B & G	1	X	X	X		Sample Comments
795	BH14_1.0	S	25/01/2022	B & G	2	X	X	X		24 hr TAT for pH/pHfox, please store samples in freezer for potential CRS analysis.
796	BH14_2.0	S	25/01/2022	B & G	3	X	X	X		
797	BH15_0.5	S	25/01/2022	B & G	4	X	X	X		
798	BH15_1.0	S	25/01/2022	B & G	5	X	X	X		
799	BH15_2.0	S	25/01/2022	B & G	6	X	X	X		
800	BH15_3.0	S	25/01/2022	B & G	7	X	X	X		
801	BH17_0.5	S	25/01/2022	B & G	8	X	X	X		
802	BH17_1.0	S	25/01/2022	B & G	9	X	X	X		
803	BH17_1.8	S	25/01/2022	B & G	10	X	X	X		

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

ph / phfox - 28.01.22
rest - 31.01.22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo / Grace Tuckwell / Elisha Cassidy / Matthew Lynch
Project name: 21.1587
Number of samples: 10
COC number: 21.1587
Turn around time: pH/pHfox: 24hr Other samples: Standard
Date: 25.01.2022
Time received: 9:00 AM
SLS Reference: 2200288 - Soil
Estimated Report Delivery Date: pH/pHfox: 28/01/2022
Other samples: 31/01/2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	STANDARD SUITE	pH/pH fox	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	pH/EC	8 METAL SUITE	PFAS	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022001794	BH14_0.5	X	X													X		
2022001795	BH14_1.0	X	X													X		
2022001796	BH14_2.0	X	X													X		
2022001797	BH15_0.5	X	X													X		
2022001798	BH15_1.0	X	X													X		
2022001799	BH15_2.0	X	X													X		
2022001800	BH15_3.0	X	X													X		
2022001801	BH17_0.5	X	X													X		
2022001802	BH17_1.0	X	X													X		
2022001803	BH17_1.8	X	X													X		

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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	31/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	10
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	27/01/2022
		Date of Analysis:	27/01/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022001794	2022001795	2022001796	2022001797	2022001798	2022001799	2022001800	2022001801	2022001802	2022001803
	Sample Name	BH14_0.5	BH14_1.0	BH14_2.0	BH15_0.5	BH15_1.0	BH15_2.0	BH15_3.0	BH17_0.5	BH17_1.0	BH17_1.8
Parameter	*Units*	*PQL*									
ESA-P-ORG7 & ORG8											
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m.p Xylene	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
o Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sum of BTEX	mg/kg	2	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Total Xylenes	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Fluorobenzene (Surr.)	%		67	71	69	63	65	65	64	71	67	70
C6-C10	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C9	mg/kg	25	<25	<25	<25	<25	<25	<25	<25	<25	<25
ESA-MP-01,ICP-01											
Arsenic	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	13.9	5.8	<5.0	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	14.7	14.8	14.0	6.2	14.0	12.6	10.8	9.5	9.5	5.2
Copper	mg/kg	5	18.6	5.2	<5.0	<5.0	19.2	<5.0	<5.0	26.1	20.7	<5.0
Lead	mg/kg	10	136.5	71.1	<10.0	22.9	136.0	19.8	<10.0	155.7	201.2	<10.0
Mercury	mg/kg	0.2	14.09	0.61	1.88	0.24	0.36	<0.20	<0.20	0.39	0.43	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	180.5	8.9	<5.0	15.5	53.3	<5.0	<5.0	127.8	138.2	<5.0
ESA-P-12											
% Moisture Content	%		12.3	13.7	17.7	14.8	13.5	18.2	17.4	11.6	11.6	15.3
ESA-P-ORG(12 - 15)											
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

Certificate of Analysis

	Sample ID:	2022001794	2022001795	2022001796	2022001797	2022001798	2022001799	2022001800	2022001801	2022001802	2022001803
	Sample Name	BH14_0.5	BH14_1.0	BH14_2.0	BH15_0.5	BH15_1.0	BH15_2.0	BH15_3.0	BH17_0.5	BH17_1.0	BH17_1.8
Parameter	Units	PQL									
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.42	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.57	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.94	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.31	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.94	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.59	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	0.37	<0.30	<0.30	<0.30	1.19	<0.30	<0.30	<0.30	0.39	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.53	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	0.40	<0.30	<0.30	<0.30	1.21	<0.30	<0.30	<0.30	0.39	<0.30
Sum of Positive PAHs	mg/kg	0.3	0.77	<0.30	<0.30	<0.30	6.70	<0.30	<0.30	<0.30	0.78	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.81	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.97	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	1.14	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		130	110	114	114	125	106	135	135	118	111
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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Certificate of Analysis

	Sample ID:	2022001794	2022001795	2022001796	2022001797	2022001798	2022001799	2022001800	2022001801	2022001802	2022001803
	Sample Name	BH14_0.5	BH14_1.0	BH14_2.0	BH15_0.5	BH15_1.0	BH15_2.0	BH15_3.0	BH17_0.5	BH17_1.0	BH17_1.8
Parameter	Units	PQL									
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		88	74	75	76	97	68	89	100	125	92
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Certificate of Analysis

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	Sample Name	BH14_0.5	BH14_1.0	BH14_2.0	BH15_0.5	BH15_1.0	BH15_2.0	BH15_3.0	BH17_0.5	BH17_1.0	BH17_1.8
Parameter	*Units*	*PQL*									
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		114	98	102	102	132	94	121	123	121	100
***ESA-P-19**											
pH	-		10.5	8.1	8.9	8.1	8.1	8.3	6.2	9.1	8.9	8.1
pHox	-		9.9	7.0	7.7	7.8	7.6	6.3	4.3	8.1	7.8	6.5
Reaction Rate	-		4	4	4	4	4	2	1	4	4	4
ESA-P-ORG(3,8)											
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Jacob Jones

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	2/02/2022
Customer:	ADE Consulting Group	**No. of Samples:**	20
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	27/01/2022
		Date of Analysis:	27/01/2022

Cust Ref: 21.1587

Glossary:

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^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

Sample ID:	D202200173104
Sample Name	25 Southdown Pl TP2

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16			Pass
>C16-C34			Pass
>C34-C40			Pass
>C10-C14			Pass
>C15-C28			Pass
>C29-C36			Pass

Sample ID:	D202200179805
Sample Name	BH15_1.0

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16			Pass
>C16-C34			Pass
>C34-C40			Pass
>C10-C14			Pass
>C15-C28			Pass
>C29-C36			Pass

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Silverwater 2128
Ph: (02) 9648-6669

		Sample ID:	**D202200173102**
		Sample Name	**25 Southdown Pl TP2**
Parameter	***Units***	***PQL***	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		63
C6-C10			Pass
C6-C9			Pass

		Sample ID:	**Q2022000402**
		Sample Name	
Parameter	***Units***	***PQL***	TRH Blank-Soil
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100

		Sample ID:	**Q2022000403**
		Sample Name	
Parameter	***Units***	***PQL***	TRH Blank Spike-Soil
ESA-P-ORG(3,8)			
>C10-C16	%		78
>C10-C14	%		90

		Sample ID:	**S202200173002**
		Sample Name	**25 Southdown Pl TP1**
Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
Benzene	%		75
Toluene	%		62
Ethylbenzene	%		63
m.p Xylene	%		65
o Xylene	%		63
Fluorobenzene (Surr.)	%		79

		Sample ID:	**S202200173004**
		Sample Name	**25 Southdown Pl TP1**
Parameter	***Units***	***PQL***	
ESA-P-ORG(3,8)			
>C10-C16	%		137
>C10-C14	%		136

		Sample ID:	**Q2022000396**
		Sample Name	
Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30
Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

		Sample ID:	**Q2022000397**
		Sample Name	
Parameter	***Units***	***PQL***	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		89
Cadmium	%		98
Chromium	%		94
Copper	%		94
Lead	%		95
Mercury	%		102
Nickel	%		102
Zinc	%		98

		Sample ID:	**D202200173101**
		Sample Name	**25 Southdown Pl TP2**
Parameter	***Units***	***PQL***	
ESA-MP-01,ICP-01			
Arsenic			Pass
Cadmium			Pass
Chromium			Pass
Copper			Pass
Lead			Pass
Mercury			Pass
Nickel			Pass
Zinc			Pass

Sample ID:	S202200173001
Sample Name	25 Southdown Pl TP1

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		91
Cadmium	%		108
Chromium	%		96
Copper	%		97
Lead	%		100
Mercury	%		99
Nickel	%		97
Zinc	%		99

Sample ID:	D202200179802
Sample Name	BH15_1.0

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic			Pass
Cadmium			Pass
Chromium			Pass
Copper			Pass
Lead			Pass
Mercury			Pass
Nickel			Pass
Zinc			Pass

Sample ID:	**D202200179803**
Sample Name	**BH15_1.0**

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		63
C6-C10			Pass
C6-C9			Pass

Sample ID:	**Q2022000398**
Sample Name	

Parameter	*Units*	*PQL*	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0
C6-C10	mg/kg	35	<35
C6-C9	mg/kg	25	<25

Sample ID:	Q2022000399
Sample Name	

Parameter	Units	PQL	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		76
Toluene	%		67
Ethylbenzene	%		69
m.p Xylene	%		71
o Xylene	%		70
Fluorobenzene (Surr.)	%		83

Sample ID:	Q2022000400
Sample Name	

Parameter	Units	PQL	PCB Blank - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30

aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10
prophos	mg/kg	0.1	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50

Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50

Sample ID: **Q2022000401**

Sample Name

Parameter	*Units*	*PQL*	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	%		82
Anthracene	%		126
Fluoranthene	%		77
Naphthalene	%		80
Phenanthrene	%		83
Pyrene	%		87
p-Terphenyl-d14 (Surr.)	%		109
aldrin	%		80
endrin	%		61
hexachlorobenzene	%		89
TCMX (Surr.)	%		85
chlorpyrifos	%		70
diazinon	%		79
2-fluorobiphenyl (Surr.)	%		102
Aroclor 1016	%		92

Sample ID: **D202200179804**

Sample Name **BH15_1.0**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene			Pass
Acenaphthylene			Pass
Anthracene			Pass

Benzo[a]anthracene			Pass
Benzo[a]pyrene			Pass
Benzo[b]fluoranthene			Pass
Benzo[g,h,i]perylene			Pass
Benzo[k]fluoranthene			Pass
Chrysene			Pass
Dibenzo[a,h]anthracene			Pass
Fluoranthene			Pass
Fluorene			Pass
Indeno(1,2,3-cd)pyrene			Pass
Naphthalene			Pass
Phenanthrene			Pass
Pyrene			Pass
p-Terphenyl-d14 (Surr.)	%		118
aldrin			Pass
a-BHC			Pass
b-BHC			Pass
d-BHC			Pass
g-BHC (lindane)			Pass
cis-chlordane			Pass
trans-chlordane			Pass
4,4'-DDD			Pass
4,4'-DDE			Pass
4,4'-DDT			Pass
dieldrin			Pass
endosulfan I			Pass
endosulfan II			Pass
endosulfan sulfate			Pass
endrin			Pass
endrin aldehyde			Pass
endrin ketone			Pass

heptachlor			Pass
heptachlor epoxide			Pass
hexachlorobenzene			Pass
methoxychlor			Pass
TCMX (Surr.)	%		98
chlorpyrifos			Pass
chlorpyrifos methyl			Pass
diazinon			Pass
fenchlorphos			Pass
methyl parathion			Pass
prophos			Pass
tributylphosphorotrithioite			Pass
Aroclor 1016			Pass
Aroclor 1221			Pass
Aroclor 1232			Pass
Aroclor 1242			Pass
Aroclor 1248			Pass
Aroclor 1254			Pass
Aroclor 1260			Pass
2-fluorobiphenyl (Surr.)	%		134

Sample ID:	S202200173003
Sample Name	25 Southdown Pl TP1

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene	%		116
Anthracene	%		138
Fluoranthene	%		106
Naphthalene	%		113
Phenanthrene	%		114
Pyrene	%		116
p-Terphenyl-d14 (Surr.)	%		121
aldrin	%		112
endrin	%		64
hexachlorobenzene	%		118
TCMX (Surr.)	%		115
chlorpyrifos	%		100
diazinon	%		116
Aroclor 1016	%		119
2-fluorobiphenyl (Surr.)	%		108

Sample ID:	D202200173103
Sample Name	25 Southdown Pl TP2

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene			Pass
Acenaphthylene			Pass
Anthracene			Pass
Benzo[a]anthracene			Pass
Benzo[a]pyrene			Pass
Benzo[b]fluoranthene			Pass

Benzo[g,h,i]perylene			Pass
Benzo[k]fluoranthene			Pass
Chrysene			Pass
Dibenzo[a,h]anthracene			Pass
Fluoranthene			Pass
Fluorene			Pass
Indeno(1,2,3-cd)pyrene			Pass
Naphthalene			Pass
Phenanthrene			Pass
Pyrene			Pass
p-Terphenyl-d14 (Surr.)	%		135
aldrin			Pass
a-BHC			Pass
b-BHC			Pass
d-BHC			Pass
g-BHC (lindane)			Pass
cis-chlordane			Pass
trans-chlordane			Pass
4,4'-DDD			Pass
4,4'-DDE			Pass
4,4'-DDT			Pass
dieldrin			Pass
endosulfan I			Pass
endosulfan II			Pass
endosulfan sulfate			Pass
endrin			Pass
endrin aldehyde			Pass
endrin ketone			Pass
heptachlor			Pass
heptachlor epoxide			Pass
hexachlorobenzene			Pass

methoxychlor			Pass
TCMX (Surr.)	%		117
chlorpyrifos			Pass
chlorpyrifos methyl			Pass
diazinon			Pass
fenchlorphos			Pass
methyl parathion			Pass
prophos			Pass
tributylphosphorotrithioite			Pass
Aroclor 1016			Pass
Aroclor 1221			Pass
Aroclor 1232			Pass
Aroclor 1242			Pass
Aroclor 1248			Pass
Aroclor 1254			Pass
Aroclor 1260			Pass
2-fluorobiphenyl (Surr.)	%		107

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Sydney Laboratory Services

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A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2200288

Date Received:	27.01.2022
Date Analysed:	31.01.2022
Report Date:	31.01.2022
Client:	ADE Consulting Group
Job Location:	DSI Parramatta (Mob 2)
Analytical method:	AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Grace (Weichen) Jia
Approved asbestos identifier

Results Authorised By:

Grace (Weichen) Jia
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH14_0.5	2022001794	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH14_1.0	2022001795	Soil	160 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH14_2.0	2022001796	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH15_0.5	2022001797	Soil	104 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH15_1.0	2022001798	Soil	130 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH15_2.0	2022001799	Soil	104 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
BH15_3.0	2022001800	Soil	131 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH17_0.5	2022001801	Soil	47 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH17_1.0	2022001802	Soil	52 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
BH17_1.8	2022001803	Soil	130 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
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Silverwater 2128
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Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	28/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	10
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	27/01/2022
		Date of Analysis:	27/01/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Silverwater 2128
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Certificate of Analysis

	Sample ID:	2022001794	2022001795	2022001796	2022001797	2022001798	2022001799	2022001800	2022001801	2022001802	2022001803
	Sample Name	BH14_0.5	BH14_1.0	BH14_2.0	BH15_0.5	BH15_1.0	BH15_2.0	BH15_3.0	BH17_0.5	BH17_1.0	BH17_1.8
Parameter	Units	PQL									
*ESA-P-19											
pH	-		10.5	8.1	8.9	8.1	8.1	8.3	6.2	9.1	8.9	8.1
pHox	-		9.9	7.0	7.7	7.8	7.6	6.3	4.3	8.1	7.8	6.5
Reaction Rate	-		4	4	4	4	4	2	1	4	4	4

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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

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Document Revision Date: 27.03.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP

PROJECT:	Delta Group Pty Ltd	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group	RECEIVED BY:	SIGNATURE:
SAMPLERS:	6/7 Millennium Ct, Silverwater NSW 2128	SAMPLES: 4 CHILLED: PRESERVED:	PRESERVATION METHOD: X CUSTODY SEAL INTACT: X
TURNAROUND:	Mathew Lynch	MINIMAL HEADSPACE :	WITHIN HOLDING TIME:
SAMPLING DATE:	24h: X 48h: 72h: 5 WORKING DAYS:	DATE: 31-01-22	TIME: 2:58 TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	25.01.2022	LIMS LOT NO. 2200352	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	ROOM TEMP: FRIDGE: X FREEZER: >>4 WEEKS: OTHER:		
CONSULTANTS SIGNATURE:	HARD COPY: E-MAIL: X		
PROJECT MANAGERS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group		
	PROJECT MANAGERS E-MAIL: mathew.lynch@ade.group, thesan.naidoo@ade.group		

SAMPLE DATA					CONTAINER DATA		ANALYSES REQUIRED																			NOTES
																						OTHER		TCLP	
LIMS Sample ID (Lab Use) 2022002	TCLP LIMS Sample ID (Consultant Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox							TCLP PAHs PQL<5.0 ug/L	TCLP Metals	POTENTIAL HAZARDOUS CONTAMINANTS:
131	2022001794	BH14_0.5	Soil	25.01.2022	G	1																		X	TCLP - Pb/Hg
132	2022001798	BH15_1.0	Soil	25.01.2022	G	2																		X	TCLP - Pb
133	2022001801	BH17_0.5	Soil	25.01.2022	G	3																		X	TCLP - Pb
134	2022001802	BH17_1.0	Soil	25.01.2022	G	4																		X	TCLP - Pb

ASBESTOS HYDROCARBONS LEAD/ARSENIC NO KNOWN CONTAMINATION OTHER:

LAB PLEASE *EMAIL COC RECEIPT:

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

01.02.22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Mathew Lynch, Thesan Naidoo
Project name: 21.1587
Number of samples: 4
COC number: 21.1587
Turn around time: 24 hours
Date: 31.01.2022
Time received: 2:58 PM
SLS Reference: 2200352
Estimated Report Delivery Date: 01.02.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
N/A	Samples were chilled
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
N/A	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP PAH B(a)P PQL<0.2 ug/L	TCLP PAH B(a)P PQL<5.0 ug/L	TCLP Metals	TCLP PFAS
2022002131	BH14_0.5			X	
2022002132	BH15_1.0			X	
2022002133	BH17_0.5			X	
2022002134	BH17_1.0			X	

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Accreditation No.14664
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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Mathew Lynch	**Date Reported:**	1/02/2022
Customer:	ADE Consulting Group	**No. of Samples:**	4
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	31/01/2022
		Date of Analysis:	1/02/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2022002131	2022002132	2022002133	2022002134
	Sample Name	BH14_0.5	BH15_1.0	BH17_0.5	BH17_1.0
Parameter	Units	PQL			
ESA-MP-01,ICP-01					
Lead	mg/L	0.5	<0.5	<0.5	<0.5
Mercury	mg/L	0.01	<0.01	-	-
ESA-P-21					
pH A	-		10.0	9.0	9.4	9.0
pH B	-		1.6	1.6	2.0	1.6
Extraction Fluid	-		1	1	1	1

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Quality Control Report

Contact:	Mathew Lynch	**Date Reported:**	1/02/2022
Customer:	ADE Consulting Group	**No. of Samples:**	4
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	31/01/2022
		Date of Analysis:	1/02/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Silverwater 2128
Ph: (02) 9648-6669

Quality Control Report

Sample ID:	**S202200213101**
Sample Name	**BH14_0.5**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Lead	%		100
Mercury	%		96

Sample ID:	**D202200213201**
Sample Name	**BH15_1.0**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Lead			Pass
Mercury			Pass

Sample ID:	**Q2022000480**
Sample Name	

Parameter	*Units*	*PQL*	Metals Blank - TCLP
ESA-MP-01,ICP-01			
Lead	mg/L	0.5	<0.5
Mercury	mg/L	0.01	<0.01

Sample ID:	**Q2022000481**
Sample Name	

Parameter	*Units*	*PQL*	Metals Blank Sp-TCLP
ESA-MP-01,ICP-01			
Lead	%		96
Mercury	%		101

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Silverwater 2128
Ph: (02) 9648-6669

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

ESA-F-02
Chain of Custody (Internal)

Date Printed: 28/01/2022

ENVIROLAB GROUP

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 287575
Date Received: 28/1/22
Time Received: 1545
Received By:
Temp: Cool/Ambient 4°
Cooling: Ice/icepack
Security: Intact/Broken/None

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (ENVIROLAB)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	28/1/2022
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY:	SIGNATURE:
SAMPLERS:	Mathew Lynch	SAMPLES: CHILLED: ✓	PRESERVED: ✓ PRESERVATION METHOD: NOT NEEDED — CUSTODY SEAL INTACT: ✓
TURNAROUND:	24h: ☐ 48h: **72h: XXX** 5 WORKING DAYS:	MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	25.01.22	DATE: 28/1/22	TIME: 1543 — TEMPERATURE UPON RECEIPT: 7 °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: FREEZER:X >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: — COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X	ANALYSES REQUIRED	NOTES
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: elisha.cassidy@ade.group; mathew.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group		

SAMPLE DATA				CONTAINER DATA		Chem Lab										Asbestos						Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Chromium Reducible Sulfur										Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
1	BH15_3.0	S	25.01.22	B	1	✓																	LAB PLEASE *EMAIL COC RECEIPT: ☐ Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Thesan Naidoo

Sample Login Details

Your reference	21.1587, DSI Parramatta
Envirolab Reference	287575
Date Sample Received	28/01/2022
Date Instructions Received	28/01/2022
Date Results Expected to be Reported	02/02/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Soil
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	4
Cooling Method	None
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Chromium Suite
BH15_3.0	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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www.envirolab.com.au

CERTIFICATE OF ANALYSIS 287575

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Thesan Naidoo
Address	Unit 6, 7 Millenium Court, Silverwater, NSW, 2128

Sample Details

Your Reference	**21.1587, DSI Parramatta**
Number of Samples	1 Soil
Date samples received	28/01/2022
Date completed instructions received	28/01/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

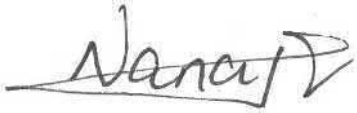
Date results requested by	02/02/2022
Date of Issue	02/02/2022

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Results Approved By
Matt Mansfield, QHSE manager

Authorised By



Nancy Zhang, Laboratory Manager

Chromium Suite		
Our Reference		287575-1
Your Reference	UNITS	BH15_3.0
Date Sampled		25/01/2022
Type of sample		Soil
Date prepared	-	02/02/2022
Date analysed	-	02/02/2022
pH $_{kcl}$	pH units	5.0
s-TAA pH 6.5	%w/w S	<0.01
TAA pH 6.5	moles H^+ /t	6
Chromium Reducible Sulfur	%w/w	<0.005
a-Chromium Reducible Sulfur	moles H^+ /t	<3
S_{HCl}	%w/w S	[NT]
S_{KCl}	%w/w S	[NT]
S_{NAS}	%w/w S	[NT]
ANC_{BT}	% $CaCO_3$	[NT]
s-ANC_{BT}	%w/w S	[NT]
s-Net Acidity	%w/w S	0.0090
a-Net Acidity	moles H^+ /t	5.8
Liming rate	kg $CaCO_3$ /t	<0.75
a-Net Acidity without ANCE	moles H^+ /t	5.8
Liming rate without ANCE	kg $CaCO_3$ /t	<0.75
s-Net Acidity without ANCE	%w/w S	0.0090

Method ID	Methodology Summary
Inorg-068	Chromium Reducible Sulfur - Hydrogen Sulfide is quantified by iodometric titration after distillation to determine potential acidity. Net acidity including ANC has a safety factor of 1.5 applied. Neutralising value (NV) of 100% is assumed for liming rate. Based on National acid sulfate soils identification and laboratory methods manual June 2018. The recommendation that the SHCL concentration be multiplied by a factor of 2 to ensure retained acidity is not underestimated, has not been applied in the SHCL results reported.

QUALITY CONTROL: Chromium Suite						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			02/02/2022	[NT]	[NT]	[NT]	[NT]	02/02/2022	[NT]
Date analysed	-			02/02/2022	[NT]	[NT]	[NT]	[NT]	02/02/2022	[NT]
pH $_{kcl}$	pH units		Inorg-068	[NT]	[NT]	[NT]	[NT]	[NT]	95	[NT]
s-TAA pH 6.5	%w/w S	0.01	Inorg-068	<0.01	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
TAA pH 6.5	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	86	[NT]
Chromium Reducible Sulfur	%w/w	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	124	[NT]
a-Chromium Reducible Sulfur	moles H^+ /t	3	Inorg-068	<3	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{HCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{KCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{NAS}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
ANC_{BT}	% $CaCO_3$	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-ANC_{BT}	%w/w S	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity without ANCE	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate without ANCE	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity without ANCE	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

Sydney Laboratory
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

Melbourne Laboratory
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	ADE Consulting Group	Project №	21.1587	Project Manager	Thesan Naidoo
Address	6/7 Millennium Ct, Silverwater NSW 2128	Project Name	DSI Parramatta	EDD Format (ESdat, EQuiS etc)	ESdat
Contact Name	Grace Tuckwell				
Phone №	0449 886 533				
Special Directions					
Purchase Order					
Quote ID №					

Sampler(s)	Grace Tuckwell				
Handed over by	Grace Tuckwell				
Email for Invoice	Thesan Naidoo				
Email for Results	thesan.naidoo@ade.group	grace.tuckwell@ade.group	elisha.cassidy@ade.group	mathew.lynch@ade.group	

Analyses — Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	B10	Containers: 500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
21	RINSATE2	25/01/22	W	X							1		
22													
23													
24													
25													
26													
27													
28													
29													
30													
	Total Counts			1							1		

Required Turnaround Time (TAT) — Default will be 5 days if not ticked

♦Surcharge will apply
- ☐ Overnight (reporting by 9am)♦
- ☐ Same day ♦ ☐ 1 day ♦
- ☑ 2 days ♦ ☐ 3
- ☐ 5 days (Standard)
- ☐ Other( )

Method of Shipment						
☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Grace Tuckwell	Signature	

Laboratory Use Only						
Received By	A Sinharage	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	27/01/22
Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	3:04 pm
					Date	
					Time	
					Time	
					Temperature	7.9°C

Eurofins Environment Testing Australia Pty Ltd

858317

eurofins | Environment Testing

web: www.eurofins.com.au
email: EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

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NATA # 1261 Site # 1254

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool WA 6106
Phone : +61 8 6253 4444
NATA # 2377 Site # 2370

Eurofins Environment Testing NZ Limited
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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: ADE Consulting Group Pty Ltd
Address: Unit 6/7 Millennium Court
Silverwater
NSW 2128

Project Name: DSI PARAMATTA
Project ID: 21.1587

Order No.:
Report #: 858317
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Jan 27, 2022 3:04 PM
Due: Jan 31, 2022
Priority: 2 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Eurofins Suite B10
Melbourne Laboratory - NATA # 1261 Site # 1254						
Sydney Laboratory - NATA # 1261 Site # 18217						X
Brisbane Laboratory - NATA # 1261 Site # 20794						
Mayfield Laboratory - NATA # 1261 Site # 25079						
Perth Laboratory - NATA # 2377 Site # 2370						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	RINSATE 2	Jan 25, 2022		Water	S22-Ja32071	X
Test Counts						1

ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Thesan Naidoo**

Report **858317-W**
Project name DSI PARAMATTA
Project ID 21.1587
Received Date Jan 27, 2022

Client Sample ID			**RINSATE 2**
Sample Matrix			**Water**
Eurofins Sample No.			**S22-Ja32071**
Date Sampled			**Jan 25, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1
Naphthalene[N02]	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	86
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001

Client Sample ID			RINSATE 2
Sample Matrix			Water
Eurofins Sample No.			S22-Ja32071
Date Sampled			Jan 25, 2022
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	79
p-Terphenyl-d14 (surr.)	1	%	120
Organochlorine Pesticides			
Chlordanes - Total	0.002	mg/L	< 0.002
4.4'-DDD	0.0002	mg/L	< 0.0002
4.4'-DDE	0.0002	mg/L	< 0.0002
4.4'-DDT	0.0002	mg/L	< 0.0002
a-HCH	0.0002	mg/L	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002
b-HCH	0.0002	mg/L	< 0.0002
d-HCH	0.0002	mg/L	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002
Endrin	0.0002	mg/L	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002
Endrin ketone	0.0002	mg/L	< 0.0002
g-HCH (Lindane)	0.0002	mg/L	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002
Toxaphene	0.005	mg/L	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002
Dibutylchlorendate (surr.)	1	%	108
Tetrachloro-m-xylene (surr.)	1	%	97
Organophosphorus Pesticides			
Azinphos-methyl	0.002	mg/L	< 0.002
Bolstar	0.002	mg/L	< 0.002
Chlorfenvinphos	0.02	mg/L	< 0.02
Chlorpyrifos	0.002	mg/L	< 0.002
Chlorpyrifos-methyl	0.002	mg/L	< 0.002
Coumaphos	0.02	mg/L	< 0.02
Demeton-S	0.002	mg/L	< 0.002
Demeton-O	0.002	mg/L	< 0.002
Diazinon	0.002	mg/L	< 0.002
Dichlorvos	0.002	mg/L	< 0.002
Dimethoate	0.002	mg/L	< 0.002
Disulfoton	0.002	mg/L	< 0.002
EPN	0.002	mg/L	< 0.002
Ethion	0.002	mg/L	< 0.002

Client Sample ID			RINSATE 2
Sample Matrix			**Water**
Eurofins Sample No.			**S22-Ja32071**
Date Sampled			**Jan 25, 2022**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Ethoprop	0.002	mg/L	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002
Fenitrothion	0.002	mg/L	< 0.002
Fensulfothion	0.002	mg/L	< 0.002
Fenthion	0.002	mg/L	< 0.002
Malathion	0.002	mg/L	< 0.002
Merphos	0.002	mg/L	< 0.002
Methyl parathion	0.002	mg/L	< 0.002
Mevinphos	0.002	mg/L	< 0.002
Monocrotophos	0.002	mg/L	< 0.002
Naled	0.002	mg/L	< 0.002
Omethoate	0.02	mg/L	< 0.02
Phorate	0.002	mg/L	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02
Pyrazophos	0.002	mg/L	< 0.002
Ronnel	0.002	mg/L	< 0.002
Terbufos	0.002	mg/L	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002
Tokuthion	0.002	mg/L	< 0.002
Trichloronate	0.002	mg/L	< 0.002
Triphenylphosphate (surr.)	1	%	97
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	< 0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jan 31, 2022	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 27, 2022	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 31, 2022	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jan 27, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 31, 2022	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Jan 31, 2022	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jan 31, 2022	7 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Metals M8	Sydney	Jan 27, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

eurofins | Environment Testing

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Company Name: ADE Consulting Group Pty Ltd
Address: Unit 6/7 Millennium Court
Silverwater
NSW 2128

Project Name: DSI PARAMATTA
Project ID: 21.1587

Order No.:
Report #: 858317
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Jan 27, 2022 3:04 PM
Due: Jan 31, 2022
Priority: 2 Day
Contact Name: Thesan Naidoo

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Eurofins Suite B10
Melbourne Laboratory - NATA # 1261 Site # 1254						
Sydney Laboratory - NATA # 1261 Site # 18217						X
Brisbane Laboratory - NATA # 1261 Site # 20794						
Mayfield Laboratory - NATA # 1261 Site # 25079						
Perth Laboratory - NATA # 2377 Site # 2370						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	RINSATE 2	Jan 25, 2022		Water	S22-Ja32071	X
Test Counts						1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	101			70-130	Pass	
TRH C10-C14	%	107			70-130	Pass	
Naphthalene	%	121			70-130	Pass	
TRH C6-C10	%	102			70-130	Pass	
TRH >C10-C16	%	126			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	97			70-130	Pass	
Toluene	%	99			70-130	Pass	
Ethylbenzene	%	108			70-130	Pass	
m&p-Xylenes	%	112			70-130	Pass	
o-Xylene	%	112			70-130	Pass	
Xylenes - Total*	%	112			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	95			80-120	Pass	
Cadmium	%	96			80-120	Pass	
Chromium	%	90			80-120	Pass	
Copper	%	87			80-120	Pass	
Lead	%	89			80-120	Pass	
Mercury	%	95			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel			%	88			80-120	Pass	
Zinc			%	91			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	N22-Ja26170	NCP	%	122			70-130	Pass	
TRH >C10-C16	N22-Ja26170	NCP	%	121			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S22-Ja32404	NCP	%	108			75-125	Pass	
Cadmium	S22-Ja32404	NCP	%	106			75-125	Pass	
Chromium	S22-Ja32404	NCP	%	93			75-125	Pass	
Copper	S22-Ja32404	NCP	%	95			75-125	Pass	
Lead	S22-Ja32404	NCP	%	95			75-125	Pass	
Mercury	S22-Ja32404	NCP	%	106			75-125	Pass	
Nickel	S22-Ja32404	NCP	%	95			75-125	Pass	
Zinc	S22-Ja32404	NCP	%	96			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S22-Ja34817	NCP	mg/L	0.05	0.05	2.0	30%	Pass	
TRH C10-C14	N22-Ja26124	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	N22-Ja26124	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	N22-Ja26124	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Naphthalene	S22-Ja34817	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S22-Ja34817	NCP	mg/L	0.05	0.05	3.0	30%	Pass	
TRH >C10-C16	N22-Ja26124	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	N22-Ja26124	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	N22-Ja26124	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S22-Ja34817	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S22-Ja34817	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S22-Ja34817	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S22-Ja34817	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S22-Ja34817	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	S22-Ja34817	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S22-Ja32403	NCP	mg/L	0.001	0.001	11	30%	Pass	
Cadmium	S22-Ja32403	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	S22-Ja32403	NCP	mg/L	< 0.001	0.001	21	30%	Pass	
Copper	S22-Ja32403	NCP	mg/L	0.004	0.003	15	30%	Pass	
Lead	S22-Ja32403	NCP	mg/L	0.002	0.001	14	30%	Pass	
Mercury	S22-Ja32403	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	S22-Ja32403	NCP	mg/L	0.001	0.002	45	30%	Fail	Q15
Zinc	S22-Ja32403	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Sydney Laboratory Services

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Certificate of Analysis

Contact:	Syed Shah	**Date Reported:**	10/06/2022
Customer:	ADE Consulting Group	**No. of Samples:**	9
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	9/06/2022
		Date of Analysis:	9/06/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2022019560	2022019561	2022019562	2022019563	2022019564	2022019565	2022019566	2022019567	2022019568
	Sample Name	TP10_0.0-0.1	TP10_0.5	TP10_1.0	TP10_1.5	TP11_0.0-0.1	TP11_0.5	TP11_1.0	TP11_1.5	BR1
Parameter	Units	PQL								
ESA-MP-01,ICP-01										
Arsenic	mg/kg	5	<5.0	7.5	10.4	8.4	<5.0	9.6	6.9	8.4	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	9.6	18.8	19.1	14.3	11.5	18.6	12.8	11.8	9.9
Copper	mg/kg	5	30.6	<5.0	6.4	7.2	<5.0	<5.0	5.9	9.1	34.3
Lead	mg/kg	10	93.0	13.1	10.3	13.0	37.6	<10.0	10.2	11.2	49.4
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	11.7	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.8
Zinc	mg/kg	5	97.3	<5.0	<5.0	5.6	6.0	<5.0	<5.0	<5.0	89.9
ESA-P-12										
% Moisture Content	%		14.7	26.2	25.0	15.5	15.4	23.6	18.5	15.3	9.1
ESA-P-ORG(12 - 15)										
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Sum of Positive PAHs	mg/kg	0.3	0.60	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

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Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.38	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		122	123	112	116	123	118	117	120	136
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		97	98	88	89	93	88	87	91	74
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		88	89	82	83	88	85	89	89	73
ESA-P-ORG17											
Phenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2-Chlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2-Methylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
3/4-Methylephenol	mg/kg	0.4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	-
2-Nitrophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4-Dimethylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,6-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,4-Dinitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-
4-Nitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
Pentachlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
Dinoseb	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
Phenol-d6 (Surr.)	%		81	72	75	74	83	80	78	76	-
2-Chlorophenol-d4 (Surr.)	%		84	77	78	76	86	80	81	78	-

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ESA-P-ORG(3,8)											
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	146	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	146	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	161	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	161	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08											
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Sum of MAHs	mg/kg	1	<1.0	-	<1.0	-	<1.0	-	<1.0	-	-
vNaphthalene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Methylene chloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Bromochloromethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Chloroform	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Carbon tetrachloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-

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Tetrachloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Trichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Chlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	<0.50	-	-
Toluene-d8 (Surr.)	%		90	96	107	90	99	93	100	91	94
1,2-Dichloroethane-d4 (Surr.)	%		121	131	137	122	133	126	131	125	131
4-Bromofluorobenzene (BFB) (Surr.)	%		95	101	114	95	104	97	104	96	100
Trifluorotoluene (Surr.)	%		105	112	126	104	116	107	117	106	99

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Quality Control Report

Contact:	Syed Shah	**Date Reported:**	10/06/2022
Customer:	ADE Consulting Group	**No. of Samples:**	20
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	9/06/2022
		Date of Analysis:	9/06/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

Sample ID:	D202201956101
Sample Name	TP10_0.5

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Styrene			Pass
vNaphthalene			Pass
C6-C9			Pass
C6-C10			Pass
Vinyl Chloride			Pass
trans-1,2-Dichloroethene			Pass
Methylene chloride			Pass
cis-1,2-Dichloroethene			Pass
Bromochloromethane			Pass
Chloroform			Pass
1,1,1-Trichloroethane			Pass
1,2-Dichloroethane			Pass
Carbon tetrachloride			Pass
1,1,2-Trichloroethane			Pass
Tetrachloroethene			Pass
1,1,1,2-Tetrachloroethane			Pass
1,1,2,2-Tetrachloroethane			Pass
1,2-Dichlorobenzene			Pass
1,4-Dichlorobenzene			Pass
1,2,4-Trichlorobenzene			Pass
Hexachlorobutadiene			Pass
1,1-Dichloroethene			Pass

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Trichloroethene			Pass
Chlorobenzene			Pass
Toluene-d8	%		94
1,2-Dichloroethane-d4	%		126
4-Bromofluorobenzene (BFB)	%		100
Trifluorotoluene (Surr.)	%		109

Sample ID:	**D202201956102**
Sample Name	**TP10_0.5**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene			Pass
Acenaphthylene			Pass
Anthracene			Pass
Benzo[a]anthracene			Pass
Benzo[a]pyrene			Pass
Benzo[b]fluoranthene			Pass
Benzo[g,h,i]perylene			Pass
Benzo[k]fluoranthene			Pass
Chrysene			Pass
Dibenzo[a,h]anthracene			Pass
Fluoranthene			Pass
Fluorene			Pass
Indeno(1,2,3-cd)pyrene			Pass
Naphthalene			Pass
Phenanthrene			Pass
Pyrene			Pass
p-Terphenyl-d14 (Surr.)	%		121
aldrin			Pass
a-BHC			Pass
b-BHC			Pass
d-BHC			Pass
g-BHC (lindane)			Pass
cis-chlordane			Pass

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trans-chlordane			Pass
4,4'-DDD			Pass
4,4'-DDE			Pass
4,4'-DDT			Pass
dieldrin			Pass
endosulfan I			Pass
endosulfan II			Pass
endosulfan sulfate			Pass
endrin			Pass
endrin aldehyde			Pass
endrin ketone			Pass
heptachlor			Pass
heptachlor epoxide			Pass
hexachlorobenzene			Pass
methoxychlor			Pass
TCMX (Surr.)	%		102
chlorpyrifos			Pass
chlorpyrifos methyl			Pass
diazinon			Pass
fenchlorphos			Pass
methyl parathion			Pass
prophos			Pass
tributylphosphorotrithioite			Pass
Aroclor 1016			Pass
Aroclor 1221			Pass
Aroclor 1232			Pass
Aroclor 1242			Pass
Aroclor 1248			Pass
Aroclor 1254			Pass
Aroclor 1260			Pass
2-fluorobiphenyl (Surr.)	%		86

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Sample ID:	**D202201956103**
Sample Name	**TP10_0.5**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16			Pass
>C16-C34			Pass
>C34-C40			Pass
>C10-C14			Pass
>C15-C28			Pass
>C29-C36			Pass

Sample ID:	**D202201956104**
Sample Name	**TP10_0.5**

Parameter	*Units*	*PQL*	
ESA-P-ORG17			
Phenol			Pass
2-Chlorophenol			Pass
2-Methylphenol			Pass
3/4-Methylephenol			Pass
2-Nitrophenol			Pass
2,4-Dimethylphenol			Pass
2,4-Dichlorophenol			Pass
2,6-Dichlorophenol			Pass
3-Methyl,4-Chlorophenol			Pass
2,4,6-Trichlorophenol			Pass
2,4,5-Trichlorophenol			Pass
2,4-Dinitrophenol			Pass
4-Nitrophenol			Pass
2,3,5,6-Tetrachlorophenol			Pass
2,3,4,5-Tetrachlorophenol			Pass
2,3,4,6-Tetrachlorophenol			Pass
2-Methyl-4,6-dinitrophenol			Pass
Pentachlorophenol			Pass

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Dinoseb			Pass
2-Cyclohexyl-4,6-dinitrophenol			Pass
Phenol-d6	%		75
2-Chlorophenol-d4	%		78

Sample ID:	**D202201956105**
Sample Name	**TP10_0.5**

Parameter	***Units***	***PQL***	
ESA-MP-01,ICP-01			
Arsenic			Pass
Cadmium			Pass
Chromium			Pass
Copper			Pass
Lead			Pass
Mercury			Pass
Nickel			Pass
Zinc			Pass

Sample ID:	**Q2022004568**
Sample Name	

Parameter	***Units***	***PQL***	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
C6-C9	mg/kg	35	<35
C6-C10	mg/kg	35	<35
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50

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Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

Sample ID: **Q2022004569**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		114
Benzene	%		122
Trichloroethene	%		114
Toluene	%		99
Chlorobenzene	%		106
Toluene-d8 (Surr.)	%		86
1,2-Dichloroethane-d4 (Surr.)	%		121
4-Bromofluorobenzene (BFB) (Surr.)	%		92
Trifluorotoluene (Surr.)	%		100

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Sample ID:	**Q2022004570**
Sample Name	

Parameter	***Units***	***PQL***	PCB Blank - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30
aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20

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endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10
prophos	mg/kg	0.1	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50
Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50

Sample ID: **Q2022004571**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	%		125
Anthracene	%		109
Fluoranthene	%		105
Naphthalene	%		100
Phenanthrene	%		103
Pyrene	%		93
p-Terphenyl-d14 (Surr.)	%		117

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aldrin	%		87
endrin	%		120
hexachlorobenzene	%		126
TCMX (Surr.)	%		102
chlorpyrifos	%		132
diazinon	%		89
2-fluorobiphenyl (Surr.)	%		89
Aroclor 1016	%		71

Sample ID: **Q2022004572**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank-Soil
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100

Sample ID: **Q2022004573**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank Spike-Soil
ESA-P-ORG(3,8)			
>C10-C16	%		109
>C10-C14	%		103

Sample ID: **Q2022004574**

Sample Name

Parameter	***Units***	***PQL***	Phenols Blank - Soil
ESA-P-ORG17			
Phenol	mg/kg	0.2	<0.20
2-Chlorophenol	mg/kg	0.1	<0.10
2-Methylphenol	mg/kg	0.2	<0.20
3/4-Methylephenol	mg/kg	0.4	<0.40

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2-Nitrophenol	mg/kg	0.2	<0.20
2,4-Dimethylphenol	mg/kg	0.2	<0.20
2,4-Dichlorophenol	mg/kg	0.05	<0.050
2,6-Dichlorophenol	mg/kg	0.05	<0.050
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050
2,4-Dinitrophenol	mg/kg	4	<4.0
4-Nitrophenol	mg/kg	4	<4.0
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0
Pentachlorophenol	mg/kg	0.2	<0.20
Dinoseb	mg/kg	5	<5.0
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0

Sample ID: **Q2022004575**

Sample Name

Parameter	***Units***	***PQL***	Phenols BlankSp-Soil
ESA-P-ORG17			
2-Chlorophenol	%		73
2-Methylphenol	%		72
3/4-Methylephenol	%		97
2,6-Dichlorophenol	%		65
Dinoseb	%		131
Phenol-d6 (Surr.)	%		81
2-Chlorophenol-d4 (Surr.)	%		79

Sample ID: **Q2022004586**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30

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Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

Sample ID: **Q2022004587**

Sample Name

Parameter	*Units*	*PQL*	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		96
Cadmium	%		98
Chromium	%		98
Copper	%		97
Lead	%		97
Mercury	%		85
Nickel	%		99
Zinc	%		101

Sample ID: **S202201956001**

Sample Name **TP10_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		134
Benzene	%		125
Trichloroethene	%		116
Toluene	%		101
Chlorobenzene	%		110
Toluene-d8 (Surr.)	%		86
1,2-Dichloroethane-d4 (Surr.)	%		122
4-Bromofluorobenzene (Surr.)	%		92
Trifluorotoluene (Surr.)	%		99

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Sample ID:	**S202201956002**
Sample Name	**TP10_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene	%		113
Anthracene	%		98
Fluoranthene	%		95
Naphthalene	%		92
Phenanthrene	%		96
Pyrene	%		83
p-Terphenyl-d14 (Surr.)	%		111
aldrin	%		81
endrin	%		90
hexachlorobenzene	%		120
TCMX (Surr.)	%		93
chlorpyrifos	%		125
diazinon	%		83
Aroclor 1016	%		71
2-fluorobiphenyl (Surr.)	%		85

Sample ID:	**S202201956003**
Sample Name	**TP10_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16	%		114
>C10-C14	%		110

Sample ID:	**S202201956004**
Sample Name	**TP10_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG17			
2-Chlorophenol	%		75
2-Methylphenol	%		72
3/4-Methylephenol	%		96
2,6-Dichlorophenol	%		65

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Dinoseb	%		128
Phenol-d6 (Surr.)	%		81
2-Chlorophenol-d4 (Surr.)	%		83

Sample ID:	**S202201956005**
Sample Name	**TP10_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		105
Cadmium	%		103
Chromium	%		95
Copper	%		84
Lead	%		89
Mercury	%		99
Nickel	%		101
Zinc	%		104

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A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2202945

Date Received: 09.06.2022
Date Analysed: 10.06.2022
Report Date: 10.06.2022
Client: ADE Consulting Group
Job Location: DSI PARRAMATTA
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:



Kim Foley
Approved asbestos identifier

Results Authorised By:



Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
TP10_0.0-0.1	2022019560	Soil	66 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP10_0.5	2022019561	Soil	41 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP10_1.0	2022019562	Soil	46 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP10_1.5	2022019563	Soil	60 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP11_0.0-0.1	2022019564	Soil	50 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP11_0.5	2022019565	Soil	44 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP11_1.0	2022019566	Soil	40 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP11_1.5	2022019567	Soil	57 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

★101

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI PARRAMATTA
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Monique Hitchens
TURNAROUND:	24h: XX 48h: 72h: ☐ 5 WORKING DAYS:
SAMPLING DATE:	9/06/2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hitchens@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: syed.shah@ade.group; matthew.toole@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587				
RECEIVED BY: KT	SIGNATURE:				
SAMPLES: 9	CHILLED: X	PRESERVED: X	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: X ☐	
MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ✓				
DATE: 9.6.22	TIME: 1130	TEMPERATURE UPON RECEIPT: N/A °C			
LIMS LOT NO. 220945	LIMS/EXCEL SIGNATURE:	COMMENTS: NoChilling			

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																			NOTES
						Chem Lab													Asbestos						Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use) 2022019	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	TCLP PREP	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould		☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
S66	TP10_0.0-0.1	SOIL	9/06/2022	B&G	1	X	X	X	X	X	X	X	X	X	X					X				LAB PLEASE *EMAIL COC RECEIPT: ☐
S61	TP10_0.5				2	X	X	X	X	X	X	X	X	X						X				Sample Comments
S62	TP10_1.0				3	X	X	X	X	X	X	X	X	X	X					X				PLEASE STORE PHFOX SAMPLES IN THE FREEZER FOR POTENTIAL CRS ANALYSIS LATER!
S63	TP10_1.5				4	X	X	X	X	X	X	X	X	X						X				
S64	TP11_0.0-0.1				5	X	X	X	X	X	X	X	X	X	X					X				
S65	TP11_0.5				6	X	X	X	X	X	X	X	X	X						X				
S66	TP11_1.0				7	X	X	X	X	X	X	X	X	X	X					X				
S67	TP11_1.5				8	X	X	X	X	X	X	X	X	X						X				
S68	BR1				9		X	X	X	X	X	X	X											

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Due: 10.06.22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact:	Syed Shah / Monique Hitchens
Project name:	21.1587
Number of samples:	9
COC number:	21.1587
Turn around time:	1 Day
Date:	09.06.2022
Time received:	11:30 AM
SLS Reference:	2202945
Estimated Report Delivery Date:	10.06.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☐	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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Silverwater 2128
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17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP Prep	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	Vtrh (C6-C10)	TRH (C10-C40)	Standard Phenols	VOC / SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOil 500 g NEPM	AAM
2022019560	TP10_0.0-0.1	X	X	X	X	X	X	X	X	X	X					X		
2022019561	TP10_0.5	X	X	X	X	X	X	X	X	X						X		
2022019562	TP10_1.0	X	X	X	X	X	X	X	X	X	X					X		
2022019563	TP10_1.5	X	X	X	X	X	X	X	X	X						X		
2022019564	TP11_0.0-0.1	X	X	X	X	X	X	X	X	X	X					X		
2022019565	TP11_0.5	X	X	X	X	X	X	X	X	X						X		
2022019566	TP11_1.0	X	X	X	X	X	X	X	X	X	X					X		
2022019567	TP11_1.5	X	X	X	X	X	X	X	X	X						X		
2022019568	BR1		X	X	X	X	X	X	X									

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Syed Shah	**Date Reported:**	10/06/2022
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	9/06/2022
		Date of Analysis:	9/06/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022019576	2022019577
	Sample Name	TB	TS
Parameter	Units	PQL	
ESA-P-ORG08 & ORG10			
Benzene		1	<1 ug/L	75%
Toluene		1	<1 ug/L	110%
Ethylbenzene		1	<1 ug/L	116%
m,p Xylene		2	<2 ug/L	94%
o Xylene		1	<1 ug/L	113%
Fluorobenzene (Surr.)	%		127	137

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Sydney Laboratory Services

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Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Syed Shah	**Date Reported:**	10/06/2022
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	9/06/2022
		Date of Analysis:	9/06/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

	Sample ID:	D202201763901	D202201764801
	Sample Name	270522-TP1(0.4-0.5m)	BR
Parameter	**Units**	**PQL**	
ESA-P-ORG7 & ORG8			
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Fluorobenzene (Surr.)	%		92	97

	Sample ID:	Q2022004076
	Sample Name	
Parameter	**Units**	**PQL**	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

		Sample ID:	**Q2022004077**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		109
Toluene	%		106
Ethylbenzene	%		104
m.p Xylene	%		102
o Xylene	%		102
Fluorobenzene (Surr.)	%		100

		Sample ID:	**S202201763801**
		Sample Name	**270522-TP1(0.0-0.1m)**
Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
Benzene	%		95
Toluene	%		99
Ethylbenzene	%		100
m.p Xylene	%		98
o Xylene	%		99
Fluorobenzene (Surr.)	%		86

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

#101

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

PROJECT:	DSI Parramatta
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group
SAMPLERS:	6/7 Millennium Ct, Silverwater NSW 2128
TURNAROUND:	Monique Hitchens
SAMPLING DATE:	24h: XX 48h: 72h: 4 WORKING DAYS:
AFTER TEST STORAGE:	09.06.2022
REPORT FORMAT:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐
CONSULTANTS SIGNATURE:	HARD COPY: ☐ E-MAIL: X
PROJECT MANAGERS SIGNATURE:	CONSULTANT E-MAIL: monique.hitchens@ade.group
	PROJECT MANAGERS E-MAIL: syed.shah@ADE.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
RECEIVED BY: 19	SIGNATURE:
SAMPLES: 2 CHILLED: X PRESERVED: X	PRESERVATION METHOD: X CUSTODY SEAL INTACT: X
MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
DATE: 09-06-22 TIME: 11:30	TEMPERATURE UPON RECEIPT: °C
LIMS LOT NO. 2202947	LIMS/EXCEL SIGNATURE: COMMENTS:

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																							NOTES
						Chem Lab															Asbestos							Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____	
2202947 S76	TB	W	09.06.2022	G	1			X																LAB PLEASE *EMAIL COC RECEIPT: ☐	
S77	TS	W	09.06.2022	G	2			X																Sample Comments	

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

10-06-22

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Sydney Laboratory Services

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Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact:	Syed Shah / Monique Hitchens
Project name:	21.1587
Number of samples:	2
COC number:	21.1587
Turn around time:	24 Hours
Date:	09.06.2022
Time received:	11:30 AM
SLS Reference:	2202947
Estimated Report Delivery Date:	10.06.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☐	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP Prep	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	Vtrh (C6-C10)	TRH (C10-C40)	Standard Phenols	VOC / SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOil 500 g NEPM	AAM
2022019576	TB			X														
2022019577	TS			X														

ADE Consulting Group Pty Ltd
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NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Syed Shah**

Report **879610-S**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Apr 12, 2022

Client Sample ID			**SR1**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ap0026559**
Date Sampled			**Apr 12, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	130
TRH C29-C36	50	mg/kg	190
TRH C10-C36 (Total)	50	mg/kg	320
Naphthalene[N02]	0.5	mg/kg	11
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	260
TRH >C34-C40	100	mg/kg	220
TRH >C10-C40 (total)*	100	mg/kg	480
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	131
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	1.0
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.3
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.6
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	0.7
Benzo(a)pyrene	0.5	mg/kg	0.8
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	0.8
Chrysene	0.5	mg/kg	0.7
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

Client Sample ID			SR1
Sample Matrix			Soil
Eurofins Sample No.			S22-Ap0026559
Date Sampled			Apr 12, 2022
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	1.0
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	1.4
Total PAH*	0.5	mg/kg	5.9
2-Fluorobiphenyl (surr.)	1	%	100
p-Terphenyl-d14 (surr.)	1	%	72
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	51
Tetrachloro-m-xylene (surr.)	1	%	91
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

Client Sample ID			SR1
Sample Matrix			Soil
Eurofins Sample No.			S22-Ap0026559
Date Sampled			Apr 12, 2022
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	82
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	51
Tetrachloro-m-xylene (surr.)	1	%	91
Heavy Metals			
Arsenic	2	mg/kg	2.6
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	84
Copper	5	mg/kg	7.3
Lead	5	mg/kg	8.6
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	30
% Moisture	1	%	9.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Apr 13, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Apr 13, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Apr 13, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Apr 12, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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NSW 2128

Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 879610
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Apr 12, 2022 4:35 PM
Due: Apr 21, 2022
Priority: 5 Day
Contact Name: Syed Shah

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Benzo(a)pyrene	USA Leaching Procedure	Eurofins Suite B15	Moisture Set	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254										
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794										
Mayfield Laboratory - NATA # 1261 Site # 25079										
Perth Laboratory - NATA # 2377 Site # 2370										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	SR1	Apr 12, 2022		Soil	S22-Ap0026559			X	X	X
2	SR1	Apr 12, 2022		US Leachate	S22-Ap0038711	X	X			
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	90			70-130	Pass	
TRH C10-C14	%	101			70-130	Pass	
Naphthalene	%	104			70-130	Pass	
TRH C6-C10	%	92			70-130	Pass	
TRH >C10-C16	%	97			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	86			70-130	Pass	
Toluene	%	83			70-130	Pass	
Ethylbenzene	%	92			70-130	Pass	
m&p-Xylenes	%	102			70-130	Pass	
o-Xylene	%	102			70-130	Pass	
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	99			70-130	Pass	
Acenaphthylene	%	94			70-130	Pass	
Anthracene	%	107			70-130	Pass	
Benz(a)anthracene	%	101			70-130	Pass	
Benzo(a)pyrene	%	102			70-130	Pass	
Benzo(b&j)fluoranthene	%	108			70-130	Pass	
Benzo(g.h.i)perylene	%	87			70-130	Pass	
Benzo(k)fluoranthene	%	125			70-130	Pass	
Chrysene	%	108			70-130	Pass	
Dibenz(a.h)anthracene	%	89			70-130	Pass	
Fluoranthene	%	109			70-130	Pass	
Fluorene	%	114			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	89			70-130	Pass	
Naphthalene	%	86			70-130	Pass	
Phenanthrene	%	105			70-130	Pass	
Pyrene	%	109			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	93			70-130	Pass	
4.4'-DDD	%	82			70-130	Pass	
4.4'-DDE	%	97			70-130	Pass	
4.4'-DDT	%	83			70-130	Pass	
a-HCH	%	85			70-130	Pass	
Aldrin	%	87			70-130	Pass	
b-HCH	%	89			70-130	Pass	
d-HCH	%	88			70-130	Pass	
Dieldrin	%	88			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	%	96			70-130	Pass	
Endosulfan II	%	83			70-130	Pass	
Endosulfan sulphate	%	75			70-130	Pass	
Endrin	%	102			70-130	Pass	
Endrin aldehyde	%	78			70-130	Pass	
Endrin ketone	%	73			70-130	Pass	
g-HCH (Lindane)	%	100			70-130	Pass	
Heptachlor	%	120			70-130	Pass	
Heptachlor epoxide	%	93			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	120			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	71			70-130	Pass	
Ethion	%	102			70-130	Pass	
Mevinphos	%	89			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	89			70-130	Pass	
Aroclor-1260	%	83			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	101			80-120	Pass	
Cadmium	%	97			80-120	Pass	
Chromium	%	102			80-120	Pass	
Copper	%	107			80-120	Pass	
Lead	%	101			80-120	Pass	
Mercury	%	100			80-120	Pass	
Nickel	%	96			80-120	Pass	
Zinc	%	100			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S22-Ap0023462	NCP	%	90			70-130	Pass	
TRH C10-C14	S22-Ap0027431	NCP	%	97			70-130	Pass	
Naphthalene	S22-Ap0023462	NCP	%	107			70-130	Pass	
TRH C6-C10	S22-Ap0023462	NCP	%	88			70-130	Pass	
TRH >C10-C16	S22-Ap0027431	NCP	%	90			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S22-Ap0023462	NCP	%	95			70-130	Pass	
Toluene	S22-Ap0023462	NCP	%	81			70-130	Pass	
Ethylbenzene	S22-Ap0023462	NCP	%	88			70-130	Pass	
m&p-Xylenes	S22-Ap0023462	NCP	%	95			70-130	Pass	
o-Xylene	S22-Ap0023462	NCP	%	96			70-130	Pass	
Xylenes - Total*	S22-Ap0023462	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S22-Ap0023502	NCP	%	83			70-130	Pass	
Acenaphthylene	S22-Ap0023502	NCP	%	72			70-130	Pass	
Anthracene	S22-Ap0023502	NCP	%	91			70-130	Pass	
Benz(a)anthracene	S22-Ap0023502	NCP	%	92			70-130	Pass	
Benzo(a)pyrene	S22-Ap0023502	NCP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	S22-Ap0023502	NCP	%	74			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(g.h.i)perylene	S22-Ap0023502	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S22-Ap0023502	NCP	%	115			70-130	Pass	
Chrysene	S22-Ap0023502	NCP	%	100			70-130	Pass	
Dibenz(a.h)anthracene	S22-Ap0023502	NCP	%	90			70-130	Pass	
Fluoranthene	S22-Ap0023502	NCP	%	96			70-130	Pass	
Fluorene	S22-Ap0023502	NCP	%	91			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ap0023502	NCP	%	89			70-130	Pass	
Naphthalene	S22-Ap0023502	NCP	%	74			70-130	Pass	
Phenanthrene	S22-Ap0023502	NCP	%	86			70-130	Pass	
Pyrene	S22-Ap0023502	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S22-Ap0030843	NCP	%	100			70-130	Pass	
4.4'-DDD	S22-Ap0030843	NCP	%	87			70-130	Pass	
4.4'-DDE	S22-Ap0030843	NCP	%	98			70-130	Pass	
4.4'-DDT	S22-Ap0030843	NCP	%	88			70-130	Pass	
a-HCH	S22-Ap0030843	NCP	%	89			70-130	Pass	
Aldrin	S22-Ap0030843	NCP	%	93			70-130	Pass	
b-HCH	S22-Ap0030843	NCP	%	91			70-130	Pass	
d-HCH	S22-Ap0030843	NCP	%	90			70-130	Pass	
Dieldrin	S22-Ap0030843	NCP	%	92			70-130	Pass	
Endosulfan I	S22-Ap0030843	NCP	%	97			70-130	Pass	
Endosulfan II	S22-Ap0030843	NCP	%	91			70-130	Pass	
Endosulfan sulphate	S22-Ap0030843	NCP	%	76			70-130	Pass	
Endrin	S22-Ap0030843	NCP	%	120			70-130	Pass	
Endrin aldehyde	S22-Ap0030843	NCP	%	72			70-130	Pass	
Endrin ketone	S22-Ap0030843	NCP	%	88			70-130	Pass	
g-HCH (Lindane)	S22-Ap0030843	NCP	%	104			70-130	Pass	
Heptachlor	S22-Ap0030843	NCP	%	119			70-130	Pass	
Heptachlor epoxide	S22-Ap0030843	NCP	%	102			70-130	Pass	
Hexachlorobenzene	S22-Ap0030843	NCP	%	104			70-130	Pass	
Methoxychlor	S22-Ap0030843	NCP	%	126			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S22-Ap0030843	NCP	%	82			70-130	Pass	
Ethion	S22-Ap0039770	NCP	%	115			70-130	Pass	
Mevinphos	S22-Ap0030843	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S22-Ap0030843	NCP	%	94			70-130	Pass	
Aroclor-1260	S22-Ap0030843	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S22-Ap0026550	NCP	%	98			75-125	Pass	
Cadmium	S22-Ap0026550	NCP	%	96			75-125	Pass	
Chromium	S22-Ap0026550	NCP	%	97			75-125	Pass	
Copper	S22-Ap0026550	NCP	%	87			75-125	Pass	
Lead	S22-Ap0026550	NCP	%	109			75-125	Pass	
Mercury	S22-Ap0026550	NCP	%	118			75-125	Pass	
Nickel	S22-Ap0026550	NCP	%	96			75-125	Pass	
Zinc	S22-Ap0017073	NCP	%	95			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S22-Ap0023460	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S22-Ap0032557	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S22-Ap0032557	NCP	mg/kg	110	93	14	30%	Pass	
TRH C29-C36	S22-Ap0032557	NCP	mg/kg	86	62	32	30%	Fail	Q15
Naphthalene	S22-Ap0023460	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S22-Ap0023460	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S22-Ap0032557	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S22-Ap0032557	NCP	mg/kg	170	130	22	30%	Pass	
TRH >C34-C40	S22-Ap0032557	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S22-Ap0023460	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S22-Ap0023460	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S22-Ap0023460	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S22-Ap0023460	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S22-Ap0023460	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S22-Ap0023460	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S22-Ap0021267	NCP	mg/kg	< 0.5	1.7	130	30%	Fail	Q15
Benz(a)anthracene	S22-Ap0021267	NCP	mg/kg	1.9	8.7	130	30%	Fail	Q02
Benzo(a)pyrene	S22-Ap0021267	NCP	mg/kg	2.1	7.5	110	30%	Fail	Q15
Benzo(b&j)fluoranthene	S22-Ap0021267	NCP	mg/kg	1.5	5.5	120	30%	Fail	Q02
Benzo(g.h.i)perylene	S22-Ap0021267	NCP	mg/kg	1.1	3.1	96	30%	Fail	Q15
Benzo(k)fluoranthene	S22-Ap0021267	NCP	mg/kg	2.5	8.3	110	30%	Fail	Q02
Chrysene	S22-Ap0021267	NCP	mg/kg	2.5	8.9	110	30%	Fail	Q02
Dibenz(a.h)anthracene	S22-Ap0021267	NCP	mg/kg	< 0.5	1.2	110	30%	Fail	Q15
Fluoranthene	S22-Ap0021267	NCP	mg/kg	4.0	18	130	30%	Fail	Q02
Fluorene	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ap0021267	NCP	mg/kg	1.1	4.2	120	30%	Fail	Q15
Naphthalene	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S22-Ap0021267	NCP	mg/kg	1.2	6.2	140	30%	Fail	Q02
Pyrene	S22-Ap0021267	NCP	mg/kg	4.0	18	130	30%	Fail	Q02
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
4.4'-DDD	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDE	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDT	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
a-HCH	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aldrin	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
b-HCH	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
d-HCH	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dieldrin	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan I	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan II	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan sulphate	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin aldehyde	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin ketone	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
g-HCH (Lindane)	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Heptachlor	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Heptachlor epoxide	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobenzene	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methoxychlor	S22-Ap0021267	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toxaphene	S22-Ap0021267	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S22-Ap0015863	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S22-Ap0015863	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S22-Ap0015863	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S22-Ap0015863	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1221	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1232	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1242	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1248	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1254	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Aroclor-1260	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Total PCB*	S22-Ap0021267	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S22-Ap0015868	NCP	mg/kg	17	11	39	30%	Fail	Q15
Cadmium	S22-Ap0015868	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S22-Ap0015868	NCP	mg/kg	38	28	31	30%	Fail	Q15
Copper	S22-Ap0015868	NCP	mg/kg	23	23	2.0	30%	Pass	
Lead	S22-Ap0015868	NCP	mg/kg	31	27	17	30%	Pass	
Mercury	S22-Ap0015868	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S22-Ap0015868	NCP	mg/kg	18	16	10	30%	Pass	
Zinc	S22-Ap0015868	NCP	mg/kg	56	50	12	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S22-Ap0026559	CP	%	9.1	10	14	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Charl Du Preez	Senior Analyst (NSW)
Gabriele Cordero	Senior Analyst (NSW)
Roopesh Rangarajan	Senior Analyst (NSW)
Raymond Siu	Senior Analyst (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Syed Shah**

Report **879610-L**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Apr 12, 2022

Client Sample ID			**SR1**
Sample Matrix			**US Leachate**
Eurofins Sample No.			**S22-Ap0038711**
Date Sampled			**Apr 12, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene	0.001	mg/L	< 0.001
USA Leaching Procedure			
Leachate Fluid[C01]		comment	1.0
pH (initial)	0.1	pH Units	8.7
pH (off)	0.1	pH Units	7.0
pH (USA HCl addition)	0.1	pH Units	2.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Polycyclic Aromatic Hydrocarbons	Sydney	Apr 20, 2022	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
USA Leaching Procedure	Sydney	Apr 20, 2022	14 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			

eurofins | Environment Testing

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Company Name: ADE Consulting Group Pty Ltd
Address: Unit 6/7 Millennium Court
Silverwater
NSW 2128

Project Name: DSI PARRAMATTA
Project ID: 21.1587

Order No.:
Report #: 879610
Phone: 02 9400 7711
Fax: 02 9401 0097

Received: Apr 12, 2022 4:35 PM
Due: Apr 21, 2022
Priority: 5 Day
Contact Name: Syed Shah

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Benzo(a)pyrene	USA Leaching Procedure	Eurofins Suite B15	Moisture Set	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254										
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794										
Mayfield Laboratory - NATA # 1261 Site # 25079										
Perth Laboratory - NATA # 2377 Site # 2370										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	SR1	Apr 12, 2022		Soil	S22-Ap0026559			X	X	X
2	SR1	Apr 12, 2022		US Leachate	S22-Ap0038711	X	X			
Test Counts						1	1	1	1	1

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Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other

Authorised by:

Asim Khan	Analytical Services Manager
Roopesh Rangarajan	Senior Analyst (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (EUROFINS)

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Sample Receipt Advice

Company name:	ADE Consulting Group Pty Ltd
Contact name:	Syed Shah
Project name:	DSI PARRAMATTA
Project ID:	21.1587
Turnaround time:	5 Day
Date/Time received	Apr 12, 2022 4:35 PM
Eurofins reference	879610

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 8.2 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Asim Khan on phone : or by email: AsimKhan@eurofins.com

Results will be delivered electronically via email to Syed Shah - syed.shah@ade.group.

Note: A copy of these results will also be delivered to the general ADE Consulting Group Pty Ltd email address.

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Syed Shah	**Date Reported:**	19/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:** **Date of Analysis:**	12/04/2022 12/04/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2022011268	2022011269	2022011270	2022011271	2022011272
	Sample Name	TP12_0.0-0.1	TP12_0.5	TP12_1.0	TP12_1.8	BR1
Parameter	Units	PQL				
ESA-MP-01,ICP-01						
Arsenic	mg/kg	5	<5.0	<5.0	12.1	5.3	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	12.9	11.7	24.8	9.1	24.7
Copper	mg/kg	5	9.2	32.1	7.3	9.4	34.0
Lead	mg/kg	10	10.5	94.7	15.4	<10.0	16.3
Mercury	mg/kg	0.2	<0.20	0.22	<0.20	<0.20	<0.20
Nickel	mg/kg	10	10.8	13.1	<10.0	<10.0	<10.0
Zinc	mg/kg	5	31.1	85.3	6.1	<5.0	43.2
ESA-P-12						
% Moisture Content	%		9.4	4.9	25.1	16.3	12.0
ESA-P-ORG(12 - 15)						
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	0.37	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	0.47	<0.30	<0.30	<0.30	0.34
Benzo[b]fluoranthene	mg/kg	0.3	0.54	<0.30	<0.30	<0.30	0.37
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	0.41	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	0.95	<0.30	<0.30	<0.30	0.56
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	1.05	<0.30	<0.30	<0.30	0.62
Sum of Positive PAHs	mg/kg	0.3	3.79	<0.30	<0.30	<0.30	1.89

Sydney Laboratory Services
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Silverwater 2128
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Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	0.57	<0.30	<0.30	<0.30	0.38
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.75	0.36	0.36	0.36	0.58
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.93	0.73	0.73	0.73	0.77
p-Terphenyl-d14 (Surr.)	%		83	67	78	70	83
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		87	75	84	76	93
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10

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Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		80	67	74	69	83
ESA-P-ORG17							
Phenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
2-Chlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	-
2-Methylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
3/4-Methylephenol	mg/kg	0.4	<0.40	<0.40	<0.40	<0.40	-
2-Nitrophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
2,4-Dimethylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
2,4-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	-
2,6-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	-
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	-
2,4-Dinitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	-
4-Nitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0	<2.0	<2.0	<2.0	-
Pentachlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	-
Dinoseb	mg/kg	5	<5.0	<5.0	<5.0	<5.0	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0	<5.0	<5.0	<5.0	-
Phenol-d6 (Surr.)	%		103	92	99	94	-
2-Chlorophenol-d4 (Surr.)	%		101	90	100	91	-

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ESA-P-ORG(3,8)							
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08							
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	-	<0.50	-	-
Sum of MAHs	mg/kg	1	<1.0	-	<1.0	-	-
vNaphthalene	mg/kg	0.5	<0.50	-	<0.50	-	-
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	-	<0.50	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	-
Methylene chloride	mg/kg	0.5	<0.50	-	<0.50	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	-
Bromochloromethane	mg/kg	0.5	<0.50	-	<0.50	-	-
Chloroform	mg/kg	0.5	<0.50	-	<0.50	-	-
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	-
Carbon tetrachloride	mg/kg	0.5	<0.50	-	<0.50	-	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	-

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Tetrachloroethene	mg/kg	0.5	<0.50	-	<0.50	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	-	<0.50	-	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	-
Trichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	-
Chlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	-	<0.50	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	-	<0.50	-	-
Toluene-d8 (Surr.)	%		112	110	100	109	103
1,2-Dichloroethane-d4 (Surr.)	%		99	98	91	95	88
4-Bromofluorobenzene (BFB) (Surr.)	%		99	99	92	97	90
Trifluorotoluene (Surr.)	%		118	117	106	115	111

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Quality Control Report

Contact:	Syed Shah	**Date Reported:**	19/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	24
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	12/04/2022
		Date of Analysis:	12/04/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

	Sample ID:	D202201126901	D202201132101
	Sample Name	TP12_0.5	BWN_WAC7_TP6

Parameter	Units	PQL		
ESA-P-ORG7 & ORG8				
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Styrene			Pass	Pass
vNaphthalene			Pass	Pass
C6-C9			Pass	Pass
C6-C10			Pass	Pass
Vinyl Chloride			Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass
Methylene chloride			Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass
Bromochloromethane			Pass	Pass
Chloroform			Pass	Pass
1,1,1-Trichloroethane			Pass	Pass
1,2-Dichloroethane			Pass	Pass
Carbon tetrachloride			Pass	Pass
1,1,2-Trichloroethane			Pass	Pass
Tetrachloroethene			Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass
1,2-Dichlorobenzene			Pass	Pass
1,4-Dichlorobenzene			Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass
Hexachlorobutadiene			Pass	Pass
1,1-Dichloroethene			Pass	Pass

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Trichloroethene			Pass	Pass
Chlorobenzene			Pass	Pass
Toluene-d8	%		96	130
1,2-Dichloroethane-d4	%		88	119
4-Bromofluorobenzene (BFB)	%		84	115
Trifluorotoluene (Surr.)	%		101	139
		Sample ID:	**D202201126902**	**D202201132102**
		Sample Name	**TP12_0.5**	**BWN_WAC7_TP6**
Parameter	***Units***	***PQL***		
ESA-P-ORG(12 - 15)				
Acenaphthene			Pass	Pass
Acenaphthylene			Pass	Pass
Anthracene			Pass	Pass
Benzo[a]anthracene			Pass	Pass
Benzo[a]pyrene			Pass	Pass
Benzo[b]fluoranthene			Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass
Benzo[k]fluoranthene			Pass	Pass
Chrysene			Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass
Fluoranthene			Pass	Pass
Fluorene			Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass
Naphthalene			Pass	Pass
Phenanthrene			Pass	Pass
Pyrene			Pass	Pass
p-Terphenyl-d14 (Surr.)	%		85	79
aldrin			Pass	Pass
a-BHC			Pass	Pass
b-BHC			Pass	Pass
d-BHC			Pass	Pass
g-BHC (lindane)			Pass	Pass
cis-chlordane			Pass	Pass

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trans-chlordane			Pass	Pass
4,4'-DDD			Pass	Pass
4,4'-DDE			Pass	Pass
4,4'-DDT			Pass	Pass
dieldrin			Pass	Pass
endosulfan I			Pass	Pass
endosulfan II			Pass	Pass
endosulfan sulfate			Pass	Pass
endrin			Pass	Pass
endrin aldehyde			Pass	Pass
endrin ketone			Pass	Pass
heptachlor			Pass	Pass
heptachlor epoxide			Pass	Pass
hexachlorobenzene			Pass	Pass
methoxychlor			Pass	Pass
TCMX (Surr.)	%		85	88
chlorpyrifos			Pass	Pass
chlorpyrifos methyl			Pass	Pass
diazinon			Pass	Pass
fenchlorphos			Pass	Pass
methyl parathion			Pass	Pass
prophos			Pass	Pass
tributylphosphorotrithioite			Pass	Pass
Aroclor 1016			Pass	Pass
Aroclor 1221			Pass	Pass
Aroclor 1232			Pass	Pass
Aroclor 1242			Pass	Pass
Aroclor 1248			Pass	Pass
Aroclor 1254			Pass	Pass
Aroclor 1260			Pass	Pass
2-fluorobiphenyl (Surr.)	%		78	81

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		Sample ID:	D202201126903	D202201132103
		Sample Name	TP12_0.5	BWN_WAC7_TP6
Parameter	*Units*	*PQL*		
ESA-P-ORG(3,8)				
>C10-C16			Pass	Pass
>C16-C34			Pass	Pass
>C34-C40			Pass	Pass
>C10-C14			Pass	Pass
>C15-C28			Pass	Pass
>C29-C36			Pass	Pass

		Sample ID:	D202201126904
		Sample Name	TP12_0.5
Parameter	*Units*	*PQL*	
ESA-P-ORG17			
Phenol			Pass
2-Chlorophenol			Pass
2-Methylphenol			Pass
3/4-Methylephenol			Pass
2-Nitrophenol			Pass
2,4-Dimethylphenol			Pass
2,4-Dichlorophenol			Pass
2,6-Dichlorophenol			Pass
3-Methyl,4-Chlorophenol			Pass
2,4,6-Trichlorophenol			Pass
2,4,5-Trichlorophenol			Pass
2,4-Dinitrophenol			Pass
4-Nitrophenol			Pass
2,3,5,6-Tetrachlorophenol			Pass
2,3,4,5-Tetrachlorophenol			Pass
2,3,4,6-Tetrachlorophenol			Pass
2-Methyl-4,6-dinitrophenol			Pass
Pentachlorophenol			Pass

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Dinoseb			Pass
2-Cyclohexyl-4,6-dinitrophenol			Pass
Phenol-d6	%		105
2-Chlorophenol-d4	%		103

		Sample ID:	**D202201126905**	**D202201132104**
		Sample Name	**TP12_0.5**	**BWN_WAC7_TP6**
Parameter	***Units***	***PQL***		
ESA-MP-01,ICP-01				
Arsenic			Pass	Pass
Cadmium			Pass	Pass
Chromium			Pass	Pass
Copper			Pass	Pass
Lead			Pass	Pass
Mercury			Pass	Pass
Nickel			Pass	Pass
Zinc			Pass	Pass

		Sample ID:	**Q2022002719**
		Sample Name	
Parameter	***Units***	***PQL***	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
C6-C9	mg/kg	35	<35
C6-C10	mg/kg	35	<35
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50

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Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

Sample ID: **Q2022002720**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		130
Benzene	%		110
Trichloroethene	%		97
Toluene	%		113
Chlorobenzene	%		115
Toluene-d8 (Surr.)	%		105
1,2-Dichloroethane-d4 (Surr.)	%		98
4-Bromofluorobenzene (BFB) (Surr.)	%		96
Trifluorotoluene (Surr.)	%		113

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Sample ID:	**Q2022002721**
Sample Name	

Parameter	***Units***	***PQL***	PCB Blank - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30
aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20

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endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10
prophos	mg/kg	0.1	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50
Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50

Sample ID: **Q2022002722**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	%		81
Anthracene	%		117
Fluoranthene	%		72
Naphthalene	%		71
Phenanthrene	%		77
Pyrene	%		82
p-Terphenyl-d14 (Surr.)	%		95

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aldrin	%		84
endrin	%		75
hexachlorobenzene	%		77
TCMX (Surr.)	%		104
chlorpyrifos	%		74
diazinon	%		80
2-fluorobiphenyl (Surr.)	%		91
Aroclor 1016	%		85

Sample ID: **Q2022002723**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank-Soil
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100

Sample ID: **Q2022002724**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank Spike-Soil
ESA-P-ORG(3,8)			
>C10-C16	%		120
>C10-C14	%		117

Sample ID: **Q2022002725**

Sample Name

Parameter	***Units***	***PQL***	Phenols Blank - Soil
ESA-P-ORG17			
Phenol	mg/kg	0.2	<0.20
2-Chlorophenol	mg/kg	0.1	<0.10
2-Methylphenol	mg/kg	0.2	<0.20
3/4-Methylephenol	mg/kg	0.4	<0.40

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2-Nitrophenol	mg/kg	0.2	<0.20
2,4-Dimethylphenol	mg/kg	0.2	<0.20
2,4-Dichlorophenol	mg/kg	0.05	<0.050
2,6-Dichlorophenol	mg/kg	0.05	<0.050
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050
2,4-Dinitrophenol	mg/kg	4	<4.0
4-Nitrophenol	mg/kg	4	<4.0
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0
Pentachlorophenol	mg/kg	0.2	<0.20
Dinoseb	mg/kg	5	<5.0
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0

Sample ID: **Q2022002726**

Sample Name

Parameter	***Units***	***PQL***	Phenols BlankSp-Soil
ESA-P-ORG17			
2-Chlorophenol	%		76
2-Methylphenol	%		73
3/4-Methylephenol	%		95
2,6-Dichlorophenol	%		65
Dinoseb	%		61
Phenol-d6 (Surr.)	%		89
2-Chlorophenol-d4 (Surr.)	%		85

Sample ID: **Q2022002729**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30

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Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

Sample ID:	**Q2022002730**
Sample Name	

Parameter	*Units*	*PQL*	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		105
Cadmium	%		104
Chromium	%		107
Copper	%		105
Lead	%		112
Mercury	%		105
Nickel	%		109
Zinc	%		111

Sample ID:	**S202201126801**
Sample Name	**TP12_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		133
Benzene	%		99
Trichloroethene	%		83
Toluene	%		103
Chlorobenzene	%		105
Toluene-d8 (Surr.)	%		96
1,2-Dichloroethane-d4 (Surr.)	%		85
4-Bromofluorobenzene (Surr.)	%		86
Trifluorotoluene (Surr.)	%		100

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Sample ID:	**S202201126802**
Sample Name	**TP12_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene	%		73
Anthracene	%		106
Fluoranthene	%		63
Naphthalene	%		64
Phenanthrene	%		70
Pyrene	%		68
p-Terphenyl-d14 (Surr.)	%		94
aldrin	%		78
endrin	%		62
hexachlorobenzene	%		72
TCMX (Surr.)	%		99
chlorpyrifos	%		70
diazinon	%		74
Aroclor 1016	%		79
2-fluorobiphenyl (Surr.)	%		89

Sample ID:	**S202201126803**
Sample Name	**TP12_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16	%		93
>C10-C14	%		94

Sample ID:	**S202201126804**
Sample Name	**TP12_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG17			
2-Chlorophenol	%		109
2-Methylphenol	%		108
3/4-Methylephenol	%		129
2,6-Dichlorophenol	%		93

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Dinoseb	%		136
Phenol-d6 (Surr.)	%		110
2-Chlorophenol-d4 (Surr.)	%		106

Sample ID:	**S202201126805**
Sample Name	**TP12_0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		101
Cadmium	%		110
Chromium	%		103
Copper	%		109
Lead	%		105
Mercury	%		108
Nickel	%		104
Zinc	%		104

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Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2201677

Date Received: 12.04.2022
Date Analysed: 21.04.2022
Report Date: 21.04.2022
Client: ADE Consulting Group
Job Location: DSI PARRAMATTA
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:



Kim Foley
Approved asbestos identifier

Results Authorised By:



Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
TP12_0.0-0.1	2022011268	Soil	83 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP12_0.5	2022011269	Soil	48 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP12_1.0	2022011270	Soil	38 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP12_1.8	2022011271	Soil	59 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

ESA-F-02
Chain of Custody (Internal)

Date Printed: 12/04/2022

T86

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI PARRAMATTA
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group
	6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Monique Hitchens
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS:
SAMPLING DATE:	12/04/2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hitchens@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: syed.shah@ade.group; matthew.toole@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
RECEIVED BY: Tree	SIGNATURE: TT
SAMPLES: 5 CHILLED: ☑ PRESERVED: ☒	PRESERVATION METHOD: Freeze hold CUSTODY SEAL INTACT: ☒
MINIMAL HEADSPACE: ☑	WITHIN HOLDING TIME: ☑
DATE: 12.04.22 TIME: 1:00pm	TEMPERATURE UPON RECEIPT: 21 °C
LIMS LOT NO. 220167 7	LIMS/EXCEL SIGNATURE:
	COMMENTS:

2022011...

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab												ANALYSES REQUIRED: Asbestos						ANALYSES REQUIRED: Mould
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	Mould
268	TP12_0.0-0.1	SOIL	12/04/2022	B&G	1		X	X	X	X	X	X	X	X	X					X				
269	TP12_0.5				2		X	X	X	X	X	X	X	X						X				
270	TP12_1.0				3		X	X	X	X	X	X	X	X	X					X				
271	TP12_1.8				4		X	X	X	X	X	X	X	X						X				
272	BR1				5		X	X	X	X	X	X	X											

NOTES

POTENTIAL HAZARDOUS CONTAMINANTS:

- ☑ ASBESTOS
- ☐ HYDROCARBONS
- ☐ LEAD/ARSENIC
- ☐ NO KNOWN CONTAMINATION
- ☐ OTHER:_____

LAB PLEASE *EMAIL COC RECEIPT: ☒

Sample Comments

PLEASE STORE PHFOX SAMPLES IN THE FREEZER FOR POTENTIAL CRS ANALYSIS LATER!

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Due: 21.04.22

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A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Syed Shah / Matthew Toole / Monique Hitchens
Project name: 21.1587
Number of samples: 5
COC number: 21.1587
Turn around time: 5 Working Days
Date: 12/04/2022
Time received: 1:00pm
SLS Reference: 2201677
Estimated Report Delivery Date: 21/04/2022
Please note that this week is Easter Long Weekend

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Trianah Tumbridge

Sydney Laboratory Services

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metals suite	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	Vtrh (C6-C10)	TRH (C10-C40)	Standard Phenols	VOC / SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022011268	TP12_0.0-0.1		X	X	X	X	X	X	X	X	X					X		
2022011269	TP12_0.5		X	X	X	X	X	X	X	X						X		
2022011270	TP12_1.0		X	X	X	X	X	X	X	X	X					X		
2022011271	TP12_1.8		X	X	X	X	X	X	X	X						X		
2022011272	BR1		X	X	X	X	X	X	X									

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Syed Shah	**Date Reported:**	19/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	13/04/2022
		Date of Analysis:	13/04/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022011299	2022011300
	Sample Name	TB	TS
Parameter	Units	PQL	
ESA-P-ORG08 & ORG10			
Benzene		1	<1 ug/L	87%
Toluene		1	<1 ug/L	106%
Ethylbenzene		1	<1 ug/L	110%
m,p Xylene		2	<2 ug/L	89%
o Xylene		1	<1 ug/L	105%
Fluorobenzene (Surr.)	%		103	95

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Silverwater 2128
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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Syed Shah	**Date Reported:**	19/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	13/04/2022
		Date of Analysis:	13/04/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

	Sample ID:	D202201134801	D202201136601
	Sample Name	2C.Cardew.Way-TP1	13.Docharty.St-TP1
Parameter	**Units**	**PQL**	
ESA-P-ORG7 & ORG8			
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Fluorobenzene (Surr.)	%		71	82

	Sample ID:	Q2022002739
	Sample Name	
Parameter	**Units**	**PQL**	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

	Sample ID:	Q2022002740
	Sample Name	

Parameter	Units	PQL	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		63
Toluene	%		82
Ethylbenzene	%		82
m.p Xylene	%		76
o Xylene	%		81
Fluorobenzene (Surr.)	%		71

	Sample ID:	S202201134701
	Sample Name	2C.Cardew.Way-SP1

Parameter	Units	PQL	
ESA-P-ORG-07 & 08			
Benzene	%		66
Toluene	%		85
Ethylbenzene	%		84
m.p Xylene	%		70
o Xylene	%		82
Fluorobenzene (Surr.)	%		73

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

T86

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Monique Hitchens
TURNAROUND:	24h: 48h: 72h: 4 WORKING DAYS: XX
SAMPLING DATE:	12.04.2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hitchens@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: syed.shah@ADE.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587		
RECEIVED BY: Tree	SIGNATURE: TT		
SAMPLES: 2	CHILLED: ✓	PRESERVED: X	PRESERVATION METHOD: X
MINIMAL HEADSPACE: ✓	WITHIN HOLDING TIME: ✓		CUSTODY SEAL INTACT: X
DATE: 12.04.22	TIME: 1:00 pm		TEMPERATURE UPON RECEIPT: X
LIMS LOT NO. 220168	LIMS/EXCEL SIGNATURE:		COMMENTS:

2022011...

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																						NOTES
						Chem Lab																Asbestos					Mould	
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
299	T	S	12.04.2022	G	1			X																LAB PLEASE *EMAIL COC RECEIPT: ☐
300	TS	S	12.04.2022	G	2			X																Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Due: 21.04.22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Syed Shah / Matthew Toole / Monique Hitchens
Project name: 21.1587
Number of samples: 2
COC number: 21.1587
Turn around time: 4 Working Days
Date: 12/04/2022
Time received: 1:00pm
SLS Reference: 2201683
Estimated Report Delivery Date: 20/04/2022
Please note that this week is Easter Long Weekend

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Trianah Tumbridge

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metals suite	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	Vtrh (C6-C10)	TRH (C10-C40)	Standard Phenols	VOC / SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022011299	TB			X														
2022011300	TS			X														

Sydney Laboratory Services
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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 293357

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Syed Shah
Address	Unit 6, 7 Millenium Court, Silverwater, NSW, 2128

Sample Details

Your Reference	**21.1587, Delta DSI Parramatta**
Number of Samples	1 Soil
Date samples received	13/04/2022
Date completed instructions received	13/04/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

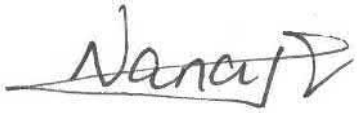
Date results requested by	20/04/2022
Date of Issue	20/04/2022

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Jenny He, Chemist

Authorised By



Nancy Zhang, Laboratory Manager

Chromium Suite		
Our Reference		293357-1
Your Reference	UNITS	TP12_1.8
Date Sampled		12/04/2022
Type of sample		Soil
Date prepared	-	20/04/2022
Date analysed	-	20/04/2022
pH $_{kcl}$	pH units	4.3
s-TAA pH 6.5	%w/w S	0.08
TAA pH 6.5	moles H^+ /t	47
Chromium Reducible Sulfur	%w/w	<0.005
a-Chromium Reducible Sulfur	moles H^+ /t	<3
S_{HCl}	%w/w S	0.038
S_{KCl}	%w/w S	0.039
S_{NAS}	%w/w S	<0.005
ANC_{BT}	% $CaCO_3$	[NT]
s-ANC_{BT}	%w/w S	[NT]
s-Net Acidity	%w/w S	0.078
a-Net Acidity	moles H^+ /t	49
Liming rate	kg $CaCO_3$ /t	4
a-Net Acidity without ANCE	moles H^+ /t	49
Liming rate without ANCE	kg $CaCO_3$ /t	3.7
s-Net Acidity without ANCE	%w/w S	0.078

Method ID	Methodology Summary
Inorg-068	Chromium Reducible Sulfur - Hydrogen Sulfide is quantified by iodometric titration after distillation to determine potential acidity. Net acidity including ANC has a safety factor of 1.5 applied. Neutralising value (NV) of 100% is assumed for liming rate. Based on National acid sulfate soils identification and laboratory methods manual June 2018. The recommendation that the SHCL concentration be multiplied by a factor of 2 to ensure retained acidity is not underestimated, has not been applied in the SHCL results reported.

QUALITY CONTROL: Chromium Suite						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/04/2022	[NT]	[NT]	[NT]	[NT]	20/04/2022	[NT]
Date analysed	-			20/04/2022	[NT]	[NT]	[NT]	[NT]	20/04/2022	[NT]
pH $_{kcl}$	pH units		Inorg-068	[NT]	[NT]	[NT]	[NT]	[NT]	96	[NT]
s-TAA pH 6.5	%w/w S	0.01	Inorg-068	<0.01	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
TAA pH 6.5	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	104	[NT]
Chromium Reducible Sulfur	%w/w	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	122	[NT]
a-Chromium Reducible Sulfur	moles H^+ /t	3	Inorg-068	<3	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{HCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{KCl}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
S_{NAS}	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
ANC_{BT}	% $CaCO_3$	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-ANC_{BT}	%w/w S	0.05	Inorg-068	<0.05	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-Net Acidity without ANCE	moles H^+ /t	5	Inorg-068	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Liming rate without ANCE	kg $CaCO_3$ /t	0.75	Inorg-068	<0.75	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-Net Acidity without ANCE	%w/w S	0.005	Inorg-068	<0.005	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (External: Envirolab Laboratory Services)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	Delta DSI Parramatta
PROJECT NUMBER - INVOICE NUMBER	21.1587
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Monique Hitchens
TURNAROUND:	24h: XX 48h: 72h: 4 WORKING DAYS:
SAMPLING DATE:	12.04.2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hitchens@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: syed.shah@ADE.group, matthew.toole@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):					
RECEIVED BY:				SIGNATURE:	
SAMPLES:	CHILLED: ☐	PRESERVED: ☐	PRESERVATION METHOD:		CUSTODY SEAL INTACT: ☐
MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐				
DATE:	TIME:		TEMPERATURE UPON RECEIPT: °C		
LIMS LOT NO.	LIMS/EXCEL SIGNATURE:		COMMENTS:		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab																			Asbestos						Mould
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Chromium Reduction Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	
1	TP12_1.8	S	12.04.2022	P	1	X																		

NOTES

POTENTIAL HAZARDOUS CONTAMINANTS:

☐ ASBESTOS ☐ HYDROCARBONS
☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION
☐ OTHER:_____

LAB PLEASE *EMAIL COC RECEIPT: ☐

Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

ENVIROLAB Environmental Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 293357
Date Received: 13/4/22
Time Received: 15 38
Received by:
Temp: Cool/Ambient 18 4°C
Cooling: Ice/Icepack
Security: Intact/Broken/None

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Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Syed Shah

Sample Login Details

Your reference	21.1587, Delta DSI Parramatta
Envirolab Reference	293357
Date Sample Received	13/04/2022
Date Instructions Received	13/04/2022
Date Results Expected to be Reported	20/04/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Soil
Turnaround Time Requested	1 day
Temperature on Receipt (°C)	4
Cooling Method	None
Sampling Date Provided	YES

Comments

Quickest TAT -20/04

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Chromium Suite
TP12_1.8	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	18/03/2022
Customer:	ADE Consulting Group	**No. of Samples:**	7
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	14/03/2022
		Date of Analysis:	14/03/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2022007385	2022007386	2022007387	2022007388	2022007389	2022007390	2022007391
	Sample Name	TP18-0.2	TP18-0.8	TP19-0.2	TP19-0.8	TP20-0.2	TP20-0.8	TP18-BR
Parameter	Units	PQL						
ESA-MP-01,ICP-01								
Arsenic	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	24.5	27.0	22.6	12.6	28.0	13.2	35.1
Copper	mg/kg	5	84.8	102.2	93.5	48.7	178.1	47.0	117.1
Lead	mg/kg	10	40.9	36.3	64.3	74.7	1880.8	309.9	43.0
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	1.74	2.12	<0.20
Nickel	mg/kg	10	136.4	115.4	103.0	41.8	39.4	22.7	146.3
Zinc	mg/kg	5	73.3	55.2	76.0	98.0	1624.3	173.9	71.8
ESA-P-12								
% Moisture Content	%		12.2	13.6	9.9	14.9	11.9	12.4	14.7
ESA-P-ORG(12 - 15)								
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.32	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.34	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.87	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.87	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.81	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.16	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	0.86	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.42	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	3.01	0.34	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.05	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	1.23	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	3.19	0.38	<0.30
Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	18.13	0.72	<0.30

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Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	2.45	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	2.60	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	2.75	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		106	112	99	96	125	88	80
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	2.03	0.26	<0.10
TCMX (Surr.)	%		125	134	117	115	138	106	99
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		112	117	103	102	130	94	85
***ESA-P-19**									
pH	-		10.6	10.7	10.1	9.4	8.7	8.5	-
pHox	-		10.8	10.8	9.4	8.9	7.0	6.9	-
Reaction Rate	-		4	4	4	4	4	4	-
ESA-P-ORG17									
Phenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2-Chlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2-Methylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
3/4-Methylephenol	mg/kg	0.4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	-
2-Nitrophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4-Dimethylphenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,6-Dichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
2,4-Dinitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-
4-Nitrophenol	mg/kg	4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
Pentachlorophenol	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
Dinoseb	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-

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Phenol-d6 (Surr.)	%		103	107	92	94	129	86	-
2-Chlorophenol-d4 (Surr.)	%		95	98	83	87	137	80	-
ESA-P-ORG(3,8)									
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	104	102	<100	101
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	104	102	<50	101
ESA-P-ORG07 & ORG08									
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Sum of MAHs	mg/kg	1	<1.0	-	<1.0	-	<1.0	-	-
vNaphthalene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Methylene chloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Bromochloromethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Chloroform	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-

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Carbon tetrachloride	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Tetrachloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Trichloroethene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Chlorobenzene	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	-	<0.50	-	<0.50	-	-
Toluene-d8 (Surr.)	%		74	81	80	73	90	84	74
1,2-Dichloroethane-d4 (Surr.)	%		84	92	94	84	106	97	85
4-Bromofluorobenzene (BFB) (Surr.)	%		85	91	94	83	104	96	85
Trifluorotoluene (Surr.)	%		72	79	78	70	89	82	71

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	18/03/2022
Customer:	ADE Consulting Group	**No. of Samples:**	20
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	14/03/2022
		Date of Analysis:	14/03/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

Sample ID:	D202200738601
Sample Name	TP18-0.8

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Styrene			Pass
vNaphthalene			Pass
C6-C9			Pass
C6-C10			Pass
Vinyl Chloride			Pass
trans-1,2-Dichloroethene			Pass
Methylene chloride			Pass
cis-1,2-Dichloroethene			Pass
Bromochloromethane			Pass
Chloroform			Pass
1,1,1-Trichloroethane			Pass
1,2-Dichloroethane			Pass
Carbon tetrachloride			Pass
1,1,2-Trichloroethane			Pass
Tetrachloroethene			Pass
1,1,1,2-Tetrachloroethane			Pass
1,1,2,2-Tetrachloroethane			Pass
1,2-Dichlorobenzene			Pass
1,4-Dichlorobenzene			Pass
1,2,4-Trichlorobenzene			Pass
Hexachlorobutadiene			Pass
1,1-Dichloroethene			Pass

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Trichloroethene			Pass
Chlorobenzene			Pass
Toluene-d8	%		88
1,2-Dichloroethane-d4	%		99
4-Bromofluorobenzene (BFB)	%		100
Trifluorotoluene (Surr.)	%		87

Sample ID:	**D202200738602**
Sample Name	**TP18-0.8**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene			Pass
Acenaphthylene			Pass
Anthracene			Pass
Benzo[a]anthracene			Pass
Benzo[a]pyrene			Pass
Benzo[b]fluoranthene			Pass
Benzo[g,h,i]perylene			Pass
Benzo[k]fluoranthene			Pass
Chrysene			Pass
Dibenzo[a,h]anthracene			Pass
Fluoranthene			Pass
Fluorene			Pass
Indeno(1,2,3-cd)pyrene			Pass
Naphthalene			Pass
Phenanthrene			Pass
Pyrene			Pass
p-Terphenyl-d14 (Surr.)	%		112
aldrin			Pass
a-BHC			Pass
b-BHC			Pass
d-BHC			Pass
g-BHC (lindane)			Pass
cis-chlordane			Pass

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trans-chlordane			Pass
4,4'-DDD			Pass
4,4'-DDE			Pass
4,4'-DDT			Pass
dieldrin			Pass
endosulfan I			Pass
endosulfan II			Pass
endosulfan sulfate			Pass
endrin			Pass
endrin aldehyde			Pass
endrin ketone			Pass
heptachlor			Pass
heptachlor epoxide			Pass
hexachlorobenzene			Pass
methoxychlor			Pass
TCMX (Surr.)	%		129
chlorpyrifos			Pass
chlorpyrifos methyl			Pass
diazinon			Pass
fenchlorphos			Pass
methyl parathion			Pass
prophos			Pass
tributylphosphorotrithioite			Pass
Aroclor 1016			Pass
Aroclor 1221			Pass
Aroclor 1232			Pass
Aroclor 1242			Pass
Aroclor 1248			Pass
Aroclor 1254			Pass
Aroclor 1260			Pass
2-fluorobiphenyl (Surr.)	%		117

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Sample ID:	**D202200738603**
Sample Name	**TP18-0.8**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16			Pass
>C16-C34			Pass
>C34-C40			Pass
>C10-C14			Pass
>C15-C28			Pass
>C29-C36			Pass

Sample ID:	**D202200738604**
Sample Name	**TP18-0.8**

Parameter	*Units*	*PQL*	
ESA-P-ORG17			
Phenol			Pass
2-Chlorophenol			Pass
2-Methylphenol			Pass
3/4-Methylephenol			Pass
2-Nitrophenol			Pass
2,4-Dimethylphenol			Pass
2,4-Dichlorophenol			Pass
2,6-Dichlorophenol			Pass
3-Methyl,4-Chlorophenol			Pass
2,4,6-Trichlorophenol			Pass
2,4,5-Trichlorophenol			Pass
2,4-Dinitrophenol			Pass
4-Nitrophenol			Pass
2,3,5,6-Tetrachlorophenol			Pass
2,3,4,5-Tetrachlorophenol			Pass
2,3,4,6-Tetrachlorophenol			Pass
2-Methyl-4,6-dinitrophenol			Pass
Pentachlorophenol			Pass

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Dinoseb			Pass
2-Cyclohexyl-4,6-dinitrophenol			Pass
Phenol-d6	%		108
2-Chlorophenol-d4	%		99

Sample ID:	**D202200738605**
Sample Name	**TP18-0.8**

Parameter	***Units***	***PQL***	
ESA-MP-01,ICP-01			
Arsenic			Pass
Cadmium			Pass
Chromium			Pass
Copper			Pass
Lead			Pass
Mercury			Pass
Nickel			Pass
Zinc			Pass

Sample ID:	**Q2022001866**
Sample Name	

Parameter	***Units***	***PQL***	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
C6-C9	mg/kg	35	<35
C6-C10	mg/kg	35	<35
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50

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Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

Sample ID: **Q2022001867**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		97
Benzene	%		105
Trichloroethene	%		78
Toluene	%		98
Chlorobenzene	%		99
Toluene-d8 (Surr.)	%		84
1,2-Dichloroethane-d4 (Surr.)	%		92
4-Bromofluorobenzene (BFB) (Surr.)	%		95
Trifluorotoluene (Surr.)	%		81

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Sample ID:	**Q2022001868**
Sample Name	

Parameter	***Units***	***PQL***	PCB Blank - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30
aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20

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endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10
prophos	mg/kg	0.1	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50
Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50

Sample ID: **Q2022001869**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	%		118
Anthracene	%		103
Fluoranthene	%		91
Naphthalene	%		101
Phenanthrene	%		99
Pyrene	%		98
p-Terphenyl-d14 (Surr.)	%		106

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aldrin	%		102
endrin	%		61
hexachlorobenzene	%		98
TCMX (Surr.)	%		125
chlorpyrifos	%		83
diazinon	%		89
2-fluorobiphenyl (Surr.)	%		110
Aroclor 1016	%		99

Sample ID: **Q2022001870**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank-Soil
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100

Sample ID: **Q2022001871**

Sample Name

Parameter	***Units***	***PQL***	TRH Blank Spike-Soil
ESA-P-ORG(3,8)			
>C10-C16	%		115
>C10-C14	%		111

Sample ID: **Q2022001872**

Sample Name

Parameter	***Units***	***PQL***	Phenols Blank - Soil
ESA-P-ORG17			
Phenol	mg/kg	0.2	<0.20
2-Chlorophenol	mg/kg	0.1	<0.10
2-Methylphenol	mg/kg	0.2	<0.20
3/4-Methylephenol	mg/kg	0.4	<0.40

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2-Nitrophenol	mg/kg	0.2	<0.20
2,4-Dimethylphenol	mg/kg	0.2	<0.20
2,4-Dichlorophenol	mg/kg	0.05	<0.050
2,6-Dichlorophenol	mg/kg	0.05	<0.050
3-Methyl,4-Chlorophenol	mg/kg	0.2	<0.20
2,4,6-Trichlorophenol	mg/kg	0.05	<0.050
2,4,5-Trichlorophenol	mg/kg	0.05	<0.050
2,4-Dinitrophenol	mg/kg	4	<4.0
4-Nitrophenol	mg/kg	4	<4.0
2,3,5,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,5-Tetrachlorophenol	mg/kg	0.1	<0.10
2,3,4,6-Tetrachlorophenol	mg/kg	0.1	<0.10
2-Methyl-4,6-dinitrophenol	mg/kg	2	<2.0
Pentachlorophenol	mg/kg	0.2	<0.20
Dinoseb	mg/kg	5	<5.0
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	5	<5.0

Sample ID: **Q2022001873**

Sample Name

Parameter	***Units***	***PQL***	Phenols BlankSp-Soil
ESA-P-ORG17			
2-Chlorophenol	%		134
2-Methylphenol	%		117
3/4-Methylephenol	%		134
2,6-Dichlorophenol	%		138
Dinoseb	%		117
Phenol-d6 (Surr.)	%		108
2-Chlorophenol-d4 (Surr.)	%		102

Sample ID: **Q2022001874**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30

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Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

Sample ID: **Q2022001875**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		99
Cadmium	%		110
Chromium	%		107
Copper	%		105
Lead	%		107
Mercury	%		98
Nickel	%		106
Zinc	%		109

Sample ID: **S202200738501**

Sample Name **TP18-0.2**

Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		93
Benzene	%		100
Trichloroethene	%		72
Toluene	%		94
Chlorobenzene	%		95
Toluene-d8 (Surr.)	%		79
1,2-Dichloroethane-d4 (Surr.)	%		85
4-Bromofluorobenzene (Surr.)	%		87
Trifluorotoluene (Surr.)	%		75

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Sample ID:	**S202200738502**
Sample Name	**TP18-0.2**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene	%		133
Anthracene	%		132
Fluoranthene	%		122
Naphthalene	%		129
Phenanthrene	%		128
Pyrene	%		132
p-Terphenyl-d14 (Surr.)	%		124
aldrin	%		130
endrin	%		86
hexachlorobenzene	%		123
TCMX (Surr.)	%		129
chlorpyrifos	%		111
diazinon	%		119
Aroclor 1016	%		116
2-fluorobiphenyl (Surr.)	%		121

Sample ID:	**S202200738503**
Sample Name	**TP18-0.2**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16	%		133
>C10-C14	%		131

Sample ID:	**S202200738504**
Sample Name	**TP18-0.2**

Parameter	*Units*	*PQL*	
ESA-P-ORG17			
2-Chlorophenol	%		117
2-Methylphenol	%		128
3/4-Methylephenol	%		137
2,6-Dichlorophenol	%		113

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Dinoseb	%		82
Phenol-d6 (Surr.)	%		115
2-Chlorophenol-d4 (Surr.)	%		114

Sample ID:	**S202200738505**
Sample Name	**TP18-0.2**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		99
Cadmium	%		102
Chromium	%		95
Copper	%		101
Lead	%		88
Mercury	%		103
Nickel	%		88
Zinc	%		94

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A.B.N. 52 093 452 950

Analysis report: 21.1587
Laboratory LOT NO: 2201150

Date Received: 11.03.2022
Date Analysed: 18.03.2022
Report Date: 18.03.2022
Client: ADE Consulting Group
Job Location: DSI Parramatta
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Sifan Xu
Approved asbestos identifier

Results Authorised By:

Sifan Xu
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
TP18-0.2	2022007385	Soil	72 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP18-0.8	2022007386	Soil	80 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP19-0.2	2022007387	Soil	85 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP19-0.8	2022007388	Soil	85 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP20-0.2	2022007389	Soil	72 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP20-0.8	2022007390	Soil	69 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
TP20-FC1	2022007392	Fibre Cement	4.5 x 3.9 x 0.4 (10 grams)	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

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Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI PARRAMATTA	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587	RECEIVED BY:	SIGNATURE:
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	SAMPLES: 8 CHILLED: ☒ PRESERVED: ☒	PRESERVATION METHOD: X CUSTODY SEAL INTACT: ☒
SAMPLERS:	Shane Metcalfe	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☒
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS:	DATE: 11-3-22	TIME: 12:30 TEMPERATURE UPON RECEIPT: °C
SAMPLING DATE:	11/03/2022	LIMS LOT NO. 2201150	LIMS/EXCEL SIGNATURE: COMMENTS:
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >4 WEEKS: ☐ OTHER: ☐		
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: shane.metcalfe@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group; matthew.toole@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab																						Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould											POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☒ Sample Comments
2201207																																			
385	TP18-0.2	SOIL	11/03/2022	B&G	1		X	X	X	X	X	X	X	X	X	X				X															PLEASE DO 48HR TAT FOR PH/PHFOX ANALYSIS ON ALL SAMPLES ON THIS COC - ON COMPLETION, PLEASE STORE THESE SAMPLES IN THE FREEZER FOR POTENTIAL CRS ANALYSIS LATER!
386	TP18-0.8				2		X	X	X	X	X	X	X	X		X				X															
387	TP19-0.2				3		X	X	X	X	X	X	X	X	X	X				X															
388	TP19-0.8				4		X	X	X	X	X	X	X	X		X				X															
389	Tp20-0.2				5		X	X	X	X	X	X	X	X	X	X				X															
390	TP20-0.8				6		X	X	X	X	X	X	X	X		X				X															
391	TP18-BR				7		X	X	X	X	X	X	X																						
392	TP20-FC1				8												X																	

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

pHpHfox - 15 · 03 · 22
Due - 18 · 03 · 22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo / Matthew Toole / Shane Metcalfe
Project name: 21.1587
Number of samples: 8
COC number: 21.1587
Turn around time: pH/pHfox: 48hr Other samples: Standard
Date: 11.03.2022
Time received: 12:30 PM
SLS Reference: 2201150
Estimated Report Delivery Date: pH/pHfox: 16.03.2022
Other samples: 18.03.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metals suite	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	Phenols	VOC	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022007385	TP18-0.2		X	X	X	X	X	X	X	X	X	X				X		
2022007386	TP18-0.8		X	X	X	X	X	X	X	X		X				X		
2022007387	TP19-0.2		X	X	X	X	X	X	X	X	X	X				X		
2022007388	TP19-0.8		X	X	X	X	X	X	X	X		X				X		
2022007389	TP20-0.2		X	X	X	X	X	X	X	X	X	X				X		
2022007390	TP20-0.8		X	X	X	X	X	X	X	X		X				X		
2022007391	TP18-BR		X	X	X	X	X	X	X									
2022007392	TP20-FC1												X					

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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Matthew Toole	**Date Reported:**	8/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	7
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:** **Date of Analysis:**	4/04/2022 5/04/2022
Cust Ref:	21.1587		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2022009779	2022009780	2022009781	2022009782	2022009783	2022009784	2022009785
	Sample Name	TP18-0.2	TP18-0.8	TP19-0.2	TP19-0.8	TP20-0.2	TP20-0.8	TP18-BR
Parameter	Units	PQL						
ESA-MP-01,ICP-01								
Lead	mg/L	0.5	-	-	-	-	<0.5	<0.5	-
Nickel	mg/L	0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2
ESA-P ORG(02,04,12)								
Acenaphthene	mg/L	0.005	-	-	-	-	<0.005	-	-
Acenaphthylene	mg/L	0.005	-	-	-	-	<0.005	-	-
Anthracene	mg/L	0.005	-	-	-	-	<0.005	-	-
Benzo[a]anthracene	mg/L	0.005	-	-	-	-	<0.005	-	-
Benzo[a]pyrene	mg/L	0.005	-	-	-	-	<0.005	-	-
Benzo[b]fluoranthene	mg/L	0.005	-	-	-	-	<0.005	-	-
Benzo[g,h,i]perylene	mg/L	0.005	-	-	-	-	<0.005	-	-
Benzo[k]fluoranthene	mg/L	0.005	-	-	-	-	<0.005	-	-
Chrysene	mg/L	0.005	-	-	-	-	<0.005	-	-
Dibenzo[a,h]anthracene	mg/L	0.005	-	-	-	-	<0.005	-	-
Fluoranthene	mg/L	0.005	-	-	-	-	<0.005	-	-
Fluorene	mg/L	0.005	-	-	-	-	<0.005	-	-
Indeno(1,2,3-cd)pyrene	mg/L	0.005	-	-	-	-	<0.005	-	-
Naphthalene	mg/L	0.005	-	-	-	-	<0.005	-	-
Phenanthrene	mg/L	0.005	-	-	-	-	<0.005	-	-
Pyrene	mg/L	0.005	-	-	-	-	<0.005	-	-
p-Terphenyl-d14	%		-	-	-	-	82	-	-
ESA-P-21								
pH A	-		10.0	9.7	9.5	8.8	8.8	8.3	10.0
pH B	-		1.9	1.9	2.0	1.6	1.7	1.6	2.0
Extraction Fluid	-		1	1	1	1	1	1	1

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Accreditation No.14664
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This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

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This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Quality Control Report

Contact:	Matthew Toole	**Date Reported:**	8/04/2022
Customer:	ADE Consulting Group	**No. of Samples:**	10
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	4/04/2022
		Date of Analysis:	5/04/2022

Cust Ref: 21.1587

Glossary:

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> greater than
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Reaction rate 2 = Moderate
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Quality Control Report

			Sample ID:	D202200986001	D202200986901
			Sample Name	FDK_WAC3c_TP2	FDK_WAC3_BR3
Parameter	Units	PQL			
ESA-P-ORG(02,04,12)					
Acenaphthene				Pass	Pass
Acenaphthylene				Pass	Pass
Anthracene				Pass	Pass
Benzo[a]anthracene				Pass	Pass
Benzo[a]pyrene				Pass	Pass
Benzo[b]fluoranthene				Pass	Pass
Benzo[g,h,i]perylene				Pass	Pass
Benzo[k]fluoranthene				Pass	Pass
Chrysene				Pass	Pass
Dibenzo[a,h]anthracene				Pass	Pass
Fluoranthene				Pass	Pass
Fluorene				Pass	Pass
Indeno(1,2,3-cd)pyrene				Pass	Pass
Naphthalene				Pass	Pass
Phenanthrene				Pass	Pass
Pyrene				Pass	Pass
p-Terphenyl-d14	%			104	82

			Sample ID:	D202200986002	D202200986902
			Sample Name	FDK_WAC3c_TP2	FDK_WAC3_BR3
Parameter	Units	PQL			
ESA-MP-01,ICP-01					
Lead				Pass	Pass
Nickel				Pass	Pass

Sydney Laboratory Services
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Sample ID:	**Q2022002497**
Sample Name	

Parameter	***Units***	***PQL***	PAH Blank - TCLP
ESA-P-ORG(02,04,12)			
Acenaphthene	mg/L	0.005	<0.005
Acenaphthylene	mg/L	0.005	<0.005
Anthracene	mg/L	0.005	<0.005
Benzo[a]anthracene	mg/L	0.005	<0.005
Benzo[a]pyrene	mg/L	0.005	<0.005
Benzo[b]fluoranthene	mg/L	0.005	<0.005
Benzo[g,h,i]perylene	mg/L	0.005	<0.005
Benzo[k]fluoranthene	mg/L	0.005	<0.005
Chrysene	mg/L	0.005	<0.005
Dibenzo[a,h]anthracene	mg/L	0.005	<0.005
Fluoranthene	mg/L	0.005	<0.005
Fluorene	mg/L	0.005	<0.005
Indeno(1,2,3-cd)pyrene	mg/L	0.005	<0.005
Naphthalene	mg/L	0.005	<0.005
Phenanthrene	mg/L	0.005	<0.005
Pyrene	mg/L	0.005	<0.005

Sample ID:	**Q2022002498**
Sample Name	

Parameter	***Units***	***PQL***	PAH Blank Spike-TCLP
ESA-P-ORG(02,04,12)			
Acenaphthene	%		124
Anthracene	%		85
Fluoranthene	%		82
Naphthalene	%		99
Phenanthrene	%		86
Pyrene	%		83
p-Terphenyl-d14	%		107

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Unit 4/10-11 Millennium Court
Silverwater 2128
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Sample ID: **Q2022002499**

Sample Name

Parameter	*Units*	*PQL*	Metals Blank - TCLP
ESA-MP-01,ICP-01			
Lead	mg/L	0.5	<0.5
Nickel	mg/L	0.2	<0.2

Sample ID: **Q2022002500**

Sample Name

Parameter	*Units*	*PQL*	Metals Blank Sp-TCLP
ESA-MP-01,ICP-01			
Lead	%		105
Nickel	%		104

Sample ID: **S202200985901**

Sample Name **FDK_WAC3c_TP1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(02,04,12)			
Acenaphthene	%		131
Anthracene	%		78
Fluoranthene	%		75
Naphthalene	%		92
Phenanthrene	%		80
Pyrene	%		77
p-Terphenyl-d14 (Surr.)	%		102

Sample ID: **S202200985902**

Sample Name **FDK_WAC3c_TP1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Lead	%		111
Nickel	%		106

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*52

Document Revision Date: 27.03.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP

PROJECT:	Delta Group Pty Ltd	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587 TCLP
PROJECT NUMBER - INVOICE NUMBER	21.1587	RECEIVED BY: K	SIGNATURE:
SAMPLES DELIVERED BY:	ADE Consulting Group	SAMPLES: 7 CHILLED: ~~N~~ PRESERVED: ☐	PRESERVATION METHOD: X / CUSTODY SEAL INTACT: ~~N~~ X
SAMPLERS:	6/7 Millennium Ct, Silverwater NSW 2128	MINIMAL HEADSPACE : ~~N~~	WITHIN HOLDING TIME: ☐
TURNAROUND:	Shane Metcalfe	DATE: 4.04.22	TIME: 8:34
SAMPLING DATE:	24h: 48h: 72h: 5 WORKING DAYS: X	LIMS LOT NO. 2201514	LIMS/EXCEL SIGNATURE:
AFTER TEST STORAGE:	11.03.2022	TEMPERATURE UPON RECEIPT: °C	
REPORT FORMAT:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	COMMENTS:	
CONSULTANTS SIGNATURE:	HARD COPY: ☐ E-MAIL: X		
PROJECT MANAGERS SIGNATURE:	CONSULTANT E-MAIL:		
	PROJECT MANAGERS E-MAIL: matthew.toole@ade.group		

SAMPLE DATA					CONTAINER DATA		ANALYSES REQUIRED																	NOTES
															OTHER			TCLP						POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use) 2022009	TCLP LIMS Sample ID (Consultant Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox						TCLP PAHs PQL<5.0 ug/L	TCLP Metals	☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:
779	2022007385	TP18-0.2	Soil	11.03.2022	G	1																	x	Ni
780	2022007386	TP18-0.8				2																	x	Ni
781	2022007387	TP19-0.2				3																	x	Ni
782	2022007388	TP19-0.8				4																	x	Ni
783	2022007389	TP20-0.2				5																x	x	Pb
784	2022007390	TP20-0.8				6																	x	Pb
785	2022007391	TP18-BR				7																	x	Ni

LAB PLEASE *EMAIL COC RECEIPT: ☐

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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Due: 11-04-22

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SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Mathew Toole
Project name: 21.1587
Number of samples: 7
COC number: 21.1587
Turn around time: STD
Date: 04.04.2022
Time received: 8:34 AM
SLS Reference: 2201514
Estimated Report Delivery Date: 11.04.2022

Sample information

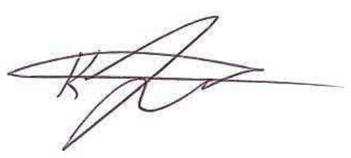
☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
N/A	Samples were chilled
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
N/A	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP PAH B(a)P PQL<0.2 ug/L	TCLP PAH B(a)P PQL<5.0 ug/L	TCLP Metals	TCLP PFAS
2022009779	TP18-0.2			X	
2022009780	TP18-0.8			X	
2022009781	TP19-0.2			X	
2022009782	TP19-0.8			X	
2022009783	TP20-0.2		X	X	
2022009784	TP20-0.8			X	
2022009785	TP18-BR			X	

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Certificate of Analysis

Contact:	Thesan Naidoo	**Date Reported:**	18/03/2022
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	14/03/2022
		Date of Analysis:	14/03/2022

Cust Ref: 21.1587

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Certificate of Analysis

	Sample ID:	2022007407	2022007408
	Sample Name	TB1	TS2
Parameter	Units	PQL	
ESA-P-ORG08 & ORG10			
Benzene		1	<1 ug/L	103%
Toluene		1	<1 ug/L	112%
Ethylbenzene		1	<1 ug/L	121%
m,p Xylene		2	<2 ug/L	101%
o Xylene		1	<1 ug/L	119%
Fluorobenzene (Surr.)	%		95	112

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Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	18/03/2022
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	14/03/2022
		Date of Analysis:	14/03/2022

Cust Ref: 21.1587

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Quality Control Report

Sample ID:	**D202200641101**
Sample Name	**WAC2-TP2-D**

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		83

Sample ID:	**D202200645901**
Sample Name	**WAC18-TP6**

Parameter	*Units*	*PQL*	
ESA-P-ORG7 & ORG8			
Benzene			Pass
Toluene			Pass
Ethylbenzene			Pass
m.p Xylene			Pass
o Xylene			Pass
Fluorobenzene (Surr.)	%		74

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Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

		Sample ID:	**Q2022001624**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

		Sample ID:	**Q2022001625**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		104
Toluene	%		87
Ethylbenzene	%		77
m.p Xylene	%		77
o Xylene	%		76
Fluorobenzene (Surr.)	%		85

		Sample ID:	**S202200641001**
		Sample Name	**WAC2-TP1-D**
Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
Benzene	%		127
Toluene	%		106
Ethylbenzene	%		93
m.p Xylene	%		93
o Xylene	%		93
Fluorobenzene (Surr.)	%		101

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Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:		LABORATORY REFERENCE NO. (Lab use ONLY):	21.1587
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: K	SIGNATURE:
SAMPLERS:	Shane Metcalfe	SAMPLES: 2 CHILLED: ☐ PRESERVED: ☒	PRESERVATION METHOD: X / CUSTODY SEAL INTACT: X
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS:	MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	11.03.22	DATE: 11-3-22	TIME: 12:30 / TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ > >4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO. 220154	LIMS/EXCEL SIGNATURE: / COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: shane.metcalfe@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group; matthew.toole@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab												ANALYSES REQUIRED: Asbestos						ANALYSES REQUIRED: Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	Standard suite	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☐ Sample Comments
2201407	TB1	W	11/03/2022	WATER	1			X																
408	TS1	W	11/03/2022	WATER	2			X																

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

18-03-22

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Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Thesan Naidoo / Matthew Toole / Shane Metcalfe
Project name: 21.1587
Number of samples: 2
COC number: 21.1587
Turn around time: STD
Date: 11.03.2022
Time received: 12:30 PM
SLS Reference: 2201154
Estimated Report Delivery Date: 18.03.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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Ph: (02) 9648-6669

Accreditation No.14664
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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metals suite	8 Metals suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	Phenols	VOC	pH/pH fox	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022007407	TB1			X														
2022007408	TS1			X														

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ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater
NSW 2128

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Thesan Naidoo**

Report **870714-S**
Project name DSI PARRAMATTA
Project ID 21.1587
Received Date Mar 11, 2022

Client Sample ID			**SR1**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ma24944**
Date Sampled			**Mar 11, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	129
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

Client Sample ID			SR1
Sample Matrix			Soil
Eurofins Sample No.			S22-Ma24944
Date Sampled			Mar 11, 2022
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	83
p-Terphenyl-d14 (surr.)	1	%	90
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	115
Tetrachloro-m-xylene (surr.)	1	%	87
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

Client Sample ID			SR1
Sample Matrix			Soil
Eurofins Sample No.			S22-Ma24944
Date Sampled			Mar 11, 2022
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	98
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	115
Tetrachloro-m-xylene (surr.)	1	%	87
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	27
Copper	5	mg/kg	47
Lead	5	mg/kg	17
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	85
Zinc	5	mg/kg	63

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Mar 14, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Mar 14, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Mar 14, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

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IANZ # 1290

Company Name:	ADE Consulting Group Pty Ltd	**Order No.:**	
Address:	Unit 6/7 Millennium Court Silverwater NSW 2128	**Report #:**	870714
		Phone:	02 9400 7711
		Fax:	02 9401 0097
Project Name:	DSI PARRAMATTA		
Project ID:	21.1587		

Received:	Mar 11, 2022 2:27 PM		
Due:	Mar 18, 2022		
Priority:	5 Day		
Contact Name:	Thesan Naidoo		

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254						
Sydney Laboratory - NATA # 1261 Site # 18217						X
Brisbane Laboratory - NATA # 1261 Site # 20794						
Mayfield Laboratory - NATA # 1261 Site # 25079						
Perth Laboratory - NATA # 2377 Site # 2370						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	SR1	Mar 11, 2022		Soil	S22-Ma24944	X
Test Counts						1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	94			70-130	Pass	
TRH C10-C14	%	110			70-130	Pass	
Naphthalene	%	108			70-130	Pass	
TRH C6-C10	%	94			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	89			70-130	Pass	
Toluene	%	96			70-130	Pass	
Ethylbenzene	%	99			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
o-Xylene	%	101			70-130	Pass	
Xylenes - Total*	%	99			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	86			70-130	Pass	
Acenaphthylene	%	105			70-130	Pass	
Anthracene	%	102			70-130	Pass	
Benz(a)anthracene	%	89			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	%	91			70-130	Pass	
Benzo(g.h.i)perylene	%	96			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	89			70-130	Pass	
Dibenz(a.h)anthracene	%	95			70-130	Pass	
Fluoranthene	%	99			70-130	Pass	
Fluorene	%	104			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	89			70-130	Pass	
Naphthalene	%	101			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	99			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	76			70-130	Pass	
4.4'-DDD	%	84			70-130	Pass	
4.4'-DDE	%	79			70-130	Pass	
4.4'-DDT	%	116			70-130	Pass	
a-HCH	%	74			70-130	Pass	
Aldrin	%	83			70-130	Pass	
b-HCH	%	82			70-130	Pass	
d-HCH	%	79			70-130	Pass	
Dieldrin	%	89			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	%	84			70-130	Pass	
Endosulfan II	%	80			70-130	Pass	
Endosulfan sulphate	%	93			70-130	Pass	
Endrin	%	107			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
Endrin ketone	%	93			70-130	Pass	
g-HCH (Lindane)	%	81			70-130	Pass	
Heptachlor	%	98			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	77			70-130	Pass	
Methoxychlor	%	93			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	92			70-130	Pass	
Dimethoate	%	103			70-130	Pass	
Ethion	%	97			70-130	Pass	
Fenitrothion	%	107			70-130	Pass	
Methyl parathion	%	123			70-130	Pass	
Mevinphos	%	98			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1221	%	93			70-130	Pass	
Aroclor-1254	%	104			70-130	Pass	
Aroclor-1260	%	83			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	98			80-120	Pass	
Cadmium	%	102			80-120	Pass	
Chromium	%	112			80-120	Pass	
Copper	%	118			80-120	Pass	
Lead	%	119			80-120	Pass	
Mercury	%	116			80-120	Pass	
Nickel	%	116			80-120	Pass	
Zinc	%	108			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S22-Ma24697	NCP	%	81			70-130	Pass	
TRH C10-C14	S22-Ma25957	NCP	%	116			70-130	Pass	
Naphthalene	S22-Ma24697	NCP	%	86			70-130	Pass	
TRH C6-C10	S22-Ma24697	NCP	%	81			70-130	Pass	
TRH >C10-C16	S22-Ma25957	NCP	%	117			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S22-Ma24697	NCP	%	78			70-130	Pass	
Toluene	S22-Ma24697	NCP	%	84			70-130	Pass	
Ethylbenzene	S22-Ma24697	NCP	%	86			70-130	Pass	
m&p-Xylenes	S22-Ma24697	NCP	%	85			70-130	Pass	
o-Xylene	S22-Ma24697	NCP	%	88			70-130	Pass	
Xylenes - Total*	S22-Ma24697	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S22-Ma38226	NCP	%	99			70-130	Pass	
Acenaphthylene	S22-Ma38226	NCP	%	89			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Anthracene	S22-Ma38226	NCP	%	92			70-130	Pass	
Benz(a)anthracene	S22-Ma38226	NCP	%	88			70-130	Pass	
Benzo(a)pyrene	S22-Ma38226	NCP	%	94			70-130	Pass	
Benzo(b&j)fluoranthene	S22-Ma38226	NCP	%	93			70-130	Pass	
Benzo(g.h.i)perylene	S22-Ma38226	NCP	%	101			70-130	Pass	
Benzo(k)fluoranthene	S22-Ma38226	NCP	%	92			70-130	Pass	
Chrysene	S22-Ma38226	NCP	%	95			70-130	Pass	
Dibenz(a.h)anthracene	S22-Ma38226	NCP	%	93			70-130	Pass	
Fluoranthene	S22-Ma38226	NCP	%	96			70-130	Pass	
Fluorene	S22-Ma38226	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ma38226	NCP	%	94			70-130	Pass	
Naphthalene	S22-Ma38226	NCP	%	96			70-130	Pass	
Phenanthrene	S22-Ma38226	NCP	%	96			70-130	Pass	
Pyrene	S22-Ma38226	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S22-Ma38226	NCP	%	84			70-130	Pass	
4.4'-DDD	S22-Ma38226	NCP	%	102			70-130	Pass	
4.4'-DDE	S22-Ma38226	NCP	%	93			70-130	Pass	
4.4'-DDT	S22-Ma38226	NCP	%	96			70-130	Pass	
a-HCH	S22-Ma38226	NCP	%	88			70-130	Pass	
Aldrin	S22-Ma38226	NCP	%	51			70-130	Fail	Q08
b-HCH	S22-Ma38226	NCP	%	99			70-130	Pass	
d-HCH	S22-Ma38226	NCP	%	95			70-130	Pass	
Dieldrin	S22-Ma38226	NCP	%	115			70-130	Pass	
Endosulfan I	S22-Ma38226	NCP	%	98			70-130	Pass	
Endosulfan II	S22-Ma38226	NCP	%	90			70-130	Pass	
Endosulfan sulphate	S22-Ma38226	NCP	%	102			70-130	Pass	
Endrin	S22-Ma38226	NCP	%	104			70-130	Pass	
Endrin aldehyde	S22-Ma38226	NCP	%	78			70-130	Pass	
Endrin ketone	S22-Ma38226	NCP	%	106			70-130	Pass	
g-HCH (Lindane)	S22-Ma38226	NCP	%	92			70-130	Pass	
Heptachlor	S22-Ma38226	NCP	%	102			70-130	Pass	
Heptachlor epoxide	S22-Ma38226	NCP	%	90			70-130	Pass	
Hexachlorobenzene	S22-Ma38226	NCP	%	89			70-130	Pass	
Methoxychlor	S22-Ma38226	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S22-Ma38226	NCP	%	111			70-130	Pass	
Dimethoate	S22-Ma38226	NCP	%	109			70-130	Pass	
Ethion	S22-Ma38226	NCP	%	109			70-130	Pass	
Fenitrothion	S22-Ma38226	NCP	%	130			70-130	Pass	
Methyl parathion	S22-Ma38226	NCP	%	145			70-130	Fail	Q08
Mevinphos	S22-Ma38226	NCP	%	125			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1221	S22-Ma20812	NCP	%	90			70-130	Pass	
Aroclor-1254	S22-Ma20812	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S22-Ma23718	NCP	%	87			75-125	Pass	
Cadmium	S22-Ma23718	NCP	%	89			75-125	Pass	
Chromium	S22-Ma23718	NCP	%	100			75-125	Pass	
Copper	S22-Ma23718	NCP	%	107			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Lead	S22-Ma23718	NCP	%	103			75-125	Pass	
Mercury	S22-Ma23718	NCP	%	109			75-125	Pass	
Nickel	S22-Ma23718	NCP	%	103			75-125	Pass	
Zinc	S22-Ma23718	NCP	%	97			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S22-Ma24696	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S22-Ma26109	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S22-Ma26109	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S22-Ma26109	NCP	mg/kg	56	61	7.0	30%	Pass	
Naphthalene	S22-Ma24696	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S22-Ma24696	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S22-Ma26109	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S22-Ma26109	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S22-Ma26109	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S22-Ma24696	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S22-Ma24696	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S22-Ma24696	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S22-Ma24696	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S22-Ma24696	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S22-Ma24696	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S22-Ma34045	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endosulfan II	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S22-Ma19983	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S22-Ma19983	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S22-Ma19613	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S22-Ma19613	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S22-Ma19613	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S22-Ma19613	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1254	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S22-Ma19983	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S22-Ma23716	NCP	mg/kg	4.3	2.8	43	30%	Fail	Q15
Cadmium	S22-Ma23716	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S22-Ma23716	NCP	mg/kg	14	18	25	30%	Pass	
Copper	S22-Ma23716	NCP	mg/kg	140	120	20	30%	Pass	
Lead	S22-Ma23716	NCP	mg/kg	15	20	28	30%	Pass	
Mercury	S22-Ma23716	NCP	mg/kg	< 0.1	0.2	130	30%	Fail	Q15
Nickel	S22-Ma23716	NCP	mg/kg	21	18	15	30%	Pass	
Zinc	S22-Ma23716	NCP	mg/kg	78	76	3.0	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Asim Khan	Analytical Services Manager
Gabriele Cordero	Senior Analyst-Metal (NSW)
Andrew Sullivan	Senior Analyst-Organic (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (EUROFINS)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	DSI Parramatta	LABORATORY REFERENCE NO. (Lab use ONLY):	
PROJECT NUMBER - INVOICE NUMBER	21.1587		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: Ali.s	SIGNATURE:
SAMPLERS:	Shane Metcalfe	SAMPLES: CHILLED: ☐	PRESERVED: ☐ PRESERVATION METHOD: CUSTODY SEAL INTACT: ☐
TURNAROUND:	24h: ☐ 48h: 72h: ☐ 5 WORKING DAYS:	MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	11/03/2022	DATE: 11/3/22	TIME: 2:27 PM TEMPERATURE UPON RECEIPT: 7.8 °C
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: shane.metcalfe@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group; matthew.toole@ade.group		

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																	NOTES
						Chem Lab											Asbestos						Mould	
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	VTRH (C6-C10)	TRH (C10-C40)	standard phenols	VOCs/SVOCs	NEPM Screen/Soil Classification suite: Fe, CEC, pH($CaCl_2$), TOC, Clay Content + pH(1:5) & EC(1:5)]	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☐ Sample Comments
	SR1	S	11/03/2022	G	1		X	X	X	X	X		X											

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

#870714

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eurofins | Environment Testing

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Sample Receipt Advice

Company name:	ADE Consulting Group Pty Ltd
Contact name:	Thesan Naidoo
Project name:	DSI PARRAMATTA
Project ID:	21.1587
Turnaround time:	5 Day
Date/Time received	Mar 11, 2022 2:27 PM
Eurofins reference	870714

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 7.8 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Asim Khan on phone : or by email: AsimKhan@eurofins.com

Results will be delivered electronically via email to Thesan Naidoo - Thesan.Naidoo@ade.group.

Note: A copy of these results will also be delivered to the general ADE Consulting Group Pty Ltd email address.

Appendix VIII – Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 10 Nov 2021 13:10:20

Reference: LS026280 EP

Address: Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Finance, Services & Innovation	30/06/2021	30/06/2021	Quarterly	-	-	-	-
Topographic Data	NSW Department of Finance, Services & Innovation	25/06/2019	25/06/2019	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	13/10/2021	11/10/2021	Monthly	1000m	0	0	2
Contaminated Land Records of Notice	Environment Protection Authority	08/10/2021	08/10/2021	Monthly	1000m	0	0	0
Former Gasworks	Environment Protection Authority	11/08/2021	11/10/2017	Quarterly	1000m	0	0	1
National Waste Management Facilities Database	Geoscience Australia	12/05/2021	07/03/2017	Annually	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	15/02/2021	13/07/2012	Annually	1000m	0	0	2
EPA PFAS Investigation Program	Environment Protection Authority	28/10/2021	14/07/2021	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	29/10/2021	29/10/2021	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	29/10/2021	29/10/2021	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	08/10/2021	08/10/2021	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	19/08/2021	19/08/2021	Quarterly	2000m	0	0	1
EPA Other Sites with Contamination Issues	Environment Protection Authority	02/02/2021	13/12/2018	Annually	1000m	0	0	3
Licensed Activities under the POEO Act 1997	Environment Protection Authority	28/10/2021	28/10/2021	Monthly	1000m	1	2	3
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	28/10/2021	28/10/2021	Monthly	1000m	0	0	1
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	28/10/2021	28/10/2021	Monthly	1000m	0	1	10
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	100m	105	1163	1163
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	100m	-	82	82
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	250m	0	73	178
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	250m	-	15	33
Points of Interest	NSW Department of Finance, Services & Innovation	19/08/2021	19/08/2021	Quarterly	1000m	1	6	135
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	19/08/2021	19/08/2021	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	19/08/2021	19/08/2021	Quarterly	1000m	0	0	0
Major Easements	NSW Department of Finance, Services & Innovation	19/08/2021	19/08/2021	Quarterly	1000m	0	1	3
State Forest	Forestry Corporation of NSW	25/02/2021	14/02/2021	Annually	1000m	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	22/01/2021	11/12/2020	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000m	1	1	1
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Industry and Environment	26/10/2020	21/02/2018	Annually	1000m	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	24/07/2018	23/07/2018	Annually	2000m	0	0	37

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Geological Units 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		Annually	1000m	1	1	7
Geological Structures 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		Annually	1000m	0	0	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000m	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000m	1	1	1
Soil Landscapes of Central and Eastern NSW	NSW Department of Planning, Industry and Environment	14/10/2020	27/07/2020	Annually	1000m	1	2	10
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	19/08/2021	28/06/2021	Monthly	500m	2	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	2	2	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000m	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Department of Planning, Industry and Environment	12/05/2017	01/01/2002	None planned	1000m	1	1	3
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	19/08/2021	05/08/2021	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Industry	02/11/2021	02/11/2021	Monthly	1000m	0	0	0
Mining Title Applications	NSW Department of Industry	02/11/2021	02/11/2021	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Industry	02/11/2021	02/11/2021	Monthly	1000m	10	10	13
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	19/08/2021	07/12/2018	Monthly	1000m	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	19/08/2021	13/08/2021	Monthly	1000m	1	3	110
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	2
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	1
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	19/08/2021	25/06/2021	Quarterly	1000m	0	1	30
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Industry and Environment	19/08/2021	13/08/2021	Monthly	1000m	2	12	284
Bush Fire Prone Land	NSW Rural Fire Service	02/11/2021	19/10/2021	Weekly	1000m	0	0	0
Native Vegetation of the Sydney Metropolitan Area	NSW Office of Environment & Heritage	01/03/2017	16/12/2016	As required	1000m	0	1	12
Ramsar Wetlands of Australia	Australian Government Department of Agriculture, Water and the Environment	24/02/2021	19/03/2020	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Annually	1000m	0	0	0
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	0	0	0
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	18/10/2021	18/10/2021	Weekly	10000m	-	-	-

Site Diagram

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 6861m²

Total Perimeter: 366m

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Scale: 0 15 30 Meters

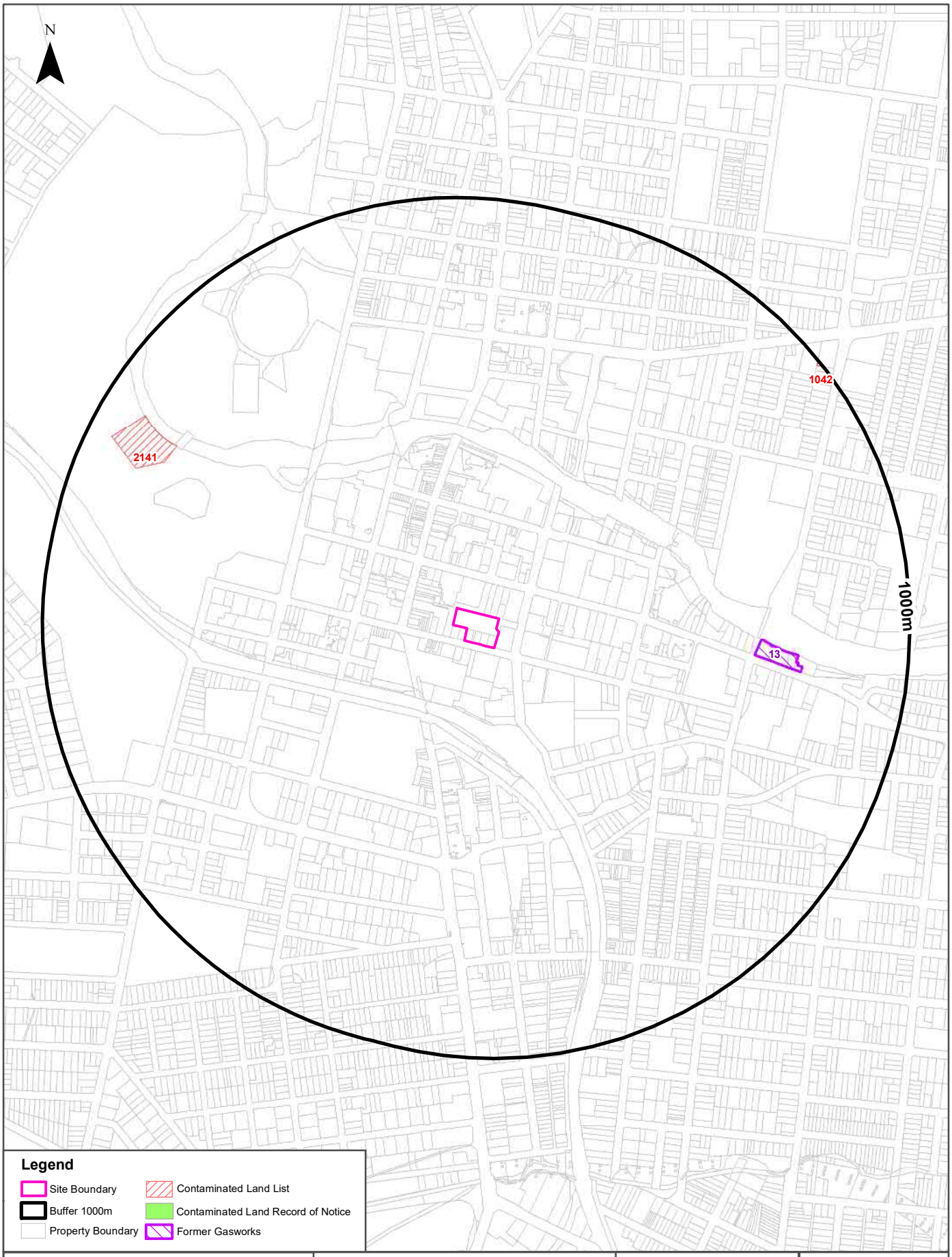
Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Coordinate System:
GDA 1994 MGA Zone 56

Date: 10 November 2021

Contaminated Land

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Contaminated Land

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist	Direction
2141	Parramatta Park Toilet Block Demolition	The Cresent Toilet Block Parramatta Park	Parramatta	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	788m	North West
1042	7-Eleven (former Mobil) Service Station	81 Victoria Road	Parramatta	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	988m	North East

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
N/A	No records in buffer							

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

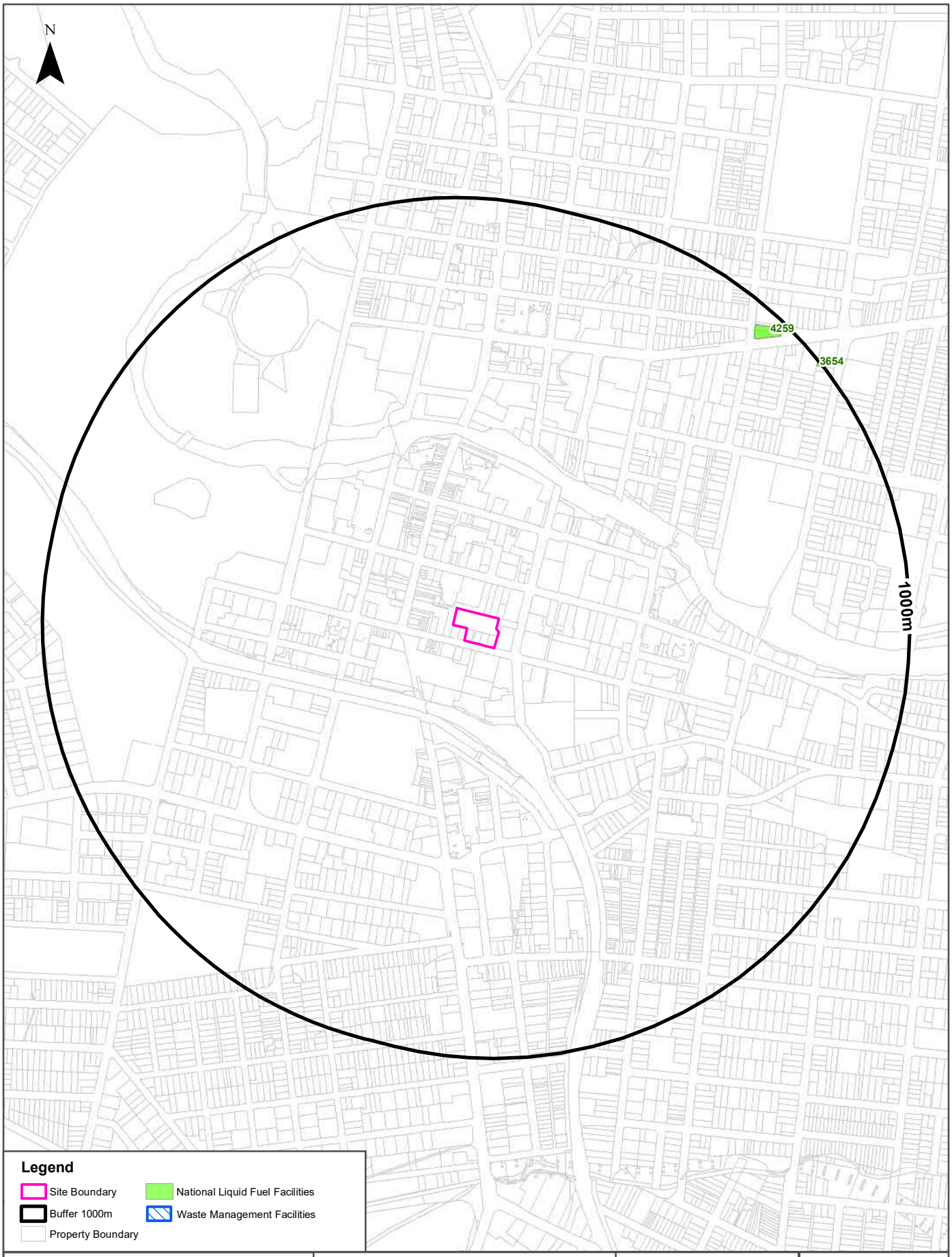
Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
13	George Street, Parramatta	Parramatta City Council	Contact council	Premise Match	623m	East

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Waste Management & Liquid Fuel Facilities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia
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National Liquid Fuel Facilities

National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Direction
4259	Shell	Coles Express Parramatta	88 Victoria Road	North Parramatta	Petrol Station	Operational		25/07/2011	Premise Match	923m	North East
3654	7-Eleven Pty Ltd	Parramatta North	81 Victoria Road	Parramatta	Petrol Station	Operational		13/07/2012	Premise Match	988m	North East

National Liquid Fuel Facilities Data Source: Geoscience Australia
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PFAS Investigation & Management Programs

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Map ID	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

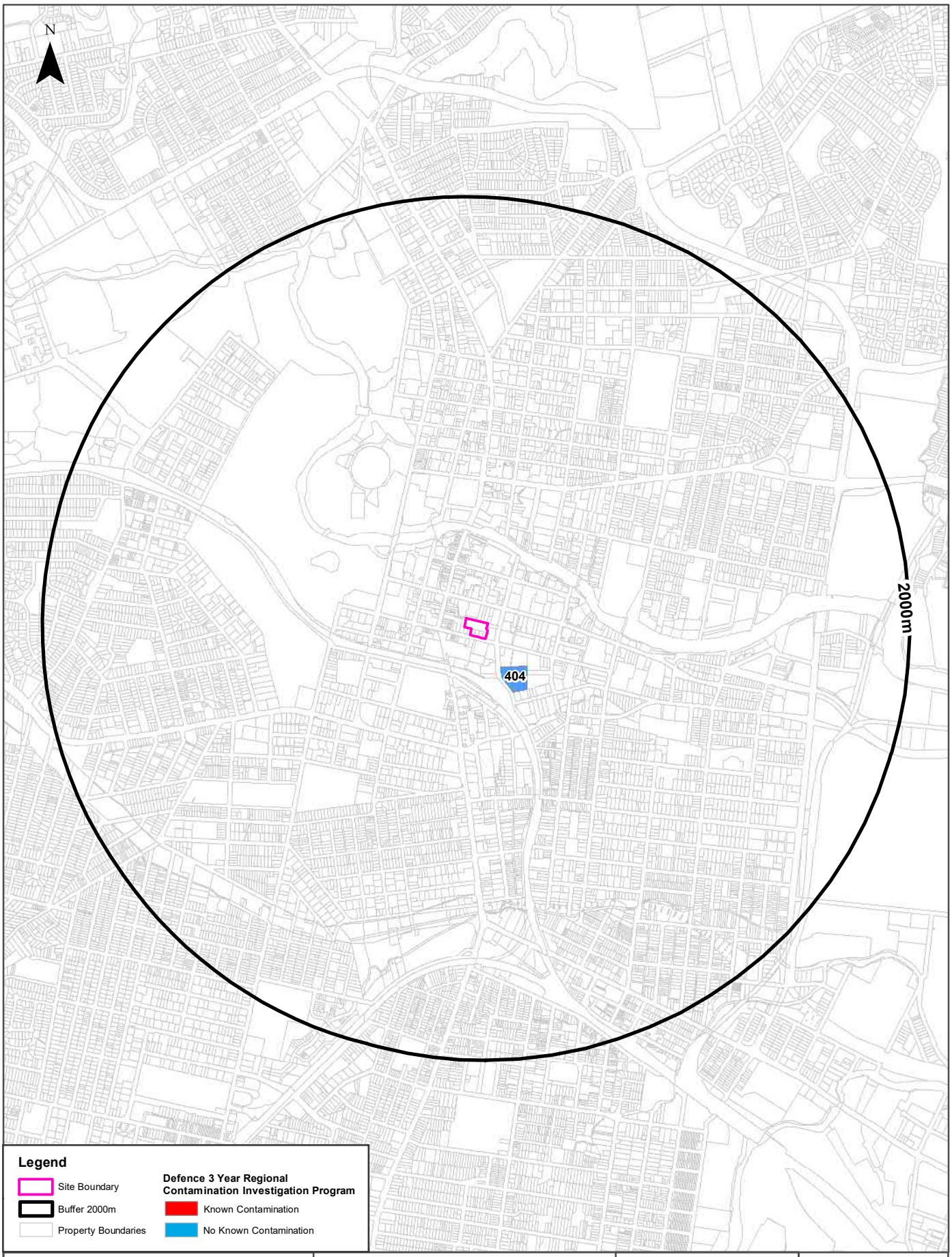
Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence 3 Year Regional Contamination Investigation Program

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021	Coordinate System: GDA 1994 MGA Zone 56	Date: 10 November 2021

0 200 400 800 1,200
Meters

Defence Sites

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Defence 3 Year Regional Contamination Investigation Program

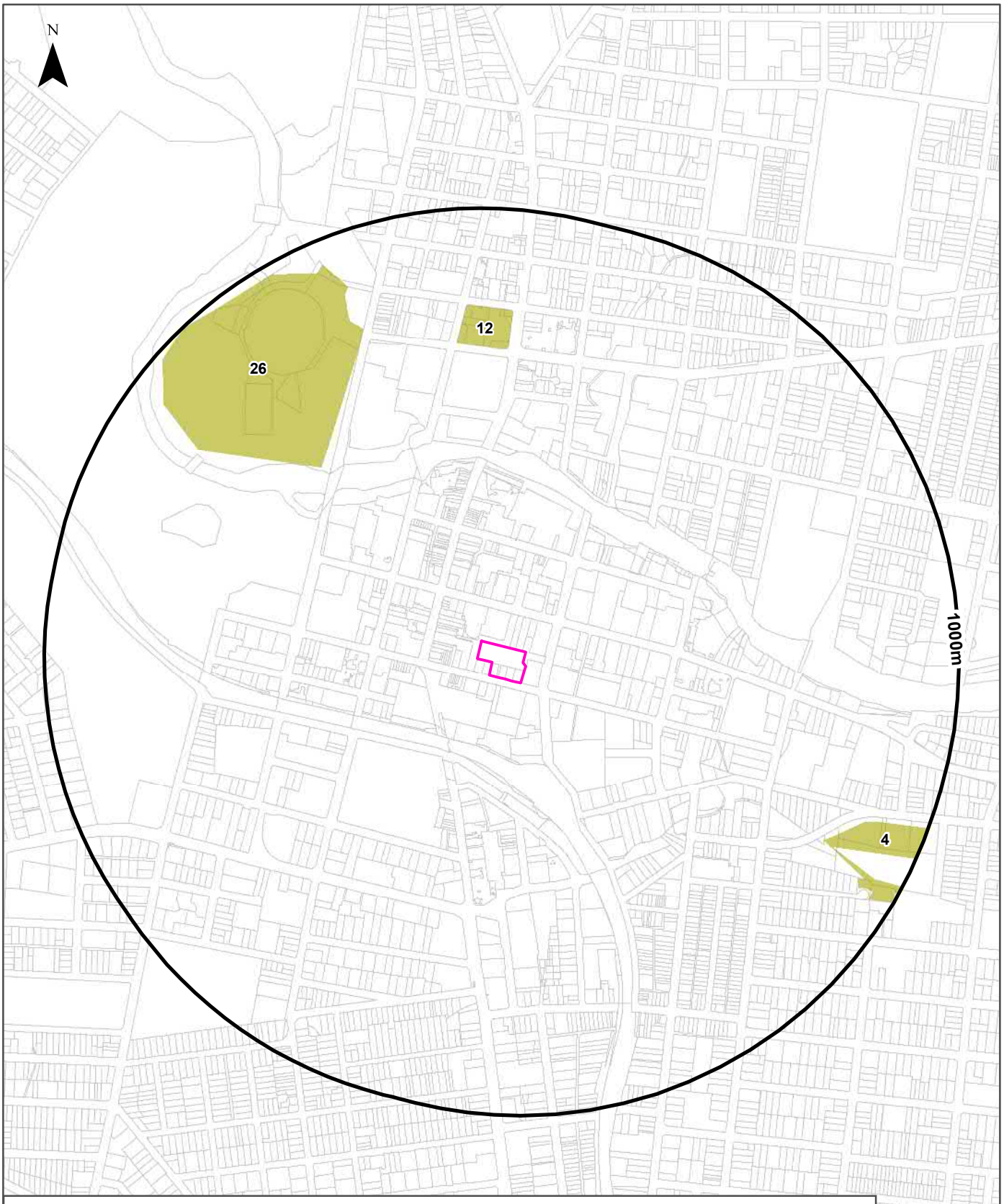
Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
404	Lancer Barracks - Parramatta	Parramatta, New South Wales	NO	Premise Match	152m	South East

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



EPA Other Sites with Contamination Issues

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
26	Cumberland Oval	O'Connell Street, Parramatta	James Hardie Asbestos Waste Sites	Current Land Use: Parramatta Stadium Parramatta Pool	Premise Match	545m	North West
12	Catt & Goldsmith Pty Ltd site	Victoria Rd, Parramatta	James Hardie Asbestos Waste Sites	Current Land Use: Commercial site Possibly a timber yard.	Premise Match	676m	North
4	Embankment along stormwater canal.	Hassall and Ruse Streets, Parramatta	James Hardie Asbestos Waste Sites	Current Land Use: Hambeldon Cottage. Disposal area covered by grass and vegetation.	Premise Match	787m	South East

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



EPA Activities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Licensed Activities under the POEO Act 1997

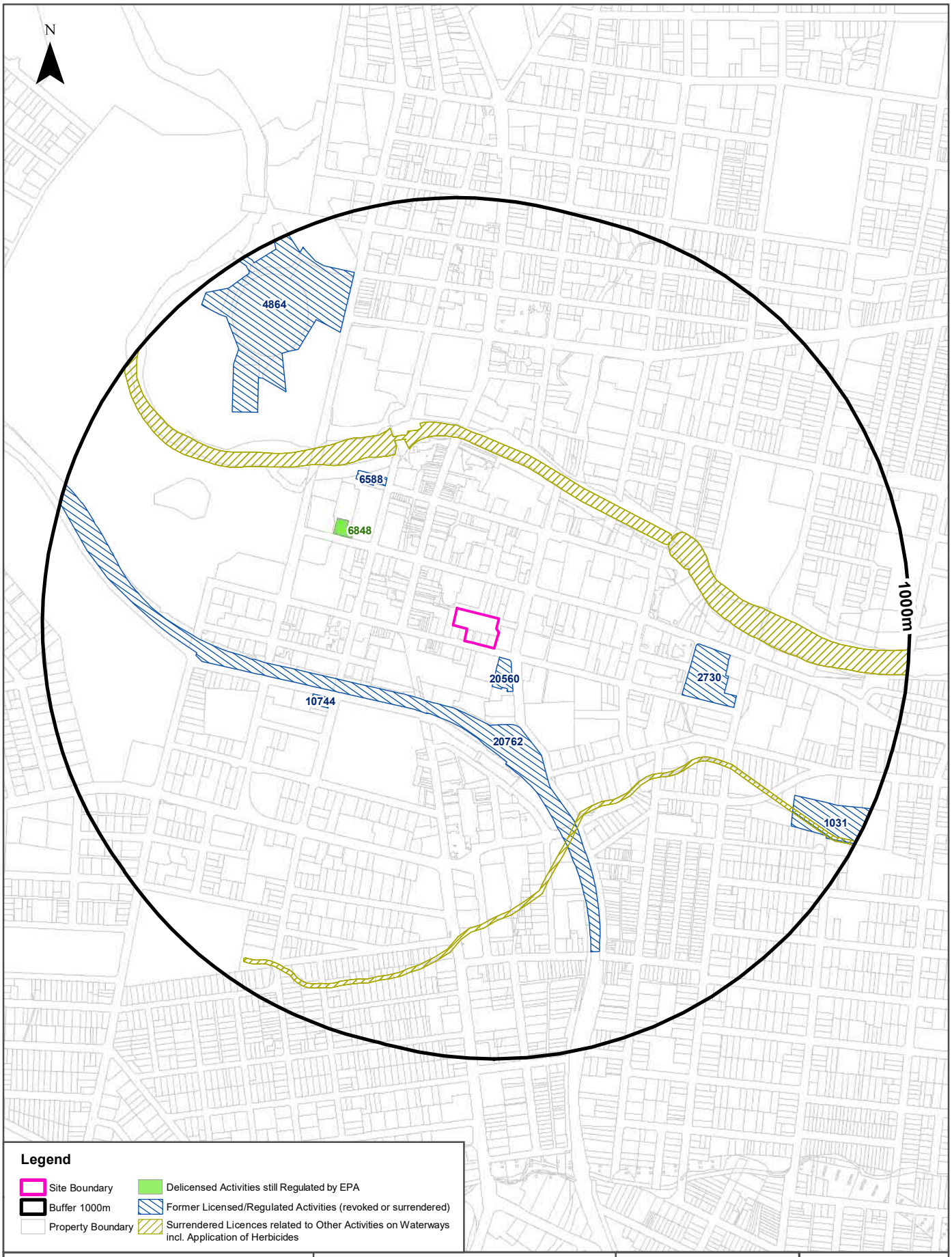
Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
21247	Metro Trains Sydney Pty Ltd		SYDNEY METRO, ROUSE HILL, NSW 2155		Railway systems activities	Network of Features	0m	On-site
21347	CPB CONTRACTORS PTY LIMITED		PACKAGE 4, PARRAMATTA, NSW 2123		Railway infrastructure construction (>=50,000T & track to be constructed>10km & <30km)	Network of Features	1m	South East
12208	SYDNEY TRAINS		SYDNEY TRAINS, HAYMARKET, NSW 1238		Railway systems activities	Network of Features	166m	South West

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



EPA Activities

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6848	AUSTRALIAN RED CROSS SOCIETY	PARRAMATTA BLOOD SERVICE	4 GEORGE ST	PARRAMATTA	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	309m	North West

Delicensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

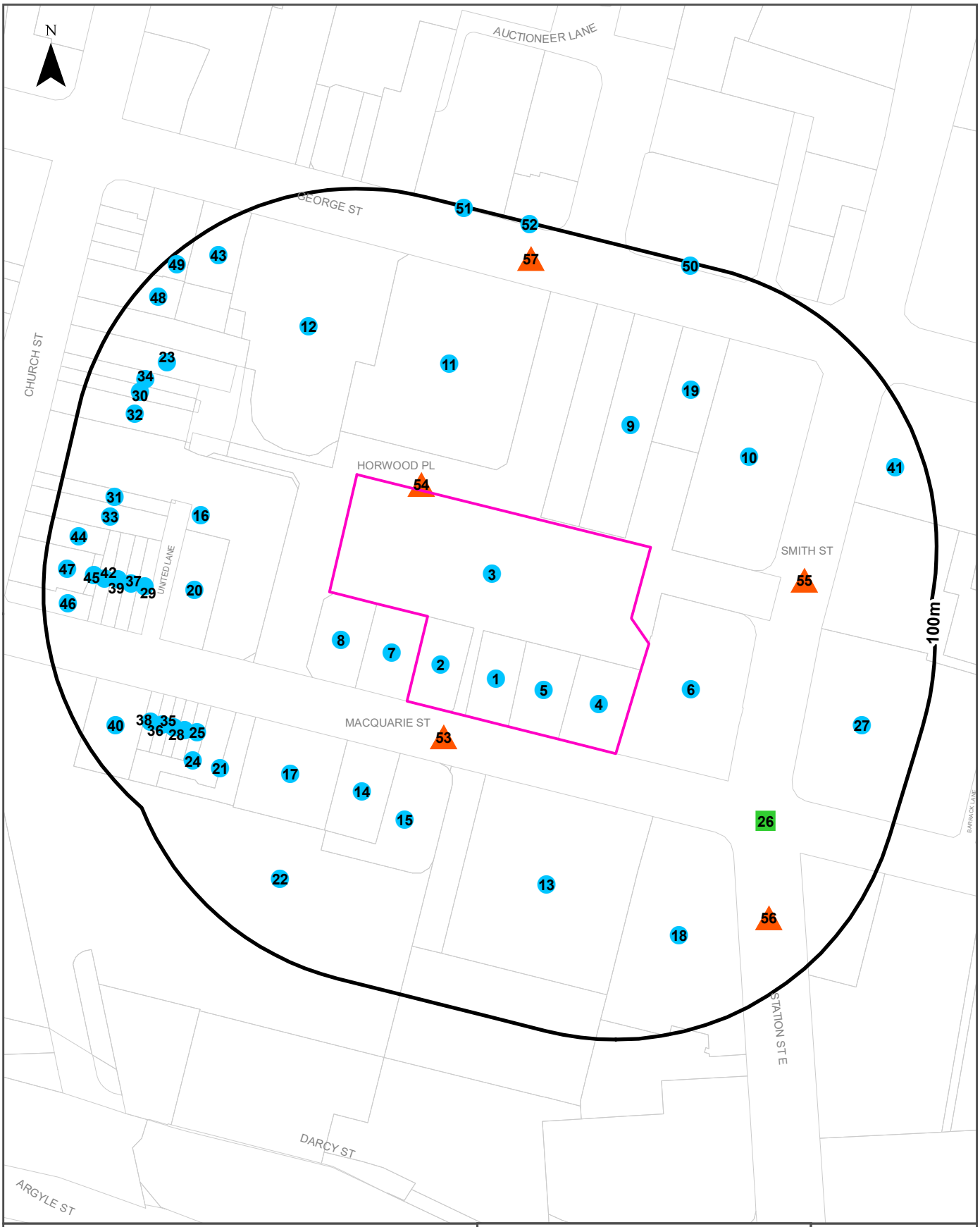
Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
20560	JOHN HOLLAND PTY LTD	MACQUARIE HOUSE AND ADJACENT CAR PARK, 143 and 169 Macquarie Street, PARRAMATTA, NSW 2150	Surrendered	15/04/2015	Extractive Activities	Premise Match	26m	South East
20762	Laing O'Rourke Australia Construction Pty Ltd	, within the rail corridor between Hawksbury Rd, Westmead and Marion St, Harris Park, PARRAMATTA, NSW 2150,	Surrendered	19/04/2016	Railway systems activities	Network of Features	164m	South West
6588	SYDNEY WEST AREA HEALTH SERVICE	MARSDEN ROAD, PARRAMATTA, NSW 2150	Surrendered	30/03/2000	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	346m	North West
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	349m	North East
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	349m	North East
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	349m	North East
10744	THE HOSPITALS CONTRIBUTION FUND OF AUSTRALIA LTD	6/128 MARSDEN STREET, PARRAMATTA, NSW 2150	Surrendered	03/04/2000	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	350m	South West
2730	NATIONWIDE NEWS PTY. LIMITED	142-154 MACQUARIE STREET, PARRAMATTA, NSW 2150	Surrendered	17/01/2000	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	470m	East
4864	PARRAMATTA STADIUM TRUST	O'CONNELL STREET, PARRAMATTA, NSW 2150	Surrendered	26/06/2000	Miscellaneous licensed discharge to waters (wet weather only)	Premise Match	672m	North West

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
1031	WYETH AUSTRALIA PTY LIMITED	GREGORY PLACE, PARRAMATTA, NSW 2150	Surrendered	09/05/2000	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	814m	South East

Former Licensed Activities Data Source: Environment Protection Authority
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Historical Business Directories

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Legend

- Site Boundary
- Buffer 100m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 25 50 75 100 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Historical Business Directories

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Business Directory Records 1950-1991
Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	Business Agents &/or Brokers	Central Brokers., 70 Macquarie St., Parramatta 2150	37698	1991	Premise Match	0m	On-site
	Property Management	Newsome Real Estate Pty. Ltd., 70 Macquarie St Parramatta 2150	59675	1991	Premise Match	0m	On-site
	DENTISTS.	Cannon, J. L., 70 Macquarie St., Parramatta. 2150	22368	1986	Premise Match	0m	On-site
	BUSINESS AGENTS &/OR BROKERS.	Central Brokers, 70 Macquarie St., Parramatta. 2150	9325	1986	Premise Match	0m	On-site
	BOOKSELLERS-RETAIL.	Macquarie Book Shop, 70 Macquarie St., Parramatta. 2150	7098	1986	Premise Match	0m	On-site
	PROPERTY MANAGEMENT.	Newsome Real Estate Pty. Ltd., 70 Macquarie St., Parramatta. 2150	77816	1986	Premise Match	0m	On-site
	REAL ESTATE AGENTS.	Newsome Real Estate Pty. Ltd., 70 Macquarie St., Parramatta. 2150	79923	1986	Premise Match	0m	On-site
	DENTISTS.	Theodore, A., 70 Macquarie St., Parramatta. 2150	23440	1986	Premise Match	0m	On-site
	DENTISTS. (D1800)	Cannon, J. L., 70 Macquarie St., Parramatta. 2150.	20051	1982	Premise Match	0m	On-site
	BOOKSELLERS - RETAIL. (B4475)	Macquarie Book Shop, 70 Macquarie St., Parramatta. 2150.	7916	1982	Premise Match	0m	On-site
	DENTISTS. (D1800)	Theodore, A., 70 Macquarie St., Parramatta. 2150.	20925	1982	Premise Match	0m	On-site
	REAL ESTATE AGENTS. (R2555)	Westhaven Pty. Ltd., 70 Macquarie St., Parramatta. 2150.	69864	1982	Premise Match	0m	On-site
	DENTAL SUPPLIES &/OR EQUIPMENT. (D1750)	Wilson, J. & Son, 70 Macquarie St., Parramatta. 2150.	19924	1982	Premise Match	0m	On-site
	BOOKSELLERS RETAIL.	Macquarie Book Shop. 70 Macquarie St., Parramatta. 2150	6883	1978	Premise Match	0m	On-site
	DENTAL SUPPLIES &/OR EQUIPMENT.	Wilson, J. & Son, 70 Macquarie St., Parramatta. 2150	17853	1978	Premise Match	0m	On-site
	BUILDERS &/OR BUILDING CONTRACTORS.	Gavan, Michael Houses Pty. Ltd. 70 Macquarie St. Parramatta 2150	8478	1975	Premise Match	0m	On-site
	REAL ESTATE AGENTS &/OR VALUERS.	Gavan, Michael Houses Pty. Ltd., 70 Macquarie St., Parramatta. 2150	72334	1975	Premise Match	0m	On-site
	DENTAL LABORATORIES &/OR TECHNICIANS.	Gow, G. E., 70 Macquarie St., Parramatta. 2150	20649	1975	Premise Match	0m	On-site
	BOOKSELLERS RETAIL	Macquarie Book Shop, 70 Macquarie St., Parramatta. 2150	7389	1975	Premise Match	0m	On-site
	CHEMISTS-PHARMACEUTICAL	Macquarie Pharmacy, 70 Macquarie St., Parramatta. 2150	15558	1975	Premise Match	0m	On-site
	PHYSIOTHERAPISTS.	Mottershaw. S. C., 70 Macquarie St., Parramatta. 2150	67069	1975	Premise Match	0m	On-site
	DENTAL SUPPLIES &/OR EQUIPMENT.	Wilson, J. & Son, 70 Macquarie St., Parramatta. 2150	20713	1975	Premise Match	0m	On-site
	DENTISTS (D140)	Altman, E. C., 70 Macquarie St., Parramatta	288333	1970	Premise Match	0m	On-site
	MEDICAL PRACTITIONERS	Cumming, Gordon.,70 Macquarie St., Parramatta	656711	1970	Premise Match	0m	On-site
	BUTCHERS-WHOLESALE (B868)	Garniss, G & Co., 70 Macquarie St., Parramatta	274917	1970	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS (A040)	Genner, L.J., 70 Macquarie St., Parramatta	258785	1970	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	DENTAL LABS.& TECHNICIANS (D120)	Gow, G. E., 70 Macquarie St., Parramatta	288211	1970	Premise Match	0m	On-site
	OPTOMETRISTS-REGISTERED (O 280)	McConnell, L., 70 Macquarie St., Parramatta	345395	1970	Premise Match	0m	On-site
	PHYSIOTHERAPISTS (P312)	Mottershaw, S. C., 70 Macquarie St., Parramatta	348612	1970	Premise Match	0m	On-site
	ARCHITECTS (A440)	Smith, B.S., 70 Macquarie St., Parramatta.	262150	1970	Premise Match	0m	On-site
	DENTAL SUPPLIES & EQUIP. (D130)	Wilson, J. & Son., 70 Macquarie St., Parramatta	288307	1970	Premise Match	0m	On-site
	Mercantile Agents	Bond's Mercantile Agency, 70 Macquarie St., Parramatta	113047	1965	Premise Match	0m	On-site
	Butchers' - Wholesale	Garniss, G. & Co., 70 Macquarie St., Parramatta	59670	1965	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS	Genner, L. J., 70 Macquarie St., Parramatta	43689	1965	Premise Match	0m	On-site
	DENTAL LABS. & TECHNICIANS	Gow, G. E., 70 Macquarie St., Parramatta	72979	1965	Premise Match	0m	On-site
	Physiotherapists	Mottershaw, S. C., 70 Macquarie St., Parramatta	132955	1965	Premise Match	0m	On-site
	Architects	Smith, B. S., 70 Macquarie St., Parramatta	46804	1965	Premise Match	0m	On-site
	DENTAL SUPPLIES & EQUIP.	Wilson, J. & Son, 70 Macquarie St., Parramatta	73084	1965	Premise Match	0m	On-site
	MEDICAL PRACTITIONERS	Cumming, Gordon, 70 Macquarie St., Parramatta	334900	1961	Premise Match	0m	On-site
	FROCK & COAT SALONS	Fashion Academy (The) (High Fashions), 70 Macquarie St., Parramatta	314145	1961	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS	Genner, L. J., 70 Macquarie St., Parramatta	265017	1961	Premise Match	0m	On-site
	PHYSIOTHERAPISTS	Mottershaw, S. C., 70 Macquarie St., Parramatta	358134	1961	Premise Match	0m	On-site
	DENTISTS	Ritchie, C. H., 70 Macquarie St., Parramatta	296364	1961	Premise Match	0m	On-site
	ARCHITECTS	Smith, B. S, & Green, R., 70 Macquarie St., Parramatta	268517	1961	Premise Match	0m	On-site
	SOLICITORS	Thomas, H. G., 70 Macquarie St., Parramatta	251839	1961	Premise Match	0m	On-site
2	Real Estate Agents	Hooker, L. J. Ltd., 68 Macquarie St., Parramatta 2150	60325	1991	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS.	Chambers, B. L. & Co., 68 Macquarie St., Parramatta 2150	275	1986	Premise Match	0m	On-site
	TAXATION CONSULTANTS.	Chambers, B. L. & Co., 68 Macquarie St., Parramatta. 2150	92199	1986	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS.	Chambers, B. L., 68 Macquarie St., Parramatta. 2150	276	1986	Premise Match	0m	On-site
	VALUERS - REAL ESTATE.	Hooker, L. J. Ltd. 68 Macquarie St. Parramatta. 2150	96870	1986	Premise Match	0m	On-site
	AUCTIONEERS-GENERAL.	Hooker, L. J. Ltd., 68 Macquarie St., Parramatta. 2150	4260	1986	Premise Match	0m	On-site
	PROPERTY MANAGEMENT.	Hooker, L. J. Ltd., 68 Macquarie St., Parramatta. 2150	77665	1986	Premise Match	0m	On-site
	REAL ESTATE AGENTS.	Hooker, L.J. Ltd., 68 Macquarie St., Parramatta. 2150	79647	1986	Premise Match	0m	On-site
	LAND DEVELOPERS. (L1200)	Bunny Industries Ltd., 68 Macquarie St., Parramatta. 2150.	44607	1982	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS. (A0360)	Chambers, B. L. & Co., 68 Macquarie St., Parramatta. 2150.	248	1982	Premise Match	0m	On-site
	TAXATION CONSULTANTS. (T1050)	Chambers, B. L. & Co., 68 Macquarie St., Parramatta. 2150.	79150	1982	Premise Match	0m	On-site
	REAL ESTATE AGENTS. (R2555)	Hooker L. J. Ltd., 68 Macquarie St., Parramatta. 2150.	69155	1982	Premise Match	0m	On-site
	AUCTIONEERS-GENERAL. (A8310)	Hooker, L. J. Ltd., 68 Macquarie St., Parramatta. 2150.	3803	1982	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
2	PROPERTY MANAGEMENT. (P9060)	Hooker, L. J. Ltd., 68 Macquarie St., Parramatta. 2150.	67368	1982	Premise Match	0m	On-site
	REAL ESTATE AGENTS &/OR VALUERS.	Hooker, L. J., 68 Macquarie St., Parramatta. 2150	61817	1978	Premise Match	0m	On-site
	REAL ESTATE AGENTS &/OR VALUERS.	Hooker, L. J., 68 Macquarie St., Parramatta. 2150	72477	1975	Premise Match	0m	On-site
	FURNITURE-HOUSEHOLD RETAIL	Ready Cut Furniture Pty. Ltd., 68 Macquarie St., Parramatta. 2150	36954	1975	Premise Match	0m	On-site
	FURNITURE-HOUSEHOLD-RETAILERS	Ready Cut Furniture Co., 68-70 Macquarie St., Parramatta	309565	1970	Premise Match	0m	On-site
	Furniture - Household - Retailers	Ready Cut Furniture Co., 68-70 Macquarie St., Parramatta	93623	1965	Premise Match	0m	On-site
	MEDICAL PRACTITIONERS	Morey, B. R., 68 Macquarie St., Parramatta	335922	1961	Premise Match	0m	On-site
3	Real Estate Agents	Impell, J. & Co., 7 Smith St., Parramatta 2150	60358	1991	Premise Match	0m	On-site
	TAKE-AWAY FOODS.	Healthy Bites, 7 Smith St., Parramatta. 2150.	90957	1986	Premise Match	0m	On-site
	REAL ESTATE AGENTS.	Impell J. & Co., 7 Smith St., Parramatta. 2150	79712	1986	Premise Match	0m	On-site
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Fleets Salon, 7 Smith St., Parramatta. 2150.	5634	1982	Premise Match	0m	On-site
	REAL ESTATE AGENTS. (R2555)	Impell, J. & Co., 7 Smith St., Parramatta. 2150.	69215	1982	Premise Match	0m	On-site
	REAL ESTATE AGENTS &/OR VALUERS.	Impell, J. & Co., 7 Smith St., Parramatta. 2150	61840	1978	Premise Match	0m	On-site
	INSURANCE COMPANIES-GENERAL	Guardian Royal Exchange., 7 Smith St., Parramatta. 2150	45034	1975	Premise Match	0m	On-site
	REAL ESTATE AGENTS &/OR VALUERS.	Impell J. & Co., 7 Smith St., Parramatta. 2150	72506	1975	Premise Match	0m	On-site
	TRAVEL AGENCIES &/OR BOOKING OFFICES.	Impell, J. & Co., 7 Smith St., Parramatta. 2150	85052	1975	Premise Match	0m	On-site
	EMBROIDERY MANUFACTURERS &/OR SPECIALISTS (E420)	Russell Embroidery Co., 7 Smith St., Parramatta	296789	1970	Premise Match	0m	On-site
	SILICONE PROCESSORS &/OR SUPPLIERS (S322)	Stokes, S. H. Pty. Ltd., 5 Smith St., Parramatta.	361683	1970	Premise Match	0m	On-site
	ANTIQUE RESTORERS & REPAIRERS (A410)	Stokes., S.H. Pty. Ltd., 5 Smith St, Parramatta	261815	1970	Premise Match	0m	On-site
	HAIRDRESSERS (GENT.'S) (H070)	Style Cutting., 5a Smith St., Parramatta	314468	1970	Premise Match	0m	On-site
	Church Supplies - Catholic	Pellegrini Bros., 5 Smith St., Parramatta	66326	1965	Premise Match	0m	On-site
	Upholsterers - Mfrg.	Stokes, S. H., 5 Smith St., Parramatta	155021	1965	Premise Match	0m	On-site
	BUILDERS & CONTRACTORS	Norman, V. & Co. Pty. Ltd., 5a Smith St., Parramatta	276568	1961	Premise Match	0m	On-site
	MEDICAL PRACTITIONERS	Morey, B. R., 56 Macquarie St., Parramatta	73483	1950	Premise Match	0m	On-site
4	Insurance Companies General	New Zealand Insurance, 74 Macquarie St., Parramatta. 2150	49568	1991	Premise Match	0m	On-site
	INSURANCE COMPANIES ¬GENERAL.	New Zealand Insurance, 74 Macquarie St., Parramatta. 2150	48948	1986	Premise Match	0m	On-site
	INSURANCE COMPANIES - GENERAL (I4400)	South British Insurance Co. Ltd., 74 Macquarie St., Parramatta. 2150.	42805	1982	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS.	Beattie, Wallace, C. & Co., 74 Macquarie St., Parramatta. 2150	134	1978	Premise Match	0m	On-site
	INSURANCE COMPANIES-GENERAL.	South British Insurance Co. Ltd., 74 Macquarie St., Parramatta. 2150	38145	1978	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS.	Beattie. Wallace, C. & Co., 74 Macquarie St., Parramatta. 2150	124	1975	Premise Match	0m	On-site
	FINANCIERS &/OR FINANCE AGENTS.	General Motors Acceptance Corp, Aust., 74 Macquarie St., Parramatta. 2150.	31976	1975	Premise Match	0m	On-site
	INSURANCE COMPANIES-GENERAL	South British Insurance Co. Ltd., 74 Macquarie St., Parramatta. 2150	45102	1975	Premise Match	0m	On-site

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
4	ACCOUNTANTS & AUDITORS (A040)	Beattie, Wallace C & Co., 74 Macquarie St., Parramatta	258532	1970	Premise Match	0m	On-site
	FINANCIERS/FINANCE AGENTS (F180)	General Motors Acceptance Corp. Aust., 74 Macquarie St., Parramatta	302940	1970	Premise Match	0m	On-site
	REAL ESTATE AGENTS/VALUERS(R205)	Mayford & Co. Pty. Ltd., 74 Macquarie St., PARRAMATTA	355709	1970	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS	Beattie, Wallace C. & Co., 74 Macquarie St., Parramatta	43426	1965	Premise Match	0m	On-site
	SWIMMING POOL CONSTRUCTION CONTRACTORS	Laurie, Percy Contstruction Pty. Ltd., 74 Macquarie St., Parramatta	254735	1961	Premise Match	0m	On-site
	INSURANCE COMPANIES—GENERAL	South British Insurance Co Ltd South British Bldg., 74 Macquarie St., Parramatta	328391	1961	Premise Match	0m	On-site
5	ARTISTS SUPPLIES-RETAIL.	Artdraft, 72A Macquarie St., Parramatta. 2150	3927	1986	Premise Match	0m	On-site
	DRAWING OFFICE SUPPLIES.	Artdraft, 72A Macquarie St., Parramatta. 2150	24936	1986	Premise Match	0m	On-site
	PLAN PRINTERS.	Artdraft, 72A Macquarie St., Parramatta. 2150	74021	1986	Premise Match	0m	On-site
	ACCOUNTANTS & AUDITORS.	Rowan, H. W. Miller Co., 72 Macquarie St., Parramatta. 2150	947	1986	Premise Match	0m	On-site
	DESIGN CONSULTANTS.	Mechanical Drawing Service Pty. Ltd., 72 Macquarie St., Parramatta.	21621	1975	Premise Match	0m	On-site
	DRAUGHTSMEN.	Mechanical Drawing Service Pty. Ltd., 72 Macquarie St., Parramatta. 2150	22706	1975	Premise Match	0m	On-site
	ENGINEERS-DESIGNING	Mechanical Drawing Service Pty. Ltd., 72 Macquarie St., Parramatta. 2150	28018	1975	Premise Match	0m	On-site
	DESIGN CONSULTANTS (D175)	Mechanical Drawing Service Pty. Ltd., 72 Macquarie St., Parramatta.	289242	1970	Premise Match	0m	On-site
	MEDICAL PRACTITIONERS	Iceton, S. G., 72 Macquarie St., Parramatta	335504	1961	Premise Match	0m	On-site
6	FLORISTS-RETAIL.	Arcade Flowers, 3 Smith St., Parramatta. 2150	33640	1986	Premise Match	0m	South East
	MUSICAL INSTRUMENT DEALERS	Guitar Factory, 1A Smith St., Parramatta. 2150	68954	1986	Premise Match	0m	South East
	SECONDHAND DEALERS.	Smith Street Loan Office, 1 Smith St., Parramatta. 2150	85484	1986	Premise Match	0m	South East
	ACCOUNTANTS & AUDITORS.	Storey, John H., 1 Smith St., Parramatta. 2150	1028	1986	Premise Match	0m	South East
	ARCHITECTS. (A6570)	Sibir, A., 1 Smith St., Parramatta. 2150.	3254	1982	Premise Match	0m	South East
	ARCHITECTS.	Macdonald, B.D., 1 Smith St., Parramatta 2150	3015	1978	Premise Match	0m	South East
	ARCHITECTS.	MacDonald, B. D., 1 Smith St., Parramatta. 2150	2791	1975	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS(M6S6)	Clarke, A., 1 Smith St Parramatta	337582	1970	Premise Match	0m	South East
	ANTIQUE DEALERS (A400)	Flairs Antiques, 1 Smith St, Parramatta	261734	1970	Premise Match	0m	South East
	ANTIQUE DEALERS (A400)	Flairs Antiques, 1 Smith St, Parramatta	261735	1970	Premise Match	0m	South East
	CHEMISTS-BIOLOGICAL (C277)	Green, C. J., 78 Macquarie St, Parramatta	279696	1970	Premise Match	0m	South East
	ARCHITECTS (A440)	Macdonald, B.D., 1-3 Smith St., Parramatta	262055	1970	Premise Match	0m	South East
	ACCOUNTANTS & AUDITORS (A040)	Smith, J.F., 78 Macquarie St., Parramatta	259299	1970	Premise Match	0m	South East
	RUBBER GOODS MANUFACTURERS &/OR DISTRIBUTORS	Stewart, Thomas & Co. Pty. Ltd., 1 Smith St., Parramatta	358117	1970	Premise Match	0m	South East
	RUBBER GOODS MFRS.-INDUSTRIAL(R485)	Stewart, Thomas & Co. Pty. Ltd., 1 Smith St., Parramatta	358074	1970	Premise Match	0m	South East
	RUBBER HOSE MANUFACTURERS &/OR DISTRIBUTORS (R490)	Stewart, Thomas & Co. Pty. Ltd., 1 Smith St., Parramatta	358140	1970	Premise Match	0m	South East

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6	RUBBER MOULDED PRODUCTS-SYNTHETIC-MFRS. (R505)	Stewart, Thomas & Co. Pty. Ltd., 1 Smith St., Parramatta	358202	1970	Premise Match	0m	South East
	MUSIC SHEET &/OR RECORDS DEALERS	Watson's Music Centre., 3 Smith St., Parramatta	343224	1970	Premise Match	0m	South East
	Gift Shops	"Flairs" Antiques., 1 Smith St., Parramatta	94897	1965	Premise Match	0m	South East
	Motor Garages & Engineers	Clarke, A., 1 Smith St Parramatta	123165	1965	Premise Match	0m	South East
	Antique Dealers	Flairs" Antiques., 1 Smith St., Parramatta	46439	1965	Premise Match	0m	South East
	Baths - Turkish	Head, Stan W., 78 Macquarie St., Parramatta	49995	1965	Premise Match	0m	South East
	Electrotherapists	Head, Stan W., 78 Macquarie St., Parramatta	80317	1965	Premise Match	0m	South East
	Masseurs/Masseuses	Head, Stan W., 78 Macquarie St., Parramatta	110308	1965	Premise Match	0m	South East
	Architects	Macdonald, B. D., 1-3 Smith St., Parramatta	46713	1965	Premise Match	0m	South East
	Office Supplies &/or Equipment - Retail	Parramatta Stationary Supplies, 76 Macquarie St., Parramatta	129466	1965	Premise Match	0m	South East
	STATIONERS—RETAIL	Parramatta Stationery Supplies, 76 Macquarie St., Parramatta	147652	1965	Premise Match	0m	South East
	Music - Sheet, Gramophone Records - Dealers	Watson's Music Centre, 3 Smith St., Parramatta	127609	1965	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS	Clarke, A., 1 Smith St Parramatta	346895	1961	Premise Match	0m	South East
	BUTCHERS-WHOLESALE	Humphrey & Peare Pty. Ltd., 78 Macquarie St., Parramatta	281478	1961	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS	Clarke, A., 1 Smith St Parramatta	83594	1950	Premise Match	0m	South East
	MOTOR SERVICE STATIONS-PETROL, Etc.	Clarke, Pat., 1 Smith St Parramatta	85875	1950	Premise Match	0m	South East
	PRODUCE MERCHANTS-GRAIN & SEED-RETAIL	N.S.W. Produce Co. Pty. Ltd., 76 Macquarie St., Parramatta	95625	1950	Premise Match	0m	South East
	PRODUCE MERCHANTS-WHOLESALE	N.S.W. Produce Co. Pty. Ltd., 76 Macquarie St., Parramatta	95855	1950	Premise Match	0m	South East
7	ACCOUNTANTS & AUDITORS.	Palmer, Heppleston & Farrar, 64 Macquarie St., Parramatta. 2150	842	1986	Premise Match	0m	West
	TAXATION CONSULTANTS.	Palmer, Heppleston & Farrar, 64 Macquarie St., Parramatta. 2150	92342	1986	Premise Match	0m	West
	TAXATION CONSULTANTS.	West Tax Australia Ltd., 64 Macquarie St., Parramatta. 2150	92396	1986	Premise Match	0m	West
8	ACCOUNTANTS & AUDITORS.	Price-Waterhouse & Co., 58 Macquarie St., Parramatta. 2150	894	1986	Premise Match	0m	West
	TRAVEL AGENCIES &/OR BOOKING OFFICES.	Traveland Travel, 58 Macquarie St., Parramatta. 2150	95724	1986	Premise Match	0m	West
	TRAVEL AGENCIES &/OR BOOKING OFFICES. (T7425)	Grace-Swire Travel, 58 Macquarie St., Parramatta. 2150.	81906	1982	Premise Match	0m	West
	ACCOUNTANTS & AUDITORS. (A0360)	Price-Waterhouse & Co., 58 Macquarie St., Parramatta. 2150.	790	1982	Premise Match	0m	West
	Electrical Contractors - Licensed Firms	Parramatta & Granville Electric Supply Co. Ltd., 60 Macquarie St., Parramatta	79027	1965	Premise Match	0m	West
	CHIROPODISTS	Parramatta Foot Centre, 60 Macquarie St., Parramatta	288624	1961	Premise Match	0m	West
	FARRIERS	Lyons, H. (J. Waters), 58 Macquarie St., Parramatta	43554	1950	Premise Match	0m	West
	AGRICULTURAL MACHINERY DEALERS	Rowston, E. D., 60 Macquarie St., Parramatta	1353	1950	Premise Match	0m	West
	BUSINESS AGENTS &/OR BROKERS	Rowston, E. D., 60 Macquarie St., Parramatta	12915	1950	Premise Match	0m	West
	INSURANCE AGENTS	Rowston, E. D., 60 Macquarie St., Parramatta	64982	1950	Premise Match	0m	West
	REAL ESTATE AGENTS	Rowston, E. D., 60 Macquarie St., Parramatta	98759	1950	Premise Match	0m	West
	STOCK & STATION AGENTS	Rowston, E. D., 60 Macquarie St., Parramatta	105641	1950	Premise Match	0m	West

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8	VALUERS	Rowston, E. D., 60 Macquarie St., Parramatta	111708	1950	Premise Match	0m	West
	AUCTIONEERS-GENERAL	Rowston, F. D., 60 Macquarie St., Parramatta	4154	1950	Premise Match	0m	West
9	DENTISTS.	Choo, Mary G. Y., Roxy Arc. George St., Parramatta. 2150	22412	1986	Premise Match	1m	North East
	RESTAURANTS.	Phoenecia, The, Roxy Arc, George St., Parramatta. 2150	82562	1986	Premise Match	1m	North East
	TAKE-AWAY FOODS.	Pizzeria Take Away Foods, Roxy Arc., George St., Parramatta. 2150	91601	1986	Premise Match	1m	North East
	DENTISTS.	Rodman, C. H., Roxy Arc, George St., Parramatta. 2150	23254	1986	Premise Match	1m	North East
	TAKE-AWAY FOODS.	Roxy Kitchen, Roxy Arc., George St., Parramatta. 2150	91689	1986	Premise Match	1m	North East
	STAMP DEALERS.	Sao Stamps, Rosy Arc. George St., Parramatta. 2150	88150	1986	Premise Match	1m	North East
	COIN DEALERS.	Sao Stamps, Roxy Arc. George St., Parramatta. 2150	19133	1986	Premise Match	1m	North East
	HAIRDRESSERS-MENS.	Stallion Stable, Roxy Arc., George St., Parramatta. 2150	44111	1986	Premise Match	1m	North East
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Chevelure Hair Studio, Roxy Arc., George St., Parramatta. 2150.	5416	1982	Premise Match	1m	North East
	HAIRDRESSERS - GENTS. (H0550)	Chevelure Hair Studio, Roxy Arc., George St., Parramatta. 2150.	38434	1982	Premise Match	1m	North East
	TAKE-AWAY FOODS. (T0235)	Pizzeria Take Away Foods, Roxy Arc., George St., Parramatta. 2150.	78840	1982	Premise Match	1m	North East
	HAIRDRESSERS - GENTS. (H0550)	Stallion Stable. Roxy Arc., George St., Parramatta. 2150.	38762	1982	Premise Match	1m	North East
	Milk, Fruit Juice Bars/Confectioners	Roxy Candy Shoppe, 67 George St., Parramatta	115561	1965	Premise Match	1m	North East
	PICTURE THEATRES	Parramatta Roxy, 67 George St., Parramatta	358520	1961	Premise Match	1m	North East
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Roxy Candy Shoppe, 67 George St., Parramatta	339580	1961	Premise Match	1m	North East
	MEDICAL PRACTITIONERS	Sands, C. C., 69 George St., Parramatta	336248	1961	Premise Match	1m	North East
	MEDICAL PRACTITIONERS	Hogg, J. E. P., 69 George St., Parramatta	73163	1950	Premise Match	1m	North East
	PICTURE THEATRES-SUBURBAN	Parramatta Roxy, George St., Parramatta	92872	1950	Premise Match	1m	North East
	CONFECTIONERS-RETAIL	Roxy Candy Shoppe, George St., Parramatta	28765	1950	Premise Match	1m	North East
	FROCK & COAT SALONS	Roxy Frocks, 65 George St., Parramatta	48899	1950	Premise Match	1m	North East
	PICTURE THEATRES-SUBURBAN	Roxy Theatre (Hoyts), George St., Parramatta	92894	1950	Premise Match	1m	North East
10	Information Services	Parramatta Community Services & information Centre, 13 Smith St., Parramatta. 2150	49087	1991	Premise Match	8m	North East
	ACCOUNTANTS & AUDITORS.	Coopers & Lybrand, 27 Smith St., Parramatta. 2150	319	1986	Premise Match	8m	North East
	TYPEWRITER DEALERS &/OR REPAIRERS (T730)	Ess-An-Vee Typewriter & Supplies Co, 9 Smith St, Parramatta	371492	1970	Premise Match	8m	North East
	TYPEWRITER/OFFICE MACHINE HIRERS (T740)	Ess-An-Vee Typewriter & Supplies Co, 9 Smith St, Parramatta	371601	1970	Premise Match	8m	North East
	ADDING & CALCULATING MACHINES-DEALERS &/OR IMPS	Ess-An-Vee Typewriter & Supplies Co., 9 Smith St., Parramatta	259598	1970	Premise Match	8m	North East
	CASH REGISTER REPAIRERS	Ess-an-Vee Typewriter & Supplies Co., 9 Smith St., Parramatta	278641	1970	Premise Match	8m	North East
	CASH REGISTERS-IMPORTERS &/OR DEALERS (C171)	Ess-an-Vee Typewriter & Supplies Co., 9 Smith St., Parramatta	278659	1970	Premise Match	8m	North East
	OFFICE MACHINE REPAIRS (O 050)	Ess-An-Vee Typewriter & Supplies Co., 9 Smith St., Parramatta	344812	1970	Premise Match	8m	North East

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10	HOTELS-LICENSED (H690)	Lennox Hotel., 73-81 George St., Parramatta	317398	1970	Premise Match	8m	North East
	Jewellers/Watchmakers - Retail	Campbell, J. H., 11 Smith St., Parramatta	105904	1965	Premise Match	8m	North East
	SPORTS GOODS RETAILERS	Campbell, J. H., 11 Smith St., Parramatta	146432	1965	Premise Match	8m	North East
	Hotels - Licensed	Lennox Hotel, 73-81 George St., Parramatta	101714	1965	Premise Match	8m	North East
	MEDICAL PRACTITIONERS	Cooper, J. H., 73 George St., Parramatta	334849	1961	Premise Match	8m	North East
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Peisley, T. G., 75 George St., Parramatta	339472	1961	Premise Match	8m	North East
	INSURANCE COMPANIES—GENERAL	Phoenix Assurance Company Ltd 11 Smith St Parramatta,	328362	1961	Premise Match	8m	North East
	MEDICAL PRACTITIONERS	Waugh, I. P., 9 Smith St., Parramatta	336584	1961	Premise Match	8m	North East
	MEDICAL PRACTITIONERS	Cooper, J. H., 73 George St., Parramatta	72669	1950	Premise Match	8m	North East
11	Bakers	Daily Bread, 23 Parra Mall, George St, Parramatta 2150	35243	1991	Premise Match	13m	North
	Diving Equipment Mfrs &/or Dists	Scuba Warehouse, 65 George St, Parramatta 2150	41596	1991	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra-Mall, George St., Parramatta. 2150	25515	1986	Premise Match	13m	North
	DELICATESSENS.	Blue Ribbon Deli, 12 Parra-Mall, George St., Parramatta. 2150	21555	1986	Premise Match	13m	North
	RESTAURANTS.	Crystal Lounge, 6 Parra-Mall, George St., Parramatta. 2150	81415	1986	Premise Match	13m	North
	BAKERS-BREAD.	Daily Bread, 23 Parra-Mall, George St., Parramatta. 2150	5041	1986	Premise Match	13m	North
	REAL ESTATE AGENTS.	Diamond Grant Real Estate Pty. Ltd., 63 George St., Parramatta. 2150	79361	1986	Premise Match	13m	North
	HAIRDRESSERS-LADIES &/OR BEAUTY SALONS.	Erics, 19 Parra-Mall, George St., Parramatta. 2150	42011	1986	Premise Match	13m	North
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Freckles Boutique, 14 Parra-Mall, George St., Parramatta.2150	17217	1986	Premise Match	13m	North
	HAIRDRESSERS-LADIES &/OR BEAUTY SALONS.	Hair Connection, 10 Parra-Mall, George St., Parramatta. 2150	42189	1986	Premise Match	13m	North
	HAIRDRESSERS-MENS.	Hair Connection, 10 Parra-Mall, George St., Parramatta. 2150	43714	1986	Premise Match	13m	North
	HEALTH FOODS-RETAIL.	Healthy Life, 13 Parra-Mall, George St., Parramatta. 2150	45300	1986	Premise Match	13m	North
	GIFT SHOPS.	Heres Something, 16 Parra-Mall, George St., Parramatta. 2150	39133	1986	Premise Match	13m	North
	TAKE-AWAY FOODS.	Lee's Gourmet, 4 Parra-Mall, George St., Parramatta. 2150.	91203	1986	Premise Match	13m	North
	JEWELLERS &/OR WATCHMAKERS-RETAIL.	McLaughlins, 7 Parra-Mall, George St., Parramatta. 2150	49833	1986	Premise Match	13m	North
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Parra-Mall Boutique, 18 Parra-Mall, George St., Parramatta. 2150	17677	1986	Premise Match	13m	North
	CAKE SHOPS &/OR PASTRYCOOKS.	Parra-Mall Donuts, 8 Parra-Mall, George St., Parramatta. 2150	11851	1986	Premise Match	13m	North
	BUTCHERS-RETAIL.	Parra-mall Meats, 22 Parra-Mall, George St., Parramatta. 2150	10408	1986	Premise Match	13m	North
	CHEMISTS-PHARMACEUTICAL.	Parra-mall Pharmacy, 17 Parra-Mall, George St., Parramatta. 2150	14686	1986	Premise Match	13m	North
	STATIONERS - RETAIL.	Pentad, W. C. & Co. Pty. Ltd., 30 Parra -Mall, George St., Parramatta. 2150	88528	1986	Premise Match	13m	North
	FOOTWEAR RETAILERS.	Prestige Shoe, 9 Parra-Mall, George St., Parramatta. 2150	34939	1986	Premise Match	13m	North
	THEATRES.	Roxy Theatre, 65 George St., Parramatta. 2150	93106	1986	Premise Match	13m	North
	DIVING SCHOOLS.	Scuba Warehouse, 1 Parra-Mall, George St., Parramatta. 2150	24482	1986	Premise Match	13m	North
	SPORTS GOODS RETAILERS.	Scuba Warehouse, 1 Parra-Mall, George St., Parramatta. 2150	87582	1986	Premise Match	13m	North

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11	DIVING EQUIPMENT MFRS. &/OR DISTS.	Scuba Warehouse, 65 George St., Parramatta. 2150	24463	1986	Premise Match	13m	North
	DIVING SCHOOLS.	Scuba Warehouse, 65 George St., Parramatta. 2150	24481	1986	Premise Match	13m	North
	FRUITERERS &/OR GREENGROCERS.	She's Apples, 24 Parra-Mall, George St., Parramatta. 2150	36349	1986	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.(D8500)	60 Minute Cleaners, 27 Parra- Mall, George St., Parramatta. 2150.	24047	1982	Premise Match	13m	North
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Bonnefoy, Ernest, 10 Parra-Mall, George St., Parramatta. 2150.	5308	1982	Premise Match	13m	North
	RESTAURANTS. (R5180)	Crystal Lounge, 6 Parra-Mall, George St., Parramatta. 2150.	70694	1982	Premise Match	13m	North
	BAKERS - BREAD. (B0440)	Daily Bread, 23 Parra-Mall, George St., Parramatta. 2150.	4562	1982	Premise Match	13m	North
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Erics, 19 Parra-Mall, George St., Parramatta. 2150.	5598	1982	Premise Match	13m	North
	GROCERS - RETAIL. (G7850)	Franklins, Parra-Mall, George St., Parramatta. 2150.	37644	1982	Premise Match	13m	North
	DRESS SHOPS & ACCESSORIES.(D7450)	Freckles Boutique, 14 Parra-Mall, George St., Parramatta. 2150.	22823	1982	Premise Match	13m	North
	HEALTH FOODS - RETAIL. (H3000)	Healthy Life, 13 Parra-Mall, George St., Parramatta. 2150.	39702	1982	Premise Match	13m	North
	DELICATESSENS, (D1250)	Igloo Deli, 12 Parra-Mall, George St., Parramatta. 2150.	19463	1982	Premise Match	13m	North
	DRESS SHOPS & ACCESSORIES.(D7450)	Jean Justis, 26 Parra-Mall, George St., Parramatta. 2150.	22966	1982	Premise Match	13m	North
	TAKE-AWAY FOODS. (T0235)	Lee's Gourmet, 4 Parra-Mall, George St., Parramatta. 2150.	78587	1982	Premise Match	13m	North
	RECORD BARS. (R2835)	Light-N-Sound, 15 Parra-Mall, George St., Parramatta. 2150.	69969	1982	Premise Match	13m	North
	JEWELLERS &/OR WATCHMAKERS RETAIL. (J0550)	McLaughlins, 7 Parra-Mall, George St., Parramatta. 2150.	43662	1982	Premise Match	13m	North
	BUTCHERS - RETAIL. (B8040)	Parramal Meats, 22 Parra-Mall, George St., Parramatta. 2150.	11365	1982	Premise Match	13m	North
	CHEMISTS - PHARMACEUTICAL.(C4110)	Parramal Pharmacy, 17 Parra-Mall, George St., Parramatta. 2150.	15496	1982	Premise Match	13m	North
	TAKE-AWAY FOODS. (T0235)	Pavlova Corner, 1 Parra-Mall, George St., Parramatta. 2150.	78778	1982	Premise Match	13m	North
	DRAWING OFFICE SUPPLIES. (D6750)	Penfold, W. C. & Co. Pty, Ltd., Shop 30 Parra-mall, Parramatta. 2150.	22286	1982	Premise Match	13m	North
	OFFICE SUPPLIES &/OR EQUIPMENT-RETAIL. (O0800)	Penfold, W. C. & Co. Pty. Ltd Shop 30 Parra-mall, Parramatta. 2150.	61469	1982	Premise Match	13m	North
	STATIONERS - RETAIL. (S5535)	Penfold, W. C. & Co. Pty. Ltd., 30 Parra-Mall, George St., Parramatta. 2150.	76537	1982	Premise Match	13m	North
	ACCOUNTING BOOK MFRS. (A0390)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra Mall, Parramatta. 2150.	1057	1982	Premise Match	13m	North
	OFFICE EQUIPMENT MFRS.&/OR DISTS. (O0400)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra Mall, Parramatta. 2150.	61356	1982	Premise Match	13m	North
	STATIONERY - LOOSE LEAF SYSTEMS &/OR EQUIPMENT MFRS. &/OR DISTS. (S5595)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra Mall, Parramatta. 2150.	76736	1982	Premise Match	13m	North
	ENVELOPE MFRS. &/OR DISTS.(E8910)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra Mall, Parramatta.2150.	29654	1982	Premise Match	13m	North
	STATIONERS - COMMERCIAL. (S5475)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra-mall, Parramatta. 2150.	76256	1982	Premise Match	13m	North
	STATIONERS - RETAIL. (S5535)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra-mall, Parramatta. 2150.	76540	1982	Premise Match	13m	North
	FURNITURE - OFFICE - RETAIL.(F8805)	Penfold, W. C. & Co. Pty. Ltd., Shop 30 Parra-mall, Parramatta.2150.	35391	1982	Premise Match	13m	North
	STATIONERS - LAW. (S5480)	Penfold. W. C. & Co. Pty. Ltd., Shop 30 Parra-mall, Parramatta. 2150.	76277	1982	Premise Match	13m	North
	FOOTWEAR RETAILERS (F5575)	Prestige Shoe, 9 Parra-Mall, George St., Parramatta. 2150.	32554	1982	Premise Match	13m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
11	FRUITERERS &/OR GREENGROCERS. (F6775)	She's Apples, 24 Parra-Mall, George St., Parramatta. 2150.	33944	1982	Premise Match	13m	North
	BABY & CHILDREN'S WEAR-RETAIL(B005)	Dimity Gay., 61 George St., Parramatta	264084	1970	Premise Match	13m	North
	MERCERS-MEN'S & BOYS' OUTFITTERS(M232)	Langford, R., 61 George St., Parramatta	328989	1970	Premise Match	13m	North
	TAILORS-LADIES' &/OR GENTS	Langford, R., 61 George St., Parramatta	366786	1970	Premise Match	13m	North
	PICTURE THEATRES (P364)	Parramatta Roxy., 67 George St., Parramatta	348891	1970	Premise Match	13m	North
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Roxy Candy Shoppe., 67 George St., Parramatta	331163	1970	Premise Match	13m	North
	Baby & Children's Wear - Retail	"Dimity Gay," 61 George St., Parramatta	48788	1965	Premise Match	13m	North
	Management Consultants	Australian Property Units Managements Ltd., 61 George St., Parramatta	108995	1965	Premise Match	13m	North
	Chemists - Pharmaceutical	George Street Pharmacy, 61 George St., Parramatta	65046	1965	Premise Match	13m	North
	Financiers/Finance Agents	Intermediate Finance Co. Ltd., 61 George St., Parramatta	86333	1965	Premise Match	13m	North
	Mercers - Men's & Boys' Outfitters	Langford, R., 61 George St., Parramatta	113339	1965	Premise Match	13m	North
	Tailors-Ladies'/Gents	Langford, R., 61 George St., Parramatta	149634	1965	Premise Match	13m	North
	Newspaper Publishers	Parramatta & Hills News, 61a George St., Parramatta	128632	1965	Premise Match	13m	North
	Printers - Letterpress	Parramatta & Hills News., 61a George St., Parramatta	136228	1965	Premise Match	13m	North
	BABY & CHILDREN'S WEAR-RETAIL	"Dimity Gay., 61 George St., Parramatta	270330	1961	Premise Match	13m	North
	ARCHITECTS	Ardill, F. O., 61 George St., Parramatta	268077	1961	Premise Match	13m	North
	BUILDING SOCIETIES & COMPANIES	Hills District No. 1-30 Co-operative Building Society, 61a George St., Parramatta	278617	1961	Premise Match	13m	North
	FROCK & COAT SALONS	J's Store, 61a George St., Parramatta	314228	1961	Premise Match	13m	North
	MERCERS—MEN'S & BOYS' OUTFITTERS	Langford, R., 61 George St., Parramatta	336992	1961	Premise Match	13m	North
	TAILORS-LADIES'/GENT.'S	Langford, R., 61 George St., Parramatta	254987	1961	Premise Match	13m	North
	REAL ESTATE AGENTS/VALUERS	Oades, Leonard & Co., 61a George St. PARRAMATTA	244963	1961	Premise Match	13m	North
	MOTOR ACCESSORIES/DEALERS	Roxy Garage & Parking Station, 61 George St., Parramatta	343756	1961	Premise Match	13m	North
	MOTOR CAR/TRUCK DEALERS—NEW/USED	Roxy Service Station Pty Ltd 61 George St., Parramatta	345357	1961	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS	Roxy Service Station Pty. Ltd., 61 George St Parramatta	348073	1961	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS	Roxy Service Station Pty. Ltd., 61 George St Parramatta	348072	1961	Premise Match	13m	North
	MOTOR SERVICE STATIONS—PETROL, OIL, Etc.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	351045	1961	Premise Match	13m	North
	MOTOR ACCESSORIES—W'SALE	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	344014	1961	Premise Match	13m	North
	MOTOR CAR/TRUCK DEALERS—NEW/USED	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	345358	1961	Premise Match	13m	North
	MOTOR PAINTERS	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	349143	1961	Premise Match	13m	North
	MOTOR PANEL BEATERS	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	349924	1961	Premise Match	13m	North
	MOTOR TOWING SERVICES	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	352182	1961	Premise Match	13m	North
	MOTOR WHEEL REPAIRERS/SPECIALISTS	Roxy Service Station Pty. Ltd., 61 George St., Parramatta	352431	1961	Premise Match	13m	North

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11	REAL ESTATE AGENTS/VALUERS	Telfer, K. J., 61a George St. PARRAMATTA	244977	1961	Premise Match	13m	North
	BUILDING SOCIETIES & COMPANIES	Western Suburbs Homes Co-op. Soc. Pty. Ltd., 61a George St., Parramatta	278699	1961	Premise Match	13m	North
	REAL ESTATE AGENTS	Central Livestock Co., Macquarie Chamb., 61 George St., Parramatta	98064	1950	Premise Match	13m	North
	INSURANCE AGENTS	Dawson, S., 61a George St., Parramatta	64821	1950	Premise Match	13m	North
	RADIO SALES &/OR SERVICEMEN	Dawson, Stan, 61a George St., Parramatta	97124	1950	Premise Match	13m	North
	TAILORS-LADIES &/OR GENT.'S	Langford, R., 61 George St., Parramatta	106493	1950	Premise Match	13m	North
	MOTOR ACCESSORIES-DEALER	Roxy Garage and Parking Station, 61 George St., Parramatta	81762	1950	Premise Match	13m	North
	MOTOR ACCESSORIES-WHOLESALE	Roxy Garage and Parking Station, 61 George St., Parramatta	81942	1950	Premise Match	13m	North
	MOTOR CAR & TRUCK DEALERS-USED	Roxy Garage and Parking Station, 61 George St., Parramatta	82548	1950	Premise Match	13m	North
	MOTOR PAINTERS	Roxy Garage and Parking Station, 61 George St., Parramatta	85007	1950	Premise Match	13m	North
	MOTOR PARKING STATIONS	Roxy Garage and Parking Station, George St., Parramatta	85654	1950	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS	Roxy Garage and Parking Station., 61 George St Parramatta	84325	1950	Premise Match	13m	North
	MOTOR SERVICE STATIONS-PETROL, Etc.	Roxy Garage and Parking Station., George St Parramatta	86363	1950	Premise Match	13m	North
12	Office Equipment &/or Supplies Mfrs &/or Imps &/or W/salers	Complete Office Supplies, 41 George St., Parramatta. 2150	55972	1991	Premise Match	14m	North West
	Blind Mfrs &/or Specialists	In Touch Interiors, 55 George St, Parramatta 2150	36012	1991	Premise Match	14m	North West
	BOOKSELLERS-RETAIL.	Books Unlimited, 47 George St., Parramatta.2150	6924	1986	Premise Match	14m	North West
	FRUITERERS &/OR GREENGROCERS.	Charles Fruit Mart, 45 George St., Parramatta. 2150	35849	1986	Premise Match	14m	North West
	OFFICE EQUIPMENT &/OR SUPPLIES MFRS. &/OR IMPS. &/OR W/SALERS.	Complete Office Supplies, 41 George St., Parramatta. 2150	70224	1986	Premise Match	14m	North West
	STATIONERS - RETAIL.	Complete Office Supplies, 41 George St., Parramatta. 2150	88386	1986	Premise Match	14m	North West
	FRUITERERS &/OR GREENGROCERS. (F6775)	Charles Fruit Mart, 45 George St., Parramatta. 2150.	33427	1982	Premise Match	14m	North West
	BOOKSELLERS - RETAIL. (B4475)	El-Cheapo, 47 George St., Parramatta. 2150.	7832	1982	Premise Match	14m	North West
	MOTOR HIRE SERVICES - DRIVE YOURSELF &/OR RENTAL. (M6960)	Rapid Rent & Car, 55 George St., Parramatta. 2150.	57969	1982	Premise Match	14m	North West
	WELDERS., Electric &/OR OXY.	Cumberland Auto Body Repairs, 57 George St., Granville. 2142	86847	1975	Premise Match	14m	North West
	MOTOR PAINTERS.	Cumberland Auto Body Repairs., 57 George St., Granville. 2142	60071	1975	Premise Match	14m	North West
	MOTOR PANEL BEATERS.	Cumberland Auto Body Repairs., 57 George St., Granville. 2142	60725	1975	Premise Match	14m	North West
	MOTOR TOWING SERVICES.	Cumberland District Towing Service., 57 George St., Granville. 2142	62678	1975	Premise Match	14m	North West
	INSULATING MATERIALS MFRS. &/OR DISTS. &/OR SUPPLIERS.	Lightgauge Metal Products Pty. Ltd., 49 George St., Granville. 2162	44731	1975	Premise Match	14m	North West
	ROOFING MATERIAL MFRS &/OR DISTS.	Lightgauge Metal Products Pty. Ltd., 49 George St., Granville. 2162	74654	1975	Premise Match	14m	North West
	SHEET METAL WORKERS.	Lightgauge Metal Products Pty. Ltd., 49 George St., Granville. 2162	76879	1975	Premise Match	14m	North West
	VENTILATION EQUIPMENT MFRS. &/OR DISTS.	Lightgauge Metal Products Pty. Ltd., 49 George St., Granville. 2162	86129	1975	Premise Match	14m	North West
	FRUITERERS/GREENGROCERS (F640)	Blackwell's., 45 George St., Parramatta	306682	1970	Premise Match	14m	North West
	FURNITURE-HOUSEHOLD-RETAILERS	Burgess Furniture Co. Pty. Ltd. (The)., Shop 1, 57-59 George St., Parramatta	309397	1970	Premise Match	14m	North West

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12	MILK, FRUIT JUICE BARS/CONFECTIONERS	George St. Milk Bar., 57-59 (Shop 2) George St., Parramatta	330635	1970	Premise Match	14m	North West
	HAIRDRESSERS (GENT.'S) (H070)	Robbins, H., 43a George St., Parramatta	314370	1970	Premise Match	14m	North West
	BOOT & SHOE REPAIRERS	Sutton, ER., 59 George St., Parramatta	269232	1970	Premise Match	14m	North West
	SEWING MACHINE DEALERS (S191)	Ward Bros., 57 George St., Parramatta	360397	1970	Premise Match	14m	North West
	SEWING MACHINE REPAIRERS (S204)	Ward Bros., 57 George St., Parramatta	360460	1970	Premise Match	14m	North West
	Fruiterers & Greengrocers	Blackwell's, 45 George St., Parramatta	90885	1965	Premise Match	14m	North West
	Furniture - Household - Retailers	Burgess Furniture Co. Pty. Ltd. (The), Shop 1, 57-59 George St., Parramatta	93452	1965	Premise Match	14m	North West
	Milk, Fruit Juice Bars/Confectioners	George St. Milk Bar, 57-59 (Shop 2) George St., Parramatta	115075	1965	Premise Match	14m	North West
	Hat Renovators	Jack's, 47 George St., Parramatta	99749	1965	Premise Match	14m	North West
	Dry Cleaners, Pressers/Dyers	Jack's., 47 George St Parramatta	76202	1965	Premise Match	14m	North West
	Hairdressers (Gent.'s)/Tobacconists	Robbins, H., 43a George St., Parramatta	98472	1965	Premise Match	14m	North West
	BOOT & SHOE REPAIRERS	Sultan, E. R., 59 George St., Parramatta	53726	1965	Premise Match	14m	North West
	Sewing Machine Dealers	Ward Bros.., 57b George & 416 Church Sts., Parramatta	143687	1965	Premise Match	14m	North West
	BABY & CHILDREN'S WEAR-RETAIL	"Elizabeth" Baby Shop, 53 George St., Parramatta	270334	1961	Premise Match	14m	North West
	FRUITERERS/GREENGROCERS	Blackwell's, 45 George St., Parramatta	315045	1961	Premise Match	14m	North West
	BLOUSE SPECIALISTS	Brantley, Elvie, 53 George St., Parramatta	273484	1961	Premise Match	14m	North West
	CHEMISTS-PHARMACEUTICAL	Gass, W. J., 49 George St., Parramatta	287608	1961	Premise Match	14m	North West
	CAKE SHOPS & PASTRYCOOKS	Hall's., 51 George St., Parramatta	283036	1961	Premise Match	14m	North West
	FLORISTS-RETAIL	Haswell, M., 59 George St., Parramatta	311898	1961	Premise Match	14m	North West
	HAT RENOVATORS	Jack's, 47 George St., Parramatta	323855	1961	Premise Match	14m	North West
	INVISIBLE MENDING SPECIALISTS	Jack's, 47 George St., Parramatta	328694	1961	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS / DYERS	Jack's., 47 George St Parramatta	299145	1961	Premise Match	14m	North West
	DELICATESSENS	Paragon (The), 53 George St., Parramatta	295130	1961	Premise Match	14m	North West
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Psalidas, M., 57a George St., Parramatta	339529	1961	Premise Match	14m	North West
	BOOT & SHOE REPAIRERS	Sutton, E. R., 59 George St., Parramatta	275238	1961	Premise Match	14m	North West
	SEWING MACHINE DEALERS	Ward Bros., 57b George & 416 Church Sts., Parramatta.	249032	1961	Premise Match	14m	North West
	CAKE SHOPS & PASTRYCOOKS	"R and E." Bakery (The), 51 George St., Parramatta	16348	1950	Premise Match	14m	North West
	FRUITERERS & GREENGROCERS	Blackwells, 43 George St., Parramatta	49603	1950	Premise Match	14m	North West
	BUSINESS AGENTS &/OR BROKERS	Carbis and Co. (R. G. Harper), 51a George St., Parramatta	12715	1950	Premise Match	14m	North West
	INSURANCE AGENTS	Carbis and Co. (R. G. Harper), 51a George St., Parramatta	64789	1950	Premise Match	14m	North West
	REAL ESTATE AGENTS	Carbis and Co. (R. G. Harper), 51a George St., Parramatta	98051	1950	Premise Match	14m	North West
	CHEMISTS-PHARMACEUTICAL	Gass Pharmacy, 49 George St., Parramatta	21556	1950	Premise Match	14m	North West
	VALUERS	Harper, Richard G., 51a George St., Parramatta	111612	1950	Premise Match	14m	North West

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12	FLORISTS-RETAIL	Haswell, Margaret, 59 George St., Parramatta	45951	1950	Premise Match	14m	North West
	GROCERS-RETAIL	McEwans Pty. Ltd., 41 George St., Parramatta	58278	1950	Premise Match	14m	North West
	DELICATESSENS & SMALLGOODS DEALERS	Paragon (The), 53 George St., Parramatta	30987	1950	Premise Match	14m	North West
	ANIMAL &/OR BIRD FOOD SUPPLIERS	Parramatta Dog and Cat Meat Shop, 49a George St., Parramatta	1780	1950	Premise Match	14m	North West
	BUSINESS AGENTS &/OR BROKERS	Parramatta Live Stock Company, 57 George St., Parramatta	12891	1950	Premise Match	14m	North West
	REAL ESTATE AGENTS	Parramatta Livestock Co., 57 George St., Parramatta	98664	1950	Premise Match	14m	North West
	STOCK & STATION AGENTS	Parramatta Livestock Co., 57 George St., Parramatta	105613	1950	Premise Match	14m	North West
	GIFT SHOPS	Parramatta Y.W.C.A. Gift Shop, 55a George St., Parramatta	54440	1950	Premise Match	14m	North West
	HAIRDRESSERS (GENT.'S) &/OR TOBACCONISTS	Robbins, H., 43 George St., Parramatta	59957	1950	Premise Match	14m	North West
	MILK BARS & CONFECTIONERS	Sawtells, 57 George St., Parramatta	77331	1950	Premise Match	14m	North West
	LEATHER GOODS MANUFACTURERS &/OR WHOLESALERS	Sutton, E. R., 59 George St., Parramatta	68250	1950	Premise Match	14m	North West
	SEWING MACHINE DEALERS	Ward Bros., 57 George St., Parramatta	101453	1950	Premise Match	14m	North West
13	Real Estate Agents	Modbury Pty. Ltd., 155 Macquarie St., Parramatta 2150	60477	1991	Premise Match	18m	South
	AUCTIONEERS-GENERAL. (A8310)	Raine & Horne, 153 Macquarie St., Parramatta. 2150.	3830	1982	Premise Match	18m	South
	REAL ESTATE AGENTS. (R2555)	Raine & Horne, 153 Macquarie St., Parramatta. 2150.	69571	1982	Premise Match	18m	South
	VALUERS & APPRAISERS - GENERAL. (V0696)	Raine & Horne, 153 Macquarie St., Parramatta. 2150.	83055	1982	Premise Match	18m	South
	PARCEL DELIVERY SPECIALISTS.	Ansett A. N. A. Air Cargo Depot, 159 Macquarie St., Parramatta. 2150	56128	1978	Premise Match	18m	South
	PARCEL DELIVERY SPECIALISTS.	Ansett A.N.A. Air Cargo Depot., 159 Macquarie St., Parramatta. 2150	66115	1975	Premise Match	18m	South
	AUCTIONEERS-GENERAL	Nickson, H. W. Pty. Ltd., 153 Macquarie St., Parramatta. 2150	3382	1975	Premise Match	18m	South
	BUSINESS AGENTS &/OR BROKERS.	Nickson, H. W. Pty. Ltd., 153 Macquarie St., Parramatta. 2150	9842	1975	Premise Match	18m	South
	REAL ESTATE AGENTS &/OR VALUERS.	Nickson, H. W. Pty. Ltd., 153 Macquarie St., Parramatta. 2150	72741	1975	Premise Match	18m	South
	PARCEL DELIVERY SPECIALISTS (P166)	Ansett A.N.A. Air Cargo Depot., 159 Macquarie St., Parramatta	347272	1970	Premise Match	18m	South
	BUILDERS' SUPPLIERS (B814)	Cheapa Goods, 159 (Lane) Macquarie St., Parramatta	271280	1970	Premise Match	18m	South
	BUTCHERS-RETAIL (B860)	MacQuarie Butchery., 153 Macquarie St., Parramatta	273995	1970	Premise Match	18m	South
	AUCTIONEERS-REAL ESTATE (A625)	Nickson, H W., 153 Macquarie St., Parramatta, 2150	263811	1970	Premise Match	18m	South
	REAL ESTATE AGENTS/VALUERS(R205)	Nickson, H. W., 153 Macquarie St., Parramatta. 2150	355798	1970	Premise Match	18m	South
	Builders' Suppliers	Cheapa Goods, 159 Macquarie St., Parramatta	56050	1965	Premise Match	18m	South
	Butchers - Retail	Macquarie Butchery, 153 Macquarie St., Parramatta	58796	1965	Premise Match	18m	South
	LINGERIE/HOSIERY SPEC.	Joy Ella, 155 Macquarie St., Parramatta	331923	1961	Premise Match	18m	South
14	MILK, FRUIT JUICE BARS/CONFECTIONERS	"Edinburgh" (The), 119c Macquarie St., Parramatta	338764	1961	Premise Match	18m	South West
	FOUNDATION GARMENTS	Admiration Foundation Garments, 119 Macquarie St., Parramatta	313432	1961	Premise Match	18m	South West
	BEAUTY SALONS & LADIES' HAIRDRESSERS	Audette Beauty Salon, 119 Macquarie St., Parramatta	272233	1961	Premise Match	18m	South West

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14	DRESSMAKING/SEWING SERVICES	Handy Gift Centre (The), Rear 119 Macquarie St., P'matta	298881	1961	Premise Match	18m	South West
	BOOT & SHOE REPAIRERS	Maurice, G., 119 Macquarie St., Parramatta	275006	1961	Premise Match	18m	South West
	MILLINERY—RETAIL	Murray, Rose, 119 Macquarie St., Parramatta	340125	1961	Premise Match	18m	South West
	MILLINERY—RETAIL	Thompson, W., 119a Macquarie St., Parramatta	340160	1961	Premise Match	18m	South West
15	MILK, FRUIT JUICE BARS/CONFECTIONERS	George, S., 121 Macquarie St., Parramatta	339095	1961	Premise Match	18m	South West
	MIXED BUSINESS	George, S., 121 Macquarie St., Parramatta	340997	1961	Premise Match	18m	South West
	GROCERS-RETAIL	Freedman, S., 121 Macquarie St., Parramatta	57349	1950	Premise Match	18m	South West
16	Optical Prescription Dispensers	Perfect Vision, Greenway Arc 224 Church St Parramatta 2150	56232	1991	Premise Match	19m	West
	Building Societies	St. George Building Society., St. George Arc., 228 Church St., Parramatta 2150	37429	1991	Premise Match	19m	West
	Building Societies	State Building Society., 218 Church St., Parramatta 2150	37467	1991	Premise Match	19m	West
	FASHION ACCESSORIES.	Annabels, Shop 11 Greenway Arc. 224 Church St., Parramatta. 2150	32015	1986	Premise Match	19m	West
	GIFT SHOPS.	Aunty Mays Paper Shop, Shop 8 Greenway Arc, 224 Church St., Parramatta. 2150	38805	1986	Premise Match	19m	West
	GIFT SHOPS.	Barbara's House & Garden Pty Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150	38824	1986	Premise Match	19m	West
	CANE PRODUCTS.	Barbara's House & Garden Pty. Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150	12113	1986	Premise Match	19m	West
	KITCHENWARE RETAILERS	Barbara's House & Garden Pty. Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150	50605	1986	Premise Match	19m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Bedazzled, Shop 3 Greenway Arc. 224 Church St., Parramatta. 2150	16842	1986	Premise Match	19m	West
	CLOTHING-RETAIL-MENS &/OR BOYS WEAR.	Boysport, Shop 4 Greenway Arc. 224 Church St., Parramatta, 2150	18320	1986	Premise Match	19m	West
	CONFECTIONERS-RETAIL.	Darrell-Lea, Shop 1 Greenway Arc. 224 Church St., Parramatta. 2150	20025	1986	Premise Match	19m	West
	JEWELLERS &/OR WATCHMAKERS-RETAIL.	Diamond House, Shop 6 Greenway Arc, 224 Church St., Parramatta. 2150	49664	1986	Premise Match	19m	West
	HAIRDRESSERS-LADIES &/OR BEAUTY SALONS.	Flamingo, Shop 10 Greenway Arc. 224 Church St., Parramatta. 2150	42048	1986	Premise Match	19m	West
	HAIRDRESSERS-MENS.	Flamingo, Shop 10 Greenway Arc. 224 Church St., Parramatta. 2150	43649	1986	Premise Match	19m	West
	PHOTOGRAPHIC EQUIPMENT DEALERS.	Foto Hut, Shop 2 Greenway Arc. 224 Church St., Parramatta. 2150	73145	1986	Premise Match	19m	West
	DENTAL LABORATORIES &/OR TECHNICIANS.	Gow, G. E., St. George Arc. 228 Church St., Parramatta. 2150	22168	1986	Premise Match	19m	West
	JEWELLERS &/OR WATCHMAKERS-RETAIL.	Hennings, Shop 12 Greenway Arc. 224 Church St., Parramatta. 2150	49762	1986	Premise Match	19m	West
	PHOTO COPYING SERVICES.	Hot Spot Pty. Ltd., Shop 29, The Greenway, Horwood Pl., Parramatta. 2150	72735	1986	Premise Match	19m	West
	PRINTERS- INSTANT.	Hot Spot Pty. Ltd., Shop 29, The Greenway, Horwood Pl., Parramatta. 2150	76005	1986	Premise Match	19m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Kathe Stephan, Shop 9 Greenway Arc. 224 Church St., Parramatta. 2150	17413	1986	Premise Match	19m	West
	BOOT &/OR SHOE REPAIRERS.	Parramatta Cobbler, Shop 7 Greenway Arc. 224 Church St., Parramatta. 2150	7431	1986	Premise Match	19m	West
	BEAUTICIANS.	Perfect Fingernails, St George Arc 228 Church St, Parramatta. 2150	5822	1986	Premise Match	19m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Regines, Shop 1A Greenway Arc, 224 Church St., Parramatta. 2150	17772	1986	Premise Match	19m	West

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16	BUILDING SOCIETIES.	St. George Building Society, St. George Arc, 228 Church St, Parramatta.2150	8985	1986	Premise Match	19m	West
	BUILDING SOCIETIES.	State Building Society, 218 Church St., Parramatta. 2150	9051	1986	Premise Match	19m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Today & Forever, Shop 5 Greenway Arc. 224 Church St., Parramatta. 2150	18054	1986	Premise Match	19m	West
	HOSPITAL &/OR MEDICAL BENEFITS FUNDS.	Western District Health Fund, St. George Arc. 228 Church St., Parramatta. 2150	46229	1986	Premise Match	19m	West
	PODIATRISTS.	Williams, Stephen L., St. George Arc. 228 Church St., Parramatta. 2150	75426	1986	Premise Match	19m	West
	CANE PRODUCTS. (C0773)	Barbara's House & Garden Pty Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150.	12981	1982	Premise Match	19m	West
	GIFT SHOPS. (G3350)	Barbara's House & Garden Pty. Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150.	36086	1982	Premise Match	19m	West
	KITCHENWARE RETAILERS. (K0560)	Barbara's House & Garden Pty. Ltd., Shop 21, The Greenway, Horwood Pl., Parramatta. 2150.	44334	1982	Premise Match	19m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Delor, 218 Church St., Parramatta. 2150.	5521	1982	Premise Match	19m	West
	HAIRDRESSERS - GENTS. (H0550)	Delor, 218 Church St., Parramatta. 2150.	38466	1982	Premise Match	19m	West
	PHOTO COPYING SERVICES. (P3280)	Hot Spot Pty. Ltd., Shop 29 Horwood Pl., Parramatta. 2150.	63400	1982	Premise Match	19m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Elizabeth French Ladies Hairstylists, 218 Church St., Parramatta. 2150	4956	1978	Premise Match	19m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Elizabeth French, 218 Church St., Parramatta. 2150	4958	1978	Premise Match	19m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Elizabeth French Ladies Hairstylists, 218 Church St., Parramatta.	5211	1975	Premise Match	19m	West
	FOOTWEAR RETAILERS.	Fay's Shoes, 224 Church St., Parramatta. 2150.	33946	1975	Premise Match	19m	West
	LINGERIE &/OR HOSIERY SPECIALISTS	Susan Lingerie & Sportswear., 222 Church St., Parramatta. 2150	47755	1975	Premise Match	19m	West
	SPORTSWEAR RETAILERS	Susans Lingerie & Sportswear., 222 Church St., Parramatta. 2150	79302	1975	Premise Match	19m	West
	NEWSPAPERS/PERIODICALS (N130)	Argus Advertiser (The)., 224 Church St., Parramatta	344072	1970	Premise Match	19m	West
	Newspapers/Periodicals	Argus Advertiser (The), 224 Church St., Parramatta	128693	1965	Premise Match	19m	West
	NEWSPAPERS/PERIODICALS	Advertiser (The), 224 Church St., Parramatta	353648	1961	Premise Match	19m	West
	NEWSPAPERS/PERIODICALS	Argus Advertiser (The), 224 Church St., Parramatta	353654	1961	Premise Match	19m	West
	DRAPERS-RETAIL	Bargain Store, 228 Church St., Parramatta	297748	1961	Premise Match	19m	West
	FROCK & COAT SALONS	Belles Modelle Salon, 222 Church St., Parramatta	314024	1961	Premise Match	19m	West
	ARCHITECTS	McDonald, B. D,. 224 Church St., Parramatta	268380	1961	Premise Match	19m	West
	DENTISTS	Watson, C. R., 224 Church St., Parramatta	296525	1961	Premise Match	19m	West
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	“Beauty Lox”, Post Office Chamb., 224 Church St., Parramatta	6701	1950	Premise Match	19m	West
	FURNISHINGS-SOFT-RETAILERS	Ashley’s (Soft only), 222 Church St., Parramatta	52242	1950	Premise Match	19m	West
	LINGERIE & HOSIERY SPECIALISTS	Ashley’s, 222 Church St., Parramatta	69202	1950	Premise Match	19m	West
	NEWSPAPER PUBLISHERS	Cumberland Newspapers Ltd., 224 Church St., Parramatta	88484	1950	Premise Match	19m	West
	FOOTWEAR-RETAILERS	Fostars Shoes Pty. Ltd., 218 Church St., Parramatta	47255	1950	Premise Match	19m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
16	FOOTWEAR-RETAILERS	Gardiner, Joe Pty. Ltd., 226 Church St., Parramatta	47280	1950	Premise Match	19m	West
	DENTISTS	Gates, C. T., Post Office Chamb., 224 Church St., Parramatta	31899	1950	Premise Match	19m	West
	CHIROPODISTS	Marshall, R. D., Post Office Chamb., 224 Church St., Parramatta	22662	1950	Premise Match	19m	West
	ARCHITECTS	McDonald, B. D., Post Office Chamb., 224 Church St., Parramatta	2270	1950	Premise Match	19m	West
	CAKE SHOPS & PASTRYCOOKS	Red, White and Blue Ribbon, 230 Church St., Parramatta	17145	1950	Premise Match	19m	West
	SOLICITORS	Scott, L. G. and Co., Post Office Chamb., 224 Church St., Parramatta	104099	1950	Premise Match	19m	West
17	Electrical Appliance Repair &/or Service Agents	Morans Electrical Service, 111 Macquarie St, Parramatta 2150	42411	1991	Premise Match	25m	South West
	Real Estate Agents	Parramatta Realty, 103 Macquarie St., Parramatta 2150	60541	1991	Premise Match	25m	South West
	TAXATION CONSULTANTS.	Block, H. & R., 113 Macquarie St., Parramatta. 2150	92180	1986	Premise Match	25m	South West
	MISSIONS &/OR RELIGIOUS BODIES.	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150	59762	1986	Premise Match	25m	South West
	BOOKSELLERS-RETAIL.	Christian Literature Crusade, 99 Macquarie St., Parramatta.2150	6961	1986	Premise Match	25m	South West
	TAILORS - LADIES &/OR MENS.	Langfords Tailoring, 109 Macquarie St., Parramatta. 2150.	90276	1986	Premise Match	25m	South West
	PODIATRISTS.	Mitchel, Lynne, 107 Macquarie St., Parramatta. 2150	75403	1986	Premise Match	25m	South West
	ELECTRICAL APPLIANCES-REPAIRS &/OR SERVICE AGENTS.	Morans Electrical Service, 111 Macquarie St., Parramatta. 2150	27007	1986	Premise Match	25m	South West
	ELECTRICAL CONTRACTORS-LICENSED.	Morans Electrical Service, 111 Macquarie St., Parramatta. 2150	27165	1986	Premise Match	25m	South West
	REAL ESTATE AGENTS.	Parramatta Realty, 103 Macquarie St., Parramatta. 2150	79957	1986	Premise Match	25m	South West
	BOOKSELLERS - RETAIL. (B4475)	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150.	7803	1982	Premise Match	25m	South West
	MISSIONS &/OR RELIGIOUS BODIES. (M4040)	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150.	52837	1982	Premise Match	25m	South West
	PROPERTY MANAGEMENT. (P9060)	Compass Real Estate, 107 Macquarie St., Parramatta. 2150.	67226	1982	Premise Match	25m	South West
	REAL ESTATE AGENTS. (R2555)	Compass Real Estate, 107 Macquarie St., Parramatta. 2150.	68792	1982	Premise Match	25m	South West
	TAILORS - LADIES &/OR GENTS.(T0075)	Langfords Tailoring, 109 Macquarie St., Parramatta. 2150.	77988	1982	Premise Match	25m	South West
	ELECTRICAL CONTRACTORS -LICENSED. (E3360)	Morans Electrical Service, 111 Macquarie St, Parramatta. 2150.	25508	1982	Premise Match	25m	South West
	RADIO &/OR TELEVISION SALES&/OR SERVICEMEN. (R1260)	Morans Electrical Service, 111 Macquarie St., Parramatta. 2150.	68316	1982	Premise Match	25m	South West
	BOOKSELLERS RETAIL.	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150	6799	1978	Premise Match	25m	South West
	MISSIONS &/OR RELIGIOUS BODIES.	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150	46532	1978	Premise Match	25m	South West
	FOOTWEAR RETAILERS.	Maxine Pty. Ltd., 105 Macquarie St., Parramatta. 2150	29411	1978	Premise Match	25m	South West
	ACCOUNTANTS & AUDITORS.	Size. J.W., 107 Macquarie St., Parramatta. 2150	771	1978	Premise Match	25m	South West
	TOY DEALERS., RETAIL	Berg's Hobbies, 111 Macquarie St., Parramatta. 2150	84189	1975	Premise Match	25m	South West
	BOOKSELLERS RETAIL	Christian Literature Crusade, 99 Macquarie St., Parramatta. 2150	7284	1975	Premise Match	25m	South West
	MISSIONS &/OR RELIGIOUS BODIES.	Christian Literature Crusade., 99 Macquarie St., Parramatta. 2150	54345	1975	Premise Match	25m	South West
	TRAVEL AGENCIES &/OR BOOKING OFFICES.	Eardley Travel Service Pty. Ltd., 103 Macquarie St., Parramatta. 2150	85020	1975	Premise Match	25m	South West
	LINGERIE &/OR HOSIERY SPECIALISTS	Lucille's Lingerie., 101 Macquarie St., Parramatta. 2150	47709	1975	Premise Match	25m	South West

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17	FOOTWEAR RETAILERS.	Maxine Pty. Ltd., 105 Macquarie St., Parramatta. 2150.	34066	1975	Premise Match	25m	South West
	JEWELLERS &/OR WATCHMAKERS-RETAIL	Parker F. J., 107 Macquarie St., Parramatta. 2150	46044	1975	Premise Match	25m	South West
	ACCOUNTANTS & AUDITORS.	Size. J. W., 107 Macquarie St., Parramatta. 2150	556	1975	Premise Match	25m	South West
	SOLICITORS.	Taylor, F. T., 107 Macquarie St., Parramatta. 2150	78761	1975	Premise Match	25m	South West
	TOY DEALERS-RETAIL	Bergs Hobbies, 111 Macquarie St., Parramatta	369976	1970	Premise Match	25m	South West
	MISSIONS/RELIGIOUS BODIES (M404)	Christian Literature Crusade., 101 Macquarie St., Parramatta	331868	1970	Premise Match	25m	South West
	TRAVEL AGENCIES/BOOKING OFFICES(T645)	Eardley Travel Service Pty. Ltd., 103 Macquarie St., Parramatta	371046	1970	Premise Match	25m	South West
	OPTOMETRISTS-REGISTERED (O 280)	Jackson, J., 109 Macquarie St., Parramatta	345371	1970	Premise Match	25m	South West
	LINGERIE/HOSIERY SPEC. (L530)	Lucille's Lingerie., 101 Macquarie St., Parramatta	323603	1970	Premise Match	25m	South West
	FOOTWEAR RETAILERS (F495)	Maxine Pty. Ltd., 105 Macquarie St., Parramatta	305648	1970	Premise Match	25m	South West
	JEWELLERS/WATCHMAKERS-RETAIL(J060)	Parker, F. J., 107 Macquarie St., Parramatta	321224	1970	Premise Match	25m	South West
	SOLICITORS (S413)	Taylor, F. T., 107 Macquarie St., Parramatta	363083	1970	Premise Match	25m	South West
	REAL ESTATE AGENTS/VALUERS(R205)	York, Philip Pty. Ltd., 113 Macquarie St., PARRAMATTA	356264	1970	Premise Match	25m	South West
	Missions/Religious Bodies	Christian Literature Crusade, 101 Macquarie St., Parramatta	116452	1965	Premise Match	25m	South West
	Draughtsmen	Contract Draughting Services, Epworth Hse., 107 Macquarie St., Parramatta	75384	1965	Premise Match	25m	South West
	Newspapers/Periodicals	Cumberland Newspapers Ltd., 107 Macquarie St., Parramatta	128767	1965	Premise Match	25m	South West
	Travel Agencies/Booking Offices	Eardley Travel Service Pty. Ltd., 103 Macquarie St., Parramatta	153866	1965	Premise Match	25m	South West
	Opticians	Jackson, John, 111 Macquarie St., Parramatta	129830	1965	Premise Match	25m	South West
	Herbalists	James, Hugh, 107 Macquarie St., Parramatta	100252	1965	Premise Match	25m	South West
	Osteopaths	James, Hugh, Room 3, 107 Macquarie St, Parramatta	130148	1965	Premise Match	25m	South West
	Lingerie/Hosiery Spec.	Lucille's Lingerie, 101 Macquarie St., Parramatta	108145	1965	Premise Match	25m	South West
	Carpet & Floor Covering Retailers &/Specialists	Macquarie Floor Coverings Pty. Ltd., 113 Macquarie St., Parramatta	62526	1965	Premise Match	25m	South West
	Electrical Supplies/Appliances Retailers	Macquarie Home Electrics Pty. Ltd., 109 Macquarie St. Parramatta	79540	1965	Premise Match	25m	South West
	SOLICITORS	Martin, Louis, Epworth Hse., 107 Macquarie St, Parramatta	145910	1965	Premise Match	25m	South West
	Footwear Retailers	Maxine Pty. Ltd., 105 Macquarie St., Parramatta	89033	1965	Premise Match	25m	South West
	Jewellers/Watchmakers - Retail	Parker, F. J., 107 Macquarie St., Parramatta	106155	1965	Premise Match	25m	South West
	SOLICITORS	Taylor, F. T., 107 Macquarie St., Parramatta	146162	1965	Premise Match	25m	South West
	Real Estate Agents/Valuers	York, Philip Pty. Ltd., 113 Macquarie St. Parramatta	139561	1965	Premise Match	25m	South West
	MISSIONS/RELIGIOUS BODIES	Christian Literature Crusade, 101 Macquarie St., Parramatta	340371	1961	Premise Match	25m	South West
	DRAUGHTSMEN	Contract Draughting Services, Epworth Hse., 107 Macquarie St., Parramatta	298247	1961	Premise Match	25m	South West
	ENGINEERS-DESIGNING	Contract Industries Pty. Ltd., Room 10, Epworth Hse., 107 Macquarie St., Parramatta	305240	1961	Premise Match	25m	South West

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17	ENGINEERS-FABRICATING	Contract Industries Pty. Ltd., Room 10, Epworth Hse., 107 Macquarie St., Parramatta	305740	1961	Premise Match	25m	South West
	ENGINEERS-GENERAL/MFRG./ MECHANICAL	Contract Industries Pty. Ltd., Room 10, Epworth Hse., 107 Macquarie St., Parramatta	306320	1961	Premise Match	25m	South West
	ENGINEERS-STRUCTURAL	Contract Industries Pty. Ltd., Room 10, Epworth Hse., 107 Macquarie St., Parramatta	308510	1961	Premise Match	25m	South West
	TRAVEL AGENCIES/BOOKING OFFICES	Eardley Travel Service, 103 Macquarie St., Parramatta	259418	1961	Premise Match	25m	South West
	SURVEYORS-QUANTITY	Glaisher, G. A., Epworth Hse., 107 Macquarie St., Pmta	254692	1961	Premise Match	25m	South West
	SCHOOLS-KINDERGARTEN/DAY NURSERY	Macquarie Nursery School, 99 Macquarie St., Parramatta	248528	1961	Premise Match	25m	South West
	ACCOUNTANTS & AUDITORS	Size, J. W., 107 Macquarie St., Parramatta	265712	1961	Premise Match	25m	South West
	REAL ESTATE AGENTS/VALUERS	Vale & Co., 107 Macquarie St. PARRAMATTA	244979	1961	Premise Match	25m	South West
	DENTISTS	Webb, Kenneth R., 101 Macquarie St., Parramatta	296534	1961	Premise Match	25m	South West
	MEDICAL PRACTITIONERS	Woolnough, A. R., 111 Macquarie St., Parramatta	336658	1961	Premise Match	25m	South West
	PRAM & STROLLER MANUFACTURERS	McDermott, M. A., 99 Macquarie St., Parramatta	94507	1950	Premise Match	25m	South West
	MEDICAL PRACTITIONERS	Woolnough, A. R., 111 Macquarie St., Parramatta	74112	1950	Premise Match	25m	South West
18	ACCOUNTANTS & AUDITORS.	Peat Marwick Mitchell & Co., 169 Macquarie St., Parramatta. 2150	857	1986	Premise Match	26m	South East
	FOUNDATION GARMENTS.	Admiration Foundation Garments. 163 Macquarie St., Parramatta. 2150.	34314	1975	Premise Match	26m	South East
	FOUNDATION GARMENTS.	Admiratlon Foundation Garments, 163 Macquarie St., Parramatta. 2150.	34313	1975	Premise Match	26m	South East
	MILK, FRUIT JUICE BARS &/OR CONFECTIONERS.	Macquarie Milk Bar., 169 Macquarie St., Parramatta. 2150	53545	1975	Premise Match	26m	South East
	RUBBISH &/OR GARBAGE CONTRACTORS.	Northwood, T. W. & Sons Pty. Ltd., 167 Macquarie St., Parramatta. 2150	75009	1975	Premise Match	26m	South East
	FOUNDATION GARMENTS (F520)	Admiration Foundation Garments., 163 Macquarie St., Parramatta	305936	1970	Premise Match	26m	South East
	MUSIC TEACHERS (M780)	Blochs Music Academy., 165 Macquarie St., Parramatta	342923	1970	Premise Match	26m	South East
	SURVEYORS-LAND	Calderwood, S. C., 11 Taylor St., Parramatta	366395	1970	Premise Match	26m	South East
	SOLICITORS (S413)	Folbigg & Foibigg, 171 Macquarie St., Parramatta	362499	1970	Premise Match	26m	South East
	BOOT & SHOE REPAIRERS	Maurice, G., 163 Macquarie St., Parramatta	269023	1970	Premise Match	26m	South East
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Taits Snack Bar., 169 Macquarie St., Parramatta	331274	1970	Premise Match	26m	South East
	REAL ESTATE AGENTS/VALUERS(R205)	Zix & Co., 165 Macquarie St., PARRAMATTA	356274	1970	Premise Match	26m	South East
	Foundation Garments	Admiration Foundation Garments, 163 Macquarie St., Parramatta	89286	1965	Premise Match	26m	South East
	Musical Instrument Dealers	Bloch's Music Academy, 163 Macquarie St., Parramatta	127817	1965	Premise Match	26m	South East
	Music Teachers	Blochs Music Academy, 165 Macquarie St., Parramatta	127627	1965	Premise Match	26m	South East
	SURVEYORS—LAND	Calderwood, S. C., 11 Taylor St., Parramatta	149295	1965	Premise Match	26m	South East
	Milk, Fruit Juice Bars/Confectioners	Edinburgh (The), 169 Macquarie St., Parramatta	115018	1965	Premise Match	26m	South East
	BOOT & SHOE REPAIRERS	Maurice, G., 163 Macquarie St., Parramatta	53503	1965	Premise Match	26m	South East
	Milk, Fruit Juice Bars/Confectioners	Smith St. Corner, 171 Macquarie St., Parramatta	115610	1965	Premise Match	26m	South East

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18	Real Estate Agents/Valuers	Zix & Co., 165 Macquarie St. Parramatta	139562	1965	Premise Match	26m	South East
	MUSIC TEACHERS	Blochs Music Academy, 165 Macquarie St., Parramatta	352606	1961	Premise Match	26m	South East
	SURVEYORS-LAND	Calderwood, S. C., 11 Taylor St., Parramatta	254604	1961	Premise Match	26m	South East
	REAL ESTATE AGENTS/VALUERS	Carbis & Co., 11 Taylor St. PARRAMATTA	244950	1961	Premise Match	26m	South East
	BEAUTY SALONS & LADIES' HAIRDRESSERS	Lido Beauty Salon (The), 19 Taylor St., Parramatta	272556	1961	Premise Match	26m	South East
	PLYWOOD MFRS./MERCHANTS	Parramatta Plywood Centre, 167 Macquarie St., Parramatta	361176	1961	Premise Match	26m	South East
19	SURVEYORS-LAND	Clements, V.R.& Blacket, 71d George St., Parramatta	366399	1970	Premise Match	36m	North East
	REAL ESTATE AGENTS/VALUERS(R205)	Dunk, R., 71b George St., PARRAMATTA	355256	1970	Premise Match	36m	North East
	HAIRDRESSERS (GENT.'S) (H070)	Hennessey, E., 71d George St., Parramatta	313987	1970	Premise Match	36m	North East
	SCHOOLS/COLLEGES-COMMERCIAL(S137)	Myers, Miss J. S., 71 George St., Parramatta	359544	1970	Premise Match	36m	North East
	SOLICITORS (S413)	Nolan, D. R., 71c George St., Parramatta	362862	1970	Premise Match	36m	North East
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS (B260)	Parramatta Nola-Fay Salon., 71b George St., Parramatta	266448	1970	Premise Match	36m	North East
	FISH MERCHANTS-RETAIL (F245)	Roxy Fish Service., 71a George St., Parramatta	303716	1970	Premise Match	36m	North East
	SURVEYORS—LAND	Clements, V. R. & Blacket, 71d George St., Parramatta	149299	1965	Premise Match	36m	North East
	Hairdressers (Gent.'s)/Tobacconists	Hennessey, E., 71d George St., Parramatta	98109	1965	Premise Match	36m	North East
	Schools/Colleges - Commercial	Myers, Miss J. S., 71 George St., Parramatta	142742	1965	Premise Match	36m	North East
	SOLICITORS	Nolan, D. R., 71c George St., Parramatta	145972	1965	Premise Match	36m	North East
	Beauty Salons &/or Ladies Hairdressers	Parramatta Nola-Fay Salon., 71b George St., Parramatta	51071	1965	Premise Match	36m	North East
	Mercantile Agents	Rickards & Moloney, 71d George St., Parramatta	113072	1965	Premise Match	36m	North East
	Fish Merchants - Retail	Rosy Fish Service, 71a George St., Parramatta	87060	1965	Premise Match	36m	North East
	RADIO &/OR TELEVISION SALES & SERVICEMEN	Dawson, Stan, 71a George St. PARRAMATTA	364413	1961	Premise Match	36m	North East
	HAIRDRESSERS (GENT.'S) /TOBACCONISTS	Hennessey, E., 71d George St., Parramatta	322122	1961	Premise Match	36m	North East
	HAIRDRESSERS (GENT.'S) &/OR TOBACCONISTS	Hennessey, E., 71d George St., Parramatta	59554	1950	Premise Match	36m	North East
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	June Russell 71b George St., Parramatta	7343	1950	Premise Match	36m	North East
20	Printers Instant	Alert Instant Printing, 48 Macquarie St., Parramatta. 2150	58904	1991	Premise Match	38m	West
	PRINTERS- INSTANT.	Alert Instant Printing, 48 Macquarie St., Parramatta. 2150	75982	1986	Premise Match	38m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	House of Jean Fox, The, 48 Macquarie St., Parramatta. 2150	17315	1986	Premise Match	38m	West
	CLOTHING-RETAIL-LINGERIE.	House of Jean Fox, The, 48 Macquarie St., Parramatta. 2150	18226	1986	Premise Match	38m	West
	SPORTS GOODS RETAILERS.	Mick Simmons, 50 Macquarie St., Parramatta. 2150	87529	1986	Premise Match	38m	West
	ARCHITECTS.	Murray, Kim, 48 Macquarie St., Parramatta. 2150	3570	1986	Premise Match	38m	West
	DRAFTING EQUIPMENT MFRS.&/OR IMPS. &/OR DISTS. (D6305)	A.A.S. Art Supplies, Shop 4, 48 Macquarie St., Parramatta. 2150.	22018	1982	Premise Match	38m	West
	HOBBY &/OR HANDICRAFT SUPPLIES. (H4250)	A.A.S. Art Supplies, Shop 4, 48 Macquarie St., Parramatta. 2150.	40133	1982	Premise Match	38m	West

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20	PLAN PRINTERS. (P5200)	A.A.S. Art Supplies, Shop 4, 48 Macquarie St., Parramatta. 2150.	64364	1982	Premise Match	38m	West
	PRINTERS - LETTERPRESS. (P8420)	Alert Instant Printing, 48 Macquarie St, Parramatta. 2150.	65967	1982	Premise Match	38m	West
	PRINTERS - LITHOGRAPHIC (OFFSET). (P8440)	Alert Instant Printing, 48 Macquarie St., Parramatta. 2150.	66358	1982	Premise Match	38m	West
	DRESS SHOPS & ACCESSORIES.(D7450)	House of Jean Fox, The, 48 Macquarie St., Parramatta. 2150.	22920	1982	Premise Match	38m	West
	LINGERIE &/OR HOSIERY SPECIALISTS. (L5000)	House of Jean Fox, The, 48 Macquarie St., Parramatta. 2150.	45431	1982	Premise Match	38m	West
	ACCOUNTANTS & AUDITORS. (A0360)	Levingston, Godfrey H. & Co., 48 Macquarie St., Parramatta. 2150.	595	1982	Premise Match	38m	West
	LINGERIE &/OR HOSIERY SPECIALISTS.	Lucilles Lingerie. 48 Macquarie St., Parramatta. 2150	40427	1978	Premise Match	38m	West
	SOLICITORS.	Cohen, I. & L. & Co., 48 Macquarie St., Parramatta. 2150	78189	1975	Premise Match	38m	West
	SURVEYORS-LAND.	Exley, U. K., 48 Macquarie St., Parramatta. 2150.	81402	1975	Premise Match	38m	West
	SOLICITORS.	Walker, J. W., 48 Macquarie St., Parramatta. 2150	78800	1975	Premise Match	38m	West
	SOLICITORS (S413)	Cohen, I. A. L. & Co., 48 Macquarie St., Parramatta	362373	1970	Premise Match	38m	West
	ACCOUNTANTS & AUDITORS (A040)	Gibbings, C.C. & Webb, 48 Macquarie St., Parramatta	258787	1970	Premise Match	38m	West
	REAL ESTATE AGENTS/VALUERS(R205)	Hooker, L. J. Ltd., 48 Macquarie St., PARRAMATTA	355508	1970	Premise Match	38m	West
	SURVEYORS-LAND	Menzies & Co., 48 Macquarie St., Parramatta	366431	1970	Premise Match	38m	West
	SOLICITORS (S413)	White, Nevin E. & Halbert Room 1-04, 48-50 Macquarie St., Parramatta	363158	1970	Premise Match	38m	West
	ACCOUNTANTS & AUDITORS	Cloogh, J. A., 48 Macquarie St., Parramatta	43526	1965	Premise Match	38m	West
	SOLICITORS	Cohen, I. & L. & Co., 48 Macquarie St., Parramatta	145564	1965	Premise Match	38m	West
	SURVEYORS—LAND	Exley, U. K., 48-50 Macquarie St., Parramatta	149313	1965	Premise Match	38m	West
	Real Estate Agents/Valuers	Hazlewood, J. H. & Co., 50 Macquarie St. Parramatta	139543	1965	Premise Match	38m	West
	Auctioneers - General	Heazlewood & Knapp Pty. Ltd., 48-50 Macquarie St., Parramatta	48391	1965	Premise Match	38m	West
	STOCK/STATION AGENTS	Heazlewood & Knapp Pty. Ltd., 48-50 Macquarie St., Pmta	148848	1965	Premise Match	38m	West
	Auctioneers - General	Hooker, L. J. Ltd., 48 Macquarie St., Parramatta	48394	1965	Premise Match	38m	West
	Real Estate Agents/Valuers	Hooker. L J. Ltd., 48 Macquarie St. Parramatta	139545	1965	Premise Match	38m	West
	SOLICITORS	Nevin, E. White & Halbert, 48 Macquarie St., Parramatta	145961	1965	Premise Match	38m	West
	STOCK/STATION AGENTS	Sewell, John R. Pty. Ltd. , 48-50 Macquarie St., Parramatta	148920	1965	Premise Match	38m	West
	Insurance Agents	Sewell, John R. Pty. Ltd., 48-50 Macquarie St., Parramatta	104529	1965	Premise Match	38m	West
	SOLICITORS	Thomas, Keith., 48-50 Macquarie St., Parramatta	146173	1965	Premise Match	38m	West
	SOLICITORS	Walker, J. W., Room 210, 48-50 Macquarie St., Parramatta	146206	1965	Premise Match	38m	West
	SOLICITORS	White, Nevin E. & Halbert, Room 104, 48-50 Macquarie St., Parramatta	146229	1965	Premise Match	38m	West
	SURVEYORS-LAND	Busby, H. F., 48 Macquarie St., Parramatta	254603	1961	Premise Match	38m	West
	ACCOUNTANTS & AUDITORS	Clough, J. A., 48 Macquarie St., Parramatta	264802	1961	Premise Match	38m	West
	ACCOUNTANTS & AUDITORS	Gibbings, C. C. & Webb, 48 Macquarie St., Parramatta	265020	1961	Premise Match	38m	West
	REAL ESTATE AGENTS/VALUERS	Heaselwood & Knapp, 48-50 Macquarie St. PARRAMATTA	244958	1961	Premise Match	38m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
20	AUCTIONEERS-GENERAL	Heaselwood & Knapp, 48-50 Macquarie St., Parramatta	270011	1961	Premise Match	38m	West
	STOCK/STATION AGENTS	Heazlewood & Knapp Pty. Ltd., 48-50 Macquarie St., Parramatta	254269	1961	Premise Match	38m	West
	REAL ESTATE AGENTS/VALUERS	Hooker, L. J. Ltd., 48 Macquarie St. PARRAMATTA	244959	1961	Premise Match	38m	West
	CREDIT PROTECTION AGENCIES	Laurens George (NSW) Pty Ltd 48 Macquarie St, Parramatta	293810	1961	Premise Match	38m	West
	DEBT COLLECTORS	Laurens George (NSW) Pty Ltd 48 Macquarie St., Parramatta	294508	1961	Premise Match	38m	West
	MERCANTILE AGENTS	Laurens George (NSW) Pty Ltd 48 Macquarie St., Parramatta	336739	1961	Premise Match	38m	West
	ADVERTISING SERVICE AGENTS	Rosebery, Arthur L., 48 Macquarie St., Parramatta	266683	1961	Premise Match	38m	West
	STOCK/STATION AGENTS	Sewell, John R. Pty. Ltd., 48-50 Macquarie St., Parramatta	254337	1961	Premise Match	38m	West
	SOLICITORS	Thomas, K., 48 Macquarie St., Parramatta	251843	1961	Premise Match	38m	West
	SOLICITORS	White, N. E. & Co., 48 Macquarie St., Parramatta	251897	1961	Premise Match	38m	West
21	INSURANCE & ASSURANCE COMPANIES	Queensland Insurance Co. Ltd., 97 Macquarie St., Parramatta	64707	1950	Premise Match	51m	South West
22	Insurance Brokers	Lion Insurance Brokers Pty Ltd, Shop 2, Level 2 Connection Arc, 170 Church St., Parramatta. 2150	49492	1991	Premise Match	52m	South West
	Employment Agencies	Western Personnel Services Pty. Ltd., 180 Church St, Parramatta 2150	43214	1991	Premise Match	52m	South West
	CLOTHING-RETAIL-JEANS & DENIMS.	Bargain Jeans, 178 Church St., Parramatta. 2150	16649	1986	Premise Match	52m	South West
	ACCOUNTANTS & AUDITORS.	Baskerville, E. H., 180 Church St., Parramatta. 2150	167	1986	Premise Match	52m	South West
	TAXATION CONSULTANTS.	Baskerville, E. H., 180 Church St., Parramatta. 2150	92147	1986	Premise Match	52m	South West
	BUTCHERS-RETAIL.	Chris's Butchery, 170 Church St., Parramatta. 2150	9756	1986	Premise Match	52m	South West
	TAKE-AWAY FOODS.	Cincotta Pie Shop, 170 Church St., Parramatta. 2150.	90670	1986	Premise Match	52m	South West
	NEWSAGENTS.	Dalla's Newsagency, 170 Church St., Parramatta. 2150	69276	1986	Premise Match	52m	South West
	FOOTWEAR RETAILERS.	Flints Shoes, 176 Church St., Parramatta. 2150	34744	1986	Premise Match	52m	South West
	BOOKSELLERS-SECONDHAND.	Parramatta Book Exchange, 170 Church St., Parramatta. 2150	7257	1986	Premise Match	52m	South West
	SECONDHAND DEALERS.	Parramatta Book Exchange, 170 Church St., Parramatta. 2150	85466	1986	Premise Match	52m	South West
	HAIRDRESSERS-LADIES &/OR BEAUTY SALONS.	Pino's Unisex, 170 Church St., Parramatta. 2150	42938	1986	Premise Match	52m	South West
	HAIRDRESSERS-MENS.	Pino's Unisex, 170 Church St., Parramatta. 2150	44003	1986	Premise Match	52m	South West
	PRINTERS - LITHOGRAPHIC.	Printout Pty. Ltd., 4 Railway Arc. Darcy St., Parramatta. 2150	76838	1986	Premise Match	52m	South West
	HOTELS-LICENSED.	Star Hotel, 174 Church St., Parramatta. 2150	47031	1986	Premise Match	52m	South West
	HAIRDRESSER LADIES &/OR BEAUTY SALONS	Thomas Beauty Salon, Railway Arc., Parramatta. 2150	43283	1986	Premise Match	52m	South West
	BOOT &/OR SHOE REPAIRERS.	Thornleys, 170 Church St., Parramatta. 2150	7467	1986	Premise Match	52m	South West
	GIFT SHOPS.	Thornleys, 170 Church St., Parramatta. 2150	39536	1986	Premise Match	52m	South West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Veeni Robes, 170 Church St., Parramatta. 2150	18099	1986	Premise Match	52m	South West
	CAFES, MILK BARS &/OR SNACK BARS.	Wander-Inn, 170 Church St., Parramatta. 2150	11444	1986	Premise Match	52m	South West
	EMPLOYMENT AGENCIES.	Western Personnel Services Pty. Ltd., 180 Church St., Parramatta. 2150	28414	1986	Premise Match	52m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
22	FLORISTS - RETAIL. (F4125)	Arcade Exclusive Flowers, 170 Church St., Parramatta. 2150.	31379	1982	Premise Match	52m	South West
	TOY DEALERS - RETAIL. (T6200)	Arcade Sports Store, 170 Church St, Parramatta. 2150.	81008	1982	Premise Match	52m	South West
	SPORTS GOODS RETAILERS. (S4875)	Arcade Sports Store, 170 Church St., Parramatta. 2150.	75399	1982	Premise Match	52m	South West
	SPORTS GOODS RETAILERS. (S4875)	Cumberland Sports Centre, Railway Arc., Parramatta. 2150.	75436	1982	Premise Match	52m	South West
	NEWSAGENTS. (N0800)	Davidsons Newsagency, 170 Church St., Parramatta. 2150.	60475	1982	Premise Match	52m	South West
	FOOTWEAR RETAILERS (F5575)	Flints Shoes, 176 Church St., Parramatta. 2150.	32396	1982	Premise Match	52m	South West
	DRESS SHOPS & ACCESSORIES.(D7450)	Hartleys (Parramatta) Pty. Ltd., 178 Church St., Parramatta. 2150.	22884	1982	Premise Match	52m	South West
	HEALTH FOODS - RETAIL. (H3000)	Martins Health Foods, 170 Church St., Parramatta. 2150.	39732	1982	Premise Match	52m	South West
	BABY &/OR CHILDRENS WEAR -RETAIL. (B0080)	Peter & Wendy, 170 Church St., Parramatta. 2150.	4423	1982	Premise Match	52m	South West
	PRINTERS - LETTERPRESS. (P8420)	Printout Pty. Ltd., 4 Railway Arc., Darcy St., Parramatta. 2150.	66246	1982	Premise Match	52m	South West
	HOTELS - LICENSED. (H7150)	Star Hotel, 174 Church St., Parramatta. 2150.	41053	1982	Premise Match	52m	South West
	LEATHER GOODS RETAILERS.(L3500)	Stephens of Parramatta, 170 Church St., Parramatta. 2150.	45227	1982	Premise Match	52m	South West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Thomas Beauty Salon, Railway Arc., Parramatta. 2150.	6630	1982	Premise Match	52m	South West
	DRESS SHOPS & ACCESSORIES.(D7450)	Veeni Robes, 170 Church St., Parramatta. 2150.	23588	1982	Premise Match	52m	South West
	CAFES, TEA ROOMS &/OR COFFEELOUNGES. (C0345)	Wander-Inn 170 Church St., Parramatta. 2150.	12418	1982	Premise Match	52m	South West
	EMPLOYMENT AGENCIES. (E5340)	Western Personnel Services Pty. Ltd., 180 Church St., Parramatta 2150.	26575	1982	Premise Match	52m	South West
	FLORISTS-RETAIL.	Arcade Exclusive Flowers, 170 Church St., Parramatta. 2150	28427	1978	Premise Match	52m	South West
	MILK, FRUIT JUICE BARS &/OR CONFECTIONERS.	Arcadia Cafe Pty.Ltd., 172 Church St., Parramatta. 2150	45823	1978	Premise Match	52m	South West
	CHEMISTS-PHARMACEUTICAL.	Baggs. L., 170 Church St., Parramatta. 2150	12925	1978	Premise Match	52m	South West
	NEWSAGENTS-GENERAL.	Davidsons Newsagency, 170 Church St, Parramatta 2150	53863	1978	Premise Match	52m	South West
	DRESS SHOPS & ACCESSORIES.	Hartleys (Parramatta) Pty. Ltd., 178 Church St., Parramatta. 2150	20144	1978	Premise Match	52m	South West
	SPORTS GOODS RETAILERS.	Leonards, L. Sports Store, 10 Parramatta Arc., Parramatta. 2150	66881	1978	Premise Match	52m	South West
	HEALTH FOODS-RETAIL.	Martins Health Foods, 170 Church St., Parramatta. 2150	35373	1978	Premise Match	52m	South West
	LIBRARIES-PUBLIC.	Parramatta Public Library, Civic Pl., Parramatta. 2150	40269	1978	Premise Match	52m	South West
	BABY &/OR CHILDRENS WEAR- RETAIL.	Peter & Wendy, 170 Church St., Parramatta 2150	4082	1978	Premise Match	52m	South West
	HOTELS-LICENSED.	Star Hotel, 174 Church St., Parramatta. 2150	36392	1978	Premise Match	52m	South West
	EMPLOYMENT AGENCIES.	Western Personnel Services Pty. Ltd., 180 Church St., Parramatta. 2150	23563	1978	Premise Match	52m	South West
	MUSICAL INSTRUMENT DEALERS.	Albert Radio., 170 Church St., Parramatta. 2150	63208	1975	Premise Match	52m	South West
	FOOTWEAR RETAILERS.	Alf's Shoes 178 Church St., Parramatta. 2150.	33861	1975	Premise Match	52m	South West
	HAIRDRESSERS-GENTS.	Arcade Barber, 170 Church St., Parramatta. 2150	40292	1975	Premise Match	52m	South West
	FLORISTS-RETAIL	Arcade Exclusive Flowers, 170 Church St., Parramatta. 2150.	32978	1975	Premise Match	52m	South West
	DRESS FABRIC RETAILERS.	Arcade Fabrics & Handbags, 170 Church St., Parramatta. 2150	22794	1975	Premise Match	52m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
22	DRESS FABRIC RETAILERS.	Arcade Fabrics & Handbags, 7 Parramatta Arc., 170 Church St., Parramatta. 2150	22793	1975	Premise Match	52m	South West
	HANDBAG &/OR GLOVE SPECIALISTS.	Arcade Fabrics & Handbags, 7 Parramatta Arc., 170 Church St., Parramatta. 2150	41060	1975	Premise Match	52m	South West
	BUTCHERS-RETAIL	Arcade Meats, 170 Church St., Parramatta. 2150	9979	1975	Premise Match	52m	South West
	MILK, FRUIT JUICE BARS &/OR CONFECTIONERS.	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta. 2150	53198	1975	Premise Match	52m	South West
	CHEMISTS-PHARMACEUTICAL	Baggs, L., 170 Church St., Parramatta. 2150	14946	1975	Premise Match	52m	South West
	FOOTWEAR RETAILERS.	Boston Shoes, 170 Church St., Parramatta. 2150.	33885	1975	Premise Match	52m	South West
	MERCERS-MENS &/OR BOYS OUTFITTERS.	Harry's Men's Wear., 170 Church St., Parramatta. 2150	52171	1975	Premise Match	52m	South West
	DRESS SHOPS & ACCESSORIES.	Hartleys (Parramatta) Pty. Ltd., 178 Church St., Parramatta. 2150	23225	1975	Premise Match	52m	South West
	JEWELLERS &/OR WATCHMAKERS-RETAIL	Jewellery Kiosk., 170 Church St., Parramatta. 2150	45969	1975	Premise Match	52m	South West
	NEWSAGENTS-GENERAL	Jones, O., 170 Church St., Parramatta. 2150	63640	1975	Premise Match	52m	South West
	JEWELLERS MFRG. &/OR W/SALERS &/OR IMPS.	K. & H. Mfg. Jewellers., 180 Church St., Parramatta. 2150	45719	1975	Premise Match	52m	South West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Ladies Hairdresser, 170 Church St., Parramatta. 2150	5528	1975	Premise Match	52m	South West
	SPORTS GOODS RETAILERS.	Leonard's. L. Sports Store., 10 Parramatta Arc., Parramatta. 2150	79071	1975	Premise Match	52m	South West
	FURRIERS - RETAIL	Linklater & Clarke., 180 Church St., Parramatta. 2150	37524	1975	Premise Match	52m	South West
	HEALTH FOODS-RETAIL	Martin's Health Foods, 170 Church St., Parramatta. 2150	41838	1975	Premise Match	52m	South West
	LOCAL BODIES.	Parramatta City Council (Town Hall)., 184 Church St., Parramatta.	47825	1975	Premise Match	52m	South West
	LIBRARIES-PUBLIC.	Parramatta Public Library., Civic Pl., Parramatta. 2150	47528	1975	Premise Match	52m	South West
	BABY &/OR CHILDRENS WEAR- RETAIL	Peter & Wendy, 170 Church St., Parramatta. 2150	3916	1975	Premise Match	52m	South West
	HOTELS-LICENCED	Star Hotel., 176 Church St., Parramatta. 2150	43152	1975	Premise Match	52m	South West
	SOLICITORS.	Templeman. R. G. B., 180 Church St., Parramatta. 2150	78769	1975	Premise Match	52m	South West
	BOOT &/OR SHOE REPAIRERS.	Thornley, H., 170 Church St., Parramatta. 2150	7867	1975	Premise Match	52m	South West
	TRAVEL GOODS., RETAILERS.	Thornley, H., 170 Church St., Parramatta. 2150	85241	1975	Premise Match	52m	South West
	DRESS SHOPS & ACCESSORIES.	Veeni Ropes, 170 Church St., Parramatta. 2150	23711	1975	Premise Match	52m	South West
	EMPLOYMENT AGENCIES.	Western Girl (Aust.) Pty. Ltd., 180 Church St., Parramatta. 2150.	27259	1975	Premise Match	52m	South West
	HAIRDRESSERS (GENT.'S) (H070)	Arcade Barber., Rear 170 Church St., Parramatta	313588	1970	Premise Match	52m	South West
	FLORISTS-RETAIL (F335)	Arcade Exclusive Flowers., 4 Parramatta Arc, 170 Church St., PARRAMATTA	304256	1970	Premise Match	52m	South West
	HANDBAG/GLOVE SPECIALISTS (H160)	Arcade Fabrics & Handbags., 7 Parramatta Arc, 170 Church St., Parramatta	314730	1970	Premise Match	52m	South West
	DRESS FABRIC RETAILERS (D590)	Arcade Fabrics & Handbags., 7 Parramatta Arc., 170 Church St., Parramatta	290819	1970	Premise Match	52m	South West
	JEWELLERS-COSTUME-RETAIL (J040)	Arcade Jewellery Kiosk., Centre Parramatta Arc, 170 Church St., Parramatta	321455	1970	Premise Match	52m	South West
	BUTCHERS-RETAIL (B860)	Arcade Meats., 170 Church St., Parramatta	273093	1970	Premise Match	52m	South West

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22	MILK, FRUIT JUICE BARS/CONFECTIONERS	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	330325	1970	Premise Match	52m	South West
	CHEMISTS-PHARMACEUTICAL	Baggs, LS., 11 Parramatta Arc., 170 Church St., Parramatta	280016	1970	Premise Match	52m	South West
	FOOTWEAR RETAILERS (F495)	Boston Shoes, 8 Parramatta Arc., 170 Church St., Parramatta	305467	1970	Premise Match	52m	South West
	FURRIERS-RETAIL (F815)	De Barte, M., 2 Parramatta Arc., 170 Church St., Parramatta	310159	1970	Premise Match	52m	South West
	SPORTS GOODS RETAILERS (S443)	Gillman, R., 10 Parramatta Arc, Parramatta	363416	1970	Premise Match	52m	South West
	MERCERS-MEN'S & BOYS' OUTFITTERS(M232)	Harry's Men's Wear & Parramatta Arc., 170 Church St., Parramatta	328919	1970	Premise Match	52m	South West
	DRESS SHOPS (D595)	Hartley's (Parramatta) Pty. Ltd., 178-180 Church St., Parramatta.	291313	1970	Premise Match	52m	South West
	NEWSAGENTS (N100)	Jones, D., 170 Church St., Parramatta	343614	1970	Premise Match	52m	South West
	FURRIERS-RETAIL (F815)	Linklater & Clarke., 180 Church St., Parramatta	310173	1970	Premise Match	52m	South West
	BABY & CHILDREN'S WEAR-RETAIL(B005)	Lorral Tots & Teens Wear., 3 Parramatta Arc., Parramatta	264186	1970	Premise Match	52m	South West
	HEALTH FOOD RETAILERS (H350)	Martins' Health Foods., 170 Church St., Parramatta	316003	1970	Premise Match	52m	South West
	LOCAL BODIES (L630)	Parramatta City Council., 184 Church St., Parramatta	323775	1970	Premise Match	52m	South West
	BABY & CHILDREN'S WEAR-RETAIL(B005)	Peter & Wendy., 11a Parramatta Arc., 170 Church St., Parramatta	264246	1970	Premise Match	52m	South West
	HOTELS-LICENSED (H690)	Star Hotel., 176 Church St., Parramatta	317592	1970	Premise Match	52m	South West
	FOOTWEAR RETAILERS (F495)	Steward's O Shoe Store., 178 Church St., Parramatta	305741	1970	Premise Match	52m	South West
	BOOT & SHOE REPAIRERS	Thornley, H., 13 Parramatta Arc., 170 Church St, Parramatta	269247	1970	Premise Match	52m	South West
	TRAVEL GOODS RETAILERS (T655)	Thornley, H., 15 Parramatta Arc., 170 Church St., Parramatta	371315	1970	Premise Match	52m	South West
	DRESS SHOPS (D595)	Veeni Robes., 2 Parramatta Arc., 170 Church St., Parramatta	291805	1970	Premise Match	52m	South West
	Hairdressers (Gent.'s)/Tobacconists	Arcade Barber., Rear 170 Church St., Parramatta	97715	1965	Premise Match	52m	South West
	Florists - Retail	Arcade Exclusive Flowers, 4 Parramatta Arc., 170 Church St. Parramatta	87804	1965	Premise Match	52m	South West
	Dress Fabric Retailers	Arcade Fabrics & Handbags, 7 Parramatta Arc., 170 Church St., Parramatta	75505	1965	Premise Match	52m	South West
	Handbag/Glove Specialists	Arcade Fabrics & Handbags., 7 Parramatta Arc., 170 Church St., Parramatta	98771	1965	Premise Match	52m	South West
	Jewellers - Costume - Retail	Arcade Jewellery Kiosk, Centre Parramatta Arc., 170 Church St., Parramatta	105581	1965	Premise Match	52m	South West
	Pram & Stroller Retailers &/or Specialists	Arcade Toy Pty. Ltd., 10-12 Parramatta Arc., 170 Church St., Parramatta	135673	1965	Premise Match	52m	South West
	TOY DEALERS--- RETAIL	Arcade Toy Pty. Ltd., 10-12 Parramatta Arc., 170 Church St., Parramatta	152808	1965	Premise Match	52m	South West
	Milk, Fruit Juice Bars/Confectioners	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	114776	1965	Premise Match	52m	South West
	Chemists - Pharmaceutical	Baggs, L. S., 11 Parramatta Arc., 170 Church St., Parramatta	64684	1965	Premise Match	52m	South West
	Footwear Retailers	Boston Shoes, 8 Parramatta Arc., 170 Church St., Parramatta	88862	1965	Premise Match	52m	South West
	Furriers - Retail	De Barte, M., 2 Parraamtta Arc., 170 Church St., Pmta	94347	1965	Premise Match	52m	South West
	Mercers - Men's & Boys' Outfitters	Harry's Men's Wear, 6 Parramatta Arc., 170 Church St., Parramatta	113278	1965	Premise Match	52m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
22	Frock & Coat Salons	Hartley's (Parramatta) Pty. Ltd., 178-180 Church St., Parramatta	89943	1965	Premise Match	52m	South West
	Newsagents	Jones, D., 170 Church St., Parramatta	128231	1965	Premise Match	52m	South West
	Furriers - Retail	Linklater & Clarke., 180 Church St., Parramatta	94367	1965	Premise Match	52m	South West
	Baby & Children's Wear - Retail	Lorral., 3 Parramatta Arc., 170-172 Church St., Parramatta	48895	1965	Premise Match	52m	South West
	Local Bodies	Parramatta City Council, 184 Church St., Parramatta	108340	1965	Premise Match	52m	South West
	Newspapers/Periodicals	Parramatta Mall, 180 Church St., Parramatta	128861	1965	Premise Match	52m	South West
	Baby & Children's Wear - Retail	Peter & Wendy., 11a Parramatta Arc., 170 Church St., Parramatta	48969	1965	Premise Match	52m	South West
	Hotels - Licensed	Star Hotel, 176 Church St., Parramatta	101901	1965	Premise Match	52m	South West
	Footwear Retailers	Steward's O Shoe Store, 178 Church St., Parramatta	89115	1965	Premise Match	52m	South West
	BOOT & SHOE REPAIRERS	Thornley, H. 13 Parramatta Arc., 170 Church St., Parramatta	53744	1965	Premise Match	52m	South West
	Travel Goods Retailers	Thornley, H., 15 Parramatta Arc., 170 Church St., Parramatta	154115	1965	Premise Match	52m	South West
	Frock & Coat Salons	Veeni Robes, 2 Parramatta Arc., 170 Church St., Parramatta	90374	1965	Premise Match	52m	South West
	DRESSMAKERS/COSTUMIERS	Alicia, Madame, 180 Church St., Parramatta	298511	1961	Premise Match	52m	South West
	ACCOUNTANTS & AUDITORS	Almeida, Maurice J., 180 Church St., Parramatta	264599	1961	Premise Match	52m	South West
	BOOKSELLERS-RETAIL	Arcade Bookshop (The), 7 Parramatta Arc, 170 Church St., Parramatta	274310	1961	Premise Match	52m	South West
	FLORISTS-RETAIL	Arcade Exclusive Flowers, 4 Parramatta Arc, 170 Church St.	311757	1961	Premise Match	52m	South West
	LIBRARIES—LENDING	Arcade Library (The), 6 Parramatta Arc, 170 Church St., Parramatta	331302	1961	Premise Match	52m	South West
	CAFES, TEA ROOMS, COFFEE LOUNGES, Etc.	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	281968	1961	Premise Match	52m	South West
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	338804	1961	Premise Match	52m	South West
	CHEMISTS-PHARMACEUTICAL	Baggs, L. S., 11 Parramatta Arc., 170 Church St., Parramatta	287301	1961	Premise Match	52m	South West
	UMBRELLA DEALERS/REPAIR.	Barnes, E. (“Shelta”), 8 Parramatta Arc, 170 Church St., Parramatta	260353	1961	Premise Match	52m	South West
	BUSINESS AGENTS &/OR BROKERS	Bloor, G. & Co., 180 Church St., Parramatta	279431	1961	Premise Match	52m	South West
	REAL ESTATE AGENTS/VALUERS	Bloor, Gordon & Co., 180 Church St. PARRAMATTA	244949	1961	Premise Match	52m	South West
	STOCK/STATION AGENTS	Bloor, Gordon & Co., 180 Church St., Parramatta	254214	1961	Premise Match	52m	South West
	FURRIERS-RETAIL	De Barte, M., 2 Parraamtta Arc, 170 Church St., Parramatta	318388	1961	Premise Match	52m	South West
	BUSINESS AGENTS &/OR BROKERS	Gordon, Bloor & Co., 180 Church St., Parramatta	279529	1961	Premise Match	52m	South West
	NEWSAGENTS	Jones, D., 170 Church St., Parramatta	353235	1961	Premise Match	52m	South West
	FURRIERS-RETAIL	Linklater & Clarke, 180 Church St., Parramatta	318406	1961	Premise Match	52m	South West
	BABY & CHILDREN’S WEAR-RETAIL	Lorral, 3 Parramatta Arc., 170-172 Church St., Parramatta	270547	1961	Premise Match	52m	South West
	LOCAL BODIES	Parramatta City Council, 184 Church St., Parramatta	332132	1961	Premise Match	52m	South West
	TRAVEL AGENCIES/BOOKING OFFICES	Parramatta Tourist Services Pty. Ltd., 170 Church St., Parramatta	259484	1961	Premise Match	52m	South West
	BABY & CHILDREN’S WEAR-RETAIL	Peter & Wendy, 11a Parramatta Arc, 170 Church St., Parramatta	270613	1961	Premise Match	52m	South West
	HOTELS—LICENSED	Star Hotel, 176 Church St., Parramatta	325676	1961	Premise Match	52m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
22	FOOTWEAR RETAILERS	Steward's O Shoe Store, 178 Church St., Parramatta	313262	1961	Premise Match	52m	South West
	SOLICITORS	Templeman, R. G. B., 180 Church St., Parramatta	251838	1961	Premise Match	52m	South West
	BOOT & SHOE REPAIRERS	Thornley, H., 13 Parramatta Arc, 170 Church St., Parramatta	275258	1961	Premise Match	52m	South West
	HAIRDRESSERS (GENT.'S) /TOBACCONISTS	Webb, E., Rear 170 Church St., Parramatta	322613	1961	Premise Match	52m	South West
	NEWSPAPERS/PERIODICALS	Weekly Press, 180 Church St., Parramatta	353876	1961	Premise Match	52m	South West
	BOOKSELLERS &/OR STATIONERS	Arcade Book Shop, 7 Parramatta Arc, Parramatta	9337	1950	Premise Match	52m	South West
	FLORISTS-RETAIL	Arcade Exclusive Flowers (Mrs. D. M. Lock), 4 The Arcade, Parramatta	45744	1950	Premise Match	52m	South West
	GIFT SHOPS	Arcade Library and Gift Store, The Arcade, Parramatta	54254	1950	Premise Match	52m	South West
	LIBRARIES-LENDING	Arcade Library and Gift Store, The Arcade, Parramatta	68475	1950	Premise Match	52m	South West
	CAFES, TEA ROOMS, COFFEE LOUNGES, Etc.	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	15180	1950	Premise Match	52m	South West
	MILK BARS & CONFECTIONERS	Arcadia Cafe Pty. Ltd., 172 Church St., Parramatta	76279	1950	Premise Match	52m	South West
	UMBRELLA DEALERS &/OR REPAIRERS	Barnes, E., 8 The Arcade, Parramatta	111067	1950	Premise Match	52m	South West
	ACCOUNTANTS & AUDITORS	Bolton, G., Town Hall Chamb., 180 Church St., Parramatta	147	1950	Premise Match	52m	South West
	TAXATION CONSULTANTS & SPECIALISTS	Bolton, G., Town Hall Chamb.,180 Church St., Parramatta	107107	1950	Premise Match	52m	South West
	HANDBAG &/OR GLOVE SPECIALISTS	De Barte, M., 6 The Arcade, Parramatta	60507	1950	Premise Match	52m	South West
	FURRIERS-MANUFACTURING &/OR WHOLESALE	De Barte, M., Arcade Chamb., The Arcade, Parramatta	53753	1950	Premise Match	52m	South West
	TOY MANUFACTURERS	De Barte, M., The Arcade, Parramatta	109769	1950	Premise Match	52m	South West
	PHOTOGRAPHERS-PORTRAIT	Duval Studios, 11 The Arcade, Parramatta	91827	1950	Premise Match	52m	South West
	PRAM & STROLLER MANUFACTURERS	Hutchison, M., The Arcade, Parramatta	94500	1950	Premise Match	52m	South West
	TOY DEALERS-RETAIL	Hutchison, M., The Arcade, Parramatta	109465	1950	Premise Match	52m	South West
	HAIRDRESSERS (GENT.'S) &/OR TOBACCONISTS	Jones, D., 170 Church St., Parramatta	59627	1950	Premise Match	52m	South West
	NEWSAGENTS	Jones, D., 170 Church St., Parramatta	88093	1950	Premise Match	52m	South West
	TOY DEALERS-RETAIL	Jones, David, 170 Church St., Parramatta	109481	1950	Premise Match	52m	South West
	PHOTOGRAPHERS-PORTRAIT	Leica Snaps (Candid), The Arcade, Parramatta	91900	1950	Premise Match	52m	South West
	PHOTOGRAPERS-COMMERCIAL	Leica Snaps, The Arcade, Parramatta.	91630	1950	Premise Match	52m	South West
	FUR DRESSERS & DYERS	Linklater and Clarke, Town Hall Chamb., 180 Church St., Parramatta	52102	1950	Premise Match	52m	South West
	FURRIERS-MANUFACTURING &/OR WHOLESALE	Linklater and Clarke, Town Hall Chamb., Parramatta	53776	1950	Premise Match	52m	South West
	BABY & CHILDREN'S WEAR-RETAIL	Lorral, 3 Parramatta Arc, Parramatta	4646	1950	Premise Match	52m	South West
	DRESSMAKERS & COSTUMIERS	Madame Alicia, Town Hall Chamb., 180 Church St., Parramatta	34617	1950	Premise Match	52m	South West
	TRAVEL AGENCIES & BOOKING OFFICES	Parramatta Tourist Agency, The Arcade, Parramatta	110385	1950	Premise Match	52m	South West
	BABY & CHILDREN'S WEAR-RETAIL	Peter and Wendy, 11a Parramatta Arc, Parramatta	4750	1950	Premise Match	52m	South West
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Regal Salon (The), 5 Parramatta Arc, Parramatta	7712	1950	Premise Match	52m	South West
	HOTELS-LICENSED	Star Hotel (B. McDonough), 176 Church St., Parramatta	63424	1950	Premise Match	52m	South West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
22	FOOTWEAR-RETAILERS	Stewart, D., 178 Church St., Parramatta	47496	1950	Premise Match	52m	South West
	BOOT & SHOE REPAIRERS	Thornley, H., 13 Parramatta Arc, Parramatta	10705	1950	Premise Match	52m	South West
	FROCK & COAT SALONS	Veeni Robes, 2 Parramatta Arc, Parramatta	49002	1950	Premise Match	52m	South West
	PLEATING SPECIALISTS	Veenl Robes, 2 Parramatta Arc, Parramatta	93337	1950	Premise Match	52m	South West
23	FURNITURE &/OR FURNISHINGS-RETAIL.	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta 2150	37216	1986	Premise Match	53m	North West
	ELECTRICAL SUPPLIES &/OR APPLIANCES-RETAIL.	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta. 2150	27459	1986	Premise Match	53m	North West
	ELECTRICAL SUPPLIES &/OR APPLIANCES - RETAIL. (E3840)	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta. 2150.	25769	1982	Premise Match	53m	North West
	FURNITURE &/OR FURNISHINGS-RETAIL. (F7625)	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta.2150.	34724	1982	Premise Match	53m	North West
	ELECTRICAL SUPPLIES &/OR APPLIANCES-RETAIL.	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta. 2150	22798	1978	Premise Match	53m	North West
	FURNITURE-HOUSEHOLD RETAIL	Homecrafts (Electrical) Discounts, 240 Church St., Parramatta. 2150	31769	1978	Premise Match	53m	North West
	ELECTRICAL SUPPLIES &/OR APPLIANCES-RETAIL	Reid's (Electrical) Discounts, 240 Church St., Parramatta. 2150.	26467	1975	Premise Match	53m	North West
	FURNITURE-HOUSEHOLD RETAIL	Reid's (Electrical) Discounts., 240 Church St., Parramatta. 2150	36956	1975	Premise Match	53m	North West
	DEPARTMENTAL STORES	Selfridges (A'asia) Ltd., 240 Church St., Parramatta	32512	1950	Premise Match	53m	North West
24	REAL ESTATE AGENTS. (R2555)	Moxham, C. S. & Co., 95 Macquarie St., Parramatta. 2150.	69445	1982	Premise Match	53m	South West
	REAL ESTATE AGENTS &/OR VALUERS.	Moxham, C. S. & Co., 95 Macquarie St., Parramatta. 2150	62029	1978	Premise Match	53m	South West
	REAL ESTATE AGENTS &/OR VALUERS.	Moxham, C. S. & Co., 95 Macquarie St., Parramatta. 2150	72720	1975	Premise Match	53m	South West
25	TAKE-AWAY FOODS.	Macquarie Food Bar, 93 Macquarie St., Parramatta. 2150.	91297	1986	Premise Match	57m	West
	ELECTRICAL SUPPLIES &/OR APPLIANCES-RETAIL	Downing, N. & Co., 93 Macquarie St., Parramatta. 2150.	26290	1975	Premise Match	57m	West
	CAFES, COFFEE LOUNGES, Etc. (C030)	Bar-Roma Espresso., 93 Macquarie St., Parramatta	275351	1970	Premise Match	57m	West
	ELECTRICAL CONTRACTORS-LICENSED (E300)	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., PARRAMATTA	294716	1970	Premise Match	57m	West
	ELECTRICAL CONTRACTORS-LICENSED (E300)	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., PARRAMATTA	295219	1970	Premise Match	57m	West
	ELECTRICAL SUPPLIES/APPLIANCES RETAILERS	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., Parramatta	295631	1970	Premise Match	57m	West
	Cafes, Tea Rooms, Coffee Lounges, Etc.	Bar-Roma Espresso, 93 Macquarie St., Parramatta	60117	1965	Premise Match	57m	West
	Electrical Contractors - Licensed	Downing, N. & Co. Pty. Ltd., 93 Macquarie St. Parramatta	78772	1965	Premise Match	57m	West
	Electrical Supplies/Appliances Retailers	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., Parramatta	79393	1965	Premise Match	57m	West
	ELECTRICAL CONTRACTORS-LICENSED	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., Parramatta	301838	1961	Premise Match	57m	West
	ELECTRICAL SUPPLIES/APPLIANCES RETAILERS	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., Parramatta	303100	1961	Premise Match	57m	West
	FLUORESCENT LIGHTING SPEC.	Downing, N. & Co. Pty. Ltd., 93 Macquarie St., Parramatta	312246	1961	Premise Match	57m	West
	CAFES, TEA ROOMS, COFFEE LOUNGES, Etc.	West Lake Restaurant, 93 Macquarie St., Parramatta	282628	1961	Premise Match	57m	West
26	Real Estate Agents/Valuers	Manning & Young., Cnr. Smith & Macquarie Sts. Parramatta	139546	1965	Road Intersection	57m	South East
27	Auctioneers - General	Central Live Stock Co. Pty. Ltd., 80 Macquarie St., Parramatta	48349	1965	Premise Match	58m	East

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
27	STOCK/STATION AGENTS	Central. Livestock Co. Pty. Ltd., 80 Macquarie St., Parramatta	148800	1965	Premise Match	58m	East
	Wrought Iron Workers	Lewis, A. W. & Sons Pty. Ltd., 84 Macquarie St., Parramatta	158456	1965	Premise Match	58m	East
	REAL ESTATE AGENTS/VALUERS	Central Livestock Co., 80 Macquarie St. PARRAMATTA	244951	1961	Premise Match	58m	East
	ACCOUNTANTS & AUDITORS	Levingston, G. H. & Co., 80 Macquarie St., Parramatta	265300	1961	Premise Match	58m	East
	ELECTRICAL CONTRACTORS-LICENSED	Parramatta & Granville Electric Supply Co. Ltd, 80 Macquarie St., Parramatta	302365	1961	Premise Match	58m	East
	ELECTRIC POWER SUPPLIES	Parramatta & Granville Electric Supply Co. Ltd., 80 Macquarie St., Parramatta	301203	1961	Premise Match	58m	East
	AUCTIONEERS-GENERAL	Pig Producers Co-op. Ltd. Central Livestock Co. (The), 80 Macquarie St., Parramatta	270060	1961	Premise Match	58m	East
	STOCK/STATION AGENTS	Pig Producers Co-op. Ltd., 80 Macquarie St., Parramatta	254321	1961	Premise Match	58m	East
	BUTCHERS-WHOLESALE	Raffaele, J. Pty. Ltd., 80 Macquarie St., Parramatta	281502	1961	Premise Match	58m	East
28	CAKE SHOPS &/OR PASTRYCOOKS.	Marcel's Patisserie, 91 Macquarie St., Parramatta. 2150	11793	1986	Premise Match	60m	West
	RESTAURANTS.	Bistro Restaurant., 91 Macquarie St., Parramatta. 2150	73574	1975	Premise Match	60m	West
29	Hire Services	Dress Circle Fashion Hire, 46 Macquarie St., Parramatta. 2150	48412	1991	Premise Match	61m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	After Dark, 46 Macquarie St., Parramatta, 2150	16763	1986	Premise Match	61m	West
	HIRING SERVICES.	Dress Circle Fashion Hire, 46 Macquarie St., Parramatta. 2150	45772	1986	Premise Match	61m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Sugar House, 46 Macquarie St., Parramatta. 2150	17964	1986	Premise Match	61m	West
30	CLOTHING-RETAIL-MENS &/OR BOYS WEAR.	Peter Valle's, 236 Church St., Parramatta. 2150	18619	1986	Premise Match	61m	North West
	DRESS SHOPS & ACCESSORIES.(D7450)	Astons, 236 Church St., Parramatta. 2150.	22483	1982	Premise Match	61m	North West
	BUTCHERS-RETAIL	Johiv's Meat Store, 236 Church St., Parramatta. 2150	10624	1975	Premise Match	61m	North West
	BUTCHERS-RETAIL (B860)	John's Meat Store., 236 Church St., Parramatta	273841	1970	Premise Match	61m	North West
	BUTCHERS-RETAIL (B860)	Metro Meats., 236 Church St., Parramatta	274094	1970	Premise Match	61m	North West
	Butchers - Retail	Metro Meats., 236 Church St., Parramatta	58856	1965	Premise Match	61m	North West
	BUTCHERS-RETAIL	Cash's Great Western Butchery Pty. Ltd., 236 Church St., Parramatta	13269	1950	Premise Match	61m	North West
31	GIFT SHOPS.	Tennispere Distributors, 220 Church St., Parramatta. 2150	39532	1986	Premise Match	61m	West
	IMPORTERS.	Tennispere Distributors, 220 Church St., Parramatta. 2150	47920	1986	Premise Match	61m	West
	REAL ESTATE AGENTS. (R2555)	Feltham & Assoc., 220 Church St., Parramatta. 2150.	68923	1982	Premise Match	61m	West
	CHEMISTS-PHARMACEUTICAL.	Pye. L. T., 220 Church St., Parramatta. 2150	13717	1978	Premise Match	61m	West
	CHEMISTS-PHARMACEUTICAL	Pye, L. T., 220 Church St., Parramatta. 2150	15793	1975	Premise Match	61m	West
	CHEMISTS-PHARMACEUTICAL	Pye, L.T., 220 Church St., Parramatta	280996	1970	Premise Match	61m	West
	Chemists - Pharmaceutical	Pye, L. T., 220 Church St., Parramatta	65503	1965	Premise Match	61m	West
	CHEMISTS-PHARMACEUTICAL	Pye. L. T., 220 Church St., Parramatta	288015	1961	Premise Match	61m	West
	CHEMISTS-PHARMACEUTICAL	Pye, L. T., 220 Church St., Parramatta	21952	1950	Premise Match	61m	West
32	HOSPITAL &/OR MEDICAL BENEFITS FUNDS.	Western District Health Fund, Shop 5 St George Building Arc., 232 Church St., Parramatta. 2150	46233	1986	Premise Match	61m	North West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
32	FOOTWEAR RETAILERS.	Fays Shoes, 234 Church St., Parramatta. 2150	29319	1978	Premise Match	61m	North West
	SPORTSWEAR RETAILERS.	Susans Lingerie & Sportswear, 232 Church St., Parramatta. 2150	67078	1978	Premise Match	61m	North West
	LINGERIE &/OR HOSIERY SPECIALISTS.	Susans Lingerie & Sportswear, 232. Church St., Parramatta. 2150	40459	1978	Premise Match	61m	North West
	FROCK & COAT SALONS	Chic Salon, 232 Church St., Parramatta	48348	1950	Premise Match	61m	North West
33	CONFECTIONERS - RETAIL. (C7290)	Darrell-Lea, 216 Church St., Parramatta. 2150.	17784	1982	Premise Match	61m	West
	FRUITERERS &/OR GREENGROCERS.	Roxy Fruit Shop, 216 Church St., Parramatta. 2150	30791	1978	Premise Match	61m	West
	FRUITERERS &/OR GREENGROCERS.	Roxy Fruit Shop., 216 Church St., Parramatta. 2150.	35767	1975	Premise Match	61m	West
	FRUITERERS/GREENGROCERS (F640)	Roxy Fruit Shop., 216 Church St., Parramatta	307854	1970	Premise Match	61m	West
	Fruiterers & Greengrocers	Roxy Fruit Shop, 216 Church St., Parramatta	92037	1965	Premise Match	61m	West
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Roxy Milk Bar, 216 Church St., Parramatta	339582	1961	Premise Match	61m	West
34	BOOKSELLERS-RETAIL.	Angus & Robertson, 238 Church St., Parramatta. 2150	6881	1986	Premise Match	62m	North West
	BOOKSELLERS - RETAIL. (B4475)	Angus & Robertson, 238 Church St., Parramatta. 2150.	7736	1982	Premise Match	62m	North West
	ELECTRICAL SUPPLIES &/OR APPLIANCES-RETAIL	Anderson, E., 238 Church St., Parramatta. 2150.	26211	1975	Premise Match	62m	North West
	GARDEN SUPPLIES-RETAIL (G060)	Coles Stores Pty. Ltd. (Garden only)., 238 Church St., Parramatta	310275	1970	Premise Match	62m	North West
	Garden Supplies - Retail	Coles Stores Pty. Ltd. (Garden only), 238 Church St., Parramatta	94458	1965	Premise Match	62m	North West
	WINE SALOONS	Penfolds Wine Saloon (R. N. Trevivlan), 238 Church St., Parramatta	113810	1950	Premise Match	62m	North West
35	HAIRDRESSERS (GENT.'S) (H070)	Joyce, R. & J., 89-91 Macquarie St., Parramatta	314061	1970	Premise Match	63m	West
	Hairdressers (Gent.'s)/Tobacconists	Joyce, R. & J., 89-91 Macquarie St., Parramatta	98179	1965	Premise Match	63m	West
36	CLOTHING-RETAIL-MENS &/OR BOYS WEAR.	Arida's Menswear, 87 Macquarie St., Parramatta. 2150	18295	1986	Premise Match	65m	West
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS (B260)	Nola-Fay., 87a Macquarie St., Parramatta	266419	1970	Premise Match	65m	West
	Beauty Salons &/or Ladies Hairdressers	Nola-Fay., 87a Macquarie St., Parramatta	51034	1965	Premise Match	65m	West
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	June Russell, 87a Macquarie St., Parramatta	7348	1950	Premise Match	65m	West
37	ANIMAL &/OR BIRD FOOD SUPPLIES. (A5880)	Lewis Pet & Garden Supplies, 44 Macquarie St., Parramatta. 2150.	2744	1982	Premise Match	66m	West
	GARDENERS SUPPLIES - RETAIL(G0750)	Lewis Pet & Garden Supplies, 44 Macquarie St., Parramatta. 2150.	35741	1982	Premise Match	66m	West
	ANIMAL &/OR BIRD FOOD SUPPLIES.	Lewis Pet & Garden Supplies, 44 Macquarie St., Parramatta. 2150	2548	1978	Premise Match	66m	West
	GARDENERS SUPPLIES-RETAIL.	Lewis Pet & Garden Supplies. 44 Macquarie St., Parramatta. 2150	32415	1978	Premise Match	66m	West
	ANIMAL &/OR BIRD FOOD SUPPLIES.	Lewis' Pet & Garden Supplies, 44 Macquarie St., Parramatta. 2150	2409	1975	Premise Match	66m	West
	GARDENERS SUPPLIES-RETAIL	Lewis' Pet & Garden Supplies., 44 Macquarie St., Parramatta. 2150	37659	1975	Premise Match	66m	West
	GARDEN SUPPLIES-RETAIL (G060)	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	310324	1970	Premise Match	66m	West
	WROUGHT IRON WORKERS (W545)	Lewis, A.W.& Sons Pty. Ltd., 44 Macquarie St, Parramatta	375517	1970	Premise Match	66m	West
	Animal & Bird Food Supplies	Lewis, A, W. & Sans Pty. Ltd., 44 Macquarie St., Parramatta	46288	1965	Premise Match	66m	West
	Animal & Bird Dealers	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	46185	1965	Premise Match	66m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
37	Aquariums & Supplies	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	46528	1965	Premise Match	66m	West
	POULTRY FOOD MFRS./DIST.	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	135592	1965	Premise Match	66m	West
	ANIMAL & BIRD DEALERS	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	267817	1961	Premise Match	66m	West
	POULTRY FOOD MFRS./DIST.	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parramatta	361595	1961	Premise Match	66m	West
	WROUGHT IRON WORKERS	Lewis, A. W. & Sons Pty. Ltd., 44 Macquarie St., Parrsmatta	264292	1961	Premise Match	66m	West
	POULTRY FARMERS' SUPPLIERS	Lewis, A. W., 44 Macquarie St., Parramatta	94410	1950	Premise Match	66m	West
38	POULTRY DEALERS - RETAIL.	Parramatta Chicken Shop, 85 Macquarie St., Parramatta. 2150	75616	1986	Premise Match	68m	West
	DENTISTS. (D1800)	Gow-Gates, G. A. E., 85 Macquarie St., Parramatta. 2150.	20285	1982	Premise Match	68m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Hair Connection, 85 Macquarie St., Parramatta. 2150.	5748	1982	Premise Match	68m	West
	POULTRY DEALERS - RETAIL. (P7480)	Parramatta Chicken Shop, 85 Macquarie St., Parramatta. 2150.	65681	1982	Premise Match	68m	West
	DENTISTS.	Gow-Gates, G. A. E., 85 Macquarie St., Parramatta. 2150	18092	1978	Premise Match	68m	West
	DUPLICATING &/OR TYPING SPECIALISTS.	Parramatta Secretarial Service, 85 Macquarie St., Parramatta. 2150	21104	1978	Premise Match	68m	West
	PHOTO COPYING SERVICES.	Parramatta Secretarial Service, 85 Macquarie St., Parramatta. 2150	56459	1978	Premise Match	68m	West
	PRINTERS-LITHOGRAPHIC	Parramatta Secretarial Service, 85 Macquarie St., Parramatta. 2150	59568	1978	Premise Match	68m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Rembrandt Hair Fashions, 85 Macquarie St., Parramatta. 2150	5493	1978	Premise Match	68m	West
	DENTISTS.	Gow-Gates, G. A. E., 85 Macquarie St., Parramatta. 2150	20976	1975	Premise Match	68m	West
	HEALTH FOODS-RETAIL	Parramatta Health Foods, 85 Macquarie St., Parramatta. 2150	41864	1975	Premise Match	68m	West
	ADDING &/OR CALCULATING SERVICES.	Parramatta Secretarial Service, 85 Macquarie St., Parramatta.	802	1975	Premise Match	68m	West
	DUPLICATING &/OR TYPING SPECIALISTS.	Parramatta Secretarial Service, 85 Macquarie St., Parramatta. 2150	24572	1975	Premise Match	68m	West
	PHOTO COPYING SERVICES.	Parramatta Secretarial Service., 85 Macquarie St., Parramatta. 2150	66512	1975	Premise Match	68m	West
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS.	Rembrandt Hair Fashions, 85 Macquarie St., Parramatta. 2150	5838	1975	Premise Match	68m	West
	DENTISTS (D140)	Gow-Gates, G. A. E., Room 1, 85 Macquarie St., Parramatta	288619	1970	Premise Match	68m	West
	LIBRARIES-LENDING (L450)	Macquarie Book Club & Library., 85 Macquarie St., Parramatta	323208	1970	Premise Match	68m	West
	BOOKSELLERS-RETAIL	Macquarie Book Club A Library., 85 Macquarie St., Pmta.	268430	1970	Premise Match	68m	West
	DUPLICATING &/OR TYPING SPEC.	Parramatta Secretarial Services., 85 Macquarie St., Parramatta	292759	1970	Premise Match	68m	West
	Dentists	Gow-Gates, G. A. E., Room 1, 85 Macquarie St., Parramatta	73369	1965	Premise Match	68m	West
	Libraries - Lending	Macquarie Book Club & Library, 85 Macquarie St., Parramatta	107736	1965	Premise Match	68m	West
	BOOKSELLERS---RETAIL	Macquarie Book Club & Library, 85 Macquarie St., Parramatta.	52844	1965	Premise Match	68m	West
	Health Food Retailers	Parramatta Health Foods, 85 Macquarie St., Parramatta	100111	1965	Premise Match	68m	West
	ADDING & CALCULATING SERVICES	Parramatta Calculating Service, 85 Macquarie St., Parramatta	266154	1961	Premise Match	68m	West
	DUPLICATING/TYPING SPECS.	Parramatta Secretarial Services, 85 Macquarie St., Parramatta	299512	1961	Premise Match	68m	West
39	GIFT SHOPS. (G3350)	Moons Giftware, 42 Macquarie St., Parramatta. 2150.	36447	1982	Premise Match	70m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
39	GIFTS - WHOLESALE. (G3470)	Moon's Kitchenware, 42 Macquarie St., Parramatta. 2150.	36691	1982	Premise Match	70m	West
	KITCHENWARE - WHOLESALERS.(K0600)	Moon's Kitchenware, 42 Macquarie St., Parramatta. 2150.	44351	1982	Premise Match	70m	West
	DRESS SHOPS & ACCESSORIES.	Harrolds (Fashion), 42 Macquarie St., Parramatta. 2150	20142	1978	Premise Match	70m	West
	DRESS SHOPS & ACCESSORIES.	Harrolds (Fashion), 42 Macquarie St., Parramatta. 2150	23223	1975	Premise Match	70m	West
	MUSICAL INSTRUMENT DEALERS	Johnstons Radio & Music Store, 42 Macquarie St., Parramatta	352792	1961	Premise Match	70m	West
	MUSIC—SHEET, GRAMOPHONE RECORDS—DEALERS	Johnstons Radio & Music Store, 42 Macquarie St., Parramatta	352882	1961	Premise Match	70m	West
	RADIO &/OR TELEVISION SALES & SERVICEMEN	Johnstons Radio & Music Stores, 42 Macquarie St. PARRAMATTA	364414	1961	Premise Match	70m	West
	MUSICAL INSTRUMENT DEALERS	Johnson, L., 42 Macquarie St., Parramatta	87592	1950	Premise Match	70m	West
	MUSIC-SHEET-RETAILERS	Johnson, L., 42 Macquarie St., Parramatta	87672	1950	Premise Match	70m	West
	RADIO SALES &/OR SERVICEMEN	Johnston, L., 42 Macquarie St., Parramatta	97337	1950	Premise Match	70m	West
40	Photographic Developing Printing &/or Colouring Services	1 Hour Photo Lab, 190 Church St., Parramatta 2150	57361	1991	Premise Match	71m	West
	BUTCHERS-RETAIL.	Budget Meats, 190 Church St., Parramatta. 2150	9646	1986	Premise Match	71m	West
	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Jody Michaels, 196 Church St., Parramatta. 2150	17380	1986	Premise Match	71m	West
	CAKE SHOPS &/OR PASTRYCOOKS.	John's Cakes, 192 Church St., Parramatta. 2150	11723	1986	Premise Match	71m	West
	MILK, FRUIT JUICE BARS &/OR CONFECTIONERS.	Sunshine Food Bar, 194 Church St., Parramatta. 2150	59399	1986	Premise Match	71m	West
	TAKE-AWAY FOODS.	Sunshine Food Bar, 194 Church St., Parramatta., 2150	91818	1986	Premise Match	71m	West
	DRESS FABRIC RETAILERS.	Wella Fabrics, 188 Church St., Parramatta. 2150	25111	1986	Premise Match	71m	West
	BUTCHERS - RETAIL. (B8040)	Budget Meats, 190 Church St., Parramatta, 2150.	10586	1982	Premise Match	71m	West
	TAKE-AWAY FOODS. (T0235)	Hallo Milk Bar, 194 Church St., Parramatta 2150.	78411	1982	Premise Match	71m	West
	MILK, FRUIT JUICE BARS &/OR CONFECTIONERS, (M3180)	Hallo Milk Bar, 194 Church St., Parramatta. 2150.	52222	1982	Premise Match	71m	West
	CAKE SHOPS &/OR PASTRYCOOKS. (C0465)	Henri's Cakes, 192 Church St., Parramatta. 2150.	12628	1982	Premise Match	71m	West
	DRESS SHOPS & ACCESSORIES.(D7450)	Jody Michaels, 196 Church St., Parramatta. 2150.	22984	1982	Premise Match	71m	West
	DRESS SHOPS & ACCESSORIES.	Bonnie Blair Frocks, 190 Church St., Parramatta. 2150	19936	1978	Premise Match	71m	West
	CAKE SHOPS &/OR PASTRYCOOKS.	Adams, H., Cakes. 190 Church St., Parramatta. 2150	12403	1975	Premise Match	71m	West
	HANDBAG &/OR GLOVE SPECIALISTS.	American Bag Store, 194 Church St., Parramatta 2150	41055	1975	Premise Match	71m	West
	DRESS SHOPS & ACCESSORIES.	Bonnie Blair Frocks, 192 Church St., Parramatta. 2150	23004	1975	Premise Match	71m	West
	CAFES, TEA ROOMS &/OR COFFEE LOUNGES.	Hallo Coffee Lounge, 190c Church St., Parramatta. 2150	12002	1975	Premise Match	71m	West
	BUTCHERS-RETAIL	Parramatta Supermeats. 190a Church St., Parramatta 2150	10951	1975	Premise Match	71m	West
	BUTCHERS-RETAIL	Supermeats, 188 Church St., Parramatta 2150	11257	1975	Premise Match	71m	West
	FOOTWEAR RETAILERS.	Whites Shoe Store, 186 Church St., Parramatta. 2150.	34191	1975	Premise Match	71m	West
	DRESS SHOPS (D595)	Brooks, B., 190d Church St., Parramatta	291102	1970	Premise Match	71m	West
	CAFES, COFFEE LOUNGES, Etc. (C030)	Hallo Coffee Lounge., 190c Church St., Parramatta	275675	1970	Premise Match	71m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
40	BUTCHERS-RETAIL (B860)	Parramatta Supermeats., 190a Church St., Parramatta	274291	1970	Premise Match	71m	West
	CAKE SHOPS & PASTRYCOOKS (C045)	Theodora Cakes., 190 Church St., Parramatta	276935	1970	Premise Match	71m	West
	Mercers - Men's & Boys' Outfitters	Miller Tom, 190c Church St., Parramatta	113402	1965	Premise Match	71m	West
	Butchers - Retail	Parramatta Supermeats., 190a Church St., Parramatta	59044	1965	Premise Match	71m	West
	Cake Shops & Pastrycooks	Samios Cakes., 190b Church St., Parramatta	61577	1965	Premise Match	71m	West
	BUILDERS' SUPPLIERS	Murrays Pty. Limited, 190 Church St., Parramatta	278328	1961	Premise Match	71m	West
	PAINT, VARNISH/COLOUR MFRS.' SUPPLIES	Murrays Pty. Ltd., 190 Church St., Parramatta	355821	1961	Premise Match	71m	West
	ACCOUNTANTS & AUDITORS	Sinclair, A. S., 190 Church St., Parramatta	265705	1961	Premise Match	71m	West
	STOCK REMEDIES MANUFACTURERS &/OR DISTRIBUTORS	Stock Health Service Pty. Ltd., 188 Church St., Parramatta	254092	1961	Premise Match	71m	West
	PHOTOGRAPHERS-PORTRAIT	Howard Harris Studios, 182 Church St., Parramatta	91868	1950	Premise Match	71m	West
	FOOTWEAR-RETAILERS	Hunter, John and Son Pty. Ltd., 194 Church St., Parramatta	47335	1950	Premise Match	71m	West
	HARDWARE DEALERS &/OR IRONMONGERS	Murrays Pty. Ltd., 190 Church St., Parramatta	61249	1950	Premise Match	71m	West
41	HOSPITALS-PRIVATE	Inchneuk Hospital, 77 George St., Parramatta	62665	1950	Premise Match	73m	East
	MEDICAL PRACTITIONERS	msticTiernan, M. P., 77 George St., Parramatta	73444	1950	Premise Match	73m	East
42	JEWELLERS &/OR WATCHMAKERS-RETAIL	Edments, 40 Macquarie St., Parramatta. 2150	45898	1975	Premise Match	76m	West
	MILLINERY-RETAIL	Wilson, Miss M., 40 Macquarie St., Parramatta	79015	1950	Premise Match	76m	West
43	PROPERTY MANAGEMENT.	Diamond Grant Real Estate Pty. Ltd., 39 George St., Parramatta. 2150	70598	1975	Premise Match	77m	North West
	NURSERYMEN	Parramatta Seed Co., 39 George St., Parramatta	354175	1961	Premise Match	77m	North West
	GARDEN SUPPLIES-RETAIL	Parramatta Seed Co., 39 George St., Parramatta	53991	1950	Premise Match	77m	North West
	NURSERYMEN	Parramatta Seed Co., 39 George St., Parramatta	89242	1950	Premise Match	77m	North West
	NURSERYMEN	Parramatta Seed Co.,39 George St., Parramatta	89243	1950	Premise Match	77m	North West
	CHINA, CROCKERY, GLASSWARE, CRYSTAL, EARTHENWARE & CUTLERY DEALERS	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	22478	1950	Premise Match	77m	North West
	GARDEN SUPPLIES-RETAIL	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	54006	1950	Premise Match	77m	North West
	GIFT SHOPS	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	54477	1950	Premise Match	77m	North West
	HARDWARE DEALERS &/OR IRONMONGERS	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	61403	1950	Premise Match	77m	North West
	PAINT, VARNISH, OILS & COLOUR MERCHANTS	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	90830	1950	Premise Match	77m	North West
	TOOL DEALERS-RETAIL	Spooner, W. J. Pty. Ltd., 37 George St., Parramatta	109039	1950	Premise Match	77m	North West
44	FOOTWEAR RETAILERS.	Fays Shoes, 210 Church St., Parramatta. 2150	34696	1986	Premise Match	80m	West
	FOOTWEAR RETAILERS (F5575)	Fays Shoes, 210 Church St., Parramatta. 2150.	32360	1982	Premise Match	80m	West
	FOOTWEAR RETAILERS.	Key Shoes. 210 Church St., Parramatta. 2150	29385	1978	Premise Match	80m	West
	EMPLOYMENT AGENCIES.	Staff Exchange, The, (Div. Adam L. Assoc.), 1st Floor, 210 Church St., Parramatta. 2150	23556	1978	Premise Match	80m	West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
44	EMPLOYMENT AGENCIES.	Adam Employment Bureau, 210 Church St., Parramatta. 2150	27167	1975	Premise Match	80m	West
	NEWSPAPER PUBLISHERS	Cumberland Newspapers Pty. Ltd., 210 Church St., Parramatta. 2150	63960	1975	Premise Match	80m	West
	FOOTWEAR RETAILERS.	Key Shoes, 210 Church St., Parramatta. 2150.	34038	1975	Premise Match	80m	West
	EMPLOYMENT AGENCIES.	Staff Exchange, The, 210 Church St., Parramatta. 2150.	27247	1975	Premise Match	80m	West
	BEAUTY SALONS & LADIES' HAIRDRESSERS	Parkinson, Phyllis, Belford Chamb., 210 Church St., Parramatta	272691	1961	Premise Match	80m	West
	MERCERS & GENT'S OUTFITTERS	Beare and Ley, 212 Church St., Parramatta	74248	1950	Premise Match	80m	West
	PHOTOGRAPHERS-PORTRAIT	Harris Howard, 210 Church St., Parramatta	91856	1950	Premise Match	80m	West
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Parkinson, Phyllis, Belford Chamb., 210 Church St., Parramatta	7641	1950	Premise Match	80m	West
45	FRUITERERS/GREENGROCERS	Bert's, 200 Church St., Parramatta	315036	1961	Premise Match	80m	West
	FRUITERERS & GREENGROCERS	Bret's Fruit Arcade, 200 Church St.	49653	1950	Premise Match	80m	West
	FRUITERERS & GREENGROCERS	Bret's, 200 Church St., Parramatta	49586	1950	Premise Match	80m	West
	DEPARTMENTAL STORES	Woolworths Ltd., 200 Church St., Parramatta	32528	1950	Premise Match	80m	West
46	JEWELLERS &/OR WATCHMAKERS-RETAIL.	Alexander, 198 Church St., Parramatta. 2150	49529	1986	Premise Match	83m	West
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Kalligrerls, P., 198 Church St., Parramatta	330756	1970	Premise Match	83m	West
	Milk, Fruit Juice Bars/Confectioners	Kalligraris, P., 198 Church St., Parramatta	115173	1965	Premise Match	83m	West
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Kalligreris, P., 198 Church St., Parramatta	339210	1961	Premise Match	83m	West
47	CLOTHING-RETAIL-LADIES &/OR GIRLS WEAR.	Katies Fashion Store, 202 Church St., Parramatta. 2150	17425	1986	Premise Match	83m	West
	DRESS SHOPS & ACCESSORIES.(D7450)	Katies Fashion Store, 202 Church St., Parramatta. 2150	23013	1982	Premise Match	83m	West
	DRESS SHOPS & ACCESSORIES.	Katies Fashion Store, 202 Church St., Parramatta. 2150	20202	1978	Premise Match	83m	West
	DRESS SHOPS & ACCESSORIES.	Katies Fashion Store, 208 Church St., Parramatta. 2150	23300	1975	Premise Match	83m	West
	CAFES, TEA ROOMS &/OR COFFEE LOUNGES.	Mumma's Cafe, 208 Church St., Parramatta 2150	12143	1975	Premise Match	83m	West
	FOOTWEAR RETAILERS (F495)	Hewitts., 208 Church St., Parramatta	305589	1970	Premise Match	83m	West
	Footwear Retailers	Hewitts, 208 Church St., Parramatta	88972	1965	Premise Match	83m	West
	FOOTWEAR RETAILERS	Hewitts, 208 Church St., Parramatta	313137	1961	Premise Match	83m	West
	PHYSIOTHERAPISTS	O'Toole, S. M., 204 Church St., Parramatta	358139	1961	Premise Match	83m	West
	MERCERS—MEN'S & BOYS' OUTFITTERS	Shayler's, 202 Church St., Parramatta	337111	1961	Premise Match	83m	West
	DENTISTS	Smith, R. S., 204 Church St., Parramatta	296427	1961	Premise Match	83m	West
	FOOTWEAR-RETAILERS	Hewitts, 208 Church St., Parramatta	47314	1950	Premise Match	83m	West
	MASSEURS & MASSEUSES	O'Toole, S. M., 204 Church St., Parramatta	72130	1950	Premise Match	83m	West
	PHYSIOTHERAPISTS	O'Toole, S. M., 204 Church St., Parramatta	92326	1950	Premise Match	83m	West
	MERCERS & GENT'S OUTFITTERS	Shayler, A., 202 Church St., Parramatta	74622	1950	Premise Match	83m	West
48	DEPARTMENTAL STORES.	Woolworths Ltd. Parramatta, 242 Church St., Parramatta. 2150	23753	1986	Premise Match	84m	North West
	DEPARTMENTAL STORES. (D1950)	Woolworths Ltd, 242 Church St., Parramatta. 2150.	21218	1982	Premise Match	84m	North West

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
48	Agricultural Machinery - Mfrs. &/or Dists.	Horwood Motors., 250 Church St., Parramatta	45452	1965	Premise Match	84m	North West
	MOTOR GARAGES & ENGINEERS	Brooklands Garage, 250 Church St. PARRAMATTA	346745	1961	Premise Match	84m	North West
	AGRICULTURAL MACHINERY-MFRS. &/OR DISTS.	Horwood Motors, 250 Church St., Parramatta	267026	1961	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS	Brooklands Garage, 250 Church St., Parramatta	83505	1950	Premise Match	84m	North West
	CHEMISTS-PHARMACEUTICAL	Harris and Smith, 250 Church St., Parramatta	21610	1950	Premise Match	84m	North West
	KNITTED GOODS &/OR KNITTING SUPPLIES RETAIL	Johnsons, 248 Church St., Parramatta	67141	1950	Premise Match	84m	North West
	LINGERIE & HOSIERY SPECIALISTS	Johnsons, 248 Church St., Parramatta	69402	1950	Premise Match	84m	North West
	FROCK & COAT SALONS	Johnstons, 248 Church St., Parramatta	48618	1950	Premise Match	84m	North West
	BANKS	Union Bank of Australia Ltd, 248 Church St., Parramatta	6031	1950	Premise Match	84m	North West
49	DRY CLEANERS, PRESSERS & DYERS	Mark Mayne Pty. Ltd. 33 George St., Parramatta	35498	1950	Premise Match	90m	North West
	GROCERS-RETAIL	Thompson, A. and Sons Pty. Ltd., 35 George St., Parramatta	55877	1950	Premise Match	90m	North West
50	RESTAURANTS.	Pappy's Restaurant, 74 George St., Parramatta. 2150	82507	1986	Premise Match	98m	North East
	TRAVEL AGENCIES &/OR BOOKING OFFICES.	United Permanent Travel Parramatta, 74 George St., Parramatta. 2150	95745	1986	Premise Match	98m	North East
	FURNITURE &/OR FURNISHINGS-RETAIL. (F7625)	Atek Interiors, 68 George St., Parramatta. 2150.	34599	1982	Premise Match	98m	North East
	RESTAURANTS. (R5180)	Cahills Light Horse Restaurant, 68 George St., Parramatta. 2150.	70556	1982	Premise Match	98m	North East
	ACCOUNTANTS & AUDITORS. (A0360)	Coopers & Lybrand., 76 George St., Parramatta. 2150.	286	1982	Premise Match	98m	North East
	ACOUSTIC MATERIAL MFRS. &/OR DISTS.	Australian Gypsum Ltd., 76 George St., Parramatta. 2150	991	1978	Premise Match	98m	North East
	ACOUSTICAL CONTRACTORS.	Australian Gypsum Ltd., 76 George St., Parramatta. 2150	1013	1978	Premise Match	98m	North East
	FERTILIZER MFRS. &/OR SUPPLIERS.	Australian Gypsum Ltd., 76 George St., Parramatta. 2150	27302	1978	Premise Match	98m	North East
	PLASTER MFRS.	Australian Gypsum Ltd., 76 George St., Parramatta. 2150	57368	1978	Premise Match	98m	North East
	WALLBOARD MFRS. .	Australian Gypsum Ltd., 76 George St., Parramatta. 2150	73666	1978	Premise Match	98m	North East
	PLASTER MFRS.	Australian Plaster Pty. Ltd., 76 George St., Parramatta. 2150	57369	1978	Premise Match	98m	North East
	ACOUSTIC MATERIAL MFRS. &/OR DISTS.	Insulwool Products, 76 George St., Parramatta. 2150	996	1978	Premise Match	98m	North East
	INSULATING MATERIALS MFRS. &/OR DISTS. &/OR SUPPLIERS.	Insulwool Products, 76 George St., Parramatta. 2150	37813	1978	Premise Match	98m	North East
	ACOUSTIC MATERIAL MFRS. &/OR DISTS.	Australian Gypsum Ltd., 82 George St., Parramatta. 2150	711	1975	Premise Match	98m	North East
	MODELLERS &/OR SCULPTORS.	Australian Gypsum Ltd., 82 George St., Parramatta. 2150	88353	1975	Premise Match	98m	North East
	PLASTER MFRS.	Australian Gypsum Ltd., 82 George St., Parramatta. 2150	67558	1975	Premise Match	98m	North East
	WALLBOARD MFRS.	Australian Gypsum Ltd., 82 George St., Parramatta. 2150	86324	1975	Premise Match	98m	North East
	FERTILIZER MFRS. &/OR SUPPLIERS.	Australian Gypsum Ltd., 82 George St., Parramatta. 2150.	31494	1975	Premise Match	98m	North East
	EMPLOYMENT AGENCIES.	Executive Recruiters Pty. Ltd., 76 George St., Parramatta. 2150.	27205	1975	Premise Match	98m	North East
	MANAGEMENT CONSULTANTS.	Executive Recruiters Pty. Ltd., 76 George St., Parramatta. 2150.	48391	1975	Premise Match	98m	North East
	EMPLOYMENT AGENCIES.	Jordon Personnel. 82 George St., Parramatta. 2150.	27219	1975	Premise Match	98m	North East

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50	MILK, FRUIT JUICE BARS/CONFECTIONERS	Cominos, P., 80 George St., Parramatta	330506	1970	Premise Match	98m	North East
	CLUBS & SPORTING BODIES (C487)	Parramatta Police-Citizens Boys Club., 70 George St., Parramatta	284546	1970	Premise Match	98m	North East
	Milk, Fruit Juice Bars/Confectioners	Cominos, P., 80 George St., Parramatta	114949	1965	Premise Match	98m	North East
	Caterers	Nolan Bros. ("Caraleon"), 74-76 George St., Parramatta	63587	1965	Premise Match	98m	North East
	Clubs & Sporting Bodies	Parramatta Police-Citizens Boys Club, 70 George St., Pmta	69209	1965	Premise Match	98m	North East
	Real Estate Agents/Valuers	Rawlinson & Co. Pty. Ltd., 78 George St. Parramatta	139553	1965	Premise Match	98m	North East
	Auctioneers - General	Rawlinson & Company Pty. Ltd., 78 George St., Parramatta	48429	1965	Premise Match	98m	North East
	STOCK/STATION AGENTS	Rawlinson & Company Pty. Ltd., 78 George St., Parramatta	148908	1965	Premise Match	98m	North East
	Dry Cleaners, Pressers/Dyers	Swan's French Dry Cleaners., 68 George St Parramatta	76356	1965	Premise Match	98m	North East
	TAXATION CONSULTANTS/SPECIALISTS	Tyers, R. D. (& Business Investigator), 80a George St., Parramatta	150222	1965	Premise Match	98m	North East
	MOTOR DRIVING SCHOOLS	Better Driving Tuition, 50 George St., Parramatta	345921	1961	Premise Match	98m	North East
	ENGINEERS-REFRIGERATION	Cowderoys Refrigeration Service, 68 George St., Parramatta	308035	1961	Premise Match	98m	North East
	REFRIGERATOR DEALERS &/OR SERVICEMEN	Cowderoys Refrigeration Service, 68 George St., Parramatta	245491	1961	Premise Match	98m	North East
	WASHING MACHINE SALES/SERVICE	Cowderoys Refrigeration Service, 68 George St., Parramatta	261503	1961	Premise Match	98m	North East
	ELECTRIC MOTOR INSTALLATION/MAINTENANCE SPECIALISTS	Lennox Electric, 68 George St., Parramatta	300909	1961	Premise Match	98m	North East
	ELECTRIC MOTOR WINDING/REWINDING SPECIALISTS	Lennox Electric, 68 George St., Parramatta	300975	1961	Premise Match	98m	North East
	ELECTRIC MOTORS-REPAIRERS/HIRERS	Lennox Electric, 68 George St., Parramatta	301160	1961	Premise Match	98m	North East
	ELECTRICAL CONTRACTORS-LICENSED	Lennox Electric, 68 George St., Parramatta	302185	1961	Premise Match	98m	North East
	ENGINEERS-ELECTRICAL	Lennox Electric, 68 George St., Parramatta	305525	1961	Premise Match	98m	North East
	MOTOR ELECTRICIANS	Lennox Electric, 68 George St., Parramatta	346087	1961	Premise Match	98m	North East
	STOCK/STATION AGENTS	Parramatta Livestock Co. (The), 76 George St., Parramatta	254312	1961	Premise Match	98m	North East
	CLUBS & SPORTS BODIES	Parramatta Police-Citizens Boys Club, 70 George St., Parramatta	291717	1961	Premise Match	98m	North East
	PRINTERS-LETTERPRESS	Parramatta Preview Pty. Ltd., 44a George St., Parramatta	362354	1961	Premise Match	98m	North East
	REAL ESTATE AGENTS/VALUERS	Raper, S. Pty. Ltd., 44 George St. PARRAMATTA	244966	1961	Premise Match	98m	North East
	REAL ESTATE AGENTS/VALUERS	Rawlinson & Co. Pty. Ltd., 78 George St. PARRAMATTA	244967	1961	Premise Match	98m	North East
	AUCTIONEERS-GENERAL	Rawlinson & Company Pty. Ltd., 78 George St., Parramatta	270064	1961	Premise Match	98m	North East
	INSURANCE AGENTS	Rawlinson & Company Pty. Ltd., 78 George St., Parramatta	327977	1961	Premise Match	98m	North East
	STOCK/STATION AGENTS	Rawlinson & Company Pty. Ltd., 78 George St., Parramatta	254326	1961	Premise Match	98m	North East
	MOTOR DRIVING TEACHERS	Bert's Driving Tuition, 50 George St., Parramatta	83036	1950	Premise Match	98m	North East
	SURVEYORS-LAND	Busby, H. H., 44a George St., Parramatta	105953	1950	Premise Match	98m	North East
	GROCERS-RETAIL	Faust, H., 46 George St., Parramatta	57264	1950	Premise Match	98m	North East
	PRINTERS-GENERAL	Parramatta Review, 44a George St., Parramatta	95092	1950	Premise Match	98m	North East

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50	REAL ESTATE AGENTS	Rawlinson and Co. Pty. Ltd., 44 George St., Parramatta	98714	1950	Premise Match	98m	North East
	STOCK & STATION AGENTS	Rawlinson and Co. Pty. Ltd., 44 George St., Parramatta	105628	1950	Premise Match	98m	North East
	AUCTIONEERS-GENERAL	Rawlinson and Company Pty. Limited, 44 George St., Parramatta	4144	1950	Premise Match	98m	North East
	BUSINESS AGENTS &/OR BROKERS	Rawlinson and Company Pty. Limited, 44 George St., Parramatta	12905	1950	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS	Swan's Dry Cleaners., 42A George St Parramatta	35724	1950	Premise Match	98m	North East
51	Auctioneers Real Estate	Blake & Munro Real Estate Pty. Ltd., 24 Civic Arc., 48 George St., Parramatta 2150	34669	1991	Premise Match	99m	North
	Real Estate Agents	Kennedy, M., 48 George St., Parramatta 2150	60380	1991	Premise Match	99m	North
	Caterers	Nolan Bros., 48 George St. Parramatta 2150	38603	1991	Premise Match	99m	North
	Jewellery Manufacturers, Designers, Imps &/or W/salers	Totterdell & Hilder, 48 George St, Parramatta. 2150	49911	1991	Premise Match	99m	North
	Property Management	Williams, A. H., 28/48 George St., Parramatta. 2150	59734	1991	Premise Match	99m	North
	ACCOUNTANTS & AUDITORS.	Aboud, V., 50 George St., Parramatta. 2150	103	1986	Premise Match	99m	North
	HAIRDRESSERS-LADIES &/OR BEAUTY SALONS.	Antons, 50 George St., Parramatta. 2150	41594	1986	Premise Match	99m	North
	AUCTIONEERS-REAL ESTATE.	Blake & Munro Real Estate Pty. Ltd., Civic Arc, 24/48 George St., Parramatta. 2150	4351	1986	Premise Match	99m	North
	PROPERTY MANAGEMENT.	Blake & Munro Real Estate Pty. Ltd., Civic Arc. 24/48 George St., Parramatta. 2150	77439	1986	Premise Match	99m	North
	REAL ESTATE AGENTS.	Blake & Munro Real Estate Pty. Ltd., Civic Arc. 24/48 George St., Parramatta. 2150	79172	1986	Premise Match	99m	North
	RESTAURANTS.	Butler Did It, The, 50 George St., Parramatta. 2150	81195	1986	Premise Match	99m	North
	BEAUTICIANS.	Champagne Nails, 50 George St., Parramatta. 2150	5697	1986	Premise Match	99m	North
	BUTCHERS-RETAIL.	Civic Meat Market, 50 George St., Parramatta. 2150	9760	1986	Premise Match	99m	North
	REAL ESTATE AGENTS.	Kennedy, M., 48 George St., Parramatta. 2150	79752	1986	Premise Match	99m	North
	CATERERS.	Nolan Bros., 48 George St., Parramatta.2150	13165	1986	Premise Match	99m	North
	FISH MERCHANTS-RETAIL.	Parramatta Seafoods, 50 George St., Parramatta. 2150	33226	1986	Premise Match	99m	North
	JEWELLERY-MFRS. &/OR IMPS. &/OR W/SALERS.	Totterdell & Hilder, 48 George St., Parramatta. 2150	49511	1986	Premise Match	99m	North
	GIFT SHOPS.	Totterdell Jewellers Pty. Ltd., 48 George St., Parramatta. 2150	39545	1986	Premise Match	99m	North
	JEWELLERS &/OR WATCHMAKERS-RETAIL.	Totterdell Jewellers Pty. Ltd., 48 George St., Parramatta. 2150	50008	1986	Premise Match	99m	North
	SEWING MACHINE SALES &/OR SERVICE.	Western Suburbs Sewing Machine Centre, 50 George St., Parramatta. 2150	85885	1986	Premise Match	99m	North
	PROPERTY MANAGEMENT.	Williams, A. H., 28/48 George St., Parramatta. 2150	78053	1986	Premise Match	99m	North
	REAL ESTATE AGENTS	Williams, A. H., 28/48 George St., Parramatta. 2150	80359	1986	Premise Match	99m	North
	BEAUTY SALONS &/OR LADIES HAIRDRESSERS. (B2000)	Antons, 50 George St., Parramatta. 2150.	5214	1982	Premise Match	99m	North
	FINANCIERS &/OR FINANCEAGENTS. (F1950)	Australian Property Units Managements, 48 George St., Parramatta. 2150.	30615	1982	Premise Match	99m	North
	CHEMISTS - PHARMACEUTICAL.(C4110)	George Street Pharmacy, Civic Arc., Parramatta. 2150.	15059	1982	Premise Match	99m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
51	AUCTIONEERS - REAL ESTATE.(A8430)	Kennedy, M. Real Estate, Civic Arc., 48 George St., Parramatta. 2150.	3998	1982	Premise Match	99m	North
	PROPERTY MANAGEMENT. (P9060)	Kennedy, M. Real Estate, Civic Arc., 48 George St., Parramatta. 2150.	67405	1982	Premise Match	99m	North
	REAL ESTATE AGENTS. (R2555)	Kennedy, M. Real Estate, Civic Arc., 48 George St., Parramatta. 2150.	69268	1982	Premise Match	99m	North
	STOCK &/OR STATION AGENTS.(S7140)	Kennedy, M. Real Estate. Civic Arc., 48 George St., Parramatta. 2150.	77417	1982	Premise Match	99m	North
	REAL ESTATE AGENTS. (R2555)	Kennedy, M., 48 George St., Parramatta. 2150.	69267	1982	Premise Match	99m	North
	ACCOUNTANTS & AUDITORS. (A0360)	McCulloch, Robert, B., 50 George St., Parramatta. 2150.	631	1982	Premise Match	99m	North
	CATERERS. (C2685)	Nolan Bros., 48 George St., Parramatta. 2150.	14015	1982	Premise Match	99m	North
	LINGERIE &/OR HOSIERY SPECIALISTS. (L5000)	Nu-Style, 50 George St., Parramatta. 2150.	45450	1982	Premise Match	99m	North
	FISH MERCHANTS - RETAIL (F2825)	Parramatta Seafoods, 50 George St., Parramatta. 2150.	31015	1982	Premise Match	99m	North
	FLORISTS - RETAIL. (F4125)	Pumpkins Plants & Things, 50 George St., Parramatta. 2150.	31580	1982	Premise Match	99m	North
	JEWELLERS - MFRG. &/OR W/SALERS &/OR IMPS. (J0400)	Totterdell & Hilder, 48 George St., Parramatta. 2150.	43394	1982	Premise Match	99m	North
	GIFT SHOPS. (G3350)	Totterdell Jewellers Pty. Ltd., 48 George St., Parramatta. 2150.	36595	1982	Premise Match	99m	North
	JEWELLERS &/OR WATCHMAKERS RETAIL. (J0550)	Totterdell Jewellers Pty. Ltd., 48 George St., Parramatta. 2150.	43804	1982	Premise Match	99m	North
	JEWELLERS &/OR WATCHMAKERS RETAIL. (J0550)	Totterdell Jewellers Pty. Ltd., Civic Arc., Parramatta. 2150.	43803	1982	Premise Match	99m	North
	SEWING MACHINE SALES &/ORSERVICE. (S2280)	Western Suburbs Sewing Machine Centre, Civic Arc., Parramatta. 2150.	74177	1982	Premise Match	99m	North
	REAL ESTATE AGENTS. (R2555)	Williams, A. H., 48 George St., Parramatta. 2150.	69874	1982	Premise Match	99m	North
	FINANCIERS &/OR FINANCE AGENTS.	Australian Property Units Managements, 48 George St., Parramatta. 2150	27697	1978	Premise Match	99m	North
	FINANCIERS &/OR FINANCE AGENTS.	Australian Property (Nominees) Pty Ltd., Civic Arc., Parramatta. 2150.	31913	1975	Premise Match	99m	North
	FINANCIERS &/OR FINANCE AGENTS.	Australian Property Units Managements, Civic Arc., Parramatta. 2150.	31914	1975	Premise Match	99m	North
	CONVEYORS &/OR CONVEYING EQUIP. MFRS. &/OR IMPS. &/OR DISTS.	Industrial Overload Ltd., 48 George Street, Parramatta.	18778	1975	Premise Match	99m	North
	CATERERS.	Kalinda Nolan Bros., 48 George St., Parramatta. 2150	14043	1975	Premise Match	99m	North
	CATERERS.	Nolan Bros. Civic Arc., 48 George St., Parramatta. 2150	14057	1975	Premise Match	99m	North
	PHOTOGRAPHERS-GENERAL	Price A., Civic Arc., Parramatta. 2150	66780	1975	Premise Match	99m	North
	CAFES, COFFEE LOUNGES, Etc. (C030)	Ann's Coffee Shop, Civic Arc., 48 George St., Parramatta	275319	1970	Premise Match	99m	North
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS (B260)	Anton's, Civic Arc., 48 George St., Parramatta	265514	1970	Premise Match	99m	North
	BUILDERS & CONTRACTORS (B800)	Bullock Ray Pty. Ltd., Civic Arc., 48 George St., Parramatta	269986	1970	Premise Match	99m	North
	CHEMISTS-PHARMACEUTICAL	George Street Pharmacy., 50 George St., Parramatta	280421	1970	Premise Match	99m	North
	CATERERS (C183)	Kalinda, Nolan Bros., Civic Arc., 48 George St., Parramatta	278761	1970	Premise Match	99m	North
	CATERERS (C183)	Nolan Bros., Civic Arc., 48 George St., Parramatta	278785	1970	Premise Match	99m	North
	BUTCHERS-RETAIL (B860)	Peters Continental Butchery., Civic Arc., 48 George St., Parramatta	274322	1970	Premise Match	99m	North
	FISH MERCHANTS-RETAIL (F245)	Sea Foods., 48 George St., Parramatta	303733	1970	Premise Match	99m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
51	CLOTHING MFRS. &/OR W'SALERS-SCHOOL UNIFORMS (C467)	Uniform Specialists Pty. Ltd., 48 George St., Parramatta	283443	1970	Premise Match	99m	North
	Oil Blenders	Petroleum Products Pty. Ltd., 48-50 George St., Parramatta	129538	1965	Premise Match	99m	North
	Oil Merchants-General	Petroleum Products Pty. Ltd., 48-50 George St., Parramatta	129595	1965	Premise Match	99m	North
	Oils - Lubricating - Merchants	Petroleum Products Pty. Ltd., 48-50 George St., Parramatta	129717	1965	Premise Match	99m	North
	Oils - Vegetable - Merch.	Petroleum Products Pty. Ltd., 48-50 George St., Parramatta	129742	1965	Premise Match	99m	North
	Paint, Solvent/Thinner Manufacturers/Wholesalers	Petroleum Products Pty. Ltd., 48-50 George St., Parramatta	130636	1965	Premise Match	99m	North
	Acid Manufacturers	Petroleum Products Pty. Ltd., Civic Arc., 48-50 George St., Parramatta	44404	1965	Premise Match	99m	North
	Chemists - Industrial	Petroleum Products Pty. Ltd., Civic Arc., 48-50 George St., Parramatta	64423	1965	Premise Match	99m	North
	SOLICITORS	Scott, L. G. & Co., 48 George St., Parramatta	146098	1965	Premise Match	99m	North
	Real Estate Agents/Valuers	White, Paul & Co., Parramatta, 48-50 George St. Parramatta	139559	1965	Premise Match	99m	North
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Civic Milk Bar, 34a George St., Parramatta	338970	1961	Premise Match	99m	North
	PICTURE THEATRES	Parramatta Civic, 34 George St., Parramatta	358519	1961	Premise Match	99m	North
52	ACCOUNTANTS & AUDITORS.	Lee Morris & Associates, 58 George St., Parramatta. 2150	676	1986	Premise Match	99m	North
	TAXATION CONSULTANTS.	Lee Morris & Associates, 58 George St., Parramatta. 2150	92317	1986	Premise Match	99m	North
	CARPET &/OR FLOOR COVERING RETAILERS &/OR SPECIALISTS.	Regency Floor Coverings, 52 George St., Parramatta. 2150	12582	1986	Premise Match	99m	North
	PROPERTY MANAGEMENT. (P9060)	Diamond Grant Real Estate Pty. Ltd., 58 George St., Parramatta. 2150.	67256	1982	Premise Match	99m	North
	REAL ESTATE AGENTS. (R2555)	Diamond Grant Real Estate Pty. Ltd., 58 George St., Parramatta. 2150.	68865	1982	Premise Match	99m	North
	REAL ESTATE AGENTS &/OR VALUERS.	Bond Real Estate & Developments., 58 George St., Parramatta. 2150	72043	1975	Premise Match	99m	North
	CAFES, COFFEE LOUNGES, Etc. (C030)	Brazil Espresso & Milk Bar., 52 George St., Parramatta	275395	1970	Premise Match	99m	North
	GIFT SHOPS (G180)	Gift Shop (The)., 54 George St., Parramatta	310807	1970	Premise Match	99m	North
	Cafes, Tea Rooms, Coffee Lounges, Etc.	Brazil Espresso & Milk Bar, 52 George St. Parramatta	60156	1965	Premise Match	99m	North
	UMBRELLA DEALERS/REPAIR.	Collett, F. G., 36a George St., Parramatta	260357	1961	Premise Match	99m	North
	MILK, FRUIT JUICE BARS/CONFECTIONERS	Frelingos, A., 36 George St., Parramatta	339082	1961	Premise Match	99m	North
	GIFT SHOPS	Collect, F. G., 36a George St., Parramatta	54311	1950	Premise Match	99m	North
	SECONDHAND DEALERS	Collett, F. G., 36a George St., Parramatta	101111	1950	Premise Match	99m	North
	UMBRELLA DEALERS &/OR REPAIRERS	Collett, F. G., 36a George St., Parramatta	111073	1950	Premise Match	99m	North
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Cordony Bros. 36b George St., Parramatta	7008	1950	Premise Match	99m	North
	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Cordony Bros. 38 George St., Parramatta	7007	1950	Premise Match	99m	North

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Business Directory Records 1950-1991
Road or Area Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
53	Insurance Companies General	Australian Mutual Provident Society, Macquarie St, Parramatta. 2150	49531	1991	Road Match	0m
	Concrete Ready Mixed	Gravel & Sand Suppliers Pty. Ltd., Macquarie St, Parramatta 2150	40570	1991	Road Match	0m
	INSURANCE COMPANIES ¬GENERAL.	Australian Mutual Provident Society, Macquarie St., Parramatta. 2150	48882	1986	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES.	Gravel & Sand Suppliers Pty Ltd., Macquarie St., Parramatta. 2150	40234	1986	Road Match	0m
	CONCRETE-READY MIXED SUPPLIES.	Gravel & Sand Suppliers Pty. Ltd., Macquarie St., Parramatta. 2150	19899	1986	Road Match	0m
	INSURANCE COMPANIES - GENERAL (I4400)	Australian Mutual Provident Society, Macquarie St., Parramatta. 2150.	42714	1982	Road Match	0m
	INSURANCE COMPANIES-GENERAL.	Australian Mutual Provident Society, Macquarie St., Parramatta. 2150	38052	1978	Road Match	0m
	INSURANCE COMPANIES-GENERAL	Australian Mutual Provident Society., Macquarie St., Parramatta.	44978	1975	Road Match	0m
	INSURANCE COMPANIES-GENERAL(I530)	A.M.P. Engineering Dept., Macquarie St., Parramatta	320146	1970	Road Match	0m
	INSURANCE COMPANIES-GENERAL(I530)	Australian Mutual Provident Society., Macquarie St., Parramatta	320170	1970	Road Match	0m
	DENTISTS (D140)	Binns, W. F. & Knox, A. R., Macquarie St., Parramatta	288384	1970	Road Match	0m
	ARCHITECTS (A440)	Bowen, B.O., Macquarie St., Parramatta.	261899	1970	Road Match	0m
	MEDICAL PRACTITIONERS (M216)	Davies, D. R., Macquarie St., Parramatta	326612	1970	Road Match	0m
	GOVERNMENT DEPTS.-C'WEALTH (G490)	Dept, of Labour St National Service., Macquarie St., Parramatta	311600	1970	Road Match	0m
	CHIROPODISTS (C316)	Matthews, A.E. & R. W., Macquarie St., Parramatta	281639	1970	Road Match	0m
	DENTISTS (D140)	Miles, R., Macquarie St., Parramatta	288845	1970	Road Match	0m
	NEWSPAPERS/PERIODICALS	Cumberland Newspapers Ltd., Macquarie St., Parramatta	353717	1961	Road Match	0m
	PUBLISHERS	Cumberland Newspapers Ltd., Macquarie St., Parramatta	363200	1961	Road Match	0m
	NEWSPAPERS/PERIODICALS	Hawkesbury Journal, Macquarie St., Parramatta	353755	1961	Road Match	0m
	REAL ESTATE AGENTS	Davies, Sydney, Queensland Hse., Macquarie St., Parramatta	98158	1950	Road Match	0m
	JUSTICES OF THE PEACE	De Vilnits, Dr. J. P. A., Macquarie St., Parramatta	66666	1950	Road Match	0m
	MUSIC TEACHERS	Harvey, Miss Lillian, St. Johns Chamb., Macquarie St., Parramatta	87446	1950	Road Match	0m
	FUNERAL DIRECTORS	Labour Motor Funerals Ltd., St. Johns Chamb., Macquarie St., Parramatta	52034	1950	Road Match	0m
	CAFES, TEA ROOMS, COFFEE LOUNGES, Etc.	Rivett's Waratah Restaurant, Macquarie St., Parramatta	15949	1950	Road Match	0m
	FURNITURE DEALERS-SECONDHAND	Sterling Furniture Co., Macquarie St., Parramatta	52583	1950	Road Match	0m
	PIANO DEALERS	West's, Macquarie St., Parramatta	92433	1950	Road Match	0m
54	Stationers Commercial	Penfold W.C & Co, 30 Horwood Pl Parramatta 2150	63168	1991	Road Match	0m
	HAIRDRESSERS-MENS.	George's Hair Salon, Shop 22, The Greenway, Horwood Pl., Parramatta. 2150	43675	1986	Road Match	0m

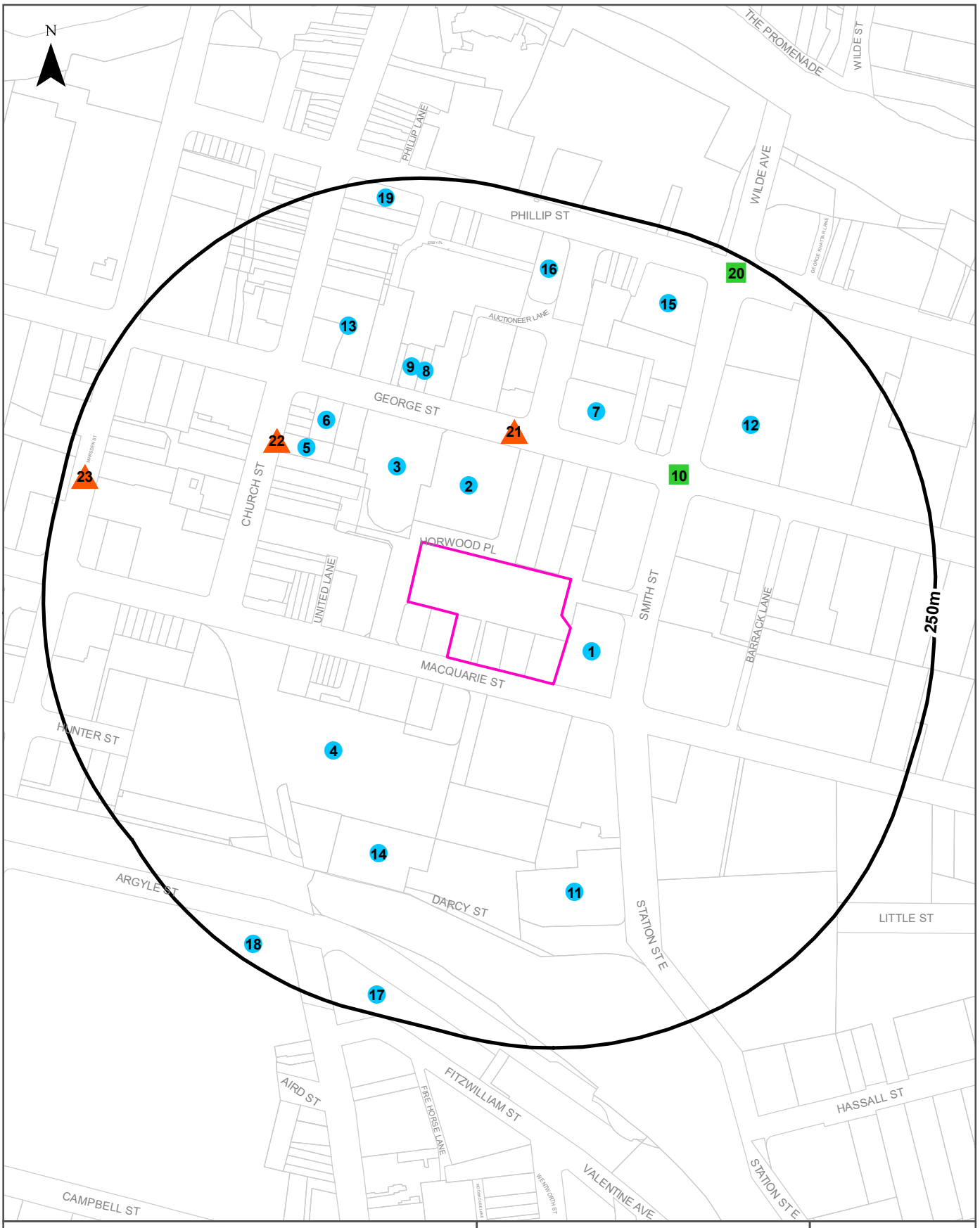
Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
54	FURNITURE-OFFICE-RETAIL.	Penfold, W C & Co., 30 Horwood Pl., Parramatta 2150	37942	1986	Road Match	0m
	ENVELOPE MFRS. &/OR DISTS.	Penfold, W. C & Co, 30 Horwood Pl, Parramatta. 2150	31646	1986	Road Match	0m
	OFFICE EQUIPMENT &/OR SUPPLIES MFRS. &/OR IMPS. &/OR W/SALERS.	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150	70281	1986	Road Match	0m
	ACCOUNTING BOOK MFRS.	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150	1212	1986	Road Match	0m
	STATIONERS - LAW.	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150	88233	1986	Road Match	0m
	STATIONERS - RETAIL.	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150	88533	1986	Road Match	0m
	STATIONERY - LOOSE LEAF SYSTEMS &/OR EQUIPMENT MFRS. &/OR DISTS.	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150	88757	1986	Road Match	0m
	STATIONERS - MANUFACTURING.	W. C. Penfold & Co. Pty. Ltd. Parramatta, 30 Horwood Place.,	88269	1986	Road Match	0m
	HAIRDRESSERS - GENTS. (H0550)	George's Hair Salon, Shop 22 Horwood Pl., Parramatta. 2150.	38507	1982	Road Match	0m
	STATIONERS - RETAIL. (S5535)	Penfold, W. C. & Co., 30 Horwood Pl., Parramatta. 2150.	76541	1982	Road Match	0m
55	HOTELS - LICENSED. (H7150)	Hotel Lennox, Smith St., Parramatta. 2150.	40824	1982	Road Match	34m
	OFFICE EQUIPMENT MFRS. &/OR DISTS.	Vaughan KG Pty Ltd, Smith St, Parramatta 2150	54610	1978	Road Match	34m
	RUBBER STAMP MFRS. &/OR DISTS	Vaughan, K. G. Pty. Ltd., Smith St., Parramatta. 2150	64239	1978	Road Match	34m
	ST ATIONERS-WHOLESALE.	Vaughan, K. G. Pty. Ltd., Smith St., Parramatta. 2150	67922	1978	Road Match	34m
	FURNITURE MFRS. &/OR W/SALERS. -OFFICE.	Vaughan. K.G. Pty. Ltd., Smith St., Parramatta. 2150	32062	1978	Road Match	34m
	SAFE &/OR STRONGROOM DOOR MFRS. &/OR DISTS.	Vaughan, K. G. Pty. Ltd., Smith St., Parramatta. 2150	75099	1975	Road Match	34m
	ICE MANUFACTURERS & VENDORS	Woods, W. and Son, Smith St., Parramatta	63963	1950	Road Match	34m
56	BEAUTY SALONS &/OR LADIES' HAIRDRESSERS	Josette Beauty Salon, Taylor St., Parramatta	7329	1950	Road Match	48m
57	Electronic Equipment Mfrs &/or Dists	Dick Smith Electronics, George St, Parramatta 2150	42938	1991	Road Match	78m
	Air Compressor Mfrs &/or Imps &/or Dists	Wreckair Pty. Ltd., George St. Parramatta 2150	33808	1991	Road Match	78m
	CONVEYOR &/OR CONVEYING EQUIP. MFRS. &JOR IMPS. &/OR DISTS.	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150	20332	1986	Road Match	78m
	LADDER MFRS. &/OR DISTS	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150	50890	1986	Road Match	78m
	MATERIAL HANDLING EQUIPMENT MFRS. &/OR IMPS. &/OR DISTS.	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150	53149	1986	Road Match	78m
	PLASTIC CONTAINERS MFRS. &/OR DISTS.	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150	74209	1986	Road Match	78m
	TROLLEY MFRS.	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150	95855	1986	Road Match	78m
	CASTOR &/OR WHEEL MFRS. &/OR DISTS.	Reflex Engineering Pty. Ltd., George St., Parramatta.2150	13127	1986	Road Match	78m
	EARTH MOVING MACHINERY HIRERS.	Wreckair Pty Ltd., George St., Parramatta. 2150	25881	1986	Road Match	78m
	AIR COMPRESSOR MFRS. &/OR IMPS. &/OR DISTS.	Wreckair Pty. Ltd., George St., Parramatta. 2150	2000	1986	Road Match	78m
	BUILDERS EQUIPMENT HIRES.	Wreckair Pty. Ltd., George St., Parramatta. 2150	8365	1986	Road Match	78m
	COAL MINING MACHINERY &/OR EQUIPMENT.	Wreckair Pty. Ltd., George St., Parramatta. 2150	19052	1986	Road Match	78m
	CONCRETE HANDLING EQUIPMENT & MACHINERY MFRS. &/OR IMPS. &/OR DISTS.	Wreckair Pty. Ltd., George St., Parramatta. 2150	19828	1986	Road Match	78m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
57	HIRING SERVICES.	Wreckair Pty. Ltd., George St., Parramatta. 2150	45925	1986	Road Match	78m
	CASTOR &/OR WHEEL MFRS.&/OR DISTS. (C2670)	Reflex Engineering Pty, Ltd., George St., Parramatta. 2150.	13980	1982	Road Match	78m
	MATERIAL HANDLING EQUIPMENT MFRS. IMPS. &/OR DISTS. (M1500)	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150.	46771	1982	Road Match	78m
	PLASTIC CONTAINERS MFRS.&/OR DISTS. (P5580)	Reflex Engineering Pty. Ltd., George St., Parramatta. 2150.	64516	1982	Road Match	78m
	AIR COMPRESSOR MFRS.&/OR DISTS. (A3330)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	1845	1982	Road Match	78m
	BUILDERS EQUIPMENT HIRERS. (B6960)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	9535	1982	Road Match	78m
	COAL MINING MACHINERY &/OR EQUIPMENT. (C5865)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	17367	1982	Road Match	78m
	CONCRETE MIXER MFRS. (C6810)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	17614	1982	Road Match	78m
	EARTH MOVING MACHINERYHIRERS. (E0270)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	24385	1982	Road Match	78m
	HIRING SERVICES. (H4200)	Wreckair Pty. Ltd., George St., Parramatta. 2150.	40130	1982	Road Match	78m
	ADVERTISING AGENCIES.	Baker, R., George St., Parramatta. 2150	910	1975	Road Match	78m
	MOTOR SERVICE STATIONS - PETROL, OIL	Burkes Motor Services Pty. Ltd., George St., Parramatta. 2150	61461	1975	Road Match	78m
	MOTOR SERVICE STATIONS - PETROL, OIL	David's Auto Centre., George St., Parramatta. 2150	61666	1975	Road Match	78m
	CLUBS & SPORTS BODIES	Parramatta Business & Professional Men's Club Ltd., George St., Parramatta	291716	1961	Road Match	78m
	MOTOR GARAGES & ENGINEERS	Speedy Spring Service Pty. Ltd., George St. PARRAMATTA	348178	1961	Road Match	78m
	MILK BARS & CONFECTIONERS	Civic Milk Bar, George St., Parramatta	76499	1950	Road Match	78m
	PICTURE THEATRES-SUBURBAN	Civic Theatre, George St., Parramatta	92771	1950	Road Match	78m
	RADIO SALES &/OR SERVICEMEN	Cumberland Refrigeration and Radio Co., George St., Parramatta	97107	1950	Road Match	78m
	HOTELS-PRIVATE	Hiawatha Private Hotel, George St., Parramatta	63591	1950	Road Match	78m
	CLUBS & SPORTS BODIES	Parramatta Business and Professional Men's Club Ltd., George St., Parramatta	25410	1950	Road Match	78m
	PICTURE THEATRES-SUBURBAN	Parramatta Civic, George St., Parramatta	92871	1950	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS	Speedy Spring Service Pty. Ltd., George St., Parramatta	84398	1950	Road Match	78m
	MOTOR SERVICE STATIONS-PETROL, Etc.	Speedy Spring Service Pty. Ltd., George St., Parramatta	86408	1950	Road Match	78m

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Dry Cleaners, Motor Garages & Service Stations

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Legend

- Site Boundary
- Buffer 250m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 50 100 150 200 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Historical Business Directories

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Dry Cleaners, Motor Garages & Service Stations 1948-1993 Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	12802	1972	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	62476	1971	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS(M6S6)	Clarke, A., 1 Smith St Parramatta	337582	1970	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS.	Clarke, A., 1 Smith St Parramatta	42741	1969	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS	Clarke, A., 1 Smith St Parramatta	26291	1968	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS.	Clarke, A., 1 Smith St Parramatta	10787	1967	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS.	Clarke, A., 1 Smith St Parramatta	60524	1966	Premise Match	0m	South East
	Motor Garages & Engineers	Clarke, A., 1 Smith St Parramatta	123165	1965	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS	Clarke, A., 1 Smith St Parramatta	48450	1964	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS.	Clarke, A., 1 Smith St Parramatta	33173	1962	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS	Clarke, A., 1 Smith St Parramatta	346895	1961	Premise Match	0m	South East
	MOTOR GARAGES & ENGINEERS.	Clarke, A., 1 Smith St Parramatta	19750	1959	Premise Match	0m	South East
	MOTOR GARAGE/ENGINEERS.	Clarke, A., 1 Smith St Parramatta	841	1958	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	57436	1956	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	49065	1954	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	39819	1953	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS.	Clarke, A., 1 Smith St Parramatta	31483	1952	Premise Match	0m	South East
	MOTOR SERVICE STATIONS–PETROL, ETC.	Clarke, Pat., 1 Smith St Parramatta	35809	1952	Premise Match	0m	South East
	MOTOR GARAGES &/OR ENGINEERS	Clarke, A., 1 Smith St Parramatta	83594	1950	Premise Match	0m	South East
	MOTOR SERVICE STATIONS-PETROL, Etc.	Clarke, Pat., 1 Smith St Parramatta	85875	1950	Premise Match	0m	South East
2	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra-Mall, George St., Parramatta. 2150	53287	1988	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra-Mall, George St., Parramatta. 2150	25515	1986	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra-Mall, George St., Parramatta. 2150	38793	1985	Premise Match	13m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
2	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra- Mall, George St., Parramatta. 2150	22183	1984	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra -Mall, George St., Parramatta 2150	8777	1983	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.(D8500)	60 Minute Cleaners, 27 Parra- Mall, George St., Parramatta. 2150.	24047	1982	Premise Match	13m	North
	DRY CLEANERS & PRESSERS.	60 Minute Cleaners, 27 Parra- Mall, George St., Parramatta. 2150	63536	1981	Premise Match	13m	North
	DRY CLEANERS, PRESSERS &/OR DYERS.	60 Minute Cleaners, Parra- Mall, George St., Parramatta. 2150	50017	1980	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	33192	1962	Premise Match	13m	North
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	38543	1962	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS	Roxy Service Station Pty. Ltd., 61 George St Parramatta	348072	1961	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS	Roxy Service Station Pty. Ltd., 61 George St Parramatta	348073	1961	Premise Match	13m	North
	MOTOR SERVICE STATIONS—PETROL, OIL, Etc.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	351045	1961	Premise Match	13m	North
	MOTOR GARAGES & ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	19771	1959	Premise Match	13m	North
	MOTOR SERVICE STATIONS-PETROL,. OIL, ETC.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	24453	1959	Premise Match	13m	North
	MOTOR GARAGE/ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	4904	1958	Premise Match	13m	North
	MOTOR SERVICE STATIONS-PETROL, ETC.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	9798	1958	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	61430	1956	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	54046	1954	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS.	Roxy Service Station Pty. Ltd., 61 George St Parramatta	40627	1953	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS.	Roxy Garage & Parking Station., 61 George St Parramatta	32193	1952	Premise Match	13m	North
	MOTOR GARAGES &/OR ENGINEERS	Roxy Garage and Parking Station., 61 George St Parramatta	84325	1950	Premise Match	13m	North
	MOTOR SERVICE STATIONS-PETROL, Etc.	Roxy Garage and Parking Station., George St Parramatta	86363	1950	Premise Match	13m	North
3	Dry Cleaners, Pressers/Dyers	Jack's., 47 George St Parramatta	76202	1965	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS/ DYERS.	Jack's., 47 George St Parramatta	43049	1964	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS/DYERS.	Jack's., 47 George St Parramatta	24799	1962	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS / DYERS	Jack's., 47 George St Parramatta	299145	1961	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS/DYERS	Jack's., 47 George St Parramatta	10085	1959	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS & DYERS	Jack's., 47 George St Parramatta	273	1958	Premise Match	14m	North West
	DRY CLEANERS, PRESSERS & DYERS.	Jack's., 47 George St Parramatta	54863	1956	Premise Match	14m	North West
4	DRY CLEANERS, PRESSERS & DYERS.	Dyeing For Country Cleaners, Parramatta Arc, Parramatta	26901	1952	Premise Match	52m	South West
5	MOTOR GARAGES & ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	33169	1962	Premise Match	84m	North West
	MOTOR GARAGES & ENGINEERS	Brooklands Garage, 250 Church St. PARRAMATTA	346745	1961	Premise Match	84m	North West

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5	MOTOR GARAGES & ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	19747	1959	Premise Match	84m	North West
	MOTOR GARAGE/ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	716	1958	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	57328	1956	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	48961	1954	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	36674	1953	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS.	Brooklands Garage., 250 Church St Parramatta	27573	1952	Premise Match	84m	North West
	MOTOR GARAGES &/OR ENGINEERS	Brooklands Garage, 250 Church St., Parramatta	83505	1950	Premise Match	84m	North West
6	DRY CLEANERS, PRESSERS & DYERS	Mark Mayne Pty. Ltd. 33 George St., Parramatta	35498	1950	Premise Match	90m	North West
	DRY CLEANERS, PRESSERS & DYERS.	Mark Mayne Pty. Ltd., 33 George St Parramatta	17356	1948-49	Premise Match	90m	North West
7	Dry Cleaners, Pressers/Dyers	Swan's French Dry Cleaners., 68 George St Parramatta	76356	1965	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS/ DYERS.	Swan's French Dry Cleaners., 68 George St Parramatta	43187	1964	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS/DYERS.	Swan's French Dry Cleaners., 68 George St Parramatta	24932	1962	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS/DYERS	Swan's French Dry Cleaning Service., 42A George St Parramatta	13275	1959	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS	Swan's French Dry Cleaning Service., 42A George St Parramatta	399	1958	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS.	Swan's French Dry Cleaning Service., 42A George St Parramatta	54987	1956	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS.	Swan's French Dry Cleaning Service., 42A George St Parramatta	44546	1954	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS.	Swan's French Dry Cleaning Service., 42A George St Parramatta	36375	1953	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS.	Swan's French Dry Cleaning Service., 42A George St Parramatta	27306	1952	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS	Swan's Dry Cleaners., 42A George St Parramatta	35724	1950	Premise Match	98m	North East
	DRY CLEANERS, PRESSERS & DYERS.	Swan's Dry Cleaners., 42A George St Parramatta	65231	1948-49	Premise Match	98m	North East
8	DRY CLEANERS, PRESSERS &/OR DYERS.	Jacks Dry Cleaners., 42 George St., Parramatta 2150	2949	1972	Premise Match	102m	North
	DRY CLEANERS, PRESSERS/ DYERS	Jacks Dry Cleaners., 42 George St Parramatta	37159	1969	Premise Match	102m	North
	DRY CLEANERS, PRESSERS/DYERS	Jacks Dry Cleaners., 42 George St Parramatta	20618	1968	Premise Match	102m	North
	DRY CLEANERS, PRESSERS/ DYERS	Jacks Dry Cleaners., 42 George St Parramatta	6174	1967	Premise Match	102m	North
	DRY CLEANERS, PRESSERS/ DYERS	Jacks Dry Cleaners., 42 George St Parramatta	55228	1966	Premise Match	102m	North
9	DRY CLEANERS, PRESSERS &/OR DYERS.	Swift Dry Cleaners., 40A George St Parramatta	7294	1972	Premise Match	104m	North
	DRY CLEANERS, PRESSERS &/OR DYERS	Swift Dry Cleaners., 40A George St Parramatta	55051	1971	Premise Match	104m	North
	DRY CLEANERS,PRESSERS /DYERS (D710)	Swift Dry Cleaners., 40a George St., Parramatta	292541	1970	Premise Match	104m	North
	DRY CLEANERS, PRESSERS/ DYERS	Swift Dry Cleaners., 40A George St Parramatta	37345	1969	Premise Match	104m	North
	DRY CLEANERS, PRESSERS/DYERS	Swift Dry Cleaners., 40A George St Parramatta	20801	1968	Premise Match	104m	North
	DRY CLEANERS, PRESSERS/ DYERS	Swift Dry Cleaners., 40A George St Parramatta	6355	1967	Premise Match	104m	North

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9	DRY CLEANERS, PRESSERS/ DYERS	Swift Dry Cleaners., 40A George St Parramatta	55404	1966	Premise Match	104m	North
	DRY CLEANERS, PRESSERS/DYERS.	Swift Enterprises Pty. Ltd., 26A George St Parramatta	24933	1962	Premise Match	104m	North
	DRY CLEANERS, PRESSERS / DYERS	Swift Enterprises Pty. Ltd., 26a George St., Parramatta	299289	1961	Premise Match	104m	North
	DRY CLEANERS, PRESSERS/DYERS	Swift Enterprises Pty. Ltd., 26A George St Parramatta	13277	1959	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS	Swift Enterprises Pty. Ltd., 26A George St Parramatta	401	1958	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS.	Swift Enterprises Pty. Ltd., 26A George St., Parramatta	54989	1956	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS.	Swift Enterprises Pty. Ltd., 26A George St Parramatta	44547	1954	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS.	Swift Enterprises Pty. Ltd., 26A George St Parramatta	36377	1953	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS.	Swift Enterprises Pty. Ltd., 26A George St Parramatta	27308	1952	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS	Swift Dry Cleaning Service, 26a George St, Parramatta	35727	1950	Premise Match	104m	North
	DRY CLEANERS, PRESSERS & DYERS.	Swift Dry Cleaning Service., 26A George St Parramatta	17497	1948-49	Premise Match	104m	North
10	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	All Service Garage., Smith & George Sts Parramatta	50585	1969	Road Intersection	104m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	All Service Garage., Smith & George Sts Parramatta	32610	1968	Road Intersection	104m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	All Service Garage., Smith & George Sts Parramatta	16075	1967	Road Intersection	104m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	All Service Garage., Smith & George Sts Parramatta	1642	1966	Road Intersection	104m	North East
	Motor Service Stations - Petrol, Oil, Etc.	All Service Garage., Smith & George Sts Parramatta	125999	1965	Road Intersection	104m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	All Service Garage., Smith & George Sts Parramatta	52265	1964	Road Intersection	104m	North East
	MOTOR GARAGES & ENGINEERS.	All Services Garage., Smith & George Sts Parramatta	33167	1962	Road Intersection	104m	North East
	MOTOR GARAGES & ENGINEERS	All Services Garage., Smith & George Sts Parramatta	346493	1961	Road Intersection	104m	North East
	MOTOR GARAGES & ENGINEERS.	All Services Garage., Smith & George Sts Parramatta	19745	1959	Road Intersection	104m	North East
	MOTOR GARAGE/ENGINEERS.	All Services Garage., Smith & George Sts Parramatta	517	1958	Road Intersection	104m	North East
	MOTOR GARAGES &/OR ENGINEERS.	All Services Garage., Smith & George Sts Parramatta	57142	1956	Road Intersection	104m	North East
	MOTOR GARAGES &/OR ENGINEERS.	All Service Garage., Smith & George Sts Parramatta	44715	1954	Road Intersection	104m	North East
11	DRY CLEANERS, PRESSERS &/OR DYERS.	Gales Dry Cleaning., 48 Darcy St., Parramatta 2150	2904	1972	Premise Match	116m	South
12	MOTOR GARAGES &/OR ENGINEERS.	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	12813	1972	Premise Match	120m	North East
	MOTOR GARAGES &/OR ENGINEERS.	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	62487	1971	Premise Match	120m	North East
	MOTOR GARAGES & ENGINEERS(M6S6)	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	338155	1970	Premise Match	120m	North East
	MOTOR GARAGES & ENGINEERS.	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	42754	1969	Premise Match	120m	North East
	MOTOR GARAGES & ENGINEERS	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	26304	1968	Premise Match	120m	North East
	MOTOR GARAGES & ENGINEERS.	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	10800	1967	Premise Match	120m	North East

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12	MOTOR GARAGES & ENGINEERS.	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	60535	1966	Premise Match	120m	North East
	Motor Garages & Engineers	Lennox Motors Pty. Ltd., 100-108 George St Parramatta	123176	1965	Premise Match	120m	North East
13	DRY CLEANERS, PRESSERS &/OR DYERS.	Jacks Dry Cleaners., 272 Church St., Parramatta 2150	23560	1976	Premise Match	122m	North West
	DRY CLEANERS, PRESSERS &/OR DYERS.	Jack's Dry Cleaners, 272 Church St., Parramatta	24085	1975	Premise Match	122m	North West
	DRY CLEANERS, PRESSERS & DYERS.	Jack's., 20-22 George St Parramatta	44396	1954	Premise Match	122m	North West
	DRY CLEANERS, PRESSERS & DYERS.	Jack's., 20 George St Parramatta	27103	1952	Premise Match	122m	North West
14	DRY CLEANERS & PRESSERS.	Economy Dry Cleaners, 14 Darcy St., Parramatta 2150	8542	1983	Premise Match	123m	South West
	DRY CLEANERS & PRESSERS.(D8500)	Economy Dry Cleaners, 14 Darcy St., Parramatta. 2150.	23817	1982	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS &/OR DYERS.	Tasman Dry Cleaners., 14 Darcy St., Parramatta 2150	7305	1972	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS &/OR DYERS	Garily's., 14 Darcy St Parramatta	51058	1971	Premise Match	123m	South West
	DRY CLEANERS,PRESSERS /DYERS (D710)	Garily's, 14 Darcy St., Parramatta	292311	1970	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/ DYERS	Garily's., 14 Darcy St Parramatta	37116	1969	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/DYERS	Garily's., 14 Darcy St Parramatta	20577	1968	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/ DYERS	Garily's., 14 Darcy St Parramatta	6134	1967	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/ DYERS	Garily's., 14 Darcy St Parramatta	52663	1966	Premise Match	123m	South West
	Dry Cleaners, Pressers/Dyers	Garily's, 14 Darcy St., Parramatta	76167	1965	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/ DYERS.	Garily's., 14 Darcy St Parramatta	43019	1964	Premise Match	123m	South West
	DRY CLEANERS, PRESSERS/DYERS.	Garily's., 14 Darcy St Parramatta	24768	1962	Premise Match	123m	South West
15	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Smith, D. Spares & Repairs., 91 Phillip St., Parramatta. 2150	58846	1980	Premise Match	179m	North East
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Smith, D. Spares & Repairs., 91 Phillip St., Parramatta. 2150	46346	1979	Premise Match	179m	North East
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Smith, D. Spares & Repairs., 91 Phillip St., Parramatta. 2150	50840	1978	Premise Match	179m	North East
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Smith, D. Spares & Repairs., 91 Phillip St., Parramatta. 2150	34910	1976	Premise Match	179m	North East
	MOTOR SERVICE STATIONS - PETROL, OIL	Smith, D. Spares & Repairs., 91 Phillip St., Parramatta. 2150	61948	1975	Premise Match	179m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Smith's D. Spares & Repairs., Phillip St., Parramatta	17020	1972	Premise Match	179m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Smith's D. Spares & Repairs., Phillip St., Parramatta	2477	1971	Premise Match	179m	North East
	MOTOR SERVICE STATIONS-PETROL,OIL,Etc.	Smith's, D. Spares & Repairs., Phillip St., Parramatta	341472	1970	Premise Match	179m	North East

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15	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Smith's D. Spares & Repairs., Phillip St., Parramatta	50604	1969	Premise Match	179m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Smith's D. Spares & Repairs., Phillip St., Parramatta	32630	1968	Premise Match	179m	North East
16	MOTOR GARAGES & ENGINEERS	Phillip Garage., 67 Phillip St Parramatta	48466	1964	Premise Match	180m	North
	MOTOR GARAGES & ENGINEERS.	Phillip Garage., 67 Phillip St Parramatta	33187	1962	Premise Match	180m	North
	MOTOR GARAGES & ENGINEERS	Phillip Garage., 67 Phillip St Parramatta	347912	1961	Premise Match	180m	North
	MOTOR GARAGES & ENGINEERS.	Phillip Garage., 67 Phillip St Parramatta	19766	1959	Premise Match	180m	North
	MOTOR GARAGE/ENGINEERS.	Phillip Garage., 67 Phillip St Parramatta	4756	1958	Premise Match	180m	North
	MOTOR GARAGES &/OR ENGINEERS.	Phillip Garage., 67 Phillip St Parramatta	61291	1956	Premise Match	180m	North
17	DRY CLEANERS & PRESSERS.(D8500)	Venus Dry Cleaning. 89 Argyle St., Parramatta. 2150.	24082	1982	Premise Match	214m	South
	DRY CLEANERS & PRESSERS.	Venus Dry Cleaning., 89 Argyle St., Parramatta. 2150	63572	1981	Premise Match	214m	South
	DRY CLEANERS, PRESSERS &/OR DYERS.	Venus Dry Cleaning., 89 Argyle St., Parramatta. 2150	50051	1980	Premise Match	214m	South
	DRY CLEANERS, PRESSERS &/OR DYERS.	Venus Dry Cleaning., 89 Argyle St., Parramatta. 2150.	35591	1979	Premise Match	214m	South
	DRY CLEANERS, PRESSERS &/OR DYERS.	Venus Dry Cleaners., 89 Argyle St., Parramatta 2150	7336	1972	Premise Match	214m	South
18	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 258 Westfield Centre, Parramatta. 2150	53179	1988	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 258 Westfield Centre, Parramatta. 2150	25374	1986	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 258 Westfield Centre, Parramatta. 2150	34614	1985	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 258 Westfield Centre, Parramatta. 2150	22045	1984	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners., 258 Westfield Centre Parramatta 2150	8638	1983	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.(D8500)	Lawrence Dry Cleaners, 258 Westfield Centre, Parramatta. 2150.	23911	1982	Premise Match	217m	South West
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners., 258 Westfield Centre Parramatta. 2150	63394	1981	Premise Match	217m	South West
	DRY CLEANERS, PRESSERS &/OR DYERS.	Lawrence Dry Cleaners., 258 Westfield Centre., Parramatta. 2150	46822	1980	Premise Match	217m	South West
	DRY CLEANERS, PRESSERS &/OR DYERS.	Lawrence Dry Cleaners., 258 Westfield Centre., Parramatta. 2150.	35428	1979	Premise Match	217m	South West
19	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 35 Phillip St., Parramatta. 2150	53172	1988	Premise Match	224m	North
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 35 Phillip St., Parramatta. 2150	34594	1985	Premise Match	224m	North
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners, 35 Phillip St., Parramatta. 2150	22069	1984	Premise Match	224m	North
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners., 35 Phillip St., Parramatta 2150	8637	1983	Premise Match	224m	North
	DRY CLEANERS & PRESSERS.(D8500)	Lawrence Dry Cleaners, 35 Phillip St., Parramatta. 2150.	23910	1982	Premise Match	224m	North
	DRY CLEANERS & PRESSERS.	Lawrence Dry Cleaners., 35 Phillip St., Parramatta. 2150	63393	1981	Premise Match	224m	North
	DRY CLEANERS, PRESSERS &/OR DYERS.	Lawrence Dry Cleaners., 35 Phillip St., Parramatta. 2150	46837	1980	Premise Match	224m	North

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
19	DRY CLEANERS, PRESSERS &/OR DYERS.	Lawrence Dry Cleaners., 35 Phillip St., Parramatta. 2150.	35429	1979	Premise Match	224m	North
	DRY CLEANERS, PRESSERS &/OR DYERS.	Dry Cleaners., 35 Phillip St., Parramatta 2150	23474	1976	Premise Match	224m	North
	DRY CLEANERS, PRESSERS &/OR DYERS.	Dry Cleaners, 35 Phillip St., Parramatta.	23998	1975	Premise Match	224m	North
	DRY CLEANERS, PRESSERS &/OR DYERS.	Dry Cleaners., 35 Phillip St., Parramatta 2150	2853	1972	Premise Match	224m	North
20	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Lennox Garage., Cnr Phillip & Smith Sts Parramatta	16090	1967	Road Intersection	239m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Lennox Garage., Cnr Phillip & Smith Sts Parramatta	1661	1966	Road Intersection	239m	North East
	Motor Service Stations - Petrol, Oil, Etc.	Lennox Garage., Cnr Phillip & Smith Sts Parramatta	126017	1965	Road Intersection	239m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Lennox Garage., Cnr Phillip & Smith Sts Parramatta	52281	1964	Road Intersection	239m	North East
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	Lennox Garage., Cnr Phillip & Smith Sts Parramatta	38537	1962	Road Intersection	239m	North East

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Dry Cleaners, Motor Garages & Service Stations 1948-1993 Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

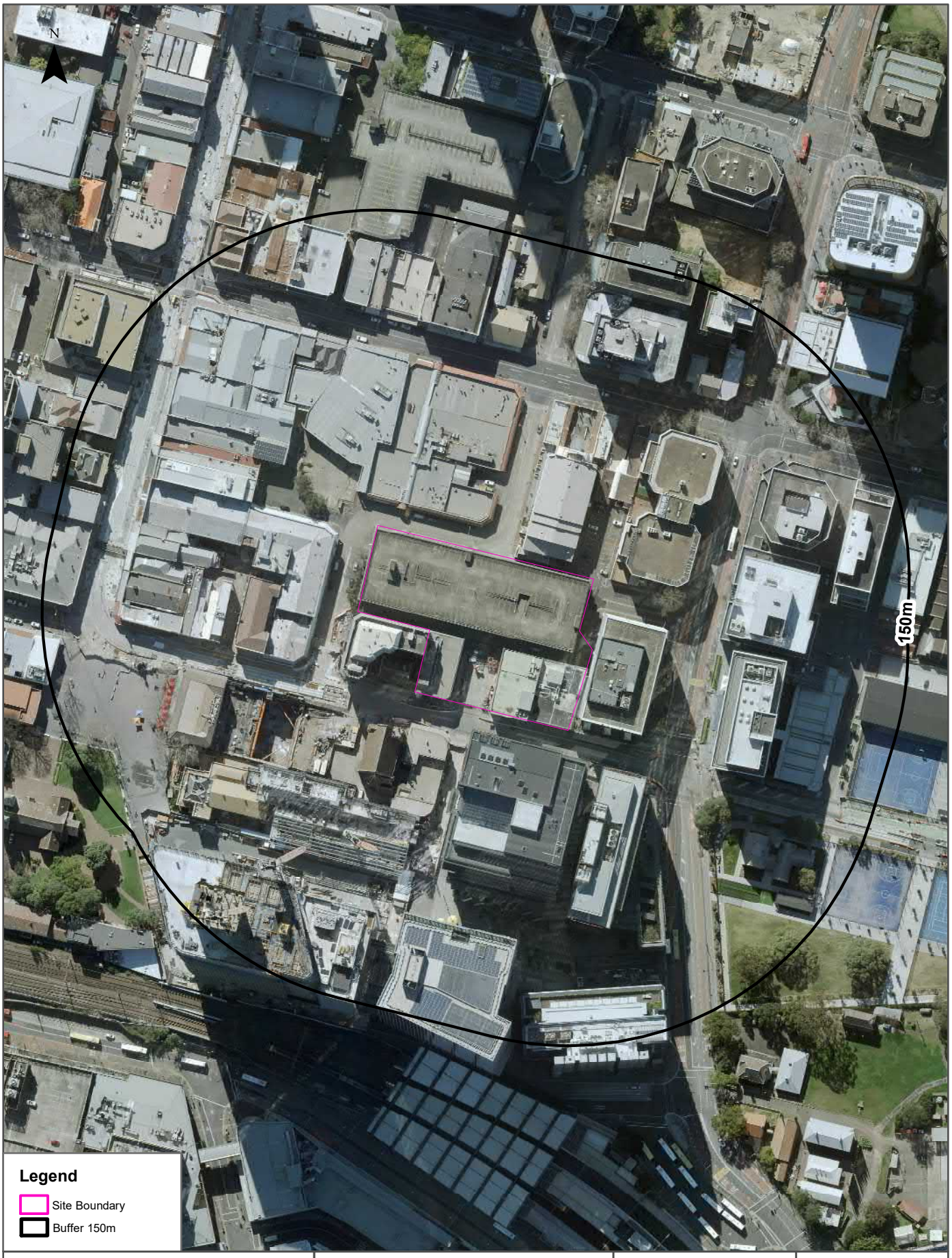
Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
21	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Burkes Motor Services Pty. Ltd., George St., Parramatta 2150	25199	1976	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Davids Auto Centre., George St., Parramatta 2150	29824	1976	Road Match	78m
	MOTOR SERVICE STATIONS - PETROL, OIL	Burkes Motor Services Pty. Ltd., George St., Parramatta. 2150	61461	1975	Road Match	78m
	MOTOR SERVICE STATIONS - PETROL, OIL	David's Auto Centre., George St., Parramatta. 2150	61666	1975	Road Match	78m
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	David's Auto Centre., George St Parramatta	17008	1972	Road Match	78m
	MOTOR SERVICE STATIONS-PETROL, OIL, ETC.	David's Auto Centre., George St Parramatta	2466	1971	Road Match	78m
	MOTOR GARAGES & ENGINEERS	Speedy Spring Service Pty. Ltd., George St. PARRAMATTA	348178	1961	Road Match	78m
	MOTOR GARAGES & ENGINEERS.	Speedy Spring Service Pty. Ltd., George St Parramatta	19774	1959	Road Match	78m
	MOTOR GARAGE/ENGINEERS.	Speedy Spring Service Pty. Ltd., George St Parramatta	5001	1958	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS.	Speedy Spring Service Pty. Ltd., George St Parramatta	61523	1956	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS.	Speedy Spring Service Pty. Ltd., George St Parramatta	54138	1954	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS.	Speedy Spring Service Pty. Ltd., George St., Parramatta	40712	1953	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS.	Speedy Spring Service Pty. Ltd., George St Parramatta	32266	1952	Road Match	78m
	MOTOR GARAGES &/OR ENGINEERS	Speedy Spring Service Pty. Ltd., George St., Parramatta	84398	1950	Road Match	78m
	MOTOR SERVICE STATIONS-PETROL, Etc.	Speedy Spring Service Pty. Ltd., George St., Parramatta	86408	1950	Road Match	78m
22	MOTOR GARAGES & ENGINEERS.	Sayers F., Church St Parramatta	42768	1969	Road Match	109m
	MOTOR GARAGES & ENGINEERS	Sayers F., Church St Parramatta	26316	1968	Road Match	109m
	MOTOR GARAGES & ENGINEERS.	Sayers F., Church St Parramatta	10812	1967	Road Match	109m
	MOTOR GARAGES & ENGINEERS	Fair Deal Car Sales (Parramatta), Church St. Parramatta	347120	1961	Road Match	109m
	MOTOR SERVICE STATIONS—PETROL, OIL, Etc.	Fair Deal Car Sales (Parramatta), Church St. Parramatta	350571	1961	Road Match	109m
23	MOTOR GARAGES & ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	42734	1969	Road Match	226m
	MOTOR GARAGES & ENGINEERS	Admands & Turton., 41 Marsdon St Parramatta	26284	1968	Road Match	226m
	MOTOR GARAGES & ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	10780	1967	Road Match	226m
	MOTOR GARAGES & ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	60519	1966	Road Match	226m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
23	Motor Garages & Engineers	Admands & Turton., 41 Marsden St., Parramatta	123160	1965	Road Match	226m
	MOTOR GARAGES & ENGINEERS	Admands & Turton., 41 Marsden St., Parramatta	48441	1964	Road Match	226m
	MOTOR GARAGES & ENGINEERS.	Admands & Turton., 41 Marsden St. Parramatta	33166	1962	Road Match	226m
	MOTOR GARAGES & ENGINEERS	Admands & Turton, 41 Marsden St., PARRAMATTA	346477	1961	Road Match	226m
	MOTOR GARAGES & ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	19744	1959	Road Match	226m
	MOTOR GARAGE/ENGINEERS.	Admands & Turton., 41 Marsdon St., Parramatta	502	1958	Road Match	226m
	MOTOR GARAGES &/OR ENGINEERS.	Admands & Turton., 41 Marsdon St., Parramatta	57127	1956	Road Match	226m
	MOTOR GARAGES &/OR ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	44701	1954	Road Match	226m
	MOTOR GARAGES &/OR ENGINEERS.	Admands & Turton., 41 Marsden St., Parramatta	36499	1953	Road Match	226m

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Aerial Imagery 2021

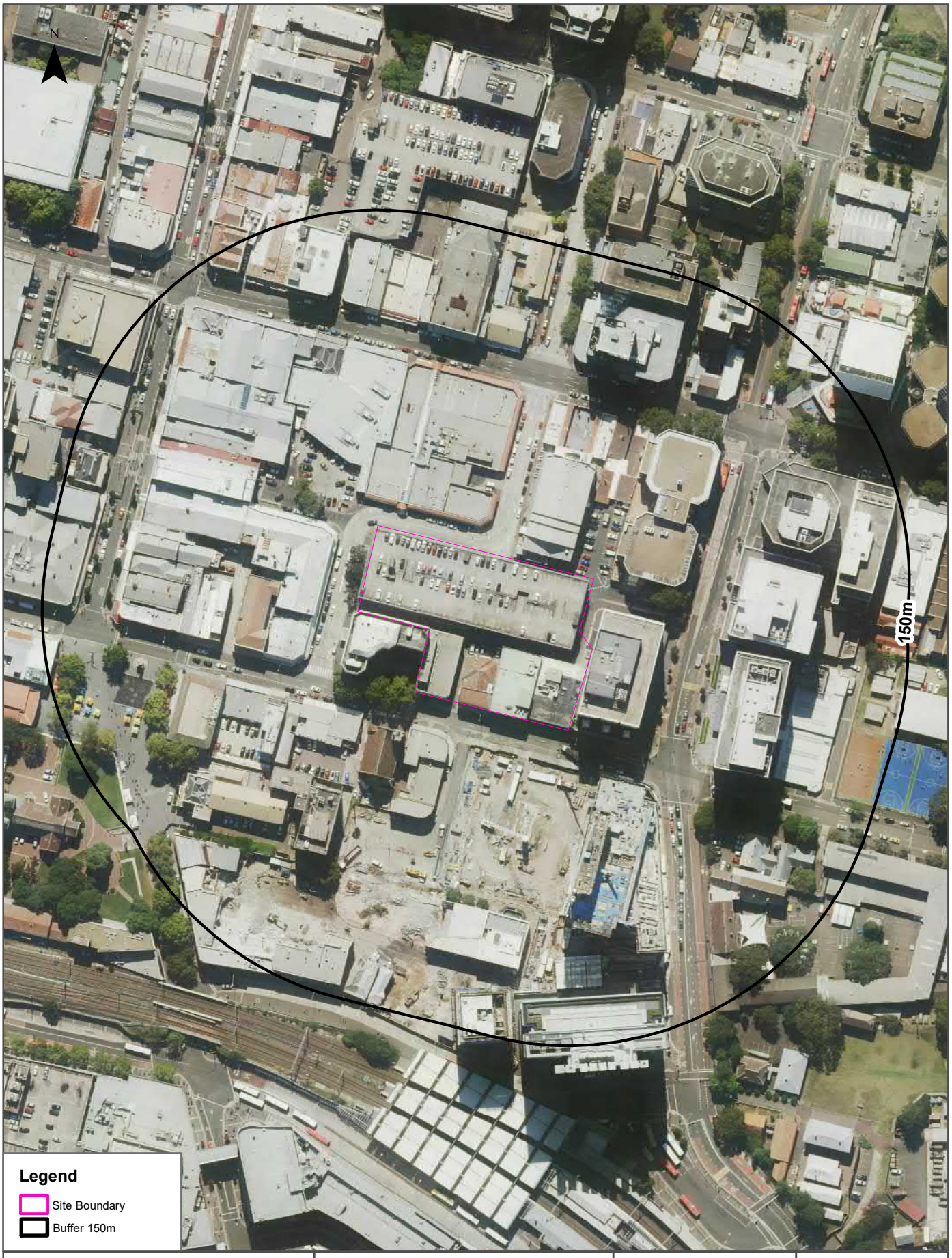
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 56	

Aerial Imagery 2016

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Aerial Imagery 2011

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 56	

Aerial Imagery 2005

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 56	

Aerial Imagery 2000

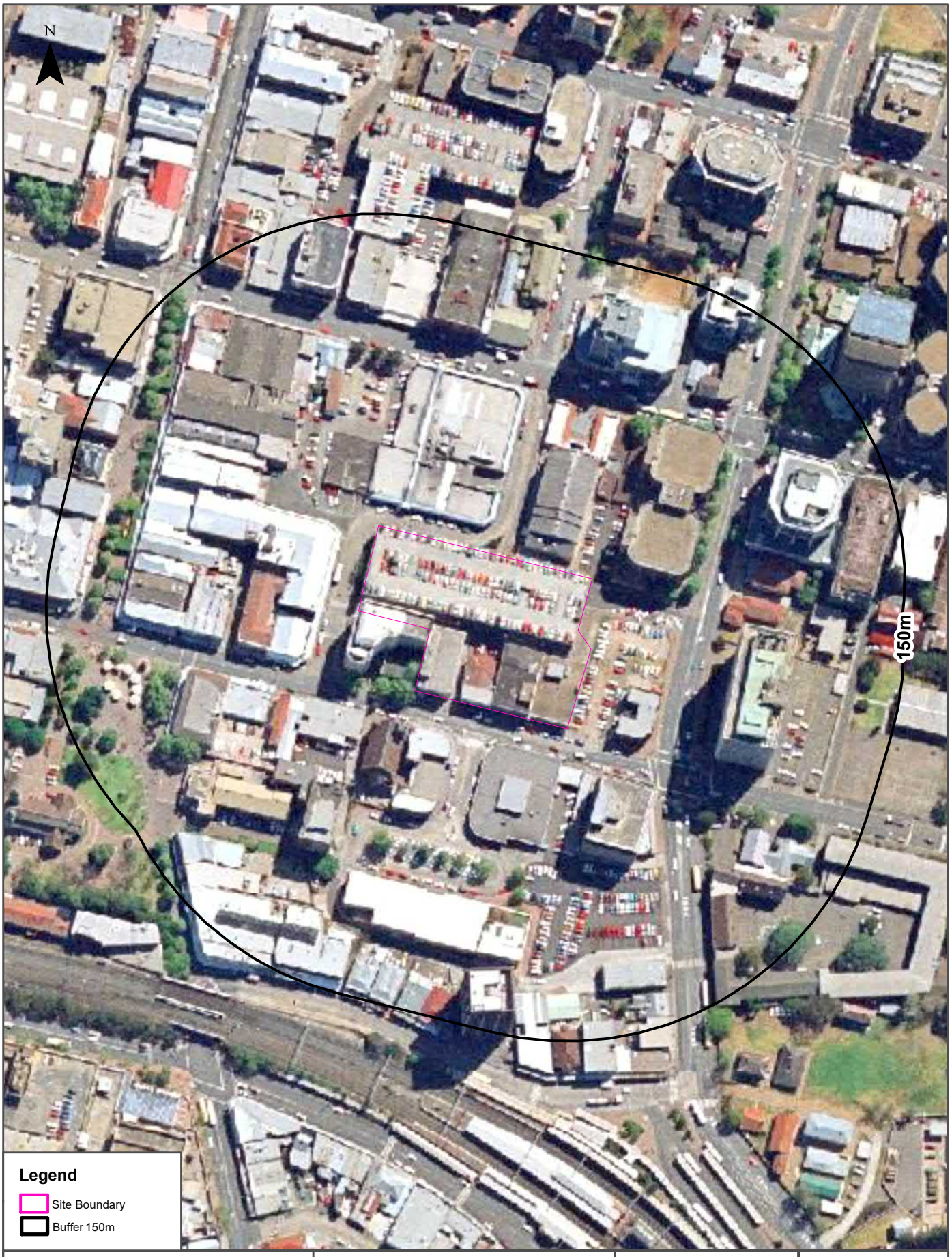
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 56	

Aerial Imagery 1994

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



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0 25 50 75 100 Meters	© NSW Department of Customer Service	GDA 1994 MGA Zone 56	

Aerial Imagery 1991

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Aerial Imagery 1986

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Aerial Imagery 1982

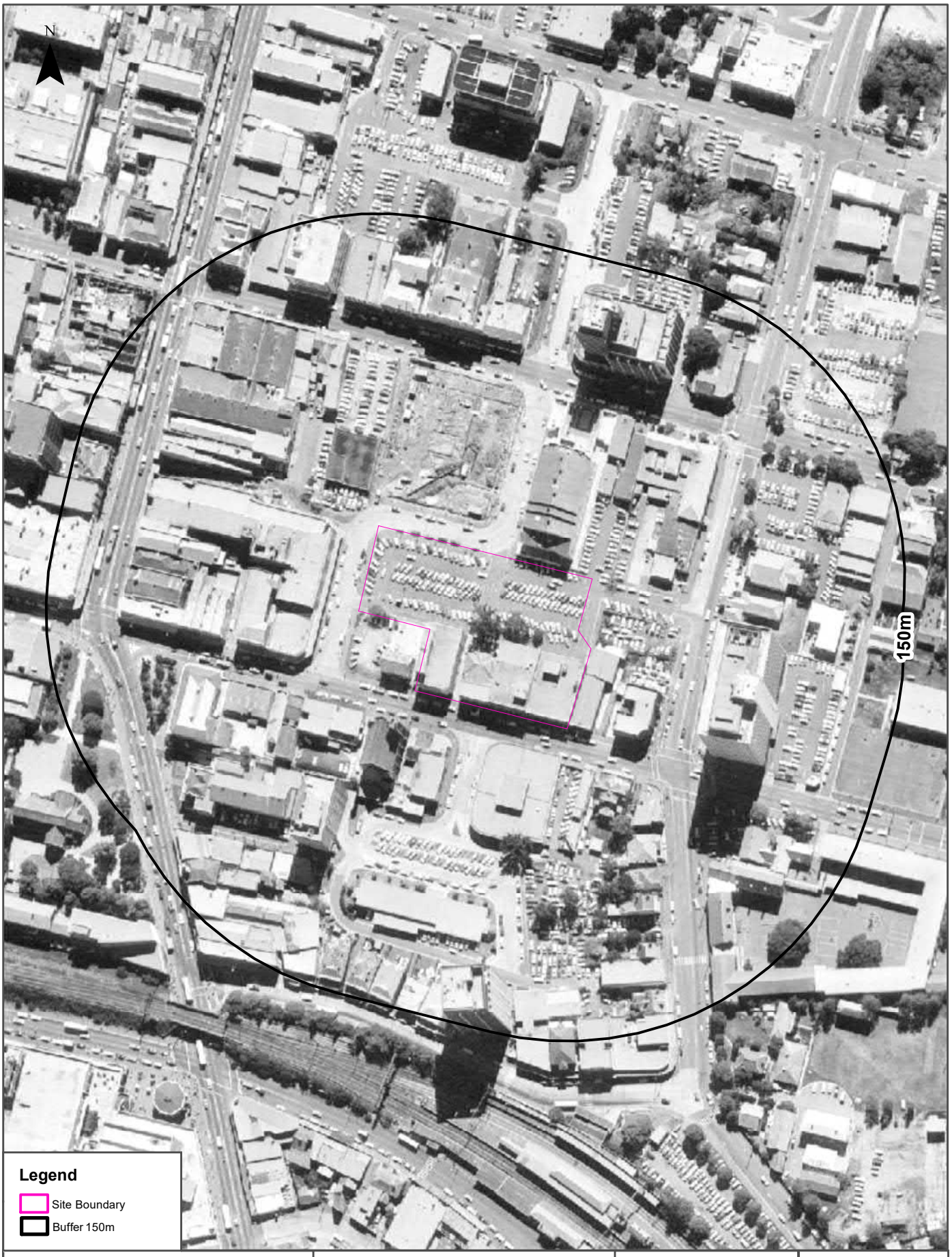
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Sources: Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© NSW Department of Customer Service	GDA 1994 MGA Zone 56	

Aerial Imagery 1978

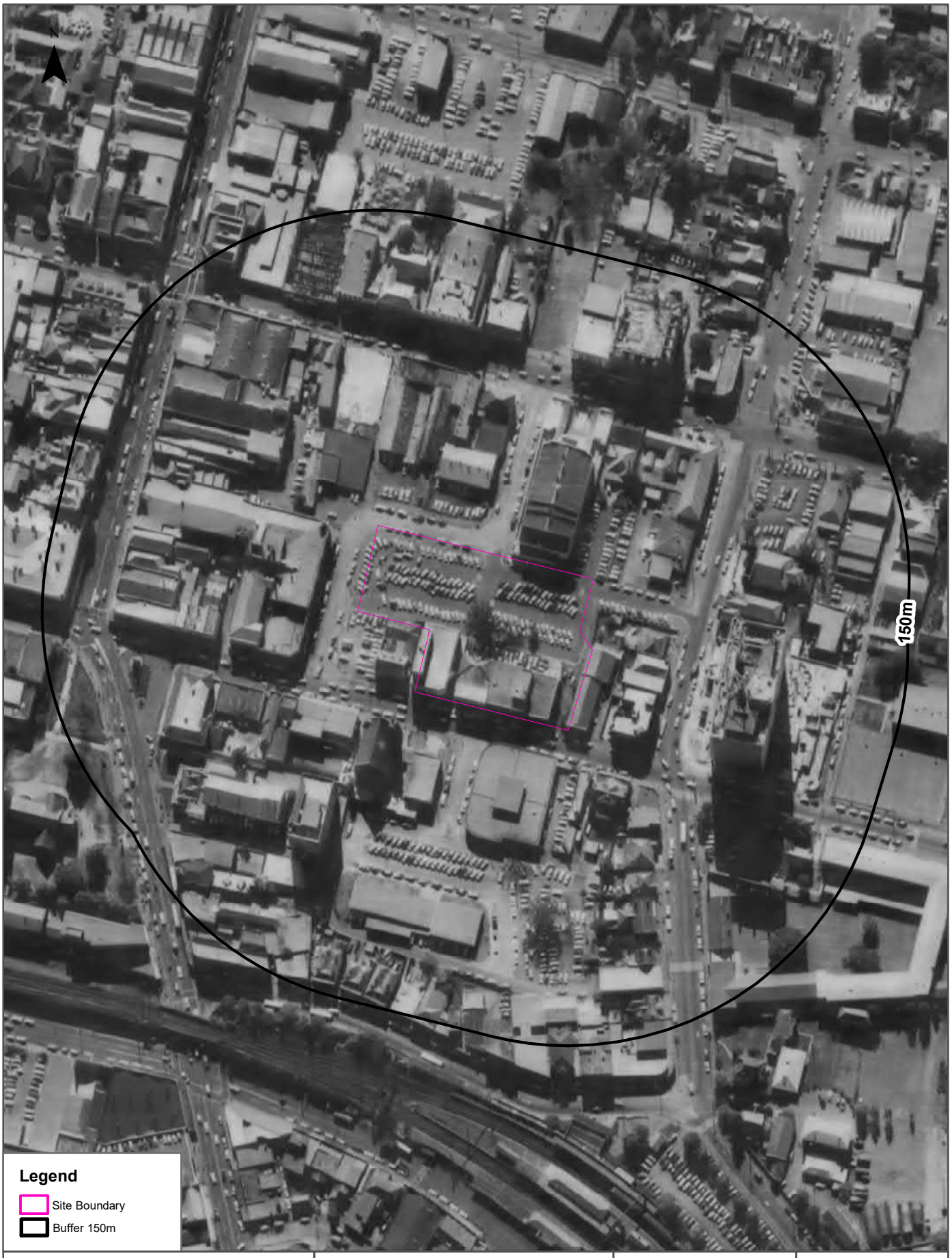
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 08 November 2021

Aerial Imagery 1970

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Sources: Aerial Imagery:	Coordinate System:	Date: 10 November 2021
0 25 50 75 100 Meters	© NSW Department of Customer Service	GDA 1994 MGA Zone 56	

Aerial Imagery 1965

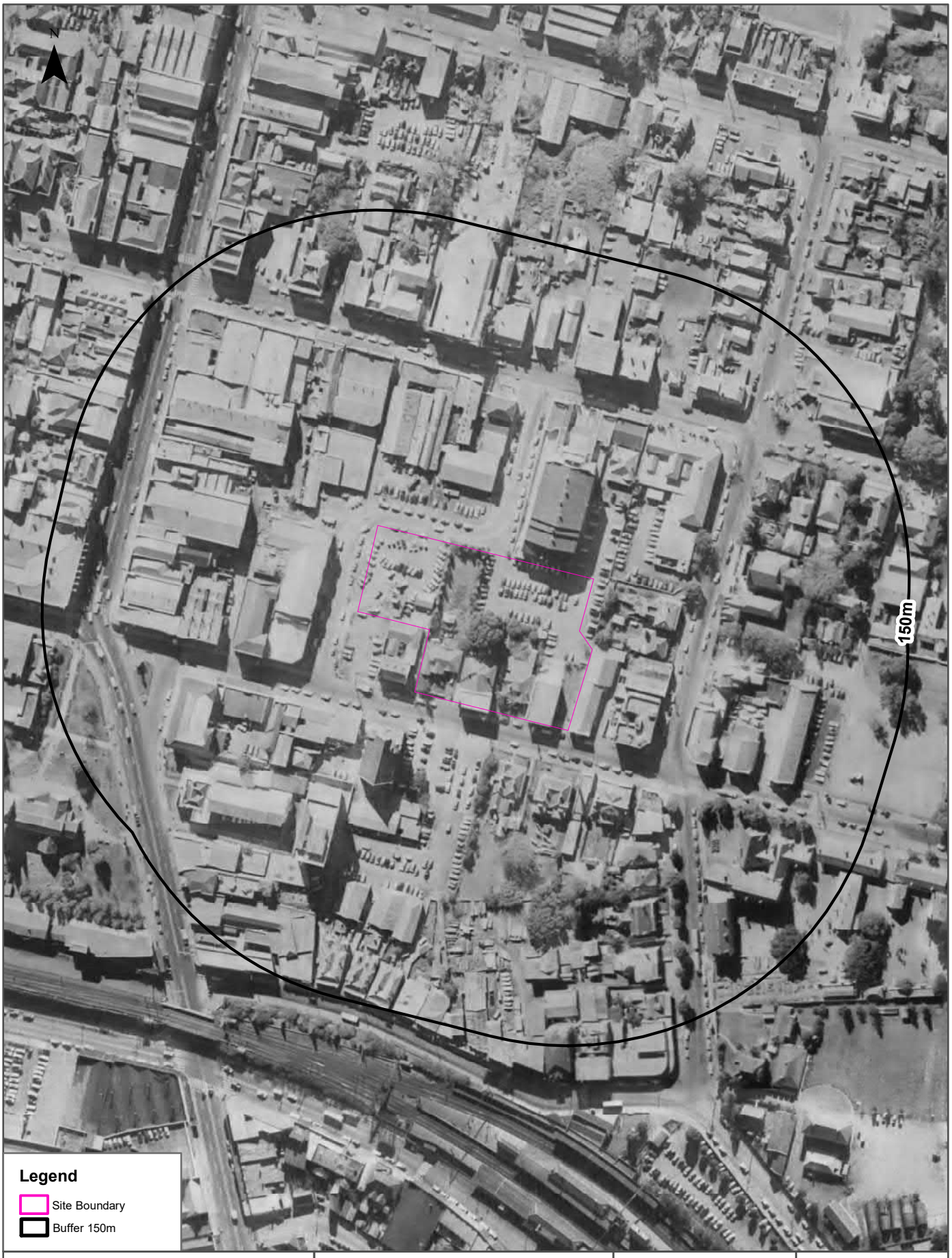
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 08 November 2021

Aerial Imagery 1961

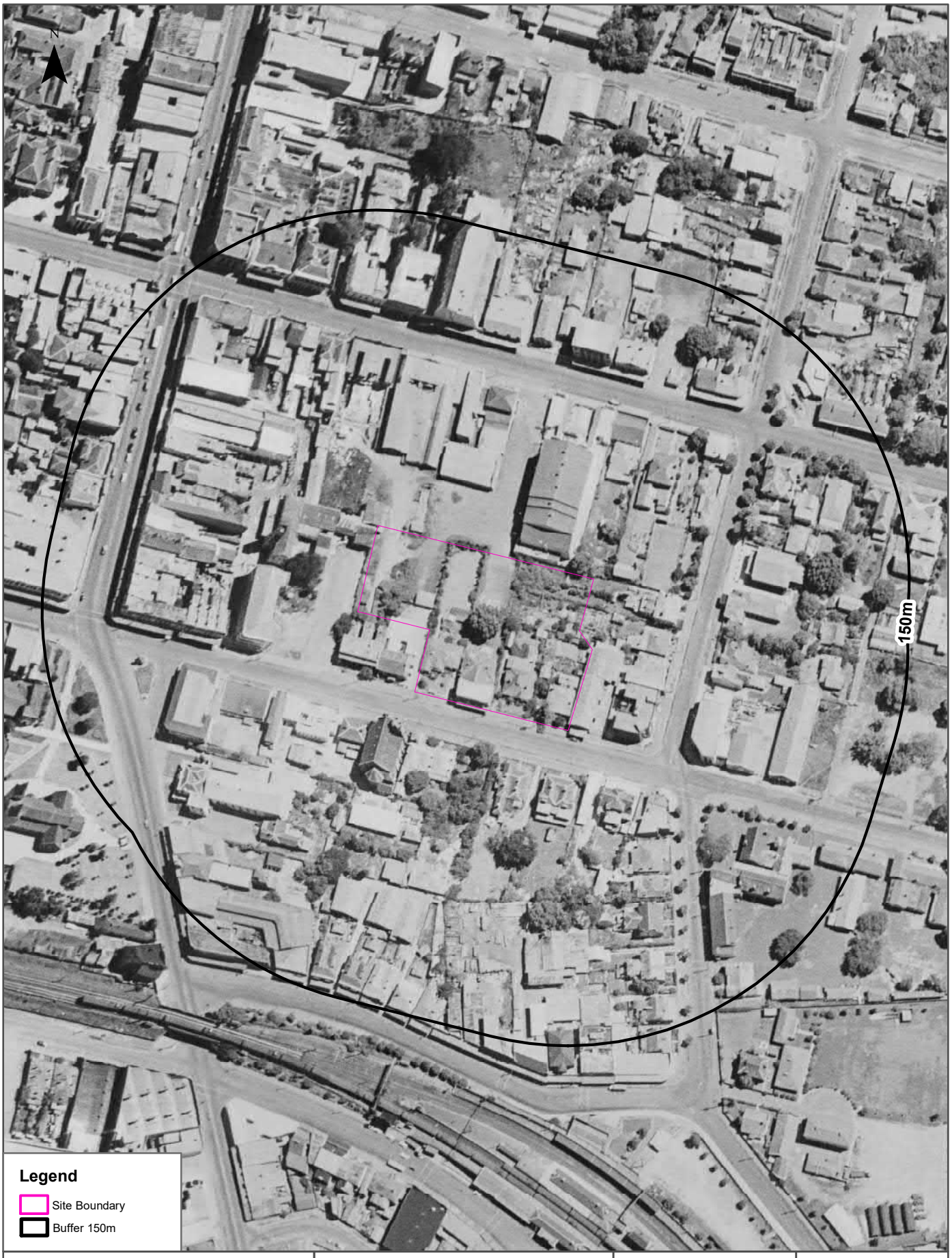
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 10 November 2021

Aerial Imagery 1955, 1956

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale:	Data Sources: Aerial Imagery:	Coordinate System:	Date: 10 November 2021
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Aerial Imagery 1951

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



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0 25 50 75 100 Meters	© NSW Department of Customer Service	GDA 1994 MGA Zone 56	

Aerial Imagery 1943

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



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Aerial Imagery 1930

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

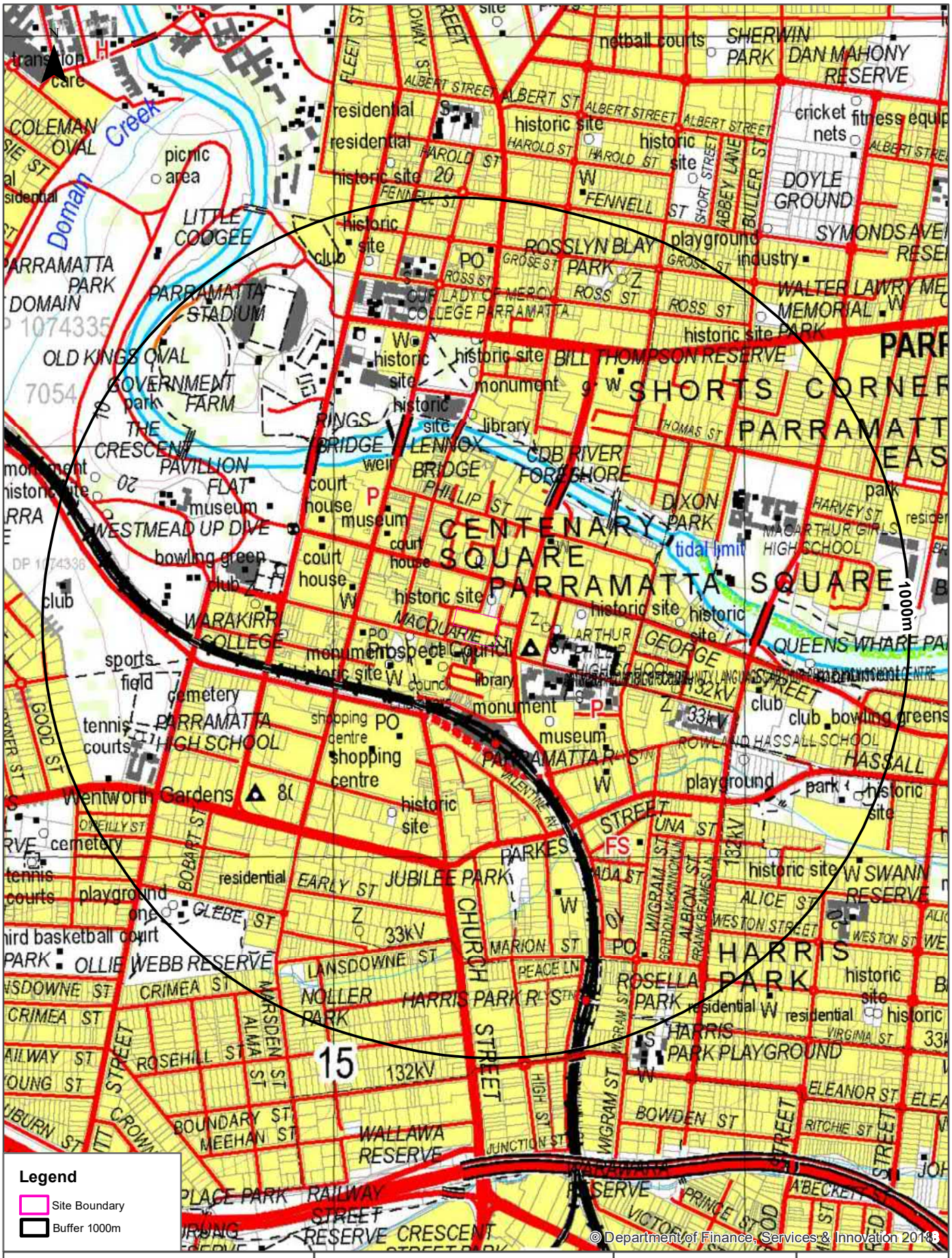


Scale:	Data Sources: Aerial Imagery: © Geoscience Australia	Coordinate System: GDA 1994 MGA Zone 56	Date: 10 November 2021

0 25 50 75 100 Meters

Topographic Map 2015

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 150 300 450 600 Meters

Data Sources: Topographic Map Data © NSW Land and Property Information

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Historical Map 1975

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Historical Map 1936 - 1942

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 290 580 870 1,160 Meters

Data Sources: Australia 1:63360
Produced by Australian Section Imperial General Staff

Coordinate System:
GDA 1994 MGA Zone 56

Date: 10 November 2021

Historical Map 1917 - 1929

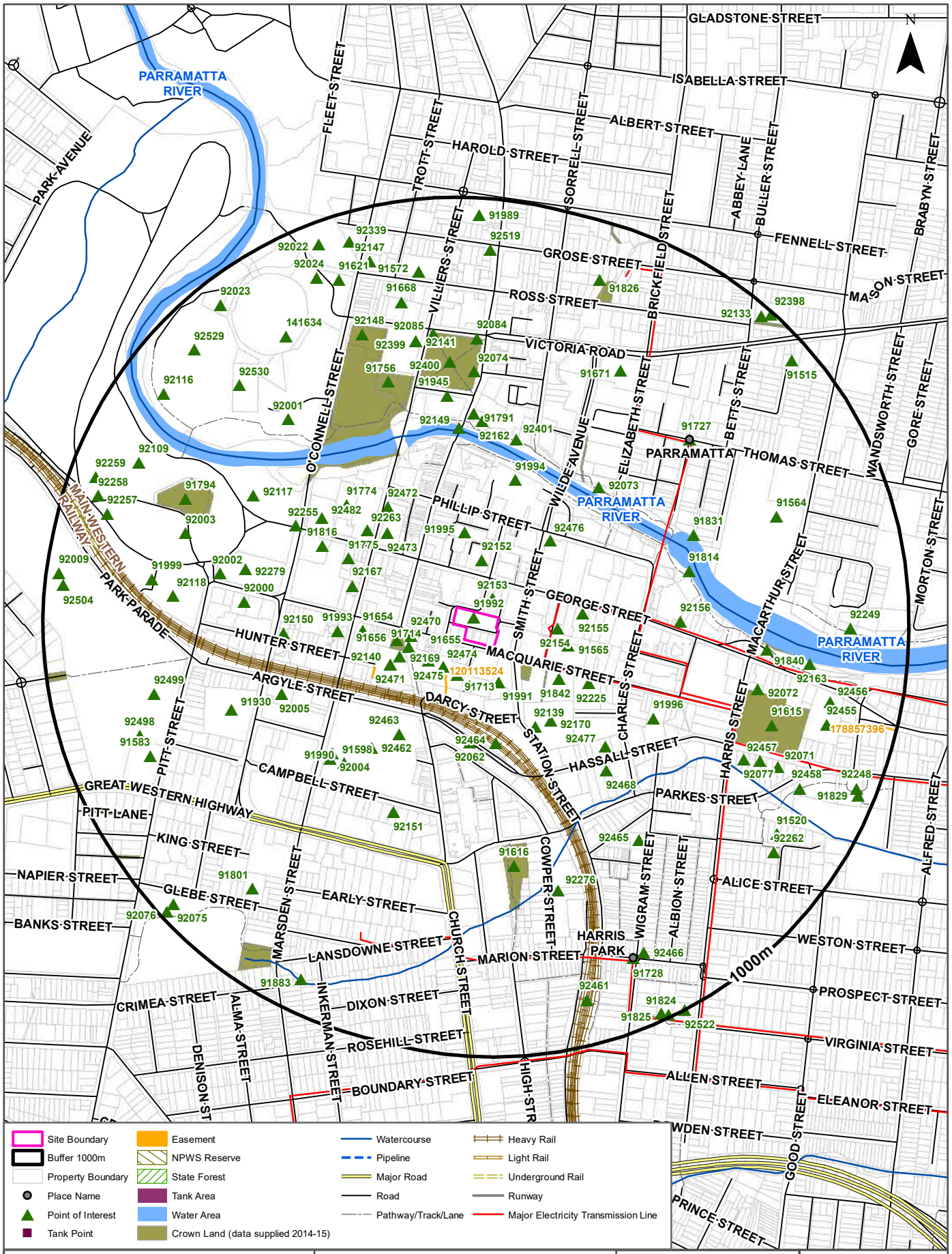
Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 290 580 870 1,160 Meters	Data Sources: Australia 1:63360 Produced by Australian Section Imperial General Staff	Coordinate System: GDA 1994 MGA Zone 56	Date: 10 November 2021

Topographic Features

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Topographic Features

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
91992	Parking Area	Parking Area	0m	On-site
91655	Place Of Worship	LEIGH MEMORIAL UNITING CHURCH PARRAMATTA MISSION	37m	South West
92153	Historic Site	ROXY THEATRE	41m	North East
92474	Local Government Chambers	PARRAMATTA CITY COUNCIL	83m	South West
91991	Parking Area	Parking Area	86m	South
91713	Urban Place	PARRAMATTA SQUARE	88m	South West
92475	Community Facility	PARRAMATTA TOWN HALL	101m	South West
91657	Library	PARRAMATTA CENTRAL LIBRARY	105m	South
92470	Monument	CENTENNIAL FOUNTAIN	106m	West
91714	Urban Place	CENTENARY SQUARE	122m	West
92152	Historic Site	REDCOATS MESS HOUSE	126m	North
91656	Park	ST JOHNS PARK	142m	West
92154	Historic Site	WARDERS COTTAGES	144m	East
92169	Monument	FIRST LIGHT HORSE REGIMENT NSW LANCERS	152m	West
91565	High School	ARTHUR PHILLIP HIGH SCHOOL	173m	East
92223	High School	ARTHUR PHILLIP HIGH SCHOOL	177m	South East
91842	High School	SATURDAY SCHOOL OF COMMUNITY LANGUAGES ARTHUR PHIL	177m	South East
92140	Historic Site	ST JOHNS CATHEDRAL	181m	South West
92471	Place Of Worship	ST JOHNS ANGLICAN CATHEDRAL	181m	South West
91995	Parking Area	Parking Area	184m	North
92155	Historic Site	PERTH HOUSE AND STABLES	204m	East
92139	Museum	THE LANCER BARRACKS AND LINDEN MILITARY MUSEUM	219m	South East
91654	Post Office	PARRAMATTA POST BUSINESS CENTRE	220m	West
92170	Monument	1ST AUSTRALIAN ARMOURED REGIMENT LANCERS MEMORIAL	226m	South East
92476	Place Of Worship	SALVATION ARMY CHURCH	226m	North East
92464	Railway Station	PARRAMATTA RAILWAY STATION	233m	South
92062	Bus Interchange	PARRAMATTA BUS INTERCHANGE	239m	South
92225	Primary School	PARRAMATTA PUBLIC SCHOOL	248m	South East
92473	Court House	PARRAMATTA COURT HOUSE	249m	North West
92167	Place Of Worship	PARRAMATTA MOSQUE	260m	West
92463	Post Office	PARRAMATTA WESTFIELD POST OFFICE	279m	South West

Map Id	Feature Type	Label	Distance	Direction
91993	Parking Area	Parking Area	281m	West
92263	Museum	BRISLINGTON MEDICAL AND NURSING MUSEUM	287m	North West
91775	Community Medical Centre	PARRAMATTA EARLY CHILDHOOD CENTRE	290m	North West
92472	Police Station	PARRAMATTA POLICE STATION	296m	North West
91994	Parking Area	Parking Area	335m	North
92462	Shopping Centre	WESTFIELD PARRAMATTA	347m	South West
91816	Court House	FEDERAL CIRCUIT COURT OF AUSTRALIA NSW	361m	North West
92477	Community Facility	PARRAMATTA PCYC	364m	South East
91774	Community Medical Centre	PARRAMATTA COMMUNITY HEALTH CENTRE	366m	North West
92482	Court House	PARRAMATTA CHILDRENS COURT	395m	North West
92073	Park	CDB RIVER FORESHORE	400m	North East
92468	Place Of Worship	ORTHODOX CHURCH	406m	South East
92150	Historic Site	TRAVELLERS REST INN GROUP	414m	West
91990	Parking Area	Parking Area	419m	South West
91598	Shopping Centre	Shopping Centre	424m	South West
91996	Parking Area	Parking Area	426m	South East
92401	Park	Park	432m	North
92004	Parking Area	Parking Area	437m	South West
92149	Historic Site	LENNOX BRIDGE	437m	North
92255	Historic Site	TUDOR GATEHOUSE	441m	North West
92156	Historic Site	HARRISFORD	443m	East
92005	Parking Area	Parking Area	451m	West
92151	Historic Site	LENNOX HOUSE	453m	South West
92162	Library	LOCAL STUDIES FAMILY HISTORY LIBRARY	458m	North
91791	Tourist Information Centre	PARRAMATTA HERITAGE AND VISITOR INFORMATION CENTRE	474m	North
91814	Wharf	PARRAMATTA WHARF	477m	East
92000	Parking Area	Parking Area	512m	West
91831	Park	DIXON PARK	515m	North East
91945	Community Facility	PARRAMATTA RIVER THEATRES	517m	North
92279	Club	PARRAMATTA RSL CLUB	523m	West
91616	Park	JUBILEE PARK	535m	South
92117	Park	PAVILLION FLAT	567m	North West
91756	Primary School	BAYANAMI PUBLIC SCHOOL	575m	North
92074	Monument	PARRAMATTA WAR MEMORIAL	577m	North
91930	Cemetery	ST JOHNS CEMETERY	579m	West
92002	Parking Area	Parking Area	581m	West
92465	Fire Station	PARRAMATTA FIRE STATION	589m	South East

Map Id	Feature Type	Label	Distance	Direction
92400	Park	PRINCE ALFRED SQUARE	599m	North
92276	Place Of Worship	NAN THIEN VIHARA IBBA BUDDHIST CENTRE	614m	South
92001	Parking Area	Parking Area	616m	North West
91727	City	PARRAMATTA	636m	North East
92072	Club	GRANVILLE WARATAH SOCCER FOOTBALL CLUB	648m	East
91840	Park	QUEENS WHARF PARK	656m	East
92141	Historic Site	ST PATRICKS CATHEDRAL	657m	North
92399	Place Of Worship	ST PATRICKS ROMAN CATHOLIC CATHEDRAL	657m	North
92084	Historic Site	BILLS HORSE TROUGH PRINCE ALFRED SQUARE	657m	North
92077	Sports Court	PARRAMATTA SKATE PARK	668m	South East
92085	Monument	MATHEW ANDERSON MEMORIAL FOUNTAIN	670m	North
91671	Place Of Worship	ALL SAINTS ANGLICAN CHURCH	673m	North East
92003	Parking Area	Parking Area	686m	West
92118	Park	THE BOWLING GREEN	686m	West
91615	Sports Field	ROBIN THOMAS RESERVE	703m	East
92148	Historic Site	MARSDEN REHABILITATION CENTRE GROUP	704m	North
92457	Park	JAMES RUSE RESERVE	705m	South East
91794	Museum	OLD GOVERNMENT HOUSE	712m	North West
91564	High School	MACARTHUR GIRLS HIGH SCHOOL	720m	East
91999	Parking Area	Parking Area	742m	West
92499	Sports Field	Sports Field	748m	West
92071	Park	PLAYGROUND	751m	South East
91668	High School	OUR LADY OF MERCY COLLEGE PARRAMATTA	757m	North
92530	Sports Field	GOVERNMENT FARM	758m	North West
92163	Monument	H M A S PARRAMATTA	762m	East
141634	Sports Field	PARRAMATTA STADIUM	781m	North West
91801	Community Home	BRENTWOOD RESIDENTIAL AGED CARE FACILITY	796m	South West
91583	High School	PARRAMATTA HIGH SCHOOL	805m	West
92498	Sports Court	TENNIS COURTS	811m	West
92458	Park	Park	821m	South East
91572	Primary School	ST PATRICK'S PRIMARY SCHOOL	824m	North
91520	Park	EXPERIMENT FARM RESERVE	827m	South East
92456	Sports Field	BOWLING GREENS	827m	East
92466	Post Office	HARRIS PARK POST OFFICE	829m	South East
91728	Locality	HARRIS PARK	831m	South East
92455	Club	WORKERS PARRAMATTA	832m	East
92262	Historic Site	EXPERIMENT FARM COTTAGE	846m	South East

Map Id	Feature Type	Label	Distance	Direction
91621	Park	PARRAMATTA PARK	849m	North
92109	Park	THE CRESCENT	853m	North West
92249	Park	RANGIHOU RESERVE	858m	East
91826	Park	ROSSLYN BLAY PARK	860m	North
92147	Historic Site	ROSENEATH COTTAGE	870m	North
92024	Parking Area	Parking Area	873m	North West
92519	Post Office	NORTH PARRAMATTA POST OFFICE	876m	North
92257	Historic Site	ASTRONOMICAL OBSERVATORY REMAINS	882m	West
92116	Park	Park	884m	North West
92461	Railway Station	HARRIS PARK RAILWAY STATION	889m	South
92529	Sports Field	OLD KINGS OVAL	896m	North West
92258	Historic Site	GOVERNORS BATH HOUSE	916m	West
91883	Park	NOLLER PARK	919m	South West
92339	Club	PARRAMATTA LEAGUES CLUB	930m	North
92023	Parking Area	Parking Area	936m	North West
92259	Monument	BOER WAR MEMORIAL	936m	West
92022	Parking Area	Parking Area	947m	North West
92248	Park	HAMBLEDON COTTAGE RESERVE	949m	South East
91515	Park	BILL THOMSON RESERVE	951m	North East
92504	Club	PARRAMATTA GOLF CLUB	955m	West
92075	Picnic Area	PLAYGROUND	958m	South West
91989	Parking Area	Parking Area	959m	North
91829	Historic Site	HAMBLEDON COTTAGE	959m	South East
92009	Parking Area	Parking Area	969m	West
92133	Historic Site	PARRAMATTA METHODIST CEMETERY	975m	North East
91825	Park	ROSELLA PARK	982m	South East
92076	Sports Court	ONE THIRD BASKETBALL COURT	982m	South West
91824	Park	HARRIS PARK PLAYGROUND	992m	South East
92398	Park	WALTER LAWRY METHODIST MEMORIAL PARK	993m	North East
92522	Retirement Village	THE WHIDDON GROUP HARRIS PARK	999m	South East

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Topographic Features

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks Data Source: © Land and Property Information (2015)
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Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120113524	Primary	Undefined		97m	South West
120107893	Primary	Undefined		219m	South West
178857396	Primary	Right of way	Var	975m	East

Easements Data Source: © Land and Property Information (2015)
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Topographic Features

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
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National Parks and Wildlife Service Reserves

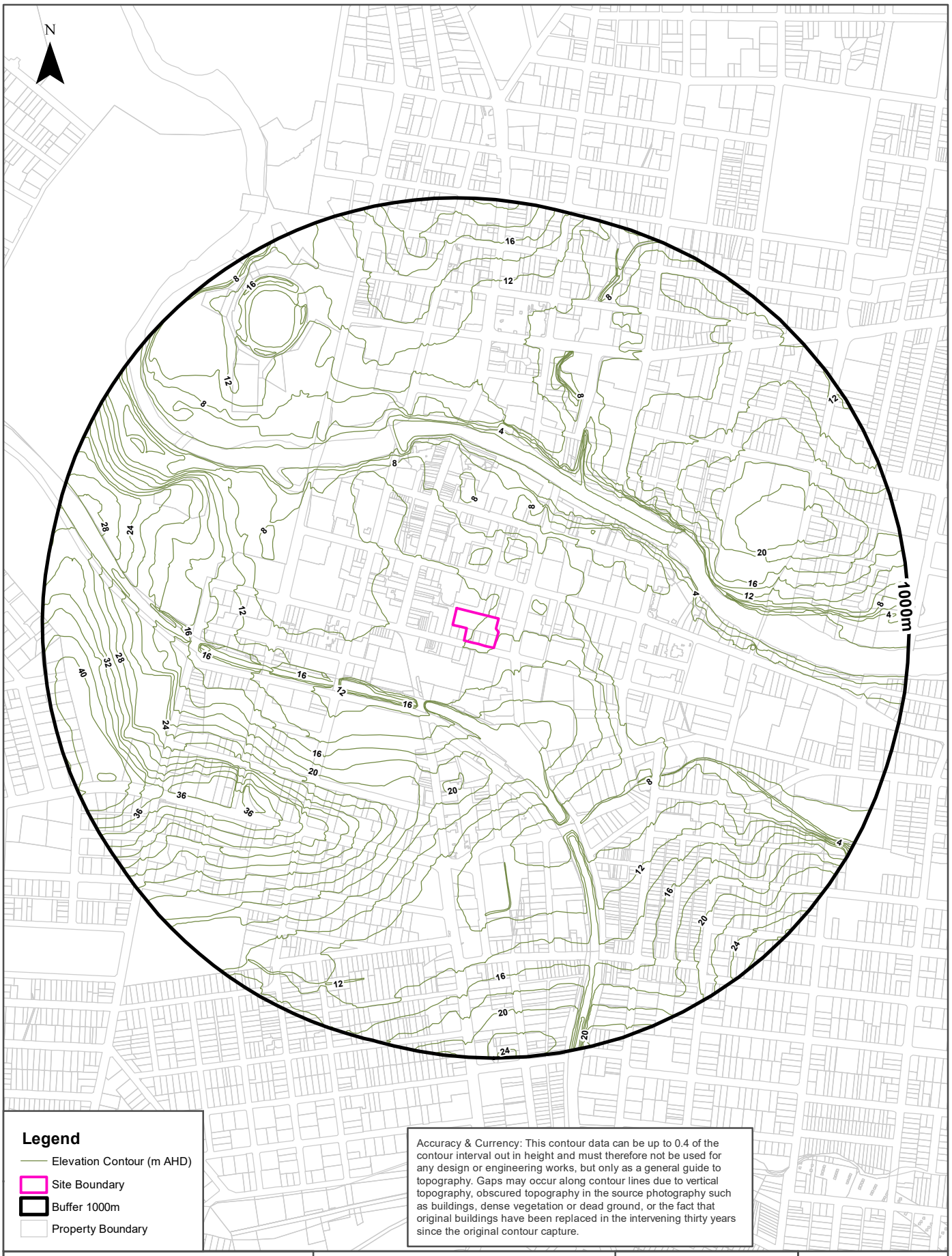
What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
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Elevation Contours (m AHD)

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Hydrogeology & Groundwater

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive aquifers of low to moderate productivity	0m	On-site

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
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Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

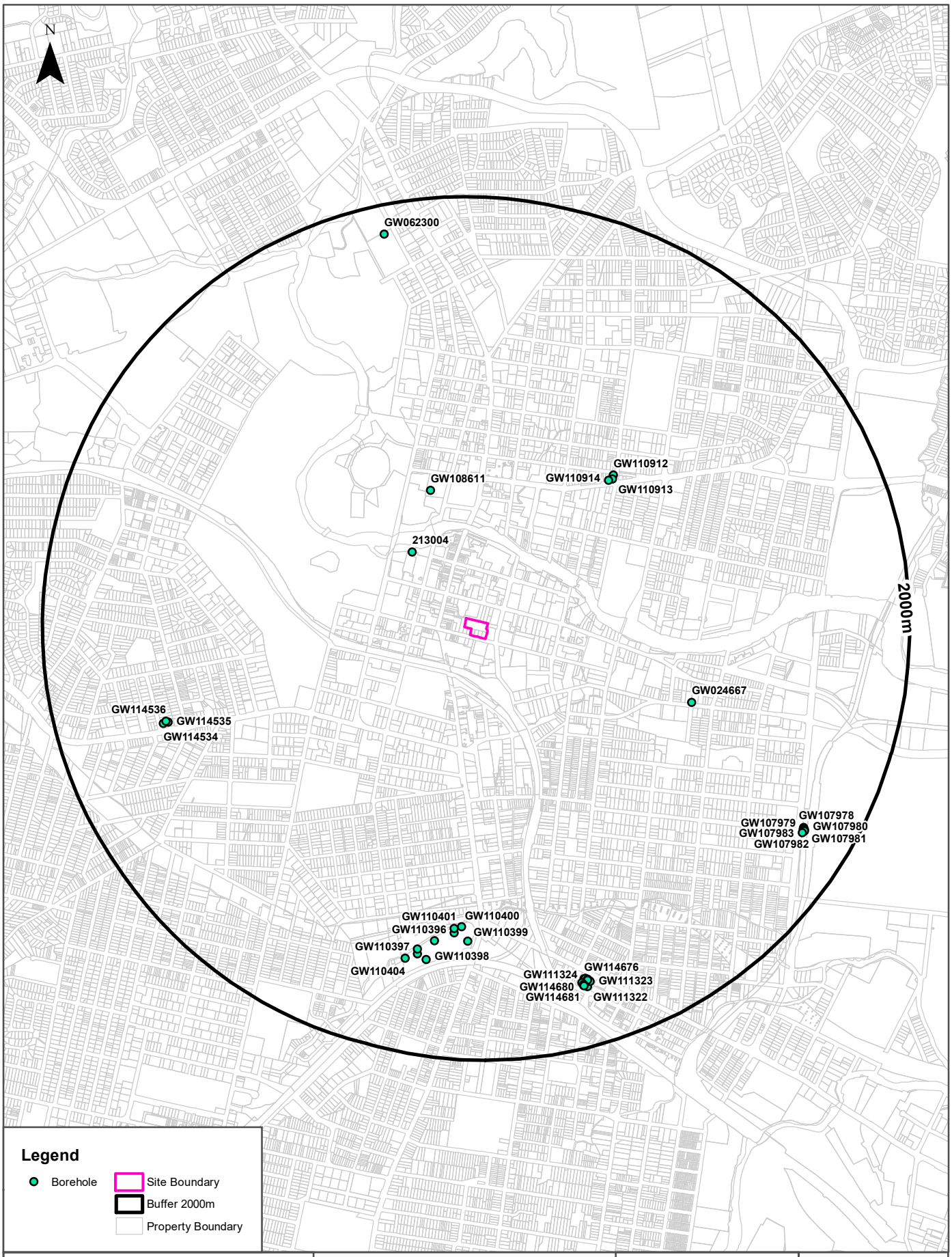
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Hydrogeology & Groundwater

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
213004					UNK								11.75	405m	North West
GW108611	10BL162941, 10WA108668	Bore	Private	Domestic	Domestic		20/04/2005	60.50	60.50	5300	6.20	5.500		629m	North
GW110914	10BL603583	Well	Private	Monitoring Bore	Monitoring Bore		20/01/2010	6.00	6.00		5.00			888m	North East
GW110913	10BL603583	Well	Private	Monitoring Bore	Monitoring Bore		20/01/2010	10.00	10.00		7.00			905m	North East
GW110912	10BL603583	Well	Private	Monitoring Bore	Monitoring Bore		20/01/2010	10.00	10.00		7.00			922m	North East
GW024667	10BL019073, 10WA108142	Well	Private	Domestic	General Use		01/10/1966	4.50	4.60	Fresh				1025m	East
GW110400	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		06/03/1996	5.40	5.40					1371m	South
GW110401	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		18/05/2001	7.00	7.00					1383m	South
GW110396	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		26/06/1996	7.00	7.00					1403m	South
GW110399	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		26/06/1996	5.30	5.30					1438m	South
GW110402	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		18/05/2001	8.00	8.00					1452m	South
GW114535	10BL604593	Bore	Other Govt	Monitoring Bore	Monitoring Bore		12/08/2014	7.00	7.00		4.80			1475m	West
GW114536	10BL604593	Bore	Other Govt	Monitoring Bore	Monitoring Bore		12/08/2014	6.50	6.50					1482m	West
GW114534	10BL604593	Bore	Other Govt	Monitoring Bore	Monitoring Bore		12/08/2014	6.90	6.90		5.00			1499m	West
GW110403	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		18/05/2001	9.00	9.00					1508m	South
GW110397	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		06/03/1996	5.00	5.00					1529m	South
GW110398	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		26/06/1996	6.00	6.00					1547m	South
GW110404	10BL160282	Well	Private	Monitoring Bore	Monitoring Bore		18/05/2001	9.00	9.00					1563m	South
GW114676	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/04/2011	7.50	7.50					1680m	South
GW114677	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		31/03/2011	7.50	7.50					1680m	South
GW114678	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		31/03/2011	8.50	8.50					1687m	South
GW114675	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/04/2011	7.50	7.50					1690m	South
GW111324	10BL601807	Bore	Private	Monitoring Bore	Monitoring Bore		25/05/2007	8.10	8.10					1691m	South
GW114679	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/01/2011	7.50	7.50					1691m	South
GW114680	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/01/2011	7.50	7.50					1696m	South
GW111323	10BL601807	Bore	Private	Monitoring Bore	Monitoring Bore		25/05/2007	4.10	4.10					1701m	South
GW114681	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/01/2011	7.50	7.50					1706m	South

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114682	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/01/2011	8.00	8.00					1709m	South
GW114683	10BL604491	Bore	Private	Monitoring Bore	Monitoring Bore		01/01/2011	3.00	3.00					1713m	South
GW111322	10BL601807	Bore	Private	Monitoring Bore	Monitoring Bore		25/05/2007	3.60	3.60					1720m	South
GW107978	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00	6.00		3.00			1755m	South East
GW107979	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00	6.00		3.00			1759m	South East
GW107983	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00	6.00		3.00			1763m	South East
GW107981	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00	6.00		3.00			1764m	South East
GW107980	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00			3.00			1766m	South East
GW107982	10BL162924, 10BL601779	Bore		Monitoring Bore	Monitoring Bore		01/03/2005	6.00	6.00		3.00			1768m	South East
GW062300	10BL137938, 10WA109363	Bore	Other Govt	Industrial	Industrial		01/07/1988	100.00	100.00	Fresh				1862m	North

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW108611	0.00m-1.00m Fill 1.00m-3.00m Clay, brown 3.00m-5.50m Shale 5.50m-7.00m Sandstone, with Shale bedding 7.00m-22.00m Sandstone, grey 22.00m-23.30m Sandstone, soft 23.30m-46.10m Sandstone, grey 46.10m-46.30m Sandstone, fractured 46.30m-47.50m Sandstone, grey 47.50m-47.70m Sandstone, fractured 47.70m-56.50m Sandstone, grey 56.50m-56.60m Sandstone, fractured 56.60m-60.50m Sandstone, grey	629m	North
GW110914	0.00m-0.20m FILL, SILTY SAND BROWN 0.20m-0.40m FILL,SANDY CLAY RED GREY 0.40m-1.10m FILL SANDY CLAY RED 1.10m-2.50m CLAY SANDY RED 2.50m-3.20m CLAY RED 3.20m-5.00m SILTSTONE, SHALE FRAGMENTS 5.00m-5.50m CLAY SANDY BROWN 5.50m-6.00m SANDSTONE BROWN LOW STRENGTH	888m	North East
GW110913	0.00m-0.10m CONCRETE 0.10m-0.20m CLAY SILTY RED BROWN 0.20m-1.20m CLAY SANDY RED BROWN 1.20m-2.00m CLAY SANDY RED 2.00m-3.50m CLAY SANDY BROWN 3.50m-4.50m CLAY SANDY BROWN/SHALE 4.50m-4.90m SANDSTONE BROWN LOW STRENGTH 4.90m-6.00m CLAY SANDY BROWN SHALE FRAGMENTS 6.00m-6.20m SANDSTONE WEATHERED GREY WHITE 6.20m-10.00m SANDSTONE WHITE	905m	North East
GW110912	0.00m-0.10m CONCRETE 0.10m-0.50m FILL,SILTY CLAY, GRAVEL 0.50m-1.80m CLAY SANDY GREY RED 1.80m-2.50m CLAY SANDY GREY BROWN 2.50m-3.00m CLAY SANDY GREY 3.00m-3.50m CLAY SANDY SOME SHALE FRAGMENTS 3.50m-4.30m SHALE CLAY BROWN 4.30m-5.00m SHALE LOW STRENGTH,IRONSTONE,SANDSTONE 5.00m-5.20m SHALE LOW STRENGTH DARK GREY 5.20m-6.50m SHALE LOW STRENGTH BROWN SANDSTONE BANDS 6.50m-6.80m SANDSTONE LOW STRENGTH WHITE 6.80m-10.00m SANDSTONE MEDIUM STRENGTH WHITE	922m	North East
GW024667	0.00m-4.57m Sand Water Supply	1025m	East
GW110400	0.00m-0.80m FILL,CLAY,GREY,SANDY,GRAVELLY 0.80m-4.30m FILL,CLAY,LT BROWN,SOFT , PLASTIC 4.30m-5.40m CLAY, LT BROWN,PINK,SOFT SILT	1371m	South
GW110401	0.00m-0.85m FILL,LOOSE SAND/GRAVEL 0.85m-7.00m FILL,CRUSHED SANDSTONE	1383m	South
GW110396	0.00m-0.30m FILL,LOOSE,BROWN,SANDY 0.30m-6.00m CLAY, LT BROWN,SOFT,PLASTIC 6.00m-7.00m CLAY,RED BROWN,PLASTIC FILL.	1403m	South
GW110399	0.00m-1.50m FILL,CLAY BROWN PLASTIC 1.50m-2.00m CLAY,YELLOW,BRWON, HARD 2.00m-2.50m CLAY,LT BROWN ,SOFT SILTY PLASTIC 2.50m-3.40m CLAY,LT GREY,SILTY SOFT PLASTIC 3.40m-5.30m CLAY,ORANGE,GREY MOTTLE	1438m	South
GW110402	0.00m-0.85m FILL.LOOSE SAND,W/GRAVEL 0.85m-5.00m FILL,CRUSHED SANDSTONE 5.00m-8.00m FILL,SOFT,SANDY CLAY W/GRAVEL	1452m	South
GW114535	0.00m-1.60m CLAY FILL 1.60m-2.00m CEMENTED SAND/CLAY 2.00m-3.50m SANDY CLAY 3.50m-5.00m SANDSTONE WEATHERED 5.00m-7.00m SHALE	1475m	West

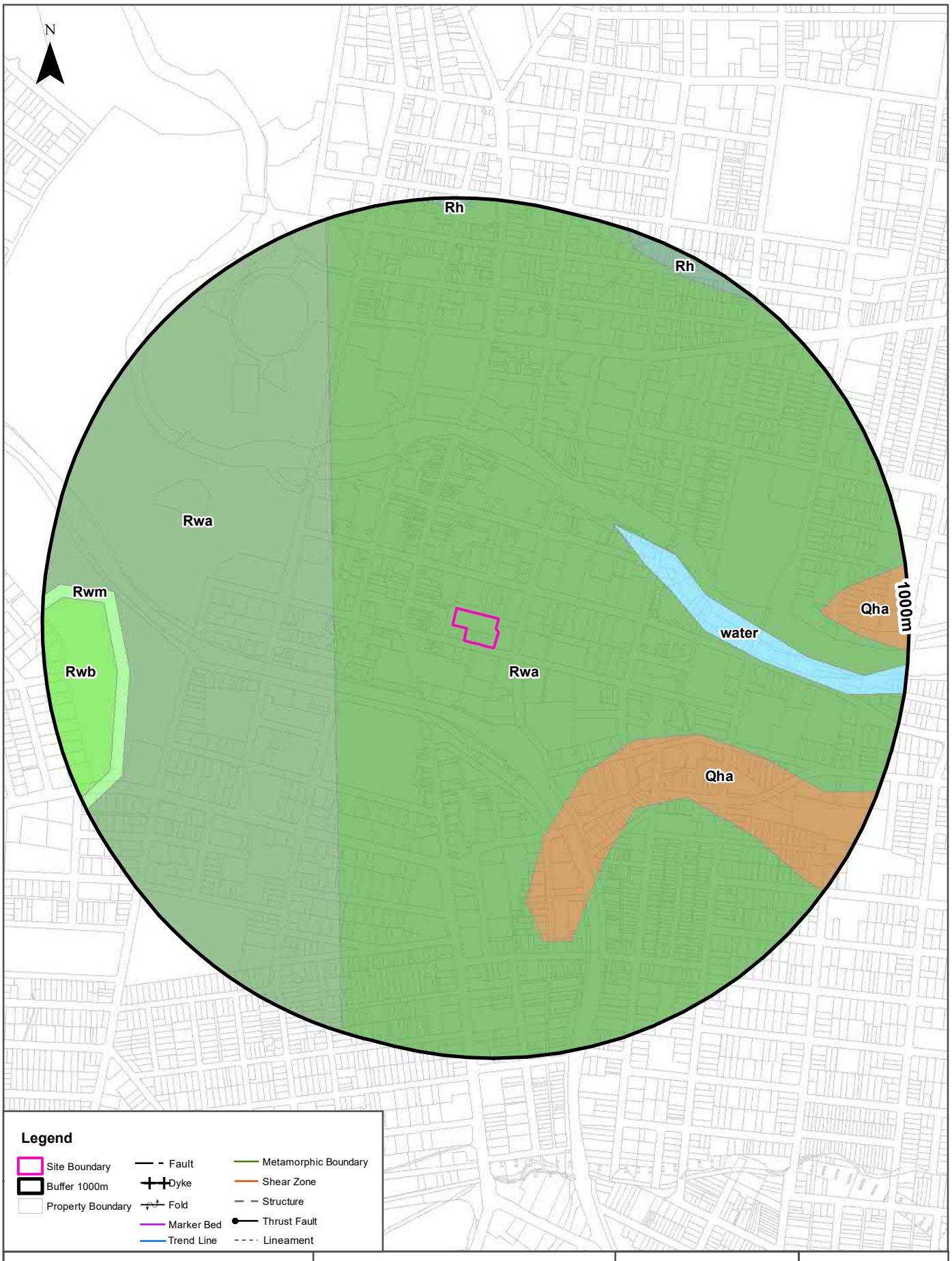
Groundwater No	Drillers Log	Distance	Direction
GW114536	0.00m-1.20m CLAY FILL 1.20m-1.50m CEMENTED SAND / CLAY 1.50m-3.00m CLAY 3.00m-4.30m WEATHERED SANDSTONE 4.30m-6.50m SHALE	1482m	West
GW114534	0.00m-1.80m CLAY 1.80m-3.00m CEMENTED SAND / CLAY 3.00m-6.70m SANDSTONE WEATHERED 6.70m-6.90m SHALE	1499m	West
GW110403	0.00m-0.10m TOPSOIL 0.10m-0.20m BASALT GRAVEL FILL 0.20m-0.85m FILL,SILTY SAND 0.85m-1.50m FILL,STIFF,GREY/BROWN,SANDY CLAY 1.50m-4.00m FILL,CRUSHED SANDSTONE 4.00m-6.40m SILTY CLAY,V/SOFT,GREY 6.40m-8.50m CLAY,SOFT YELLOW 8.50m-9.00m SHALE EXTREMELY WEATHERED	1508m	South
GW110397	0.00m-1.50m FILL, CLAY,SOFT BROWN,PLASTIC 1.50m-3.50m CLAY RED,PINK,PURPLE,HARD 3.50m-4.30m CLAY LT/BROWN, HARD 4.30m-4.50m CLAY LT BROWN,SOFT,PLASTIC 4.50m-5.00m CLAY,DARK YELLOW,SILTY	1529m	South
GW110398	0.00m-0.50m FILL, ROAD BASE 0.50m-1.50m CLAY,RED,GREY,PLASTIC,MOIST 1.50m-4.00m CLAY RED BROWN,STIFF, PLASTIC 4.00m-5.50m CLAY,ORANGE/BROWN.STIFF 5.50m-6.00m SHALE,GREY, WEATHERED	1547m	South
GW110404	0.00m-0.90m FILL,CLAYEY SAND,GRAVEL 0.90m-1.50m FILL,GRAVELLY SILTY SAND 1.50m-6.50m FILL,CRUSHED SANDSTONE 6.50m-8.50m SILTY CLAY,W/MINOR SAND 8.50m-9.00m SHALE,GREY EXTREMELY WEATHERED	1563m	South
GW114676	0.00m-0.20m CONCRETE 0.20m-0.50m GRAVELLY SANDY CLAY 0.50m-1.40m SILTY CLAY,MINOR IRONSTONE 1.40m-2.40m SILTY CLAY,WEATHERED SHALE 2.40m-3.00m SHALE WEATHERED,MINOR SILT AND CLAY 3.00m-4.50m SHALE WEATHERED MINOR SILT AND CLAY 4.50m-6.00m SHALE WEATHERED MINOR SILT AND CLAY FIRM 6.00m-7.50m SHALE VERY WEATHERED MINOR SILT AN CLAY SOFT	1680m	South
GW114677	0.00m-0.20m CONCRETE 0.20m-0.50m SANDY GRAVEL FINE GRAINED SAND 0.50m-1.00m SILTY CLAY WITH MINOR GRAVEL, FINE GRAINED SAND 1.00m-1.20m SILTY CLAY WITH MINOR GRAVEL,RED BROWN 1.20m-2.00m SILTY CLAY,MINOR IRONSTONE,RED BROWN 2.00m-2.80m SHALE WEATHERED MINOR SILT HARD 2.80m-5.85m SHALE WEATHERED SHALE,MINOR SILT,DRY 5.85m-7.50m SHALE VERY WEATHERED,SOFT,MOIST,LOW PLASTICITY	1680m	South
GW114678	0.00m-0.20m CONCRETE 0.20m-0.40m SANDY GRAVEL,FINE GRAINED 0.40m-0.80m SILTY CLAY , MINOR IRONSTONE 0.80m-1.00m SILTY CLAY , SHALE,FIRM,MOIST 1.00m-2.00m SHALE WEATHERED,MINOR IRONSTONE 2.00m-2.70m SHALE WEATHERED,DRY, LOW PLASTICITY 2.70m-7.00m SHALE WEATHERED,MINOR SILT LOW PLASTICITY 7.00m-8.50m SHALE WEATHERED,MINOR SILT,HARD,MOIST TI WET	1687m	South
GW114675	0.00m-0.20m CLAYAY SAND WITH MINOR GRAVEL 0.20m-0.50m SAND FINE GRAINED,MOIST,DAR BROWN 0.50m-1.00m CLAYEY SANDY GRAVEL,DARK BROWN 1.00m-2.80m SILTY CLAY STIFF,MOIA,LOW PLASTICITY 2.80m-4.00m SILTY CLAY STIFF,MOIST GREY BROWN 4.00m-7.50m SHALE WEATHERED,HARD SLIGHTLY MOIST	1690m	South
GW111324	0.00m-0.30m TOPSOIL,SILTY SAND,FINE GRAIN,BROWN 0.30m-5.50m FILL.GRAVELLY CLAY,MODERATE PLASTICITY,RED BROWN 5.50m-8.10m SHALE,DARK GREY,HARD,UNIFORM,WET	1691m	South
GW111323	0.00m-0.30m TOPSOIL,SILTY SAND,FINE GRAIN 0.30m-2.50m FILL,SANDY CLAY,RED BROWN,GREY MOTTLING 2.50m-4.10m SHALE,WEATHERED,STIFF TO HARD,SOME CLAY	1701m	South
GW111322	0.00m-0.30m TOPSOIL,GRAVELLY SILTY SAND 0.30m-2.20m FILL,SILTY CLAY,MEDIUM DENSITY 2.20m-3.50m SAND,MEDIUM GRAIN,GREY,SOFT 3.50m-3.60m CLAY,LOW TO MODERATE PLASTICITY,GREY,SHALE	1720m	South

Groundwater No	Drillers Log	Distance	Direction
GW062300	0.00m-0.40m Topsoil 0.40m-5.60m Sandstone Some Layers 0.40m-5.60m Shale Clay 5.60m-9.50m Sandstone Yellow 9.50m-12.10m Shale 12.10m-26.80m Sandstone Grey Water Supply 26.80m-37.70m Sandstone Grey Some Shale 37.70m-38.10m Shale 38.10m-100.00m Sandstone Grey Water Supply	1862m	North

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
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Geology

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Geology

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Geological Units 1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dist	Dir
Rwa	Black to dark grey shale and laminate	Ashfield Shale	Wianamatta Group		Triassic		Sydney	0m	On-site
Rwa	Dark-grey to black claystone-siltstone and fine sandstone -siltstone laminate	Ashfield Shale	Wianamatta Group (undifferentiated)		Middle Triassic		Penrith	291m	West
water							Sydney	362m	East
Qha	Silty to peaty quartz sand, silt, and clay. Ferruginous and humic cementation in places. Common shell layers				Quaternary		Sydney	376m	South East
Rwm	Fine to medium-grained quartz-lithic sandstone	Minchinbury Sandstone	Wianamatta Group (undifferentiated)		Middle Triassic		Penrith	796m	West
Rwb	Shale, carbonaceous claystone,claystone, laminate, fine to medium-grained lithic sandstone, rare coal and tuff	Bringelly Shale	Wianamatta Group (undifferentiated)		Middle Triassic		Penrith	826m	West
Rh	Medium to coarse grained quartz sandstone, very minor shale and laminate lenses				Triassic		Sydney	948m	North East

Geological Structures 1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Distance	Direction
N/A	No records in buffer				

Geological Data Source : NSW Department of Industry, Resources & Energy
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Naturally Occurring Asbestos Potential

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Naturally Occurring Asbestos Potential

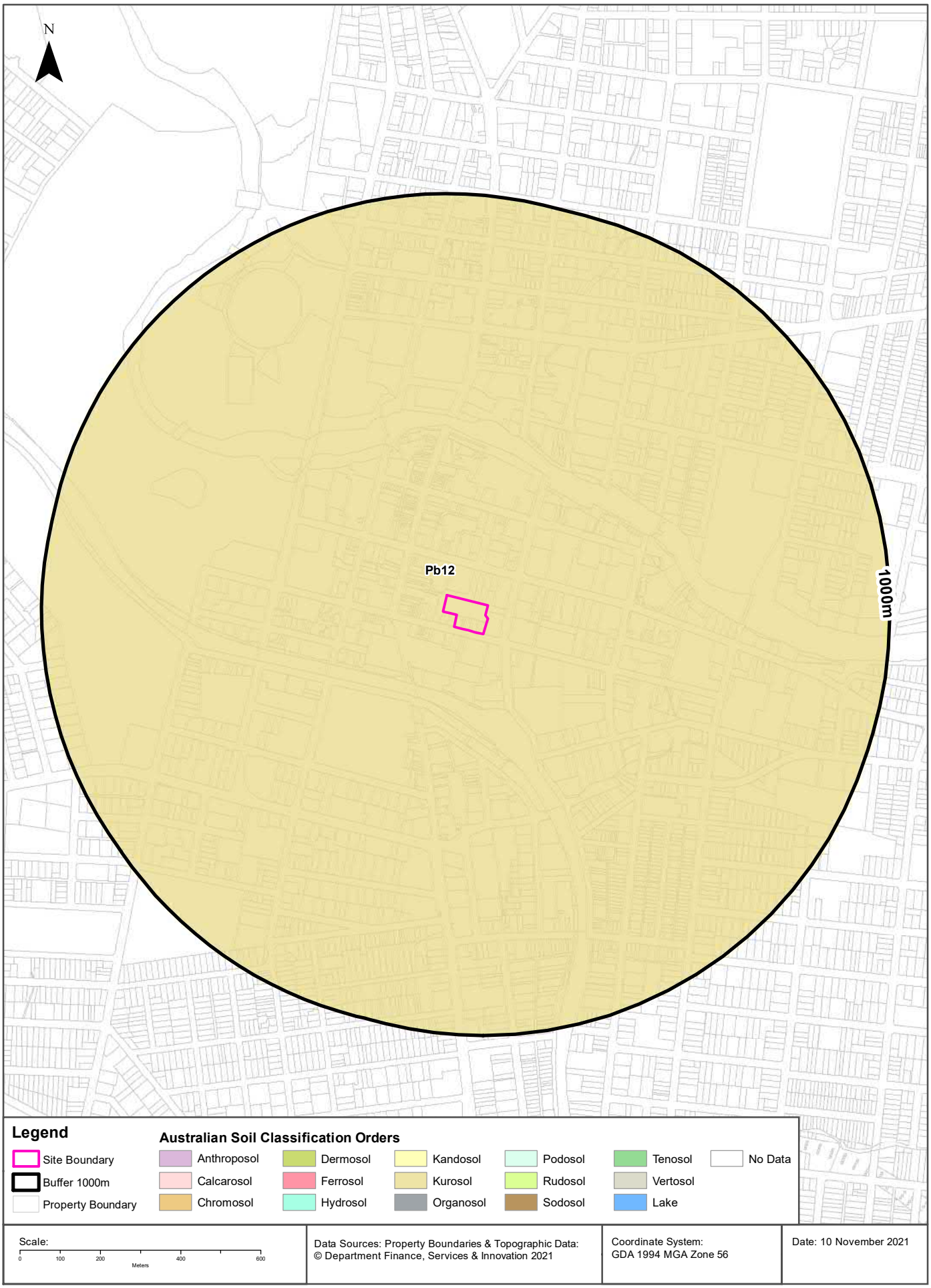
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Atlas of Australian Soils

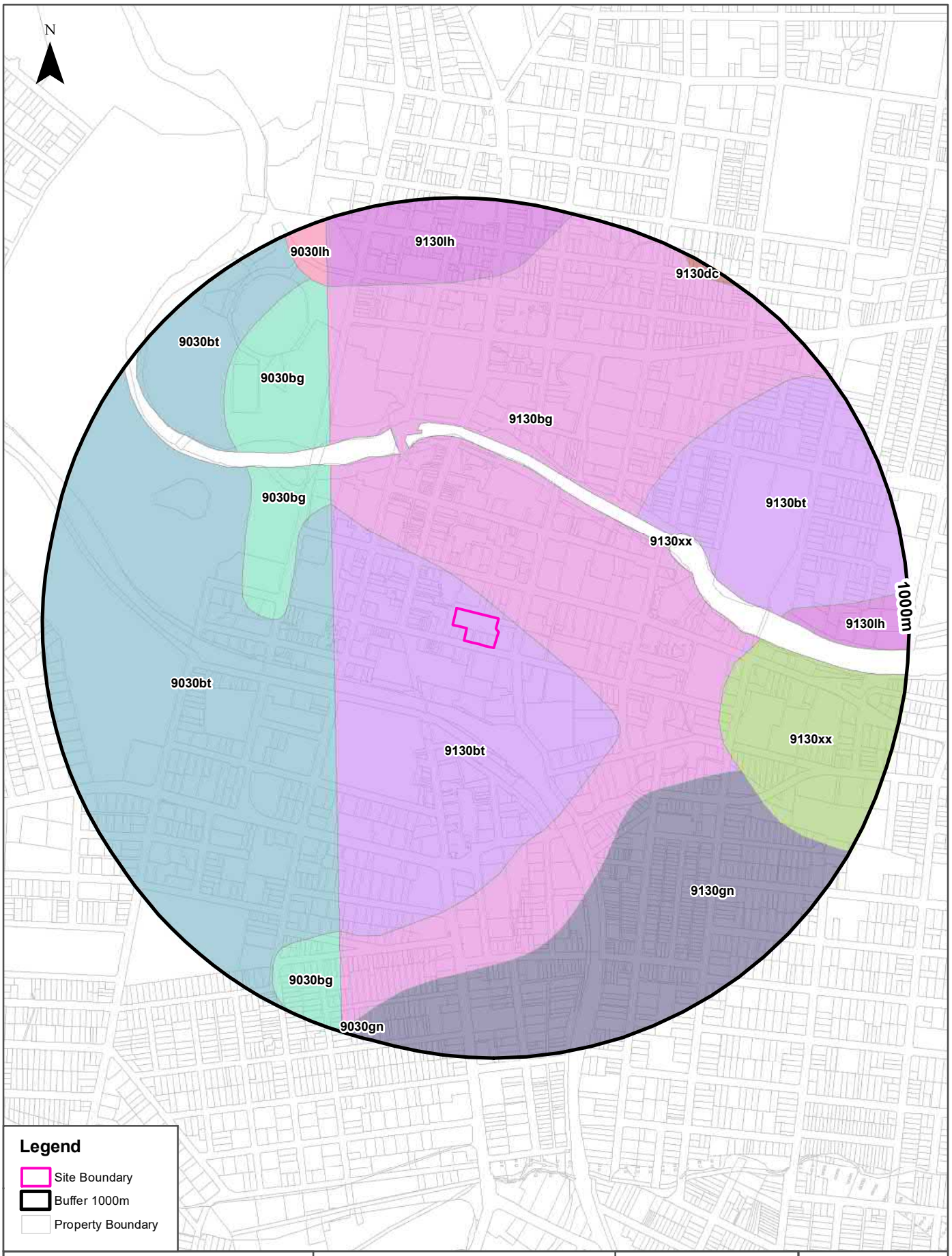
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Pb12	Kurosol	Gently rolling to rounded hilly country with some steep slopes and broad valleys: chief soils are hard acidic red soils (Dr2.21) with hard neutral and acidic yellow mottled soils (Dy3.42 and Dy3.41) on lower slopes and in valleys. Associated are small areas of various soils including (Gn3.54) on some ridges, (Dr3.31) on some slopes; (Dr2.23) in saddles and some mid-slope positions, and some low- lying swampy areas of (Uf6) soils and (Uc1.2) soils with peaty surfaces. Small areas of other soils such as (Db1.2) are likely throughout.	0m	On-site

Atlas of Australian Soils Data Source: CSIRO
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Soil Landscapes of Central and Eastern NSW

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Soil Landscapes of Central and Eastern NSW

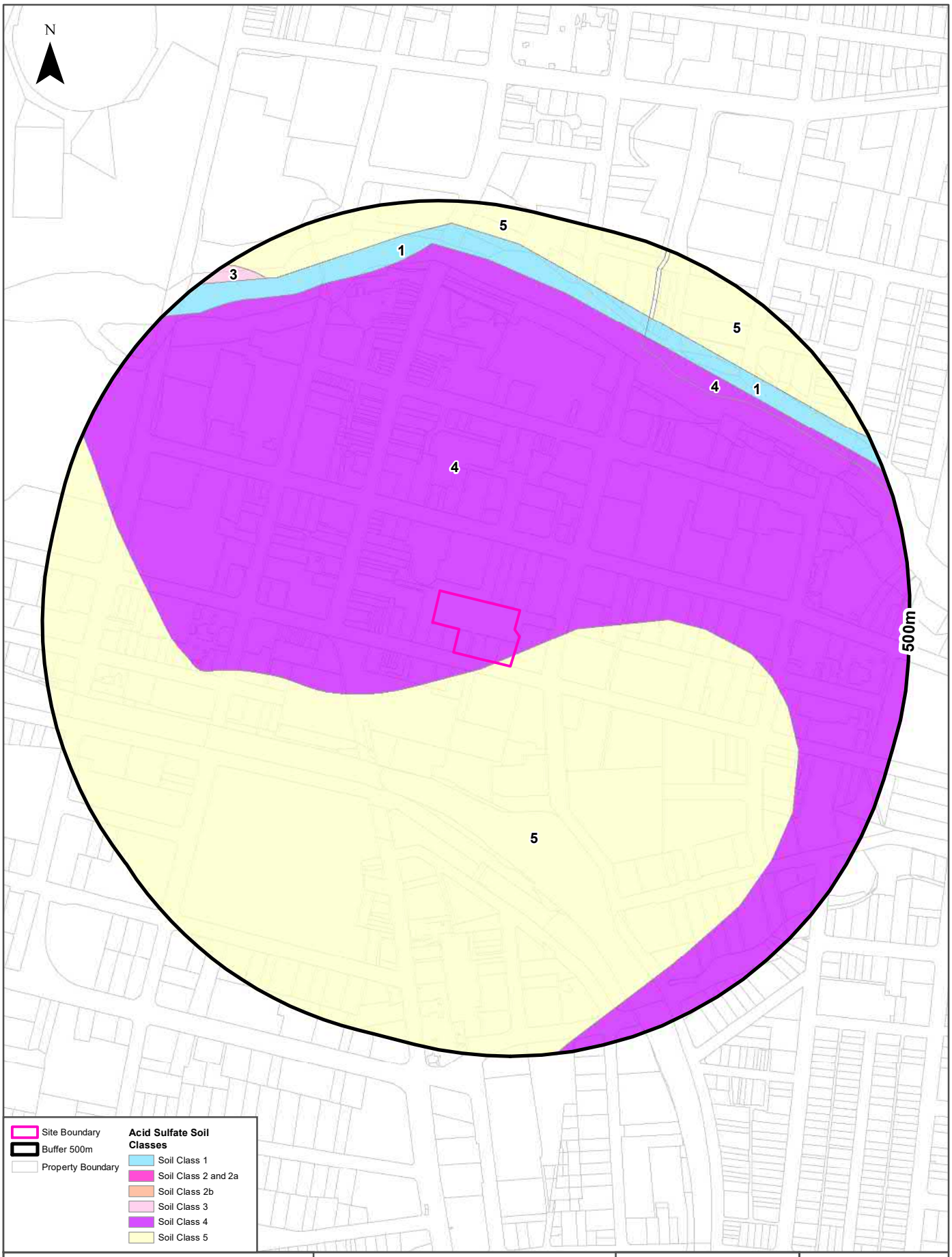
Soil Landscapes of Central and Eastern NSW within the dataset buffer:

Soil Code	Name	Distance	Direction
9130bt	Blacktown	0m	On-site
9130bg	Birrong	15m	North East
9030bt	Blacktown	291m	West
9030bg	Birrong	398m	North West
9130xx	Disturbed Terrain	445m	North East
9130gn	Glenorie	508m	South East
9130lh	Lucas Heights	685m	East
9030lh	Lucas Heights	846m	North West
9130dc	Deep Creek	968m	North East
9030gn	Glenorie	996m	South

Soil Landscapes of Central and Eastern NSW: NSW Department of Planning, Industry and Environment
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Acid Sulfate Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Acid Sulfate Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
4	Works more than 2 metres below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered more than 2 metres below natural ground surface, present an environmental risk	Parramatta Local Environmental Plan 2011

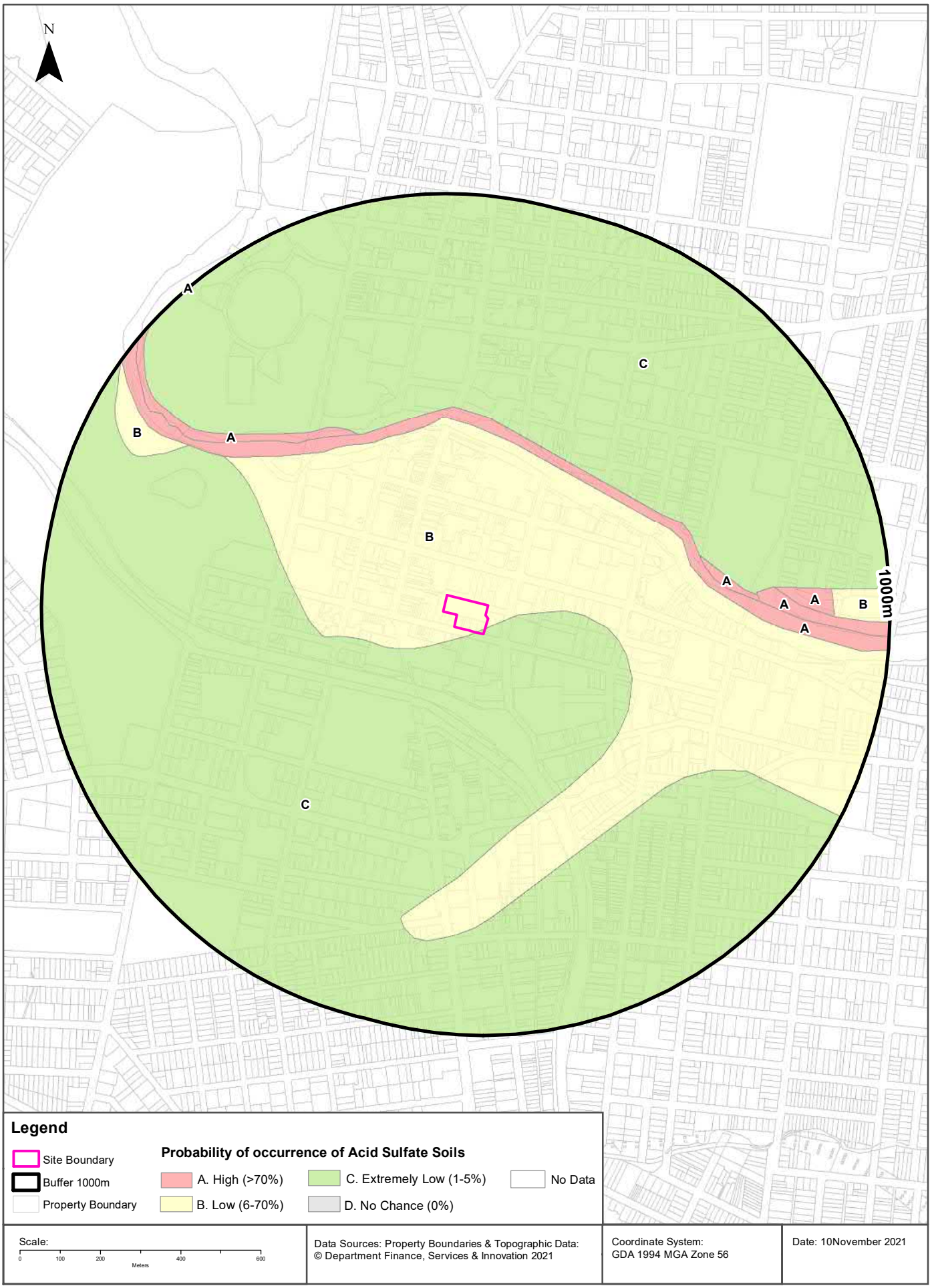
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

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Atlas of Australian Acid Sulfate Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Acid Sulfate Soils

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Atlas of Australian Acid Sulfate Soils

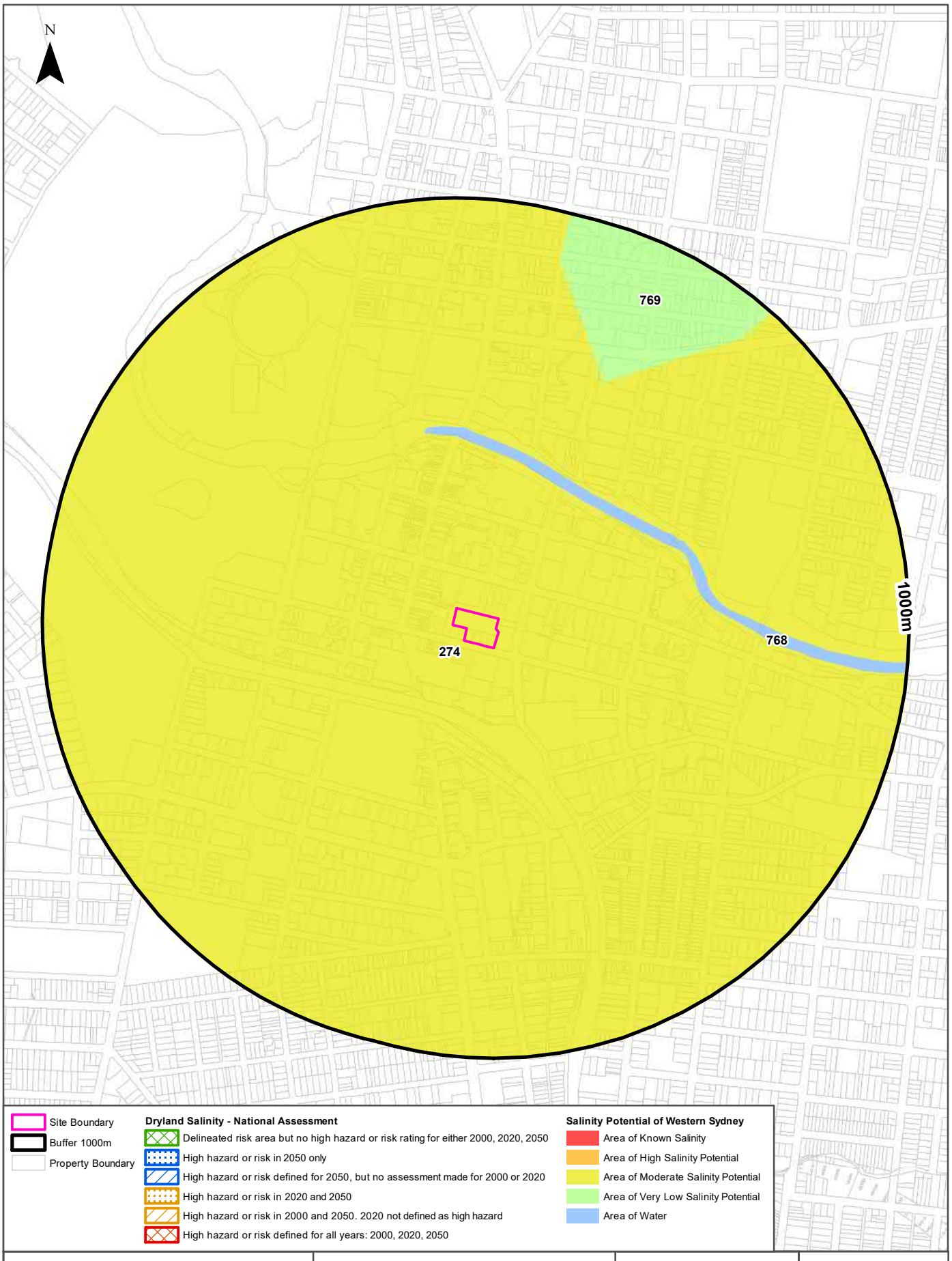
Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m	On-site
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m	On-site
A	High Probability of occurrence. >70% chance of occurrence.	384m	North

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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Dryland Salinity

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Dryland Salinity

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A		

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
274	MODERATE	Area of Moderate Salinity Potential	0m	On-site
768	WATER	Area of Water	352m	East
769	LOW	Area of Very Low Salinity Potential	630m	North East

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
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Mining

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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Mining & Exploration Titles

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Mining

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer								

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
EL0081	CONTINENTAL OIL CO OF AUSTRALIA LIMITED	01 Feb 1967	01 Feb 1968	MINERALS		0m	On-site
PEL0102	AUSTRALIAN OIL AND GAS CORPORATION LTD			PETROLEUM	Petroleum	0m	On-site
PEL0198	JOHN STREVENS (TERRIGAL) NL			PETROLEUM	Petroleum	0m	On-site
PEL0260	NORTH BULLI COLLIERIES PTY LTD, AGL PETROLEUM OPERATIONS PTY LTD, THE AUSTRALIAN GAS LIGHT CO.	9/09/1981	8/03/1993	PETROLEUM	Petroleum	0m	On-site
PEL0463	DART ENERGY (APOLLO) PTY LTD	22/10/2008	6/03/2015	PETROLEUM	Petroleum	0m	On-site
PEL0210	THE AUSTRALIAN GAS LIGHT COMPANY (AGL), NORTH BULLI COLLIERIES PTY LTD			PETROLEUM	Petroleum	0m	On-site
PSPAUTH17	MACQUARIE ENERGY PTY LTD	8/03/2007	7/03/2008	PETROLEUM	Petroleum	0m	On-site
PEL0005	AGL UPSTREAM INVESTMENTS PTY LIMITED	11/11/1993	4/03/2015	PETROLEUM	Petroleum	0m	On-site
PEL463	DART ENERGY (APOLLO) PTY LTD			MINERALS		0m	On-site
PEL5	AGL UPSTREAM INVESTMENTS PTY LIMITED			MINERALS		0m	On-site
EL0083	CONTINENTAL OIL CO OF AUSTRALIA LIMITED	01 Feb 1967	01 Feb 1968	MINERALS		387m	South
EL6212	HOT ROCK ENERGY PTY LTD,LONGREACH OIL LIMITED	4 Mar 2004	3 Mar 2013	MINERALS	Geothermal	398m	West
EL7513	GRADIENT ENERGY LIMITED	7 Apr 2010	15 Apr 2011	MINERALS	Geothermal	414m	West

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

State Environmental Planning Policy

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

State Significant Precincts

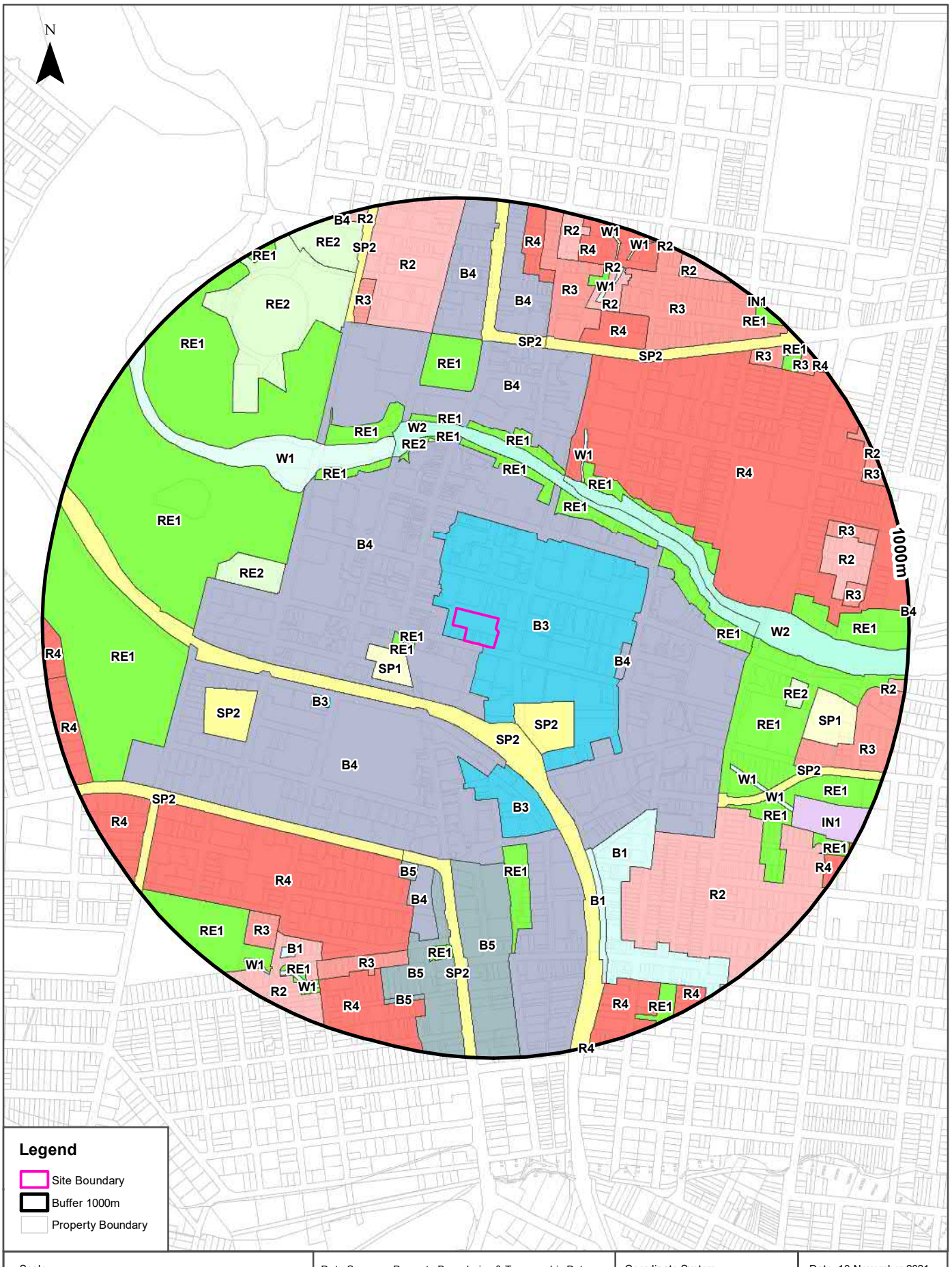
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No records in buffer							

State Environment Planning Policy Data Source: NSW Crown Copyright - Planning & Environment
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EPI Planning Zones

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Environmental Planning Instrument

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Land Zoning

What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
B3	Commercial Core		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	0m	On-site
B4	Mixed Use		Parramatta Local Environmental Plan 2011	18/06/2021	18/06/2021	18/06/2021	Amendment No 62	0m	South
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	93m	West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	128m	West
SP1	Special Activities	Place of Public Worship	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	134m	South West
SP2	Infrastructure	Defence	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	143m	South East
SP2	Infrastructure	Railway Corridor	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	162m	South West
B4	Mixed Use		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 43	191m	South West
B3	Commercial Core		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	278m	South
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	287m	North East
B4	Mixed Use		Parramatta Local Environmental Plan 2011	23/09/2016	23/09/2016	18/06/2021	Amendment No 12	299m	East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	302m	North
W2	Recreational Waterways		Parramatta Local Environmental Plan 2011	18/06/2021	18/06/2021	18/06/2021	Amendment No 62	349m	North East
B3	Commercial Core		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 43	350m	South West
W2	Recreational Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		362m	East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/06/2021	18/06/2021	18/06/2021	Amendment No 62	371m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	383m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	383m	North West
R4	High Density Residential		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	384m	North East
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		389m	North East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		390m	North East
B4	Mixed Use		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	395m	North
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	401m	North West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	408m	East
RE2	Private Recreation		Parramatta Local Environmental Plan 2011	18/06/2021	18/06/2021	18/06/2021	Amendment No 62	410m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	428m	West
RE2	Private Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	431m	West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	446m	North West

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	449m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	482m	South
SP2	Infrastructure	Cemetery	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	503m	West
B5	Business Development		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	523m	South
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	527m	South
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	530m	North West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	530m	North
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		531m	South West
B1	Neighbourhood Centre		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		537m	South East
B1	Neighbourhood Centre		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	539m	South East
B4	Mixed Use		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	556m	South
B5	Business Development		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	556m	South
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		556m	South West
B5	Business Development		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	557m	South
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		593m	South East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		598m	East
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		641m	South East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	645m	West
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		651m	South East
B4	Mixed Use		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	654m	North
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	654m	North
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		666m	North East
RE2	Private Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	672m	North West
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	673m	North
B4	Mixed Use		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	682m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		684m	South East
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		695m	North
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		702m	North East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	711m	East
RE2	Private Recreation		Parramatta Local Environmental Plan 2011	28/07/2017	28/07/2017	18/06/2021	Amendment No 20	720m	East
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	726m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	730m	South
SP2	Infrastructure	Classified Road	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	18/06/2021	Amendment No 40	739m	North
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		743m	North East

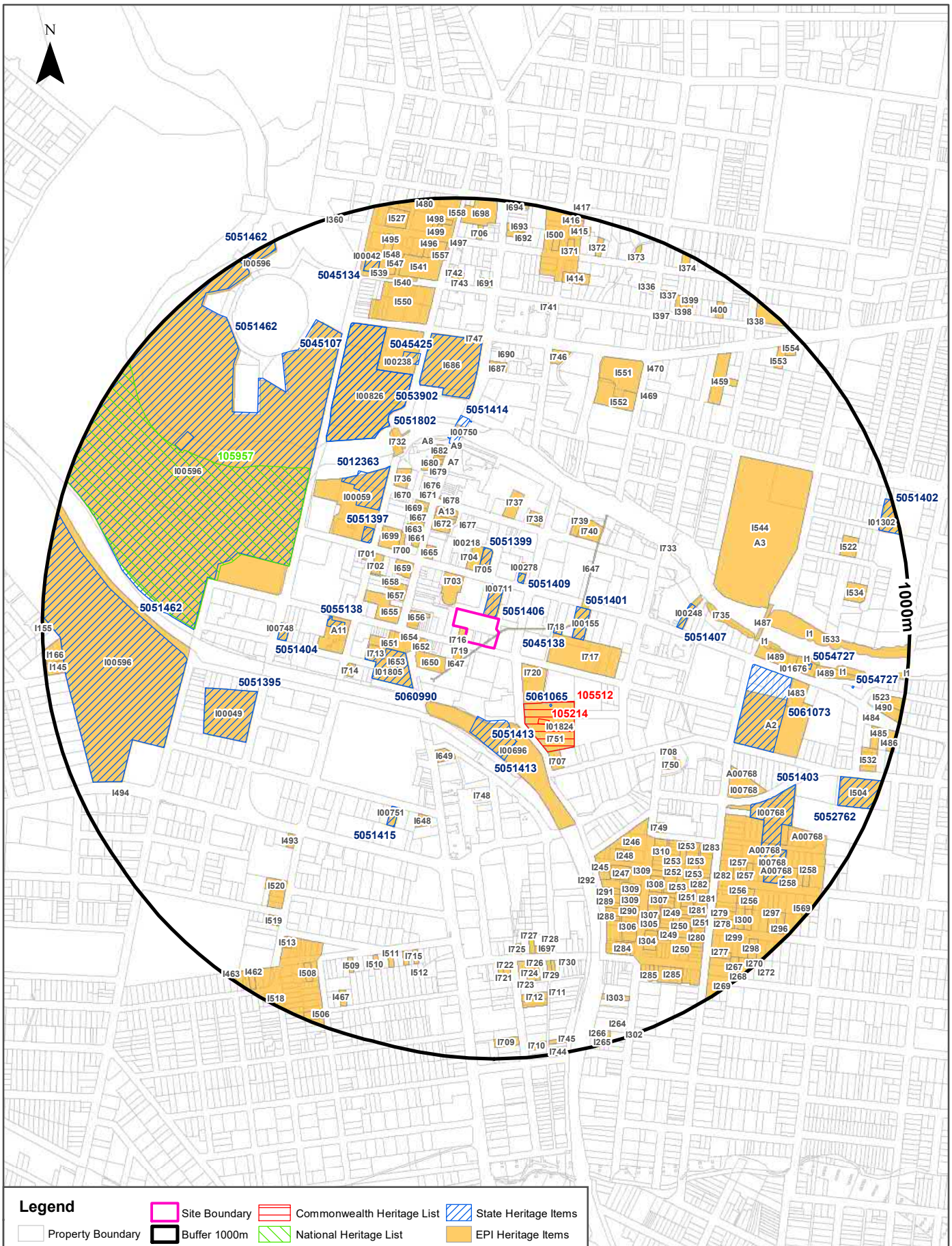
Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	14/09/2018	14/09/2018	18/06/2021	Amendment No 33	765m	South
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		768m	South East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		774m	South East
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		780m	East
SP1	Special Activities	Educational Establishment & Place of Worship	Parramatta Local Environmental Plan 2011	18/09/2015	18/09/2015	18/06/2021	Amendment No 11	780m	East
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		787m	East
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		787m	North
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	14/09/2018	14/09/2018	18/06/2021	Amendment No 33	807m	South West
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		808m	North
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	14/09/2018	14/09/2018	18/06/2021	Amendment No 33	812m	South West
IN1	General Industrial		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		814m	South East
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		820m	East
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		822m	North
R4	High Density Residential		Parramatta Local Environmental Plan 2011	14/09/2018	14/09/2018	18/06/2021	Amendment No 33	825m	South
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		836m	East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	28/07/2017	28/07/2017	18/06/2021	Amendment No 20	839m	South West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		842m	North
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		852m	South West
B1	Neighbourhood Centre		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		853m	South West
RE2	Private Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		854m	North
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		858m	South East
B5	Business Development		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		861m	South
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		864m	North
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		871m	North East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		878m	South West
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		887m	North
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		892m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		898m	South East
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		909m	South West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		912m	South East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		917m	South West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		918m	North East
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		919m	South West

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		922m	North
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		927m	North East
W1	Natural Waterways		Parramatta Local Environmental Plan 2011	28/07/2017	28/07/2017	18/06/2021	Amendment No 20	930m	South West
R3	Medium Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		943m	North East
R4	High Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		944m	West
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		944m	North East
R4	High Density Residential		Holroyd Local Environmental Plan 2013	05/04/2013	05/08/2013	14/08/2020		951m	West
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		954m	North East
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		955m	East
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		966m	North
RE1	Public Recreation		Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	18/06/2021	Amendment No 10	976m	North West
B4	Mixed Use		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		981m	North
R2	Low Density Residential		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		994m	North East
IN1	General Industrial		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		996m	North East
B4	Mixed Use		Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	18/06/2021		998m	East

Environmental Planning Instrument Data Source: NSW Crown Copyright - Planning & Environment
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Heritage Items

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Legend

- Property Boundary
- Site Boundary
- Buffer 1000m
- Commonwealth Heritage List
- National Heritage List
- State Heritage Items
- EPI Heritage Items

Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021
Heritage - NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Heritage

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
105512	Lancer Barracks Precinct	Smith St, Parramatta NSW	1/14/028/0016	Historic	Listed place	22/06/2004	152m	South East
105214	Lancer Barracks	Smith St, Parramatta NSW	1/14/028/0016	Historic	Listed place	22/06/2004	203m	South East

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
105957	Old Government House and the Government Domain	O'Connell St, Parramatta NSW	1/14/028/0109	Historic	Listed place	01/08/2007	422m	West

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
5051406	Roxy Theatre	65-69 George Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00711	1762	1m	North East
5051409	Shop and office	88-92 George Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00278	694	101m	North East
5051399	Redcoats Mess House	Horwood Place, Parramatta	CITY OF PARRAMATTA	02/04/1999	00218	525	116m	North
5045138	Warders Cottages	1 and 3 Barrack Lane Parramatta	CITY OF PARRAMATTA	02/04/1999	00709	1760	132m	East
5060990	St John's Anglican Cathedral	195 Church Street Parramatta	CITY OF PARRAMATTA	05/03/2010	01805	2305	134m	South West
5051413	Parramatta Railway Station	Great Western Railway, Parramatta	CITY OF PARRAMATTA	02/04/1999	00696	1746	170m	South
5051401	Perth House and Stables	85 George Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00155	346	178m	East
5061065	1st/15th Royal NSW Lancers Memorial Museum Collection	Linden House 2 Smith Street Parramatta	CITY OF PARRAMATTA	14/05/2010	01824	2924	193m	South East
5051413	Parramatta Railway Station	Great Western Railway, Parramatta	CITY OF PARRAMATTA	02/04/1999	00696	1746	233m	South
5055138	Archaeological Site and associated artefacts	45 Macquarie street, Parramatta	CITY OF PARRAMATTA	05/07/2019	02027	3220	264m	West

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
5051397	Parramatta District Hospital - Brislington and Landscape	10 George Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00059	253	265m	North West
5012363	Parramatta District Hospital - Archaeology	Marsden Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00828	2689	305m	North West
5051414	Lennox Bridge	349-351 (adj) Church Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00750	1813	394m	North
5051404	Travellers Rest Inn Group	12,14,16 O'Connell Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00748	1810	397m	West
5051462	Parramatta Park and Old Government House	O'Connell Street, Parramatta	CITY OF PARRAMATTA	02/04/1999	00596	1547	422m	North West
5051407	Harrisford	182 George Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00248	588	432m	East
5051415	Lennox House	39 Campbell Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00751	1814	436m	South West
5051802	Marsden Rehabilitation Centre Group	Marsden Street, Parramatta	CITY OF PARRAMATTA	02/04/1999	00826	1843	461m	North West
5045107	Kings School Group (former)	3 Marist Place Parramatta	CITY OF PARRAMATTA	02/04/1999	00771	1843	461m	North West
5051395	St John's Anglican Cemetery	1 O'Connell Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00049	419	503m	West
5053902	Prince Alfred Square and potential archaeological site	353 Church Street, Parramatta	CITY OF PARRAMATTA	28/08/2017	01997	3136	512m	North
5045425	Murphys House	1 Marist Place Parramatta	CITY OF PARRAMATTA	02/04/1999	00238	555	602m	North
5061073	Ancient Aboriginal and Early Colonial Landscape	Robin Thomas Reserve , Harris Park	CITY OF PARRAMATTA	08/07/2011	01863	2463	619m	East
5051462	Parramatta Park and Old Government House	O'Connell Street, Parramatta	CITY OF PARRAMATTA	02/04/1999	00596	1547	653m	West
5051403	Experiment Farm Cottage	9 Ruse Street Harris Park	CITY OF PARRAMATTA	02/04/1999	00768	1837	732m	South East
5054727	HMAS Parramatta shipwreck and memorials	Historic Shipwreck: Cascade Gully Memorials Parramatta and Sydney Parramatta	CENTRAL COAST	15/12/2006	01676	2188	756m	East
5045134	Roseneath Cottage	40-42 O'Connell Street Parramatta	CITY OF PARRAMATTA	02/04/1999	00042	211	841m	North
5054727	HMAS Parramatta shipwreck and memorials	Historic Shipwreck: Cascade Gully Memorials Parramatta and Sydney Parramatta	CENTRAL COAST	15/12/2006	01676	2188	870m	East
5052762	Hambledon Cottage, Grounds and Archaeology	Hassall Street	CITY OF PARRAMATTA	21/09/2012	01888	2547	899m	South East
5051402	Broughton House	43a Thomas Street Parramatta	CITY OF PARRAMATTA	01/10/1999	01302	3098	949m	East

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Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I716	Kia Ora (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	0m	On-site

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I647	Residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	0m	On-site
I00711	Roxy Cinema	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	1m	North East
I703	Shops (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	13m	North West
I719	Leigh Memorial Uniting Church	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	18m	South West
I650	Parramatta Town Hall (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	61m	South West
I656	House	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	61m	West
I652	House	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	71m	West
I720	Arthur Phillip High School (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	73m	South East
I651	Milestone	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	84m	West
I705	Dr Pringles Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	99m	North
I704	Civic Arcade (former theatre) (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	99m	North
I00278	Shop and office (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	101m	North East
I654	House	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	104m	West
I00218	Redcoats Mess House (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	116m	North
I717	Convict barracks wall	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	128m	East
I658	HMV (former Commonwealth Bank) (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	131m	North West
I657	Telstra House (former post office) (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	131m	West
I718	Cottages (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	132m	East
I655	House	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	133m	West
I01805	St Johns Anglican Cathedral	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	134m	South West

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I653	House	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	134m	South West
I665	Westpac Bank	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	134m	North West
I659	Former courthouse wall and sandstone cellblock (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	137m	North West
I751	Lancer Barracks group	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	152m	South East
I01824	1st/15th Royal NSW Lancer Museum collection	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	152m	South East
I647	Residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	156m	East
I00696	Parramatta Railway Station	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	162m	South
I713	St Johns Parish Hall	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	171m	West
I660	Parramatta House (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	176m	North West
I00155	Perth House, Moreton Bay fig tree (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	178m	East
I672	Sandstone and brick wall	Item - General	Local	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	185m	North
I700	Former Rural Bank	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	191m	North West
I661	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	193m	North West
I662	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	196m	North West
I647	Residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	201m	North East
I663	Shop (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	202m	North West
I699	Court house tower	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	204m	North West
I702	Woolpack Hotel (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	207m	North West
I664	Shops and offices	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	216m	North West
I677	Shop (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	217m	North
A13	Potential Archaeological Site	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	224m	North

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I666	Shop (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	228m	North West
I667	Shop (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	231m	North West
I668	Shop (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	235m	North West
I669	Shops (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	240m	North West
I738	St Georges Terrace (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	245m	North East
I737	Willow Grove (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	246m	North
A11	Archaeological site	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	250m	West
I701	Marsdens Building (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	251m	North West
I670	Shop, office (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	254m	North West
I714	Two-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	256m	West
I678	Former ANZ Bank (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	261m	North
I00059	Parramatta hospital archaeological site	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	265m	North West
I649	Shop (former fire station)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	266m	South
I739	Barnabys Restaurant (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	268m	North East
I740	Office (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	273m	North East
I671	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	283m	North
I707	Commercial Hotel	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	284m	South East
I673	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	287m	North
I674	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	292m	North
I675	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	296m	North
I676	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	301m	North

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I736	Former St Andrews Uniting Church, hall (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	317m	North West
I679	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	336m	North
I748	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	349m	South
I680	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	351m	North
I681	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	354m	North
A7	Archaeological and terrestrial	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	363m	North
I682	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	372m	North
A8	Archaeological and terrestrial	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	383m	North
A9	Archaeological and terrestrial	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	387m	North
A10	Archaeological and terrestrial	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	392m	North
I00748	Travellers Rest Inn Group (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	397m	West
I732	Parramatta Dam archaeological site weir	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	401m	North West
I00750	Lennox Bridge	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	416m	North
I00596	Parramatta Park and old government house	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	422m	North West
I00248	Harrisford (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	433m	East
I648	Road structures	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	434m	South
I00751	Lennox House (and adjoining brick wall on footpath)	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	437m	South West
I733	Charles Street Weir	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	440m	North East
I00826	Marsden Rehabilitation Centre and potential archaeological site	Item - General	State	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	461m	North West
I708	Semi-detached cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	480m	South East
I750	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	492m	South East
I00049	St Johns Anglican Cemetery	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	503m	West

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I735	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	506m	East
I686	Alfred Square (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	512m	North
A3	Newlands gates, trees and archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	527m	East
I544	Newlands gates, trees and archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	527m	East
	Harris Park West Conservation Area	Conservation Area - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	552m	South East
I246	Two timber cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	569m	South East
I552	All Saints Hall	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	575m	North East
I469	All Saints Parochial Schools	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	575m	North East
I245	Single storey residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	578m	South East
I749	Single-storey shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	578m	South East
I248	Terrace houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	580m	South East
I00238	St Patricks Cathedral, presbytery and precinct (and potential archaeological site)	Item - General	State	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	580m	North
I687	St Peters Uniting Church and studio theatre (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	585m	North
I247	Group of timber houses (Nos. 5 - 13)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	597m	South East
I292	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	597m	South East
I690	Anthony Malouf and Co	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	601m	North
I310	Single storey residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	604m	South East
I551	All Saints Church	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	609m	North East
A2	Robin Thomas Reserve	Item - Archaeological	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	618m	East
I487	Gasworks Bridge	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	619m	East
I489	Queen's Wharf Reserve and stone wall and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	623m	East
I309	Group of dwellings (Nos. 84, 88-92, 94 & 102)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	626m	South East

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I493	Veterinary Surgery	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	627m	South West
I252	Group of cottages (Nos. 25 - 51)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	630m	South East
I746	Rose and Crown Hotel (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	635m	North
I291	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	636m	South East
I1	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	639m	East
I00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	641m	South East
A00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	641m	South East
I00596	Parramatta Park and old government house	Item - General	State	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	644m	West
I309	Group of dwellings (Nos. 84, 88-92, 94 & 102)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	648m	South East
I1	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	649m	East
I290	Terrace house	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	650m	South East
I747	Horse trough	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	657m	North
I253	Group of cottages (Nos. 36-38 & 42-52)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	664m	South East
I289	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	670m	South East
I308	Single storey residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	671m	South East
I309	Group of dwellings (Nos. 84, 88-92, 94 & 102)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	679m	South East
A00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	684m	South East
I00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	684m	South East
I253	Group of cottages (Nos. 36-38 & 42-52)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	688m	South East
	Experiment Farm Conservation Area	Conservation Area - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	691m	South East
I253	Group of cottages (Nos. 36-38 & 42-52)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	692m	South East
I283	Group of cottages (Nos. 100 - 110)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	693m	South East

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I550	Convent of Our Lady of Mercy and associated buildings	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	695m	North
I306	Group of cottages (Nos. 62-80)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	696m	South East
I288	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	702m	South East
I727	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	703m	South
I253	Group of cottages (Nos. 36-38 & 42-52)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	708m	South East
I307	Group of cottages (Nos. 73 - 79)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	708m	South East
I470	Single storey residence and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	709m	North East
I253	Group of cottages (Nos. 36-38 & 42-52)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	719m	South East
I483	Tara (also known as Ellengowan)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	720m	East
I725	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	721m	South
I01676	HMAS Parramatta shipwreck and memorials	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	721m	East
I520	Single storey residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	727m	South West
I249	Group of cottages (Nos. 3-5 & 9-21)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	729m	South East
I728	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	730m	South
I697	Jeshyron	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	731m	South
I459	Single storey cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	21/02/2020	21/02/2020	26/02/2021	732m	North East
I251	Group of cottages (Nos. 24 - 32)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	739m	South East
I696	Llonells	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	741m	South
I282	Group of cottages (Nos. 90 - 98)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	743m	South East
I1	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	745m	East
I307	Group of cottages (Nos. 73 - 79)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	745m	South East
I249	Group of cottages (Nos. 3-5 & 9-21)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	749m	South East
I282	Group of cottages (Nos. 90 - 98)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	750m	South East
I305	House	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	753m	South East

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I715	Semi-detached cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	755m	South
I741	Electricity substation (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	758m	North
I722	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	765m	South
I512	Semi-detached cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	765m	South
I723	ResidenceMona	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	765m	South
I721	House/ Industrial	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	766m	South
I724	Attached house and office	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	766m	South
I726	Attached house and office	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	768m	South
I489	Queen's Wharf Reserve and stone wall and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	771m	East
I284	Group of cottages (Nos. 42 - 48)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	771m	South East
I729	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	772m	South
I251	Group of cottages (Nos. 24 - 32)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	773m	South East
I730	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	774m	South
I304	Group of cottages (Nos. 59-65)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	776m	South East
I281	Group of cottages (Nos. 82 - 88)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	776m	South East
I511	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	778m	South
I257	Cottages (Nos. 6 &10)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	780m	South East
I281	Group of cottages (Nos. 82 - 88)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	782m	South East
I691	Royal Oak Hotel and stables (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	786m	North
I743	Wine bar bistro	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	791m	North
I510	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	792m	South
I742	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	793m	North
I250	Group of cottages (Nos. 4-6 & 12-20)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	794m	South East

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I249	Group of cottages (Nos. 3-5 & 9-21)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	796m	South East
I541	Lurlinea and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	800m	North
	North Parramatta Conservation Area	Conservation Area - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	802m	North
I257	Cottages (Nos. 6 &10)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	806m	South East
I519	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	807m	South West
I00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	810m	South East
I533	Stone wall	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	810m	East
I280	Group of cottages (Nos. 64-72 & 76-78)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	810m	South East
A00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	810m	South East
	South Parramatta Conservation Area	Conservation Area - General	Local	Parramatta Local Environmental Plan 2011	14/09/2018	14/09/2018	26/02/2021	812m	South West
I509	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	818m	South
I1	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	825m	East
I540	Conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	828m	North
I256	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	831m	South East
I280	Group of cottages (Nos. 64-72 & 76-78)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	831m	South East
I279	Cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	832m	South East
	Sorrell Street Conservation Area	Conservation Area - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	832m	North
I414	Gate posts of former villa	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	834m	North
I513	Pair of cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	834m	South West
I539	Single storey residence and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	836m	North
I534	Palms	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	840m	East
I00042	Roseneath and potential archaeological site	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	841m	North
I522	Wavertree	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	842m	East

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I712	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	845m	South
A00768	Experiment Farm environs & archaeological site (part)	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	845m	South East
I278	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	846m	South East
I250	Group of cottages (Nos. 4-6 & 12-20)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	846m	South East
I256	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	847m	South East
I557	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	850m	North
I547	Compax	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	850m	North
I300	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	854m	South East
I496	Conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	856m	North
I548	Carlosa	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	860m	North
I285	Group of cottages (Nos. 65 & 69-79)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	860m	South East
I397	Timber cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	861m	North East
I497	Single storey residence and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	862m	North
I711	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	862m	South
I398	Conjoined residences and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	866m	North East
I508	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	869m	South West
I285	Group of cottages (Nos. 65 & 69-79)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	871m	South East
I399	Chivendon and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	871m	North East
I336	Conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	876m	North East
I299	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	880m	South East
I495	Conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	880m	North
I303	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	881m	South
I337	Single storey cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	881m	North East

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I258	Group of cottages (Nos. 22, 24 & 28)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	885m	South East
I494	Milestone	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	897m	South West
I467	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	898m	South
I706	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	899m	North
I504	Hambledon Cottage and all trees	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	899m	South East
I500	Single storey residence and potential archaeological site	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	902m	North
I277	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	904m	South East
I400	Timber cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	904m	North East
I553	Dunblane	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	906m	North East
I371	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	907m	North
I499	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	913m	North
I372	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	914m	North
I498	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	915m	North
I692	Shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	915m	North
I484	Trees in median strip	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	917m	East
I297	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	922m	South East
I532	Timber cottages	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	925m	East
I258	Group of cottages (Nos. 22, 24 & 28)	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	925m	South East
I373	Grose Manor	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	929m	North East
I693	Commercial building	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	929m	North
I527	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	933m	North
I698	Stable (and potential archaeological site)	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	933m	North
I558	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	933m	North
I485	Bulimba	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	934m	East

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I490	Residential flats and houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	937m	East
I298	Nerdy	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	940m	South East
I296	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	941m	South East
I523	Residential flats and houses	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	944m	East
I554	Canberra and Roach Manor	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	945m	North East
I709	Two-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	946m	South
I267	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	946m	South East
I01302	Broughton House	Item - General	State	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	949m	East
I462	Debsmor	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	951m	South West
I145	'Allengreen', Federation bungalow	Item - General	Local	Holroyd Local Environmental Plan 2013	05/04/2013	05/08/2013	09/10/2015	952m	West
I415	Two storey conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	952m	North
I166	Inter-war (Mediterranean influences) apartment block	Item - General	Local	Holroyd Local Environmental Plan 2013	05/04/2013	05/08/2013	09/10/2015	953m	West
I338	Old Wesleyan Cemetery	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	954m	North East
I268	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	960m	South East
I374	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	962m	North East
I266	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	962m	South
I745	Single-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	963m	South
I506	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	963m	South West
I710	Attached houses	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	964m	South
I265	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	966m	South
I264	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	970m	South
I416	Timber cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	972m	North
I486	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	975m	East
I270	Esperanto	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	975m	South East

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I1	Wetlands	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	975m	East
I569	Cottage	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	981m	South East
I518	Conjoined residences	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	981m	South West
I463	Elaine	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	982m	South West
I155	Federation residence	Item - General	Local	Holroyd Local Environmental Plan 2013	05/04/2013	05/08/2013	09/10/2015	983m	West
I480	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	985m	North
I417	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	988m	North
I269	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	988m	South East
I272	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	989m	South East
I694	Bicycle shop	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	989m	North
I360	Heritage brick drain	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	992m	North
I744	Two-storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	18/12/2015	18/12/2015	26/02/2021	993m	South
I302	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	998m	South
I271	Single storey residence	Item - General	Local	Parramatta Local Environmental Plan 2011	07/10/2011	07/10/2011	26/02/2021	999m	South East

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Natural Hazards

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
No records in buffer		

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & Ramsar Wetlands

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150



Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2021

Coordinate System: GDA 1994 MGA Zone 56

Date: 10 November 2021

Ecological Constraints

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Native Vegetation

What native vegetation exists within the dataset buffer?

Map ID	Map Unit Name	Threatened Ecological Community NSW	Threatened Ecological Community EPBC Act	Understorey	Disturbance	Disturbance Index	Dominant Species	Dist	Dir
Urban_E/N	Urban_E/N: Urban Exotic/Native			00: Not assessed	00: Not assessed	0: Not assessed	Urban Exotic/Native	91m	West
S_FoW06	S_FoW06: Cumberland Riverflat Forest	River Flat Eucalypt Forest		20: Weeds and exotics	20: Previously cleared 1943	3: High	E.tereticornis/E.amplifolia/A.floribunda	372m	North West
Weed_Ex	Weed_Ex: Weeds and Exotics			00: Not assessed	00: Not assessed	0: Not assessed	Exotic Species >90%cover	411m	North East
S_FoW06	S_FoW06: Cumberland Riverflat Forest	River Flat Eucalypt Forest		15: Grassy natives and exotics	19: Clearing/Part clearing	4: Very high	E.tereticornis/E.amplifolia/A.floribunda	446m	North West
S_FoW07	S_FoW07: Cumberland Swamp Oak Riparian Forest	River Flat Eucalypt Forest		15: Grassy natives and exotics	20: Previously cleared 1943	3: High	C.glaucaEucalypts	456m	North West
Plant_n	Plant_n: Plantation (native and/or exotic)			00: Not assessed	00: Not assessed	0: Not assessed	Native or Exotic Plantations	459m	West
S_SW01	S_SW01: Estuarine Mangrove Forest			00: Not assessed	00: Not assessed	0: Not assessed	Mangroves	484m	East
S_SW02	S_SW02: Estuarine Saltmarsh	Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh (possible)	00: Not assessed	00: Not assessed	0: Not assessed	S.repens/S.quinqueflora/S.virginicusJ.krausii	563m	East
S_FoW07	S_FoW07: Cumberland Swamp Oak Riparian Forest	River Flat Eucalypt Forest		18: Swampy sedges, shrubs, ferns and herbs	13: Weeds	3: High	C.glaucaEucalypts	627m	North West
S_GW03	S_GW03: Cumberland Shale Plains Woodland	Cumberland Plain Woodland	Cumberland Plain Woodland/ Shale Gravel Forest (possible)	20: Weeds and exotics	20: Previously cleared 1943	3: High	E.tereticornis/E.moluccannaE.crebra/E.eugeinioides	690m	West
S_GW03	S_GW03: Cumberland Shale Plains Woodland	Cumberland Plain Woodland	Cumberland Plain Woodland/ Shale Gravel Forest (possible)	15: Grassy natives and exotics	31: Parkland open understorey	4: Very high	E.tereticornis/E.moluccannaE.crebra/E.eugeinioides	919m	West
S_FoW06	S_FoW06: Cumberland Riverflat Forest	River Flat Eucalypt Forest		15: Grassy natives and exotics	20: Previously cleared 1943	3: High	E.tereticornis/E.amplifolia/A.floribunda	941m	North West

Native Vegetation of the Sydney Metropolitan Area : NSW Office of Environment and Heritage
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Ramsar Wetlands

What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

Ecological Constraints

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
N/A	No records in buffer					

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Ecological Constraints

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
N/A	No records in buffer					

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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Ecological Constraints

Macquarie Street, Macquarie Lane & George Street, Parramatta, NSW 2150

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Endangered Population, Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black-Cockatoo (inland subspecies)	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Cuculus optatus	Oriental Cuckoo	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Endangered Population, Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Falco hypoleucos	Grey Falcon	Endangered	Category 2	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Falco subniger	Black Falcon	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Gelochelidon nilotica	Gull-billed Tern	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Motacilla flava	Yellow Wagtail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Philomachus pugnax	Ruff	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Thalasseus bergii	Crested Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA;JAMBA
Animalia	Aves	Tringa glareola	Wood Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA;JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA;JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA;JAMBA
Animalia	Aves	Tyto longimembris	Eastern Grass Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA;JAMBA
Animalia	Gastropoda	Meridolum corneovirens	Cumberland Plain Land Snail	Endangered	Not Sensitive	Not Listed	
Animalia	Gastropoda	Pommerhelix duralensis	Dural Land Snail	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Phascogale tapoatafa	Brush-tailed Phascogale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Vespadelus troughtoni	Eastern Cave Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Aspidites ramsayi	Woma	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Reptilia	Tiliqua occipitalis	Western Blue-tongued Lizard	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia cluniesrossiae	Kanangra Wattle	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia pubescens	Downy Wattle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Argyrotegium nitidulum	Shining Cudweed	Vulnerable	Not Sensitive	Vulnerable	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Callistemon linearifolius	Netted Bottle Brush	Vulnerable	Category 3	Not Listed	
Plantae	Flora	Darwinia biflora		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Dillwynia tenuifolia		Endangered Population, Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Dillwynia tenuifolia		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Epacris purpurascens var. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus leucoxylon subsp. pruinosa	Yellow Gum	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Genoplesium baueri	Bauer's Midge Orchid	Endangered	Category 2	Endangered	
Plantae	Flora	Grammitis stenophylla	Narrow-leaf Finger Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Grevillea beadleana	Beadle's Grevillea	Endangered	Category 3	Endangered	
Plantae	Flora	Hibbertia superans		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Isotoma fluviatilis subsp. fluviatilis		Not Listed	Not Sensitive	Extinct	
Plantae	Flora	Leptospermum deanei		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Macadamia tetraphylla	Rough-shelled Bush Nut	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Marsdenia viridiflora subsp. viridiflora	Native Pear	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Melaleuca deanei	Deane's Paperbark	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia nutans	Nodding Geebung	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pimelea curviflora var. curviflora		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Pimelea spicata	Spiked Rice-flower	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pomaderris brunnea	Brown Pomaderris	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Pomaderris prunifolia	Plum-leaf Pomaderris	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Pterostylis gibbosa	Illawarra Greenhood	Endangered	Category 2	Endangered	
Plantae	Flora	Pterostylis saxicola	Sydney Plains Greenhood	Endangered	Category 2	Endangered	
Plantae	Flora	Pultenaea parviflora		Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Pultenaea pedunculata	Matted Bush-pea	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Rhodamnia rubescens	Scrub Turpentine	Critically Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Senecio behrianus		Presumed Extinct	Not Sensitive	Endangered	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Tetratheca glandulosa		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Triplarina imbricata	Creek Triplarina	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Wahlenbergia multicaulis	Tadgell's Bluebell	Endangered Population	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Wilsonia backhousei	Narrow-leafed Wilsonia	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Zannichellia palustris		Endangered	Not Sensitive	Not Listed	

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available or methodologies licensed to Lotsearch by third parties with whom Lotsearch has contractual arrangements (**Third Party Content Suppliers**); and
      (ii) content which is derived from content described in paragraph (i);
   (b) Neither Lotsearch nor Third Party Content Suppliers takes any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report including any contaminated land assessment or other assessment included as part of a Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**) and accordingly neither Lotsearch nor Third Party Content Suppliers gives any warranty in relation to the accuracy or completeness of the Third Party Content incorporated into the report including any contaminated land assessment or other assessment included as part of a Report;
   (d) Reports are generated at a point in time (as specified by the date/time stamp appearing on the Report) and accordingly the Report is based on the information available at that point in time and Lotsearch is not obliged to undertake any additional reporting to take into consideration any information that may become available between the point in time specified by the date/time stamp and the date on which the Report was provided by Lotsearch to the purchaser of the Report;
   (e) Reports must be used or reproduced in their entirety and End User must not reproduce or make available to other persons only parts of the Report;
   (f) Lotsearch has not undertaken any physical inspection of the property;
   (g) neither Lotsearch nor Third Party Content Suppliers warrants that all land uses or features whether past or current are identified in the Report;
   (h) the Report does not include any information relating to the actual state or condition of the Property;
   (i) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of Land or Property for any particular purpose
   (j) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (k) the End User should undertake its own inspections of the Land or Property to satisfy itself that there are no defects or failures
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. The End User hereby to the maximum extent permitted by law:
   (a) acknowledges that the Lotsearch (nor any of its officers, employees or agents), nor any of its Third Party Content Supplier have any liability to it under or in connection with the

Report or these Terms;

(b) waives any right it may have to claim against Third Party Content Supplier in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms; and

(c) releases each Third Party Content Supplier from any claim it may have otherwise had in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms.

5. The End User acknowledges that any Third Party Supplier shall be entitled to plead the benefits conferred on it under clause 4, despite not being a party to these terms.
6. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
7. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
8. To the extent permitted by law and subject to paragraph 9, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these Terms other than as expressly set out in these Terms are excluded.
9. Subject to paragraph 6, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
10. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
11. Subject to paragraph 9, neither Lotsearch nor the End User is liable to the other for:
    (a) any indirect, incidental, consequential, special or exemplary damages arising out of or in relation to the Report or these Terms; or
    (b) any loss of profit, loss of revenue, loss of interest, loss of data, loss of goodwill or loss of business opportunities, business interruption arising directly or indirectly out of or in relation to the Report or these Terms,

    irrespective of how that liability arises including in contract or tort, liability under indemnity or for any other common law, equitable or statutory cause of action or otherwise.
12. These Terms are subject to New South Wales law.

Appendix IX – Section 10.7 Certificate

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**20-22 Alexandra Avenue WESTMEAD NSW 2145**
Title:	**SP 67282**
Land No:	129297
Certificate No:	PC2021/5680
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

Yes

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**24 Alexandra Avenue WESTMEAD NSW 2145**
Title:	**Lot 42 Sec A DP 4036**
Land No:	80082
Certificate No:	PC2021/5666
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**9-11 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 1 DP 949987**
Land No:	95614
Certificate No:	PC2021/5670
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

Yes

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**37 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 14A DP 434199**
Land No:	80978
Certificate No:	PC2021/5678
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**35 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 16A DP 434199**
Land No:	80977
Certificate No:	PC2021/5677
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**33 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 18 Sec A DP 4036**
Land No:	80975
Certificate No:	PC2021/5676
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**33 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 19 Sec A DP 4036**
Land No:	80976
Certificate No:	PC2021/5675
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**31 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 20 Sec A DP 4036**
Land No:	80973
Certificate No:	PC2021/5674
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**31 Bailey Street WESTMEAD NSW 2145**
Title:	**Lot 21 Sec A DP 4036**
Land No:	80974
Certificate No:	PC2021/5673
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**21 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 26 Sec A DP 4036**
Land No:	95619
Certificate No:	PC2021/5672
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

Yes

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**21 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 27 Sec A DP 4036**
Land No:	93852
Certificate No:	PC2021/5671
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**3 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 35 Sec A DP 4036**
Land No:	95611
Certificate No:	PC2021/5669
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**3 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 36 Sec A DP 4036**
Land No:	95612
Certificate No:	PC2021/5668
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**3 Hassall Street WESTMEAD NSW 2145**
Title:	**Lot 37 Sec A DP 4036**
Land No:	95613
Certificate No:	PC2021/5667
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

Yes

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**24 Alexandra Avenue WESTMEAD NSW 2145**
Title:	**Lot 43 Sec A DP 4036**
Land No:	80083
Certificate No:	PC2021/5665
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**24 Alexandra Avenue WESTMEAD NSW 2145**
Title:	**Lot 44 Sec A DP 4036**
Land No:	80084
Certificate No:	PC2021/5664
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**26 Alexandra Avenue WESTMEAD NSW 2145**
Title:	**Lot 45 Sec A DP 4036**
Land No:	104594
Certificate No:	PC2021/5663
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**139 Hawkesbury Road WESTMEAD NSW 2145**
Title:	**SP 1871**
Land No:	129263
Certificate No:	PC2021/5682
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**27-29 Bailey Street WESTMEAD NSW 2145**
Title:	**SP 51391**
Land No:	122548
Certificate No:	PC2021/5679
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

No

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

CUMBERLAND
CITY COUNCIL

APPLICANT: Lotsearch Pty Ltd
Level 3
68 Alfred Street
MILSONS POINT NSW 2061

PLANNING CERTIFICATE

Issued under section 10.7(2) Environmental Planning and Assessment Act 1979

Property:	**15-19 Hassall Street WESTMEAD NSW 2145**
Title:	**SP 61570**
Land No:	127384
Certificate No:	PC2021/5681
Certificate Date:	18/11/2021
Applicant's Ref:	LS026281

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 - Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Cumberland Local Environmental Plan 2021

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
State Environmental Planning Policy No. 30 – Intensive Agriculture
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 50 – Canal Estates
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 – Advertising and Signage
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)
State Environmental Planning Policy – SEPP (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy – Building Sustainability Index: BASIX 2004
State Environmental Planning Policy – (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy – (Infrastructure) 2007
State Environmental Planning Policy – (Temporary Structures) 2007
State Environmental Planning Policy – (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy – (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy – (Affordable Rental Housing) 2009
State Environmental Planning Policy – (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy – (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy – (Primary Production and Rural Development) 2019
State Environmental Planning Policy – (State and Regional Development) 2011
State Environmental Planning Policy – (Concurrences) 2018
State Environmental Planning Policy No. 21 – Caravan Parks

Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2 – 1995)
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

No proposed environmental planning instruments apply

3. The following development control plans apply to the carrying out of development on the land:

Cumberland Development Control Plan 2021

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in ITEM 1(1) above

Zone R4 High Density Residential

1. Objectives of zone

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that non-residential land uses are located in a setting that minimises impacts on the amenity of a high density residential environment.
- To encourage residential development that maintains the amenity of the surrounding area.

2. Permitted without consent

Home occupations

3. Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Home industries; Hostels; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Residential flat buildings; Respite day care centres; Roads; Seniors housing; Shop top housing; Water recycling facilities; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewerage systems; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in ITEM 1(2) above

No draft zoning applies to the land

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft environmental planning instrument

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Complying development can be carried out subject to the land not being affected by flooding referred to in ITEM 7A(1).

Housing Code
Yes, under the Housing Code complying development may be carried out on the land.

Low Rise Housing Diversity Code
Yes, under the Low Rise Housing Diversity Code complying development may be carried out on the land.

Rural Housing Code
Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code
Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code
Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code
Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code
Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code
Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code
Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code
Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code
Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – (Repealed)

ITEM 4A – (Repealed)

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal

protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or
(b) Any environmental planning instrument; or
(c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

(a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No
(vii)	Other Risk	No

ITEM 7A – Flood related development controls information

1. Is the land or part of the land within the flood planning area and subject to flood - related development controls.

Yes

2. Is the land or part of the land between the flood planning area and the probable maximum flood (PMF) and subject to flood-related development controls.

No

3. In this clause -

flood planning area *has the same meaning as in the Floodplain Development Manual.*

Floodplain Development Manual *means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

probable maximum flood *has the same meaning as in the Floodplain Development Manual.*

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

Cumberland Local Infrastructure Contributions Plan 2020

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	***All of the land is bush fire prone land.***	No
(b)	***Some of the land is bush fire prone land.***	No
(c)	***None of the land is bush fire prone land.***	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) ***Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?***

No

(b) ***Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land?***

No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020

For land to which *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies, whether the land is –

(a) in an ANEF or ANEC contour of 20 or greater as referred to in clause 19 of that Policy, or
(b) shown on the *Lighting Intensity and Wind Shear Map* under that Policy, or
(c) shown on the *Obstacle Limitation Surface Map* under that Policy, or
(d) in the "public safety area" on the *Public Safety Area Map* under that Policy, or
(e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the *Wildlife Buffer Zone Map* under that Policy.

The land is not affected.

NOTE 1 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at **http:// www.planning.nsw.gov.au**

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter J Fitzgerald
GENERAL MANAGER

Appendix X – Equipment Calibration Certificates

Calibration and Service Report – PID

Company:	ADE Consulting Group (NSW) P	**Manufacturer:**	RAE	**Serial #:**	595-002222
Contact:	Michelle Ridley	**Instrument:**	MINIRAE LITE SN: 595-002222	**Asset #:**	
Address:	Unit 6/7 Millennium Court SILVERWATER NSW 2128	**Model:**	MiniRAE Lite	**Part #:**	059-A126-000
		Configuration:	VOC 10.6EV	**Sold:**	20.02.2017
		Wireless:	-	**Last Cal:**	17.03.2021
Phone:	1300796922	**Network ID:**	-	**Job #:**	130884
Fax:		**Unit ID:**	(PID 3)	**Cal Spec:**	
Email:	michelle.ridley@ade.group	**Details:**		**Order #:**	PID3

Calibration Certificate

Sensor	Type	Serial No.	Span Gas	Concentration	Traceability Lot #	CF	Reading	
							Zero	Span
Oxygen								
LEL								
PID	050-0000-004, 10.6EV 1/2 INCH LAMP	S023060055TC/1062R01 2710	Isobutylene	100ppm	4835-1-1		0	100.0
Battery	050-0000-000, 10.6EV 1/2_ PID LAMP	159TCW0532						
Toxic 1								
Toxic 2								
Toxic 3								
Toxic 4								
Toxic 5								
Toxic 6								

Calibrated/Repaired by: JERRY JI Date: 20.09.2021 Next Due: 20.03.2022

Calibration and Service Report – PID

Company:	ADE Consulting Group (NSW) F	**Manufacturer:**	RAE	**Serial #:**	595-002222
Contact:	Michelle Ridley	**Instrument:**	MINIRAE LITE SN: 595-002222	**Asset #:**	
Address:	Unit 6/7 Millennium Court SILVERWATER NSW 2128	**Model:**	MiniRAE Lite	**Part #:**	059-A126-000
		Configuration:	VOC 10.6EV	**Sold:**	20.02.2017
		Wireless:	-	**Last Cal:**	17.03.2021
Phone:	1300796922	**Network ID:**	-	**Job #:**	130884
Fax:		**Unit ID:**	(PID 3)	**Cal Spec:**	
Email:	michelle.ridley@ade.group	**Details:**		**Order #:**	PID3

Item	Test	Pass/Fail	Comments	Serial Number
Battery	NiCd, NiMH, Dry cell, LiIon	P		
Charger	Power Supply	P		
	Cradle, Travel Charger	P		
Pump	Flow	P	>450ml/min	
Filter	Filter, fitting, etc	x	Dirty, replaced	
Alarms	Audible, visual, vibration	P		
Display	Operation	P		
Switches	Operation	P		
PCB	Operation	P		
Connectors	Condition	P		
Firmware	Version	P	V2.22A	
Datalogger	Operation	P		
Monitor Housing	Condition	P		
Case	Condition / Type	-		
Sensors				
PID	Lamp	P	Cleaned	
PID	Sensor	P	Cleaned	
THP	Sensor	P		

Engineer's Report

Cleaned lamp, lamp housing and sensor electrode
Checked flowrate and stall values; checked moisture sensitivity
Checked unit settings and configuration
Unit serviced and calibrated.

Appendix XI- Safework Hazardous Goods Search

WorkCover
NEW SOUTH WALES

Dangerous Goods Notification Team
ph (02) 4321 5500 fax (02) 9287 5500

Occupier **MANILDRA PARK PTY LIMITED**
Attn: MELANIE SAWYER
Licensee: ACN 093 014 129
WESTMEAD ETHANOL
LOT 1 CREOLE RD
ALBION PARK RAIL NSW 2527

ACKNOWLEDGEMENT OF NOTIFICATION OF DANGEROUS GOODS ON PREMISES

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF
THE OCCUPATIONAL HEALTH & SAFETY ACT 2000 AND REGULATIONS THEREUNDER

Acknowledgement Number 35/011281 **Expiry Date** 1/03/2010

Occupier Contact MELANIE SAWYER Ph. 02 4256 6680 Fax. 02 4256 1042

Premises where notified Dangerous Goods are stored / handled
MANILDRA PARK PTY LIMITED WESTMEAD ETHANOL
3 HASSALL ST CNR ALEXANDRA AVE WESTMEAD 2145

Nature of Site AUTOMOTIVE FUEL RETAILING

Emergency Contact for this Site JACK NADER Ph. 0414 439 334

Site staffing 13 HRS 7 DAYS

Details of Storage Locations

Identifier.	Type	Goods Stored In Storage Location	Qty
1	**UNDERGROUND TANK**	**Class 3**	**24700 L**
	UN 1203 PETROL		10000 L
2	**UNDERGROUND TANK**	**Class 3**	**24700 L**
	UN 1203 PETROL		10000 L
3	**UNDERGROUND TANK**	**Class 3**	**25500 L**
	UN 1203 PETROL		10000 L
4	**UNDERGROUND TANK**	**Class 3**	**25500 L**
	UN 1203 PETROL		10000 L

This acknowledgment must be retained as PROOF OF NOTIFICATION.
You must notify WorkCover annually of the Dangerous Goods stored on these premises

WorkCover. Watching out for you.

PAGE 01/05

NOTIFICATION OF DANGEROUS GOODS ON PREMISES FORM **FDG01**

CONTACT FOR NOTIFICATION INQUIRIES

Title: ~~Mr~~ / Miss / ~~Ms~~ / ~~Mrs~~ / Other (please specify) Miss **Family name** Sawyer
Given name Melanie **Other names**
Business phone (02) 42566080 **Business fax number** (02) 42561042
Business email address park@1earth.net

Previous Licence Number or Acknowledgement Number (if known)

35/011281

Previous Occupier (if known)

Site on which dangerous goods are to be kept

Number: 3 Street: Hassall Street

Suburb/Town/Locality: WESTMEAD NSW Postcode: 2145

Nearest cross Street: Alexander Avenue

Lot and DP if no street number

Is the site staffed? If yes state number of employees: 4

Site staffing: Hours per day: 13 Days per week: 7

Site Emergency Contact

Phone number: 0414 439 334 **Name**: Jack Nader

Nature of site (eg petrol station, warehouse etc): Petrol Station

$ 100.00
Date: 11.02.09
Rec No: 560348

Nature of primary business activity: As Above.

ABN Number (if any): 11 093 014 129 Website details (if any)

What is the ANSZIC code most applicable to your business? (see guide for list of codes and further information)

Code: 5321 Description: Automotive fuel Retailing

Attach a site sketch(s) of the premises. Refer to the Guide GDG01 for information on the requirements for the site sketch.

Attach a legible photocopy page from a local Street Directory or other map showing the locality of the premises. Mark the location of the premises with an X.

List the dangerous goods that will be stored and/or processed on these premises (refer to Guide GDG01). Copy this page and attach additional sheets if there is insufficient space.

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
1	Underground Tank	3	24,700 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1203	Petrol	3	II	Unleaded	3YE	10,000	L

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
2	Underground Tank	3	24,700 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1203	Petrol	3	II	Unleaded	3YE	10,000	L

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
3	Underground Tank	3	25,500 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1203	Petrol	3	II	Premium Unleaded	3YE	10,000	L

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
4	Underground Tank	3	25,500L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1203	Petrol	3	II	Unleaded	3YE	10,000	L

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
5	Above Ground Decanting	2.1	190kg.

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1075	Liquified Propane Gas	2.1		LPG.	2WE		190KG.

List the dangerous goods that will be stored and/or processed on these premises (refer to Guide GDG01). Copy this page and attach additional sheets if there is insufficient space.

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
6	Above Ground Decanting	2.1	LPG. 190 kg

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1075	Liquified Petroleum Gas	2.1		LPG.	2WE		190 KG

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)
7	Above Ground Decanting	2.1	LPG. 190kg

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg
1075	Liquified propane gas	2.1		LPG.	2WE	190	KG.

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)

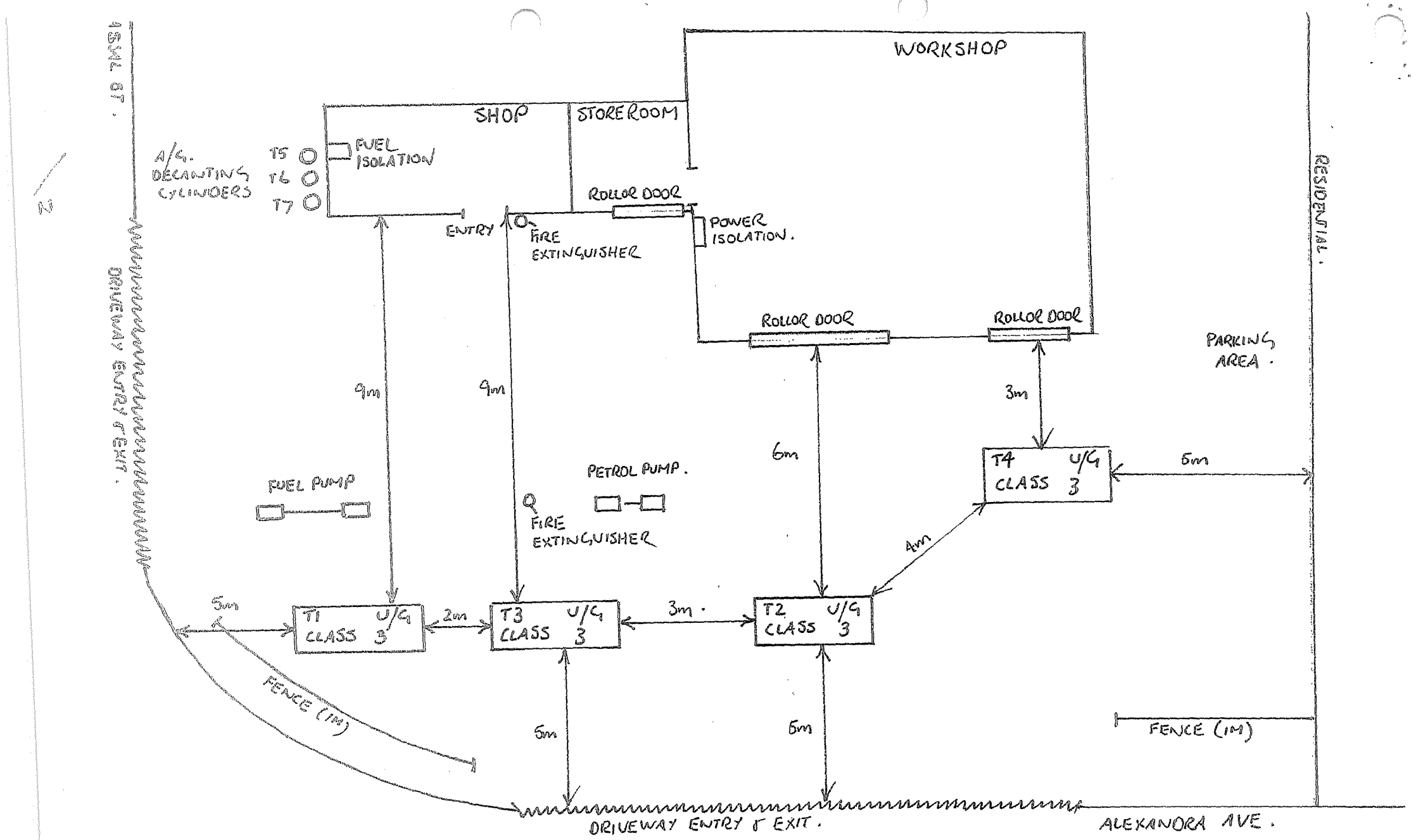
UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg

Depot No	Type of storage location or process	Class	Maximum Storage Capacity (L, kg)

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Code	Typical Qty	Unit eg L, kg



MEAD ETHANOL

RECEIVED
SERVICE CENTRE
- 2 MAR 2006
WORKCOVER

NOTIFICATION OF DANGEROUS GOODS ON PREMISES FORM FDG01

CONTACT FOR NOTIFICATION INQUIRIES

Title: Mr / Miss / Ms / Mrs / Other (please specify) MR Family name NAder

Given name Jack Other names

Gende(Male) Female (please circle) Date of birth 7 / 8 / 51 Place of birth

Postal address CNR Hassell @ Alexandria STreets

Suburb WESTMEAD State NSW Postcode

Business phone 96933816 Business fax number

Business email address park@1earth.net

Previous Licence Number or Acknowledgement Number (if known)

35/ 35/011281. J 16/10/06

Previous Occupier (if known)

Site on which dangerous goods are to be kept

Number: 3 Street: CNR Hassell @ Alexandria STreets

Nearest cross Street: Alexandria Street J 16/10/06

Lot and DP if no street number

Is the site staffed? If yes state number of employees 4

Site staffing: Hours per day 13 Days per week 7

Site Emergency Contact

Phone number: 0414439334 Name: Jack Nader

Nature of your primary business activity: Service STation

ABN Number (if any): 17 093 014 129 Website details (if any)

What is the ANSZIC code most applicable to you business? (see guide for list of codes and further information)

Code Description: Service STation

Attach a site sketch of the premises. Refer to the Guide for information on the requirements for the site sketch.

Attach a photocopy page from a local Street Directory or other map showing the locality of the premises. Mark the location of the premises with an X

Scan J 16/10/06 file ordered.

$ 100.00
Date 2.3.06
Rec. No. 446550

List the dangerous goods that will be stored and/or processed on these premises. Copy this page and attach additional sheets if there is insufficient space.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M^3)
1	UNDERGROUND TANK	3	24,700 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M^3
1203	PETROL	3	II	UNLEADED	3[Y] E	10,000	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M^3)
2	UNDERGROUND TANK	3	24,700 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M^3
1203	PETROL	3	II	UNLEADED	3[Y]E	10,000	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M^3)
3	UNDERGROUND TANK	3	25,500 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M^3
1203	PETROL	3	II	PREMIUM UNLEADED	3[Y]E	10,000	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M^3)
4	UNDERGROUND TANK	3	25,500 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M^3
1203	PETROL	3	II	UNLEADED	3[Y]E	10,000	L.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M^3)
5	ABOVE GRD DECANTING CYL.	2.1	190 KG.

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M^3
1075	LIQUIFIED PROPANE GAS	2.1		LPG.	2WE		KG.

LPL 16/10/06.

PTO

combine 5,6,7 into 1 depot

List the dangerous goods that will be stored and/or processed on these premises. Copy this page and attach additional sheets if there is insufficient space.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M³)
6	ABOVE GRD DECANTING CYL	2.1	LPG. ?

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M³
1075	LIQUIFIED PROPANE GAS	2.1		LPG.	2WE		KG..

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M³)
7	ABOVE GRD DECANTING CYL	2.1	LPG ?

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M³
1075	LIQUIFIED PROPANE GAS	2.1		LPG	2WE		KG.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M³)

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M³

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M³)

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M³

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M³)

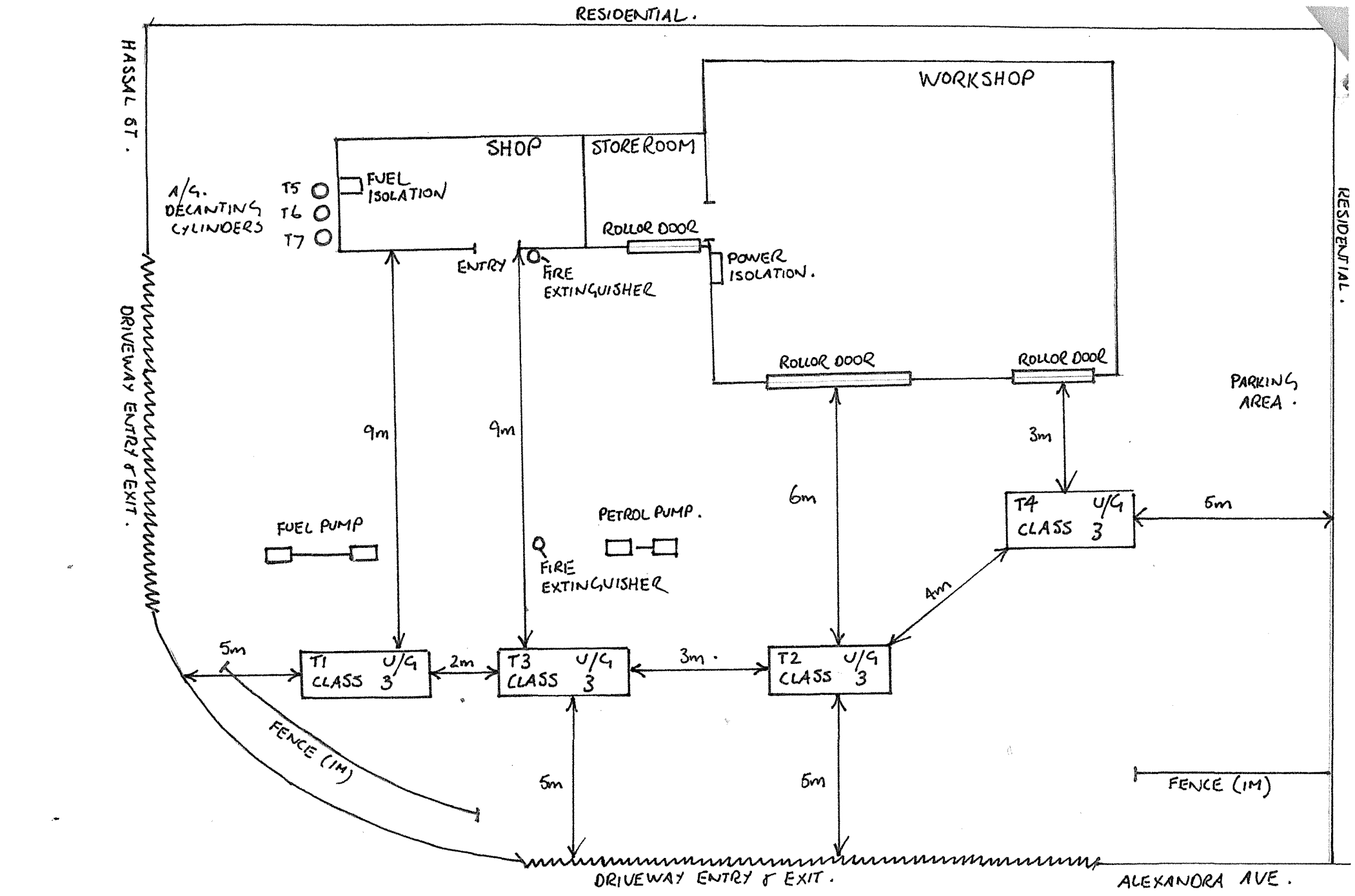
UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M³

7.

who knows?

16/10/06

sketch indicates decanting cylinders



WESTMEAD ETHANOL

Reference

WORKCOVER AUTHORITY

Dangerous Goods Section
Locked Mail Bag 2 P O, ROSEBERY NSW 2018
Ph: (02) 287 6239 OR (02) 287 6237

Licensee

SOLO OIL AUST P/L
.
BOX 578 P O
SMITHFIELD 2164

DANGEROUS GOODS BRANCH
1 - MAY 1991

17 APR 1991

Dear Sir/Madam,

RE **APPLICATION FOR RENEWAL** OF LICENCE FOR THE KEEPING OF DANGEROUS GOODS

Our records indicate you hold licence number 35/011281 for keeping dangerous goods at HASSALL ST & ALEXANDRA AVE WESTMEAD 2145.

Details of depots at site.

Depot No.	Depot type	Goods stored in depot	Quantity kg/litres/no.
1	UNDERGROUND TANK	FLAMMABLE LIQUIDS	20 000
2	UNDERGROUND TANK	FLAMMABLE LIQUIDS	20 000
3	UNDERGROUND TANK	FLAMMABLE LIQUIDS	10 000

This licence is now due for renewal. **TO RENEW YOUR LICENCE.** Please carefully check the details shown in this letter and make any required corrections. Then, **SIGN** and **DATE** the declaration below and return this letter to the WorkCover Authority, Dangerous Goods Section. **Fees for these licences have been abolished. DO NOT SEND ANY MONIES.**

Declaration: I wish to renew this licence to 15/05/92. I certify that the licence details shown in this letter are correct.

....29/4/91....
(Signature) *(Date)*

If you do not wish to renew the licence. Please provide the Dangerous Goods Section with a signed statement giving the reason why it is not to be renewed. If you have sold/vacated the site please provide the name and address of the new owner/occupier so we may contact them.

Yours faithfully

Chief Inspector of Dangerous Goods.

described below. [UPGRADE] *the transfer of the licence

(*delete whichever is not required)

for the keeping of dangerous goods in or on the premis

FEE: $10.00 per Depot for new licence.
$10.00 for amendment or transfer.

$15 [illegible] 9152 24707/85 034

Name of Applicant in full (see over)	SOHO OIL AUSTRALIA PTY LTD
Trading name or occupier's name (if any)	
Postal address	PO BOX 1132 PARRAMATTA NSW Postcode 2150
Address of the premises including street number (if any)	CNR HASSALL ST & ALEXANDRA AVE WESTMEAD Postcode 2145
Nature of premises (see over)	SERVICE STATION
Telephone number of applicant	STD Code 02 Number 6893077

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (see over)	Storage capacity	Dangerous goods: Product being stored	C & C Office use only
				003 020
1	UNDERGROUND	15,000 litres	PETROL - SUPER	2 020
2	"	15,000 litres	" "	2 020
3	"	10,000 litres	PETROL - UNLEADED	2 020
4				
5				
6				
7				
8				
9				
10				
11				
12				

Has site plan been approved? (Yes) / No — If yes, no plans required. If no, please attach site plan.

Have premises previously been licensed? (Yes) / No — If yes, state name of previous occupier P. STOWPUK

Name of company supplying flammable liquid (if any) (SOHO) (AMOCO)

Signature of applicant [signature] Date 10/7/85

GEN. MANAGER NSW

For external explosives magazine(s), please fill in side 2.

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, RAYMOND CHARLES MCGRATH being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

Signature of Inspector [signature] Date 9.9.85

Licence No.

APPLICATION FOR LICENCE (or AMENDMENT or TRANSFER of LICENCE) FOR THE KEEPING OF DANGEROUS GOODS

FLAG a

Application is hereby made for—*~~a licence (or amendment of the licence)~~ *the transfer of the licence for the keeping of dangerous goods in or on premises described below. 12/9/80

(*delete whichever is not required)

FEE: $10.00 per Depot

8452 5/09/80 03A

Name of Applicant in full (see over)	Surname STOWPIUK. Given Names PETIER. NF
Trading name or occupier's name (if any)	CLUB SERVICE STATION. TF
Postal address	CNR. HASSALL ST. & ALEXANDRA AVE. WESTMEAD) Postcode 2145
Telephone number of applicant	STD Code Number 6331512.
Address of the premises in or on which the depot or depots are situated (including street number, if any)	CNR. HASSALL ST. & ALEXANDRA AVE. WESTMEAD) Postcode 2145
Nature of premises (see over)	SERVICE STATION.

PLEASE ATTACH SITE PLAN

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (see over)	Storage capacity	Dangerous goods: Product being stored	Dangerous goods: C & C Office use only 003 020. DD
1	UNDERGROUND TANK.	10450 LTRS.	PETROL	2.020.14
2	— —	14775 LTRS.	PETROL	2.020.14
3	— —	14775 LTRS.	PETROL	2.020.14
4				
5				
6				
7				
8				
9				
10				
11				
12				

Name of company supplying flammable liquid (if any) AMPOL.

Have premises previously been licensed? YES.

If known, state name of previous occupier T. RAE. (STILL OCCUPIER) Licence No. 254900

Signature of applicant R. Stowpiuk Date 20/8/80

For external explosives magazine(s), please fill in side 2.

LICENCE No. 254496

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, RAYMOND CHARLES McGRATH being an Inspector under the Dange
1975, do hereby certify that the premises described above do comply with the requirements of the Da
1975, and the Dangerous Goods Regulation with regard to their situation and construction for the

Vind Bk/Bl Drum

2. Trading Name (if any) **WESTMEAD SERVICE STATION**

3. Locality of the premises in which the depot or depots are situated — No. or Name ____

Street CNR. ALEXANDRA & HASSALL STS,

Town WESTMEAD

4. Postal address ~~Sydney~~ Postcode 2145.

5. Occupation 5

6. Nature of premises (dwelling, garage etc.) GARAGE

7. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

PLEASE ATTACH PLAN OF PREMISES

Depot No.	Construction of depots*			Inflammable liquid		Dangerous goods					
	Walls	Roof	Floor	Mineral spirit gallons	Mineral oil gallons	Class 1 gallons	Class 2 gallons	Class 3 lb	Class 4 cu ft	Class 5A water gal	Class 9 gallons
1	Underground Tanks			3000							
2	✓		✓	3000							
3	✓		✓	2000							
4											
5											
6										PUBLIC RECEIPT A/C	
7								EHR		4-00.	
9										14/8/72	
10								(Date) Receipt No.			8002

* If product is kept in tanks describe depots as underground or aboveground tanks.

Signature of applicant X [signature]

Date of application 4/8, 1972

CERTIFICATE OF INSPECTION

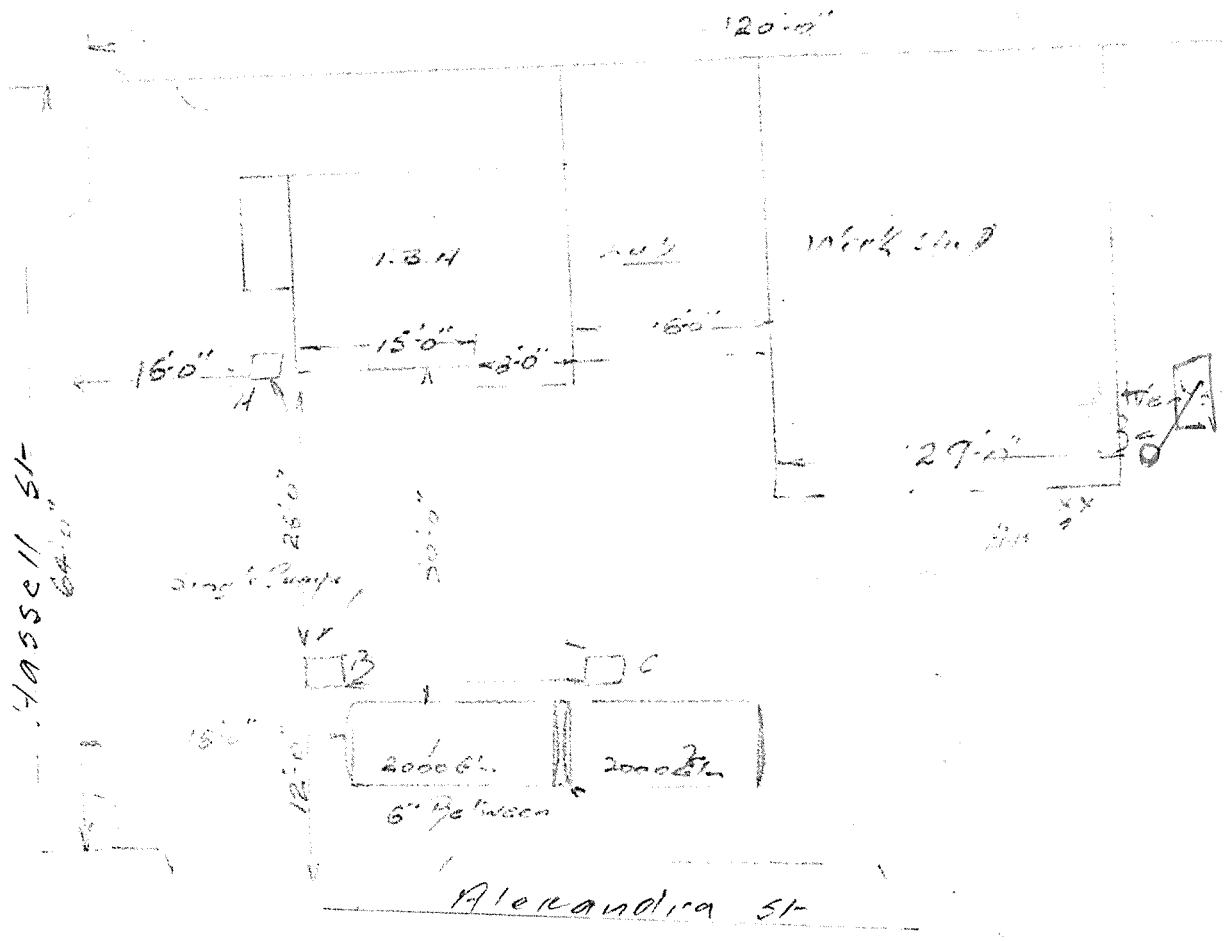
I, William A. Mackay being an Inspector under the Inflammable Liquid Act, 1915 (as amended), do hereby certify that the premises or store herein referred to and described is suitable with regard to its situation and construction for the safe keeping of inflammable liquid and/or dangerous goods in quantity and nature specified.

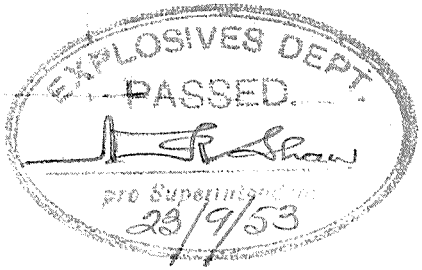
Place Sydney

Date 16-8-72

Signature of Inspector [signature]

PLEASE TURN OVER





C. E. Ajaxon
Westmead Service Station
Westmead

Tank No 858 & 861

Application for Registration of Premises or Store License under Division ____

alteration or amendment of any such Registration or License, for the keeping of Inflammable Liquid and/or Dangerous Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915 (as amended), for the ensuing year. 20/5/64

EXPLANATORY

Inflammable Liquid—

Mineral Oil—includes kerosene, mineral turpentine and white spirit (for cleaning), and compositions containing same.
Mineral Spirit—includes petrol, benzene, benzolene, benzol and naphtha, and compositions containing same.

Dangerous Goods—

Class 1.—Acetone, amyl acetate, butyl acetate, carbon bisulphide; any combination of substances of an inflammable character suitable for use as an industrial solvent and having a true flashing point of less than 73 degrees Fahrenheit.

Class 2.—Nitro-cellulose (also known as "pyroxylin" and "collodion cotton") moistened with an alcohol, butyl alcohol (also known as "butanol"), methylated spirits, vegetable turpentine; and any liquid or solid containing methylated spirits, having a true flashing point of less than 150 degrees Fahrenheit.

Class 3.—Nitro-cellulose product.

Class 4.—Compressed or dissolved acetylene contained in a porous substance.

Transfer & Renewal
Previously K Beck

DIRECTIONS

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, No. 16 Grosvenor Street, Sydney (Box 48, G.P.O.), and must be accompanied by the prescribed fee, as set out hereunder:—

Registration of Premises (Fee £1 10s. 0d. p.a.).—For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots; or 500 gallons of mineral spirit, if kept in an underground tank depot; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, £3 5s. 0d. p.a.).—For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1 and 2.

Store License, Div. B (Fees, See Regulation 7).—For quantities exceeding 4,000 gallons of mineral and/or mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.
For the keeping of Dangerous Goods of Classes 3 and/or 4. **(£7 10s. 0d. p.a.).**

2. The certificate of inspection at foot hereof must be signed by an Inspector under the Inflammable Liquid Act, 1915 (as amended), or Police Officer, or other officer duly authorised in that behalf, and where the premises are situated outside the Metropolitan Area of Sydney, it is requested that such certificate be obtained prior to forwarding application.

1. Name in full of occupier ... ... Brian William Blanning T/A Westmead Service Station.
2. Occupation ... ... Service Station Prop.
3. Locality of the premises in which the depot or depots are situated ... No. or Name Corner
   Street Hassall & Alexander Sts
   Town Westmead
4. Nature of premises (Dwelling, Garage, Store, etc.) ... ... Service Station.
5. Will mineral spirit be kept in a prescribed underground tank depot? Yes

24/5

6. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

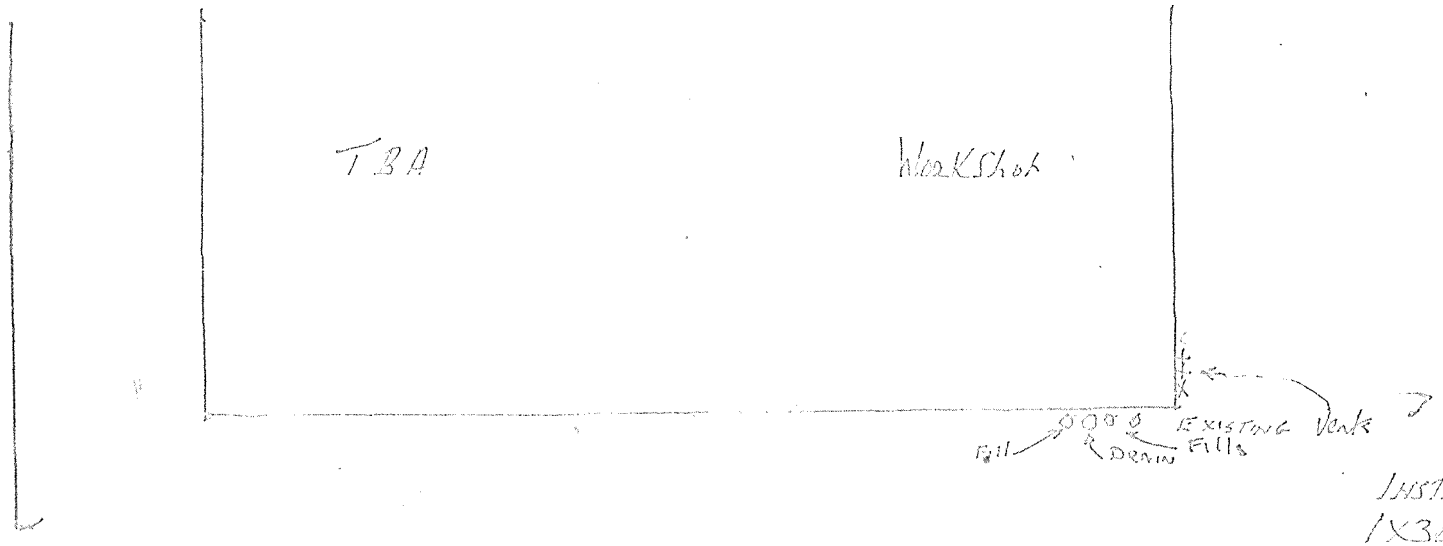
Depot No.	Construction of Depots			Inflammable Liquid		Dangerous Goods			
	Walls	Roof	Floor	Mineral Spirit Gallons	Mineral Oil Gallons	Class 1 Gallons	Class 2 Gallons	Class 3 lb.	Class 4 cub. ft.
1	Underground	Tank.		~~3500~~ 3000					
2	"	"		1000	(1/2000-gallon Tank Decommissioned.				
3									
4									
5			Cleared 6/5						
6									
7			Public Revenue Account						
8			(Date) 7-6-63						
9			Receipt No. 0289						
10									

Date of Application 3rd June 1963 Signature of Applicant X B Blanning
Postal Address As Above.

CERTIFICATE OF INSPECTION

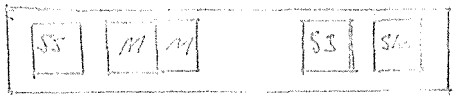
I, Noel Budd being an Inspector under the Inflammable Liquid Act, 1915 (as amended), do hereby certify that the premises or store herein referred to and described is suitable with regard to its situation and construction for the safe keeping of inflammable liquid and/or dangerous goods in quantity and nature specified.

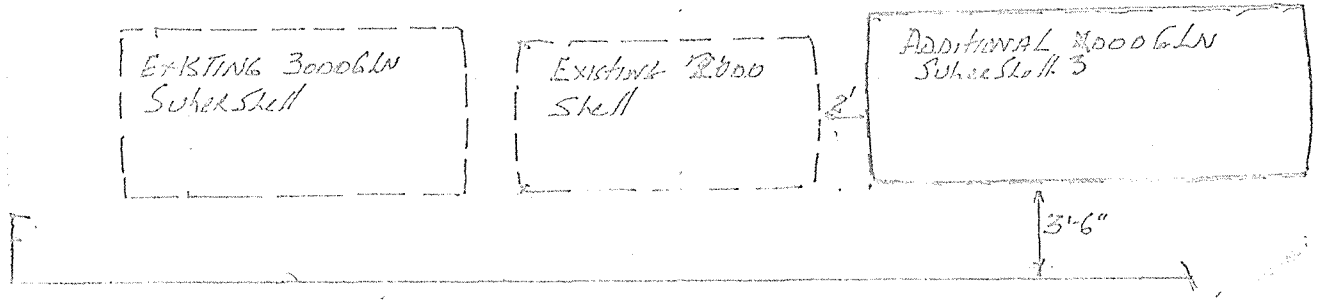
Place Westmead Signature of Inspector Noel Budd

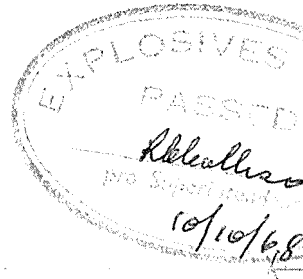


Installation of Additio
1 X 3000 GLN Tank For Subwe
At Westmead. S/E. CB Branch.
Liquid Seal in S/E Box No 10
Run Vent in 2" Line. To Positio
Adjacent to Existing. Run
In. 4" Line to Position Adj
to Existing. Fit 4" SPW Ti
Fitting. Fit 2" Lock Lock Unit
To. Div Interconnect Pipe
All Subwe Pumps. Do not

Hassal St.







Alexandra Avenue.

INFLAMMABLE LIQUID ACT, 1915 (AS AMENDED)

Application for Registration of Premises or Store License under Division B or for the transfer alteration or amendment of any such Registration or License, for the keeping of Inflammable Liquid and/or Dangerous Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915 (as amended), for the ensuing year.

Prev. Div A
Bl. $8.50.

EXPLANATORY

Inflammable Liquid-

Mineral Oil - includes kerosene, mineral turpentine and white spirit (for cleaning), and compositions containing same.
Mineral Spirit - includes petrol, benzene, benzolene, benzol and naphtha, and compositions containing same.

Dangerous Goods -

Class 1 - acetal, acetaldehyde, acetone, acrolein, amyl mercaptan, butyl acetate, butyl mercaptan, butyl propionate, crotonaldehyde, dichloro-ethylene, diethylketone, dioxane, diethylamine, dimethyl hydrozine, dipropylamine, divinyl ether, dipropyl ether, ethyl acetate, ethyl acrylate, ethyl chloride, ethyl ether, dichloroethane (ethylene dichloride), ethyl mercaptan, ethyl methacrylate, ethyl methyl ether, ethyl propyl ether, ethyl propionate, methyl propyl ketone, methyl acetate, methyl acrylate, methylal, methyl ethyl ether, methyl ethyl ketone, methyl methacrylate, methyl vinyl ketone, methyl vinyl acetate, piperidine, propanal, propyl acetate, propylamine, propylene oxide, pyridine, tetrahydrofuran, thiophene, triethylamine, valeraldehyde, vinyl acetate, vinyl allyl ether, vinyl butyl ether, vinyl butyrate, vinyl cyanide (acrylonitrile), vinylidene chloride, vinyl ethyl ether, vinyl propyl ether, vinyl propionate, any combination of substances of an inflammable character suitable for use as an industrial solvent and having a true flashing point of less than 73 degrees Fahrenheit, manufactured products, containing organic solvents, having a true flashing point of less than 73 degrees Fahrenheit.

Class 2 - acetic acid, acetyl acetone, acetic anhydride, allyl alcohol, amyl acetate, amyl alcohol, butyl alcohol, butyl methacrylate, chlorobenzene, cyclohexanone, dibutyl ether, dibutyl ketone, dipentene, epichlorohydrin, ethanol (ethyl alcohol), ethyl benzene, ethylene diamine, furfural, mesityl oxide, methyl alcohol, methyl amyl ketone, methyl butyl ketone, pine oil (having a flashing point below 150°F), propyl benzene, propanol, vegetable turpentine, vinyl benzene (styrene monomer), any liquid containing more than 50 per centum ethyl alcohol, manufactured products, containing organic solvents, having a true flashing point of 73 degrees Fahrenheit and above but not exceeding 150 degrees Fahrenheit.

Class 3 - nitro-cellulose moistened with an alcohol, nitro-cellulose product.

Class 4 - compressed or dissolved acetylene contained in a porous substance.

Class 5 (A) - liquefied inflammable gases (liquefied petroleum gas, vinyl chloride, ethylene chloride, ethylene oxide, butadine, methylamine, dimethylamine and trimethylamine).

Class 9 - Carbon disulphide, ethyl nitrite.

DIRECTIONS

Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, Department of Mines, Sydney, and must be accompanied by the prescribed fee, as set out in Regulation 7.

1. Name in full of occupier — Brani Williams Plumbing Westmead S/Stn. J S/Stn Proptr
2. Occupation
3. Locality of the premises in which the depot or depots are situated — No. or Name 16/5; Street Russell St. & Alexander Avenue; Town Westmead S/Stn; Postcode 2145
4. Nature of premises (Dwelling, Garage, Store, etc.)

5. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time

PLEASE ATTACH PLAN OF PREMISES.

Depot No.	Construction of depots*			Inflammable liquid		Dangerous goods					
	Walls	Roof	Floor	Mineral Spirit gallons	Mineral Oil gallons	Class 1 gallons	Class 2 gallons	Class 3 lb	Class 4 cu ft	Class 5 A water gallons	Class 9 gallons
1	Underground	Tank		3000							
2	″	″		3000							
3		″	″	2000							
4											
5											
6											
7											
8											
9											
10											

PUBLIC REVENUE A/C. $8.50 23/12/68 (Date) Receipt No. 6326

* If product is kept in tanks describe depots as underground or aboveground tanks.

FORM B 2nd

Register No. 11801

INFLAMMABLE LIQUID ACT, 1915-1953.

Application for Registration of Premises or Store License under Division B or for the transfer, alteration or amendment of any such Registration or License, for the keeping of Inflammable Liquid and/or Dangerous Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915-53, for the ensuing year.

EXPLANATORY

Inflammable Liquid—

Mineral Oil—includes kerosene, mineral turpentine and white spirit (for cleaning), and compositions containing same.

Mineral Spirit—includes petrol, benzene, benzolene, benzol and naphtha, and compositions containing same.

Dangerous Goods—

Class 1.—Acetone, amyl acetate, butyl acetate, carbon bisulphide; any combination of substances of an inflammable character suitable for use as an industrial solvent and having a true flashing point of less than 73 degrees Fahrenheit.

Class 2.—Nitro-cellulose (also known as "pyroxylin" and "collodion cotton") moistened with an alcohol, butyl alcohol (also known as "butanol"), methylated spirits, vegetable turpentine; and any liquid or solid containing methylated spirits, having a true flashing point of less than 150 degrees Fahrenheit.

Class 3.—Nitro-cellulose product.

Class 4.—Compressed or dissolved acetylene contained in a porous substance.

DIRECTIONS

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, No. 4 Albert Street, off Phillip Street, Circular Quay, Sydney (Box 48, G.P.O.), and must be accompanied by the prescribed fee, as set out hereunder:—

Registration of Premises (Fee, 15s. p.a.).—For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots; or 500 gallons of mineral spirit, if kept in an underground tank depot; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, £1 10s. p.a.).—For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1 and 2.

Store License, Div. B (Fee, £3 p.a.).—For quantities exceeding 4,000 gallons of mineral oil and/or mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.
For the keeping of Dangerous Goods of Classes 3 and/or 4.

2. The certificate of inspection at foot hereof must be signed by an Inspector under the Inflammable Liquid Act, 1915–1953, or Police Officer, or other officer duly authorised in that behalf, and where the premises are situated outside the Metropolitan Area of Sydney, it is requested that such certificate be obtained prior to forwarding application.

1. Name in full of occupier	Charles Frederick Mason
2. Occupation	Garage Proprs
3. Locality of the premises in which the depot or depots are situated	No. or Name Street c/- Bassett & Alexandra Ave Town Westmead
4. Nature of premises (Dwelling, Garage, Store, etc.)...	Garage
5. Will mineral spirit be kept in a prescribed underground tank depot ?	

23/6

6. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

Depot No.	Construction of Depots.			Inflammable Liquid.		Dangerous Goods.			
	Walls.	Roof.	Floor.	Mineral Spirit. Gallons.	Mineral Oil. Gallons.	Class 1. Gallons.	Class 2. Gallons.	Class 3. lb.	Class 4. cub. ft.
1	Underground	Tanks		2400					
2	do			2380			6 Degree 1/2		
3	do				500				
4									
5									
6									
7									
8									
9									
10									

Public Revenue Account
(Date) 21-7-55
Receipt No. 907

Date of Application 20/7/ 1955

Signature of Applicant C. F. C. Mason

Postal Address Alexandra Ave. Westmead. N.S.W.

CERTIFICATE OF INSPECTION.

I, Brueckmann being an Inspector under the Inflammable Liquid Act, 1915-53, do hereby certify that the premises or store herein referred to and described is suitable with regard

Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915-46, for the [illegible]

No 25/6/54 - OCT 1953 NO.

EXPLANATORY.

Inflammable Liquid—

Mineral Oil—includes kerosene, mineral turpentine and white spirit (for cleaning), and compositions containing same.

Mineral Spirit—includes petrol, benzine, benzolene, benzol and naphtha, and compositions containing same.

Dangerous Goods—

Class 1.—Acetone, amyl acetate, butyl acetate, carbon bisulphide ; any combination of substances of an inflammable character suitable for use as an industrial solvent and having a true flashing point of less than 73 degrees Fahrenheit.

Class 2.—Nitro-cellulose (also known as "pyroxylin" and "collodion cotton") moistened with an alcohol, butyl alcohol (also known as "butanol"), methylated spirits, vegetable turpentine ; and any liquid or solid containing methylated spirits, having a true flashing point of less than 150 degrees Fahrenheit.

Class 3.—Nitro-cellulose product.

Class 4.—Compressed or dissolved acetylene contained in a porous substance.

DIRECTIONS.

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, No. 4 Albert Street, off Phillip Street, Circular Quay, Sydney (Box 48 G.P.O.), and must be accompanied by the prescribed fee, as set out hereunder:—

Registration of Premises (Fee, 10s. p.a.).—For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together ; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots ; or 500 gallons of mineral spirit, if kept in an underground tank depot ; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions ; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, £1. p.a.).—For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1 and 2.

Store License, Div. B (Fee, £2. p.a.).—For quantities exceeding 4,000 gallons of mineral oil and/or mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.

For the keeping of Dangerous Goods of Classes 3 and/or 4.

2. The certificate of inspection at foot hereof must be signed by an Inspector under the Inflammable Liquid Act, 1915-1946, or Police Officer, or other officer duly authorised in that behalf, and where the premises are situated outside the Metropolitan Area of Sydney, it is requested that such certificate be obtained prior to forwarding application.

1. Name in full of occupier ... ... Charles Frederick Keaton

2. Occupation... ... ... Garage Propr.

3. Locality of the premises in which the depot or depots are situated... No. or Name ... Street 4m Hassall St & Alexandra Av. Town Westmead

4. Nature of premises (Dwelling, Garage, Store, etc.) ... ... Garage

5. Will mineral spirit be kept in a prescribed underground tank depot ? Yes

2516

6. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

Depot No.	Construction of Depots.			Inflammable Liquid.		Dangerous Goods.			
	Walls.	Roof.	Floor.	Mineral Spirit. Gallons.	Mineral Oil. Gallons.	Class 1. Gallons.	Class 2. Gallons.	Class 3. lb.	Class 4. cub. ft.
1	Underground tank			2400			esa K?		
2	do			2380					
3									
4									
5									
6									
7									
8									
9									
10									

Public Reference Accounts (Date) 2 - OCT 1953 Receipt No. 5389

Date of Application 2/10/53 19

Signature of Applicant C. F. Keaton

Postal Address 4m Hassall St Alexandria Ave Westmead

CERTIFICATE OF INSPECTION.

I, R Brancksmon being an Inspector under the Inflammable Liquid Act, 1915-46, do hereby certify that the premises or store herein referred to and decribed is suitable with regard to its situation and construction for the safe keeping of inflammable liquid and/or dangerous goods in quantity and nature specified.

Place Sydney

Date 29/9/53

Signature of Inspector R Brancksmon

[PLEASE TURN OVER

B 12281

Prosecution of C. L. Mason, Westmead.

Information laid 8-10-53. Case set down for hearing at Parramatta Court on Monday 26th Oct., 1953.

Brown
9-10-53

Noted.

Mr McKinnon 20/10/53

Case heard at Parramatta Summons Court this am. Defn. of £5 imposed with 12/- costs of court.

Brown
26-10-53

Noted.

Submitted for your information.

Officer in Charge
27.10.53

Chief Inspector of Inflammable Liquids

Chief Inspector.
27 OCT 1953

File One Explosives

DEPARTMENT OF MINES
SYDNEY

Minute Paper

St 9785

PAPERS:—

CEP:JS.

B 12281

SUBJECT:—

Illegal storage of mineral spirit by C.F. Mason at Westmead.

In view of Mr. McKinnon's report of the 2nd instant regarding storage of inflammable liquid by the abovenamed without a license, notwithstanding previous efforts to obtain compliance with statutory requirements, it is recommended that legal proceedings be taken against Mr. Mason for a breach of Section 11 (1) of the Inflammable Liquid Act, 1915-52, and the information may be to the effect of the following:-

" x x x on the 1st October, 1953, on certain premises situated at the corner of Hassall Street and Alexandra Avenue, Westmead, did unlawfully keep mineral spirit, an inflammable liquid, in excess of 16 gallons, to wit, 2,000 gallons thereof."

Signed admission of the breach is attached.

Chief Inspector of Inflammable Liquids.

Officer-in-Charge.
6.10.53

Approved.
Under Secretary. Chief Inspector.
7 OCT 1953

Dir C Explosives

Prosecutions Register noted.
Information may be now laid.
8/10/53

Mr McKinnon

RMcK:JS.

CIRCULAR QUAY,

SYDNEY, 2nd October, 19 53.

In reply please quote
E. DEPT.
No.

The Officer-in-Charge.

SUBJECT: Illegal Storage of Mineral Spirit at Westmead.

I have to report having called at service station premises occupied by Charles Frederick Mason at corner of Hassall Street and Alexandra Avenue, Westmead, yesterday, October 1st, in connection with his failure to apply for a license under the Inflammable Liquid Act, 1915-52.

On 24.9.53 I had called at the service station and in Mr. Mason's absence, dipped his tanks (2 x 2000 gallons) and left an instruction for him to apply for license immediately, as he had been operating since June 25th, 1953.

Asked yesterday why he had failed to carry out the instruction, Mr. Mason said he was "fed up" with paying Government licenses; later said he did not know he had to have one for the tanks. When I referred to the instruction I had left he said he did not see why he should obey an instruction from a person he had never seen. He also told me I had no right to dip his tanks in his absence.

It was necessary to make two calls yesterday and to wait about twenty minutes to see Mr. Mason and I have a suspicion he was deliberately avoiding me.

Asked how much petrol he had in the tanks Mr. Mason said "about 2000 gallons". He refused to sign an admission , but when I informed him that his petrol would be placed under seizure he signed the attached form.

There should have been no necessity for a second visit to these premises and much Departmental time is wasted in trying to obtain applications from such people as Mr. Mason. It is certain that had I not waited a third visit would have been necessary.

In submitting this report I would recommend that legal proceedings be taken.

R. McKinnon

Inspector.

Appendix XII – Dial Before You Dig (DYBD)

If further clarification is required, please contact:
Endeavour Energy
Phone: (02) 9853 4161 (8:00am-4:30pm Mon-Fri)
Emergency Phone Number: 131 003

DBYD Underground Search Report

Date: 02/11/2021

DBYD Sequence No: 204756947 **DBYD Job No:** 30815700

ENDEAVOUR ENERGY ASSETS AFFECTED

To:	Elisha cassidy	Company:	ADE
Address:	6 Millennium Court, Silverwater, NSW 2128		
Cust. ID:	3125618	Email:	elisha.cassidy@ade.group
Phone:	+61420309645		
Enquiry Location:	33 Bailey Street, Westmead, NSW 2145		

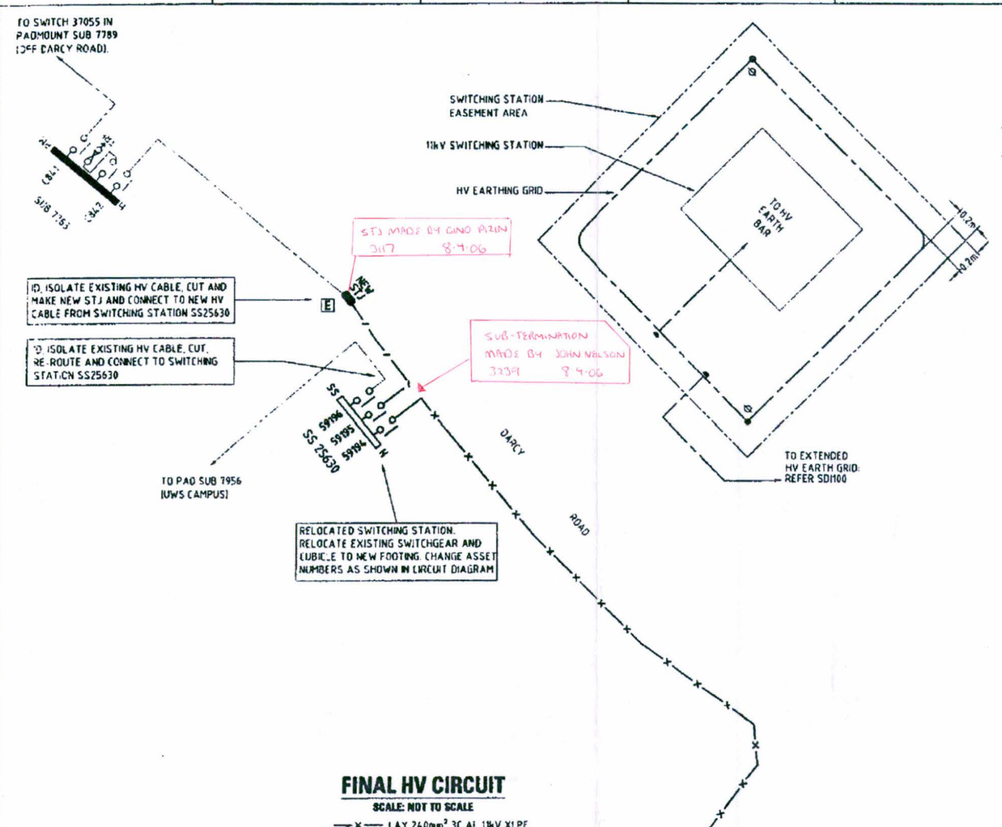
Our Search has shown that **UNDERGROUND ASSETS ARE PRESENT** on our plans within the nominated enquiry location. This search is based on the graphical position of the excavation site as denoted in the DBYD customer confirmation sheet.

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

SUPPLEMENTARY MATERIAL

Material	Purpose	Location
DBYD Cover Letter	Endeavour Energy DBYD response Cover Letter	Attached
DBYD Important Information & Disclaimer	Endeavour Energy disclaimer, responsibilities and information on understanding plans	Attached
DBYD Response Plans	Endeavour Energy DBYD plans	Attached
Work Cover NSW *"Work near underground assets: Guide"*	Guideline for anyone involved in construction work near underground assets	Contact Work Cover NSW for a copy
Work Cover NSW *"Excavation work: Code of practice"*	Practical guidance on managing health and safety risks associated with excavation	URL [Click Here]
Safe Work Australia *"Working in the vicinity of overhead and underground electric lines guidance material"*	Provides information on how to manage risks when working in the vicinity of overhead and underground electric lines at a workplace	URL [Click Here]
Endeavour Energy Safety Brochures & Guides	To raise awareness of dangers of working on or near Endeavour Energy's assets	URL [Click Here]



COMMON EARTHING

TYPICAL EARTHING DIAGRAM ONLY.

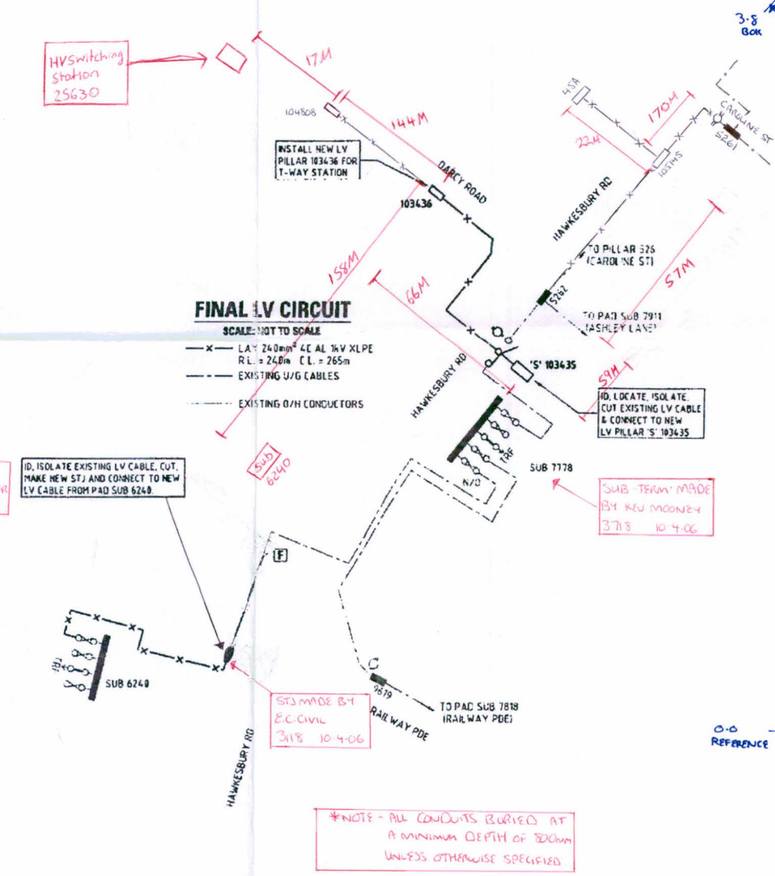
SCALE: NOT TO SCALE

- CABLE COPPER BARE 19/2.14 (SZ13771)
- SWITCHING STATION EASEMENT BOUNDARY
- CADWELD GT 19/2.14 -OA 15 EARTH ROD MOULD GTC15Y4 (F20 115)
- CADWELD TA 19/2.14 -19/2.14 MOULD TACY4Y4 (F20 90)
- ROD EARTH COPPER 2.4m EXTENDABLE

NOTE:
THIS EARTHING DIAGRAM IS A GUIDE ONLY. ADDITIONAL EARTHING MAY BE REQUIRED TO MEET THE MAXIMUM EARTHING RESISTANCE AS DETAILED IN INTEGRAL STANDARD SD1100

EARTHING DESIGN DETAILS

EARTHING DESIGN:	COMMON EARTHING
TEST TYPE:	WENNER 4 PIN METHOD
TEST DATE:	5.10.05
TEST CONDITIONS:	DRY
TEST RESISTIVITY:	94.95 Ohms/m
HV DESIGN ASSUMPTION:	2 x 5m STAKES
HV EARTH RESISTIVITY:	15 Ohms
LV DESIGN ASSUMPTION:	COMMON EARTHING
LV EARTH RESISTIVITY:	COMMON EARTHING



FINAL SL CIRCUIT

SCALE: NOT TO SCALE

- LAY 16mm² 4C Cu XLPE/PVC R.L. = 410m C.L. = 490m
- EXISTING U/G CABLES
- A — STREET LIGHT PHASE
- L??????? (??????) — NEW LANTERN & COLUMN NO
- L??????? (??????) — EXISTING LANTERN & COLUMN NO

ENDEAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for any errors in the information shown on such plans from any cause whatsoever arising.

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property

All Electrical apparatus shall be considered as live until proved dead. Contact with live electrical apparatus will cause severe injury or death

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches

UG OLD PLAN CAPTURE

COMBINATION WAE / FB

PROJECT TRACKING & AIM MAINTENANCE			
ACTIVITY	NAME	SIGNATURE	DATE
AIM/PI			
SLIM INTERFACE			
GIS UPDATED	WAH		13/9/07
GIS CHECKED			24/10/07
JOB POSTED			26/10/07
COMMENTS	UG OLD PLAN CAPTURE		

COMPLIANCE

No	DATE	DESCRIPTION	BY
A	H.K. 17.02.06	ORIGINAL ISSUE (INTEGRAL ENERGY SUBMISSION)	
A	H.K. 19.12.05	ORIGINAL ISSUE (INTEGRAL ENERGY SUBMISSION)	
A	H.K. 12.12.05	ORIGINAL ISSUE (INTEGRAL SUBMISSION)	
A	23.06.05	ORIGINAL ISSUE (INTEGRAL SUBMISSION)	WVR

STATUS: DETAILED DESIGN — DRAWING NO: N777-US-2144112 — REV: A

MAUNSELL AECOM — NORTHWEST TRANSITWAY REFERENCE

AMENDMENTS: ORIGINAL ISSUE A GJB 17.06.05

AUTHORISATION OF ESTIMATED VALUE OF INTEGRAL ENERGY FUNDED ASSETS

CERTIFIED BY INTEGRAL ENERGY
Amendment 4
Date Approved 23.12.06
Engineer's Signature
Signed
Print Name NIL
Service Number
Funding Amount $ Date
Integral Energy's Standard Certification Terms

Maunsell Australia Pty Ltd A.B.N. 20 093 846 925

SCALE 1:1000 AT ORIGINAL DRAWING SIZE

WEBB AUSTRALIA — WEBB AUSTRALIA GROUP (NSW) PTY LTD, LVL 4, 828 PACIFIC HWY, GORDON NSW 2072, T: +61 2 9418 1444, F: +61 2 9418 1191

REFERENCE DRAWINGS	CAP No.	ARP0931	
297830 DARCY ROAD ASSET RELOCATION	FILE No.	2005/02340/001	
	LG AREA	PARRAMATTA	
	GIS MAP No	9152-33	
	UBD REF	190 M16	
	TYP OF DIAG	WESTMEAD 014	

ORIGINAL SCALE AS SHOWN — DRAWN G.B. — DATE JULY 2006 — DTD H.K. — WEBB No 6886 — DESIGN G.B.

DO NOT SCALE — SCALE AS SHOWN AT A1 SIZE

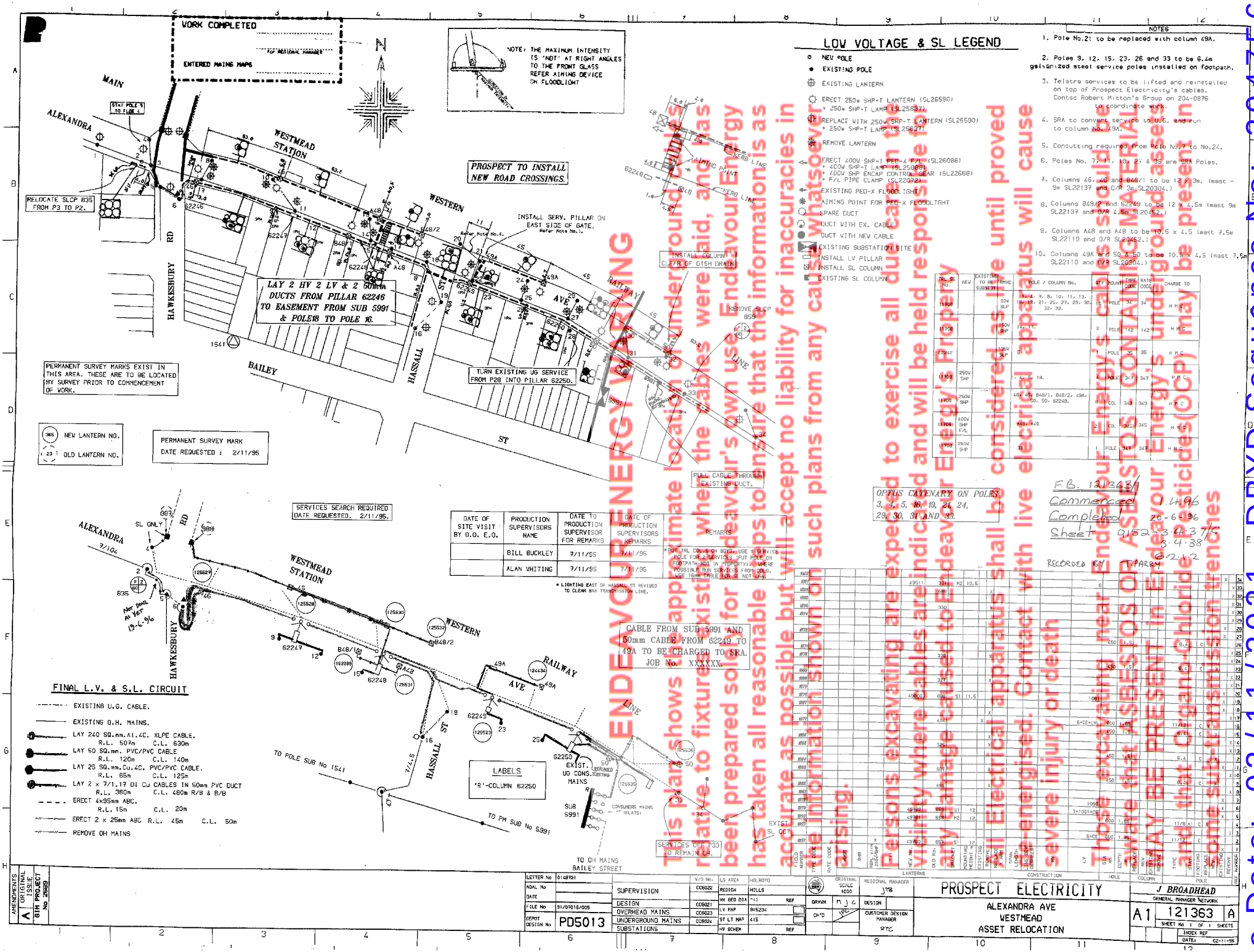
WEBB AUSTRALIA GROUP (NSW) PTY LTD

DARCY ROAD & HAWKESBURY ROAD, WESTMEAD
NORTHWEST TRANSITWAY - SECTION 1
ARP0931
ASSET RELOCATION & STREET LIGHTING

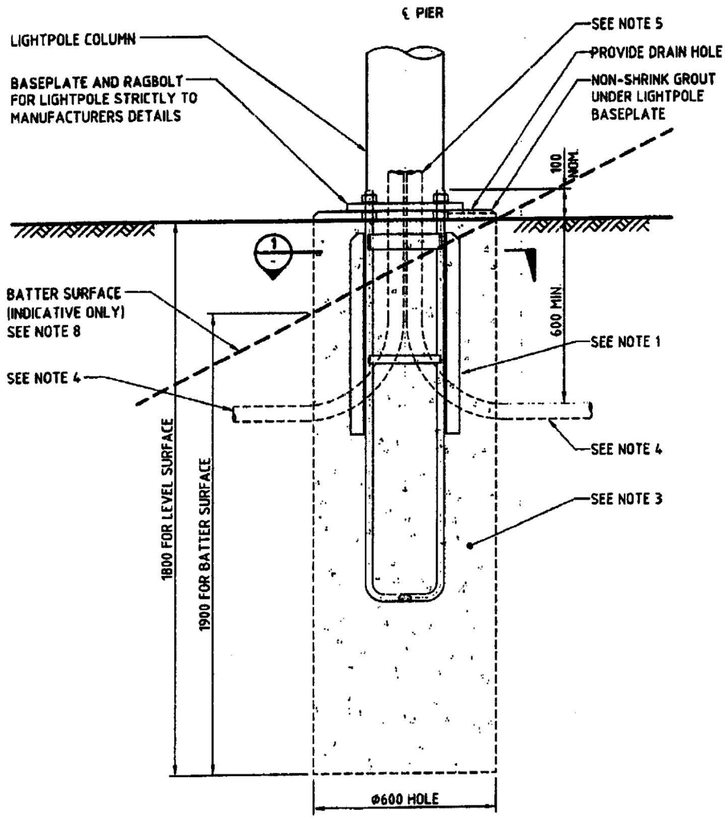
A1 — 297780 — A

SHEET No 2 OF 4 SHEETS

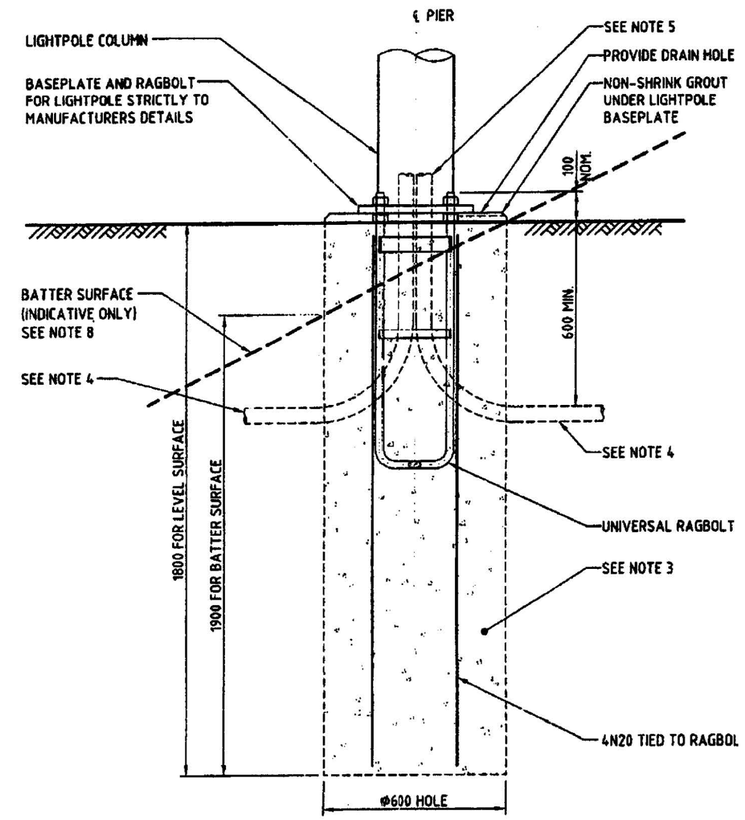
Issue Date: 02/02/2021 DBYD Sequence No: 204756947


VORK COMPLETED
FOR REGIONAL MANAGER
ENTERED MAINS MAPS
NOTE: THE MAXIMUM INTENSITY IS NOT AT RIGHT ANGLES TO THE FRONT GLASS REFER AIMING DEVICE ON FLOODLIGHT
LOW VOLTAGE & SL LEGEND
NEW POLE
EXISTING POLE
EXISTING LANTERN
ERECT 250w SHP-T LANTERN (SL26590)
+ 250w SHP-T LAMP (SL25837)
REPLACE WITH 250W SHP-T LANTERN (SL26590)
+ 250w SHP-T LAMP (SL25837)
REMOVE LANTERN
ERECT 400W SHP-T PED-X F/L (SL26086)
+ 400W SHP-T LAMP (SL25081)
+ 400W SHP ENCAP CONTROL GEAR (SL22668)
+ F/L PIPE CLAMP (SL22072)
EXISTING PED-X FLOODLIGHT
AIMING POINT FOR PED-X FLOODLIGHT
SPARE DUCT
DUCT WITH EX. CABLE
DUCT WITH NEW CABLE
EXISTING SUBSTATION SITE
INSTALL LV PILLAR
INSTALL SL COLUMN
EXISTING SL COLUMN
NOTES
1. Pole No.21 to be replaced with column 49A.
2. Poles 9, 12, 15, 23, 26 and 33 to be 6.4m galvanized steel service poles installed on footpath.
3. Telstra services to be lifted and reinstalled on top of Prospect Electricity's cables. Contac Robert Mitton's Group on 204-0876 to coordinate work.
4. SRA to convert service to U/G, and run to column No. 49A.
5. Concutting required from Pole No.7 to No.24.
6. Poles No. 7, 11, 18, 21 & 33 are SRA Poles.
7. Columns 46, 48 and B48/1 to be 12 x 3m. (mast - 9m SL22137 and O/R 3m SL20304.)
8. Columns B48/2 and 62249 to be 12 x 4.5m (mast 9m SL22137 and O/R 4.5m SL20452.)
9. Columns A48 and A49 to be 10.5 x 4.5 (mast 7.5m SL22110 and O/R SL20452.)
10. Columns 49A and 50 & 50 to be 10.5 x 4.5 (mast 7.5m SL22110 and O/R SL20304.)
MAIN
ALEXANDRA
STAY POLE'S TO FACE ↗
WESTMEAD STATION
PROSPECT TO INSTALL NEW ROAD CROSSINGS.
RELOCATE SLCP 835 FROM P3 TO P2.
HAWKESBURY RD
WESTERN
INSTALL SERV. PILLAR ON EAST SIDE OF GATE. Refer Note No.1.
LAY 2 HV 2 LV & 2 50mm DUCTS FROM PILLAR 62246 TO EASEMENT FROM SUB 5991 & POLE18 TO POLE 16.
HASSALL
AVE
RAILWAY
INSTALL COLUMN CLEAR OF DISH DRAIN
REMOVE SLCP 859
TURN EXISTING UG SERVICE FROM P28 INTO PILLAR 62250.
BAILEY
ST
PULL CABLE THROUGH EXISTING DUCT.
PERMANENT SURVEY MARKS EXIST IN THIS AREA. THESE ARE TO BE LOCATED BY SURVEY PRIOR TO COMMENCEMENT OF WORK.
NEW LANTERN NO.
OLD LANTERN NO.
PERMANENT SURVEY MARK
DATE REQUESTED : 2/11/95
SERVICES SEARCH REQUIRED
DATE REQUESTED. 2/11/95.
DATE OF SITE VISIT BY D.O. E.O.
PRODUCTION SUPERVISORS NAME
DATE TO PRODUCTION SUPERVISOR FOR REMARKS
DATE OF PRODUCTION SUPERVISORS REMARKS
REMARKS
BILL BUCKLEY 7/11/95 7/11/95
ALAN WHITING 7/11/95 7/11/95
* PUT TRL COLS ON SQ49 - USE H SERVICE POLE FOR 2 SERVICES (PUT POLE ON FOOTPATH-NOT IN PROPERTY). WHERE POSSIBLE RUN SERVICES FROM COLS. USE 16mm CABLE FOR SL NOT CNS.
* LIGHTING EAST OF HASSALL ST REVISED TO CLEAR SRA TRANSMISSION LINE.
OPTUS CATENARY ON POLES 3, 4, 5, 16, 19, 21, 24, 29, 30, 31 AND 33.
CABLE FROM SUB 5991 AND 50mm CABLE FROM 62249 TO 49A TO BE CHARGED TO SRA. JOB No. XXXXXX.
LABELS
'R'-COLUMN 62250
SERVICES OFF P33 TO REMAIN ON.
TO POLE SUB No 1541
TO PM SUB No 5991
TO OH MAINS BAILEY STREET
EXIST. UG CONS. MAINS
CONSUMERS MAINS (FLATS)
SUB 5991
EXIST. SL OCT
FINAL L.V. & S.L. CIRCUIT
EXISTING U.G. CABLE.
EXISTING O.H. MAINS.
LAY 240 SQ.mm.Al.4C. XLPE CABLE. R.L. 507m C.L. 630m
LAY 50 SQ.mm. PVC/PVC CABLE R.L. 120m C.L. 140m
LAY 25 SQ.mm.Cu.4C. PVC/PVC CABLE. R.L. 65m C.L. 125m
LAY 2 x 7/1.17 DI Cu CABLES IN 50mm PVC DUCT R.L. 380m C.L. 480m R/B & B/B
ERECT 4x95mm ABC. R.L. 15m C.L. 20m
ERECT 2 x 25mm ABC R.L. 45m C.L. 50m
REMOVE OH MAINS
FB. 121363/1
Commenced 1.4.96
Completed 26-6-96
Sheet 0152 3.4.3.7.6 3.4.38
RECORDED BY T. PARRY 6.2.97
This plan shows the approximate location of underground assets as recorded, and has been prepared solely for Endeavour Energy's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in relative to fixtures existing at the time the cables were laid, and has any damage caused to Endeavour Energy's underground assets as a result of excavating near such plans from any cause whatsoever.
Persons excavating are expected to exercise all due care until proved the exact location of cables and pipes by hand digging.
Where cables are indicated as being present, Endeavour Energy's Electrical apparatus shall be considered as de-energised. Contact with live electrical apparatus will cause severe injury or death
Where asbestos or asbestos containing materials are present in the ground, there may be present one or more of the following hazards: Fibre release, Fire, Explosion, Electrocution, Chemical burns, Toxic gas release
ENDEAVOUR ENERGY WARNING
Issue Date: 02/11/2021, DBYD Sequence No: 20475669
AMENDMENTS ORIGINAL A 61M PROJECT No 2689
LETTER No 0148931
NOAL No
DATE
FILE No 91/07016/005
DEPOT DESIGN No PD5013
SUPERVISION CC6022
DESIGN CC6021
OVERHEAD MAINS CC6023
UNDERGROUND MAINS CC6024
SUBSTATIONS
W/O No. LG AREA HOLROYD
REGION HILLS
HV GED DIA REF
LV MAP 915234
ST LT MAP 415
HV SCHEM REF
ORIGINAL SCALE 1000
DRAWN M J C
CH'D
REGIONAL MANAGER JTB
DESIGN
CUSTOMER DESIGN MANAGER RTC
PROSPECT ELECTRICITY
ALEXANDRA AVE
WESTMEAD
ASSET RELOCATION
J BROADHEAD
GENERAL MANAGER NETWORK
A1 121363 A
SHEET No 1 OF 1 SHEETS
INDEX REF
DATE: 02-11-95

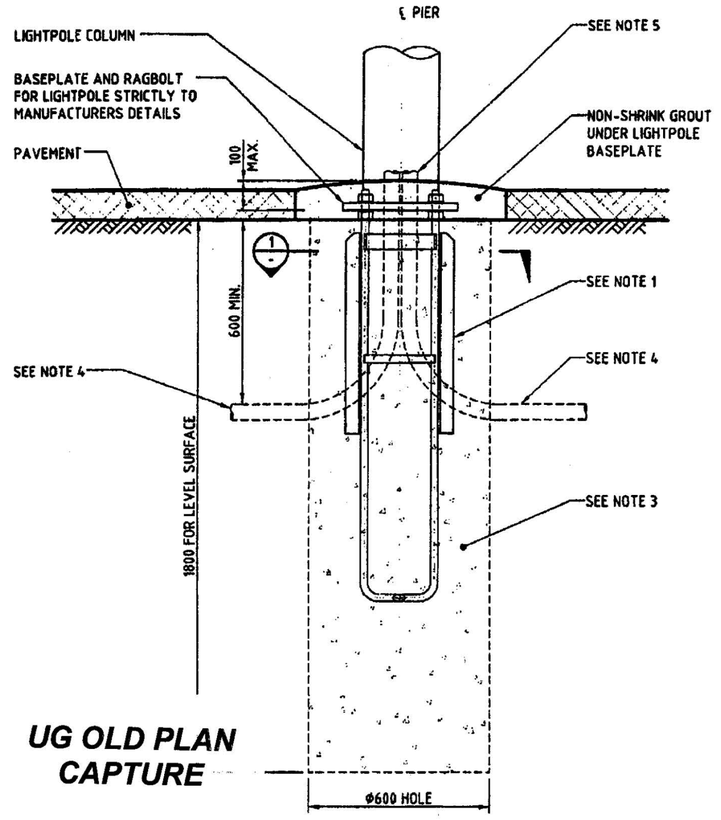
Cad ref: K:\Maunsell\Z0019505_NWTV\Engineering\Electrical Reticulation\Z0019505_NWT1_CAD\Dwg\NT77-US-2144012.dwg Last modified: 04 Jan 06 - 09:54



GENERAL FOUNDATION DETAIL
SCALE 1:10

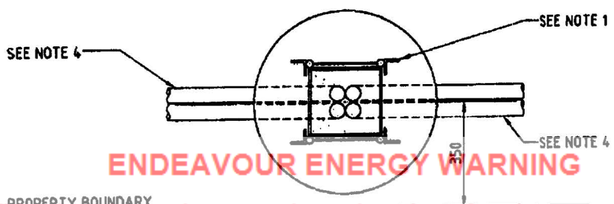


GENERAL FOUNDATION ALTERNATIVE DETAIL FOR UNIVERSAL RAGBOLT
SCALE 1:10



FOUNDATION IN PAVED AREA DETAIL
SCALE 1:10

UG OLD PLAN CAPTURE



SECTION 1-1
SCALE 1:10

COMBINATION WAE / FB

NOTES:
1. TYPE 2 RAGBOLT ASSEMBLY.
2. ANY VARIATION TO DIMENSIONS TO BE APPROVED BY LIGHTING SOLUTIONS MANAGER.
3. CONCRETE TO BE MINIMUM 20 MPa COMPRESSIVE STRENGTH.
4. INSTALL 4 x 50mm DIAMETER HD CONDUITS, FEMALE/FEMALE, 304mm RADIUS BENDS. INSTALL CONDUIT END CAPS TO PREVENT THE ENTRY OF CONCRETE.
5. CUT OFF CONDUITS 200mm ABOVE FINAL GROUND LEVEL.
6. MAXIMUM COLUMN HEIGHT IS 10m TO GIVE MAXIMUM MOUNTING HEIGHT OF 12m. MAXIMUM OUTREACH IS 6m LONG.
7. WHERE FOOTING IS TO BE INSTALLED IN A BATTER THEN 'FORMATUBE' OR SIMILAR MUST BE USED TO ALLOW THE BASE PLATE TO BE ABOVE FINAL GROUND LEVEL.
8. MAXIMUM ALLOWABLE BATTER IS 1:2.

L208905

PUBLIC LIGHTING SYSTEM - SCHEDULE OF PROPOSED ADDITIONS AND ALTERATIONS

PAD Pole/Col No	PAD Light No	Street	Suburb	Lamp Type	Charge Code	Mounting Type	Annual Charge	Remarks	Charge to
C5259	L208880	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770091	L208881	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770092	L208882	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770093	L208883	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770094	L208884	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770095	L208885	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770096	~~L208886~~	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770097	L208887	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770098	L208888	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770099	L208889	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	
C770100	L208890	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	Parramatta City Council
C770101	L208891	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	
C770102	L208892	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	
C770103	L208893	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	
C770104	L208894	Hawkesbury Rd	Westmead	400WHPS	352	Col	$42.16	New	
C770105	L208895	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770106	L208896	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770108	L208898	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770109	L208899	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770110	L208900	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770111	L208901	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770112	L208902	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
C770113	L208903	Hawkesbury Rd	Westmead	250WHPS	343	Col	$48.02	New	
						Additional Annual Charge:	$1069.30		

C238776	L126624	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238777	L126625	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238779	L126626	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238778	L126627	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238781	L126628	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238780	L126629	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238783	L126630	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238782	L126631	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238785	L126632	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238786	L126633	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	Parramatta City Council
C238789	L126634	Darcy Rd	Westmead	250WHPS	343	Col	-$48.02	Remove	
C238788	L49944	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238790	L49385	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238787	L49937	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238784	L49936	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238691	L49933	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238692	L49934	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238693	~~L49942~~ 49932	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238695	L49930	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C238696	L49970	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
C5259	L49949	Darcy Rd	Westmead	250WHPS	55	Col	-$348.03	Remove	
						Reduced Annual Charge:	$4008.52		

COMPLIANCE

PROJECT TRACKING & AIM MAINTENANCE			
ACTIVITY	NAME	SIGNATURE	DATE
AIMS	WW	WW	24-10-06
GIS CAT. LD	WW	WW	24-10-06
JOB POSTED	[illegible]	[illegible]	[illegible]
COMMENTS			

SCANNED 11 JUL

ENDEAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for any loss or damage arising from any person relying on the information shown on such plans from any cause whatsoever arising.

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property.

Any person who damages or destroys a cable may be considered as the cable owner is entitled to do. Contact with electrical apparatus can cause severe injury or death.

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides(OCP) may be present in pole transmission trenches

AMENDMENTS				
	ORIGINAL ISSUE	DRAWN	DATE	CHECKED
A				

DETAILED DESIGN	N777-US-2144012
NORTH WEST TRANSITWAY REFERENCE	

SCALE 0.1 0 0.1 0.2 0.3 0.4 0.5m
SCALE 1 : 10 FULL SIZE A1

DRAWN	L.B.	DESIGN	T.L.
CHECKED	C.Y	DATE	4/01/06

CERTIFIED BY INTEGRAL ENERGY
Amendment: A
Date Approved: 23-02-06
Examiner's Signature:
This certification is issued subject to Integral Energy's Standard Certification Terms.

REFERENCE
FILE No.:
UBD Ref: 190 M16
LG Area: PARRAMATTA
I.E. Region: NORTHERN
HV OP Diag: WESTMEAD D14
GIS Map No: 9452-38

DESIGNED
MAUNSELL | AECOM
Maunsell Australia Pty Ltd A.B.N. 20 093 846 925

NORTH-WEST TRANSITWAY
DARCY RD & HAWKESBURY RD, WESTMEAD
NORTH-WEST TRANSITWAY SECTION 1
ARP0931
STREET LIGHT COLUMN FOOTING DETAILS
SHT 4 OF 4

A1 | I.E. DRAWING No. 297780 | I.E. REV. A

Issue Date: 02/11/2021 DBYD Sequence No: 204756947

WAE-0706385 AS 10/06

29

DESIGN COMPLIANCE AND INDEMNITY

THIS DESIGN COMPLIES WITH INTEGRAL ENERGY'S RELEVANT STANDARDS AS CURRENT AT THIS TIME AND AS LISTED ON THE INTEGRAL ENERGY ACCREDITED SERVICE PROVIDER'S INTERNET SITE. THESE STANDARDS INCLUDE, BUT ARE NOT LIMITED TO:

GT&C	GENERAL TERMS AND CONDITIONS
EMS	ENVIRONMENTAL MANAGEMENT STANDARD
MCI	MAINS CONSTRUCTION INSTRUCTION
MDI	MAINS DESIGN INSTRUCTION
PDI	PROTECTION DESIGN INSTRUCTION
SDI	SUBSTATION DESIGN INSTRUCTION
SAD 0001	DESIGN DRAWING STANDARD
MMI	MAINS MAINTENANCE INSTRUCTION
SMI	SUBSTATION MAINTENANCE INSTRUCTION

ADDITIONALLY, WHERE RELEVANT, THE DESIGN COMPLIES WITH (Eb)-1 "GUIDELINES FOR DESIGN AND MAINTENANCE OF OVERHEAD DISTRIBUTION AND TRANSMISSION LINES" PUBLISHED BY ESAA AND OTHER RELEVANT AUSTRALIAN STANDARDS.

WEBB AUSTRALIA GROUP (NSW) PTY LTD ..... INDEMNIFIES INTEGRAL ENERGY FOR ANY BREACH OF PROFESSIONAL DUTY RESULTING FROM NON-COMPLIANCE OF THE DESIGN WITH THE ABOVE STANDARDS. THE MINIMUM LIMIT OF LIABILITY FOR PROFESSIONAL INDEMNITY INSURANCE IN ACCORDANCE WITH THE MINISTRY OF ENERGY AND UTILITIES - $2 MILLION

SIGNED ..... NAME WEBB AUSTRALIA (NSW) PTY LTD

SERVICE PROVIDER NUMBER 1685 DATE 17/02/06

WORK COMPLETED

CONSTRUCTED BY Position Power

WORK COMPLETED Richard Coads NAME

SIGNED ..... DATE 7/2/07

INSPECTED BY Clive Watts NAME

SIGNED ..... DATE 7/2/07

FORWARDED TO CONTESTABLE WORKS ADMIN (CWA)

LOCATION ..... NAME .....

SIGNED ..... DATE .....

WEBB CAD DATA

Date-Time: Fri 17 Feb 2006 - 8:46 am

CAD File: R:\dwg\GB0804\60000_297780_SHEETLING

Attached Xrefs

1 R:\ACAD\R13\INTEGRAL_ENERGY\E_Elec_Mech\13A1.dwg
2 R:\DWG\GB0804\Needs X-Ref\GB08_Section-1_Elect.dwg
3 R:\DWG\GB0804\Section 1\1DXD-LINE.dwg
4 R:\DWG\GB0804\Section 1\1DXD-CABL.dwg
5 R:\DWG\GB0804\ABDN\1DXD-SUBV.DWG
6 R:\DWG\GB0804\Section 1\1DXD-SES_MDI.dwg

SITE PLAN LEGEND

- EXISTING O/H CONDUCTORS
- EXISTING U/G DUCTS
- NEW LV TRENCHING
- NEW HV TRENCHING
- NEW BRIDGE DUCTS
- ABANDON U/G DUCTS & RECOVER CABLE
- EXISTING U/G CONDUCTORS
- EXISTING POLE
- EXISTING LANTERN
- INSTALL NEW LANTERN (250W HPS OPTISPAN AEROD
- REPLACE LANTERN (250W HPS OPTISPAN AEROD
- REMOVE LANTERN
- EXISTING NIGHTWATCH LANTERN
- EXISTING COLUMN
- INSTALL NEW COLUMN
- REMOVE COLUMN
- ST/J (STRAIGHT THROUGH JOINT)
- A DUCT LOCATION REFERENCE
- P2/360 SLEP (STREETLIGHT CONTROL POINT)
- EXISTING PADMOUNT SUBSTATION
- RELOCATED SWITCHING STATION
- EXISTING SWITCHING STATION TO BE RELOCATED WHERE INDICATED
- INSTALL NEW LV PILLAR
- EXISTING LV PILLAR

OPERATIONAL LIMITATIONS

UNLESS APPROVED OTHERWISE, INTERRUPTION TO ANY CUSTOMER'S SUPPLY MUST BE AVOIDED. THE FOLLOWING ALTERNATIVES SHOULD BE CONSIDERED:

- ☐ MOBILE GENERATORS AND SUBSTATIONS
- ☐ LIVE LINE WORK
- ☐ DESIGN ALTERNATIVES
- ☐ LOW VOLTAGE PARALLELS
- ☐ WORK PRACTICES/ STANDARDS

TO BE FUNDED BY THE CUSTOMER/ DEVELOPER.

ASSETS TO BE RETURNED TO INTEGRAL

COLUMNS C238776, C238777, C238778, C238779, C238780, C238781, C238782, C238783, C238784, C238785, C238786, C238787, C238788, C238789, C238790, C238692, C238693, C238695, C238696

LANTERNS L126624, L126625, L126626, L126627, L126628, L126629, L126630, L126631, L126632, L126633, L126634, L49944, L49385, L49930, L49932, L49934, L49936, L49937, L49949, L49970

ALL REMOVED O/H AND U/G CABLING

WARNING

BEFORE COMMENCING ANY WORK CONTACT THE FOLLOWING

1. INTEGRAL ENERGY PH: (02) 9853 7293
2. TELSTRA PH: (02) 9204 0680
3. OPTUS PH: 1800 505 777
4. AGILITY PH: (02) 9565 7154

IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO CHECK & VERIFY LOCATION OF ALL EXISTING SERVICES INCLUDING WATER MAINS, SEWER MAINS, GAS MAINS, FIRE MAINS, ELECTRICAL (LOW & HIGH VOLTAGE) MAINS AND TELECOMMUNICATION MAINS (TELSTRA, OPTUS & OTHER UTILITIES).

DUCT SCHEDULE

DUCT CONFIGURATION	DETAILS
REPLACE DUCTS	LAY BETWEEN: A & S, M & COLUMN 770112 TRENCH DETAILS: LV x 125 m DUCTS REQ'D: 50 mm x 250 m, 125 mm x 0 m
REPLACE DUCTS, ROAD CROSSING	LAY BETWEEN: T & S, V & W, U & SS7963 TRENCH DETAILS: HV x 50 m DUCTS REQ'D: 50 mm x 100 m, 125 mm x 300 m
REPLACE DUCTS	LAY BETWEEN: C & PILLAR 103436 TRENCH DETAILS: HV x 35 m DUCTS REQ'D: 50 mm x 30 m, 125 mm x 140 m
REPLACE DUCTS	LAY BETWEEN: B & S TRENCH DETAILS: HV x 180 m DUCTS REQ'D: 50 mm x 360 m, 125 mm x 720 m
REPLACE DUCTS	LAY BETWEEN: D & C TRENCH DETAILS: HV x 55 m DUCTS REQ'D: 50 mm x 110 m, 125 mm x 220 m
MIXED DUCTS, ROAD CROSSING	LAY BETWEEN: D & K TRENCH DETAILS: HV x 30 m DUCTS REQ'D: 50 mm x 60 m, 125 mm x 120 m
REPLACE DUCTS	LAY BETWEEN: F & D TRENCH DETAILS: HV x 55 m DUCTS REQ'D: 50 mm x 55 m, 125 mm x 220 m
REPLACE DUCTS	LAY BETWEEN: G & F TRENCH DETAILS: HV x 30 m DUCTS REQ'D: 50 mm x 30 m, 125 mm x 120 m
REPLACE DUCTS, ROAD CROSSING	LAY BETWEEN: F & J TRENCH DETAILS: HV x 10 m DUCTS REQ'D: 50 mm x 20 m, 125 mm x 60 m
REPLACE DUCTS	LAY BETWEEN: H & G TRENCH DETAILS: HV x 20 m DUCTS REQ'D: 50 mm x 70 m, 125 mm x 80 m
REPLACE DUCTS, BRIDGE DUCTS	LAY BETWEEN: M & L TRENCH DETAILS: BRIDGE x 50 m DUCTS REQ'D: 50 mm x 100 m, 125 mm x 0 m
REPLACE DUCTS, ROAD CROSSING	LAY BETWEEN: X & R TRENCH DETAILS: HV x 40 m DUCTS REQ'D: 50 mm x 80 m, 125 mm x 160 m
REPLACE DUCTS, ROAD CROSSING	LAY BETWEEN: V & Q, C & P TRENCH DETAILS: HV x 45 m DUCTS REQ'D: 50 mm x 45 m, 125 mm x 90 m

NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH INTEGRAL ENERGY'S GENERAL TERMS & CONDITIONS & ALL OTHER RELEVANT INTEGRAL ENERGY STANDARDS INCLUDING BUT NOT LIMITED TO: MCI, MDI, MMI, PDI, SAD, SDI, SMI & SPJ STANDARDS. PARTICULAR ATTENTION SHOULD BE PAID TO SPJ4004.
2. THIS DRAWING IS NOT SUITABLE FOR CONSTRUCTION UNTIL SIGNED IN THE TITLE BLOCK AS CERTIFIED BY INTEGRAL ENERGY. PLEASE NOTE, DESIGN CERTIFICATION WILL LAPSE WHERE CONSTRUCTION HAS NOT COMMENCED WITHIN 6 MONTHS, OR WHERE CONSTRUCTION HAS BEEN INTERRUPTED FOR MORE THAN 6 MONTHS. WHERE DESIGN CERTIFICATION HAS LAPSED, THE DESIGN MUST BE RE-SUBMITTED FOR CERTIFICATION BY THE ACCREDITED LEVEL 3 SERVICE PROVIDER.
3. LOCAL AUTHORITY TO BE NOTIFIED OF PROPOSED WORK PRIOR TO CONSTRUCTION.
4. DEVELOPER TO EXCAVATE TRENCH, LAY DUCTS AND BACKFILL TO INTEGRAL ENERGY'S REQUIREMENTS. ALL DUCTS MUST BE MADE CONTINUOS. A DIAL BEFORE YOU DIG SEARCH (PH 1100) MUST BE PERFORMED PRIOR TO COMMENCING WORK.
5. UNLESS SHOWN OTHERWISE, ALL ASSET LOCATIONS ON THIS DRAWING ARE UNDERSTOOD TO BE WITHIN THE BOUNDARIES OF EXISTING OR PROPOSED PUBLIC ROADS AND THE DESIGN IS SUBMITTED ON BEHALF OF THE RELEVANT ROAD AUTHORITY. CERTIFICATION OF THIS PLAN GIVES NO RIGHT OF ENTRY TO THE LAND SHOWN AND ANY ACCREDITED SERVICE PROVIDER MUST ENSURE THAT PERMISSION FROM THE CURRENT OWNER OF THE LAND IS OBTAINED BEFORE ENTERING THE LAND OR COMMENCING CONSTRUCTION.
6. OPTUS &/OR TELSTRA CABLES LOCATED ON POLES CONTACT OPTUS (RON HARRISON) ON 02 9737 5625 OR TELSTRA (FIELD CONTRACTS OFFICE) ON PH (02) 9397 3015 OR FAX (02) 9397 2235 TO CO-ORDINATE RELOCATION OF THESE SERVICES IF REQUIRED.
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE SITE SPECIFIC ENVIRONMENTAL IMPACT ASSESMENT, ALONG WITH INTEGRAL'S GENERIC ENVIRONMENTAL MANAGEMENT PLAN EMS0003, & ALL MITIGATION MEASURES SPECIFIED MUST BE IMPLEMENTED. THERE HAS BEEN A GENERIC ENVIRONMENTAL IMPACT STUDY COMPLETED FOR THE NORTHWEST TRANSITWAY. ALL SERVICE PROVIDERS SHOULD BE FAMILIAR WITH THE WORK METHODS AND PROCEDURES REQUIRED BY THIS CONTACT THE HEAD CONTRACTOR (LEIGHTON) FOR DETAILS.
8. THIS DESIGN HAS BEEN BASED UPON INFORMATION RECEIVED AS BEING CORRECT AND COMPLETE AND IS CERTIFIED TO COMPLY WITH THE RELEVANT SECTIONS OF AS/NZ 1158 STANDARDS. THE STREET LIGHTING SHALL BE INSTALLED AS SPECIFIED ON THE DRAWINGS WITH A TOLERANCE OF +/- 1m ONLY. NO OTHER VARIATIONS ARE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE PROJECT DESIGNER.
9. DISMANTLED OR REMOVED INTEGRAL ASSETS MUST BE RETURNED TO THE NEAREST INTEGRAL ENERGY DEPOT.
10. ALL COLUMNS MUST BE INSTALLED WITHIN INTEGRAL'S FOOTPATH ALLOCATION UNLESS NOTED OTHERWISE. STREETLIGHT COLUMNS MUST NOT BE INSTALLED WITHIN 3m FROM BACK OF KERB. IF A SETBACK OF 3m FROM THE BACK OF KERB IS NOT ACHIEVABLE, THEN A FRANGIBLE COLUMN APPROVED BY INTEGRAL ENERGY MUST BE USED AND INSTALLED IN ACCORDANCE WITH AS1158. ALL OUTREACH ARMS ARE TO BE INSTALLED PERPENDICULAR TO THE CARRIAGEWAY. THE LOCATION OF THE COLUMNS AND LANTERNS ON THE SITE PLAN IS INDICATIVE ONLY. THE DIMENSIONS SHOWN ARE APPROXIMATE ONLY, REFER TO THE EASTINGS AND NORTHINGS FOR ACCURATE COLUMN LOCATIONS.
11. WHERE AN OPEN TRENCH IS SPECIFIED ON THIS DRAWING, THIS MAY BE REPLACED WITH AN UNDERBORE WHERE APPROVAL IS NOT GRANTED BY THE RELEVANT ROAD AUTHORITY. ENSURE THAT ALL ASSETS REMAIN WITHIN THE BOUNDARIES OF THE ROAD RESERVE AND DO NOT CROSS THE PROPERTY LINE WITHOUT PRIOR PERMISSION FROM THE PROPERTY OWNER. ENSURE APPROPRIATE CLEARANCES ARE MET IN ACCORDANCE WITH INTEGRAL STANDARDS.
12. ALL DUCTS MUST BE INSTALLED WITHIN INTEGRAL ENERGY'S FOOTPATH ALLOCATION UNLESS SPECIFICALLY NOTED ON THIS DRAWING. ROAD CROSSING DUCTS MUST RUN PERPENDICULAR TO THE KERB FROM AND TO INTEGRALS FOOTPATH ALLOCATION ON EITHER SIDE OF THE ROAD. ALL DUCTS ACROSS ROADS OR DRIVEWAYS MUST BE INSTALLED AS ROAD CROSSING DUCTS.
13. ANY INTEGRAL DUCTS THAT AS A RESULT OF THIS PROJECT (NW TRANSITWAY) HAVE THEIR LEVEL OF COVER MODIFIED MUST BE APPROVED BY INTEGRAL ENERGY. CONCRETE ENCASING MAY BE NECESSARY. ALL DUCTS MUST REMAIN WITHIN THE INTEGRAL FOOTPATH ALLOCATION.
14. THIS PROJECT HAS BEEN DESIGNED BASED ON THE ASSUMPTION THAT ALL WORKS UNDER CAP ARP0932 HAVE BEEN COMPLETED IN ACCORDANCE WITH DRAWING 297638.
15. AN EASEMENT FOR SWITCHING STATION SITE 2.75m x 2.75m IS REQUIRED OVER UWS SITE (LOT10 DP876866). THIS EASEMENT SIZE IS OF MINIMUM SIZE ONLY AND HAS TO BE INCREASED ACCORDINGLY WHEN THERE IS AN ENCROACHMENT BY OTHER SERVICES (EG WATER AND/OR SEWER).
16. A SUITABLE RETAINING WALL MAY BE REQUIRED TO BE BUILT BY THE DEVELOPER. THIS WALL IS TO MEET LOCAL COUNCIL REQUIREMENTS AND MUST BE BUILT OUTSIDE OF THE SWITCHING STATION EASEMENT. IT MAY BE NECESSARY TO ADJUST THE EASEMENT LOCATION. REFER TO INTEGRAL ENERGY'S SDI 104 FOR DETAILS.

SCOPE OF WORKS

WORKS BY LEVEL 1 SERVICE PROVIDER: INTEGRAL ENERGY FUNDED OR SUPPLIED COMPONENT	WORKS BY LEVEL 1 SERVICE PROVIDER: CUSTOMER FUNDED COMPONENT	OTHER WORKS BY CUSTOMER
NON CONTESTABLE WORK (Performed by Integral only)	NON CONTESTABLE WORK	INCLUDES, BUT NOT LIMITED TO 1. SUPPLY OF GENERATOR TO ENSURE MINIMUM INTERRUPTION TO SUPPLY FOR AFFECTED CUSTOMERS 2. RESTORATION OF FOOTPATHS & ROAD RESERVE TO ORIGINAL CONDITION 3. CREATION OF EASEMENT FOR SWITCHING STATION IN INTEGRAL ENERGY'S FAVOUR. ALL OTHER WORKS REQUIRED TO COMPLETE THIS PROJECT AS PER THIS DRAWING AND ANY RELEVANT STANDARDS.
NONE	SWITCHING, COMMISSIONING & INSPECTION FEE	
CONTESTABLE WORK (Re-imbursed by Integral)	CONTESTABLE WORK	
MIXED DUCTS ~~4Nr @ $180/Nr = $480.00~~ ~~NOTE: CURRENTLY UNDER NEGOTIATION BETWEEN I & LCPL~~	ALL WORKS INCLUDING, BUT NOT LIMITED TO 1 REMOVE SL COLUMNS & ABANDON DUCTS AS PER SITE PLAN. 2 EXCAVATE & PREPARE TRENCH ROUTES AS PER SITE PLAN. INSTALL DUCTS AS PER DUCT SLHEDULE 3 RELOCATE SWITCHING STATION 7943 4 LAY AND TERMINATE NEW CABLING AS PER CCT LAYOUTS 5 INSTALL NEW SL COLUMNS & LANTERNS AS PER SITE PLAN & CCT LAYOUTS	
SUPPLIED FREE		
NONE		

STREET LIGHT BILLING

NEW	REMOVE	LANTERN No.	QTY	TYPE CODE	RATE CODE	LTO CAT	CHARGE TO
250WHPS		L208880-L206903	24	343	SCH 2	V3	PARRAMATTA CITY COUNCIL
	250WHPS	L126624-L126634	11	343	SCH 2	V3	PARRAMATTA CITY COUNCIL
	250WHPS	L49385, L49930, L49933, L49934, L49936, L49937, L49942, L49944, L49949, L49970	10	55	SCH 1	V3	PARRAMATTA CITY COUNCIL

COMPLIANCE SCANNED 11 JUL 2007

ATTENTION

LEVEL 1 ACCREDITED SERVICE PROVIDER TO NOTIFY NETWORK DATA DAILY WHEN WORK IS IN PROGRESS.

PH: (02) 9853-7293 MOB: 0407 488 826

APPROVAL TO CONNECT TO PUBLIC LIGHTING

Date Approved 23-02-06

Reviewers Signature: PREVIOUSLY CERTIFIED BY WEBB AUSTRALIA

This approval is issued subject to Integral Energy's General Terms & Conditions for the connection of Public Lighting. 31-01-06

DUCT DECLARATION

I Richard Coads

OF Position Power

HEREBY CERTIFY THAT THE DUCTS SHOWN ON THIS DWG HAVE BEEN INSTALLED IN ACCORDANCE WITH THIS DWG & INTEGRAL ENERGY'S MDI0020 SECT 9 & WAS COMPLETED ON 19/1/07

SIGNATURE .....

SURVEYOR REGISTERED UNDER SURVEYORS ACT 1929 (AS AMENDED) OR MEMBER OF THE INSTITUTE OF ENGINEERS AUSTRALIA

SWITCHING STATION EASEMENT LAYOUT (SIZE 14)

SCALE: 1:100

PADMOUNT EASEMENT (A)

EXCLUSION ZONE (B) - (REFER SDI104)

PADMOUNT FOOTING (A)

EXCLUSION ZONE BOUNDARY

TWO OR FOUR PIER FOOTING

EXCLUSION ZONE BOUNDARY

SWITCHING STATION LOCATION DIAGRAM

SCALE: N.T.S.

PADMOUNT EASEMENT (A)

EXCLUSION ZONE (B) - (REFER SDI104)

LOT 12 DP843683

ROAD

RETAINING WALL AROUND SWITCHING STATION EASEMENT AREA TO RETAIN NEW BATTER SLOPS

SWITCHING STATION EASEMENT AREA LOCATED AT THE BOTTOM OF NEW BATTER SLOP ACCESS FROM DARCY ROAD

UWS WESTMEAD (LOT 10 DP876866)

EXCLUSION ZONE BOUNDARY

ENDEAVOUR ENERGY WARNING

This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on such plans from any cause whatsoever arising.

Persons are to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property.

All Electrical apparatus shall be considered as live until proved otherwise. Failure to do so may cause severe injury or death.

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides(OCP) may be present in some sub-transmission trenches.

MAINSELL AECOM

Mainsell Australia Pty Ltd A.B.N. 20 093 846 925

DETAILED DESIGN N777-US-2144111 A

NORTHWEST TRANSITWAY REFERENCE

HEAD CONTRACTOR'S DETAILS

COMPANY: LEIGHTON CONTRACTORS PTY LTD
CONTACT: IAN GASSON
PHONE: (02) 8198-5700
MOBILE:
EMAIL:
PROJECT: NW TRANSITWAY - SECTION 1
PROJ REF: HAWKESBURY RD RELOCATION

ATTENTION

ALL SERVICES SEARCHES TO BE ACQUIRED & CHECKED PRIOR TO CONSTRUCTION COMMENCING.

FIELD BOOK
COMN: ...../...../..... COMP...../...../.....
UG MAP No: .....
DUCT DWG: .....
RECORDED BY: LEIGHTONS
PLOTTED BY: POSITRON

NOTE: SURVEY DETAILS SUPPLIED BY LEIGHTONS TO ASSET DATA FOR LOCATION OF DUCTS.

UG OLD PLAN CAPTURE

COMBINED WAE / FIELD BOOK

AMENDMENTS	ORIGINAL	DRN	DATE
A	HK	HK	17.01.06
B	HK	HK	19.12.05
A	HK	HK	12.12.05

A ORIGINAL ISSUE (INTEGRAL ENERGY SUBMISSION)
B ORIGINAL ISSUE (INTEGRAL ENERGY SUBMISSION)
A ORIGINAL ISSUE (INTEGRAL SUBMISSION)

AUTHORISATION OF ESTIMATED VALUE OF INTEGRAL ENERGY FUNDED ASSETS
Signed .....
Print Name NIL
Service Number .....
Funding Amount $ ..... Date ...../...../.....

CERTIFIED BY INTEGRAL ENERGY
Amendment 4
Date Approved 23.02.06
Examiner's Signature .....
This Certification is issued subject to Integral Energy's Standard Certification Terms

SCALE 1:1000 AT ORIGINAL DRAWING SIZE

WEBB AUSTRALIA GROUP (NSW) PTY LTD
LVL 4, 828 PACIFIC HWY, GORDON NSW 2072
T: +61 2 9418 1444 F: +61 2 9418 1191
E: pdwyer@webbaustralia.com.au
CIVIL ENGINEERS ELECTRICAL LIGHTING MECHANICAL SECURITY CONSULTANTS ASSOCIATION

REFERENCE DRAWINGS			
297638	ARP0932 - DARCY RD ASSET RELOCATION		

CAP No	ARP0931	ORIGINAL SCALE	AS SHOWN
FILE No	2005/02848/001		
LG AREA	PARRAMATTA	DRAWN	G.B.
GIS MAP No	8152-33	DATE	JULY 2005
UBD REF	190 M16	CHD	N.K.
HV OP DIAG	WESTMEAD D14	WEBB No	GB08G

DO NOT SCALE
SCALE AS SHOWN AT A1 SIZE
DESIGN G.B.

WEBB AUSTRALIA GROUP (NSW) PTY LTD

DARCY ROAD & HAWKESBURY ROAD, WESTMEAD
NORTHWEST TRANSITWAY - SECTION 1
ARP0931
ASSET RELOCATION & STREET LIGHTING

A1 | 297780 | A

SHEET No 1 OF 4 SHEETS

PROJECT TRACKING & AIM MAINTENANCE

ACTIVITY	NAME	SIGNATURE	DATE
AIMED	AK	AK	17/1/07
S	AK	AK	17/1/07
QA CHECKED	WAH	ALS	12/1/07
GIS UPDATED			24/10/07
GIS CHECKED			26-2-07
JOB POSTED			
COMMENTS	UG OLD PLAN CAPTURE Network Completed		

Issue Date: 02/11/2021, DBYD Sequence No: 204756947

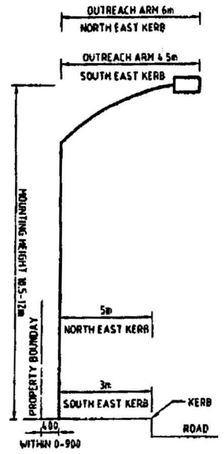
WAE - 07063855 14/2/07

MERR CAD DATA

Date-Time Fri 17 Feb 2006 - 10:40 am
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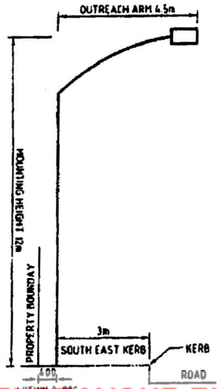
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3 R:\DWG\60000\arch\60000 AGI Background.dwg
4 R:\DWG\80000\Xrefs to REFS\80000_Section-1_Sheet.dwg
5 R:\DWG\80000\Section 1\3DCS-1.dwg
6 R:\DWG\80000\Section 1\3DCS-CADD.dwg
7 R:\DWG\80000\ARCH\3DCS-SHDV.DWG
8 R:\DWG\80000\Section 1\3DCS-DCS_ISO.dwg

N



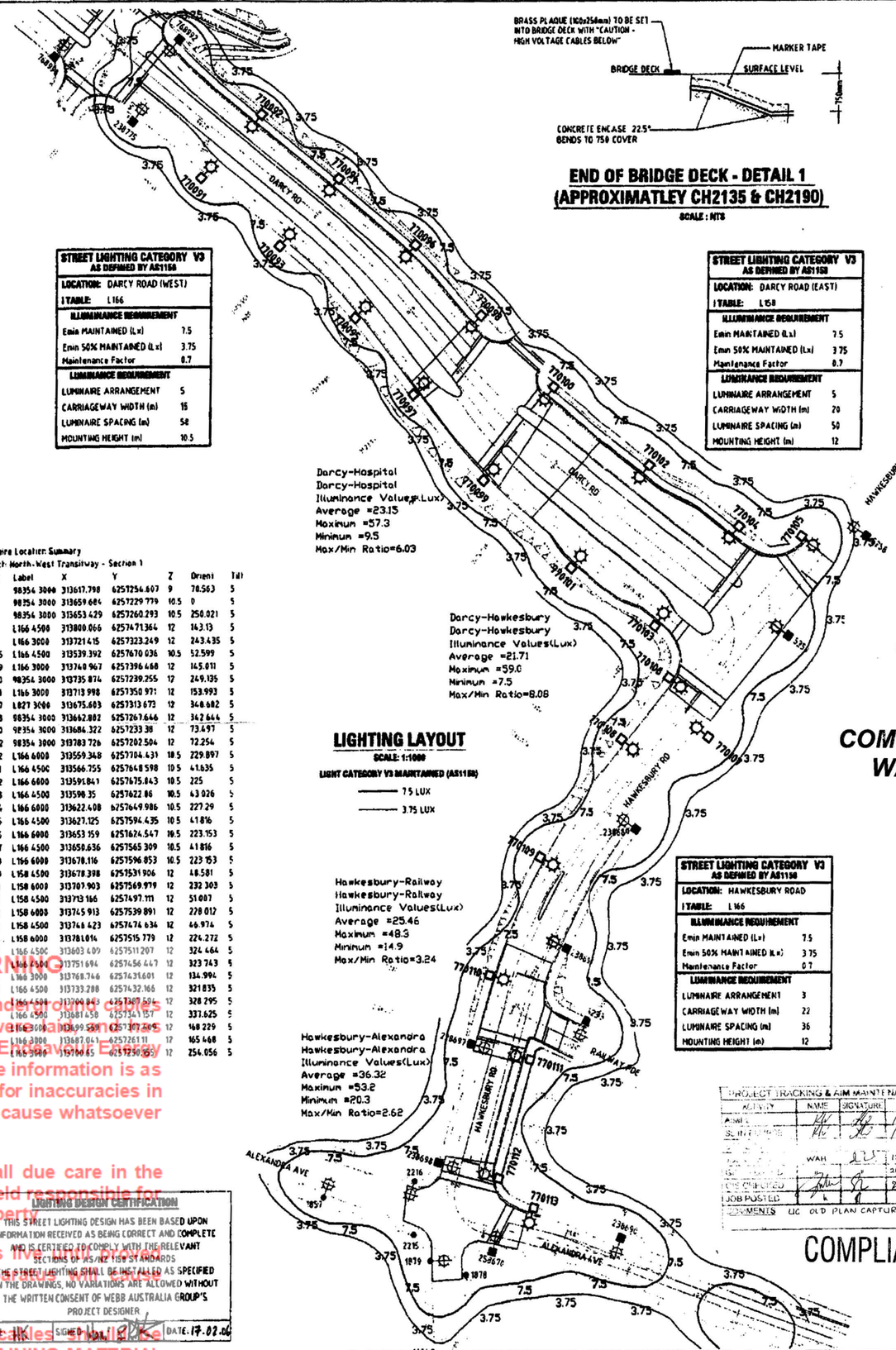
TYPICAL STREET LIGHTING COLUMN SETBACK - DARCY ROAD

NOT TO SCALE



TYPICAL STREET LIGHTING COLUMN SETBACK - HAWKESBURY ROAD

NOT TO SCALE



LIGHTING LAYOUT

SCALE: 1:1000

LIGHT CATEGORY V3 MAINTAINED (AS1158)

— 7.5 LUX
— 3.75 LUX

END OF BRIDGE DECK - DETAIL 1 (APPROXIMATLEY CH2135 & CH2190)

SCALE : NTS

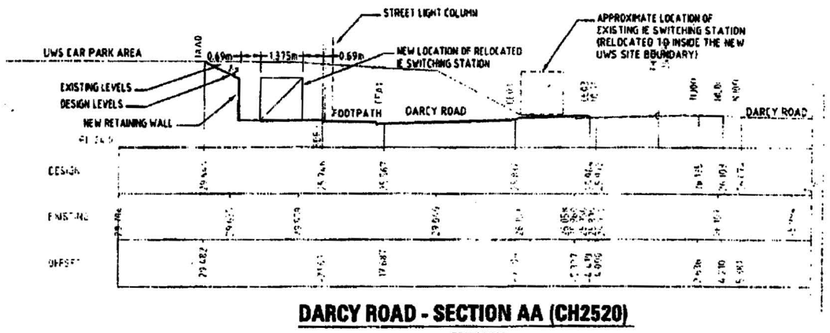
STREET LIGHTING CATEGORY V3 AS DEFINED BY AS1158	
LOCATION: DARCY ROAD (WEST)	
I TABLE: L166	
ILLUMINANCE REQUIREMENT	
Emin MAINTAINED (Lx)	7.5
Emin 50% MAINTAINED (Lx)	3.75
Maintenance Factor	0.7
LUMINANCE REQUIREMENT	
LUMINAIRE ARRANGEMENT	S
CARRIAGEWAY WIDTH (m)	15
LUMINAIRE SPACING (m)	58
MOUNTING HEIGHT (m)	10.5

STREET LIGHTING CATEGORY V3 AS DEFINED BY AS1158	
LOCATION: DARCY ROAD (EAST)	
I TABLE: L158	
ILLUMINANCE REQUIREMENT	
Emin MAINTAINED (Lx)	7.5
Emin 50% MAINTAINED (Lx)	3.75
Maintenance Factor	0.7
LUMINANCE REQUIREMENT	
LUMINAIRE ARRANGEMENT	S
CARRIAGEWAY WIDTH (m)	20
LUMINAIRE SPACING (m)	50
MOUNTING HEIGHT (m)	12

STREET LIGHTING CATEGORY V3 AS DEFINED BY AS1158	
LOCATION: HAWKESBURY ROAD	
I TABLE: L166	
ILLUMINANCE REQUIREMENT	
Emin MAINTAINED (Lx)	7.5
Emin 50% MAINTAINED (Lx)	3.75
Maintenance Factor	0.7
LUMINANCE REQUIREMENT	
LUMINAIRE ARRANGEMENT	3
CARRIAGEWAY WIDTH (m)	22
LUMINAIRE SPACING (m)	36
MOUNTING HEIGHT (m)	12

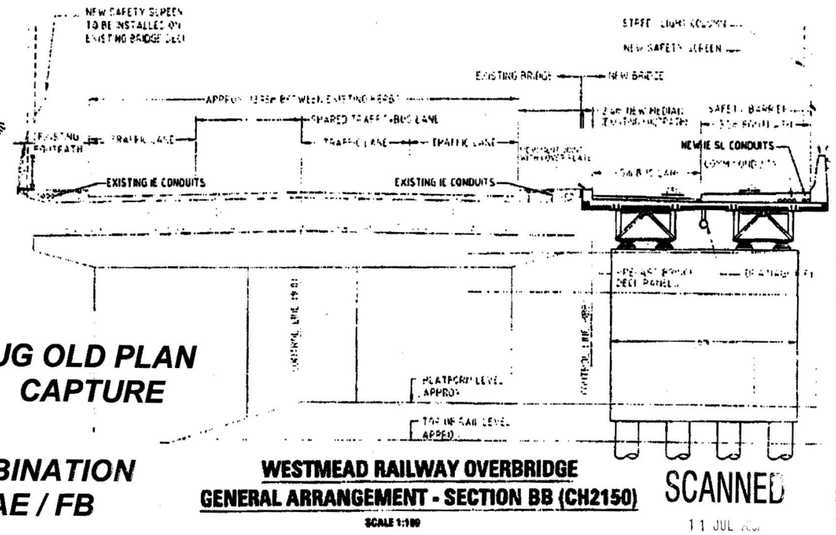
Luminaire Location Summary
Project: North-West Transitway - Section 1

SeqNo	Label	X	Y	Z	Orient	Tilt
1857	98354 3000	313617.798	6257256.607	9	78.563	5
1879	98354 3000	313659.684	6257229.779	10.5	0	5
2216	98354 3000	313653.429	6257260.293	10.5	250.021	5
5759	L166 4500	313800.066	6257471.364	12	143.13	5
6233	L166 3000	313721.415	6257323.249	12	243.435	5
238175	L166 4500	313539.392	6257670.036	10.5	52.599	5
238689	L166 3000	313740.967	6257396.468	12	145.011	5
238690	98354 3000	313735.874	6257239.255	12	249.135	5
238691	L166 3000	313713.998	6257350.971	12	153.993	5
238697	L827 3000	313675.603	6257313.673	12	348.682	5
238698	98354 3000	313662.882	6257267.646	12	342.644	5
258670	98354 3000	313684.322	6257233.38	12	73.491	5
262952	98354 3000	313783.726	6257202.504	12	72.254	5
768992	L166 6000	313559.348	6257704.431	10.5	229.897	5
770091	L166 4500	313566.755	6257648.598	10.5	41.635	5
770092	L166 6000	313591.841	6257675.843	10.5	225	5
770093	L166 4500	313598.35	6257622.86	10.5	63.026	5
770094	L166 6000	313622.408	b257649.986	10.5	227.29	5
770095	L166 4500	313627.125	6257594.435	10.5	41.816	5
770096	L166 6000	313653.159	6257624.547	10.5	223.153	5
770097	L166 4500	313650.636	6257565.309	10.5	41.816	5
770098	L166 6000	313678.116	6257596.853	10.5	223.153	5
770099	L158 4500	313678.398	6257531.906	12	48.581	5
770100	L158 6000	313707.903	6257569.979	12	232.303	5
770101	L158 4500	313713.186	6257497.111	12	51.087	5
770102	L158 6000	313745.913	6257539.891	12	228.012	5
770103	L158 4500	313746.423	6257474.634	12	46.974	5
770104	L158 6000	313781.014	6257515.779	12	224.272	5
770105	L166 4500	313603.409	6257511.207	12	324.464	5
770106	L166 6000	313751.694	6257456.447	12	323.743	5
770107	L166 3000	313768.746	6257431.601	12	134.994	5
770108	L166 4500	313733.288	6257432.166	12	321.835	5
770109	L166 4500	313700.843	6257387.594	12	328.295	5
770110	L166 6000	313681.658	6257341.157	12	337.625	5
770111	L166 3000	313699.589	6257307.565	12	148.229	5
770112	L166 3000	313687.041	6257261.11	12	165.468	5
770113	L166 6000	313700.65	6257250.365	12	256.056	5



DARCY ROAD - SECTION AA (CH2520)

SCALE 1:100



WESTMEAD RAILWAY OVERBRIDGE GENERAL ARRANGEMENT - SECTION BB (CH2150)

SCALE 1:100

UG OLD PLAN CAPTURE

COMBINATION WAE / FB

SCANNED 11 JUL 2006

REF NO	POLE/COLUMN		OUTREACH		LUMINAIRE			
	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	HEIGHT	UPCAST
C770091	8.5m IMPACT ABSORB COL	IE 8.5 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770092	8.5m ENLARGED BASE COL	IE 8.5 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770093	8.5m IMPACT ABSORB COL	IE 8.5 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770094	8.5m ENLARGED BASE COL	IE 8.5 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770095	8.5m IMPACT ABSORB COL	IE 8.5 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770096	8.5m ENLARGED BASE COL	IE 8.5 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770097	8.5m IMPACT ABSORB COL	IE 8.5 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770098	8.5m ENLARGED BASE COL	IE 8.5 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN AERO 250W HPS	OPN250SAEIEW	10.5m	5 deg
C770099	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770100	8.5m ENLARGED BASE COL	IE 10.0 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770101	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770102	10.0m ENLARGED BASE COL	IE 10.0 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770103	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770104	10.0m ENLARGED BASE COL	IE 10.0 EB	4.5m OUTREACH	IE4.5PCS + IE1SEXT	OPTISPAN STD 400W HPS	OPN400SIEW	12m	5 deg
C770105	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770106	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770107	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770108	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770109	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770110	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770111	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770112	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C770113	10.0m IMPACT ABSORB COL	IE 10.0 IA	4.5m OUTREACH	IE4.5PCS	OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C5259	EXISTING COLUMN		EXISTING		OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg
C238691	EXISTING COLUMN		EXISTING		OPTISPAN AERO 250W HPS	OPN250SAEIEW	12m	5 deg

SL208905

PROJECT TRACKING & AIM MAINTENANCE

ACTIVITY	NAME	SIGNATURE	DATE
AIM'S			
SLIM'S			
	WAH		13/9/07
GIS			24/10/07
GIS CHECKED			26-10-07
JOB POSTED			
COMMENTS	UG OLD PLAN CAPTURE.		

COMPLIANCE

ENDEAVOUR ENERGY WARNING

This plan is indicative only. The position of underground cables relative to fixtures existing when the cables were installed has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in this plan. Endeavour Energy will not be liable for any loss or damage arising on such plans from any cause whatsoever

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property. All Electrical equipment shall be considered as live and dangerous unless isolated and earthed. Contact with live electrical apparatus will result in severe injury or death.

Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground network and that Organo-Chloride Pentachlorophenol (PCP) may be present in some sub-transmission trenches

APPROVAL TO CONNECT TO PUBLIC LIGHTING

Date Approved: 8-12-06
Reviewer's Signature:
This approval is issued subject to Integral Energy's General Terms & Conditions for the connection of Public Lighting

AMENDMENTS			
ORIGINAL			
A	ISSUE	CHD	JAK
	17.02.06		
	ORIGINAL ISSUE INTEGRAL ENERGY SUBMISSION		
	ORIGINAL ISSUE INTEGRAL ENERGY SUBMISSION		
	ORIGINAL ISSUE [INTEGRAL SUBMISSION]		
	ORIGINAL ISSUE [INTEGRAL SUBMISSION]		
	DESCRIPTION		

STATUS: DETAILED DESIGN
DRAWING NO: N777-US-2144113
REV: A
NORTH WEST TRANSITWAY REFERENCE

MAUNSELL AECOM

LIGHTING DESIGN CERTIFICATION

THIS STREET LIGHTING DESIGN HAS BEEN BASED UPON INFORMATION RECEIVED AS BEING CORRECT AND COMPLETE AND IS CERTIFIED TO COMPLY WITH THE RELEVANT SECTIONS OF AS/NZ 1158 STANDARDS

THIS STREET LIGHTING SHALL BE INSTALLED AS SPECIFIED ON THE DRAWINGS, NO VARIATIONS ARE ALLOWED WITHOUT THE WRITTEN CONSENT OF WEBB AUSTRALIA GROUP'S PROJECT DESIGNER

NAME: HK SIGNED: DATE: 17.02.06

AUTHORISATION OF ESTIMATED VALUE OF PHYSICAL WORKS REQUIRED TO CONNECT ASSETS

Solution: N/E
Service Number:
Funding Amount $: Date: / /

CERTIFIED BY INTEGRAL ENERGY

Amendment: 4
Date Approved: 22.02.06
Evaluator's Signature:

This Certification is issued subject to Integral Energy's Standard Certification Terms

Maunsell Australia Pty Ltd A.B.N. 20 093 846 925

ISSUED SCALE 1:1000 AT ORIGINAL DRAWING SIZE

WEBB AUSTRALIA GROUP (NSW) PTY LTD
LVL 4, 828 PACIFIC HWY, GORDON NSW 2072
T: +61 2 9418 1444 F: +61 2 9418 1181
E: sydney@webbaustralia.com.au
CONSULTING ENGINEERS - ELECTRICAL LIGHTING MECHANICAL HYDRAULIC MELBOURNE

REFERENCE DRAWINGS			
258698	ARP0932 - DARCY ROAD ASSET RELOCATION		

CAP No	ARP0931
FILE No	2005/02340/001
LG AREA	PARRAMATTA
GIS MAP No	9152-33
UBD REF	198 N16
HV OP DIAG	WESTMEAD 014

ORIGINAL SCALE AS SHOWN @ A1

DRAWN	G.B.
DATE	JULY 2005
CHD	H.K.
WEBB No	80000
DESIGN	G.B.

DO NOT SCALE
SCALE AS SHOWN AT A1 SIZE

WEBB AUSTRALIA GROUP (NSW) PTY LTD

DARCY ROAD & HAWKESBURY ROAD, WESTMEAD
NORTHWEST TRANSITWAY - SECTION 1
ARP0931
ASSET RELOCATION & STREET LIGHTING

A1 | 297780 | A

SHEET No 3 OF 4 SHEETS

WAE12070638

Issue Date: 02/11/2021, DBYD Sequence No: 2047569471

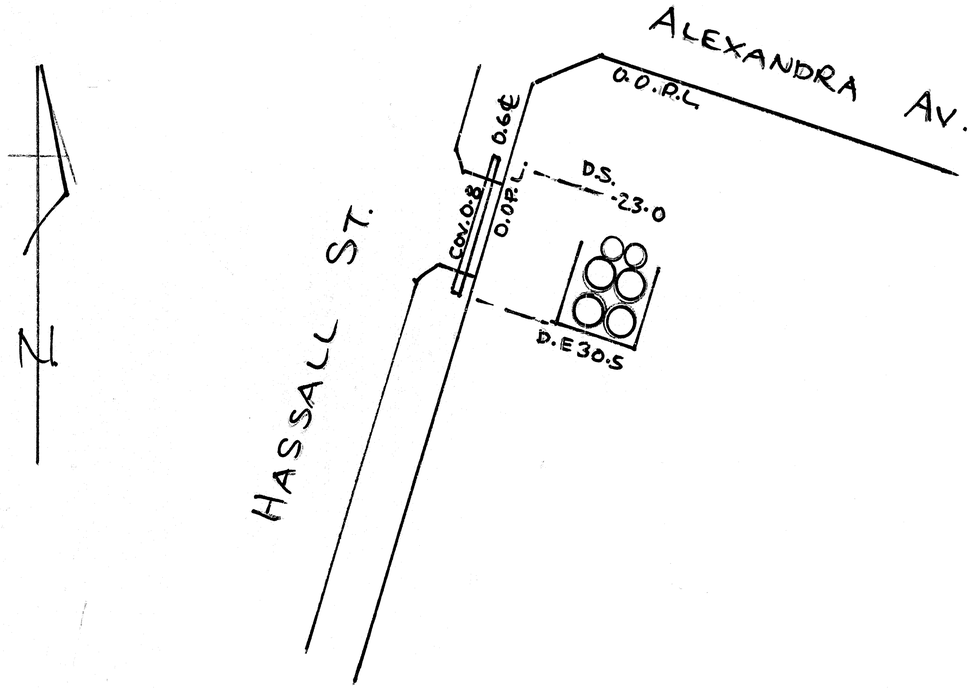
INTEGRAL energy

UNDERGROUND RETICULATION INSPECTION

NETWORK DATA BRANCH

F. B. No: 11568

Contact: MAINTASK DEVELOPMENT	Completed: 17.7.98
Location: HASSALL ST WESTMEAD.	Recorded by: G. BRIEN.
Commenced: 17.7.98	U. G. Plan No: 9152-3.4.3.8



INSPECTION OF UNDERGROUND ASSETS

☒ *SATISFACTORY* ☐ *UNSATISFACTORY*

REMARKS:

SIGNATURE: **DATE:**

FMP 4014 SEPTEMBER 1996

ENDEAVOUR ENERGY WARNING

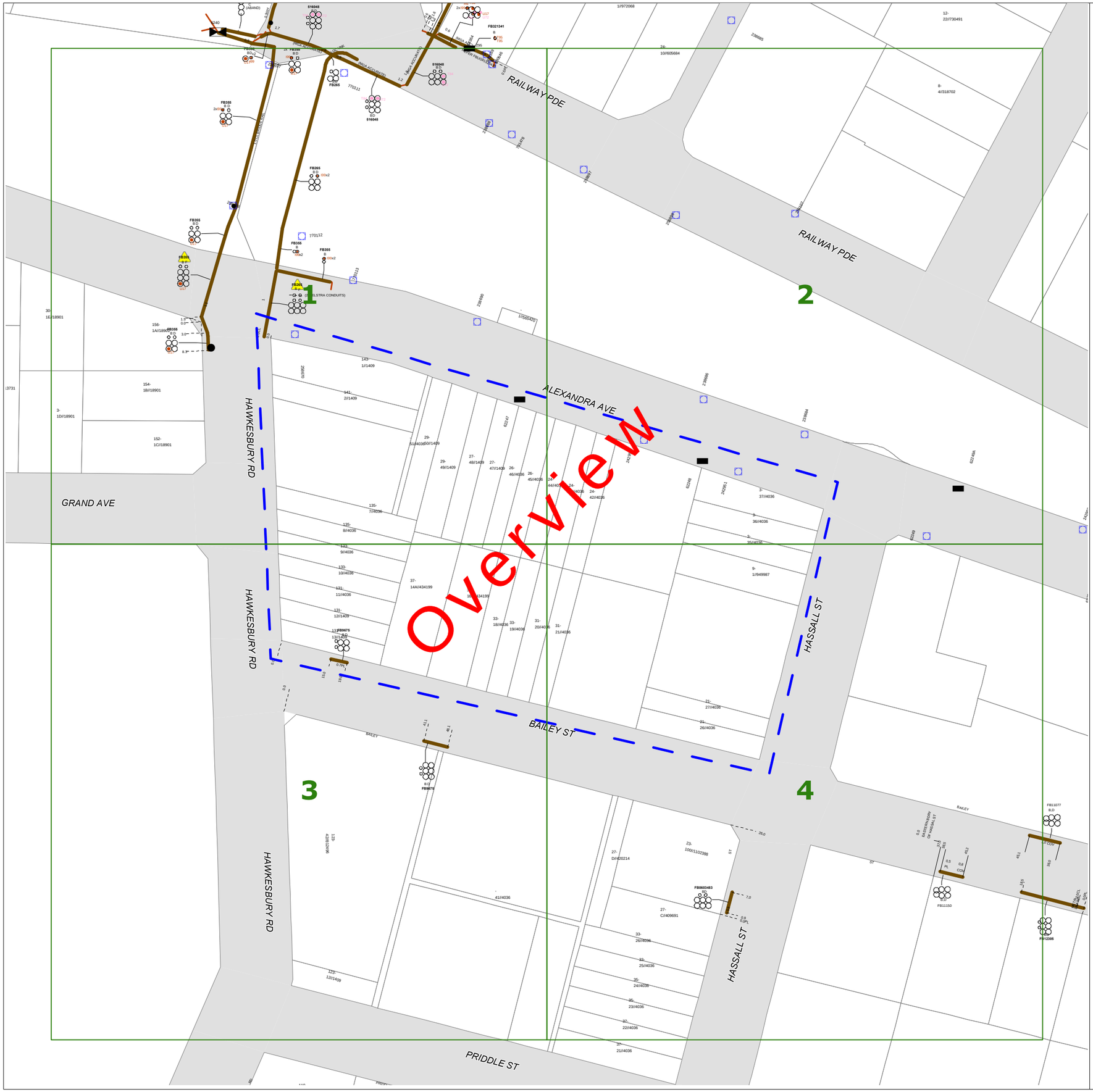
This plan shows the approximate location of underground cables relative to fixtures existing when the cables were laid, and has been prepared solely for Endeavour's own use. Endeavour Energy has taken all reasonable steps to ensure that the information is as accurate as possible but will accept no liability for inaccuracies in the information shown on such plans from any cause whatsoever arising.

Persons excavating are expected to exercise all due care in the vicinity where cables are indicated and will be held responsible for any damage caused to Endeavour Energy's Property

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Those excavating near Endeavour Energy's cables should be aware that ASBESTOS OR ASBESTOS - CONTAINING MATERIAL MAY BE PRESENT in Endeavour Energy's underground assets and that Organo-Chloride Pesticides(OCP) may be present in some sub-transmission trenches

Issue Date: 02/11/2021, DBYD Sequence No: 204756947



Endeavour Energy

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LEGEND

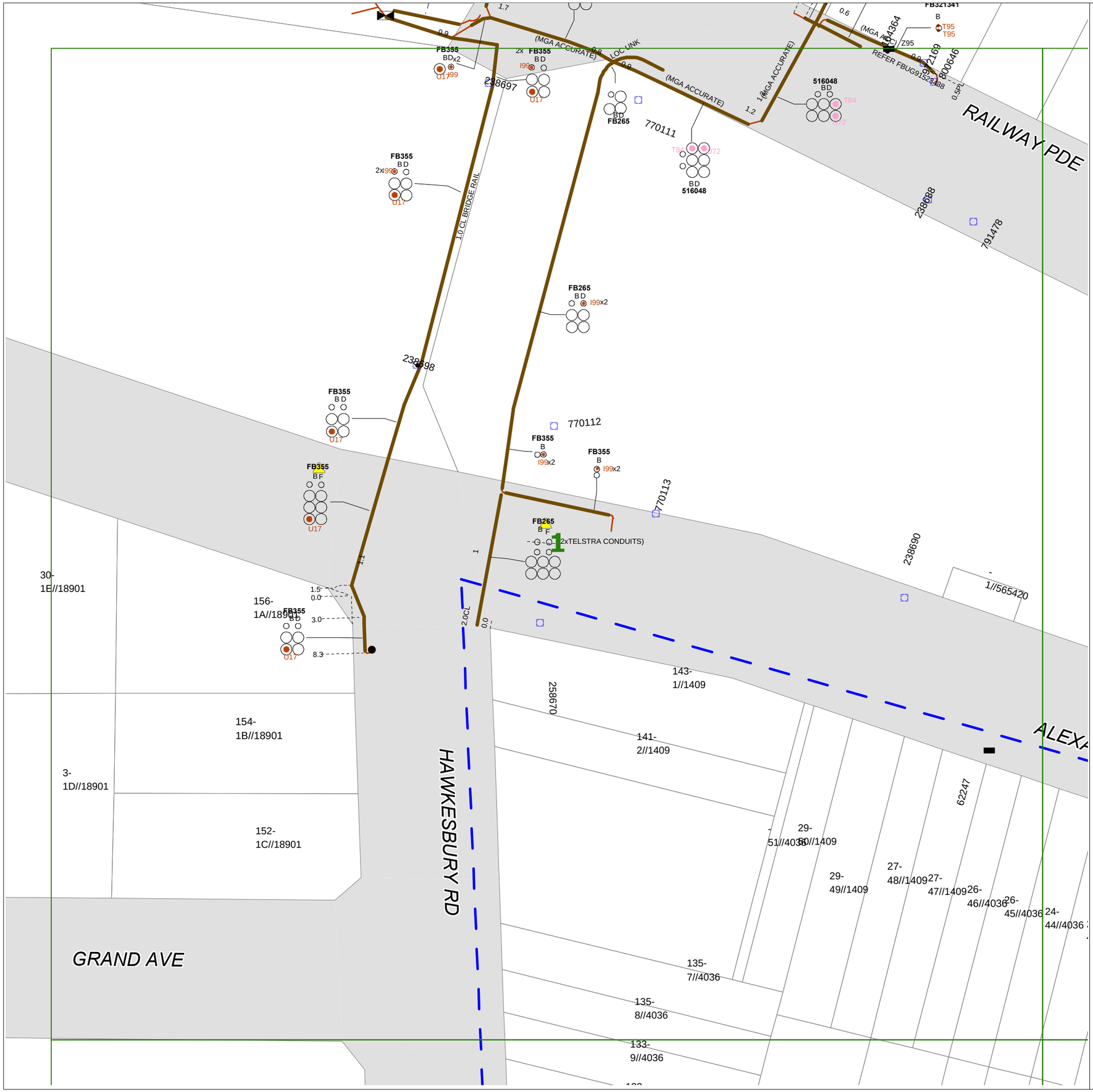
- Street light column
- Padmount substation
- Overground pillar (O.G.Box)
- Underground pit
- Duct run
- Cable run
- Typical duct section
- Asbestos warning

N

NOT TO SCALE

DBYD Sequence No.:	204756947
Issued Date:	02/11/2021

Cadastre: © Land and Property Information 2015, 2016



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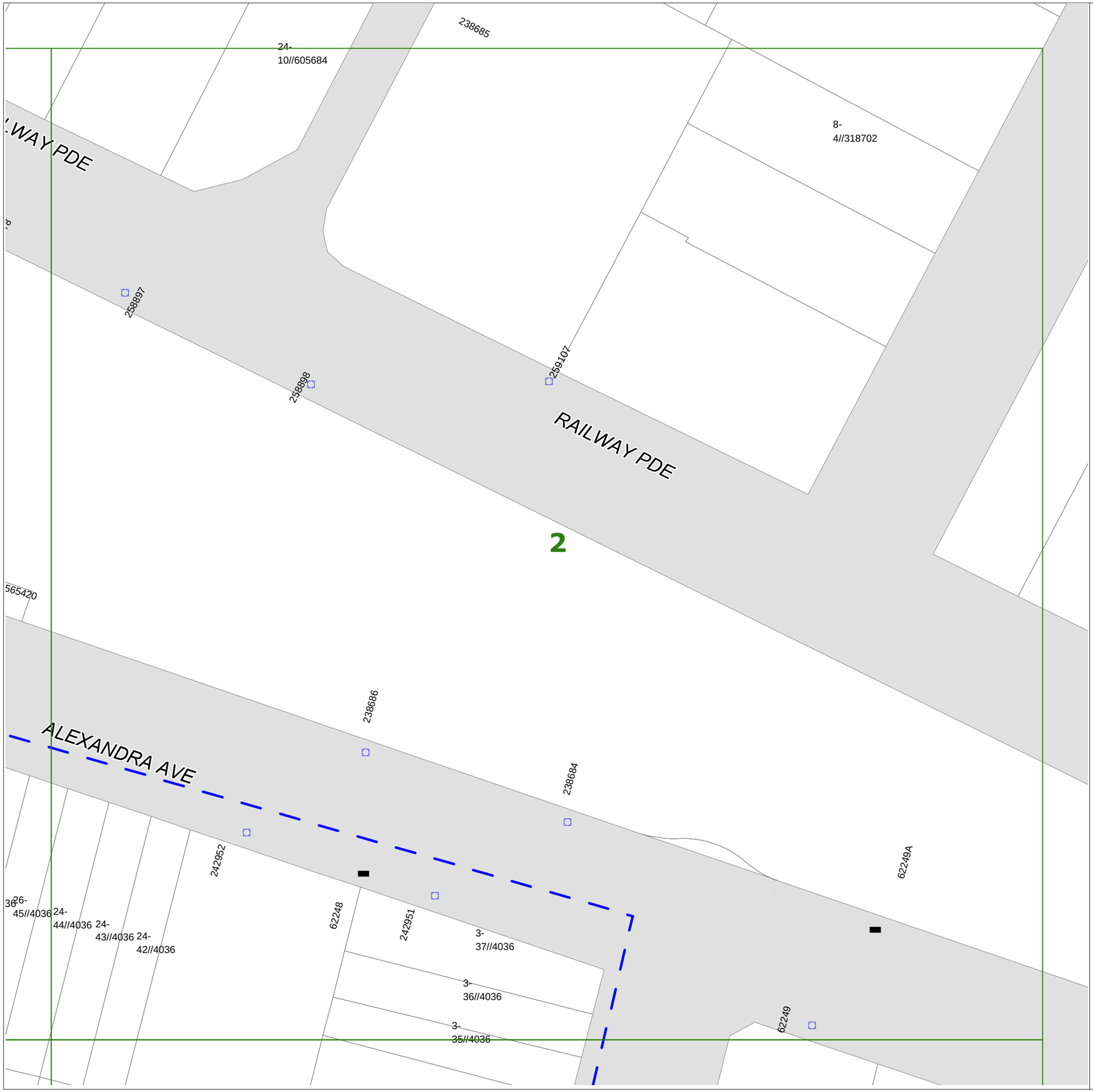
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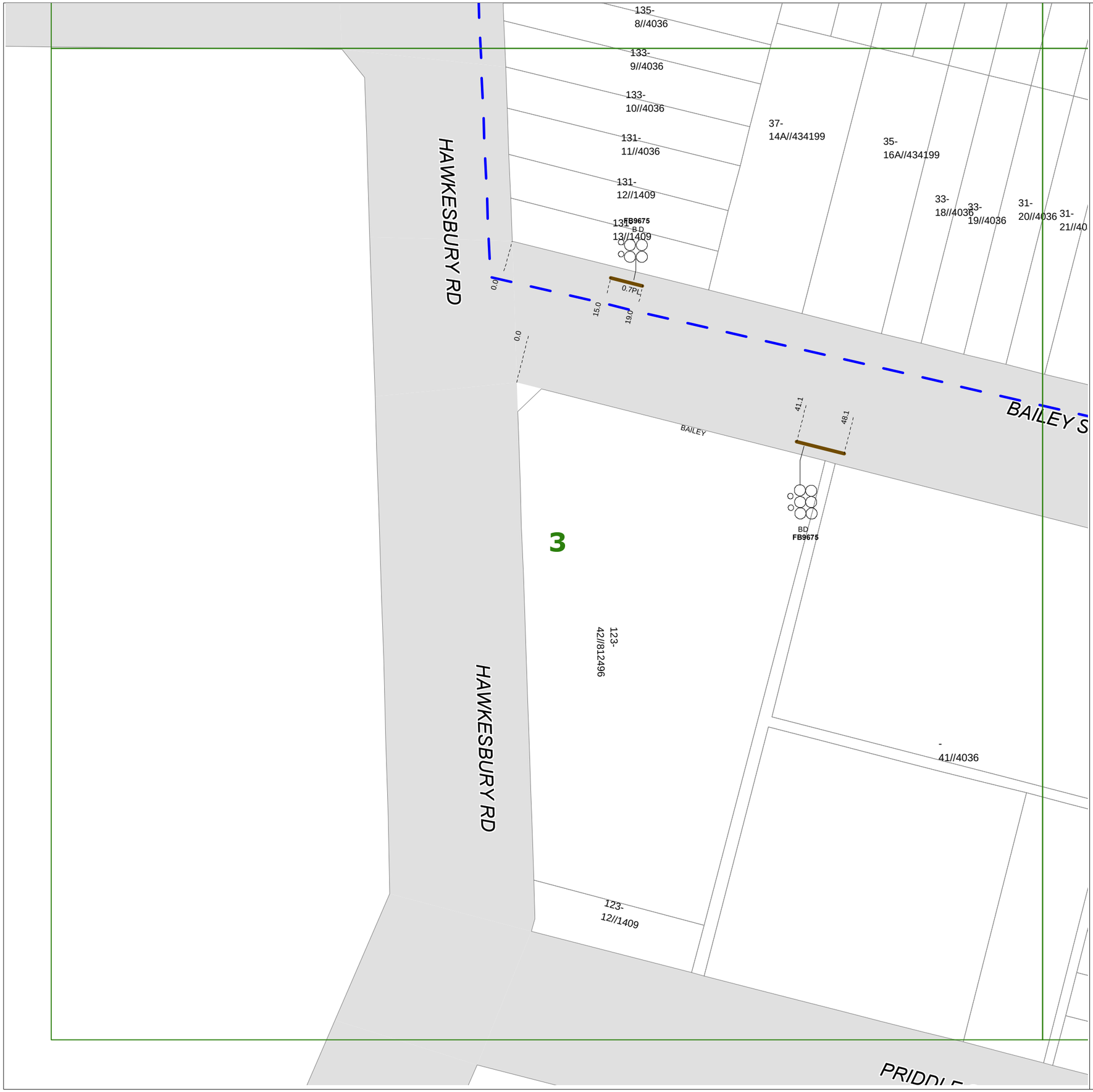
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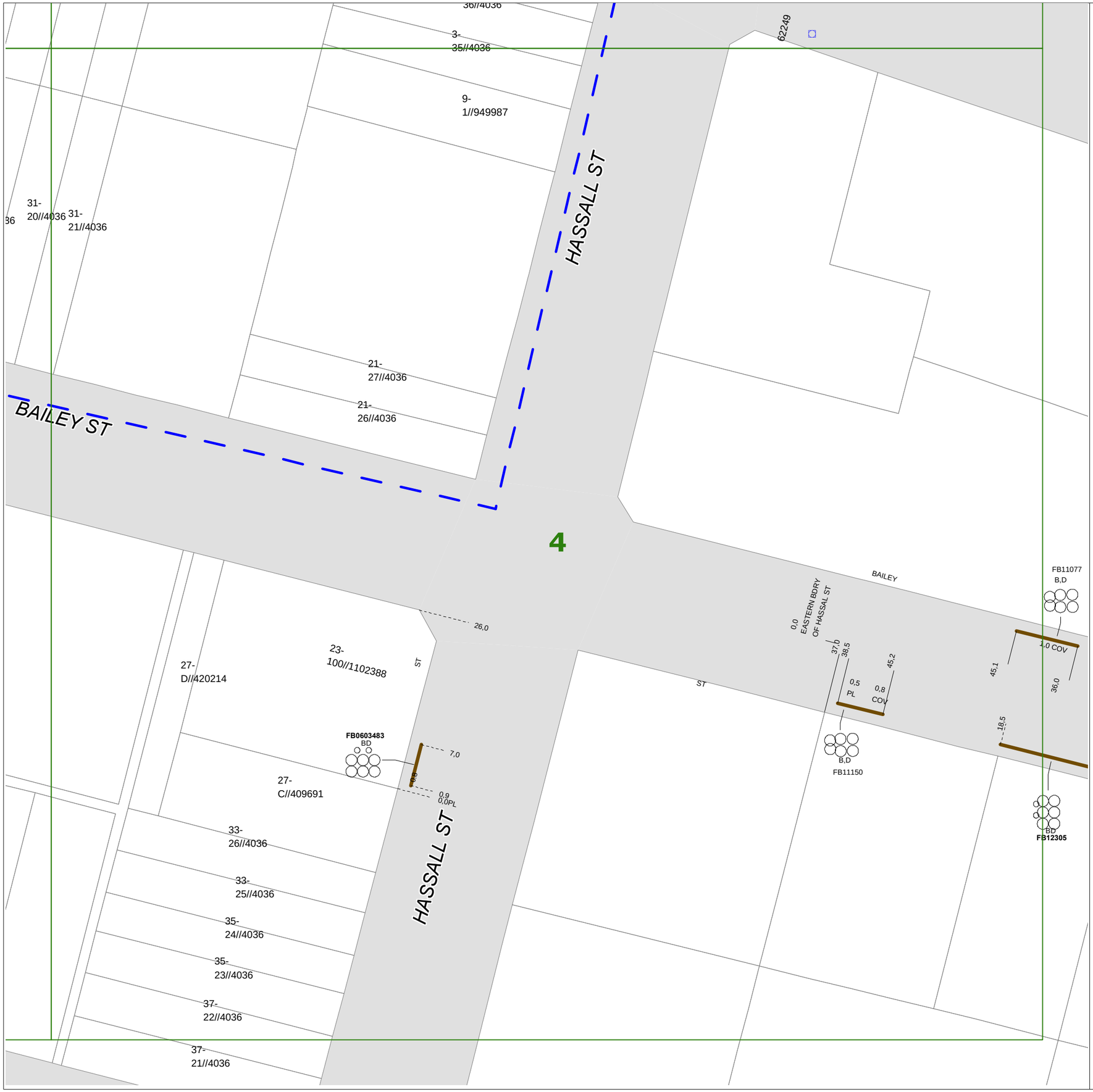
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- Typical duct section
- Asbestos warning

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NOT TO SCALE

DBYD Sequence No.:	204756947
Issued Date:	02/11/2021

Cadastre: © Land and Property Information 2015, 2016

If further clarification is required, please contact:
Endeavour Energy
Phone: (02) 9853 4161 (8:00am-4:30pm Mon-Fri)
Emergency Phone Number: 131 003

BEFORE COMMENCING EXCAVATION YOU MUST READ AND UNDERSTAND ALL INFORMATION PROVIDED IN THE DBYD RESPONSE AND LISTED BELOW

BACKGROUND

Endeavour Energy is able to make available plans of its underground assets to persons who intend to undertake excavation works in Endeavour Energy's distribution area. Any plans provided to you are made available subject to the provisions set out below, in the provided plans, and in the Endeavour Energy DBYD response Cover Letter.

We have set out below important information regarding the recommended procedures that should be followed when using this service and also the extent of our responsibility in respect of any plans provided. It is very important that you read and understand all the information and disclaimers provided below before excavating.

Information Provided by Endeavour Energy:

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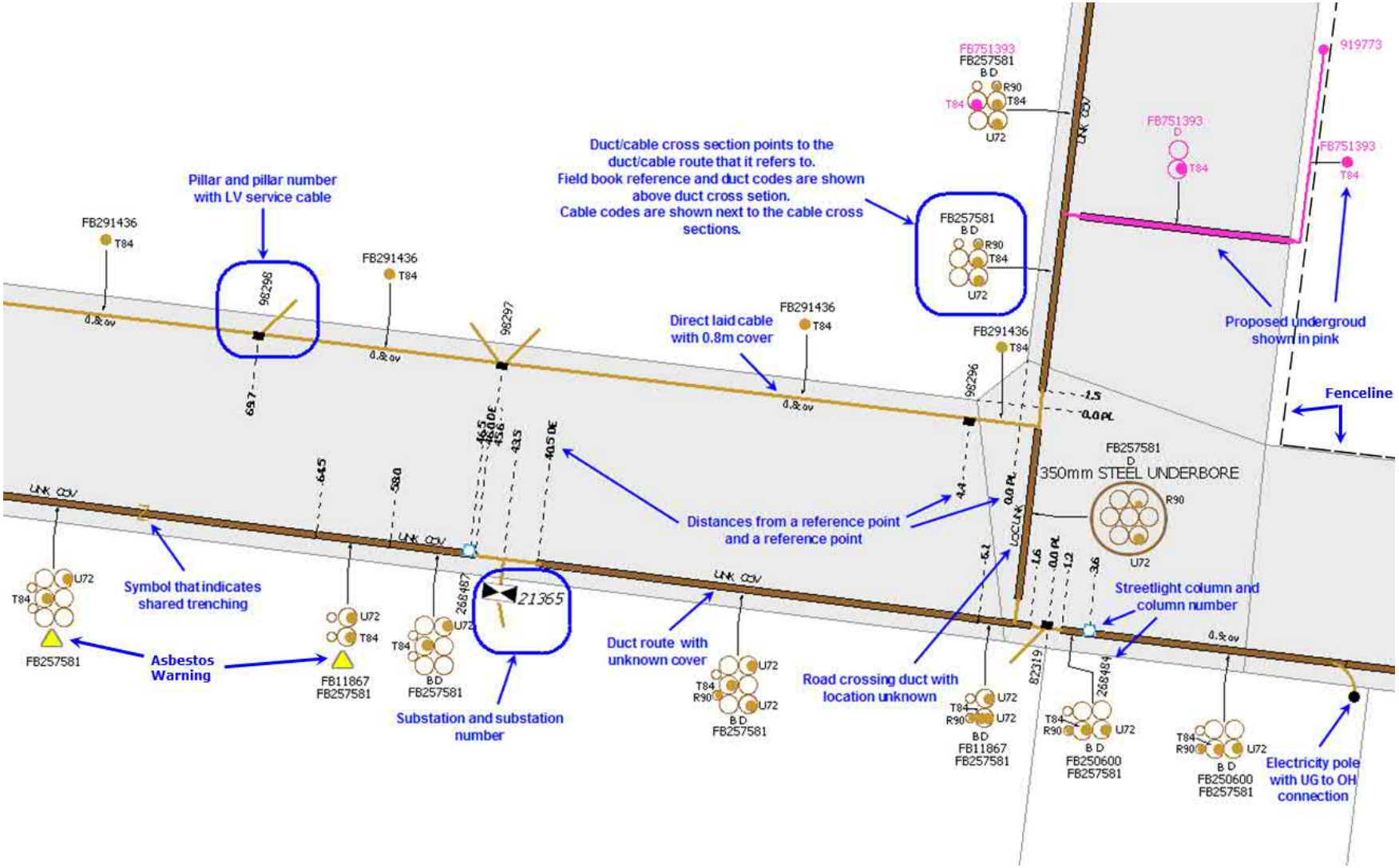
Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

CUSTOMER REQUESTS AND RESPONSIBILITIES

- Endeavour Energy expects to be able to provide relevant plans within 48 hours after a request is made.
- If the enquiry falls within the Transmission Mains area, additional notification requirements shall be complied with as per the instructions in the response Cover Letter.
- Endeavour Energy retains copyright over all plans and details provided in response to a customer's request.
- Persons excavating are expected to exercise all due care in the vicinity where underground assets are indicated and will be held responsible for any damage to any underground assets (including any Endeavour Energy property) or any other loss caused (including consequential losses) as a result of such excavations.
- All underground assets should be visually located by soft digging (pot holing) or hand digging.
- A person who undertakes excavation work is subject to duties and responsibilities under the *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2011*. Please refer to the Work Cover NSW "*Work near underground assets: Guide*" and "*Excavation work: Code of practice*" which contain practical advice for working near underground utility services.
- Any damage to Endeavour Energy's assets must be immediately reported on **131 003**.
- In all cases of electric shock or suspected electric shock the victim shall immediately be transported to hospital or medical centre for treatment.
- If conduit material cannot be identified, it should be assumed to contain asbestos material.
- Endeavour Energy plans are frequently updated to record changes to underground assets. All plans are valid for **20** working days from the date of issue.

If further clarification is required, please contact:
Endeavour Energy
Phone: (02) 9853 4161 (8:00am-4:30pm Mon-Fri)
Emergency Phone Number: 131 003

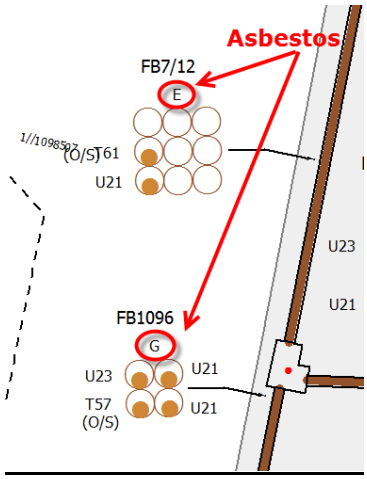
EXAMPLE OF HOW TO READ ENDEAVOUR ENERGY PLANS



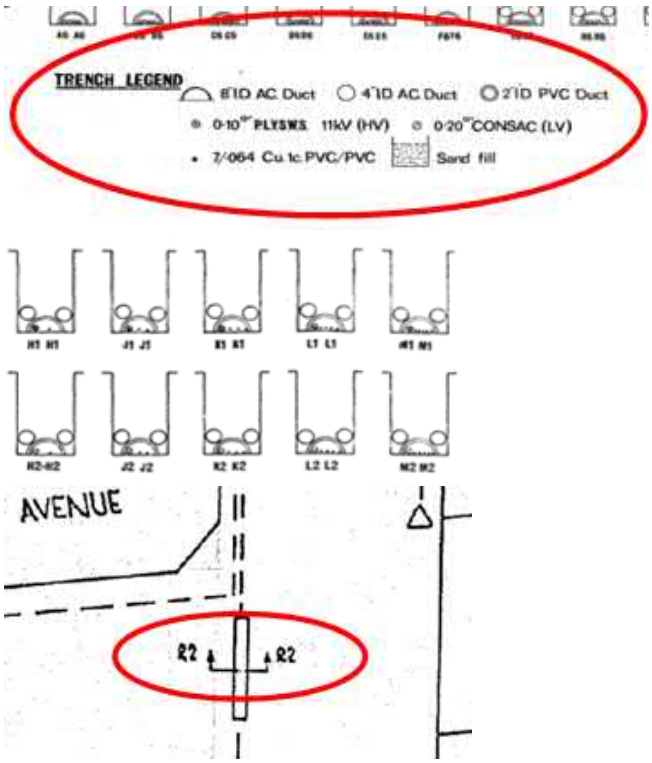
If further clarification is required, please contact:
Endeavour Energy
Phone: (02) 9853 4161 (8:00am-4:30pm Mon-Fri)
Emergency Phone Number: 131 003

IDENTIFYING ASBESTOS DUCTS

1. Duct codes **E, F** and **G** identify Fibro Conduits

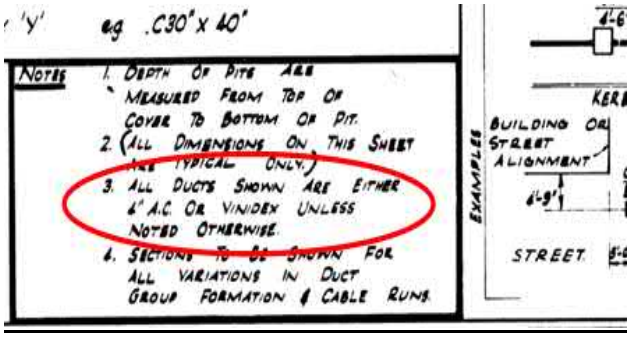


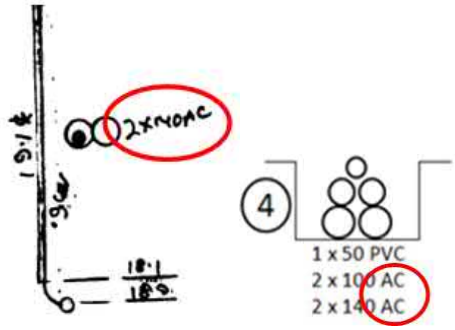
2. The duct codes **G,H,J,K,L,M Q,R,S,T,U,V,W & X** under each configuration are used on old Blue Mountains drawings to identify Asbestos



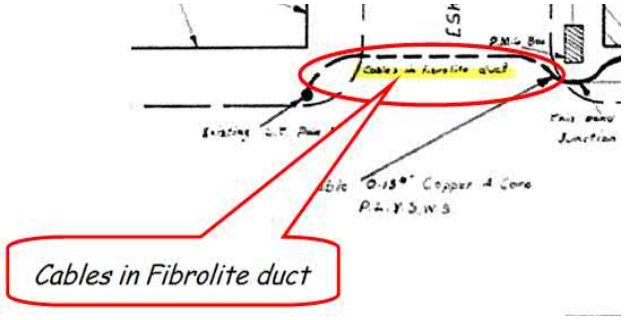
If underground details have not been captured and drawings are used, the method for identifying asbestos ducts and standards are different for the different utilities that amalgamated with Endeavour Energy. Using Reticulation Drawings, there are numerous ways to determine if a duct route has asbestos ducts, refer to following examples:

3. **AC** (Asbestos Cement) acronym





4. **Fibrolite** (asbestos) ducts



5. Yellow **triangle** identifies Fibro Conduits



If further clarification is required, please contact:
Endeavour Energy
Phone: (02) 9853 4161 (8:00am-4:30pm Mon-Fri)
Emergency Phone Number: 131 003

STANDARD UNDERGROUND SYMBOLS / LABELS

NOTE: *If symbology has not been provided on the plan use symbols as shown below.*

SYMBOLS & ACRONYMS

or — Street light column

Padmount substation

or — Overground pillar (O.G.Box)

Underground pit

Duct run

Cable run


Typical duct section


Typical underbore section

Blocked duct

Cable section

Asbestos warning

STJ, PBJ, TTJ

STJ Straight through joint

PBJ Parallel branch joint

TTJ Transition through joint

Underground to overhead pole

SL Streetlight conductor

SC Service cable

SE Cable sealed end

SF Service Feeder

OS Out of Service

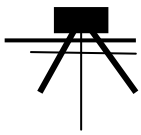
O.A.M. Over awning main

U.A.M. Under awning main

N.I.S. Not in service

Fence/dimensioning

Shared trenching


Service point of attachment

DUCT CODE LABLES

B = 50 mm PVC

D = 125mm PVC

E = 100mm Fibro Conduit (Asbestos)

F = 140mm Fibro Conduit (Asbestos)

G = 150mm Fibro Conduit (Asbestos)

DEPTH & LOCATION LABELS

0.5- 0.7 COV = 0.5m – 0.7m

0.9 COV = 0.9m Depth

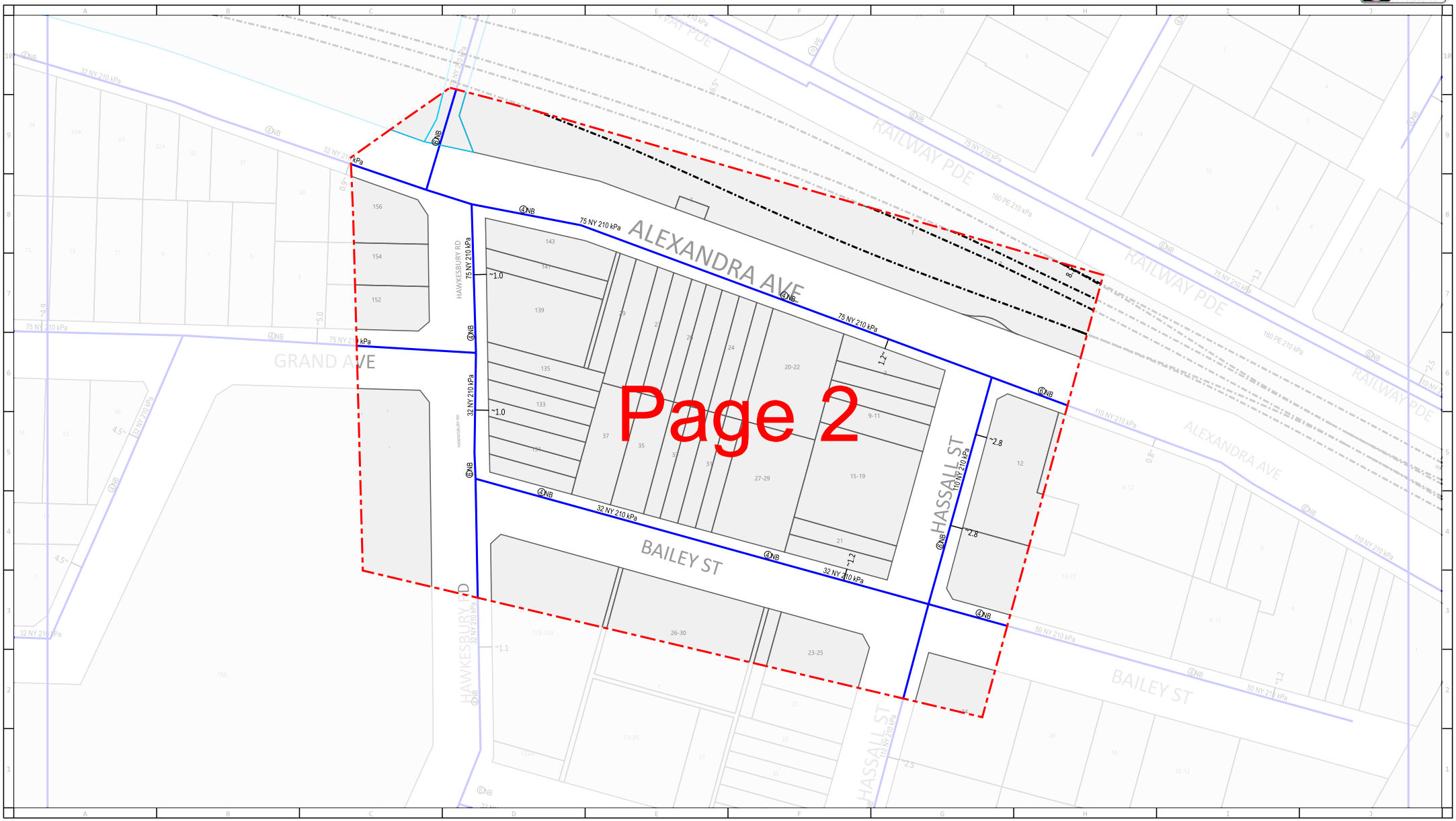
UNK COV = Depth Unknown

LOC UNK = Location Unknown

0.9 PL = Located 0.9m from Property Line


Natural Gas
Jemena
bringing energy to life

DBYD Authority: Jemena Gas Networks (NSW) **DBYD Location:** 33 Bailey Street Westmead NSW, 2145



Jemena
ABN 87 003 004 322

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

N W E S

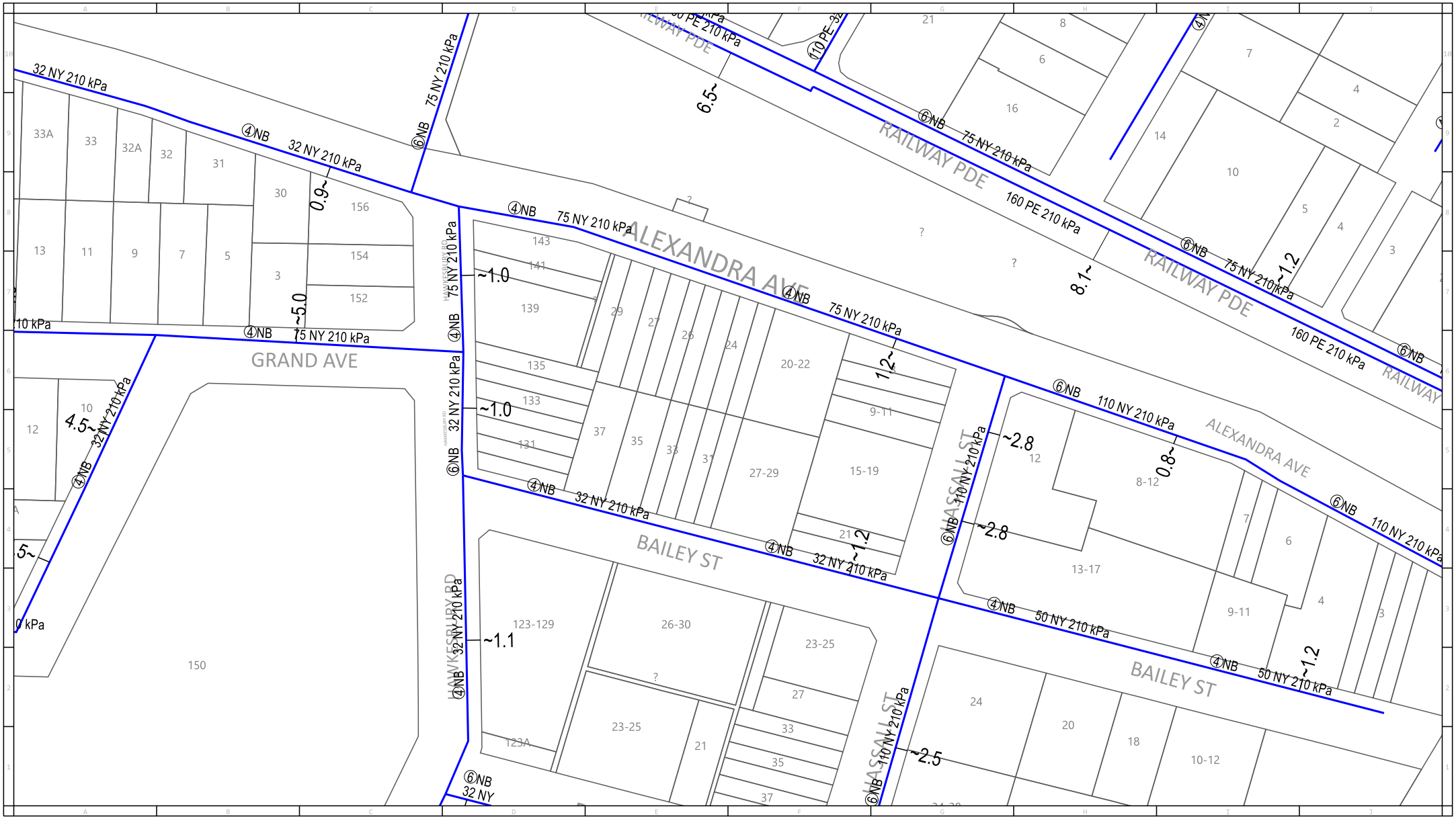
Scale: 1:2101

Issue Date: 02/11/2021
DBYD Seq No: 204756950
DBYD Job No: 30815700
Overview Page:

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

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 33 Bailey Street Westmead NSW, 2145



Jemena
ABN 87 003 004 322

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

Issue Date: 02/11/2021
DBYD Seq No: 204756950
DBYD Job No: 30815700

Scale: 1:2000

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

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

Jemena Gas Network Protection

Assets Affected

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

In reply to your enquiry, there are **Gas Mains** in the vicinity of your intended work, as generally illustrated on the attached map. There may also be other mains or services at the location, as discussed in the warning below.
For an explanation of the map, please see the information below and the legend attachment.

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

Excavation Guidelines

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

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

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

DBYD Administration 1300 880 906

Warning: The enclosed plans show the position of Jemena Gas Networks (NSW) Ltd's underground gas mains and installations in public gazetted roads only. **Individual customers' services and services belonging to other third parties are not included** on these plans. These plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "**Jemena**") and any reliance placed on these plans by you is entirely at your own risk. The plans may show the position of underground mains and installations relative to fences, buildings etc., as they existed at the time the mains etc were installed. The plans may not have been updated to take account of any subsequent change in the location or style of those features since the time at which the plans were initially prepared. Jemena makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error, omission, lack of detail, transmission failure or corruption in the information provided. Jemena does not accept any responsibility for any loss that you or anyone else may suffer in connection with the provision of these plans, however that loss may arise (including whether or not arising from the negligence of Jemena, its employees, agents, officers or contractors).

The recipient of these plans must use their own care and diligence in carrying out their works and must carry out further surveys to locate services at their work site. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains and equipment. In accordance with the Work Near Underground Assets Guideline published in 2007 by Work Cover Authority, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.

In case of Emergency Phone 131 909 (24 hours)

Admin 1300 880 906

Jemena Gas Networks
Dial Before You Dig Map Legend

Dec 2020 ver2

Network Mains

- Proposed New Main (coloured as per kPa)
- Proposed Isolate (coloured as per kPa)
- Unknown kPa
- 2kPa Low Pressure gas main
- 7kPa Low Pressure gas main
- 30kPa Medium pressure gas main
- 100kPa Medium Pressure gas main
- 210kPa Medium Pressure gas main
- 300kPa Medium Pressure gas main
- 400kPa Medium Pressure gas main
- 1050kPa High Pressure gas main
- 3500kPa High Pressure gas main
- 7000kPa High Pressure gas main
- >7000kPa Transmission pipeline
- Isolated Service - Former Med/High Pressure
- Isolated Steel Main -**Treat as High Pressure**

100 PVC — Conduit or Casing Size & Material (see conduit material codes)

Critical Main -**Treat as High Pressure** (Main coloured as per kPa)

EXPOSED — Exposed Main section

SHALLOW-SP — Shallow Main section: see Protection Code below, no code assume no protection

SP	Steel Plate	CE	Concrete Encased
PP	PE Plate	UNK	Unknown Type
CS	Concrete Slab		

Network Assets

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

Annotations

Pipe and Conduit Material Codes

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

Pipe code combinations and dimension references

6NB 50MM NY — 50mm Nylon main inserted into 6 inch (Nominal Bore) Cast Iron pipe

50MM 32MM NY — 32mm Nylon main inserted into 50mm Steel pipe

~1.5 — Distance (in metres) of main from Boundary Line (MBL)

MBK	Distance in Metres Back of Kerb
MKL	Distance in Metres from Kerb Line
MEBL	Distance in Metres from Eastern Boundary Line (North/South/West)
MCL	Distance in Metres from Centre Line of Road
MFL	Distance in Metres from Fence Line



Working near nbn™ cables

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

Practice safe work habits

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

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

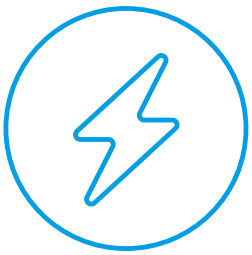
Prepare: Prepare for your job by engaging a DBYD Certified Plant Locator to help interpret plans and identify on-site assets. Contact **nbn** should you require further assistance.

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

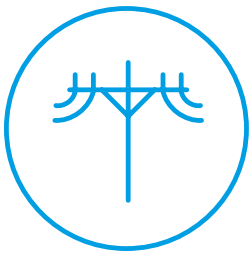
Protect: Protecting and supporting the exposed **nbn** underground asset is the responsibility of the worker. Exclusion zones for **nbn** assets are clearly stated in the plan and appropriate controls must be implemented to ensure that encroachment into the exclusion zone by machinery or activities with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

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

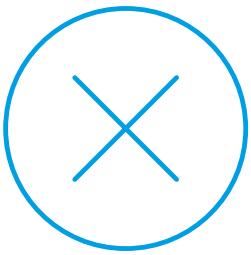
Working near nbn™ cables



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



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



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

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

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

Contact

All nbn™ network facility damages must be reported online here.
For enquiries related to your DBYD request please call 1800 626 329.

Disclaimer

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

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

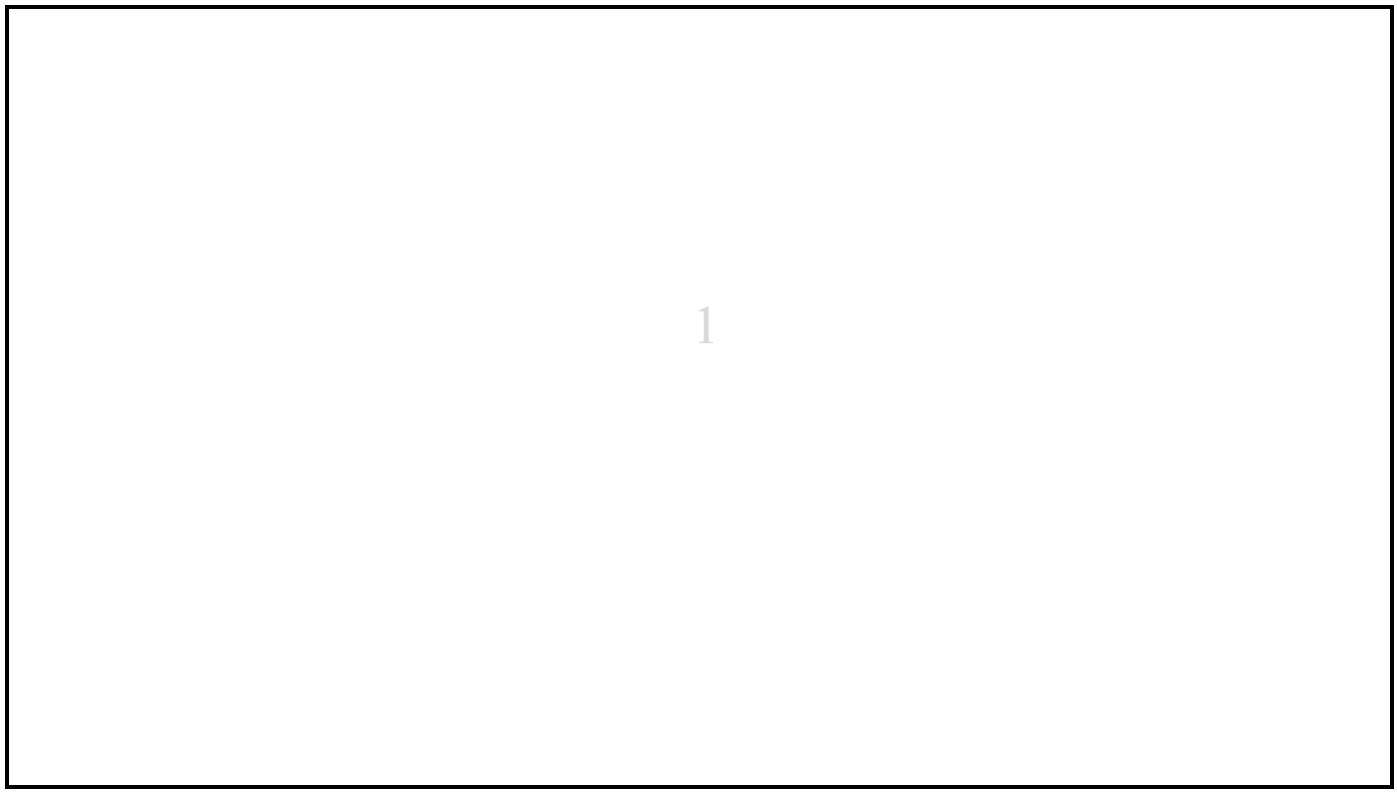
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DIAL BEFORE YOU DIG
www.1100.com.au

To:	Elisha cassidy
Phone:	Not Supplied
Fax:	Not Supplied
Email:	elisha.cassidy@ade.group

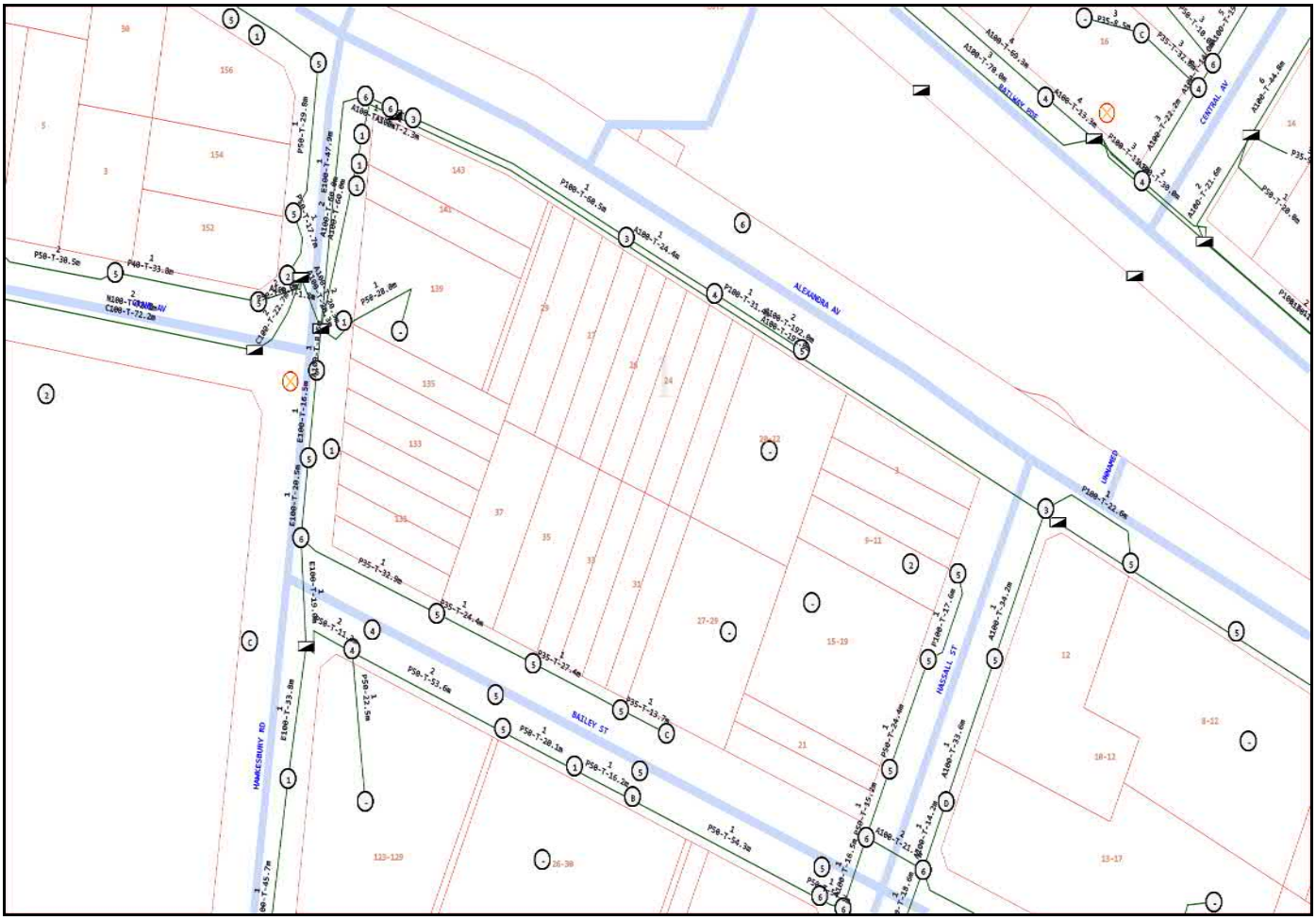
Dial before you dig Job #:	30815700
Sequence #	204756944
Issue Date:	01/11/2021
Location:	33 Bailey Street , Westmead , NSW , 2145

Indicative Plans



LEGEND

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



Emergency Contacts

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

To:	Elisha cassidy
Phone:	Not Supplied
Fax:	Not Supplied
Email:	elisha.cassidy@ade.group

Dial before you dig Job #:	30815700
Sequence #	204756944
Issue Date:	01/11/2021
Location:	33 Bailey Street , Westmead , NSW , 2145

Information

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

nbn™ Assets	Search Results
Communications	Asset identified
Electricity	No assets

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

Location of **nbn™** Underground Assets

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

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

Facilities during any activities you carry out on site).

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

Notes:

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

Referral Conditions

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

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

- All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.
- The safety of the public and other workers must be ensured.
- All excavations must be undertaken in accordance with all relevant legislation and regulations.

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

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

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

Thank You,

nbn DBYD

Date: 01/11/2021

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Sequence Number: 204756949

Date Generated: 02 Nov 2021

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



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

Date: 02 Nov 2021
To: Elisha cassidy
Company: ADE
Address: 6 Millennium Court
Silverwater, NSW 2128

ENQUIRY DETAILS
Location: 33 Bailey Street, Westmead, NSW 2145
Sequence No.: 204756949
DBYD Reference: 30815700

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

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

PLEASE NOTE THAT THE ASSETS IN THIS AREA ARE OF NATIONAL SIGNIFICANCE. Any interference with these assets has the potential to significantly disrupt communications in Australia and may be considered an offence under the Criminal Code Act 1995 (Cth). Optus reserves the right to seek compensation for loss or damage to its assets including consequential loss.

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

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

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

YOU MUST ENGAGE THE SERVICES OF ONE OF THE OPTUS ASSET ACCREDITED LOCATORS TO CARRY OUT ASSET LOCATION (REFER LIST OF ACCREDITED LOCATORS AT THE END OF THIS OPTUS RESPONSE).

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

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

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

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

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

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

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

DAMAGE TO ANY OPTUS ASSET MUST BE REPORTED TO 1800 500 253 IMMEDIATELY

You, your head contractor and any relevant subcontractor are all responsible for any Optus asset damage as a result of planned activities in the vicinity of Optus assets.

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

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

ASSET RELOCATIONS

You are not permitted by law to relocate, alter or interfere with any Optus asset under any circumstance. Any unauthorised interference with an Optus asset may lead to prosecution under the Criminal Code Act 1995 (Cth). Enquiries relating to the relocation of Optus assets must be referred to the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

APPROACH DISTANCES

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

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

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

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

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

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

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

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

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

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

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

ASSET CLEARANCES AFTER COMPLETION OF WORKS

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

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

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

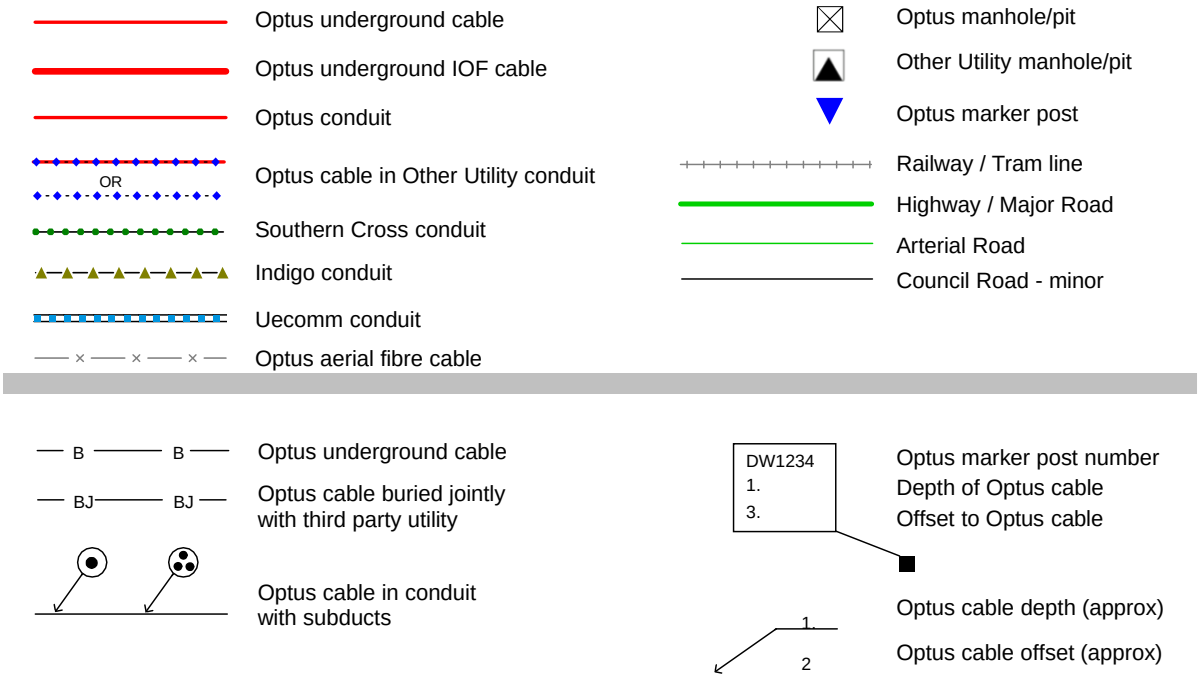
In rural areas Optus conduit must have a minimum depth of cover of 1 meter and direct buried cable 1.2 meters.

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

FURTHER ASSISTANCE

Further assistance on asset clearances, protection works or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:
NFODamages&RelocationsDropbox@optus.com.au
Further assistance relating to asset location drawings etc. can be obtained by contacting the Optus Network Operations Asset Analysis Team on 1800 505 777.

OPTUS ENGINEERING DRAWING SYMBOLS



OPTUS

Optus Accredited Asset Locators

Name	Company Name	Phone	Email	State	Region/Service Area
Alan Cordner	Alcom Fibre Services Pty Ltd	0400 300 337	alcomfibre@bigpond.com	NSW/ACT	Sydney
Brad McCorkindale	Bradmac Locating Services	0434 157 409	brad.mac@bigpond.com	NSW/ACT	All
Troy Redden	On Point Utility Locating	1300 6676 468	troy@onpointlocating.com.au	NSW	Sydney Only
Shane Buckley	Cable & Pipe Locations	0408 730 430	sabuckley@bigpond.com	NSW/QLD	Armidale, Casino, Coffs Harbour, Dorrigo, Glenn Innes, Grafton, Inverell, Kempsey, Lismore, Nambucca, Port Macquarie, Tamworth, Taree, Tenterfield, Yamba
Philip Pegler	Down Under Detection Services (DUDS)	0418 267 964	apegler@duds.net.au	NSW	All
Tina Stanhope	SureSearch Underground Services	1300 884 520 0418 920 245	tina.stanhope@suresearch.com.au	NSW/ACT QLD	NSW, Sydney, Northern NSW, Canberra, QLD, South East QLD.
Leonard McGowan	Pipesure Australia	1300 411 811	len@pipesure.com.au	NSW	Sydney
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Anthony Lane	Hydro Digga	0447 774 000	locator@hydrodigga.com	NSW	All of NSW, ACT & South East Qld
Joshua Payne	Australian Utilities Management Pty Ltd	0427 833 222	aine@ausutilities.net.au	NSW	Sydney Metro
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Rodney Pullen	One Find Cables	0451 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
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Myles Green	Australian Locating Services	1300 761 545	myles@locating.com.au	NSW	Sydney
Brett Wallin	Utility Scan	0426 354 051	brett@utilityscan.net	NSW	Sydney CBD and Regional areas
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Morgan O'Connor	Kier Contracting	1300 543 728	morgan@kier.com.au	WA	Perth Metro & Greater region, Regional WA
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Wayne Parslow	**Danisam**	**0417 089 865**	**danisam@westnet.com.au**	**NT**	**Darwin NT and Surrounds**
Elizabeth Young	**Archers Underground Services Locations (AUS Locations)**	**03 6245 1298**	**admin@auslocations.com.au auslocations@bigpond.com**	**TAS**	**All**
Patrick Monaghn	**Paneltec Group**	**0447 797 544**	**patrick@paneltec.com.au**	**TAS**	**All**
Scott Richardson	**AJ Water & Leak Detection**	**0457 710 680**	**admin@ajwater.com.au**	**TAS**	**All**

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

Date: 02 Nov 2021
To: Elisha cassidy
Company: ADE
Address: 6 Millennium Court
Silverwater, NSW 2128

ENQUIRY DETAILS
Location: 33 Bailey Street, Westmead, NSW 2145
Sequence No.: 204756949
DBYD Reference: 30815700

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

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

PLEASE NOTE that any interference with these assets may be considered an offence under the Criminal Code Act 1995 (Cth). Optus reserves the right to seek compensation for loss or damage to its assets including consequential loss.

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

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

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

YOU MUST ENGAGE THE SERVICES OF ONE OF THE OPTUS ASSET ACCREDITED LOCATORS TO CARRY OUT ASSET LOCATION (REFER LIST OF ACCREDITED LOCATORS AT THE END OF THIS OPTUS RESPONSE).

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

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

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

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

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

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

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

DAMAGE TO ANY OPTUS ASSET MUST BE REPORTED TO 1800 500 253 IMMEDIATELY

You, your head contractor and any relevant subcontractor are all responsible for any Optus asset damage as a result of planned activities in the vicinity of Optus assets.

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

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

ASSET RELOCATIONS

You are not permitted by law to relocate, alter or interfere with any Optus asset under any circumstance. Any unauthorised interference with an Optus asset may lead to prosecution under the Criminal Code Act 1995 (Cth). Enquiries relating to the relocation of Optus assets must be referred to the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

APPROACH DISTANCES

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

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

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

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

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

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

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

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

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

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

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

ASSET CLEARANCES AFTER COMPLETION OF WORKS

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

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

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

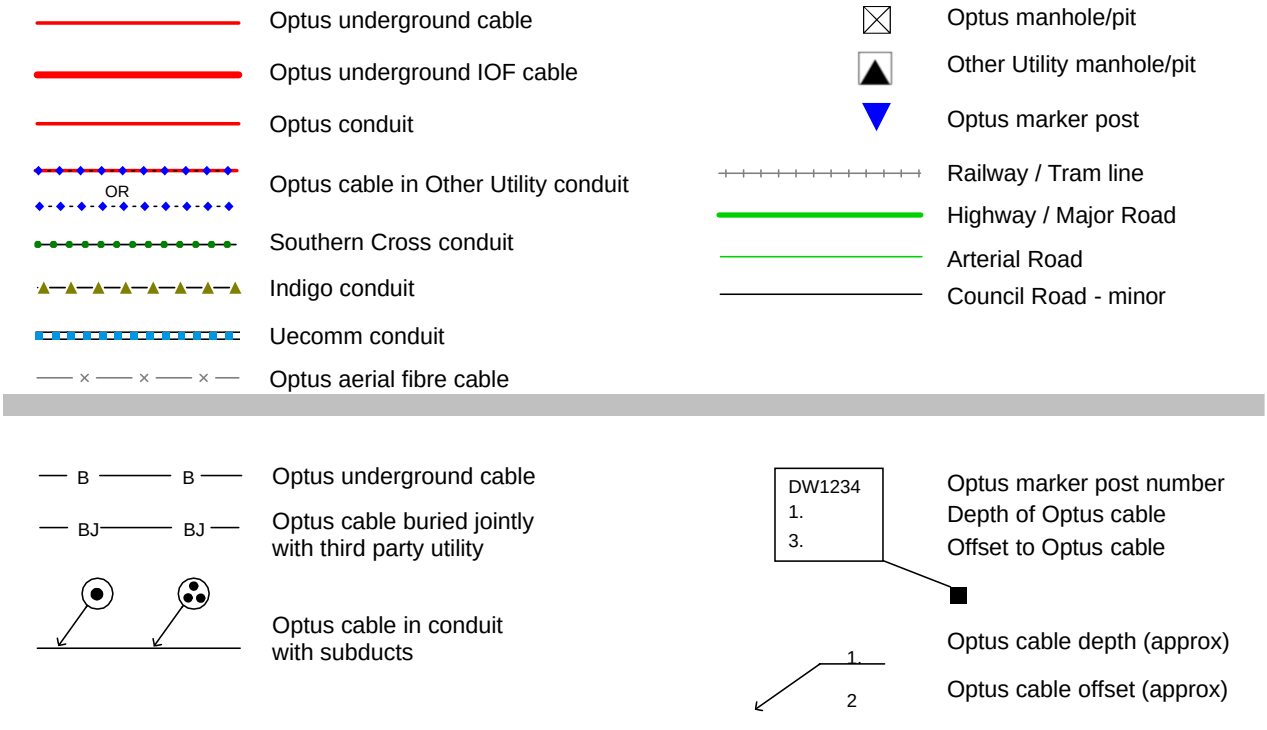
In rural areas Optus conduit must have a minimum depth of cover of 1 meter and direct buried cable 1.2 meters.

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

FURTHER ASSISTANCE

Further assistance on asset clearances, protection works or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:
NFODamages&RelocationsDropbox@optus.com.au
Further assistance relating to asset location drawings etc. can be obtained by contacting the Optus Network Operations Asset Analysis Team on 1800 505 777.

OPTUS ENGINEERING DRAWING SYMBOLS



OPTUS

Optus Accredited Asset Locators

Name	Company Name	Phone	Email	State	Region/Service Area
Alan Cordner	Alcom Fibre Services Pty Ltd	0400 300 337	alcomfibre@bigpond.com	NSW/ACT	Sydney
Brad McCorkindale	Bradmac Locating Services	0434 157 409	brad.mac@bigpond.com	NSW/ACT	All
Troy Redden	On Point Utility Locating	1300 6676 468	troy@onpointlocating.com.au	NSW	Sydney Only
Shane Buckley	Cable & Pipe Locations	0408 730 430	sabuckley@bigpond.com	NSW/QLD	Armidale, Casino, Coffs Harbour, Dorrigo, Glenn Innes, Grafton, Inverell, Kempsey, Lismore, Nambucca, Port Macquarie, Tamworth, Taree, Tenterfield, Yamba
Philip Pegler	Down Under Detection Services (DUDS)	0418 267 964	apegler@duds.net.au	NSW	All
Tina Stanhope	SureSearch Underground Services	1300 884 520 0418 920 245	tina.stanhope@suresearch.com.au	NSW/ACT QLD	NSW, Sydney, Northern NSW, Canberra, QLD, South East QLD.
Leonard McGowan	Pipesure Australia	1300 411 811	len@pipesure.com.au	NSW	Sydney
Bruce Whittaker	Optical Fibre Technologies	0402 354 322	opticaltek1@aol.com	NSW	Sydney/Wollongong
Darryl Smith	Darryl Smith Electrical	02 6642 3731	office@dsmithelectrical.com.au	NSW	Grafton
George Koenig	Downunder Locations NSW Pty	0438 243 856	Downunderlocations@gmail.com	NSW	Tweed Heads, Gold Coast, Brisbane
Michael Grant	M&K Grant Bega Bobcats Pty Ltd	0427 260 423	zzbobcat@bigpond.net.au	NSW	Bega, Far South Coast
Antony Critcher	Geotrace Pty Ltd	0417 147 945	antony@geotrace.com.au	NSW	All Areas, Sydney, Wollongong, Newcastle, ACT
Anthony Lane	Hydro Digga	0447 774 000	locator@hydrodigga.com	NSW	All of NSW, ACT & South East Qld
Joshua Payne	Australian Utilities Management Pty Ltd	0427 833 222	aine@ausutilities.net.au	NSW	Sydney Metro
Nathan Ellis	Utility Locating Services	0404 087 555	nathan@utilitylocatingservices.com.au	NSW	Sydney

Rodney Pullen	Provac	0450 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Rodney Pullen	One Find Cables	0451 268 012	rod@provac.net.au	NSW /QLD	South East QLD, Northern NSW
Drew Misko	Australian Subsurface Pty Ltd	0427 879 600	admin@australiansubsurface.com	NSW/ACT	All of NSW/ACT
Scott O'Malley	Coastal Cable Locators Pty Ltd	0427 975 777	skomalley@bigpond.com	NSW	South Coast- Snowy Mountains-Southern Highlands
Liam Bolger	Brandon Construction Services	0438 044 008	liam.bolger@hotmail.com	NSW	Sydney
Brett Pickup	All About Pipes	02 8763 4200	Brett.Pickup@allaboutpipes.com.au	NSW / VIC	All
Karen Joyce	Durkin Construction Pty Ltd	02 9712 0308	karen@durkinconstruction.com.au	NSW	Sydney
Timothy Laidler	Locate & Map	0431 191 669	tim@locateandmap.com.au	NSW	Sydney, Central Coast
Ken Brown	Riteway Traffic Control Pty Ltd	0419 212 969	kbrowne@ritewaytc.com.au	NSW	Central Coast, Hunter
Walter R Johansen	Steger & Associates	02 6296 4089	enquiries@steger.com.au	ACT/NSW	Canberra
Jean-Max Monty	Civilscan	0416 068 060	civilscan@bigpond.com	NSW	Sydney – Central Coast – Newcastle – Wollongong – Hunter Valley – Blue Mountains
Alan Hunter	Hunter Ground Search	02 4953 1244 0418 684 819	huntergroundsearch@bigpond.com	NSW	Newcastle, Central Coast, Hunter Valley, Mid North Coast, Liverpool Plains, Central West NSW.
Gilbert J Cook	Datateks Communications Specialists	0408 693 660	datateks@datateks.com.au	NSW	Southern NSW
Damien Black	Mid North Coast Hydro Digging	0418 409 465	dblack1@bigpond.com	NSW	Newcastle- foster-Taree-Wauchope -Port Macquarie -Kempsey -Coffs harbour
Neil Blenkinsop	Utility Mapping Pty Ltd	0427 318 681	nblenkinsop@utilitymapping.com.au	NSW	Sydney
Daniel Fox	Epoca Environmental Pty Ltd	02 4739 2465 0433 100 642	daniel@epocaenvironmental.com.au	NSW	All NSW, ACT
Rod Shaw	Cable Find	0478 887 073	rod@cablefind.com.au	NSW	Northern Rivers
Danny Carter	Online Pipe & Cable Locating	1300 665 384	danny@onlinepipe.com.au	NSW	Sydney, Newcastel, Canberra, Blue Mountains
Sam Romano	Locating Services	0403 065 510	sam.romano@locatingservices.com.au	NSW	NSW All
Scott Allison	Crux Surveying Australia	02 9540 9940	sydneyoffice@cruxsurveying.com.au	NSW	Sydney Metro & Surrounding Areas

Ian Brown	Peter Ellsmore & Associates	0439 423 708	ian.brown@ellsmore.com.au	NSW	Wollongong, Illawarra, South Coast, Southern Highlands, Macarthur & Sydney
Donna Wullaert	Commence Communications Pty Ltd	02 6226 3869 0428 595 620	admin@commencecomms.com.au	NSW	Canberra, Yass, Bungendore, Goulburn and Surrounding regional Areas
Stephen Fraser	Advanced Ground Locations	02 4930 3195 0412 497 488	steve_agl@hotmail.com	NSW	Newcastle, Hunter Valley, Central Coast, Taree & Surrounding Areas
Andrew Findlay	LiveLocates	0429 899 777	info@livelocates.com.au	NSW	South Coast/ACT, Snowy Mountains
Graeme Teege	Armidale Electrical	02 6772 3702	office@armidale-electrical.com.au	NSW	Armidale
Myles Green	Australian Locating Services	1300 761 545	myles@locating.com.au	NSW	Sydney
Brett Wallin	Utility Scan	0426 354 051	brett@utilityscan.net	NSW	Sydney CBD and Regional areas
Daniel Hudson	One Search Locators	1300 530 420	daniel@onesearchlocators.com.au	NSW	All NSW, ACT
Tim Galaz	Utec Solutions	02 9389 0040	office@utecsolutions.com.au	NSW/QLD/VIC	All areas, NSW, QLD, VIC
Gary Laneyrie	Laneyrie Electrical	0412 079 079 0413 048 048	bindy@laneyieelectrical.com.au	NSW	Illawarra, South Coast, Hunter Region
Reece Gainsford	East Coast Locating Services	0431 193 111	eastcoastlocating@hotmail.com	NSW	Sydney, Maitland, Newcastle, Hunter, Port Stephens, Central Coast
Allan Clarke	The Control Group Pty Ltd	0421 960 017	allan@thecontrolgroup.com.au	NSW	Northern NSW
Simon Cook	Douglas Partners	0431 507 667	simon.cook@douglaspartners.com.au	NSW	NSW All
Samual Boesen	Rubicof Cable & Pipe Locators	0403 285 352 0418 103 369	rubicof@optusnet.com.au	NSW	Cessnock
Craig Vallely	Aqua Freeze & Locate Pty Ltd	0458 774 440	service@aquafreeze.com.au	NSW	Sydney
Josiah Chapman-Hunter	Suk Truk Services Pty Ltd	0419 125 551 0478 004 606	services@suktruk.com.au	NSW	Hunter / Newcastle
Laurence Mead	Veris Australia	0419 770 560	i.mead@veris.com.au	NSW	Sydney
Jason Vane	Smartscan Locators PTY Ltd	0498 025 210	Admin@sslocators.com.au	NSW	Sydney
Alex Farcash	Newcastle Locating Services Pty Ltd	0410 698 599	Admin@newcastlelocatingservices.com.au	NSW	Newcastle, Hunter Valley, Central Coast, Taree & Surrounding Areas
Amer El Chami	Site Scan Pty Ltd	0449 992 520	office@sitescan.net.au	NSW	Sydney
Kaisar sefian	Australian Utility Search Pty Ltd	0424 841 888	kaisar@aususearch.com.au	NSW/ACT	All NSW, ACT

Ian Brown	A1 Locate Services	0400 484 828	Ian.brown@a1locate.com.au	NSW/ACT	All NSW, ACT
Alexander Bogdanoff	Expert Service Locating	0420 346 477	info@expertservicelocating.com.au	NSW/QLD	Brisbane, Gold Coast, Sunshine Coast Northern Rivers NSW
Justin Joseph S. Martinez	FJA Locating	0401 749 007	j.martinez@fjalocating.com.au	NSW, ACT, QLD, VIC	All regions
Rhiannon Kemps	Geoscope Utility Detection Services Pty Ltd	0432 296 323	simon@geoscopelocating.com.au	NSW	All regions
Laurence Mead	Astrea Pty Ltd	0413 849 666	admin@astrea.com.au.	NSW	Sydney Metro & Surrounding Areas
Bobby Friesz	VAC Group Operations (T/A Earth Radar)	0447 837 267	Bobby.Friesz@vacgroup.com.au	NSW	Sydney
Chris Hall	D C Locators Pty Ltd	0419 679 741	dcloc@powerup.com.au	QLD	Brisbane, Ipswich
Jeff Trackson	J.R & L.M Trackson Pty Ltd	0417 600 978	jtrackson@tracavoid.com.au	QLD	All
Benji Lee	LADS	0478 915 237	benji@ladsqld.com.au	QLD	South East QLD
Andrew Watson	Lambert Locations Pty Ltd	07 5562 8400	admin@lambertlocations.com.au	QLD	South East QLD & Northern NSW
Ross Clarke	FNQ Cable Locators Pty Ltd	0428 775 655	onlineco@bigpond.net.au	QLD	Far North QLD, Cape York & Peninsula
Col Greville	Bsure Locators	0488 520 688	admin@bsurelocators.com.au	QLD	Wide Bay Burnett and Central Qld
Mikael White	All Asset Locations	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Simon Griffin	Pensar Utilities	0458 800 267	sgriffin@pensar.com.au	QLD	Brisbane, Gold Coast, Sunshine Coast
Andrew Cowan	VAC Group Operations (T/A Earth Radar)	0447 008 806	andrew.cowan@vacgroup.com.au	QLD	South East and Central QLD
Jimmy Wilkins	GeoRadar Australia	0425 677 227	jimmy@georadar.net.au	QLD	Emerald, Bundeaberg
Beaumont Blake	PipeHawk CCTV	0435 558 533	accounts@pipehawkcctv.com.au	QLD	South East QLD & Northern NSW
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QLD Operations	Utility Location Services	0499 775 095 07 3807 3552	qldops@utilitylocationservices.com.au	QLD	SouthEast QLD, Northern NSW
Andrew Watson	RPS AUS East	0408 839 723	andrew.watson@rpsgroup.com.au	QLD	Brisbane
Luke Steadman	Utility Mapping Pty Ltd	0472 867 197	lsteadman@utilitymapping.com.au	QLD	All
Robert Reed	All Asset Locations Pty Ltd	0478 846 025	allassetlocations@gmail.com	QLD	Sunshine Coast
Jenny Dziduch	1300 Locate Pty Ltd	1300 562 283	admin@1300locate.com.au	QLD	All Queensland, Northern NSW

Sam Hazel	Utility ID Underground Service Locators	0401 202 515	sam@utilityid.com.au	QLD	Southern QLD
Brendon Smith	Dynamic Hydro Excavations	1300 822 878	admin@dynamicexcavation.com.au	QLD	QLD, NSW, VIC
Marty Carlson	Surveywerx Pty Ltd	0488 842 110	mike@surveywerx.com	QLD	South East QLD
Ran Gledhill	Safe Dig Services	0408 944 228	rgsafedig@gmail.com	QLD	Brisbane / North Queensland
Ben Stephens	Electroscan (DTS Group)	0434 140 556	ben.s@electroscanqld.com.au	QLD	All
Adam Lloyd	Aussie HydroVac Services	07 3287 7818	adam.lloyd@aussiehydrovac.com.au	QLD	All
Gary Poppi	Ace Cable Locations	0431 517 837	garypoppi@bigpond.com	QLD	Wide Bay Burnett
Andrew McKenna	Taylros Development Strategists	03 95012800	a.mckenna@taylords.com.au	VIC/SA/TAS	Victoria
Olivier Davies	Central Locating PTY LTD	0439 995 894	0llie@centrallocating.com.au	VIC/SA/TAS	Melbourne Surfcoast Ballarat
Tina Brereton	D-Tech Ground & Overhead Services	0421 697 090	tina@d-tech.net.au	VIC	Victoria
Josh Taylor	Advanced Locations Victoria	0427 846 716	josh@advancedlocationsvic.com.au	VIC	All
Ben Minutoli	Geelong Cable Locations	1800 449 543	ben@geelongcablelocations.com.au	VIC	Melbourne, Geelong, Country Victoria
Mick McGoldrick	Cavan Constructions	0404 241 679	mick@locatecables.com	VIC	Western Victoria
David Kelleher	Construction Sciences	03 9553 7236	utilities@constructionsciences.net	VIC	Victoria
Stuart Miles	ELS Environmental Location Systems	03 8795 7461	accounts@radiodetection.com.au	VIC	Victoria
Darren Dean	Asset Survey Solutions	1300 035 796	darren.dean@assetsurvey.com.au	VIC	Victoria
Alex Jones	Utility Mapping Pty Ltd	0417 413 353	ajones@utilitymapping.com.au	VIC	Victoria
Adam Linford	Gippsland Pipe & Cable Locations	0409 386 817	gippspac@hotmail.com	VIC	Gippsland
Thomas Pitt	Access Utility Engineering (AUE)	03 9580 0440	info@accessue.com.au	VIC	Victoria
Bernie Acabal	Taylors Development Strategists	03 9501 2800 0419 758 794	b.acabal@taylorsds.com.au	VIC	Victoria
Philong Nguyen	Asset Detection Services Pty Ltd	0413 949 400	phi.nguyen@assetdetection.com.au	VIC	VIC, NSW, TAS All areas
Maurice Tobin	Drain Solutions	1300 546 348	info@drainsolutions.com.au	VIC	Melbourne Metro
Nathan Kelleher	Seeker Utility Engineering	0439 691 840	nathan.kelleher@seekerutility.com.au	VIC	Melbourne
Jeffrey Ramos	VAC Group Operations (T/A Earth Radar)	0436 635 011	Jeffrey.ramos@earthradar.com.au	VIC	All

Ben Zurak	Veris Australia	03 7019 8400	melbourne@veris.com.au	VIC	All
Courtney Marson	CSA Specialised Service Pty Ltd	1300 859 829	courtney@csasepcialised.com.au	VIC/SA/TAS	All
Paul Murray	Able Pipe, Cable & Leak Location Services	0418 318 186	paul.murray6@bigpond.com	VIC	All
Infrastructure Civil Services	Trenchless Pipelaying Contractors (TPC)	08 8376 5911	tpc@trenchlesspipelaying.com.au	SA	All
Sean Nemeth	Enerven Energy Infrustructure Pty Ltd	0488 167 772	sean.nemeth@enerven.com.au	SA	Adelaide
SADB	SADB Civil Construction & Trenchless	08 8168 7200	reception@sadb.com.au	SA	Adelaide
Tony Simpson	Utility Mapping Pty Ltd	0438 630 146	tsimpson@utilitymapping.com.au	SA	All
Deninis Stray	Pinpoint Services Mapping	0428 917 020	dstray@pinpointsm.com.au	SA	All
JohnnyMcGlynn	Pinpoint Services Mapping	0447 185 231	jmcglynn@alexander.com.au	SA	All
Liam Gill	Michael Grear Surveys	08 82788732	ugsl@mgsurveys.com.au	SA	SA
Stefan Forsyth	Adelaide Pipline Maintenance Services	08 84272525	stefan@streamlinesa.com.au	SA	all NT, WA, QLD
Galen Shanahan	VAC Group Operations (T/A Earth Radar)	0447 837 000	Galen.Shanahan@vacgroup.com.au	SA	All
Marilyn Dentice	Cable Locates & Consulting	08 9524 6600	admin@cablelocates.com.au	WA	Metro & Country
Lisa Scofield	Abaxa	08 9256 0100	accounts@abaxa.com.au	WA	All
Derek McShane	Subterranean Service Locations	0420 862 426	Derek@sslwa.com.au	WA	Midwest/Gascoyne
Ben Upton	TerraVac Vacuum Excavation	0427 531 119	locations@terravac.com.au	WA	All
Dale Shearsmith	Subtera Subsurface Locating	1300 046 636	dale@subtera.com.au	WA	All
Liam Davies	Bunbury Telecom Service Pty Ltd	08 9726 0088	liam@btswa.com.au	WA	South West WA
Tammy Thorp	B.C.E Spatial	08 9364 6408	admin@bcespatial.com.au	WA	Perth Metro & Regional
Alex Jones	Utility Mapping Pty Ltd	0417 413 353	ajones@utilitymapping.com.au	WA	All
Chris Lee	Pulse Locating	0437 289 861	enquiries@pulselocating.com.au	WA	Perth
Morgan O'Connor	Kier Contracting	1300 543 728	morgan@kier.com.au	WA	Perth Metro & Greater region, Regional WA
Nigel Nunn	CCS Group / Utility Locating Solutions	08 9385 5000	enquiry@ccswa.com.au	WA	Perth
Paul Stevenson	Geographe Underground Services	0427 523 811	paul.stevenson@geographeunderground.com.au	WA	All

Jeremy Brown	**Spotters Asset Locations Pty Ltd**	**0459 130 677**	**jeremy@spottersassetlocations.com.au**	**WA**	**All**
Reece Topham	**Prime Locate**	**0400 888 406**	**reece@primelocate.com.au**	**WA**	**All**
Mark Docherty	**RM Surveys**	**08 9457 7900**	**mark.docherty@rmsurveys.com.au**	**WA**	**All**
Jonathon Sylva	**Advance Scanning Services**	**1300 738 118**	**bookings@advancescanning.com.au**	**WA**	**All**
Tim Daws	**Award Contracting**	**0411 878 895**	**info@awardcontracting.com.au**	**WA**	**City & Regional**
Dave Turner	**Anywair Pipe & Cable**	**0418 890 071**	**dave@anywair.com.au**	**NT**	**All NT, WA, QLD**
Steve Gault	**Northern Comms**	**0407 904 319**	**steve@northerncomms.net.au**	**NT**	**All**
Wayne Parslow	**Danisam**	**0417 089 865**	**danisam@westnet.com.au**	**NT**	**Darwin NT and Surrounds**
Elizabeth Young	**Archers Underground Services Locations (AUS Locations)**	**03 6245 1298**	**admin@auslocations.com.au auslocations@bigpond.com**	**TAS**	**All**
Patrick Monaghn	**Paneltec Group**	**0447 797 544**	**patrick@paneltec.com.au**	**TAS**	**All**
Scott Richardson	**AJ Water & Leak Detection**	**0457 710 680**	**admin@ajwater.com.au**	**TAS**	**All**

To: Elisha cassidy
ADE
6 Millennium Court
Silverwater, NSW 2128

Uecomm Pty Limited
ABN 56 079 083 195

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

LOCATION OF UNDERGROUND FIBRE OPTIC CABLE INFORMATION SHEET

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

"Dial Before You Dig" Sequence No 204756949	**Issue Date:** 02 Nov 2021
Customer ID 3125618	**Issue By:** Optus and or Uecomm Nsw

Location: 33 Bailey Street, Westmead, NSW 2145
Uecomm Asset Location No.
Dial Before You Dig Job No. 30815700

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

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

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

PLEASE READ ALL INFORMATION AND DISCLAIMERS BELOW:

1. Due to the nature of underground cables and the age of some cables and records, it is impossible to conclusively ascertain the location of all cables. The accuracy and/or completeness of the information cannot be guaranteed and, accordingly, they are intended to be indicative only and, as a result, Uecomm does not accept any responsibility for any inaccuracies of its plans. They should not be solely relied upon when undertaking underground works. It is also inaccurate to assume that fibre optic cables follow straight lines and careful on-site investigations are essential to locate its exact position.
2. The following minimum clearances must be maintained:
    - 300mm when laying asset's inline, horizontal or vertical.
    - 500mm when operating vibrating equipment, e.g., jackhammers or vibrating plates.
    - 1000mm when operating mechanical excavators.
3. Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions should be taken in the undertaking of any underground works, including (but not limited to) the following:
    - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to minimise the likely hood of damage to the cable, e.g., blades of hand equipment should be orientated parallel to the line of the cable rather than digging across the cable.
    - If any undisclosed underground cables are located, Uecomm Limited should be notified immediately.
    - All personnel must be properly briefed, particularly those associated with the use of earthmoving equipment, trenching, boring and pneumatic equipment.
    - All excavations must be undertaken in accordance with the relevant legislation and regulations.

4. **DAMAGE. ANY DAMAGE TO UECOMM'S NETWORK MUST BE REPORTED IMMEDIATELY TO 1800 707 447.**
5. Uecomm recommends using Uecomm approved location contractors to provide on-site location services for Uecomm plant. You can arrange Uecomm on-site visits by calling Uecomm on 1800 707 447 and Uecomm or its approved representative will attend your site to provide guidance to the location of the Uecomm assets (the "Uecomm Asset Alignment"). **Uecomm requires 3 clear business days' notice to conduct an on-site location**. The initial on-site visit by Uecomm will not normally incur a charge, but at the discretion of Uecomm, subsequent site visits may incur a charge to be applied at an hourly rate.
6. Uecomm will hold the relevant party responsible for any damage to Uecomm plant and all expenses incurred by Uecomm as a result of asset damage.
7. Except to the extent that liability may not be capable of lawful exclusion, Uecomm Pty Limited and its servants and agents and the related bodies corporate of Uecomm Pty Limited and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any Plans attached hereto. Except as expressly provided to the contrary in this information sheet or the attached Plans, all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

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

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



Uecomm Underground Cable

Scale: 1:2500

Printed on: 02 Nov 2021

Sequence Number: 204756949

Location: 33 Bailey Street, Westmead, NSW 2145

Job Location: Line, Point, Area

Undergound Asset: Uecomm

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

Dial Before You Dig (DBYD)
Location Information

Transport Sydney Trains
477 Pitt Street
Sydney, NSW, 2000

To:
ADE - Elisha cassidy
6 Millennium Court
Silverwater NSW 2128

Enquiry Details	
Utility ID	30224 -
Sequence Number	204756946
Job Number	30815700
Enquiry Date	02/11/2021 09:15
Response	**NOT AFFECTED**
Address	33 Bailey Street Westmead
Location in Road	Road,Nature Strip,Footpath
Activity	Mechanical Excavation

Enquirer Details	
Customer ID	3125618
Contact	Elisha cassidy
Company	ADE
Email	elisha.cassidy@ade.group
Phone	+61420309645

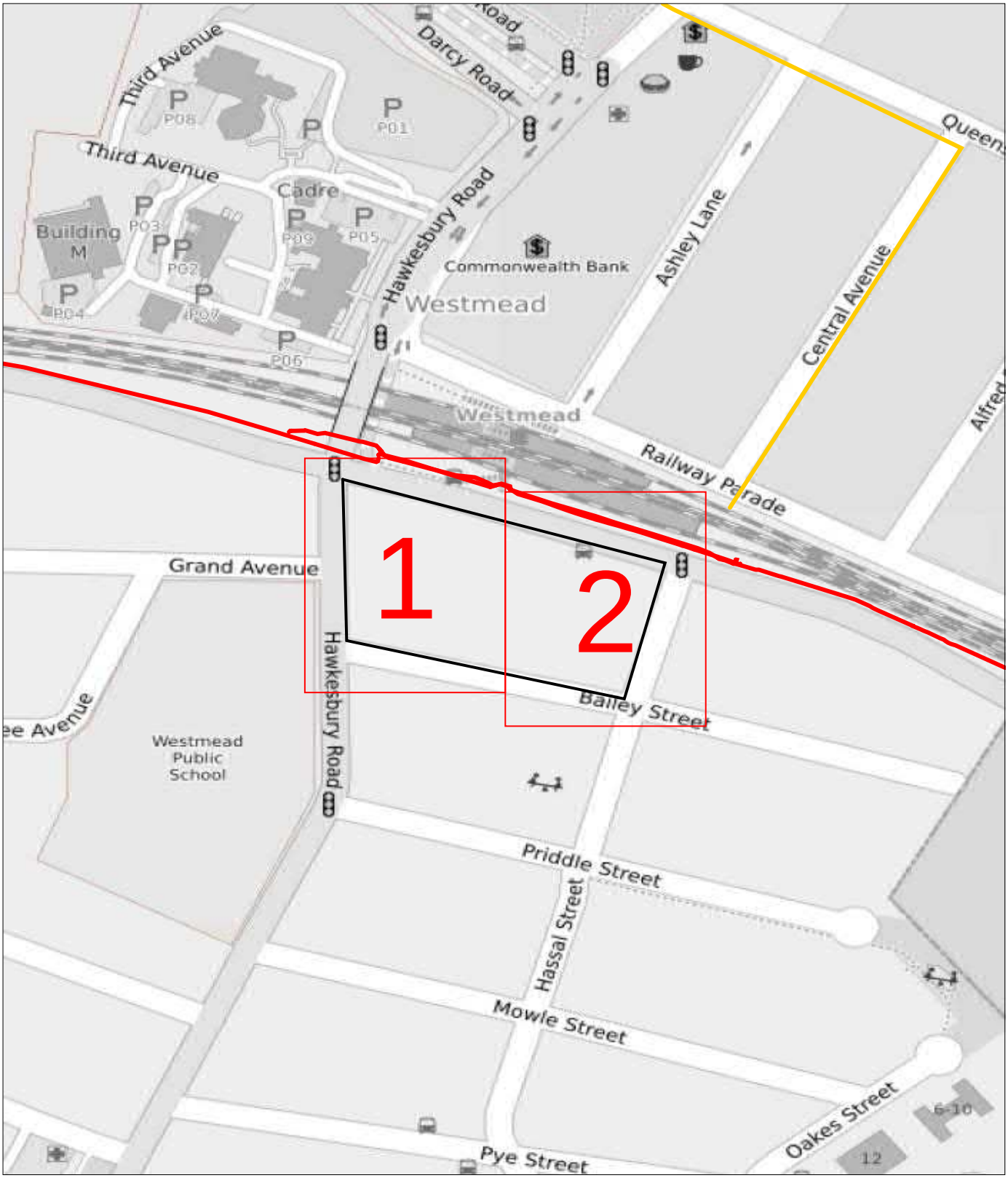
Date: 02/11/2021

Transport Sydney Trains

Overview Map

Sequence No: 204756946

33 Bailey Street Westmead



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

N

Imagery sourced from Open StreetMaps

LEGEND:

1 Detail Map

Not Affected DBYD Work Area

Powered by dbydsuite

DIAL BEFORE YOU DIG www.1100.com.au

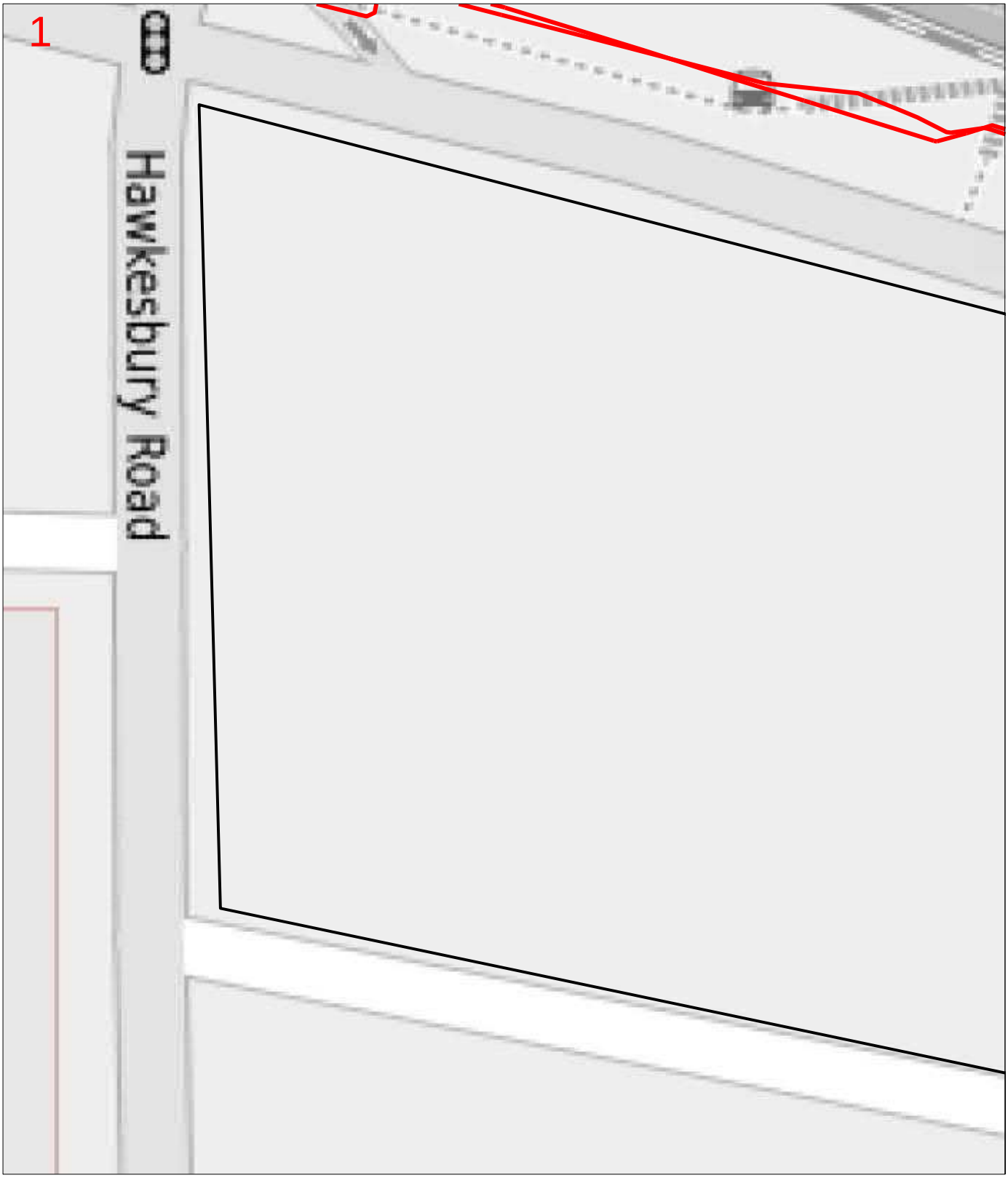
Date: 02/11/2021

Transport Sydney Trains

Map 1

Sequence No: 204756946

33 Bailey Street Westmead



N

Imagery sourced from Open StreetMaps

LEGEND:

Not Affected DBYD Work Area

HV Cable

Tunnel

Communications

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

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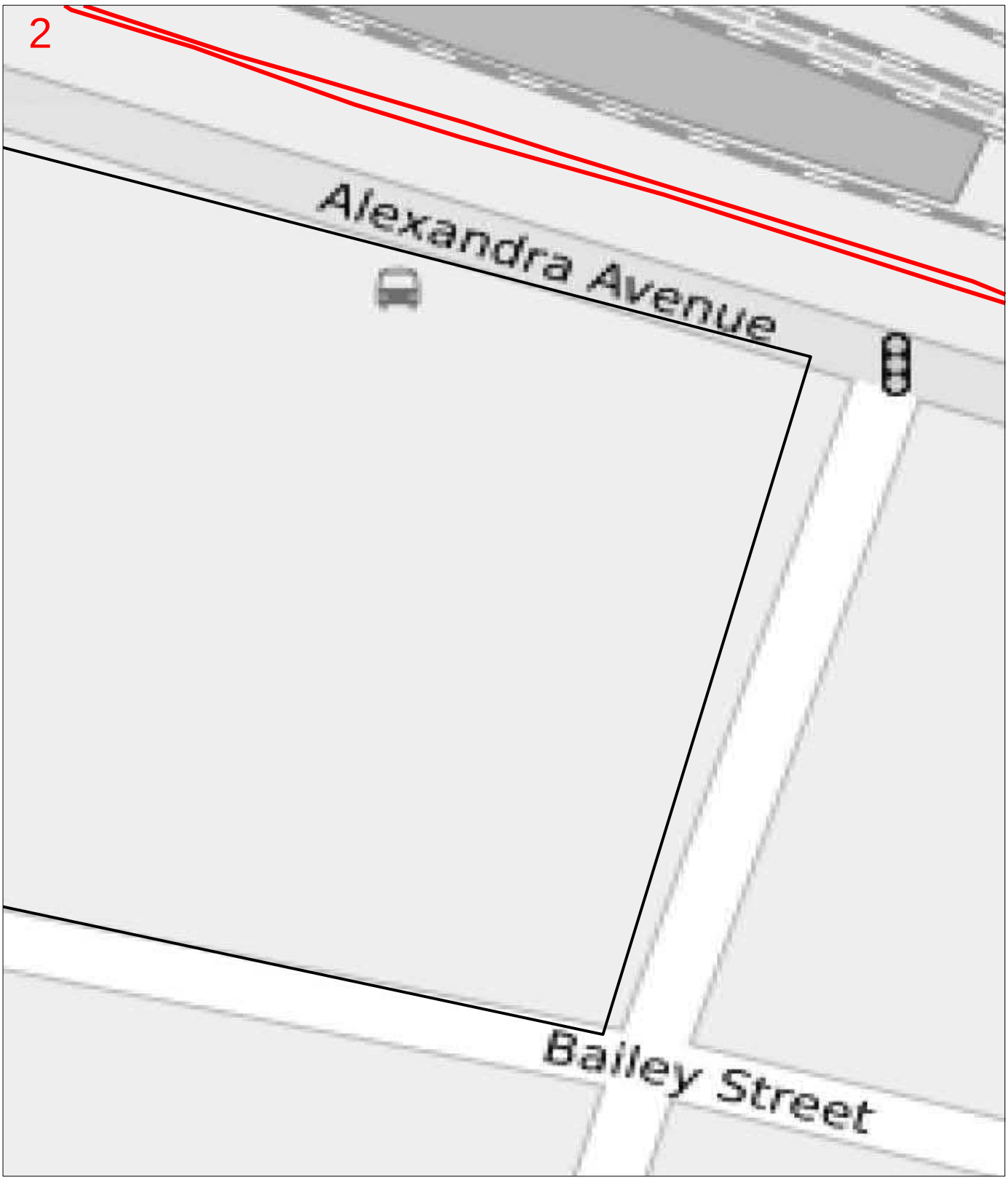
Date: 02/11/2021

Transport Sydney Trains

Map 2

Sequence No: 204756946

33 Bailey Street Westmead



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Imagery sourced from Open StreetMaps

LEGEND:

Not Affected DBYD Work Area

HV Cable

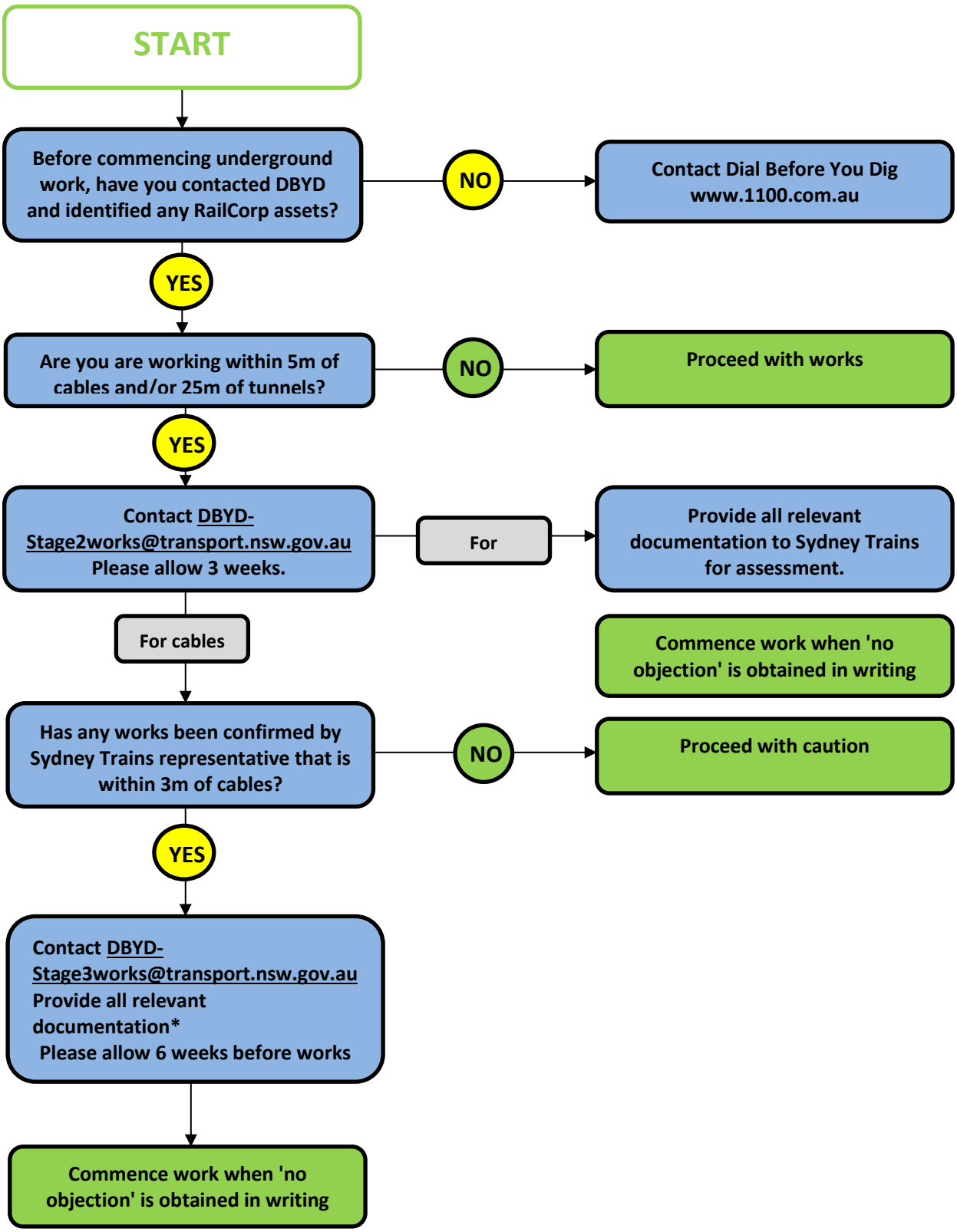
Tunnel

Communications

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

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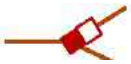


*Relevant documentation may include construction designs, construction methodology, SWMS.
**12 week notice or more may be required for isolation and is subject to the assessment of impact on the rail network and operations.

Sydney Trains is a NSW Government agency
477 Pitt Street, Sydney NSW 2000 PO Box K349 Haymarket NSW 1238 **T** 1300 038 500
www.transport.nsw.gov.au/sydneytrains ABN 38 284 779 682

Guide to reading Sydney Water DBYD Plans

This guide will help you understand our plans and what our services are.

Symbol	Meaning	Symbol	Meaning
	Sewer main with flow arrow and size type text.		Sewer vertical
	Disuses sewer main This means the sewer has been disused but remains in the ground.		Sewer pumping station
	Sewer maintenance hole with upstream depth invert.		
	Sewer Sub-surface chamber		Pressure sewer main These are also found in Vacuum sewer areas.
	Sewer Maintenance hole with overflow chamber		Pressure sewer Pump unit Alarm, electrical cable and pump unit.
	Sewer Ventshaft EDUCT		Pressure sewer property valve boundary assembly
	Sewer Ventshaft IDUCT		
			Pressure sewer stop valve
	Sewer property connection point With chainage to downstream maintenance hole.		Pressure sewer reducer / taper
	Sewer concrete encased section		
			Pressure sewer flushing point
	Sewer Rehabilitation		Vacuum sewer division valve
	Sewer terminal maintenance shaft		Vacuum sewer vacuum chamber
	Sewer maintenance shaft		Vacuum sewer clean out pot
	Sewer rodding point		Stormwater pipe
	Sewer lamphole		Stormwater channel

Symbol	Meaning	Symbol	Meaning
	Stormwater gully		Potable water stop valves with Tapers
	Stormwater maintenance hole		Potable water closed stop valve
200 PVC	Watermain – potable drinking water With size type text.		
	Disconnected watermain potable drinking water This means the watermain has been disused but remains in the ground.		Potable water air valve
	Recycled watermain		Potable water valve
	Special supply conditions – potable drinking water		Potable water scour
	Special supply conditions – recycled water		Potable water reducer / taper
	Restrained joints – Potable drinking water		Potable water vertical bends
	Sewer concrete encased section		Potable water reservoir
	Restrained joints – Potable drinking water		Recycled water is shown as per potable above. Colour as indicated
	Potable water hydrant		Private potable water main
	Potable water maintenance hole		Private recycled water main
	Potable water stop valve		Private sewer main
	Potable water stop valve with By-pass		

Pipe types

PIPE TYPES		PIPE TYPES	
ABS	Acrylonitrile Butadiene Styrene	AC	Asbestos Cement
BRICK	Brick	CI	Cast Iron
CICL	Cast Iron Cement Lined	CONC	Concrete
COPPER	Copper	DI	Ductile Iron
DICL	Ductile Iron Cement (mortar) Lined	DIPL	Ductile Iron Polymeric Lined
EW	Earthenware	FIBG	Fibreglass
FL BAR	Forged Locking Bar	GI	Galvanised Iron
GRP	Glass Reinforced Plastics	HDPE	High Density Polyethylene
MS	Mild Steel	MSCL	Mild Steel Cement Lined
IPE	Polyethylene	PC	Polymer Concrete
PP	Polypropylene	PVC	Polyvinylchloride
PVC - M	Polyvinylchloride, Modified	PVC - 0	Polyvinylchloride, Oriented
PVC - U	Polyvinylchloride, Unplasticised	RC	Reinforced Concrete
RC-PL	Reinforced Concrete Plastics Lined	S	Steel
SCL	Steel Cement (mortar) Lined	SCL IBL	Steel Cement Lined Internal Bitumen
SGW	Salt Glazed Ware	SPL	Steel Polymeric Lined
SS	Stainless Steel	STONE	Stone
VC	Vitrified Clay	WI	Wrought Iron
WS	Woodstave		

DIAL BEFORE YOU DIG www.1100.com.au

Further Information

Please consult the Dial Before You Dig enquiries page on our website.

For general enquiries please call the Customer Contact Centre on 132 092

In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)

Important information about Dial Before You Dig

The material provided or made available to you by Sydney Water (including on the Sydney Water website) in relation to your Dial Before You Dig enquiry (**Information**) is provided on each of the following conditions, which you are taken to have accepted by using the Information:

1 The Information has been generated by an automated system based on the area highlighted in the "Locality Indication Only" window on your Caller Confirmation. It is your responsibility to ensure that the dig site is properly defined when submitting your Dial Before You Dig enquiry and, if the Information does not match the dig site, to resubmit your enquiry for the correct dig site.

2 Neither Sydney Water nor Dial Before You Dig make any representation or give any guarantee, warranty or undertaking (express or implied) as to the currency, accuracy, completeness, effectiveness or reliability of the Information. The Information, including Sydney Water plans and work-as-executed diagrams, amongst other things:

(a) may not show all existing structures, including Sydney Water's pipelines, particularly in relation to newer developments and in relation to structures owned by parties who do not participate in the Dial Before You Dig service

(b) may be out of date and not show changes to surface levels, road alignments, fences, buildings and the like

(c) is approximate only and is therefore not suitable for scaling purposes

(d) does not show locations of property services (often called house service lines) belonging to or servicing individual customers, which are usually connected to Sydney Water's structures.

3 You are responsible for, amongst other things:

(a) exposing underground structures, including Sydney Water's pipelines, by pot-holing using hand-held tools or vacuum techniques so as to determine the precise location and extent of structures before any mechanical means of excavation are used

(b) the safe and proper excavation of and for underground works and structures, including having regard to the fact that asbestos cement pipelines, which can pose a risk to health, may form part of Sydney Water's water and sewerage reticulation systems

(c) protecting underground structures, including Sydney Water's pipelines, from damage and interference

(d) maintaining minimum clearances between Sydney Water's structures and structures belonging to others

(e) ensuring that backfilling of excavation work in the vicinity of Sydney Water's structures complies with Sydney Water's standards contained on its website or otherwise communicated to you

(f) notifying Sydney Water immediately of any damage caused or threat of damage to Sydney Water's structures

(g) ensuring that plans are approved by Sydney Water (usually signified by stamping) prior to landscaping or building over or in the vicinity of any Sydney Water structure

(h) ensuring that the Information is used only for the purposes for which Sydney Water and Dial Before You Dig intended.

4 You acknowledge that you use the Information at your own risk. In consideration for the provision of the Dial Before You Dig service and the Information by Sydney Water and Dial Before You Dig, to the fullest extent permitted by law

(a) all conditions and guarantees concerning the Information (whether as to quality, outcome, fitness, care, skill or otherwise) expressed or implied by statute, common law, equity, trade, custom or usage or otherwise are expressly excluded and to the extent that those statutory guarantees cannot be excluded, the liability of Sydney Water and Dial Before You Dig to you is limited to either of the following as nominated by Sydney Water in its discretion, which you agree is your only remedy:

(i) the supplying of the Information again; or
(ii) payment of the cost of having the Information supplied again;
(b) in no event will Sydney Water or Dial Before You Dig be liable for, and you release Sydney Water and Dial Before You Dig from, any Loss arising from or in connection with the Information, including the use of or inability to use the Information and delay in the provision of the Information:
(i) whether arising under statute or in contract, tort or any other legal doctrine, including any negligent act, omission or default (including wilful default) by Sydney Water or Dial Before You Dig; and
(ii) regardless of whether Sydney Water or Dial Before You Dig are or ought to have been aware of, or advised of, the possibility of such loss, costs or damages;
(c) you will indemnify Sydney Water and Dial Before You Dig against any Loss arising from or in connection with Sydney Water providing incorrect or incomplete information to you in connection with the Dial Before You Dig service; and
(d) you assume all risks associated with the use of the Dial Before You Dig and Sydney Water websites, including risk to your computer, software or data being damaged by any virus, and you release and discharge Sydney Water and Dial Before You Dig from all Loss which might arise in respect of your use of the websites.

5 "**Sydney Water**" means Sydney Water Corporation and its employees, agents, representatives and contractors. "**Dial Before You Dig**" means Dial Before You Dig Incorporated and its employees, agents, representatives and contractors. References to "**you**" include references to your employees, agents, representatives, contractors and anyone else using the Information. References to "**Loss**" include any loss, cost, expense, claim, liability or damage (including arising in connection with personal injury, death or any damage to or loss of property and economic or consequential loss, lost profits, loss of revenue, loss of management time, opportunity costs or special damages). To the extent of any inconsistency, the conditions in this document will prevail over any other information provided to you by Sydney Water and Dial Before You Dig.
In an emergency, or to notify Sydney Water of damage or threats to its structures, call 13 20 90 (24 hours, 7 days)

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

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

Or call **13 20 92** for Customer Enquires.
Note: The lodging of enquiries via **www.1100.com.au** will enable you to receive colour plans in PDF format 24 hours a day, 7 days a week via email.
This communication is confidential. If you are not the intended recipient, please destroy all copies immediately. Sydney Water Corporation prohibits unauthorised copying or distribution of this communication.

A3

RAILWAY
OVERHEAD BRIDGE
ASHLEY
CENTRAL
ALFRED
ALFRED ST
PDE
AVE
HAWKESBURY
RD
ALEXANDRA
BAILEY
PRIDDLE
ST

DBYD Address:
33 Bailey Street
Westmead NSW 2145

DBYD Job No: 30815700

DBYD Sequence No: 204756951

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No warranty is given that the information shown is complete or accurate.
SYDNEY WATER CORPORATION

Scale: 1:1500

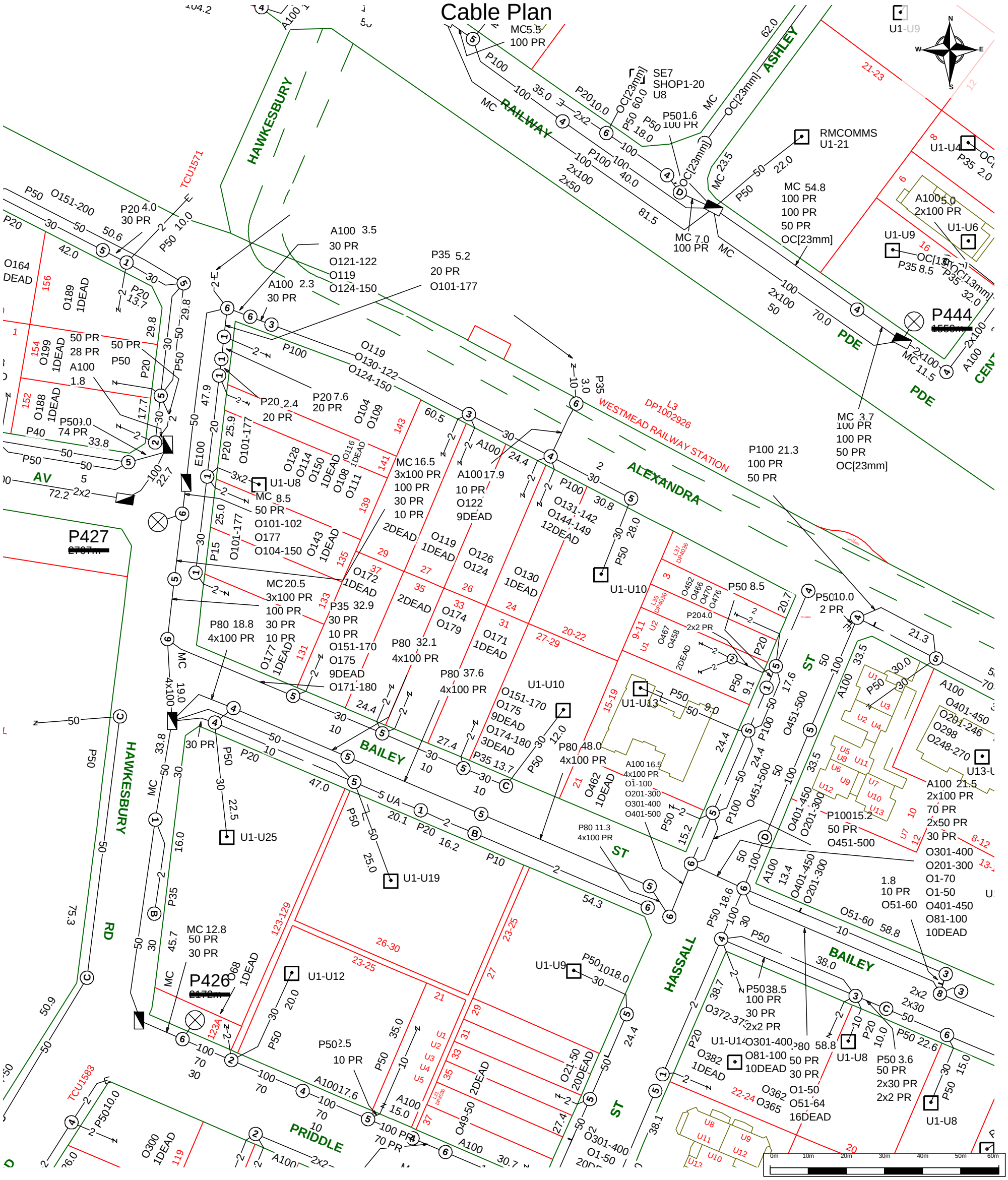
Date of Production: 02/11/2021

Plan 1 of 1

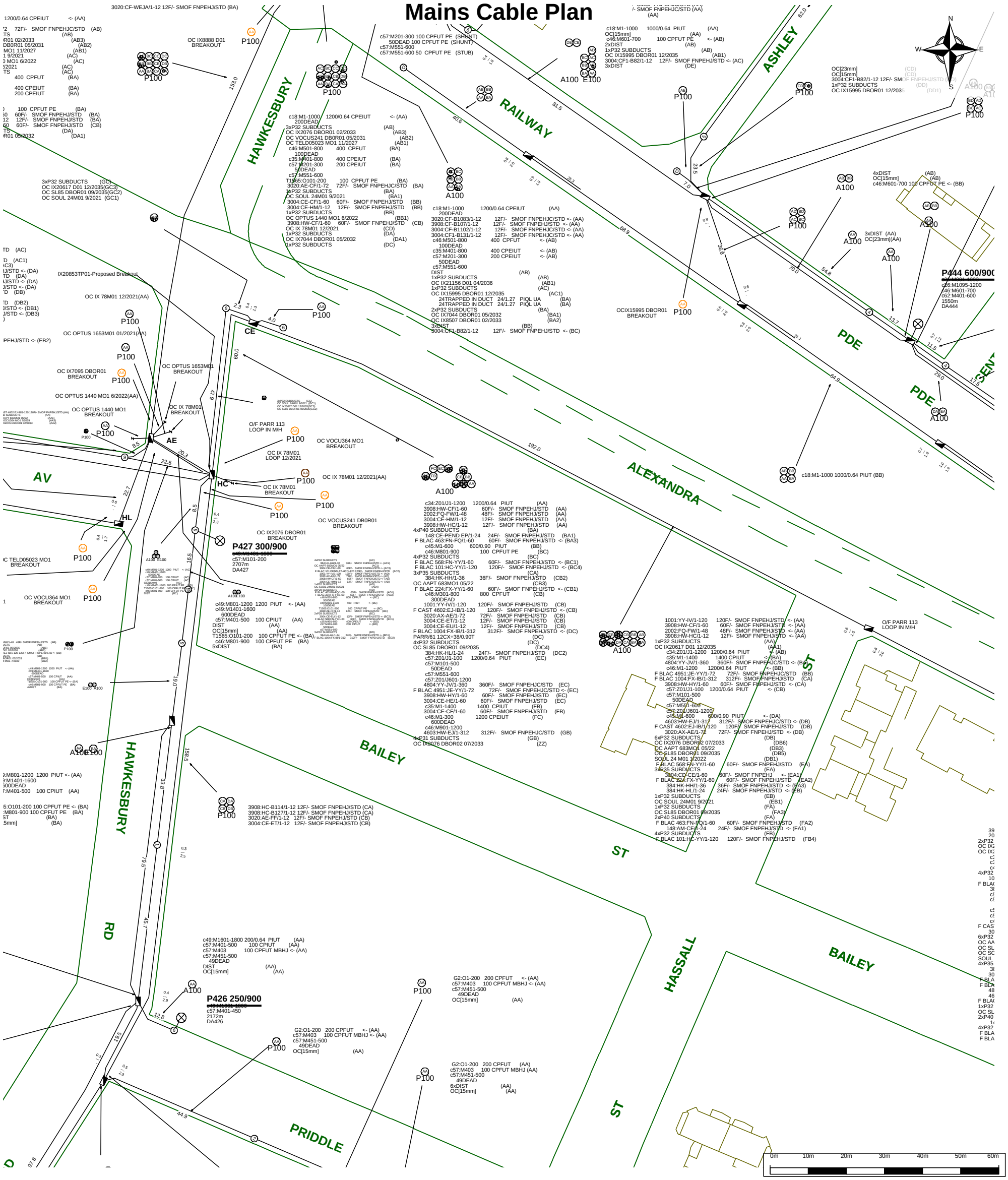
N

0m 9m 18m 27m 36m

Cable Plan


HAWKESBURY
RAILWAY
ASHLEY
PDE
CENT
WESTMEAD RAILWAY STATION
L3 DP1002926
ALEXANDRA
BAILEY
ST
HASSALL
RD
PRIDDLE
AV
TCU1571
TCU1583
P444
P427
P426
U1-U8
U1-U9
U1-U10
U1-U12
U1-U13
U1-U19
U1-U25
RMCOMMS U1-21
SE7 SHOP1-20 U8
U1-U4
U1-U6
U13-U
MC 54.8 100 PR 100 PR 50 PR OC[23mm]
MC 7.0 100 PR
MC 3.7 100 PR 100 PR 50 PR OC[23mm]
MC 16.5 3x100 PR 100 PR 30 PR 10 PR
MC 20.5 3x100 PR 100 PR 30 PR 10 PR
MC 8.5 50 PR
MC 12.8 50 PR 30 PR
P80 18.8 4x100 PR
P80 32.1 4x100 PR
P80 37.6 4x100 PR
P80 48.0 4x100 PR
P80 11.3 4x100 PR
A100 16.5 4x100 PR
P100 21.3 100 PR 50 PR
P10015.2 50 PR
P35 32.9 30 PR 10 PR
P35 13.7
P35 5.2 20 PR
P35 8.5
A100 3.5 30 PR
A100 2.3 30 PR
A100 17.9 10 PR
A100 5.0 2x100 PR
A100 21.5 2x100 PR 70 PR 2x50 PR 30 PR
P20 7.6 20 PR
P20 2.4 20 PR
P20 4.0 30 PR
P50 8.5
P50 10.0 2 PR
P50 38.5 100 PR 30 PR 2x2 PR
P50 3.6 50 PR 2x30 PR 2x2 PR
P204.0 2x2 PR
O164 DEAD
O189 1DEAD
O199 1DEAD
O188 1DEAD
O101-177
O119 O130-122 O124-150
O128 O114 O150 1DEAD O108 O111
O116 1DEAD
O104 O109
O143 1DEAD
O172 1DEAD
O177 O104-150
O177 1DEAD
O171 1DEAD
O131-142 O144-149 12DEAD
O130 1DEAD
O126 O124
O119 1DEAD
O174 O179
O151-170 O175 9DEAD O171-180
O151-170 O175 9DEAD O174-180 3DEAD
O462 1DEAD
O452 O466 O470 O476
O467 O458 2DEAD
O451-500
O401-450 O201-300
O401-450 O201-246 O298 O248-270
O301-400 O201-300 O1-70 O1-50 O401-450 O81-100 10DEAD
O382 1DEAD
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O372-373
O362 O365 O1-50 O51-64 16DEAD
O300 1DEAD
O49-50 2DEAD
O21-50 20DEAD
O151-200
O1-100 O201-300 O301-400 O401-500
O51-60
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P100 100 PR 40.0
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P50 22.0
P50 28.0
P50 74 PR
P50 50 PR 28 PR
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P50 2.5 10 PR
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P50 22.6
P40 33.8
P15 25.0
A100 1.8
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A100 13.4
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A100 15.0
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A100 2x2
A100 2x100
A100 2x30
A100 33.5
A100 30.0
A100 70
A100 2x100
A100 2x100
A100 2x100

Mains Cable Plan



For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Sequence Number: 204756945

Generated On 02/11/2021 10:19:57

CAUTION: Critical Network Route in plot area.
DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935

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

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

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

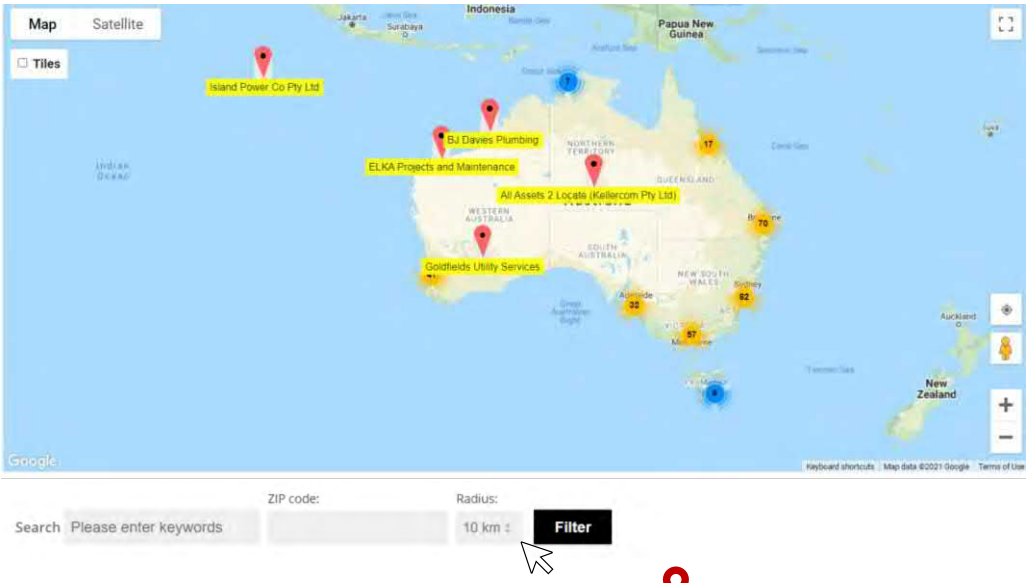
Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Certified Locating Organisations (CLO)

Find the closest CLO to your worksite on: https://dbydlocator.com/certified-locating-organisation/

Read the disclaimer and click: Accept and Search Now

A national map and an A-Z list of Certified Locating Organisations is displayed.



Use the map to zoom to your work area and choose the closest Locator indicated.

OR search by entering the **postcode** of your work area.

1. **Enter the post/zip code**
2. **Choose your search radius**
3. **Click filter** (If there is no result, you may have to increase the search radius)
4. **Click on the closest for CLO details or view the results displayed below the map**



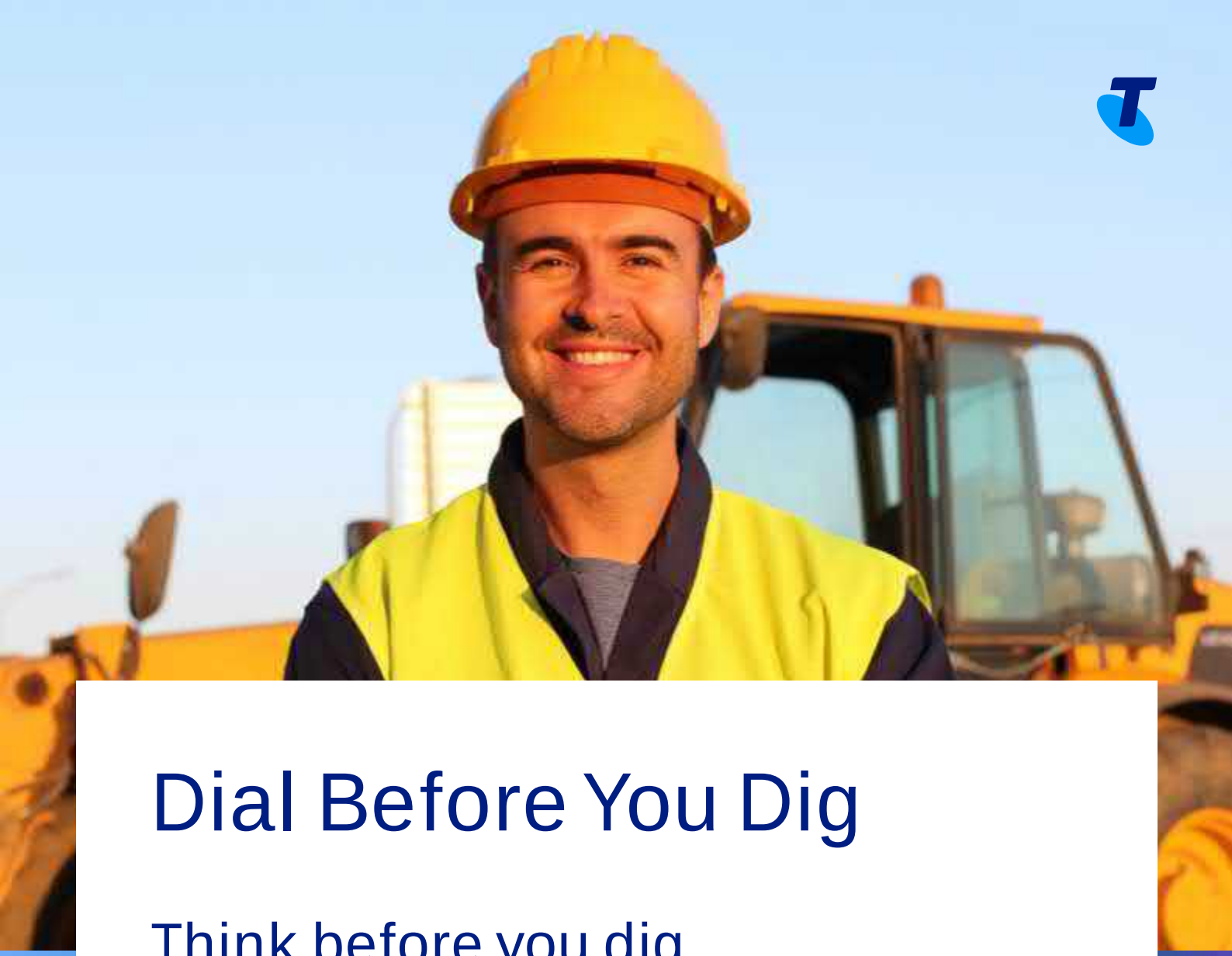
Locator skills have been tested, and the Organisation has calibrated location and safety equipment.

Telstra is aware of each Certified Locating Organisation and their employee locators.

Only a DBYD Certified Locator registered with a Certified Locating Organisation is authorised to access Telstra network for locating purposes.

Each Certified Locator working for a CLO is issued with a photo ID Card, authorising them to access Telstra pits and manholes for the purpose of cable and plant locations.

Please ask to see your Locators' CLO ID Card.



Dial Before You Dig

Think before you dig

This document has been sent to you because you requested plans of the Telstra network through Dial Before You Dig.

If you are working or excavating near telecommunications cables, or there is a chance cables are located near your site, you are responsible to avoid causing damage to the Telstra network.

Please read this document carefully. Taking your time now and following the steps below can help you avoid damaging our network, interrupting services, and potentially incurring civil and criminal penalties.

Our network is complex and working near it requires expert knowledge. Do not attempt these activities if you are not qualified to do so.

Your checklist



1. Plan

Plan your work with the latest plans of our network.

Plans provided through the DBYD process are indicative only*.

This means the actual location of our asset may differ substantially from that shown on the plans.

Refer to steps 2 and 3 to determine actual location prior to proceeding with construction.



2. Prepare

Engage a DBYD Certified Locating Organisation (CLO) via dbydlocator.com to identify, validate and protect Telstra assets before you commence work.



3. Pothole

Validate underground assets by potholing by hand or using non-destructive vacuum extraction methods.

Electronic detection alone (step 2) is not deemed to validate underground assets and must not be used for construction purposes.

If you cannot validate the Telstra network, you must not proceed with construction.



4. Protect

Protect our network by maintaining the following distances from our assets:

- 500mm Vibrating Plate or Wacker Packer Compactor
- 600mm Heavy Vehicle Traffic (over 3 tonnes) not to be driven across Telstra ducts or plant
- 1.0m Jackhammers/Pneumatic Breakers
- 2.0m Boring Equipment (in-line, horizontal and vertical)



5. Proceed

You can proceed with your work only once you have completed all the appropriate preparation, potholing and protection.

Useful information

Report any damage immediately

https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment

13 22 03

(If you receive a message asking for a phone or account number say “I don’t have one” then say “Report Damage” then press 1 to speak to an operator).

Relocating assets

If your project requires the relocation of a Telstra asset, please contact the Telstra Network Integrity Group:

1800 810 443 **(AEST business hours only)**

NetworkIntegrity@team.telstra.com

Never try to move or alter our network infrastructure without authorisation. By law, only authorised people can work on our assets or enter a facility owned or operated by us. Any interference, including unauthorised entry or tampering, may result in legal action.

Further information

Plan enquiries

1800 653 935 (**AEST** business hours only)

Telstra.Plans@team.telstra.com

Information on how to find cables and request asset relocations:

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

Asset Plan Readers

PDF Adobe Acrobat Reader DC Install for all versions
DWF Download Design Review | DWF Viewer | Autodesk

Disclaimer and legal details

Telstra advises that the accuracy of the information provided by Telstra conforms to Quality Level D as defined in AS5488-2013.

It is a criminal offence under the Criminal Code Act 1995 (Cth) to tamper or interfere with telecommunications infrastructure.

Telstra will also take action to recover costs and damages from persons who damage assets or interfere with the operation of Telstra's networks.

By receiving this information including the indicative plans that are provided as part of this information package you confirm that you understand and accept the risks of working near Telstra's network and the importance of taking all of the necessary steps to confirm the presence, alignments and various depths of Telstra's network. This in addition to, and not in replacement of, any duties and obligations you have under applicable law.

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

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

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

This Notice has been provided as a guide only and may not provide you with all the information that is required for you to determine what assets are on or near your site of interest. You will also need to collate and understand all of the information received from other Utilities and understand that some Utilities are not a part of the DBYD program and make your own enquiries as appropriate. It is the responsibility of the entities undertaking the works to protect Telstra's network during excavation / construction works.

Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.

Telstra plans or other details are provided only for the use of the applicant, its servants, agents, or Certified Locating Organisation. The applicant must not give the plans or details to any parties other than these and must not generate profit from commercialising the plans or details.

Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.

Please ensure Telstra plans and information provided always remains on-site throughout the inspection, location, and construction phase of any works.

Telstra plans are valid for 60 days after issue and must be replaced if required after the 60 days.

Data Extraction Fees

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

Telstra does not accept any liability or responsibility for the performance of or advice given by a Certified Locating Organisation. Certification is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement. condensed

Neither the Certified Locating Organisation nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Certified Locating Organisation or its employees.

Once all work is completed, the excavation should be reinstated with the same type of excavated material unless specified by Telstra

The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

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

Workers and equipment must maintain safety exclusion zones around power lines

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

Privacy Note

Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement. You can obtain a copy at www.telstra.com.au/privacy or by calling us at 1800 039 059 (business hours only).

LEGEND

IT'S HOW WE CONNECT

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

Exchange
(Major Cable Present)

Footway Access Chamber
(can vary from 1-lid to 12-lid)

Pillar / Cabinet
(above ground / free standing)

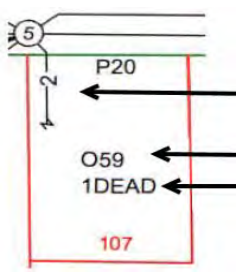
Above ground complex equipment housing (eg RIM)
Please Note: This equipment is powered by 240V Electricity

OC — Other Carrier Telecommunications Cable/Asset

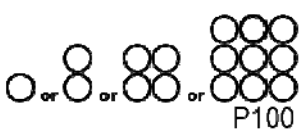
Dist — Distribution cables in Main Cable ducts

MC — Main Cable ducts on a Distribution plan

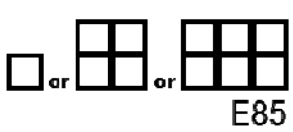
Blocked or damaged duct.



2 pair lead-in to property from pit in street 1
pair working (pair ID 059)
1 pair dead (i.e. spare, not connected)



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



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



Cable Jointing Pit
(number indicating Pit Type)



Elevated Joint
(above ground joint on buried cable)



Telstra Plant in shared Utility trench



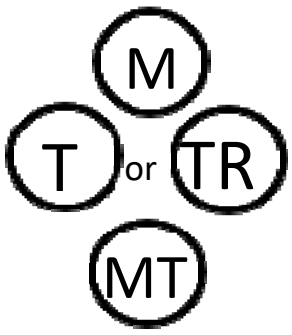
Aerial Cable



Aerial Cable
(attached to joint Use Pole eg. Power)



Direct Buried Cable



Marker Post Installed

Buried Transponder

Marker Post, Transponder

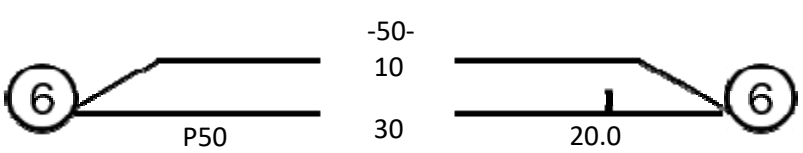


Optical Fibre cable direct buried

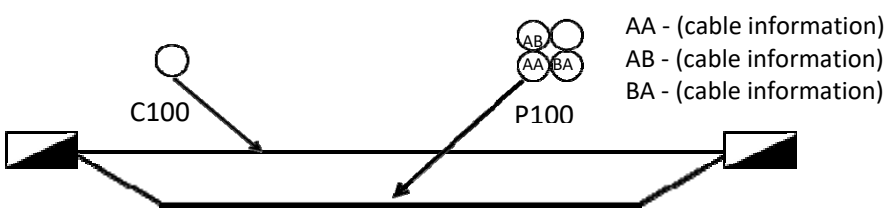
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / Plastic, C - Concrete,
GI - Galanised iron, E - Earthenware
Conduit sizes *nominally* range from 20mm to 100mm
P50 50mm PVC conduit
P100 100mm PVC conduit
A100 100mm asbestos cement conduit

Some Examples of how to read Telstra Plans



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



AA - (cable information)
AB - (cable information)
BA - (cable information)

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

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TELSTRA CORPORATION ACN 051 775 556

TPG Corporation Limited
ABN 46 093 058 069
PO Box 1844 Macquarie Centre
North Ryde NSW 2113
Phone: **1800 786 306** (24hrs)

Date: 02/11/2021

Enquirer Name: Elisha cassidy
Enquirer Address: 6 Millennium Court
Email: elisha.cassidy@ade.group
Phone: +61420309645

Dear Elisha cassidy

The following is our response on behalf of each of the TPG carriers (listed below) to your Dial Before You Dig enquiry – Sequence 204756943 .
It is provided to you on a confidential basis under the following conditions and must be shredded or securely disposed of after use.

Assets Affected:

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

PIPE Networks

Location: 33 Bailey Street

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

IMPORTANT INFORMATION

- The information provided is valid for 30 days from the date of this response. If your work site area changes or your construction activity is beyond 30 days please contact Dial Before You Dig on 1100 or www.1100.com.au to re-submit a new enquiry.
- Due to the nature of underground assets and the age of some assets and records, our plans are indicative of the general location only and may not show all assets in the location. You should not solely rely on these plans when undertaking construction works. It is also inaccurate to assume depth or that underground network conduit and cables follow straight lines, and careful on-site investigations are essential to locate an asset's exact position prior to excavation. It is your responsibility to locate and confirm the exact location of our infrastructure using non-destructive techniques. We make no warranty or guarantee that our plans are complete, current or error free, and to the maximum extent permitted by law we exclude all liability to you, your employees, agents and contractors for any loss, damage or claim arising out of or in connection with using our plans.
- Please note that some of our conduits carry electrical cables and gas pipes. Please exercise extreme care when working within the vicinity of these conduit and take into account the minimum clearance distances under Duty Of Care below.
- You (and your employee and contractors) must not open, move, interfere, alter or relocate any of our assets without our prior approval.
- **Note** It is a criminal offence under the *Criminal Code Act 1995 (Cth)* to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by us as a result of such unauthorised works may be claimed against you.

DAMAGE

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

DUTY OF CARE

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

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

- Use suitably qualified and supervised professionals, particularly if you are working near assets that contain electricity cables or gas pipes.

- Ensure the below minimum clearance distances between the construction activities and the actual location of our assets are met. If you need clearance distances for our above ground assets, or if the below distances cannot be met, call **1800 786 306** to discuss.

  Minimum assets clearance distances.

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

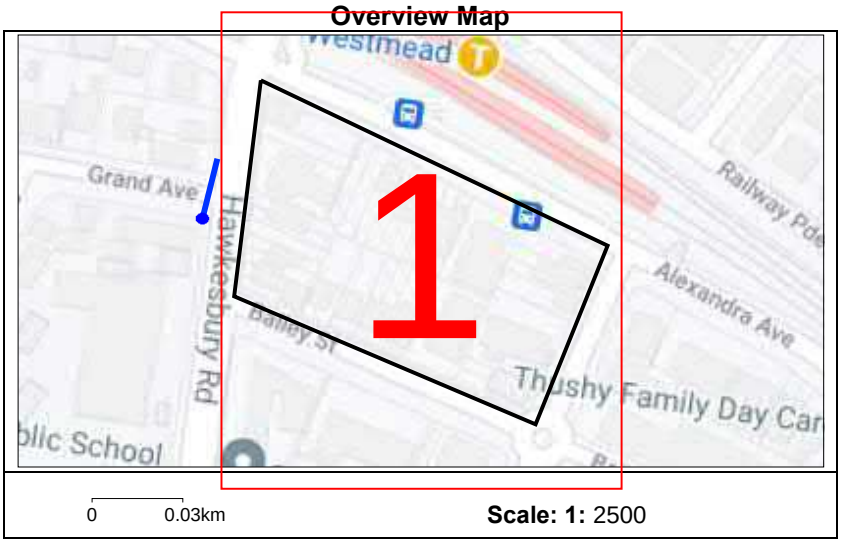
- Reinstate exposed TPG network infrastructure back to original state.

PRIVACY & CONFIDENTIALITY

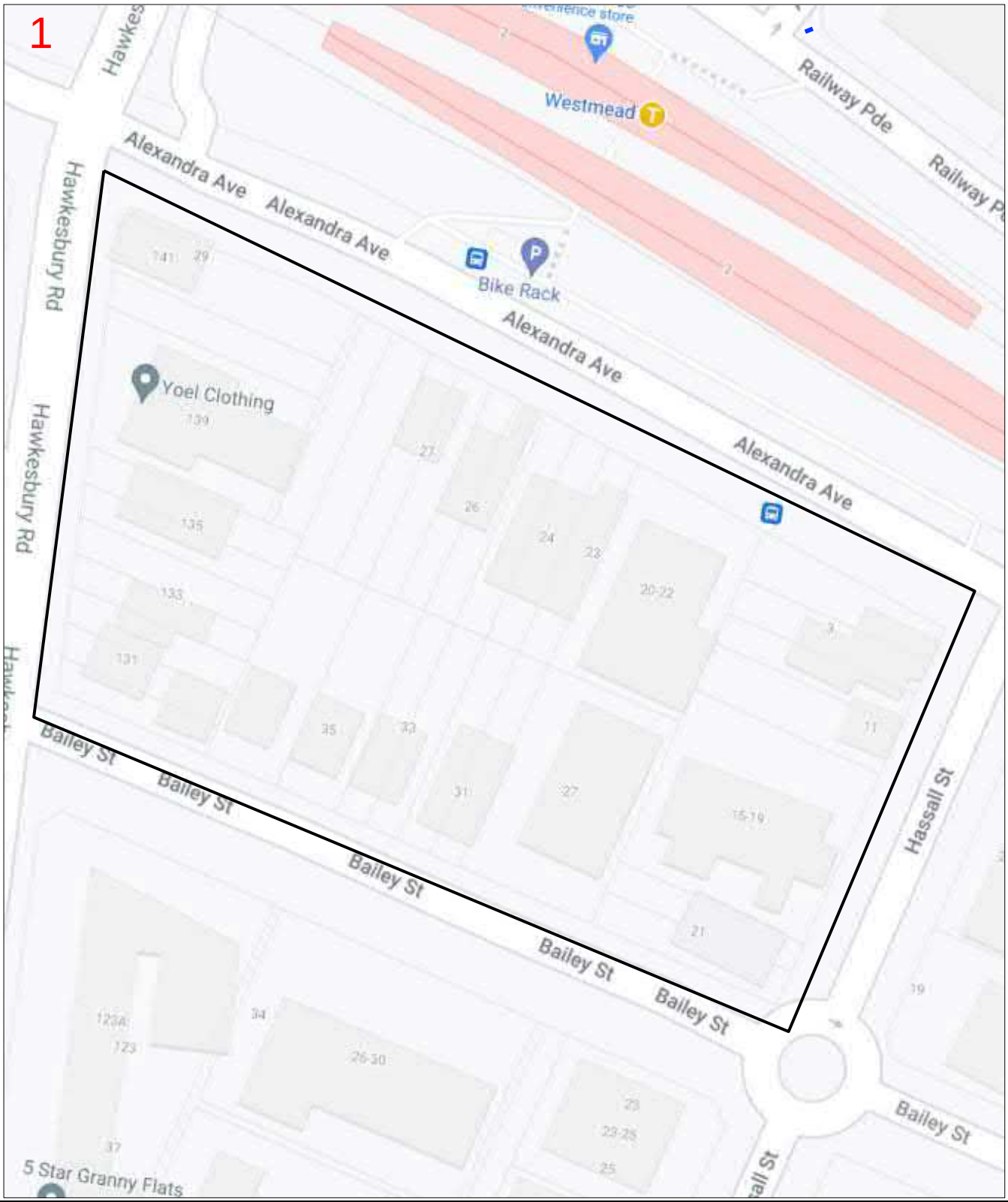
- Privacy Notice – Your information has been provided to us by Dial Before You Dig to respond to your Dial Before You Dig enquiry. We will keep your personal information in accordance with TPG's privacy policy, see www.tpg.com.au/about/privacy.

- Confidentiality – The information we have provided to you is confidential and is to be used only for planning and designing purposes in connection with your Dial Before You Dig enquiry. Please dispose of the information by shredding or other secure disposal method after use. We retain all intellectual property rights (including copyrights) in all our documents and plans.

Overview Map



TPG Corporation Limited



Enquiry Number: 204756943

Map Sheet: 1

Scale: 1: 750

N

0 0.008km

LEGEND

DBYD Work Area

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

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Marist High School
Queens Rd
48 m
Ashley Ln
Central Ave
Alfred St
Westmead Station
Alexandra Ave
Grand Ave
Alexandra Ave
Hawkesbury Rd
Batley St
Priddle St
Austral Ave
Mowle St
Mowle St

Spatial Services
Works likely to impact survey marks

Penalties apply for unauthorised removal, damage, destruction, displacement, obliteration or defacing of survey marks

ISSN 2203-9384 Information Sheet July 2018

Legislation

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

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

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

Why are survey marks important?

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

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

How do I preserve survey marks?

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

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

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

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

Types of survey marks

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



More information

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

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

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Author: DFSI Spatial Services

P18/10/036

DRAWN BY CADD
DO NOT AMEND MANUALLY

DATE IN SERVICE : 10/11/1978

R T A

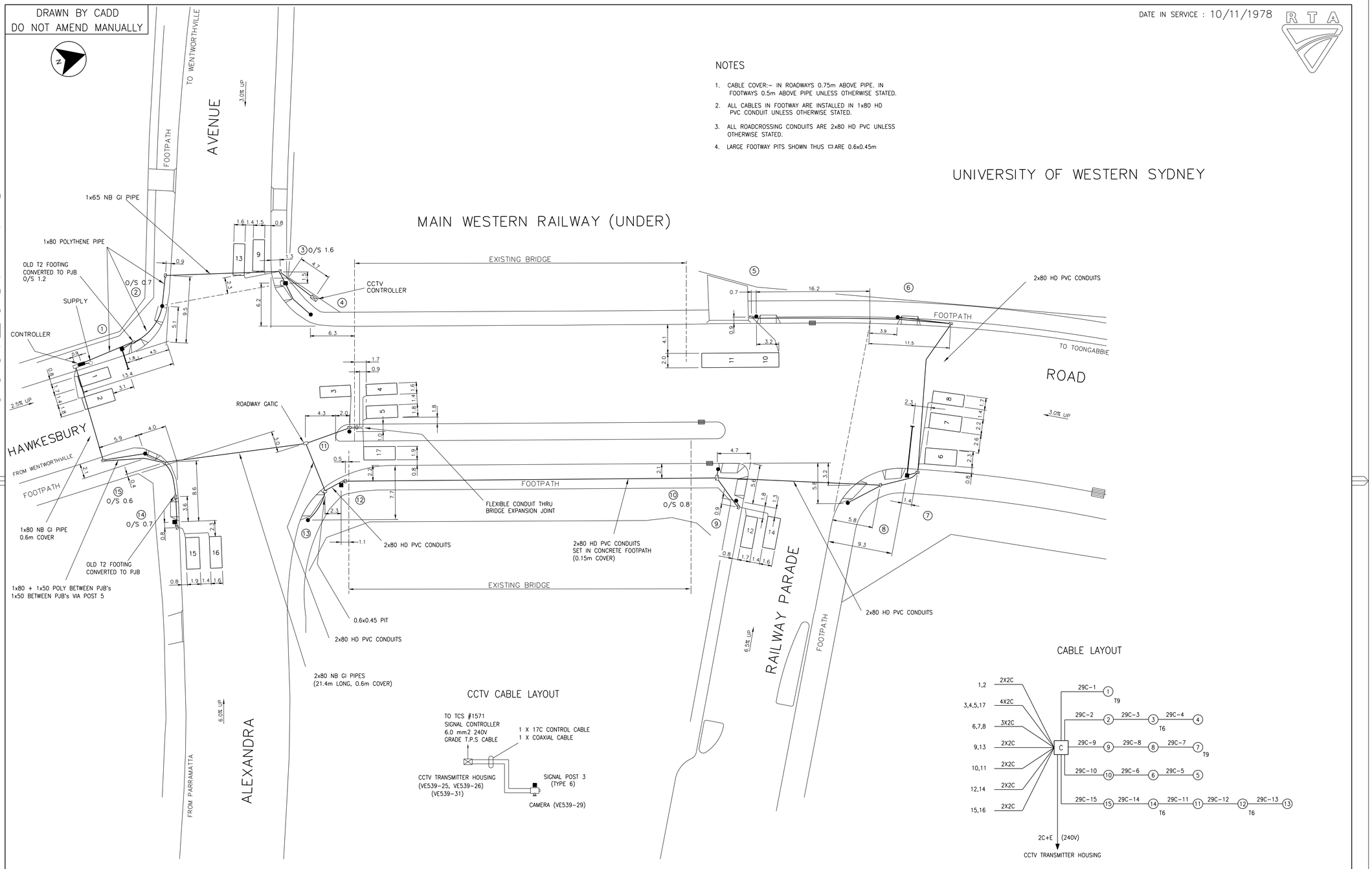
7000.205.VV.1571

NOTES

1. CABLE COVER:– IN ROADWAYS 0.75m ABOVE PIPE. IN FOOTWAYS 0.5m ABOVE PIPE UNLESS OTHERWISE STATED.
2. ALL CABLES IN FOOTWAY ARE INSTALLED IN 1x80 HD PVC CONDUIT UNLESS OTHERWISE STATED.
3. ALL ROADCROSSING CONDUITS ARE 2x80 HD PVC UNLESS OTHERWISE STATED.
4. LARGE FOOTWAY PITS SHOWN THUS ▭ ARE 0.6x0.45m

UNIVERSITY OF WESTERN SYDNEY

MAIN WESTERN RAILWAY (UNDER)



CCTV CABLE LAYOUT

CABLE LAYOUT

PUBLIC UTILITY LEGEND		REFERENCE PLANS	
HYDRANT	□	SYMBOLS/ABBS.	VD003-6
STOP VALVE	▲	STD POSIT	VD001-5
GAS VALVE	⊠	DET SCHED EXP	VD018-10
SEWER MANHOLE	⊗	PRES. DETECT	VC005-17
TELECOM PIT	◪	SSG DIS. SEQ.	VD018-8
ELECT LIGHT POLE	☾		
POWER POLE	○		
STAY POLE	⊘		
TELEPHONE BOX	T	SURVEYOR : LCPL	
TELECOM PILLAR	◪	DATE : 2005	

U.B.D.Ref. 190 M16
I.S.G CO-ORDS. E: 298 680 N: 1 257 600
DESIGNED CORRIGAN'S
CHECKED
L.EERLAND 01-09-2009
SITE CHECKED
M.MAHINTHAN
RECOMMENDED

DESIGN APPROVAL
APPROVED
POSITION ELECTRICAL DESIGN MANAGER
DATE 18-07-2012

RTA RECOMMENDED
RECOMMENDED
NETWORK OPERATIONS
POSITION
DATE

RTA ACCEPTANCE
RECOMMENDED
POSITION
DATE
ACCEPTED
POSITION
DATE

Roads and Traffic Authority,N.S.W

HOLROYD COUNCIL AREA
TRAFFIC SIGNALS AT
HAWKESBURY RD, ALEXANDRA AVE AND RAILWAY PDE
WESTMEAD

CABLE INSTALLATION TCS No 1571

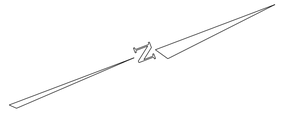
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REGN. 7000.205.VV.1571
SHEET 14

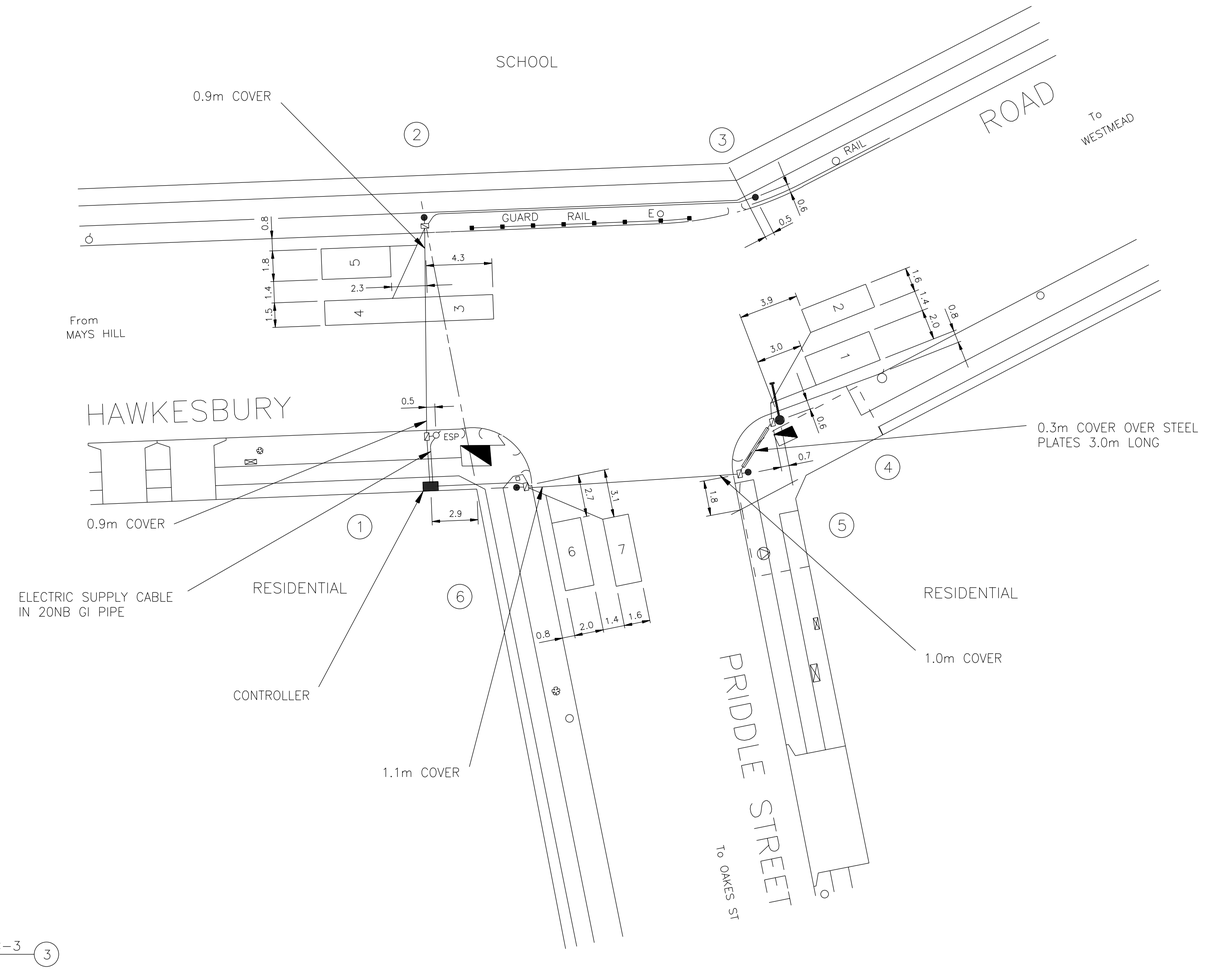
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7000.205.VV.1583

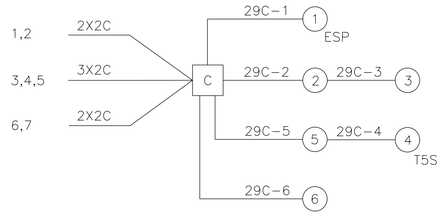
DATE IN SERVICE : 00/00/00

R T A





CABLE LAYOUT



NOTES

1. CABLE COVER:– IN ROADWAY 0.75m ABOVE PIPE
   IN FOOTWAY 0.5m ABOVE PIPE
   UNLESS OTHERWISE STATED.
2. ALL FOOTWAY CONDUITS ARE 1x80 HD PVC UNLESS OTHERWISE STATED.
3. ALL ROADCROSSING CONDUITS ARE 1x80 HD PVC.

A ORIGINAL ISSUE

PUBLIC UTILITY LEGEND		REFERENCE PLANS	
HYDRANT	□	SYMBOLS/ABBS.	VD003-6
STOP VALVE	▲	STD POSIT.	VD001-5
GAS VALVE	#	DET SCHED EXP	VD018-10
SEWER MANHOLE	⊛	PRES. DETECT	VC005-17
TELECOM PIT	◪	SSG DIS. SEQ.	VD018-8
ELECT LIGHT POLE	○		
POWER POLE	○		
STAY POLE	⊘		
TELEPHONE BOX	T	SURVEYOR : R.V.RYAN	
TELECOM PILLAR	◕	DATE : 19.04.78	

U.B.D. Ref. MAP 210 M1
I.S.G. CO-ORDS E: 298680 N: 1257400
DESIGNED CORRIGAN
CHECKED L.CLAY
T.Mc 19-08-96 SITE CHECKED
L.CLAY RECOMMENDED

APPROVED
R.C. BIRD
ELECTRICAL DESIGN MANAGER
28-08-96 DATE

Roads and Traffic Authority,N.S.W

HOLROYD COUNCIL
TRAFFIC SIGNALS AT INTERSECTION OF HAWKESBURY ROAD & PRIDDLE STREET
WESTMEAD

CABLE INSTALLATION TCS No 1583

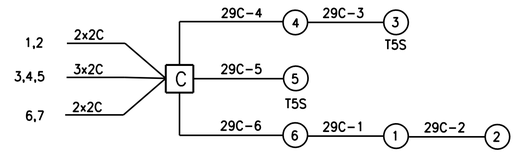
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FILE 205 TS 264	SUPERSEDES SHEET/ISSUE –		
REGN. 7000.205.VV.1583		SHEET	3

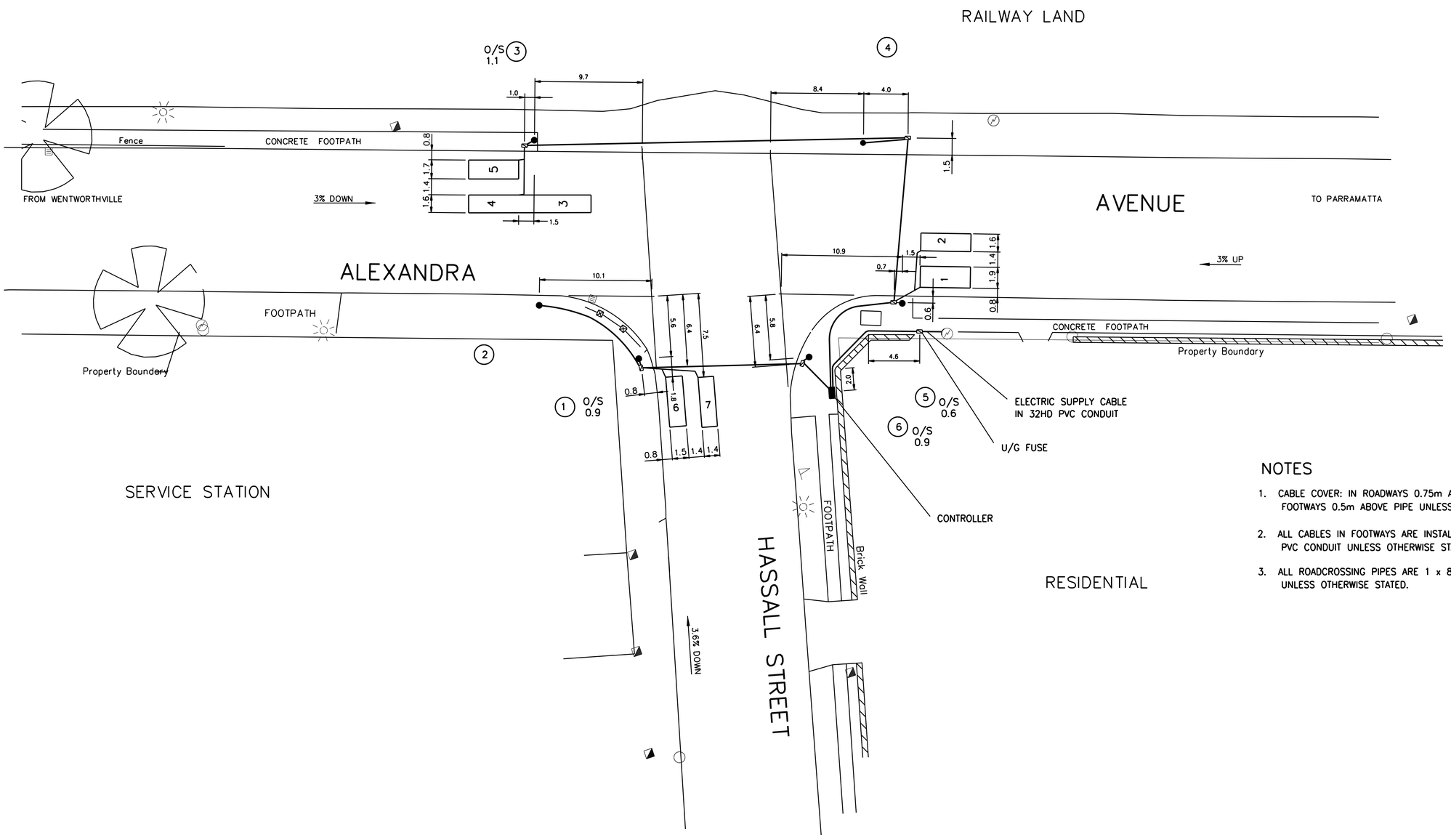
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VV1583_3A_INS.dgn 21/11/2008 3:37:15 PM

7000.205.VV.3894

CABLE LAYOUT





NOTES

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

A ORIGINAL ISSUE

PUBLIC UTILITY LEGEND	
HYDRANT	□
STOP VALVE	▲
GAS VALVE	⌗
SEWER MANHOLE	⊛
TELECOM PIT	◪
ELECT LIGHT POLE	☼
POWER POLE	○
STAY POLE	⊘
TELEPHONE BOX	T
TELECOM PILLAR	◍

REFERENCE PLANS	
SYMBOLS/ABBS.	VD003-6
STD POSIT	VD001-5
DET SCHED EXP	VD018-10
PRES. DETECT	VC005-17
SSG DIS. SEQ.	VD018-8
DESIGN LAYOUT	SHT 1
CABLE CHART	SHT 3
SURVEYOR : LCPL	
DATE : 2005	

U.B.D. Ref. Map 210 M1
M.G.A. E: 298 862
CO-ORDS N: 1 257 527
DESIGNED TASK
CHECKED
L. EERLAND 1-09-2009
SITE CHECKED
I. HAYES 06-07-2011
PASSED

APPROVED
ELECTRICAL DESIGN MANAGER
DATE: 06-07-2011

ROADS AND TRAFFIC AUTHORITY. N.S.W

HOLROYD COUNCIL AREA
TEMPORARY TRAFFIC SIGNALS AT
ALEXANDRA AVE AND HASSALL STREET
WESTMEAD

CABLE INSTALLATION TCS No 3894

EXISTING ☒ PROPOSED ☐
CADD FILE: VV3894_2A_INS.dgn
SCALE 5 0 (1:200) 5 10
ISSUE A
FILE 205 TS 351
SUPERSEDES SHEET/ISSUE -
REGN. 7000.205.VV.3894
SHEET 2

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Response Cover Letter

Western Sydney University

Locked Bag 1797

Penrith NSW 2751

Date: 02/11/2021

To:
Elisha cassidy
ADE
6 Millennium Court
Silverwater, 2128

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

Sequence No: 204756941

Job No: 30815700

Location: 33 Bailey Street
Westmead, NSW, 2145

If you require further information, please contact the Western Sydney University on (02) 4570 1443.

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

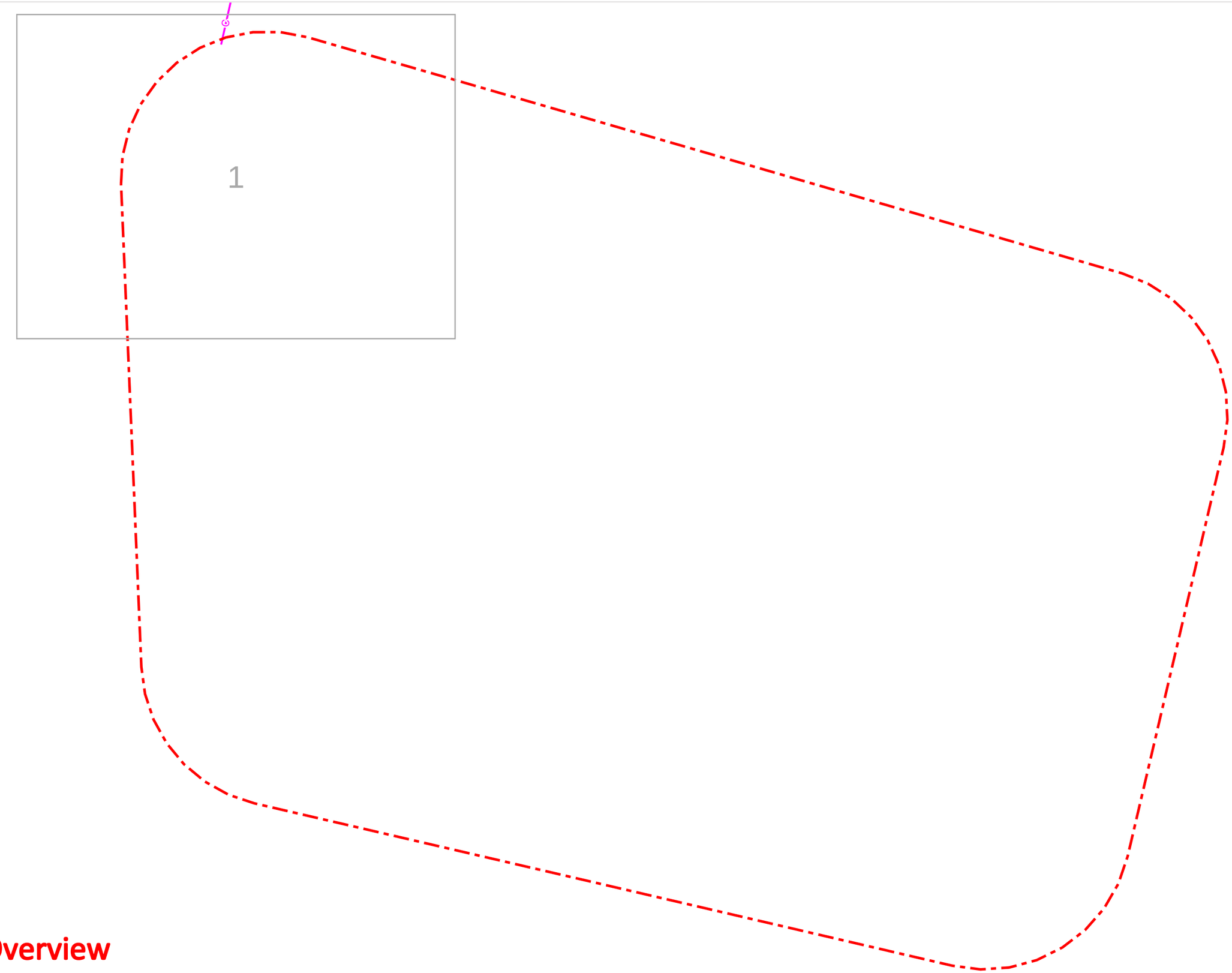
This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited.

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

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

Sequence No: 204756941
Job No: 30815700
Location: 33 Bailey Street, Westmead, NSW 2145

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



Legend:

- FH — Fire Hydrant
- FC — Fire Comms
- G — Gas
- E — Electrical
- COG — Cogeneration
- OIL — Oil
- S — Sewer
- SW — Stormwater
- C — Communications
- W — Water
- IR — Irrigation

N

Scale: 1:755
Expires: 30 Nov 2021

GENERAL NOTES: Do not scale from drawings. Verify dimensions on site. Verify any discrepancies with the Project Manager. All works to comply with the Building Code of Australia (BCA), Australian Standards (SAA), Council Conditions & Planning Instruments, & other relevant Statutory Authorities. Please refer to the notes that were provided with this plan for further information regarding data accuracies, etc.

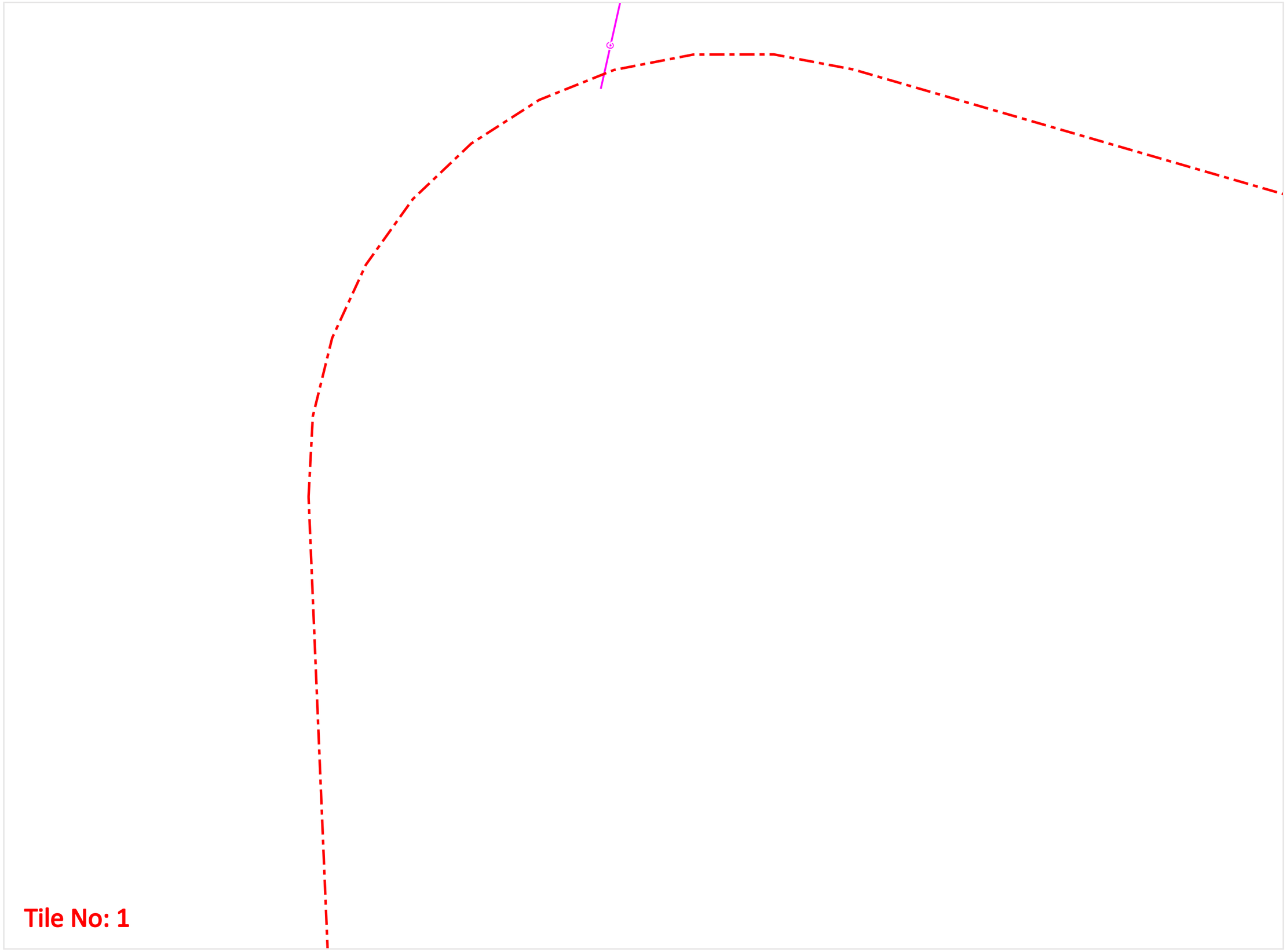
DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Western Sydney University or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response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

Overview

WESTERN SYDNEY UNIVERSITY

Sequence No: 204756941
Job No: 30815700
Location: 33 Bailey Street, Westmead, NSW 2145

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



Tile No: 1

Legend:

- FH — Fire Hydrant
- FC — Fire Comms
- G — Gas
- E — Electrical
- COG — Cogeneration
- OIL — Oil
- S — Sewer
- SW — Stormwater
- C — Communications
- W — Water
- IR — Irrigation

N

Scale: 1:250
Expires: 30 Nov 2021

GENERAL NOTES: Do not scale from drawings. Verify dimensions on site. Verify any discrepancies with the Project Manager. All works to comply with the Building Code of Australia (BCA), Australian Standards (SAA), Council Conditions & Planning Instruments, & other relevant Statutory Authorities. Please refer to the notes that were provided with this plan for further information regarding data accuracies, etc.

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

WESTERN SYDNEY
UNIVERSITY

IMPORTANT: PLEASE READ ALL INFORMATION AND CONDITIONS BELOW AND ANY NOTES ON THE PLAN/S.

1. The proposed work may impact WESTERN SYDNEY UNIVERSITY underground assets in the area. Diagrams indicating the approximate position of our known underground assets are attached.

2. Please contact your relevant WESTERN SYDNEY UNIVERSITY representative to discuss your proposed works and arrange a meeting on site if necessary.

3. The accompanying plans have been generated by an automated system.

4. The plans should cover the area highlighted in the "Locality Indication Only" window on your Caller Confirmation. It is that defined area which is used to automatically generate the plans and not UBD or address information or any free text information provided to Dial Before You Dig.

5. It is important, therefore, that you be accurate in defining your dig site when you lodge your enquiry with Dial Before You Dig. It is the enquirer's responsibility to resubmit the enquiry to Dial Before You Dig if the information supplied does not match the proposed dig site.

6. Any information provided is valid only for 14 days from the date of issue.

7. The enclosed plans show the position of known WESTERN SYDNEY UNIVERSITY services. Other services may exist that are not shown on these plans. Services belonging to other third parties may not be included on these plans.

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

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

10. The recipient of these plans must use their own care and diligence in carrying out their works and must carry out further surveys to locate services at their work site. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to WESTERN SYDNEY UNIVERSITY assets.

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

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

13. Asbestos cement pipelines form part of the WESTERN SYDNEY UNIVERSITY service infrastructure and, if damaged, can pose a risk to health. WESTERN SYDNEY UNIVERSITY have developed an asbestos management plan, if you locate any asbestos please contact the relevant WESTERN SYDNEY UNIVERSITY project manager immediately.

14. ANY DAMAGE TO WESTERN SYDNEY UNIVERSITY ASSETS MUST BE REPORTED IMMEDIATELY TO The relevant WESTERN SYDNEY UNIVERSITY contact, or Campus Safety and Security in the event of an emergency.

15. WESTERN SYDNEY UNIVERSITY owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose. The plans and details should be disposed of by shredding or any other secure disposal method after use.

16. WESTERN SYDNEY UNIVERSITY plans or other details are provided only for the use of the applicant, its servants, or agents. The applicant is to treat all plans and details as confidential and the applicant may not give the plans or details to other parties, and may not generate profit from commercialising the plans or details.

17. Please contact the relevant WESTERN SYDNEY UNIVERSITY representative immediately should you locate assets not indicated on these plans.

18. WESTERN SYDNEY UNIVERSITY must be provided with as constructed drawings of any alterations/additions made to the services infrastructure on WESTERN SYDNEY UNIVERSITY campuses.

19. Any works undertaken upon the services infrastructure must comply with WESTERN SYDNEY UNIVERSITY standards, please contact the relevant WESTERN SYDNEY UNIVERSITY representative to obtain a copy of the standards.

20. Warning: The information contained in this email is confidential and intended for the use of the person(s) to whom it is addressed. If you are not the intended recipient you are hereby notified that any perusal, use, distribution, copying disclosure is strictly prohibited. If you have received this email in error, please notify us immediately by telephone and/or return email without making a copy.

02/11/2021

Elisha cassidy
ADE
6 Millennium Court
Silverwater NSW 2128

Dear Elisha cassidy

DIAL BEFORE YOU DIG - JOB: 30815700 SEQ: 204756948

Thank you for your enquiry regarding the below mentioned area.

Enquiry Date:	02/11/2021
Address:	33 Bailey Street
Suburb:	Westmead
State:	NSW, 2145

Additional Information:

YES – We can confirm, the Vocus Group has Fibre Optic Services within the vicinity.

Please find attached a copy of the services plan for the location you have specified. These plans are valid for 30 days from the date requested.

IMPORTANT INFORMATION

Drawings and plans provided by the Vocus Group are reference diagrams which were correct at the time the asset was built. Exact ground cover and alignments cannot be provided with any certainty, as these may alter over time. Depth of the Telecommunications asset can vary considerably as can alignments. The plans provided are to be used as a guide only.

Identifying the Vocus Group asset visually is critical. Information on how this can be arranged is provided in this document.

Please email Damage.Relocations@vocus.com.au for general enquiries about the information provided within this response.

Yours sincerely,
Vocus Group DBYD Team

EMERGENCY CONTACT: 1800 262 663

DUTY OF CARE

The Constructor has a legal "Duty of Care" that must be observed when working in the vicinity of any Vocus Group asset.

It is the responsibility of the Constructor to design their works with no impact to the Vocus Group asset.
The Constructor must;

a. Obtain and review plans for a specified area through Dial Before You Dig within a reasonable timeframe before construction begins.
b. Visually locate the Vocus Group asset, using a Vocus Group Accredited Locator who will vacuum excavate (potholing) where construction activities may damage or interfere with the Vocus Group asset. Refer to ***"Clearances for Work in the Vicinity of the Vocus Group Asset"*** section below for more information.
c. Contact the Vocus Group if the Vocus Group asset is wholly or partly located near planned construction activities.

NOTE: Plans are provided free of charge from DBYD. Request for plans of a larger area may incur a cost.

DAMAGE

The Constructor will be held responsible for all asset damage when work commences prior to obtaining the Vocus Group plans, or failure to follow instructions.

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

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

ASSET RELOCATIONS

The Constructor is not permitted to relocate or alter any Vocus Group asset or network under any circumstance.
For all enquiries relating to the relocation of a Vocus Group asset please email Damage.Relocations@vocus.com.au

RESOLUTION OF POINTS OF CONFLICT

Should asset location and potholing reveal points of conflict between the Constructors planned works and the existing Vocus Group asset, the Constructor should contact the Vocus Group for advice and to discuss possible solutions.

Please contact the Fibre Assurance Team
Phone: 1800 262 663
Email: Damage.Relocations@vocus.com.au

ASSESSMENT OF RISK AND PROTECTIVE ACTIONS

Where "Protective works" are required around existing the Vocus Group asset, a solution will be confirmed on a case by case basis. The cost of the Protective works are the responsibility of the Constructor and the works will be carried out by a Vocus Group Accredited Contractor.

Where "Relocation works" of the Vocus Group asset is part of an agreed solution, a Project Manager will be assigned to work with the Constructor. The cost of the Relocation works are the responsibility of the Constructor and the works will be carried out by a Vocus Group Accredited Contractor.

Region	Onsite Locations Contact	Phone	Mobile	Fax	After Hours
Sydney, NSW	QC Communications	(02) 9620 2407		(08) 9620 1701	
Alice Springs, NT	Chambers Engineering	(08) 8955 5022	0418 837 833 0427 971 931	(08) 8955 5322	
Darwin, NT	Anywair Electrics		0418 890 071		0418 890 071
Darwin, NT	Northern Comm.'s		0407 904 319		0407 904 319
Brisbane, QLD	Optilinx	(07) 3901 7353	A/Hours or Emergency 0404 010 658	(07) 3901 7352	
Adelaide, SA	TPC	(08) 8376 5911		(08) 8376 5944	
Melbourne, VIC	Linktech	(03) 8805 0300			
Perth, WA	Abaxa	1300 369 642	A/Hours or Emergency 0411 746 657	(08) 9256 2922	

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

The Vocus Group accepts no liability for the information provided to the Constructor by the Locators listed above.

Further to this, the Constructor acknowledges that the Locator is the agent of the Constructor and that the Vocus Group takes no responsibility for the Locators' acts or omissions.

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

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

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

CLEARANCES FOR WORK IN THE VICINITY OF THE VOCUS GROUP ASSET

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

Footpath and Verge Areas	450mm
Roadways	600mm

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

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

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

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

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

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

474.6 Interference with facilities

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

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

Penalty: Imprisonment for 1 year.

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

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

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

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

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

Penalty: Imprisonment for 2 years.

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

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

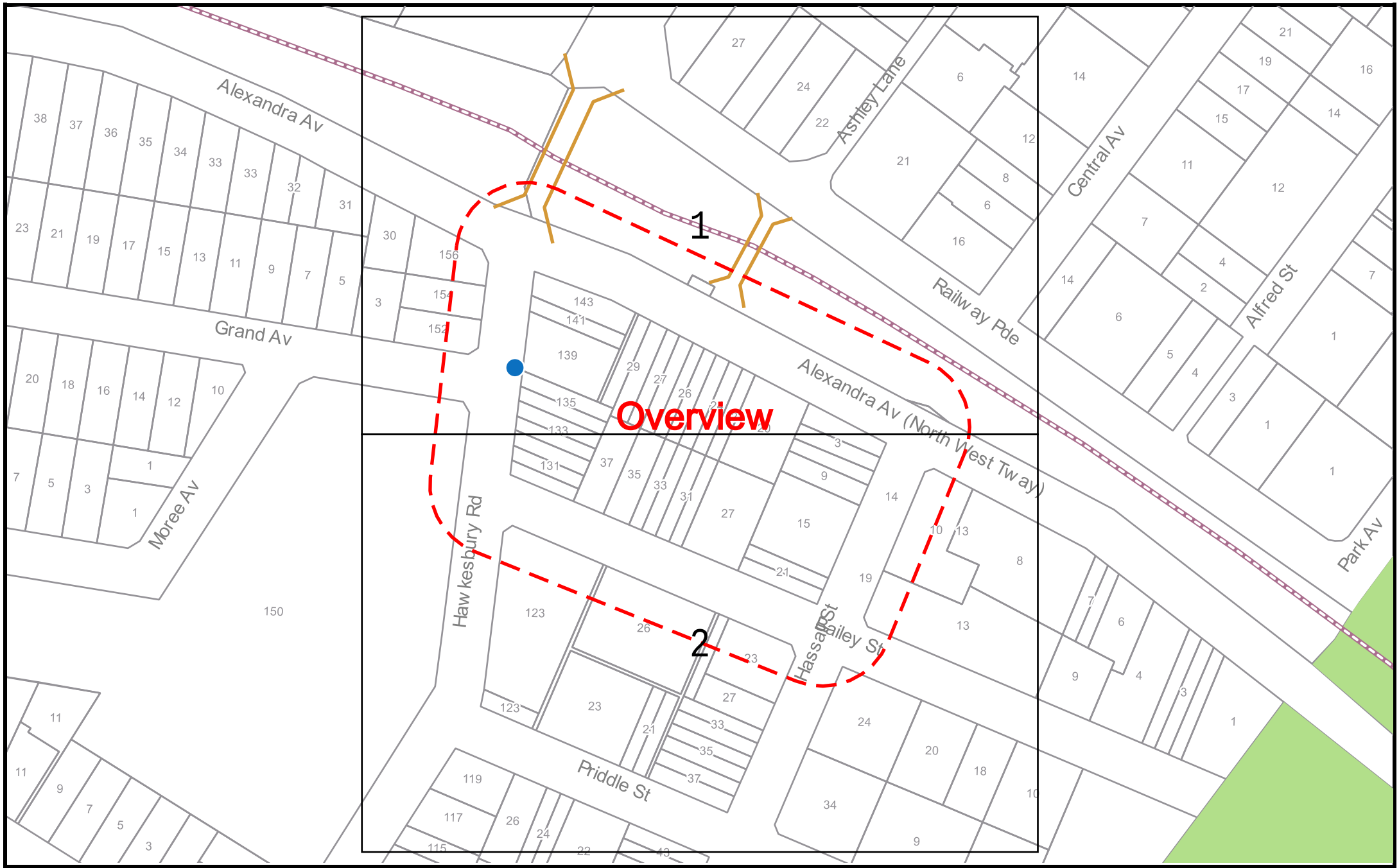
(b) that the carriage service is supplied by a carriage service provider.

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

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

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

Penalty: Imprisonment for 2 years.

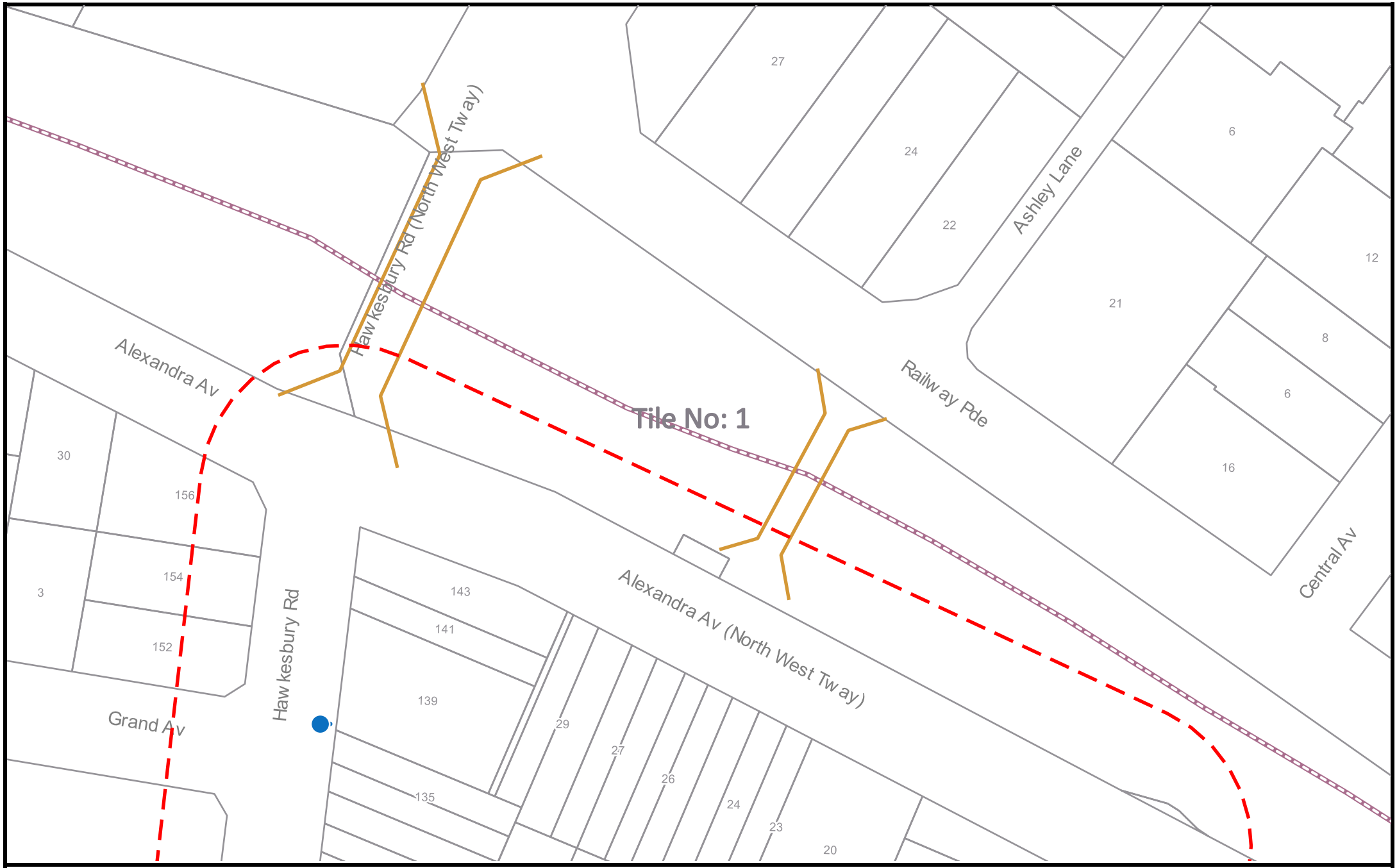


SEQUENCE NUMBER: 204756948
JOB NUMBER: 30815700
ADDRESS: 33 Bailey Street, Westmead, NSW 2145

LEGEND
Vocus Group Pit
Vocus Group Conduit

SCALE: 1:2050

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



VOCUS communications

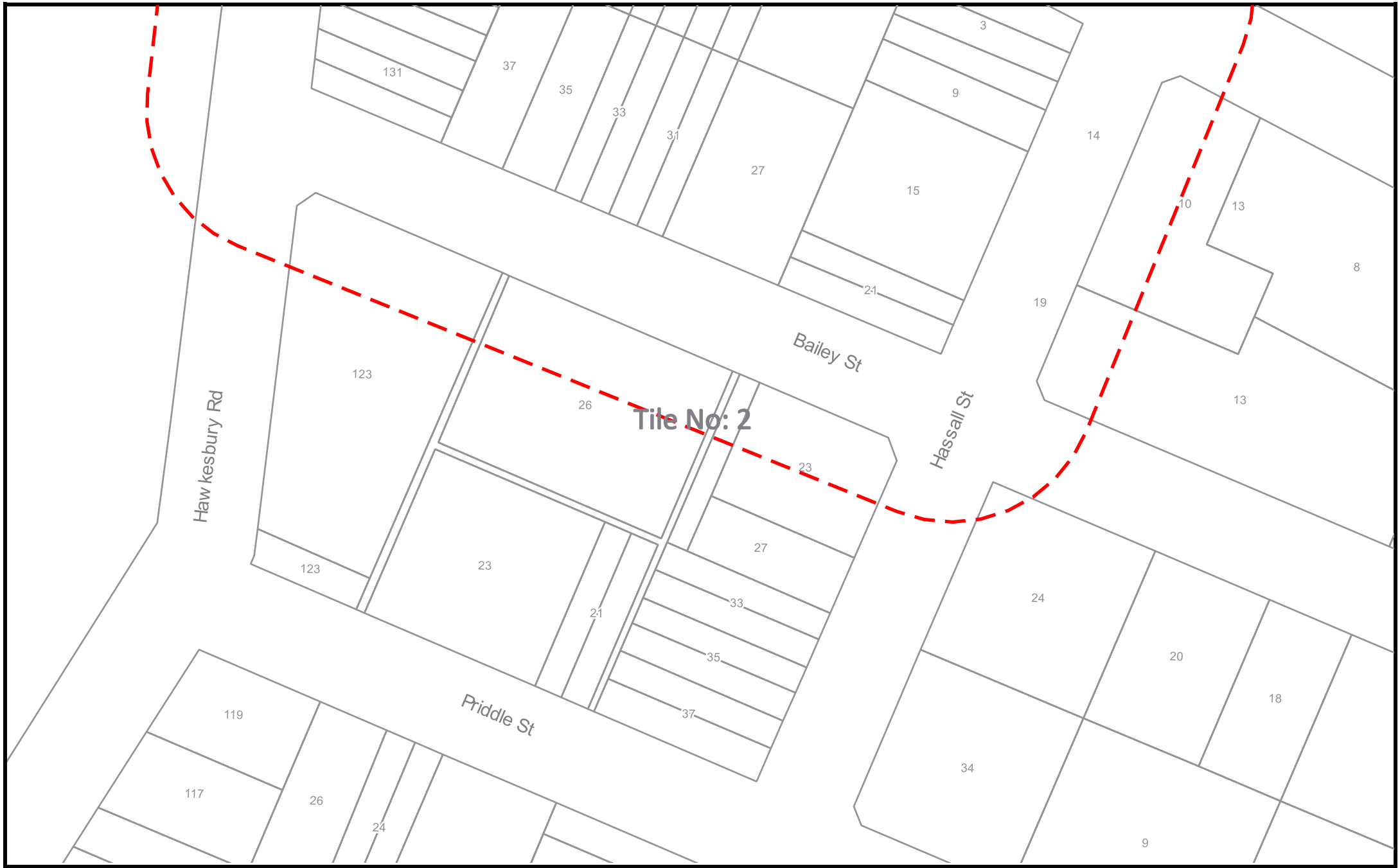
N W E S

SEQUENCE NUMBER: 204756948
JOB NUMBER: 30815700
ADDRESS: 33 Bailey Street, Westmead, NSW 2145

LEGEND
Vocus Group Pit
Vocus Group Conduit

SCALE: 1:1000

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



VOCUS communications

N W E S

SEQUENCE NUMBER: 204756948
JOB NUMBER: 30815700
ADDRESS: 33 Bailey Street, Westmead, NSW 2145

LEGEND
Vocus Group Pit
Vocus Group Conduit

SCALE: 1:1000

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

Job No 30815700

Phone: 1100
www.1100.com.au

Caller Details

Contact:	Elisha cassidy	**Caller Id:**	3125618	**Phone:**	0420 309 645
Company:	ADE				
Address:	6 Millennium Court Silverwater NSW 2128	**Email:**	elisha.cassidy@ade.group		

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: delta westmead

Working on Behalf of: Private

Enquiry Date:	**Start Date:**	**End Date:**
01/11/2021	08/11/2021	20/11/2021

Address:

33 Bailey Street
Westmead NSW 2145

Job Purpose:	**Onsite Activities:**
Excavation	Mechanical Excavation
Location of Workplace:	**Location in Road:**
Both	Road, Nature Strip, 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
204756947	Endeavour Energy	(02) 9853 4161	NOTIFIED
204756950	Jemena Gas West	1300 880 906	NOTIFIED
204756944	NBN Co NswAct	1800 687 626	NOTIFIED
204756949	Optus and or Uecomm Nsw	1800 505 777	NOTIFIED
204756946	Sydney Trains Metro West	(02) 9848 9578	NOTIFIED
204756951	Sydney Water	13 20 92	NOTIFIED
204756945	Telstra NSW Central	1800 653 935	NOTIFIED
204756943	TPG Telecom (NSW)	1800 786 306	NOTIFIED
204756942	Transport for NSW	(02) 8837 0285	NOTIFIED
204756941	University of Western Sydney	(03) 8413 5200	NOTIFIED
204756948	Vocus Communications 2	1800 262 663	NOTIFIED

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

END OF UTILITIES LIST

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

Appendix XIII – Supporting Documentation

SCHEDULE 20- REQUIREMENTS OF AUTHORITY APPROVALS

	MCoA Allocation			
Project:	Parramatta & Clyde Enabling Works			
Approval Name:	SSI 10038			
Condition Type	**Condition Classification**	**Condition Reference**	**Description**	**Allocation to Principal Contractor**
MCoA	General	C-A1	Approval is granted to the 'Concept' as described in Schedule 1 and in Chapter 6 and in Chapter 7 of the *Sydney Metro West – Westmead to The Bays and Sydney CBD Environmental Impact Statement* dated 15 April 2020, as amended by the following: (a) Sydney Metro West – Westmead to The Bays and Sydney CBD Amendment Report dated 20 November 2020; and (b) Sydney Metro West – Westmead to The Bays and Sydney CBD Submissions Report dated 20 November 2020.	Full Compliance
MCoA	General	C-A2	The Proponent must carry out the CSSI Concept in accordance with the conditions of this approval and the documents listed in **Condition C-A1** of this schedule unless otherwise specified in, or required under, the conditions of this approval.	Full Compliance
MCoA	General	C-A3	In the event of an inconsistency between: (a) the conditions of this approval and any document listed in Condition C-A1 of this schedule inclusive, the conditions of this approval will prevail to the extent of the inconsistency; and (b) any document listed in Condition C-A1 of this schedule, the most recent document will prevail to the extent of the inconsistency. Note: For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document.	Full Compliance

© TfNSW 2021

MCoA	General	C-A4	Except to the extent described in any document listed in **Condition C-A1** of this schedule, any over station development, including any future uses, does not form part of this CSSI and will be subject to the relevant assessment pathway prescribed by the EP&A Act.	Not Applicable
MCoA	Place and Design	C-B1	To ensure that a high-quality urban design response is achieved, the CSSI must have regard to, and be generally consistent with, the place and design principles for each location outlined in the documents listed in **Condition C-A1** of this schedule, unless expressly specified in the conditions of this approval.	Not Applicable
MCoA	Place and Design	C-B2	For the relevant future stage application, the following must be considered at the Clyde Maintenance and Stabling Facility site: (a) publicly-accessible active transport corridors immediately around the site adjoining James Ruse Drive that connects to existing and future links and open spaces; (b) public spaces for recreational use on residual land to offset the loss of the private recreational land, or any alternate and commensurate opportunity that achieves the objective and provides value for money, developed in consultation with City of Parramatta Council; (c) re-naturalisation of parts of Duck Creek and A'Becketts Creek and rehabilitation of the riparian corridor; and (d) integration with strategic planning for the precinct.	Not Applicable
MCoA	Place and Design	C-B3	The delivery of the section of the future Parramatta Civic Link located on the Parramatta metro station construction site must be facilitated to enable completion before operation of the CSSI.	Not Applicable
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B4	The relevant future stage application relating to the design of stations must include a **Heritage Interpretation Strategy**, prepared in consultation with Heritage NSW, which outlines how key Aboriginal and non-Aboriginal heritage values and stories of Heritage items will be interpreted in the project design, including station and precinct urban design. The **Heritage Interpretation Strategy** must include procedures for how to include results of archaeological findings (historical and Aboriginal archaeological results) when they become available.	Not Applicable
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B5	The **Heritage Interpretation Strategy** must be prepared in accordance with the *NSW Heritage Manual*, the NSW Heritage Office's *Interpreting Heritage Places and Items: Guidelines* (August	Not Applicable

			2005), and the NSW Heritage Council's *Heritage Interpretation Policy.*	
MCoA	Aboriginal and Non-Aboriginal Heritage	C-B6	The **Heritage Interpretation Strategy** must include, but not be limited to: (a) a discussion of key interpretive themes, stories and messages proposed to interpret the history and significance of archaeological excavation, the affected Heritage items and sections of heritage conservation areas (if applicable); (b) options for the re-purposing of archaeological finds (results and artefacts), heritage features or listed items salvaged or protected during construction stages of the CSSI, and how they will be integrated into the final project design; (c) Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken (or any interim results of any archaeological investigations that have commenced but have yet to be completed) and key socio-cultural values identified in the Aboriginal Cultural Heritage Assessment Report referred to in Condition C-A1 of this schedule, and those of any future stages of the CSSI; (d) details of the audience, potential devices to be employed in interpretation, possible locations for interpretation and how this will be incorporated into design; (e) engagement with the Relevant Council(s) and regard for any relevant council heritage interpretation guidelines; and (f) with respect to the Parramatta construction site and (a) above, any discussion must include how the heritage interpretation of the CSSI relates to the heritage interpretations of other projects in Parramatta, including State Significant Development projects and other SSI projects.	Not Applicable
MCoA	Sustainability	C-B7	The CSSI must achieve a minimum Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating of 75 (Version 1.2) (or equivalent level of performance using a demonstrated equivalent rating tool) or a 5-Star Green Star rating (or equivalent level of performance using a demonstrated equivalent rating tool).	Not Applicable

MCoA	Biodiversity and Trees	C-B8	As many mature trees as practicable must be retained. In addition, within ten (10) years of the date of this approval or no later than the commencement of operation of the CSSI (whichever is earlier) there must be a net increase in the number of mature trees provided at a ratio of 2:1.	Full Compliance except Sydney Metro will ensure a net increase in the number of mature trees provided at a ratio of 2:1
MCoA	Biodiversity and Trees	C-B9	The CSSI must result in an increase in tree canopy coverage.	Not Applicable
MCoA	Biodiversity and Trees	C-B10	Parts of Duck Creek and A'Becketts Creek that remain open channels at the Clyde Stabling and Maintenance Facility site must be rehabilitated and / or renaturalised before operation of the CSSI commences. Only species that are representative of PCT 920 (Mangrove Forests in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion) must be used in the revegetation of the riparian zone along the open channels to Duck Creek and A'Becketts Creek.	Not Applicable
MCoA	Climate Change	C-B11	The CSSI must be designed to withstand known impacts associated with climate change to year 2100.	Not Applicable
MCoA	General	A1	The Proponent must carry out Stage 1 of the CSSI in accordance with the conditions of this approval and generally in accordance with the: (a) Sydney Metro West – Westmead to The Bays and Sydney CBD Environmental Impact Statement dated 15 April 2020; (b) Sydney Metro West – Westmead to The Bays and Sydney CBD Submissions Report dated 20 November 2020; and (c) Sydney Metro West – Westmead to The Bays and Sydney CBD Amendment Report dated 20 November 2020.	Full Compliance
MCoA	General	A2	Stage 1 of the CSSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in **Condition A1** of this schedule unless otherwise specified in, or required under, this approval.	Full Compliance
MCoA	General	A3	In the event of an inconsistency between: (a) the conditions of this approval and any document listed in Condition A1 of this schedule, the conditions of this approval will prevail to the extent of the inconsistency; and (b) any document listed in Condition A1 of this schedule, the most recent document will prevail to the extent of the inconsistency.	Full Compliance

			Note: For the purpose of this condition, there is an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document.	
MCoA	General	A4	In the event that there are differing interpretations of the conditions of this approval, including in relation to a condition of this approval, the Planning Secretary's interpretation is final.	Full Compliance
MCoA	General	A5	The Proponent must comply with all written requirements or directions of the Planning Secretary, including in relation to: (a) the environmental performance of Stage 1 of the CSSI; (b) any document or correspondence in relation to Stage 1 of the CSSI; (c) any notification given to the Planning Secretary under the conditions of this approval; (d) any audit of Stage 1 of the CSSI; (e) the conditions of this approval and compliance with the conditions of this approval (including anything required to be done under this approval); (f) the carrying out of any additional monitoring or mitigation measures; and (g) in respect of ongoing monitoring and management obligations, compliance with an updated or revised version of a guideline, protocol, Australian Standard or policy required to be complied with under the conditions of this approval.	Full Compliance
MCoA	General	A6	Where the conditions of this approval require a document or monitoring program to be prepared, or a review to be undertaken, in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval; (b) a log of the dates of engagement or attempted engagement with the identified party and a summary of the issues raised by them; (c) documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that the party(s) has none or has failed to provide feedback after repeated requests; (d) outline of the issues raised by the identified party(s) and how	Full Compliance, except Sydney Metro would make all submissions to the Planning Secretary

			they have been addressed; and (e) a description of the outstanding issues raised by the identified party(s) and the reasons why they have not been addressed.	
MCoA	General	A7	This approval lapses five (5) years after the date on which it is granted, unless work has physically commenced on or before that date.	Not Applicable
MCoA	General	A8	References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, standards or policies in the form they are in as at the date of this approval.	Full Compliance
MCoA	General	A9	Any document that must be submitted or action taken within a timeframe specified in or under the conditions of this approval may be submitted or undertaken within a later timeframe agreed with the Planning Secretary. This condition does not apply to the written notification required in respect of an incident under **Condition A43** of this schedule.	Full Compliance, except Sydney Metro would make all submissions to and undertake all interface with the Planning Secretary
MCoA	Phasing	A10	Stage 1 of the CSSI may be constructed in phases. Where phased construction is proposed, a **Phasing Report** must be prepared and submitted to the Planning Secretary for information. The **Phasing Report** must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction of the first of the proposed phases of construction.	Not Applicable
MCoA	Phasing	A11	The **Phasing Report** must: (a) set out how construction of the whole of Stage 1 of the CSSI will be phased, including details of work and other activities to be carried out in each phase and the general timing of when construction of each phase will commence and finish; (b) specify the relevant conditions that apply to each phase and how compliance with conditions will be achieved across and between each of the phases of Stage 1 of the CSSI; (c) set out mechanisms for managing any cumulative impacts arising from the proposed phasing; and (d) include an assessment of the predicted level of environmental risk and potential level of community concern posed by the construction activities required to construct each phase of Stage 1 of the CSSI.	Not Applicable

			With respect to (d) above, the risk assessment must use an appropriate process consistent with AS/NZS ISO 31000: 2009; Risk Management - Principles and Guidelines and must be endorsed by the ER.	
MCoA	Phasing	A12	Stage 1 of the CSSI must be phased in accordance with the **Phasing Report,** as submitted to the Planning Secretary for information.	Not Applicable
MCoA	Phasing	A13	Where phasing is proposed, the conditions of this approval that apply or are relevant to the work or activities to be carried out in a specific phase must be complied with at the relevant time for that phase.	Full Compliance
MCoA	Phasing	A14	Where changes are proposed to the phasing of construction, a revised **Phasing Report** must be prepared and submitted to the Planning Secretary for information before the commencement of changes to the phasing of construction.	Not Applicable
MCoA	Phasing	A15	With the approval of the Planning Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis within each phase of Stage 1 of the CSSI. Notes: 1. While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing activities on site are covered by suitable strategies, plans or programs at all times; and 2. If the submission of any strategy, plan or program is to be submitted on a progressive basis, then the relevant strategy, plan or program must clearly describe the activities to which the strategy, plan or program applies, the relationship of this activity to any future activities within the phase, and the trigger for updating the strategy, plan or program.	Full Compliance, except Sydney Metro would make all submissions to the Planning Secretary

MCoA	Ancillary Facilities	A16	Ancillary facilities that are not identified by description and location in the documents listed in **Condition A1** of this schedule can only be established and used in each case if: (a) they are located within or immediately adjacent to the Construction Boundary; and (b) they are not located next to sensitive land user(s) (including where an access road is between the facility and the receiver), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location; and (c) they have no impacts on Heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the conditions of this approval; and (d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the conditions of this approval, including in relation to environmental, social and economic impacts. Note: This condition does not apply to any ancillary facilities or work that are exempt or complying development, established before the commencement of construction under this approval or minor ancillary facilities established under Condition A21 of this schedule.	Full Compliance

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MCoA	Site Establishment Work	A17	Before establishment of any ancillary facility (excluding exempt or complying development, minor ancillary facilities determined by the **ER** to have minimal environmental impact and those established under **Condition A21** of this schedule, and those considered in an approved **CEMP**), the Proponent must prepare a **Site Establishment Management Plan** which outlines the environmental management practices and procedures to be implemented for the establishment of the ancillary facilities. The **Site Establishment Management Plan** must be prepared in consultation with the Relevant Council(s) and relevant government agencies. The **Site Establishment Management Plan** must include: (a) a description of activities to be undertaken during establishment of the ancillary facility (including scheduling and duration of work to be undertaken at the site); (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s); (c) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of site establishment work; (d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to: (i) meet the performance outcomes stated in the documents listed in Condition A1 of this schedule, and (ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and (e) a program for monitoring the performance outcomes, including a program for construction noise monitoring, where appropriate or required. Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each ancillary facility.	Full Compliance
MCoA	Site Establishment Work	A18	With the exception of a **Site Establishment Management Plan** relating to the Silverwater ancillary facility referred to in **Condition A19** below and any other **Site Establishment Management Plan** expressly nominated by the Planning Secretary to be endorsed by the **ER**, all **Site Establishment Management Plans** must be	Full Compliance, except Sydney Metro would make all submissions to the Planning Secretary

			submitted to the Planning Secretary for approval one (1) month before the establishment of any ancillary facilities.	
MCoA	Site Establishment Work	A19	A **Site Establishment Management Plan** relating to the Silverwater ancillary facility and any other **Site Establishment Management Plan** expressly nominated by the Planning Secretary must be submitted to the **ER** for endorsement one (1) month before the establishment of that ancillary facility or as otherwise agreed with the **ER**.	Full Compliance
MCoA	Site Establishment Work	A20	The use of an ancillary facility for construction must not commence until the **CEMP** required by **Condition C1** of this schedule, relevant **CEMP Sub-plans** required by **Condition C5** of this schedule and relevant **Construction Monitoring Programs** required by **Condition C14** of this schedule have been approved by the Planning Secretary or endorsed by the **ER** (whichever is applicable). Note: This condition does not apply to Condition A21 of this schedule or where the use of an ancillary facility is Low Impact Work or for Low Impact Work.	Full Compliance
MCoA	Site Establishment Work	A21	Lunch sheds, office sheds, portable toilet facilities, and the like, can be established and used where they have been assessed in the documents listed in **Condition A1** of this schedule or satisfy the following criteria: (a) are located within or adjacent to the Construction Boundary; and (b) have been assessed by the ER to have - (i) minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the ICNG, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and (ii) minimal environmental impact with respect to waste management and flooding, and (iii) no impacts on biodiversity, soil and water, and Heritage items beyond those already approved under other conditions of this approval.	Full Compliance

MCoA	Site Establishment Work	A22	Boundary screening must be erected around ancillary facilities that are adjacent to sensitive land user(s) for the duration that the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners.	Full Compliance, except that Sydney Metro will provide graphical designs for hoarding to the Principal Contractor. The Principal Contractor will provide Sydney Metro any information it needs to provide the graphical designs.
MCoA	Site Establishment Work	A23	Boundary screening required under **Condition A22** of this schedule must minimise visual impacts on adjacent sensitive land user(s).	Full Compliance, except that Sydney Metro will provide graphical designs for Hording to the Principal Contractor. The Principal Contractor will provide Sydney Metro any information it needs to provide the graphical designs.
MCoA	Independent Appointments	A24	All **Independent Appointments** required by the conditions of this approval must hold current membership of a relevant professional body, unless otherwise agreed by the Planning Secretary.	Not Applicable
MCoA	Independent Appointments	A25	The Planning Secretary may at any time commission an audit of how an **Independent Appointment** has exercised their functions. The Proponent must: (a) facilitate and assist the Planning Secretary in any such audit; and (b) make it a term of their engagement of an Independent Appointment that the Independent Appointment facilitate and assist the Planning Secretary in any such audit.	Not Applicable
MCoA	Independent Appointments	A26	Upon completion of an audit under **Conditions A25** above, the Planning Secretary may withdraw its approval of an **Independent Appointment** should they consider the **Independent Appointment** has not exercised their functions in accordance with this approval.	Not Applicable

			Note: Conditions A25 and A26 of this schedule apply to all Independent Appointments including the ER, AA and Independent Auditor.	
MCoA	Environment Representative	A27	Work must not commence until an **Environmental Representative** (**ER**) has been nominated by the Proponent and approved by the Planning Secretary.	Full Compliance
MCoA	Environment Representative	A28	The proposed **ER** must be a suitably qualified and experienced person(s) who was not involved in the preparation of the documents listed in **Condition A1** of this schedule, and is independent from the design and construction personnel for the CSSI and those involved in the delivery of it.	Not Applicable
MCoA	Environment Representative	A29	The Proponent may engage more than one **ER** for Stage 1 of the CSSI, in which case the functions to be exercised by an **ER** under the conditions of this approval may be carried out by any **ER** that is approved by the Planning Secretary for the purposes of Stage 1 of the CSSI. The **ER** must meet the requirements of the Department's *Environmental Representative Protocol* (DPE, 2018). The appointment of the **ER** must have regard to the Department's guideline *Seeking approval from the Department for the appointment of independent experts* (DPIE, 2020).	Not Applicable

MCoA	Environment Representative	A30	For the duration of the work or as agreed with the Planning Secretary, the approved **ER** must: (a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of Stage 1 of the CSSI; (b) consider and inform the Planning Secretary on matters specified in the conditions of this approval; (c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; (d) review documents identified in Conditions A10, A17, A19, C1, C5 and C14 of this schedule and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: (i) endorse the documents before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or (ii) endorse the documents before the implementation of such documents (if those documents are only required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary / Department); (e) for documents that are required to be submitted to the Planning Secretary / Department for information under (d)(ii) above, the documents must be submitted as soon as practicable to the Planning Secretary / Department after endorsement by the ER, unless otherwise agreed by the Planning Secretary; (f) regularly monitor the implementation of the documents listed in Conditions A10, A17, A19, C1, C5 and C14 of this schedule to ensure implementation is being carried out in accordance with the document and the conditions of this approval; (g) as may be requested by the Planning Secretary, help plan or attend audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A39 of this schedule; (h) as may be requested by the Planning Secretary, assist in the resolution of community complaints received directly by the Department; (i) consider or assess the impacts of minor ancillary facilities	Not Applicable

			comprising lunch sheds, office sheds and portable toilet facilities as required by Condition A21 of this schedule; and (j) consider any minor amendments to be made to the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction monitoring programs without increasing impacts to nearby sensitive receivers, and are consistent with the conditions of this approval and the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the conditions of this approval; (k) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports". The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for Stage 1 of the CSSI, or as otherwise agreed by the Planning Secretary; and (l) assess the impacts of activities as required by the Low Impact Work definition. With respect to (d) above, the ER is not required to endorse the specialist content in documents requiring specialist review and / or endorsement.	
MCoA	Environment Representative	A31	The Proponent must provide the **ER** with all documentation requested by the **ER** in order for the **ER** to perform their functions specified in **Condition A30** of this schedule (including preparation of the **ER** monthly report), as well as: (a) the Complaints Register (to be provided on a weekly basis or as requested); and (b) a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work).	Sydney Metro would provide the ER with the Complaints Register and any consistency assessments Sydney Metro undertakes.

MCoA	Acoustics Advisor	A32	A suitably qualified and experienced **Acoustics Advisor(s)** (**AA**) in noise and vibration management, who is independent of the design and construction personnel, must be nominated by the Proponent and engaged for the duration of work (as required by **Condition A35** of this schedule) and for no less than six (6) months following completion of construction of Stage 1 of the CSSI.	Not Applicable
MCoA	Acoustics Advisor	A33	Work must not commence until an **AA** has been nominated by the Proponent and approved by the Planning Secretary.	Full Compliance
MCoA	Acoustics Advisor	A34	The Proponent must cooperate with the **AA** by: (a) providing access to noise and vibration monitoring activities as they take place; (b) providing access to the Complaints Register if requested; (c) providing for review of noise and vibration documents required to be prepared under the conditions of this approval; and (d) considering any recommendations to improve practices and demonstrating, to the satisfaction of the AA, why any recommendation is not adopted.	Full Compliance
MCoA	Acoustics Advisor	A35	The Proponent may nominate additional suitably qualified and experienced persons to assist the lead **AA** for the Planning Secretary's approval.	Not Applicable
MCoA	Acoustics Advisor	A36	The approved **AA** must: (a) receive and respond to communication from the Planning Secretary in relation to the performance of Stage 1 of the CSSI in relation to noise and vibration; (b) consider and inform the Planning Secretary on matters specified in the conditions of this approval relating to noise and vibration; (c) consider and recommend, to the Proponent, improvements that may be made to avoid or minimise adverse noise and vibration impacts; (d) review all proposed night-time works (with the exception of low risk activities) to determine if sleep disturbance would occur and recommend measures to avoid sleep disturbance or appropriate additional alternative mitigation measures; (e) review all noise and vibration documents required to be prepared under the conditions of this approval and, should they be consistent with the conditions of this approval, endorse them before submission to the Planning Secretary (if required to be submitted to	The Princiapl Contractor must provide all information and documentation required by the AA to meet their obligations under this condition.

			the Planning Secretary) or before implementation (if not required to be submitted to the Planning Secretary); (f) regularly monitor the implementation of all noise and vibration documents required to be prepared under the conditions of this approval to ensure implementation is in accordance with what is stated in the document and the conditions of this approval; (g) review the Proponent's notification of incidents in accordance with Condition A43 of this schedule; (h) in conjunction with the ER (where required), the AA must: (i) as may be requested by the Planning Secretary or Community Complaints Mediator (required by Condition B8 of this schedule), help plan, attend or undertake audits of noise and vibration management of Stage 1 of the CSSI including briefings, and site visits, (ii) in the event that conflict arises between the Proponent and the community in relation to the noise and vibration performance of Stage 1 of the CSSI, follow the procedure in the Overarching Community Communication Strategy referenced in Condition C-B1 of this schedule to attempt to resolve the conflict, and if it cannot be resolved, notify the Planning Secretary, (iii) if requested by the ER, consider relevant minor amendments made to the Site Establishment Management Plan, CEMP, relevant sub-plans and noise and vibration monitoring programs that require updating or are of an administrative nature, and are consistent with the conditions of this approval and the management plans and monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, endorse the amendment, (this does not include any modifications to the conditions of this approval), (iv) if requested by the ER, review the noise impacts of minor ancillary facilities, and (v) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, a Monthly Noise and Vibration Report detailing the AA's actions and decisions on matters for which the AA was responsible in the preceding month. The Monthly Noise and Vibration Report must be submitted within seven (7) days following the end of each month for the duration of the AA's engagement for Stage 1 of the CSSI, or as otherwise agreed by the Planning Secretary.	

MCoA	Notification of Commencement	A37	The Department must be notified in writing of the date of commencement of construction before the commencement of construction.	Not Applicable
MCoA	Notification of Commencement	A38	If construction of Stage 1 of the CSSI is to be phased, the Department must be notified in writing before the commencement of each phase, of the date of the commencement of that phase.	Not Applicable
MCoA	Independent Environmental Audit	A39	**Independent Audits** of Stage 1 of the CSSI must be conducted and carried out in accordance with the *Independent Audit Post Approval Requirements* (DPIE, 2020).	Not Applicable
MCoA	Independent Environmental Audit	A40	Proposed independent auditors must be approved by the Planning Secretary before the commencement of an **Independent Audit**.	Not Applicable
MCoA	Independent Environmental Audit	A41	The Planning Secretary may require the initial and subsequent **Independent Audits** to be undertaken at different times to those specified in the *Independent Audit Post Approval Requirements* (DPIE, 2020), upon giving at least four (4) weeks' notice (or timing as stipulated by the Planning Secretary) to the Proponent of the date upon which the audit must be commenced.	Not Applicable
MCoA	Independent Environmental Audit	A42	**Independent Audit Reports** and the Proponent's response to audit findings must be submitted to the Planning Secretary within two (2) months of undertaking the independent audit site inspection as outlined in the *Independent Audit Post Approval Requirements* (DPIE, 2020), unless otherwise agreed by the Planning Secretary.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Incident and Non-compliance Notification and Reporting	A43	The Planning Secretary must be notified via phone or in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. Any notification via phone must be followed up by a notification in writing via the Major Projects website within 24 hours of the initial phone call. The written notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and general nature of the incident.	The Principal Contractor must provide all information and documentation required by Sydney Metro to comply with this condition.
MCoA	Incident and Non-compliance Notification and Reporting	A44	Subsequent notification must be given and reports submitted in accordance with the requirements set out in **Appendix A**.	The Principal Contractor must provide all information and documentation required by Sydney Metro to comply with this condition.

MCoA	Incident and Non-compliance Notification and Reporting	A45	The Planning Secretary must be notified in writing via the Major Projects website within seven (7) days after the Proponent becomes aware of any non-compliance with the conditions of this approval.	The Principal Contractor must provide all information and documentation required by Sydney Metro to comply with this condition.
MCoA	Incident and Non-compliance Notification and Reporting	A46	A non-compliance notification must identify the CSSI (including the application number for it), set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be undertaken to address the non-compliance. Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	The Principal Contractor must provide all information and documentation required by Sydney Metro to comply with this condition.
MCoA	Identification of workforce	A47	All Heavy Vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application number to enable immediate identification by a person viewing the Heavy Vehicle standing 20 metres away.	Full Compliance
MCoA	Identification of workforce	A48	The CSSI name, application number, telephone number, postal address and email address required under **Condition B3** of this schedule must be available on site boundary fencing / hoarding at each ancillary facility before the commencement of construction. This information must also be provided on the website required under **Condition B11** of this schedule.	Full Compliance
MCoA	Community Information, Consultation and Involvement	B1	The **Overarching Community Communication Strategy** as provided in the documents listed in **Condition A1** of this schedule must be implemented for the duration of the work.	The Principal Contractor must meet any obligation required of them by the OCCS.
MCoA	Complaints Management System	B2	A **Complaints Management System** must be prepared and implemented before the commencement of any work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of Stage 1 of the CSSI.	The Principal Contractor must participate in the implementation of the Complaints Management System and provide Sydney Metro with all information it requires to comply with Condition B2.

MCoA	Complaints Management System	B3	The following information must be available to facilitate community enquiries and manage complaints before the commencement of work and for 12 months following the completion of construction: (a) a 24- hour telephone number for the registration of complaints and enquiries about the CSSI; (b) a postal address to which written complaints and enquires may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved. This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.	The Principal Contractor must participate in the implementation of the Complaints Management System and provide Sydney Metro with all information it requires to comply with Condition B3.
MCoA	Complaints Management System	B4	A **Complaints Register** must be maintained recording information on all complaints received about the CSSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The **Complaints Register** must record the: (a) number of complaints received; (b) date and time of the complaint; (c) number of people in the household affected in relation to a complaint, if relevant; (d) method by which the complaint was made; (e) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (f) issue of the complaint; (g) means by which the complaint was addressed and whether resolution was reached, with or without mediation; and (h) if no action was taken, the reason(s) why no action was taken.	The Principal Contractor must participate in the implementation of the Complaints Management System and provide Sydney Metro with all information and documentation it requires to comply with this condition.

MCoA	Complaints Management System	B5	Complainants must be advised of the following information before, or as soon as practicable after, providing personal information: (a) the Complaints Register may be forwarded to government agencies, including the Department (Department of Planning Industry and Environment, 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150), to allow them to undertake their regulatory duties; (b) by providing personal information, the complainant authorises the Proponent to provide that information to government agencies; (c) the supply of personal information by the complainant is voluntary; and (d) the complainant has the right to contact government agencies to access personal information held about them and to correct or amend that information (Collection Statement). The Collection Statement must be included on the Proponent or development website to make prospective complainants aware of their rights under the Privacy and Personal Information Protection Act 1998 (NSW). For any complaints made in person, the complainant must be made aware of the Collection Statement.	The Principal Contractor must participate in the implementation of the Complaints Management System and provide Sydney Metro with all information and documentation it requires to comply with this condition.
MCoA	Complaints Management System	B6	The **Complaints Register** must be provided to the Planning Secretary upon request, within the timeframe stated in the request. Note: Complainants must be advised that the Complaints Register may be forwarded to Government agencies to allow them to undertake their regulatory duties.	Not Applicable
MCoA	Complaints Management System	B7	A **Community Complaints Mediator** that is independent of the design and construction personnel must be engaged by the Proponent, upon the referral of the complaint by the **ER** in accordance with the **Overarching Community Communication Strategy**.	Not Applicable
MCoA	Complaints Management System	B8	The role of the **Community Complaints Mediator** is to provide independent mediation services for any reasonable and unresolved complaint referred by the **ER** where a member of the public is not satisfied by the Proponent's response. Where a **Community Complaints Mediator** is required, a mediator accredited under the National Mediator Accreditation System (NMAS), administered by the Mediator Standards Board must be appointed.	Not Applicable

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MCoA	Complaints Management System	B9	**Community Complaints Mediation** will: (a) review any unresolved disputes, referred by the ER in accordance with the Overarching Community Communication Strategy; (b) make recommendations to the Proponent to satisfactorily address complaints, resolve disputes or mitigate against the occurrence of future complaints or disputes.	Not Applicable
MCoA	Complaints Management System	B10	**Community Complaints Mediation** will not be enacted before the **Complaints Management System** required by **Condition B2** of this schedule has been executed for a complaint and will not consider issues such as property acquisition, where other dispute processes are provided for in this approval or clear government policy and resolution processes are available, or matters which are not within the scope of this CSSI.	The Principal Contractor must participate in the implementation of the Complaints Management System and provide Sydney Metro with all information and documentation it requires to comply with this condition.
MCoA	Provision of Electronic Information	B11	A website or webpage providing information in relation to the CSSI must be established before commencement of work and maintained for the duration of construction, and for a minimum of 24 months following the completion of all phases of construction of Stage 1 of the CSSI. Up-to-date information (excluding confidential, private, commercial information or other documents as agreed to by the Planning Secretary) must be published before the relevant work commencing and maintained on the website or dedicated pages including: (a) information on the current implementation status of Stage 1 of the CSSI; (b) a copy of the documents listed in Condition A1 of this schedule, and any documentation relating to any modifications made to the CSSI or the conditions of this approval; (c) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its conditions), and copies of any approval granted by the Minister to a modification of the conditions of this approval, or links to the referenced documents where available; (d) a copy of each statutory approval, licence or permit required and obtained in relation to Stage 1 of the CSSI, or where the issuing agency maintains a website of approvals, licences or permits, a link to that website;	Sydney Metro will comply with B11(a), (b) and (c) and provide a link on Sydney Metro's website to the Principal Contractors website. Any documentation, statutory approval, licence or permit required to be produced or obtained by the Principal Contractor, that is also required to be on a website under this condition, must be uploaded or linked to the Principal Contractors website.

			(e) a current copy of each document required under the conditions of this approval, which must be published within one (1) week of its approval or before the commencement of any work to which they relate or before their implementation, as the case may be; and (f) a copy of the audit reports required under this approval. Where the information / document relates to a particular work or is required to be implemented, it must be published before the commencement of the relevant work to which it relates or before its implementation. All information required in this condition is to be provided on the website or webpage, and easy to navigate.	
MCoA	Construction Environmental Management Plan	C1	**Construction Environmental Management Plans** (**CEMPs**) and **CEMP Sub-plans** must be prepared in accordance with the **Construction Environmental Management Framework** (**CEMF**) included in the documents listed in **Condition A1** of this schedule to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in **Condition A1** of this schedule will be implemented and achieved during construction.	Full Compliance
MCoA	Construction Environmental Management Plan	C2	With the exception of any **CEMPs** expressly nominated by the Planning Secretary to be endorsed by the **ER**, all **CEMPs** must be submitted to the Planning Secretary for approval.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Construction Environmental Management Plan	C3	The **CEMP(s)** not requiring the Planning Secretary's approval must be submitted to the **ER** for endorsement no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase. That **CEMP** must obtain the endorsement of the **ER** as being consistent with the conditions of this approval and all undertakings made in the documents listed in **Condition A1** of this schedule.	Full Compliance
MCoA	Construction Environmental Management Plan	C4	Any **CEMP** to be approved by the Planning Secretary must be endorsed by the **ER** and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary

MCoA	Construction Environmental Management Plan	C5	Of the **CEMP Sub-plans** required under **Condition C1** of this schedule, the following **CEMP Sub-plans** must be prepared in consultation with the relevant government agencies identified for each **CEMP Sub-plan**. Details of issues raised by a government agency during consultation must be included in the relevant **CEMP Sub-plan**, including copies of all correspondence from those government agencies as required by **Condition A6** of this schedule. Where a government agency (ies) request(s) is not included, the Proponent must provide the Planning Secretary / **ER** (whichever is applicable) justification as to why: (a) Noise and vibration Sub-plan; consult with SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (b) Flora and fauna Sub-plan; consult with DPIE EES, DPI Fisheries, SOPA (in respect of Sydney Olympic Park) and Relevant Council(s) (c) Soil and water Sub-plan; consult with DPIE EES, Relevant Council(s), SOPA (in respect of Sydney Olympic Park) and Sydney Water (if Sydney Water's assets are affected) (d) Heritage (Non-Aboriginal and Aboriginal) Sub-plan; consult with Heritage NSW, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (e) Spoil Sub-plan; consult with Relevant Council(s) and SOPA (in respect of Sydney Olympic Park	Full Compliance Except in relation to C5 (c) and (e)
MCoA	Construction Environmental Management Plan	C6	The **CEMP Sub-plans** must state how: (a) the environmental performance outcomes identified in the documents listed in Condition A1 of this schedule will be achieved; (b) the mitigation measures identified in the documents listed in Condition A1 of this schedule will be implemented; (c) the relevant conditions of this approval will be complied with; and (d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles.	Full Compliance
MCoA	Construction Environmental Management Plan	C7	With the exception of any **CEMP Sub-plans** expressly nominated by the Planning Secretary to be endorsed by the **ER**, all **CEMP Sub-plans** must be submitted to the Planning Secretary for approval.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary

MCoA	Construction Environmental Management Plan	C8	The **CEMP Sub-plans** not requiring the Planning Secretary's approval must obtain the endorsement of the **ER** as being in accordance with the conditions of approval and all relevant undertakings made in the documents listed in **Condition A1** of this schedule. Any of these **CEMP Sub-plans** must be submitted to the **ER** with, or subsequent to, the submission of the **CEMP** but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance
MCoA	Construction Environmental Management Plan	C9	Any of the **CEMP Sub-plans** to be approved by the Planning Secretary must be submitted to the Planning Secretary with, or subsequent to, the submission of the **CEMP** but in any event, no later than one (1) month before construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Construction Environmental Management Plan	C10	Construction must not commence until the **CEMP** and all **CEMP Sub-plans** have been approved by the Planning Secretary or endorsed by the **ER** (whichever is applicable), unless otherwise agreed by the Planning Secretary. The **CEMP** and **CEMP Sub-plans**, as approved by the Planning Secretary or endorsed by the **ER** (whichever is applicable), including any minor amendments approved by the **ER,** must be implemented for the duration of construction. Where construction of Stage 1 of the CSSI is phased, construction of a phase must not commence until the **CEMP** and **CEMP Sub-plans** for that phase have been approved by the Planning Secretary or certified by the **ER** upon nomination by the Planning Secretary (whichever is applicable).	Full Compliance
MCoA	Construction Environmental Management Plan	C11	In addition to the relevant requirements of the **CEMF**, the **Flora and fauna CEMP Sub-plan** must include, but not be limited to: (a) site specific mitigation measures to manage impacts (including proposed techniques, timing, frequency and responsibility of implementing); (b) measures to minimise disturbance to habitat associated with Myotis macropus / Southern Myotis, including demolition inspections by a suitably qualified ecologist of any vegetation to be cleared and any buildings or structures identified as potential roosting habitat for microbats that are to be demolished or refurbished; (c) measures to minimise and mitigate disturbance to mangrove	Full Compliance

			forests at the Clyde Maintenance and Stabling construction site to the extent necessary; and (d) details for undertaking and mitigating vegetation clearance through improved environmental outcomes.	
MCoA	Construction Environmental Management Plan	C12	In addition to the relevant requirements of the **CEMF**, the **Soil and Water CEMP Sub-plan** must include, but not be limited to: (a) details of construction activities and their locations which have the potential to expose areas known to contain, or potentially contain, contaminated soils and / or materials; (b) measures for the handling, treatment and management of hazardous and contaminated soils and materials including measures to manage and / or minimise worker and public health and safety with regards to exposure to contamination; and (c) a description of how the effectiveness of the actions and measures for managing contamination impacts would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, and how the results of the monitoring would be recorded and reported.	Not Applicable

MCoA	Construction Environmental Management Plan	C13	In addition to the relevant requirements of the **CEMF**, the **Heritage CEMP Sub-plan** must include, but not be limited to: (a) be prepared in consultation with a suitably qualified and experienced heritage expert; and (b) identify exclusion zones, archival recording requirements, baseline and periodic monitoring protocols (including before and during construction); (c) identify and assess the heritage significance of the ancillary structures proposed to be demolished or significantly impacted that are within the curtilage of White Bay Power Station and other items identified as retaining 'potential heritage significance' in the documents listed in Condition A1 of this schedule and which will be impacted by the CSSI; (d) in association with Condition D61 of this schedule, set out the final site inspections to be conducted within three (3) months of completion of construction for the following heritage sites unless otherwise agreed by the Planning Secretary: (i) the Roxy Theatre (SHR I00711); (ii) White Bay Power Station (SHR I01015); (iii) the former State Abattoirs (State Environmental Planning Policy (State Significant Precincts) 2005 Item 141); and (iv) the RTA Depot facade fronting Unwin Street (Parramatta Local Environmental Plan 2011 I576); and (e) set out means of rectification of any damage by the CSSI to Heritage items (d)(i) to (d)(iv) above within six (6) months of the completion of construction at the construction site identified in the relevant Heritage CEMP Sub-plan. This rectification work must be in consultation with a suitably qualified and experienced heritage consultant to ensure the use of appropriate materials, appropriate conservation practices and in accordance with existing heritage management documents (for example, conservation management plans or strategies) to protect and conserve the heritage significance of the items. The Heritage CEMP Sub-plan must include Aboriginal cultural heritage management and mitigation measures (that may include conservation, archaeological salvage excavation and community collection) based on the Aboriginal Cultural Heritage Excavation Report and continuing Aboriginal community consultation.	Full Compliance except for in relation to archival recording requirements, (c.) (d) (ii), (iii)

MCoA	Construction Monitoring Programs	C14	The following **Construction Monitoring Programs** must be prepared in consultation with the relevant government agencies identified for each to compare actual performance of construction of Stage 1 of the CSSI against the performance predicted in the documents listed in **Condition A1** of this schedule or in the **CEMP**: (a) Noise and vibration Monitoring program; consult with EPA, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (b) Blasting Monitoring program; consult with SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s) (c) Surface water quality Monitoring program; consult with DPIE Water, Relevant Council(s) and Sydney Water (if any Sydney Water assets are impacted) (d) Groundwater Monitoring program; consult with DPIE Water and SOPA (in respect of Sydney Olympic Park) Note: The Blasting Construction Monitoring Program is only required to be prepared if blasting is proposed to be conducted during construction.	Full Compliance only in relation to C14 (a).
MCoA	Construction Monitoring Programs	C15	Each **Construction Monitoring Program** must provide: (a) details of baseline data available including the period of baseline monitoring; (b) details of baseline data to be obtained and when; (c) details of all monitoring of the project to be undertaken; (d) the parameters of the project to be monitored; (e) the frequency of monitoring to be undertaken; (f) the location of monitoring; (g) the reporting of monitoring results and analysis results against relevant criteria; (h) details of the methods that will be used to analyse the monitoring data; (i) procedures to identify and implement additional mitigation measures where the results of the monitoring indicated unacceptable project impacts; (j) a consideration of SMART principles; and (k) any consultation to be undertaken in relation to the monitoring programs; and (l) any specific requirements as required by Conditions C16 to	Full Compliance

			C17 of this schedule.	
MCoA	Construction Monitoring Programs	C16	The **Noise and Vibration Construction Monitoring Program** and **Blasting Construction Monitoring Program** must include: (a) noise and vibration monitoring determined in consultation with the AA to confirm the best-achievable construction noise and vibration levels with consideration of all reasonable and feasible mitigation and management measures that will be implemented; (b) for the purposes of (a), noise monitoring must be undertaken during the day, evening and night-time periods and within the first month of work as well as throughout the construction period and cover the range of activities being undertaken at the sites; and (c) a process to undertake real time noise and vibration monitoring. The results of the monitoring must be readily available to the construction team, the Proponent, ER and AA. The Planning Secretary and EPA must be provided with access to the results on request.	Full Compliance except in relation to the Blasting Construction Monitoring Program.
MCoA	Construction Monitoring Programs	C17	**Groundwater Construction Monitoring Program** must include: (a) groundwater monitoring networks at each construction excavation site; (b) detail of the location of all monitoring bores with nested sites to monitor both shallow and deep groundwater levels and quality; (c) define the location of saltwater interception monitoring where sentinel groundwater monitoring bores will be installed between the saline sources of the estuary or river and that of the stations or shafts; (d) results from existing monitoring bores; (e) monitoring and gauging of groundwater inflow to the excavations, appropriate trigger action response plan for all predicted groundwater impacts upon each noted neighbouring groundwater system component for each excavation construction site; (f) trigger levels for groundwater quality, salinity and groundwater drawdown in monitoring bores and / or other groundwater users; (g) daily measurement of the amount of water discharged from the water treatment plants; (h) water quality testing of the water discharged from treatment plants; (i) management and mitigation measures and criteria;	Full Compliance

			(j) groundwater inflow to the excavations to enable a full accounting of the groundwater take from the Sydney Basin Central Groundwater Source; and (k) reporting of groundwater gauging at excavations, groundwater monitoring, groundwater trigger events and action responses; and (l) methods for providing the data collected to Sydney Water where discharges are directed to their assets.	
MCoA	Construction Monitoring Programs	C18	With the exception of any **Construction Monitoring Programs** expressly nominated by the Planning Secretary to be endorsed by the **ER**, all **Construction Monitoring Programs** must be submitted to the Planning Secretary for approval.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Construction Monitoring Programs	C19	The **Construction Monitoring Programs** not requiring the Planning Secretary's approval must obtain the endorsement of the **ER** as being in accordance with the conditions of approval and all undertakings made in the documents listed in **Condition A1** of this schedule. Any of these **Construction Monitoring Programs** must be submitted to the **ER** for endorsement at least one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance
MCoA	Construction Monitoring Programs	C20	Any of the **Construction Monitoring Programs** which require Planning Secretary approval must be endorsed by the **ER** and then submitted to the Planning Secretary for approval at least one (1) month before the commencement of construction or where construction is phased no later than one (1) month before the commencement of that phase.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Construction Monitoring Programs	C21	Unless otherwise agreed with the Planning Secretary, construction must not commence until the Planning Secretary has approved, or the **ER** has endorsed (whichever is applicable), all of the required **Construction Monitoring Programs** and all relevant baseline data for the specific construction activity has been collected.	Full Compliance
MCoA	Construction Monitoring Programs	C22	The **Construction Monitoring Programs**, as approved by the Planning Secretary or the **ER** has endorsed (whichever is applicable), including any minor amendments approved by the **ER,** must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Planning Secretary or the **ER** (whichever is applicable), whichever is the greater.	Full Compliance

MCoA	Construction Monitoring Programs	C23	The results of the **Construction Monitoring Programs** must be submitted to the Planning Secretary, **ER** and relevant regulatory agencies, for information in the form of a **Construction Monitoring Report** at the frequency identified in the relevant **Construction Monitoring Program**. Note: Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Air Quality	D1	All reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during construction.	Full Compliance
MCoA	Biodiversity and Trees	D2	The clearing of native vegetation must be minimised to the greatest extent practicable with the objective of reducing impacts to threatened ecological communities and threatened species habitat.	Full Compliance
MCoA	Biodiversity and Trees	D3	Impacts to plant community types must not exceed those identified in the documents listed in **Condition A1** of this schedule, unless otherwise approved by the Planning Secretary. In requesting the Planning Secretary's approval, an assessment of the additional impact(s) to plant community types and an updated ecosystem and / or species credit requirement under **Condition D4** below, if required, must be provided.	Full Compliance except Sydney Metro will undertake any consistency assessments for changes it proposes and offset any additional biodiversity impacts
MCoA	Biodiversity and Trees	D4	Before any vegetation clearing or tree removal that must be offset, credits specified in Table 3 below must be purchased and retired. The retirement of credits must be carried out in accordance with the offset rules of the BC Act. Mangrove Forests in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion (Plant Community Type 920) - Poor: 3 Ecosystem Credits *Myotis macropus* / Southern Myotis (Fauna): 3 Species Credits for Threatened Species Note: Credits have been calculated using the Biodiversity Assessment Method.	Full Compliance except Sydney Metro will purchase credits specified in Table 3 and retire them
MCoA	Biodiversity and Trees	D5	The requirement to retire credits in **Condition D4** above may be satisfied by payment to the Biodiversity Conservation Fund of an	Not Applicable

			amount equivalent to the class and number of species credits, as calculated by the Biodiversity Offsets Payment Calculator.	
MCoA	Biodiversity and Trees	D6	The Proponent must submit evidence of the retirement of credits required by **Condition D4** above to the Planning Secretary for information within one (1) month of receiving evidence of the retirement of credits and / or a certificate confirming payment under **Condition D5** above before any vegetation clearing or tree removal that must be offset.	Full Compliance except Sydney Metro will provide evidence of retired credits
MCoA	Biodiversity and Trees	D7	Before the removal or clearing of any vegetation, or the demolition of structures identified as potential roosting sites for microbats at the Clyde Stabling and Maintenance Facility site commences, pre-clearing / demolition inspections for the threatened species must be undertaken. The inspections, and any subsequent relocation of fauna and associated management / offset measures, must be undertaken under the guidance of a suitably qualified and experienced ecologist. Survey and relocation methodologies and management / offset measures must be included in the **Flora and fauna CEMP Sub-plan** required under **Condition C5** of this schedule or the relevant **Site Establishment Management Plan** required by **Condition A17** of this schedule.	Full Compliance
MCoA	Biodiversity and Trees	D8	In the event roosting sites have been identified under **Condition D7** above, bat boxes must be provided or suitable habitat built within the Clyde Stabling and Maintenance Facility site.	Full Compliance
MCoA	Biodiversity and Trees	D9	As many mature trees and as much urban canopy as practicable must be retained during construction. Canopy trimming should be considered where practicable prior to any mature tree removal.	Full Compliance

MCoA	Flooding	D10	Stage 1 of the CSSI must be designed and constructed to not worsen flooding characteristics within and in the vicinity of the CSSI. Not worsen existing flooding characteristics means the following: (a) a maximum increase in inundation time of one hour in a one (1) per cent Annual Exceedance Probability (AEP) flood event; (b) a maximum increase of 10 mm in inundation at properties where floor levels are currently exceeded in a one (1) per cent AEP flood event; (c) a maximum increase of 50 mm in inundation of land at properties where floor levels would not be exceeded in a one (1) per cent AEP flood event; and (d) no inundation of floor levels which are currently not inundated in a one (1) per cent AEP flood event. Measures identified in the documents listed in Condition A1 of this schedule to not worsen flooding characteristics or measures that achieve the same outcome must be incorporated into the detailed design of Stage 1 of the CSSI. The incorporation of these measures must be reviewed and endorsed by a suitably qualified and experienced person in consultation with directly affected landowners, DPIE Water, DPI Fisheries, DPIE EES, NSW State Emergency Service (SES), SOPA (in respect of Sydney Olympic Park) and Relevant Council(s).	Not Applicable
MCoA	Flooding	D11	Where flooding characteristics exceed the levels identified in **Condition D10** above the Proponent must undertake the following: (a) consult with property owners for properties adversely flood affected as a result of Stage 1 of the CSSI and mitigate where necessary; and (b) consult with the NSW State Emergency Service (SES), SOPA (in respect of Sydney Olympic Park) and Relevant Council(s) regarding the management of any residual flood risk beyond the 1 per cent AEP flood event and up to the probable maximum flood.	Not Applicable

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MCoA	Flooding	D12	Flood information including flood reports, models and geographic information system outputs must be provided to the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES in order to assist in preparing relevant documents and to reflect changes in flood behaviour as a result of Stage 1 of the CSSI. The Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES must be notified in writing that the information is available no later than one (1) month following the completion of construction. Information requested by the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES or the SES must be provided no later than six (6) months following the completion of construction or within another timeframe agreed with the Relevant Council(s), SOPA (in respect of Sydney Olympic Park), DPIE EES and the SES. The project flood models and data must be uploaded to the NSW Flood Data Portal and access must be provided to the Relevant Council(s), DPIE EES, SES and SOPA (in respect of Sydney Olympic Park) no later than one (1) month following the completion of construction.	Not Applicable
MCoA	Heritage	D13	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in **Condition A1** of this schedule. Unexpected heritage finds identified by Stage 1 of the CSSI must be managed in accordance with the **Unexpected Finds Protocol** outlined in **Conditions D31** to **D33** of this schedule. Consideration of avoidance and redesign to protect state significant unexpected finds must be addressed where this condition applies.	Full Compliance
MCoA	Heritage	D14	Before installing protective site boundary hoarding or equipment used for vibration and noise monitoring at any Heritage item identified in the documents listed in **Condition A1** of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. The installation must also consider and avoid impacts to potential historical archaeology and seek advice from the Excavation Director approved under **Condition D27** below.	Full compliance except Sydney Metro will engage a built Heritage Expert.

MCoA	Heritage	D15	Before commencement of any excavation at the Parramatta metro station construction site, a detailed investigation must be undertaken to precisely locate the Parramatta Convict Drain. All options available to retain the Parramatta Convict Drain *in situ* must be considered. If retention of any part of the Parramatta Convict Drain located *in situ* is not feasible, the Proponent must satisfactorily demonstrate to the Planning Secretary why its removal is appropriate. If it is not feasible to retain the Parramatta Convict Drain *in situ*, archival recording must be undertaken on the affected section of the item in accordance with Heritage Council of NSW guidelines.	Not Applicable
MCoA	Heritage	D16	During construction, the Proponent must implement protective measures to prevent adverse impacts on the heritage significance of the Victorian Regency terraced shops at 41-45 George Street, Parramatta and Kia Ora Georgian House at 64 Macquarie Street, Parramatta. Before installing such measures, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. Protection measures must also consider and avoid potential impacts to significant historical archaeology and seek the advice from the Excavation Director approved under **Condition D27** below.	Full compliance except Sydney Metro will engage a built Heritage Expert.
MCoA	Heritage	D17	The Roxy Theatre, White Bay Power Station, the former State Abattoirs and the former RTA Depot facade fronting Unwin Street, must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in **Condition A1** of this schedule.	Full Compliance except in relation to the White Bay Power Station, and the former State Abattiors.
MCoA	Heritage	D18	Where Heritage items, or items assessed to be of local heritage significance in the documents listed in **Condition A1** of this schedule, are proposed to be fully or partially destroyed, heritage salvage must occur in consultation with a suitably qualified heritage specialist. The Proponent must develop a salvaged materials and moveable heritage register. The register must identify significant items to be salvaged. Salvage must occur where significance is retained and / or the potential for re-use, reinstatement or re-sale has been identified. The salvage from any State- listed items must be undertaken in consultation with Heritage NSW.	Not Applicable

MCoA	Heritage	D19	All reasonable steps must be taken not to harm, modify or otherwise impact Aboriginal objects except as authorised by this approval.	Not Applicable
MCoA	Heritage	D20	The Registered Aboriginal Parties (RAPs) must be kept informed about Stage 1 of the CSSI. The RAPs must continue to be provided with the opportunity to be consulted about the Aboriginal cultural heritage management requirements of Stage 1 of the CSSI.	Sydney Metro will facilitate Aboriginal Focus Groups to coordinate consultation with RAPs
MCoA	Heritage	D21	Aboriginal archaeological test excavation must be undertaken at those areas identified in Table 25 of the revised Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by Artefact Heritage and dated November 2020.	Full Compliance
MCoA	Heritage	D22	An **Aboriginal Archaeological Test Excavation Methodology(s)** must be prepared and appropriately integrated with the revised **Archaeological Research Design and Excavation Methodology**. The **Aboriginal Archaeological Salvage Excavation Methodology(s)** must be prepared after analysis of the test excavation results.	Full Compliance
MCoA	Heritage	D23	At the completion of Aboriginal cultural heritage test and salvage excavations, an **Aboriginal Cultural Heritage Excavation Report(s)**, prepared by a suitably qualified expert, must be prepared in accordance with the *Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW*, OEH 2011 and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, DECCW 2010. The **Aboriginal Cultural Heritage Excavation Report(s)** must document the results of the archaeological test excavations and any subsequent salvage excavations. The RAPs must be given a minimum of 28 days to consider the report and provide comments before the report is finalised. The final report must be provided to Heritage NSW within 24 months of the completion of the Aboriginal archaeological excavations (both test and salvage).	Full Compliance
MCoA	Heritage	D24	Where previously unidentified Aboriginal objects are discovered, all work must immediately stop in the vicinity of the affected area and a suitably qualified and experienced Aboriginal heritage expert must be contacted to provide specialist heritage advice, before construction recommences. The measures to consider and manage this process must be specified in the **Heritage CEMP Sub-plan** required by **Condition C5** of this schedule and, where relevant,	Full Compliance

			include registration in the Aboriginal Heritage Information Management System (AHIMS).	
MCoA	Heritage	D25	Before the commencement of any work at Parramatta and The Bays metro station construction sites, a revised **Archaeological Research Design and Excavation Methodology(s)** must be prepared in accordance with Heritage Council of NSW guidelines and with reference to the detailed design of Stage 1 construction of the CSSI to guide archaeological excavation. The revised **Archaeological Research Design and Excavation Methodology(s)** must be prepared by the **Excavation Director** (approved under **Condition D27** below) and must include: (a) site specific research for the Parramatta and The Bays metro station construction sites which is conducted by a professional historian to clearly articulate the historical development of the allotments to assist with the reassessment of potential and significance; (b) comparative analysis from archaeological investigations in Parramatta (including theses, publications and grey literature reports); (c) preparation of research questions based on the additional site-specific research required by this condition, and relevant research agendas from previously excavated early historical occupation in Parramatta including recovered artefact assemblages; and (d) a reconsideration of archaeological methods to manage the sites based on this additional assessment. The revised Archaeological Research Design and Excavation Methodology(s) must apply to both Parramatta and The Bays metro station construction sites and be prepared in consultation with Heritage NSW and Place Management NSW (in respect of The Bays) and submitted to the Planning Secretary for approval. The revised Archaeological Research Design and Excavation Methodology(s) must be implemented throughout the archaeological excavation programs. Note: Nothing in these conditions prevents the Archaeological Research Design and Excavation Methodology to be separate	Full Compliance except Sydney Metro will prepare the revised Archaeological Research Design and Excavation Methodology(s)

			procedures.	
MCoA	Heritage	D26	The revised **Archaeological Research Design and Excavation Methodology(s)** must include provision for early physical investigation of areas of impact identified as likely to contain State significant archaeology or subterranean Heritage items in the research design to inform excavation in these areas. This must include the Parramatta and The Bays metro station sites, including Parramatta Convict Drain, Parramatta Sand Body, White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel.	Not Applicable
MCoA	Heritage	D27	Before commencement of archaeological excavation, the Proponent must nominate a suitably qualified **Excavation Director**, who complies with Heritage Council of NSW's *Criteria for Assessment of Excavation Director* (September 2019), to oversee and advise on matters associated with historical archaeology for the approval of the Planning Secretary, in consultation with Heritage NSW. The **Excavation Director** must be present to oversee excavation, advise on archaeological issues, advise on the duration and extent of oversight required during archaeological excavations consistent with the approved **Archaeological Research Design and Excavation Methodology(s)** required under **Condition D25** of this schedule. Aboriginal archaeological excavations must be conducted by a suitably qualified person in accordance with the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010). More than one **Excavation Director** may be engaged for Stage 1 of the CSSI to exercise the functions required under the conditions of this approval.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary and engage an Excavation Director.
MCoA	Heritage	D28	Following completion of archaeological excavation programs, a **Final Excavation Report** and an **Aboriginal Cultural Heritage Excavation Report** must be prepared that includes further detailed and site-specific historical research undertaken to enhance the final reporting, and results of archaeological excavations. The report must include details of any significant artefacts recovered (salvaged), where they are located and details of their ongoing conservation. The **Final Excavation Report** must document significant results and artefacts which may be re-used in future stages of the CSSI. The **Final Excavation Report** must be prepared in accordance with guidelines and standards required by	Not Applicable

			Heritage Council of NSW.	
MCoA	Heritage	D29	The **Final Excavation Report** and **Aboriginal Cultural Heritage Excavation Report** must be submitted to the Planning Secretary, Heritage NSW and the Relevant Council for information no later than 24 months after the completion of the archaeological excavation.	Not Applicable
MCoA	Heritage	D30	In the event the CSSI salvages state significant historical archaeology associated with early convict occupation at the Parramatta metro station construction site for which retention and future conservation is not possible: (a) the key findings of the archaeological investigations must be documented which explain their significance within the context of Parramatta and NSW no later than two (2) years after the completion of the archaeological excavations; and (b) provide for the curation, display and public access of artefacts, site records and final reports. Note: In reference to (b) above, this may involve partnerships with museums, local heritage centres and/or universities.	Not Applicable
MCoA	Heritage	D31	An **Unexpected Heritage Finds and Human Remains Procedure** must be prepared to manage unexpected heritage finds (heritage items and values) in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW.	Full Compliance
MCoA	Heritage	D32	The **Unexpected Heritage Finds and Human Remains Procedure** must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW (with respect to non-Aboriginal cultural heritage) and in relation to Aboriginal cultural heritage, in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) and submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction.	Full Compliance

MCoA	Heritage	D33	The **Unexpected Heritage Finds and Human Remains Procedure**, as submitted to the Planning Secretary, must be implemented for the duration of construction. Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately. Management of human remains in NSW is subject to requirements set out in the Public Health Act 2010 (NSW) and Public Health Regulation 2012 (NSW). Nothing in these conditions prevents separate procedures for the Unexpected Heritage Finds and Human Remains Procedure.	Full Compliance
MCoA	Noise and Vibration	D34	A detailed land use survey must be undertaken to confirm sensitive receivers (including critical working areas such as operating theatres and precision laboratories) potentially exposed to construction noise and vibration and construction ground-borne noise. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of work which generates construction noise, vibration or ground-borne noise in that area. The results of the survey must be included in the **Noise and Vibration CEMP Sub-plan** required under **Condition C5** of this schedule.	Full Compliance
MCoA	Noise and Vibration	D35	Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 6:00pm Saturdays; and (c) at no time on Sundays or public holidays.	Full Compliance
MCoA	Noise and Vibration	D36	Except as permitted by an EPL, highly noise intensive work that results in an exceedance of the applicable NML at the same receiver must only be undertaken: (a) between the hours of 8:00 am to 6:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday; and (c) if continuously, then not exceeding three (3) hours, with a minimum cessation of work of not less than one (1) hour. For the purposes of this condition, 'continuously' includes any period during which there is less than one (1) hour between ceasing and recommencing any of the work.	Full Compliance

MCoA	Noise and Vibration	D37	Notwithstanding **Conditions D35** and **D36** of this schedule work may be undertaken outside the hours specified in the following circumstances: (a) Safety and Emergencies, including: (i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm. On becoming aware of the need for emergency work in accordance with (a)(ii) above, the AA, the ER, the Planning Secretary and the EPA must be notified of the reasons for such work. The Proponent must use best endeavours to notify as soon as practicable all noise and/or vibration affected sensitive land user(s) of the likely impact and duration of those work. (b) Low impact, including: (i) construction that causes LAeq(15 minute) noise levels: · no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and · no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); and (ii) construction that causes LAFmax(15 minute) noise levels no more than 15 dB(A) above the rating background level at any residence; or (iii) construction that causes: · continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), or · intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006). (c) By Approval, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or (ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition D38 of this schedule; or	Full Compliance

			(iii) negotiated agreements with directly affected residents and sensitive land user(s). (d) By Prescribed Activity, including: (i) tunnelling (excluding cut and cover tunnelling and surface works) are permitted 24 hours a day, seven days a week; or (ii) concrete batching at the Clyde construction site is permitted 24 hours a day, seven days a week; or (iii) delivery of material that is required to be delivered outside of standard construction hours in Condition D35 of this schedule to directly support tunnelling activities, except between the hours 10:00 pm and 7:00 am to / from the Five Dock and Westmead construction sites and to / from Burwood North construction site using any roads / streets other than directly from Parramatta Road; or (iv) haulage of spoil except between the hours of 10:00 pm and 7:00 am to / from the Five Dock and Westmead construction sites and to / from Burwood North construction site using any roads / streets other than directly from Parramatta Road; or (v) work within an acoustic shed where there is no exceedance of noise levels under Low impact circumstances identified in (b) above, unless otherwise agreed by the Planning Secretary. Note: Tunnelling does not include station box excavation.	

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MCoA	Noise and Vibration	D38	An **Out-of-Hours Work Protocol** must be prepared to identify a process for the consideration, management and approval of work which are outside the hours defined in **Conditions D35** and **D36** of this schedule. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours work. The Protocol must be prepared in consultation with the **ER**, **AA** and **EPA**. The Protocol must provide: (a) identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where: (i) the ER and AA review all proposed out-of-hours activities and confirm their risk levels; (ii) low risk activities can be approved by the ER in consultation with the AA; and (iii) high risk activities that are approved by the Planning Secretary; (b) a process for the consideration of out-of-hours work against the relevant NML and vibration criteria; (c) a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of Condition D50 of this schedule. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events; (d) procedures to facilitate the coordination of out-of-hours work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and (e) notification arrangements for affected receivers for all approved out-of-hours works and notification to the Planning Secretary of approved low risk out-of-hours works. This condition does not apply if the requirements of Condition D37(b) of this schedule are met. Note: Out-of-hours work is any work that occurs outside the construction hours identified in Condition D35 and D36 of this schedule.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary

MCoA	Noise and Vibration	D39	All reasonable and feasible mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration criteria: (a) construction 'Noise affected' noise management levels established using the Interim Construction Noise Guideline (DECC, 2009); (b) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure); (c) Australian Standard AS 2187.2 - 2006 "Explosives - Storage and Use - Use of Explosives" (for human exposure); (d) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and (e) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage for structurally unsound heritage items). Any work identified as exceeding the noise management levels and / or vibration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan. Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction Noise Management Level.	Full Compliance
MCoA	Noise and Vibration	D40	All reasonable and feasible mitigation measures must be applied when the following residential ground-borne noise levels are exceeded: (a) evening (6:00 pm to 10:00 pm) — internal LAeq(15 minute): 40 dB(A); and (b) night (10:00 pm to 7:00 am) — internal LAeq(15 minute): 35 dB(A). The mitigation measures must be outlined in the Noise and Vibration CEMP Sub-plan, including in any Out-of-Hours Work Protocol, required by Condition D38 of this schedule.	Full Compliance
MCoA	Noise and Vibration	D41	Noise generating work in the vicinity of potentially-affected community, religious, educational institutions and noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) resulting in noise	Full Compliance

			levels above the NMLs must not be timetabled within sensitive periods, unless other reasonable arrangements with the affected institutions are made at no cost to the affected institution.	
MCoA	Noise and Vibration	D42	Industry best practice construction methods must be implemented where reasonably practicable to ensure that noise levels are minimised around sensitive land user(s). Practices must include, but are not limited to: (a) use of regularly serviced low sound power equipment; (b) temporary noise barriers (including the arrangement of plant and equipment) around noisy equipment and activities such as rock hammering and concrete cutting; and (c) use of alternative construction and demolition techniques.	Full Compliance
MCoA	Noise and Vibration	D43	**Detailed Noise and Vibration Impact Statements** (**DNVIS**) must be prepared for any work that may exceed the NMLs, vibration criteria and / or ground-borne noise levels specified in **Conditions D39** and **D40** of this schedule at any residence outside construction hours identified in **Condition D35** of this schedule, or where receivers will be highly noise affected. The **DNVIS** must include specific mitigation measures identified through consultation with affected sensitive land user(s) and the mitigation measures must be implemented for the duration of the works. A copy of the **DNVIS** must be provided to the **AA** and **ER** before the commencement of the associated works. The Planning Secretary and the EPA may request a copy (ies) of the **DNVIS**.	Full Compliance
MCoA	Noise and Vibration	D44	**DNVIS** must be prepared for each construction site before construction noise and vibration impacts commence and include specific mitigation measures identified through consultation with affected sensitive land users.	Full Compliance
MCoA	Noise and Vibration	D45	Owners and occupiers of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before works that generate vibration commences in the vicinity of those properties. If the potential exceedance is to occur more than once or extend over a period of 24 hours, owners and occupiers are to be provided a schedule of potential exceedances on a monthly basis for the duration of the potential exceedances, unless otherwise agreed by the owner and occupier. These properties must be identified and considered in the **Noise and Vibration CEMP Sub-plan**.	Full Compliance

MCoA	Noise and Vibration	D46	Vibration testing must be conducted during vibration generating activities that have the potential to impact on Heritage items to identify minimum working distances to prevent cosmetic damage. In the event that the vibration testing and attended monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures. Such measures must include, but not be limited to, review or modification of excavation techniques.	Full Compliance
MCoA	Noise and Vibration	D47	The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring at Heritage items.	Full Compliance
MCoA	Noise and Vibration	D48	Before conducting at-property treatment at any Heritage item identified in the documents listed in **Condition A1** of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.	Full compliance except Sydney Metro will engage a built Heritage Expert.
MCoA	Noise and Vibration	D49	If a Heritage item is found to be structurally unsound (following inspection) a more conservative cosmetic damage criterion of 2.5 mm/s peak component particle velocity (from DIN 4150) must be applied.	Full Compliance
MCoA	Noise and Vibration	D50	All work undertaken for the delivery of Stage 1 of the CSSI, including those undertaken by third parties (such as utility relocations), must be coordinated to ensure respite periods are provided. The Proponent must: (a) reschedule any work to provide respite to impacted noise sensitive receivers so that the respite is achieved in accordance with Condition D51 of this schedule; or (b) consider the provision of alternative respite or mitigation to impacted noise sensitive receivers; and (c) provide documentary evidence to the AA in support of any decision made by the Proponent in relation to respite or mitigation. The consideration of respite must also include all other approved Critical SSI, SSI and SSD projects which may cause cumulative and / or consecutive impacts at receivers affected by the delivery of Stage 1 of the CSSI.	Full Compliance

MCoA	Noise and Vibration	D51	In order to undertake out-of-hours work outside the work hours specified under **Condition D35** of this schedule, appropriate respite periods for the out-of-hours work must be identified in consultation with the community at each affected location on a regular basis. This consultation must include (but not be limited to) providing the community with: (a) a progressive schedule for periods no less than three (3) months, of likely out-of-hours work; (b) a description of the potential work, location and duration of the out-of-hours work; (c) the noise characteristics and likely noise levels of the work; and (d) likely mitigation and management measures which aim to achieve the relevant NMLs under Condition D39 (including the circumstances of when respite or relocation offers will be available and details about how the affected community can access these offers). The outcomes of the community consultation, the identified respite periods and the scheduling of the likely out-of-hour work must be provided to the AA, EPA and the Planning Secretary. Note: Respite periods can be any combination of days or hours where out-of-hours work would not be more than 5 dB(A) above the RBL at any residence.	Full Compliance
MCoA	Noise and Vibration	D52	Sensitive land uses located along local roads used to divert traffic from the closure of Alexandra Avenue in Westmead that will be affected by additional road traffic noise from the diverted traffic in excess of the criteria identified in the *NSW Road Noise Policy* (the RNP criteria) during construction of Stage 1 of the CSSI (the Affected Properties) are eligible to receive at-property noise mitigation treatments. Owners of Affected Properties must be advised of the range of noise mitigation options that can be installed at or in their property and given a choice as to which of these they agree to have installed. A copy of all noise mitigation guidelines and procedures that will be used to determine at-property treatment at each Affected Property must be provided to the property owner.	Not Applicable

			At property mitigation measures and packages must be determined based on the measured exceedance levels above the RNP criteria. Road traffic noise levels must be measured before and after the altered traffic flow detour.	
MCoA	Noise and Vibration	D53	Blasting associated with Stage 1 of the CSSI must only be undertaken during the following hours: (a) 9:00am to 5:00pm, Monday to Friday, inclusive; (b) 9:00am to 1:00pm on Saturday; and (c) at no time on Sunday or public holidays; or (d) as authorised through an EPL. This condition does not apply in the event of a direction from the NSW Police Force or other relevant authority for safety or emergency reasons to avoid loss of life, property loss and / or to prevent environmental harm.	Not Applicable
MCoA	Noise and Vibration	D54	A **Blast Management Strategy** must be prepared and must include: (a) sequencing and review of trial blasting to inform blasting; (b) regularity of blasting; (c) intensity of blasting; (d) periods of relief; and (e) blasting program.	Not Applicable
MCoA	Noise and Vibration	D55	The **Blast Management Strategy** must be endorsed by a suitably qualified and experienced person.	Not Applicable
MCoA	Noise and Vibration	D56	The **Blast Management Strategy** must be prepared in accordance with relevant guidelines in order to ensure that all blasting and associated activities are carried out so as not to generate unacceptable noise and vibration impacts or pose a significant risk to sensitive land user(s).	Not Applicable
MCoA	Noise and Vibration	D57	The **Blast Management Strategy** must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of blasting. The **Blast Management Strategy** as submitted to the Planning Secretary, must be implemented for all blasting activities.	Not Applicable
MCoA	Socio-economic, Land Use and	D58	Stage 1 of the CSSI must be designed and constructed with the objective of minimising impacts to, and interference with, third party property and infrastructure, and that such infrastructure and	Full Compliance

	Property		property is protected during construction.	
MCoA	Socio-economic, Land Use and Property	D59	The utilities and services (hereafter “services”) potentially affected by construction must be identified to determine requirements for diversion, protection and / or support. Alterations to services must be determined by negotiation between the Proponent and the service providers. Disruption to services resulting from construction must be avoided, wherever possible, and advised to customers where it is not possible.	Full Compliance
MCoA	Socio-economic, Land Use and Property	D60	A suitably qualified and experienced person must undertake condition surveys of all buildings, structures, utilities and the like identified in the documents listed in **Condition A1** of this schedule as being at risk of damage before commencement of any work that could impact on the subject surface / subsurface structure. The results of the surveys must be documented in a **Pre-construction Condition Survey Report** for each item surveyed. Copies of **Pre-construction Condition Survey Reports** must be provided to the relevant owners of the items surveyed in the vicinity of the proposed work, and no later than one (1) month before the commencement of the work that could impact on the subject surface / subsurface structure.	Full Compliance
MCoA	Socio-economic, Land Use and Property	D61	Condition surveys of all items for which condition surveys were undertaken in accordance with **Condition D60** of this schedule must be undertaken by a suitably qualified and experienced person after completion of the work identified in **Condition D60** of this schedule. The results of the surveys must be documented in a **Post-construction Condition Survey Report** for each item surveyed. Copies of **Post-construction Condition Survey Reports** must be provided to the landowners of the items surveyed, and no later than three (3) months following the completion of the work that could impact on the subject surface / subsurface structure unless otherwise agreed by the Planning Secretary.	Full Compliance
MCoA	Socio-economic, Land Use and Property	D62	The Proponent, where liable, must rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the work at no cost to the owner. Alternatively, the Proponent may pay compensation for the property damage as agreed with the property owner. Rectification or compensation must be undertaken within 12 months of completion	Full Compliance

			of the work identified in **Condition D60** of this schedule unless another timeframe is agreed with the owner of the affected surface or sub-surface structure or recommended by the **IPIAP**.	
MCoA	Socio-economic, Land Use and Property	D63	Appropriate equipment to monitor areas in proximity of construction sites and the tunnel route during construction must be installed with particular reference to at risk buildings, structures and utilities identified in the condition surveys required by **Condition D60** of this schedule and / or geotechnical analysis as required. If monitoring during construction indicate exceedance of the vibration criteria identified in the **DNVIS** prepared under **Condition D43** of this schedule, then all construction affecting settlement must cease immediately and must not resume until fully rectified or a revised method of construction is established that will ensure protection of affected buildings.	Full Compliance
MCoA	Socio-economic, Land Use and Property	D64	An **Independent Property Impact Assessment Panel** (**IPIAP**) must be established. The Planning Secretary must be informed of the members of the **IPIAP** and the **IPIAP** must comprise geotechnical and engineering experts independent of the design and construction team. The **IPIAP** will be responsible for independently verifying condition surveys undertaken under **Conditions D60** and **D61** of this schedule, the resolution of property damage disputes and the establishment of ongoing settlement monitoring requirements.	Not Applicable
MCoA	Socio-economic, Land Use and Property	D65	Either the affected property owner or the Proponent may refer unresolved disputes arising from potential and/or actual property impacts to the **IPIAP** for resolution. All costs incurred in the establishing and implementing of the panel must be borne by the Proponent regardless of which party makes a referral to the **IPIAP**. The findings and recommendations of the **IPIAP** are final and binding on the Proponent.	Full Compliance, except in relation to costs incurred in the establishment and implementation of the panel. This exclusion does not include costs as a result of findings or recommendations of the panel.
MCoA	Socio-economic, Land Use and Property	D66	Settlement must be monitored for any period beyond the minimum timeframe requirements of **Condition D63** of this schedule if directed so by the **IPIAP** following its review of the monitoring data from the period not less than six (6) months after settlement has stabilised, consistent with **Condition D63** of this schedule. The results of the monitoring must be made available to the Planning	Not Applicable

			Secretary upon request.	
MCoA	Socio-economic, Land Use and Property	D67	A **Community Benefit Plan(s)** must be prepared, by a suitably qualified and experienced person, to guide the delivery of measures identified in the documents listed in **Condition A1** of this schedule relating to social impacts and the development of community benefit initiatives. The **Community Benefit Plan(s)** must aim to: (a) make a positive contribution to the potentially affected community; (b) respond to community priorities and needs; (c) create positive community or environmental outcomes; and (d) prioritise consideration of achieving outcomes for enhancing community character, community culture and the local surroundings. Nothing in this condition prevents the preparation of individual Community Benefit Plans for each station precinct.	Not Applicable
MCoA	Socio-economic, Land Use and Property	D68	The **Community Benefit Plan(s)** must be submitted to the Planning Secretary for information before construction. The **Community Benefit Plan(s)** must be implemented for the duration of construction.	Not Applicable
MCoA	Socio-economic, Land Use and Property	D69	Potential impacts on the operation of festivals or events at Parramatta, Sydney Olympic Park or Five Dock must be limited as reasonably practicable.	Full Compliance
MCoA	Socio-economic, Land Use and Property	D70	**Small Business Owners Engagement Plan(s)** must be implemented in accordance with the **Overarching Community Communication Strategy** to minimise impact on small businesses adjacent to major construction sites during construction of Stage 1 of the CSSI. These plans must be prepared and submitted to the Planning Secretary for information before construction at the relevant construction site.	Not Applicable

MCoA	Soils and Contamination	D71	Before commencement of any construction that would result in the disturbance of moderate to high risk contaminated sites as identified in the documents identified in **Condition A1** of this schedule, **Detailed Site Investigations** (for contamination) must be conducted to determine the full nature and extent of the contamination. The **Detailed Site Investigation Report(s)** and the subsequent report(s), must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The **Detailed Site Investigations** must be undertaken in accordance with guidelines made or approved under section 105 of *Contaminated Land Management Act 1997* (NSW). The **Detailed Site Investigation** for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA. Note: Nothing in this condition prevents the Proponent from preparing individual Detailed Site Investigation Reports (for contamination) for separate sites.	Full Compliance
MCoA	Soils and Contamination	D72	Should remediation be required to make land suitable for the final intended land use, a **Remedial Action Plan** must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The **Remedial Action Plan** must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the *Contaminated Land Management Act 1997* (NSW) and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the **Remedial Action Plan** is implemented. The **Remedial Action Plan** for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA. Note: Nothing in this condition prevents the Proponent from	Full Compliance

			preparing individual Remedial Action Plans for separate sites.	
MCoA	Soils and Contamination	D73	Before commencing remediation, a **Section B Site Audit Statement(s)** must be prepared by an NSW EPA-accredited Site Auditor that certifies that the **Remedial Action Plan(s)** is/are appropriate and that the site can be made suitable for the proposed use. The **Remedial Action Plan(s)** must be implemented and any changes to the **Remedial Action Plan(s)** must be approved in writing by the NSW EPA-accredited Site Auditor. Note: Nothing in this condition prevents the Proponent from engaging an NSW EPA-accredited Site Auditor to prepare individual Site Audit Statements for Remedial Action Plans for separate sites.	Full Compliance
MCoA	Soils and Contamination	D74	**Validation Report(s)** must be prepared in accordance with *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines* (EPA, 2020) and relevant guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997* (NSW). Note: Nothing in this condition prevents the Proponent from preparing individual Validation Reports for separate sites.	Full Compliance
MCoA	Soils and Contamination	D75	A **Section A1 or Section A2 Site Audit Statement** (accompanied by an **Environmental Management Plan**) and its accompanying **Site Audit Report**, which state that the contaminated land disturbed by the work has been made suitable for the intended land use, must be submitted to the Planning Secretary, SOPA (in respect of Sydney Olympic Park) and the Relevant Council(s) after remediation and before the commencement of operation of the CSSI. Note: Nothing in this condition prevents the Proponent from obtaining Section A Site Audit Statements for individual parcels of remediated land.	Full Compliance
MCoA	Soils and Contamination	D76	A copy of **Detailed Site Investigation Report(s)**, **Remedial Action Plan(s)**, **Validation Report(s)**, **Site Audit Report(s)** and **Site Audit Statement(s)** must be submitted to the Planning Secretary, SOPA (in respect of Sydney Olympic Park) and the Relevant Council(s) for information.	Full Compliance

MCoA	Soils and Contamination	D77	An **Unexpected Contaminated Land and Asbestos Finds Procedure** must be prepared before the commencement of construction and must be followed should unexpected contaminated land or asbestos (or suspected contaminated land or asbestos) be excavated or otherwise discovered during construction.	Full Compliance
MCoA	Soils and Contamination	D78	The **Unexpected Contaminated Land and Asbestos Finds Procedure** must be implemented throughout construction.	Full Compliance
MCoA	Sustainability	D79	A **Water Reuse Strategy** must be prepared, which sets out options for the reuse of collected stormwater and groundwater during Stage 1 of the CSSI. The Water Reuse Strategy must include, but not be limited to: (a) evaluation of reuse options; (b) details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required; (c) measures to avoid misuse of recycled water as potable water; (d) consideration of the public health risks from water recycling; and (e) time frame for the implementation of the preferred reuse option(s). The Water Reuse Strategy must be prepared based on best practice and advice sought from relevant agencies, as required. The Strategy must be applied during construction. Justification must be provided to the Planning Secretary if it is concluded that no reuse options prevail. A copy of the Water Reuse Strategy must be made publicly available. Nothing in this condition prevents the Proponent from preparing separate Water Reuse Strategies for the construction phases of Stage 1 of the CSSI.	Not Applicable
MCoA	Traffic and Transport	D80	Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	Full Compliance

MCoA	Traffic and Transport	D81	Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access must be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.	Full Compliance
MCoA	Traffic and Transport	D82	Construction vehicles (including light vehicles) must not use Robert Street, Rozelle to access The Bays metro station construction site, unless required in the event of an emergency or in association with the delivery of the Rozelle power supply from the Rozelle sub-transmission substation to The Bays metro station construction site.	Not Applicable
MCoA	Traffic and Transport	D83	The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	Not Applicable
MCoA	Traffic and Transport	D84	The primary egress routes for spoil haulage trucks at Sydney Olympic Park metro station construction site must be determined in consultation with SOPA.	Not Applicable
MCoA	Traffic and Transport	D85	**Construction Traffic Management Plans** (**CTMPs**) must be prepared in accordance with the Construction Traffic Management Framework. A copy of the **CTMPs** must be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed within the relevant **CTMP**.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Traffic and Transport	D86	Local roads proposed to be used by Heavy Vehicles to directly access construction sites that are not identified in the documents listed in **Condition A1** of this schedule must be approved by the Planning Secretary and be included in the **CTMPs**.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary

MCoA	Traffic and Transport	D87	All requests to the Planning Secretary for approval to use local roads under **Condition D86** above must include the following: (a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to(d) of this condition.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Traffic and Transport	D88	Before any local road is used by a Heavy Vehicle for the purposes of construction of Stage 1 of the CSSI, a **Road Dilapidation Report** must be prepared for the road. A copy of the **Road Dilapidation Report** must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of Stage 1 of the CSSI.	Full Compliance
MCoA	Traffic and Transport	D89	If damage to roads occurs as a result of the construction of Stage 1 of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	Full Compliance
MCoA	Traffic and Transport	D90	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive land user(s); (d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMPs.	Full Compliance

MCoA	Traffic and Transport	D91	A **Construction Parking and Access Strategy** must be prepared to identify and mitigate impacts resulting from on- and off-street parking changes during construction. The **Construction Parking and Access Strategy** must include, but not necessarily be limited to: (a) achieving the requirements of Condition D90 above; (b) confirmation and timing of the removal of on- and off-street parking associated with construction of Stage 1 of the CSSI; (c) parking surveys of all parking spaces to be removed or occupied by the project workforce to determine current demand during peak, off-peak, school drop off and pickup, weekend periods and during special events; (d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction; (e) assessment of the impacts to on- and off-street parking stock taking into consideration, occupation by the project workforce, outcomes of consultation with affected stakeholders and considering the impacts of special events; (f) identification of reasonable and practicable mitigation measures to manage impacts to stakeholders as a result of on- and off-street parking changes including, but not necessarily limited to, staged removal and replacement of parking, provision of alternative parking arrangements, managed staff parking arrangements and working with relevant council(s) to introduce parking restrictions adjacent to work sites and compounds or appropriate residential parking schemes; (g) where residential parking schemes already exist, off-road parking facilities must be provided for the project workforce; (h) mechanisms for monitoring, over appropriate intervals (not less than 6 months), to determine the effectiveness of implemented mitigation measures; (i) details of shuttle bus service(s) to transport the project workforce to construction sites from public transport hubs and off-site car parking facilities (where these are provided) and between construction sites; (j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary

			(k) provision of reporting of monitoring results to the Planning Secretary and Relevant Council(s) at six (6) monthly intervals.	
MCoA	Traffic and Transport	D92	The **Construction Parking and Access Strategy** must be submitted to the Planning Secretary for approval at least one (1) month before the commencement of any construction that reduces the availability of existing parking. The approved **Construction Parking and Access Strategy** must be implemented before impacting on on-street parking and incorporated into the **CTMPs**.	Full Compliance except that Sydney Metro would make all submissions to the Planning Secretary
MCoA	Traffic and Transport	D93	During construction, all reasonably practicable measures must be implemented to maintain pedestrian, cyclist and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian, cyclist and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Full Compliance
MCoA	Traffic and Transport	D94	A **Traffic and Transport Liaison Group(s)** must be established in accordance with the Construction Traffic Management Framework to inform the development of **CTMPs**.	The Principal Contractor must participate in TTLG's were required by Sydney Metro.
MCoA	Traffic and Transport	D95	Supplementary analysis and modelling as required by TfNSW and / or the **Traffic and Transport Liaison Group(s)** must be undertaken to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the **CTMPs**.	Full Compliance except in relation to operational traffic.

MCoA	Traffic and Transport	D96	The permanent road works at Clyde / Rosehill must be designed, constructed and operated with the objective of integrating with existing and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and, accessibility of the networks, and avoid deterioration in peak period levels of service in relation to permanent and operational changes. Design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken: (a) in consultation with, and to the reasonable requirements of the relevant Traffic and Transport Liaison Group; (b) in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements; (c) to minimise and manage local area traffic impacts; (d) to ensure access is maintained to property and infrastructure; and (e) to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards, and TfNSW requirements. Copies of civil, structural and traffic signal design plans shall be submitted to the Relevant Road Authority for consultation during design development and before completion of construction of Stage 1 of the CSSI.	Not Applicable
MCoA	Traffic and Transport	D97	Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the relevant **Traffic and Transport Liaison Group** before the completion and use of the subject infrastructure and must be made available to the Planning Secretary upon request.	Not Applicable
MCoA	Traffic and Transport	D98	Safe pedestrian and cyclist access must be maintained around construction sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Full Compliance

MCoA	Traffic and Transport	D99	Opportunities to maximise spoil material removal by non-road methods must be investigated and implemented where reasonably practicable to minimise movements by road.	Not Applicable
MCoA	Traffic and Transport	D100	The Proponent must maintain emergency vehicle access, in consultation with TfNSW, emergency services and NSW Health, to Westmead Hospital at all times throughout Stage 1 of the CSSI. Measures must be outlined in the **Construction Parking and Access Strategy** required under **Condition D91** above.	Full Compliance
MCoA	Utilities Management	D101	Utilities, services and other infrastructure potentially affected by construction must be identified before works affecting the item, to determine requirements for access to, diversion protection, and / or support. The relevant owner(s) and / or provider(s) of services must be consulted to make suitable arrangements for access to diversion, protection, and / or support of the affected infrastructure as required. The Proponent must ensure that disruption to any service is minimised and be responsible for advising local residents and businesses affected before any planned disruption of service.	Full Compliance
MCoA	Utilities Management	D102	A **Utility Coordination Manager** must be appointed for the duration of work associated with Stage 1 of the CSSI. The role of the **Utility Coordination Manager** must include, but not be limited to: (a) the management and coordination of all utility work associated with the delivery of Stage 1 of the CSSI, to ensure respite is provided to the community; (b) providing advice to the Sydney Metro Place Manager regarding upcoming utility work, including the scope of the work and the responsibility for the work; and (c) investigating complaints received from the Community Complaints Mediator or the Project communication team relating to utility work and providing a response as required.	Not Applicable
MCoA	Urban Design and Visual Amenity	D103	Wayfinding information must be incorporated on temporary hoardings to guide pedestrians around ancillary facilities and enhance their understanding and experience of the locality and space.	Full Compliance
MCoA	Urban Design and Visual Amenity	D104	Nothing in this approval permits advertising on any element of Stage 1 of the CSSI.	Full Compliance

MCoA	Urban Design and Visual Amenity	D105	The Proponent must undertake temporary placemaking initiatives for the benefit of the community, such as commercial “pop up” spaces, information booths, art installations, around the perimeter or in the vicinity of construction sites at Parramatta and Five Dock with the objective of temporarily enhancing visual amenity, providing gathering places in the local area and creating temporary active frontages to construction sites during Stage 1 of the CSSI.	Not Applicable
MCoA	Urban Design and Visual Amenity	D106	The acoustic shed at the Five Dock metro station eastern construction site must be designed and constructed in a manner that minimises visual amenity, solar access and overshadowing impacts to the residential apartments at 110 Great North Road, Five Dock facing the acoustic shed. The potential visual amenity, solar access and overshadowing impacts of the acoustic shed on the affected residential apartments must be assessed in a **Visual Amenity, Solar Access and Overshadowing Report** prepared by the Proponent.	Not Applicable
MCoA	Urban Design and Visual Amenity	D107	The **Visual Amenity, Solar Access and Overshadowing Report** must include: (a) visual amenity impact assessments from the relevant residential apartments to the acoustic shed at the Five Dock metro station eastern construction site; (b) solar access assessments of the relevant residential apartments, with consideration for the relevant development controls in the City of Canada Bay Development Control Plan (Version 4, 21 October 2020) and the Apartment Design Guide; and (c) a consultation plan to detail how potential impacts and mitigation measures will be discussed and negotiated with potentially affected property owners. The Visual Amenity, Solar Access and Overshadowing Report must be provided to the Planning Secretary for approval within (1) month prior to the installation of the acoustic shed at the Five Dock metro station eastern construction site.	Not Applicable
MCoA	Urban Design and Visual Amenity	D108	Where the acoustic shed causes a moderate (or greater) adverse visual amenity impact and / or unreasonable overshadowing and solar access impacts to any of the subject residential apartments, the Proponent must consult with the relevant affected property owners and occupiers to identify appropriate mitigation measures and an agreed implementation program. A copy of agreed	Not Applicable

			implementation programs must be provided to the Planning Secretary for information.	
MCoA	Urban Design and Visual Amenity	D109	Stage 1 of the CSSI must be constructed with the objective of minimising light spill to surrounding properties including from headlights of construction vehicles. All lighting associated with the construction of Stage 1 of the CSSI must be consistent with the requirements of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting* and relevant Australian Standards in the series *AS/NZ 1158 – Lighting for Roads and Public Spaces.* Additionally, mitigation measures must be provided to manage any residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	Full Compliance
MCoA	Urban Design and Visual Amenity	D110	Stage 1 of the CSSI must be constructed in a manner that minimises visual impacts of construction sites including, providing temporary landscaping and vegetative screening, minimising light spill, minimising impacts to identified significant view lines in respect of The Bays metro station construction site and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located, wherever practicable.	Full Compliance
MCoA	Waste	D111	Waste generated during construction and operation must be dealt with in accordance with the following priorities: (a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced; (b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.	Full Compliance except for operation
MCoA	Waste	D112	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of the current EPL for Stage 1 of the CSSI, or be done in accordance with a Resource Recovery Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, as the case may be.	Full Compliance
MCoA	Waste	D113	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery	Full Compliance

			Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, or to any other place that can lawfully accept such waste.	
MCoA	Waste	D114	All waste must be classified in accordance with the EPA's *Waste Classification Guidelines*, with appropriate records and disposal dockets retained for audit purposes.	Full Compliance
MCoA	Water	D115	Work on waterfront land must be carried out in accordance with controlled activity guidelines.	Full Compliance
MCoA	Water	D116	Before undertaking any works and during maintenance or construction activities, erosion and sediment controls must be implemented and maintained to prevent water pollution consistent with LandCom's *Managing Urban Stormwater* series (The Blue Book).	Full Compliance
MCoA	Water	D117	Stage 1 of the CSSI must be designed and constructed so as to maintain the *NSW Water Quality Objectives* (NSW WQO) where they are being achieved as at the date of this approval, and contribute towards achievement of the NSW WQO over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the NSW WQO, in which case those requirements must be complied with.	Not Applicable
MCoA	Water	D118	Unless an EPL is in force in respect to Stage 1 of the CSSI and that licence specifies alternative criteria, discharges from wastewater treatment plants to surface waters must not exceed: (a) the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018 (ANZG (2018)) default guideline values for toxicants at the 95 per cent species protection level; (b) for physical and chemical stressors, the guideline values set out in Tables 3.3.2 and 3.3.3 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC/ARMCANZ); and (c) for bio accumulative and persistent toxicants, the ANZG (2018) guidelines values at a minimum of 99 per cent species protection level. Where the ANZG (2018) does not provide a default guideline value for a particular pollutant, the approaches set out in the ANZG (2018) for deriving guideline values, using interim guideline values	Not Applicable

			and/or using other lines of evidence such as international scientific literature or water quality guidelines from other countries, must be used.	
MCoA	Water	D119	If construction stage stormwater discharges are proposed, a **Water Pollution Impact Assessment** will be required to inform licensing consistent with section 45 of the POEO Act. Any such assessment must be prepared in consultation with the EPA and be consistent with the National Water Quality Guidelines, with a level of detail commensurate with the potential water pollution risk.	Not Applicable
MCoA	Water	D120	Drainage feature crossings (permanent and temporary watercourse crossings and stream diversions) and drainage swales and depressions must be carried out in accordance with relevant guidelines and designed by a suitably qualified and experienced person.	Not Applicable
MCoA	Water	D121	Make good provisions for groundwater users must be provided in the event of a material decline in water supply levels, quality or quantity from registered existing bores associated with groundwater changes from construction.	Not Applicable
MCoA	Water	D122	The Proponent must submit a revised **Groundwater Modelling Report** in association with Stage 1 of the CSSI to the Planning Secretary for information before bulk excavation at the relevant construction location. The **Groundwater Modelling Report** must include: (a) for each construction site where excavation will be undertaken, cumulative (additive) impacts from nearby developments, parallel transport projects and nearby excavation associated with the CSSI; (b) predicted incidental groundwater take (dewatering) including cumulative project effects; (c) potential impacts for all latter stages of the CSSI or detail and demonstrate why these later stages of the CSSI will not have lasting impacts to the groundwater system, ongoing groundwater incidental take and groundwater level drawdown effects; (d) actions required after Stage 1 to minimise the risk of inflows (including in the event latter stages of the CSSI are delayed or do not progress) and a strategy for accounting for any water taken beyond the life of the operation of the CSSI; (e) saltwater intrusion modelling analysis, from estuarine and	Not Applicable

			saline groundwater in shale, into The Bays metro station site and other relevant metro station sties; and (f) a schematic of the conceptual hydrogeological model.	

	REMMS Allocation				
Project	Parramatta & Clyde Enabling Works				
Approval Name:	SSI 10038				
Condition Type	**Condition Classification**	**Condition Reference**	**Description**	**Allocation to PC**	**Location***
Location* refers to the stations and acronyms in the EIS Amendment Report, p103					
REMM	Traffic and transport	TT1	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community liaison.	Full Compliance	All
REMM	Traffic and transport	TT2	In the event of a traffic related incident, coordination would be carried out with Transport for NSW, including Transport Coordination and/or the Transport Management Centre's Operations Manager.	Full Compliance	All
REMM	Traffic and transport	TT3	Access to properties for emergency vehicles would be provided at all times.	Full Compliance	All
REMM	Traffic and transport	TT4	Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasions, police presence.	Full Compliance	All
REMM	Traffic and transport	TT5	Additional enhancements for pedestrian, cyclist and motorist safety near the construction sites would be implemented during construction. This would include measures such as: • Assessing the suitability of construction haulage routes through sensitive land use areas with respect to road safety • Deployment of speed awareness signs in conjunction with variable message signs near construction sites to provide alerts to drivers • Providing community education and awareness	Full Compliance, except that Sydney Metro will assess the suitability of construction haulage routes through sensitive land use areas with respect to road safety. Sydney Metro will make resources available to the Principal Contractor in relation to the Be Truck Aware program.	All

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			about sharing the road safely with heavy vehicles • Specific construction driver training to understand route constraints, safety and environmental considerations such as sharing the road safely with other road users and limiting the use of compression braking • Requiring technology and equipment to improve vehicle safety, eliminate heavy vehicle blind spots, and monitor vehicle location and driver behaviour.		
REMM	Traffic and transport	TT6	All trucks would enter and exit construction sites in a forward direction, where feasible and reasonable.	Full Compliance	All
REMM	Traffic and transport	TT7	Construction site traffic would be managed to minimise movements during peak periods.	Full Compliance	All
REMM	Traffic and transport	TT8	Construction site traffic immediately around construction sites would be managed to minimise vehicle movements through school zones during pick up and drop off times.	Full Compliance	WMS, PMS, BNS, FDS
REMM	Traffic and transport	TT9	Opportunities to minimise impacts at the Alexandra Avenue/Bridge Road intersection would be determined in consultation with Transport for NSW.	Not Applicable	WMS
REMM	Traffic and transport	TT10	Where existing parking is removed to facilitate construction activities, consultation would occur with the relevant local council to investigate opportunities to provide alternative parking facilities.	Full Compliance	All
REMM	Traffic and transport	TT11	Construction sites would be managed to minimise the number of construction workers parking on surrounding streets by: • Encouraging workers to use public or active transport • Encouraging ride sharing • Provision of alternative parking locations and shuttle bus transfers where feasible and reasonable.	Full Compliance	All
REMM	Traffic and transport	TT12	Any temporary closure or relocation of bus stops and kiss-and-ride facilities would be carried out in consultation with Transport for NSW including Transport Coordination (for relevant locations), the relevant local council and bus operators. Wayfinding and customer information would be provided to notify	Not Applicable	WMS, NSMS, BNS, TBS

			customers of relocated bus stops.		
REMM	Traffic and transport	TT13	Opportunities to improve bus priority along the temporary detour at Westmead metro station construction site would be investigated during detailed design.	Not Applicable	WMS
REMM	Traffic and transport	TT14	Pedestrian and cyclist access would be maintained during the temporary closure of Alexandra Avenue. Wayfinding and customer information would be provided to guide pedestrians and cyclists to alternative routes.	Not Applicable	WMS
REMM	Traffic and transport	TT15	Where existing cyclist facilities (e.g. bicycle parking) would be temporarily unavailable to facilitate construction activities, suitable replacement facilities would be provided for this duration.	Full Compliance	WMS, PMS
REMM	Traffic and transport	TT16	Any relocation of taxi ranks would be carried out in consultation with Transport for NSW, the relevant local council and taxi operators. Wayfinding and customer information would be provided to notify customers of relocated taxi ranks.	Not Applicable	SOPMS
REMM	Traffic and transport	TT17	During major special events, impacts to the transport and traffic network would be reduced by (as necessary): • Minimising the level of construction activity, and if necessary, ceasing all construction activity • Maintaining appropriate access to all areas within the event precinct • Erection of hoardings, site fencing and gates at key locations within the construction site boundary to permit pedestrian movements adjacent to the construction site and separate pedestrians from construction vehicles • Scheduling deliveries to the construction site outside of event periods. For special events that require specific traffic measures, those measures would be developed in consultation with Transport for NSW, including	Full Compliance	PMS, CSMF, SOPMS

			Transport Coordination (for relevant locations) and the organisers of the event.		
REMM	Traffic and transport	TT18	Access to existing properties and buildings would be maintained in consultation with property owners.	Full Compliance	All
REMM	Traffic and transport	TT19	Traffic control measures required at the Parramatta metro station construction site access on George Street would be determined in consultation with Transport for NSW.	Full Compliance	PMS
REMM	Traffic and transport	TT20	Adjustments to site access arrangements and the local road network would be explored during detailed design to minimise conflicts with heavy vehicle movements.	Not Applicable	NSMS, FDS
REMM	Traffic and transport	TT21	Construction site traffic generated at the Five Dock Station construction site would be managed to avoid or minimise travel during the evening peak period.	Not Applicable	FDS
REMM	Traffic and transport	TT22	Construction site traffic generated at the Five Dock Station construction site would be managed to minimise movements during church service times at St Albans Anglican Church.	Not Applicable	FDS
REMM	Traffic and transport	TT23	Opportunities to provide vehicle access and egress directly to Parramatta Road and minimise the use of Loftus Street at the Burwood North Station construction site would be explored during detailed design.	Not Applicable	BNS
REMM	Traffic and transport	TT24	Co-ordination of traffic management arrangements between major construction projects would occur in consultation with Transport for NSW including Transport Coordination.	Not Applicable	TBS
REMM	Traffic and transport	TT25	If barging of spoil is progressed, a Marine Traffic Management Plan would be developed by the construction contractor. The plan would outline the general operational plan for the movement and management of barging vessels in accordance with TT27, TT28 and TT29. The Plan would also outline the process for consultation in accordance with TT26.	Not Applicable	TBS
REMM	Traffic and transport	TT26	If barging of spoil is progressed, clubs which operate watercraft would be consulted about potential barging and potential changes to courses for watercraft such	Not Applicable	TBS

			as yachts before the start of barging.		
REMM	Traffic and transport	TT27	If barging of spoil is progressed, barging vessel movements would be scheduled to avoid times and locations of high recreational marine traffic where feasible and reasonable in consultation with Transport for NSW.	Not Applicable	TBS
REMM	Traffic and transport	TT28	If barging of spoil is progressed, barging vessel movements would be managed to not interfere with port operations or the navigation of seagoing ships and ferries, unless prior approval has been obtained from the Harbour Master.	Not Applicable	TBS
REMM	Traffic and transport	TT29	If barging of spoil is progressed, barging vessel movements would not be undertaken during special events when navigation restrictions are in place.	Not Applicable	TBS
REMM	Construction and operation of vehicular traffic	TT30	The design of the temporary traffic arrangements at Westmead metro station construction site would consider construction traffic, alternate bus routes and bus stops, local vehicular traffic and pedestrian safety. The design of the temporary traffic arrangements would be undertaken in consultation with Transport for NSW, Schools Infrastructure, Heath Infrastructure, relevant local councils and bus operators.	Not Applicable	WMS
REMM	Potential parking impacts as a result of partial and full road closures required to facilitate construction works	TT31	Where existing parking is removed to facilitate construction activities for The Bays Station construction site power supply route, consultation would occur with the relevant local council, local businesses, the community and schools (where appropriate) to investigate opportunities to provide alternative parking facilities.	Not Applicable	TBS
REMM	Potential access and parking impacts as a result of partial and full road closures	TT32	Provision of assistance to carry shopping, luggage and other heavy or large goods between the alternative parking area at Ausgrid Rozelle sub-transmission substation (subject to final agreement between Sydney Metro and Ausgrid) and residences during times when access is limited.	Not Applicable	TBS

REMM	Noise and vibration	NV01	Further engagement and consultation would be carried out with: • The affected communities to understand their preferences for mitigation and management measures. • 'Other sensitive' receivers such as schools, medical facilities or places of worship to understand periods in which they are more sensitive to impacts. Based on this consultation, appropriate mitigation and management options would be considered and implemented where feasible and reasonable to minimise the impacts.	Full Compliance	All
REMM	Noise and vibration	NV02	Alternative construction methodologies and measures that minimise noise and vibration levels during noise intensive works would be investigated and implemented where feasible and reasonable. This would include consideration of: • The use of hydraulic concrete shears in lieu of hammers/rock breakers • Sequencing works to shield noise sensitive receivers by retaining building wall elements • Locating demolition load out areas away from the nearby noise sensitive receivers • Providing respite periods for noise intensive works • Minimising structural-borne noise to adjacent buildings including separating the structural connection prior to demolition through saw-cutting and propping, using hand held splitters and pulverisers or hand demolition • Installing sound barrier screening to scaffolding facing noise sensitive neighbours • Using portable noise barriers around particularly noisy equipment, such as concrete saws • Modifying demolition works sequencing / hours to minimise impacts during peak pedestrian times and / or adjoining neighbour outdoor activity periods.	Full Compliance	All

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REMM	Noise and vibration	NV03	Appropriate respite would be provided to affected receivers in accordance with the Sydney Metro Construction Noise and Vibration Standard. This would include consideration of impacts from Stage 1 utility and power supply works when determining appropriate respite periods for affected receivers. When determining appropriate respite, the need to efficiently undertake construction would be balanced against the communities' preferred noise and vibration management approach.	Full Compliance	All
REMM	Noise and vibration	NV04	The use of noise intensive equipment at construction sites with 'moderate' and 'high' out-of-hours noise management level exceedances would be scheduled for standard construction hours, where feasible and reasonable. Where this is not feasible and reasonable, the works would be undertaken as early as possible in each work shift.	Full Compliance	All
REMM	Noise and vibration	NV05	Air brake silencers would be used on heavy vehicles that access construction sites multiple times per night or over multiple nights.	Full Compliance	All
REMM	Noise and vibration	NV06	Perimeter site hoarding would be designed with consideration of on-site heavy vehicle movements with the aim of minimising sleep disturbance impacts.	Full Compliance	All
REMM	Noise and vibration	NV07	Long term construction site support equipment and machinery would be low noise emitting and suitable for use in residential areas, where feasible and reasonable. Examples include: • Low noise water pumps for use in water treatment facilities • Low noise generators and compressors • Low noise air conditioner units for use of amenities buildings.	Full Compliance	All

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REMM	Noise and vibration	NV08	For all sites where acoustic sheds are proposed, the sheds would be designed and constructed to minimise noise emissions. This would likely include the following considerations: • All significant noise producing equipment that would be used during the night-time would be inside the shed, where feasible and reasonable • Noise generating ventilation systems such as compressors, scrubbers, etc, would also be inside the shed and external air intake/discharge ports would be appropriately acoustically treated • The door of the acoustic shed would be kept closed during the night-time period, where feasible and reasonable. Where night-time vehicle access is required, the doors would be designed and constructed to minimise noise breakout.	Not Applicable	WMS, SOPMS, BNS, FDS, TBS
REMM	Noise and vibration	NV09	Feasible and reasonable measures would be implemented to minimise ground-borne noise where exceedances are predicted. This may require implementation of less ground-borne noise and less vibration intensive alternative construction methodologies.	Full Compliance	All
REMM	Noise and vibration	NV10	The proximity of cross passages to nearby receivers and the corresponding construction ground-borne noise and vibration impacts during the excavation works would be considered when determining locations. Relocation of cross passages to be further away from sensitive receivers to mitigate potential construction impacts would be considered, where feasible and reasonable.	Not Applicable	Metro rail tunnels
REMM	Noise and vibration	NV11	An activity specific Construction Noise and Vibration Impact Statement (in accordance with the requirements of the Construction Noise and Vibration Standard) would be developed for rockbreaking in the tunnel and at cross passages, specifically addressing the activity where it is required between 10pm-7am.	Not Applicable	Metro rail tunnels

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REMM	Noise and vibration	NV12	Blasting would be planned during hours that would cause the least disruption and disturbance to the nearest receivers. Notification protocols prior to blasting for the nearest sensitive receivers would be established.	Not Applicable	WMS, PMS, SSF, SOPMS, NSMS, BMS, FDS, TBS
REMM	Noise and vibration	NV13	Vibration and overpressure measurements would be completed at the start of any blasting activities to confirm that vibration levels are within the blasting criteria.	Not Applicable	WMS, PMS, SSF, SOPMS, NSMS, BMS, FDS, TBS
REMM	Noise and vibration	NV14	Further assessment of construction traffic would be completed during detailed design, including consideration of the potential for exceedances of the NSW Road Noise Policy base criteria (where greater than 2 dB increases are predicted). The potential impacts would be managed using the following approaches, where feasible and reasonable: • On-site spoil storage capacity would be maximised to reduce the need for truck movements during sensitive times • Vehicle movements would be redirected away from sensitive receiver areas and scheduled during less sensitive times • The speed of vehicles would be limited and the use of engine compression brakes would be avoided • Heavy vehicles would not be permitted to idle near sensitive receivers.	Full Compliance	All
REMM	Noise and vibration	NV15	Consultation with the owners and operators of the horse stables near the Clyde stabling and maintenance facility construction site would be carried out so that potential impacts to horses are appropriately managed.	Full Compliance	CSMF
REMM	Noise and vibration	NV16	Where vibration levels are predicted to exceed the screening criteria, a more detailed assessment of the structure (in consultation with a structural engineer) and vibration monitoring would be carried out to ensure vibration levels remain below appropriate	Full Compliance	All

			limits for that structure. For heritage items, the more detailed assessment would specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed.		
REMM	Noise and vibration	NV17	Condition surveys of buildings and structures near to the tunnel and excavations would be undertaken prior to the commencement of excavation at each site, where appropriate. For heritage buildings and structures the surveys would consider the heritage values of the structure in consultation with a heritage specialist.	Full Compliance	All
REMM	Noise and vibration	NV18	The likelihood of cumulative construction noise impacts would be reviewed during detailed design when detailed construction schedules are available. Co-ordination would occur between potentially interacting projects to minimise concurrent or consecutive works in the same areas, where possible. Specific mitigation strategies would be developed to manage impacts. Depending on the nature of the impact, this could involve adjustments to construction program or activities of Sydney Metro West or of other construction projects.	Full Compliance, except Sydney Metro will establish and lead a forum to co-ordinate and consult with stakeholders. The Principal Contractor would participate in this forum.	All
REMM	Noise and vibration	NV19	Further assessment of operational road traffic noise mitigation would be undertaken for receivers identified as being eligible for consideration of treatment. The mitigation would likely include at-property treatment. Receivers that are identified as requiring at-receiver noise mitigation would be identified and, where possible, offered treatment prior to the start of construction works which have the potential to affect them.	Not Applicable	WMS

REMM	Non-Aboriginal heritage	NAH1	Archival recording and reporting of the following heritage items would be carried out in accordance with the NSW Heritage Office's How to Prepare Archival Records of Heritage Items (1998), and Photographic Recording of Heritage Items Using Film or Digital Capture (2006): • Shops (and potential archaeological site)(Parramatta LEP Item No. I703) • Kia Ora (and potential archaeological site) (Parramatta LEP Item No. I716) • RTA Depot (Parramatta LEP Item No. I576) • State Abattoirs (SEPP Listing No. A) • White Bay Power Station (SHR Listing No. 01015)	The Principal Contractor is responsible for carrying out the physical salvage and storage of heritage items in accordance with any relevant requirements of the NSW Heritage Office's How to Prepare Archival Records of Heritage Items (1998), and Photographic Recording of Heritage Items Using Film or Digital Capture (2006)	PMS, CSMF, SOPMS, TBS
REMM	Non-Aboriginal heritage	NAH2	A method for the demolition of existing buildings and/or structures at specified construction sites would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.	Full Compliance	PMS, CSMF, SOPMS, TBS
REMM	Non-Aboriginal heritage	NAH3	Prior to commencement of demolition of heritage elements at White Bay Power Station within The Bays construction site, significant heritage fabric would be identified for salvage and reuse opportunities for salvaged fabric considered.	Not Applicable	TBS
REMM	Non-Aboriginal heritage	NAH4	The policies of the White Bay Power Station Conservation Management Plan would be considered in regard to visual impacts of the Stage 1 works, particularly the acoustic shed (or other acoustic measures) and any temporary structures. Significant view lines would be retained during Stage 1 works.	Not Applicable	TBS
REMM	Non-Aboriginal heritage	NAH5	Where heritage items, including significant archaeology are impacted by Stage 1 works, consideration would be given to their inclusion in the Heritage Interpretation Plan for future stages.	Not Applicable, except that the Principal contractor will provide Sydney Metro with any information it requires to inform the development of the Heritage Interpretation Plan.	All

REMM	Non-Aboriginal heritage	NAH6	The archaeological research design would be implemented. Significant archaeological findings would be considered for inclusion in heritage implementation (as per NAHS) for the project and be developed in consultation with the relevant local council.	Full Compliance, except that Sydney Metro will make any considerations in relation to the inclusion of significant archaeological findings in heritage implementation, and undertake any consultation with local council	All
REMM	Non-Aboriginal heritage	NAH7	An Archaeological Excavation Report would be prepared by the Excavation Director and be provided to the NSW Heritage Division within two years of the completion of archaeological excavations specified in the archaeological research design(s).	Full Compliance, except that Sydney Metro will make all submissions to the NSW Heritage Division	All
REMM	Non-Aboriginal heritage	NAH8	In the event that State significant archaeology associated with early convict occupation is located at Parramatta metro station: • In situ conservation would be considered. If in situ conservation is not feasible and reasonable, a strategy to mitigate impacts would be prepared in consultation with the NSW Heritage Council (or delegate) • An Archaeological Method Statement would be prepared in consultation with the NSW Heritage Council (or delegate) for management of the archaeological remains, whether for conservation or archaeological investigation and recording • An accessible publication would be prepared within two years of archaeological excavations to document the archaeological investigations • Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities.	Full Compliance, except that Sydney Metro would consider in-situ conservation and facilitate any consultation with NSW Heritage Council with the Principal Contractors participation. Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected.	PMS
REMM	Non-Aboriginal heritage	NAH9	Condition deleted	Not Applicable	N/A

REMM	Non-Aboriginal heritage	NAH10	An assessment of significance would be prepared in consultation with the relevant local council for the following potential unlisted heritage items: • 220 Church Street, Parramatta • 48 Macquarie Street, Parramatta • Pine Inn at 19 Parramatta Road, Concord • 338-340 Parramatta Road, Burwood • Former warehouse shed, Glebe Island. If the assessment of significance confirms these items have local heritage value, an archival recording would be undertaken.	Full Compliance in relation to: • 220 Church Street, Parramatta • 48 Macquarie Street, Parramatta Sydney Metro would undertake Archival recordings except any physical salvage and storage of any heritage items.	PMS, BNS, TBS
REMM	Aboriginal heritage	AH1	Aboriginal stakeholder consultation would be carried out in accordance with the Heritage NSW, Department of Premier and Cabinet's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).	Full Compliance, except that Sydney Metro will facilitate consultation between Principal Contractors and Registered Aboriginal Parties	All
REMM	Aboriginal heritage	AH2	Archaeological test excavation (and salvage when required) would be carried out where intact natural profiles with the potential to contain significant archaeological deposits are encountered at the specified construction sites and the Parramatta power supply route. Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report.	Full Compliance, except in relation to the Parramatta Power Supply Route.	PMS, CSMF, TBS and PSR
REMM	Aboriginal heritage	AH3	If Aboriginal archaeological remains are recovered during Stage 1, results would be incorporated into Aboriginal heritage interpretation for the Concept in consultation with registered Aboriginal parties.	The Principal Contractor will provide Sydney Metro with any information it requires to inform Aboriginal Heritage Interpretation.	All
REMM	Aboriginal heritage	AH4	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Sydney Metro Exhumation Management Plan would be implemented.	Full Compliance	All

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REMM	Property and land use	LU1	Except where required for subsequent construction activities associated with future stages of the Concept, temporary use areas for construction purposes would be stabilised and appropriately rehabilitated as soon as feasible and reasonable following completion of construction. This would be carried out in consultation with the relevant landowner.	Full Compliance. Sydney Metro will assist in identifying the relevant areas.	All
REMM	Landscape and visual amenity	LV1	Where feasible and reasonable, the elements within construction sites would be located to minimise visual impacts (for example storing materials and machinery behind fencing).	Full Compliance	All
REMM	Landscape and visual amenity	LV2	The design and maintenance of construction site hoardings would aim to minimise visual amenity and landscape character impact.	Full Compliance, except that Sydney Metro will provide graphical designs for Hording to the Principal Contractor. The Principal Contractor will provide Sydney Metro any information it needs to provide the graphical designs.	All
REMM	Landscape and visual amenity	LV3	Graffiti would be removed promptly from hoardings and any other aspects of construction sites.	Full Compliance	All
REMM	Landscape and visual amenity	LV4	All structures (including acoustic sheds or other acoustic measures, site offices and workshop sheds) would be finished in a colour which aims to minimise their visual impact, if visible from areas external to the construction site. This finish is to be applied to all visible fixtures and fittings (including exposed downpipes).	Full Compliance	WMS, PMS, SOPMS, SNMS, BNS, FDS
REMM	Landscape and visual amenity	LV5	Lighting of construction sites would be orientated to minimise glare and light spill impacts on adjacent receivers.	Full Compliance	All

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REMM	Landscape and visual amenity	LV6	Construction site hoardings would be designed in accordance with Sydney Metro Brand Design Guidelines and opportunities for public art on hoardings would be considered in high pedestrian locations.	Full Compliance, except Sydney Metro will provide the public art to be adopted on temporary hoarding in digital format.	All
REMM	Landscape and visual amenity	LV7	Works would be coordinated with the Department of Planning, Industry and Environment to manage the potential impact of construction on sporting events in other areas of Sydney Olympic Park.	Not Applicable	SOPMS
REMM	Landscape and visual amenity	LV8	Works would be coordinated with City of Canada Bay Council to manage the potential impact of construction on sporting events at Concord Oval.	Not Applicable	BNS
REMM	Landscape and visual amenity	LV9	Where feasible and reasonable the location and height of the acoustic shed at the Five Dock Station (if required) would be designed to minimise overshadowing of Fred Kelly Place between 10am and 3pm in mid-winter.	Not Applicable	FDS
REMM	Landscape and visual amenity	LV10	Opportunities to provide temporary activation in the vicinity of the Five Dock Station western construction site during construction would be explored in consultation with the City of Canada Bay Council.	Not Applicable	FDS
REMM	Landscape and visual amenity	LV11	Opportunities for the retention and protection of existing street trees and trees within the site would be identified during detailed construction planning.	Full Compliance	All
REMM	Landscape and visual amenity	LV12	Existing trees to be retained would be protected prior to the commencement of construction in accordance with Australian Standard AS4970 the Australian Standard for Protection of Trees on Development Sites and Adjoining Properties.	Full Compliance	All
REMM	Landscape and visual amenity	LV13	Trees removed by Stage 1 would be replaced to achieve no net loss to tree numbers and/or canopy in proximity to the site as a minimum in the long term (and part of future stages of Metro West).	The Principal Contractor must provide Sydney Metro with information detailing the number of tree's removed, the location of each tree removed and each removed tree's canopy area.	All

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REMM	Landscape and visual amenity	LV14	Opportunities would be investigated with the relevant local council to provide plantings in proximity to the impacted areas prior to construction commencing where feasible and reasonable.	Full Compliance	All
REMM	Business impacts	BI1	Small business owner engagement would be undertaken to assist small business owners adversely impacted by construction.	Full Compliance	All
REMM	Business impacts	BI2	Planned power and utility interruptions would be scheduled to before or after typical business hours where feasible and reasonable. Prior notice would be provided to all affected business owners of the interruptions.	Full Compliance	All
REMM	Business impacts	BI3	Hoarding and screening impacting the visibility of business would be minimised where feasible and reasonable, without compromising public safety or the effective management of construction airborne noise. Clear pathways and signage would be implemented around construction sites to maximise visibility of retained businesses, including sufficient lighting along pedestrian footpaths during night-time where relevant.	Full Compliance	All
REMM	Social impacts	S1	Consultation would be carried out with managers of social infrastructure located near construction sites about the timing and duration of construction works and management of potential impacts, with the aim of minimising potential disruptions to the use of the social infrastructure from construction activity.	Full Compliance	WMS, PMS, CSMF, SSF, SOPMS, NSMS, BNS, FDS, TBS
REMM	Social impacts	S2	Engagement would be carried out with Parramatta City Council to identify alternative locations for the Parramatta Artist Studios to provide opportunities for facilitating local creative and cultural activities.	Full Compliance	PMS
REMM	Social impacts	S3	A Community Benefit Plan would be developed to guide the development of community benefit initiatives (by Principal Contractors) during construction of Stage 1 to make a positive contribution to the potentially affected community. The key objectives of the plan would include: • Identify opportunities to create environmental and	Not Applicable	WMS, PMS, SOPMS, NSMS, BNS, FDS, TBS

			community benefits and provide positive social outcomes • Respond to community priorities and needs in the locality of each relevant construction site.		
REMM	Social impacts	S4	In addition to mitigation measure TT17, consultation would be carried out with festival and event organisers in proximity to construction sites to mitigate potential impacts on the operation of the festival or event.	Full Compliance	PMS, FDS
REMM	Social impacts	S5	In addition to mitigation measure LV6, consultation would be carried out with stakeholders to identify opportunities for public art to reflect community values, culture and identity of the local community.	Not Applicable	WMS, PMS, SOPMS, NSMS, BNS, FDS
REMM	Social impacts	S6	In addition to mitigation measure LV10, potential temporary activation in the vicinity of the Five Dock Station western construction site would include opportunities to provide spaces and places for the community to gather and meet each other, culture and identity.	Not Applicable	FDS
REMM	Social impacts	S7	In addition to mitigation measure S1, ongoing engagement would be undertaken with NSW Department of Education to continue to investigate feasible and reasonable mitigation measures related to construction traffic, pedestrian safety, construction noise and vibration, and air quality.	Full Compliance, except Sydney Metro would facilitate any consultation with NSW Department of Education.	WMS, PMS, BNS, FDS
REMM	Groundwater and ground movement	GW1	Site inspection would be carried out on private domestic supply bore GW305646 to confirm the current viability of that bore. If found to be viable, and predicted to be significantly impacted, make good measures would be implemented if a loss of yield were to occur.	Not Applicable	BNS

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REMM	Groundwater and ground movement	GW2	A review of additional geotechnical and hydrogeology data would be undertaken to confirm the geological and groundwater conditions and determine, based on these local conditions, whether predicted groundwater drawdown from Stage 1 is likely to occur in the vicinity of these creeks. Where the additional data review shows local conditions and predicted groundwater drawdown are likely to cause surface water/groundwater interaction, then additional site investigations (in accordance with GW3) would be undertaken for those creeks or surface water bodies.	Not Applicable	WMS, CSMF, SOPMS, NSMS
REMM	Groundwater and ground movement	GW3	Additional site investigations would be carried out at creeks or surface water bodies where the additional data review in GW2 shows there is a likely surface water/groundwater interaction. This would involve baseline monitoring of creek flows (streamflow gauging) prior to construction, and baseflow streamflow analysis to confirm the existing groundwater baseflow contribution to streamflow for each creek. Where a significant reduction in baseflow is predicted due to Stage 1, design responses would be implemented at station and shaft excavations to reduce potential baseflow loss.	Not Applicable	WMS, CSMF, SOPMS, NSMS
REMM	Groundwater and ground movement	GW4	Monitoring of groundwater levels and quality at the site area would occur before, during and after construction. This would also include monitoring of potential contaminants of concern. Groundwater level data would be regularly reviewed during and after construction by a qualified hydrogeologist. Groundwater monitoring data would be provided to the NSW Environment Protection Authority and Department of Planning, Industry, Environment, Water and the Natural Resources Access Regulator for information prior to commencement of construction.	Not Applicable	WMS, PMS, CSMF, SSF, SOPMS, NSMS, BNS, FDS, TBS

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REMM	Groundwater and ground movement	GW5	A detailed geotechnical and hydrogeological model for Stage 1 would be developed and progressively updated during design and construction. The detailed geotechnical and hydrogeological model would include: • Assessment of the potential for damage to structures, services, basements and other sub-surface elements through settlement or strain • Predicted groundwater inflows, groundwater take and changes to groundwater levels, including at nearby water supply works. Where building damage risk is rated as moderate or higher (as per the CIRIA 1996 risk-based criteria), a structural assessment of the affected buildings/structures would be carried out and specific measures implemented to address the risk of damage. Where a significant exceedance of target changes to groundwater levels are predicted at surrounding land uses and nearby water supply works, an appropriate groundwater monitoring program would be developed and implemented. The program would aim to confirm no adverse impacts on groundwater levels or to appropriately manage any impacts. Monitoring at any specific location would be subject to the status of the water supply work and agreement with the landowner.	Not Applicable	Where required
REMM	Groundwater and ground movement	GW6	Condition surveys of buildings and structures in the vicinity of the tunnel and excavations would be carried out prior to the commencement of excavation at each site.	Not Applicable	Where required
REMM	Soils and surface water quality	SSWQ1	Prior to ground disturbance in areas of potential acid sulfate soil occurrence, testing would be carried out to determine the presence of actual and/or potential acid sulfate soils. If acid sulfate soils are encountered, they would be managed in accordance with the Acid Sulfate Soil Manual (ASSMAC, 1998)	Not Applicable	PMS, CSMF, TBS

REMM	Soils and surface water quality	SSWQ2	Prior to ground disturbance in high probability salinity areas, testing would be carried out to determine the presence of saline soils. If salinity is encountered, excavated soils would not be reused or it would be managed in accordance with Book 4 Dryland Salinity: Productive Use of Saline Land and Water (NSW DECC 2008). Erosion controls would be implemented in accordance with Blue Book (Landcom, 2004).	Not Applicable	All
REMM	Soils and surface water quality	SSWQ3	Erosion and sediment measures would be implemented at all construction sites in accordance with the principles and requirements in Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom 2004) and Volume 2D (NSW Department of Environment, Climate Change and Water 2008), commonly referred to as the 'Blue Book'. Additionally, any water collected from construction sites would be appropriately treated and discharged to avoid any potential contamination or local stormwater impacts. Temporary sediment basins would be designed in accordance with Managing Urban Stormwater: Soils and Construction and Managing Urban Stormwater, Volume 2D: Main Road Construction (DECC, 2008).	Full Compliance	All
REMM	Soils and surface water quality	SSWQ4	Works in waterways and surrounding low lying areas would be carried out in accordance with progressive erosion and sediment control plans.	Full Compliance	CSMF
REMM	Soils and surface water quality	SSWQ5	The water treatment plants would be designed so that wastewater is treated to a level that is compliant with the ANZECC/ARMCANZ (2000) and ANZG (2018) and draft ANZG (2020) default guidelines for 95 per cent species protection and 99 per cent species protection and 99 per cent species protection for toxicants that bioaccumulate unless other discharge criteria are agreed with relevant authorities.	Not Applicable	All

REMM	Soils and surface water quality	SSWQ6	A surface water monitoring program would be implemented to observe any changes in surface water quality that may be attributable to Stage 1 and inform appropriate management responses. The program would be developed in consultation with the EPA and relevant Councils. The program would consider monitoring being undertaken as part of other infrastructure projects such as the WestConnex M4 East monitoring. Monitoring would occur during pre-construction and during construction at all waterways with the potential to be impacted. Monitoring sites could be located upstream and downstream of the potential discharges and would include sampling for key indicators of concern.	Not Applicable	All
REMM	Soils and surface water quality	SSWQ7	Further design development would confirm the local stormwater system capacity to receive construction water treatment plant inflows. In the event there is a stormwater infrastructure capacity issue with existing infrastructure, mitigation measures such as storage detention to control water outflow during wet weather events would be implemented.	Not Applicable	All
REMM	Contamination	C1	For sites where potential contamination risk is moderate, high or very high, a further review of data would be performed. Where the additional data review provides sufficient information to confirm that contamination is likely to have a very low or low risk, the site would then be managed in accordance with the Soil and Water Management Plan. This would typically occur where there is minor, isolated contamination that can be readily remediated through standard construction practices such as excavation and off-site disposal.	Full Compliance except very low or low risk contamination would be managed in accordance with the CEMP	All

REMM	Contamination	C2	Where data from the additional data review (mitigation measure C1) is insufficient to understand the risk of contamination, a Detailed Site Investigation would be carried out in accordance with the National Environment Protection Measure (2013) and other guidelines made or endorsed by the NSW EPA. The sites requiring a Detailed Site Investigation would be confirmed following the additional data review (mitigation measure C1), however on the basis of the Stage 1 assessment, it is anticipated that Detailed Site Investigations would be required at the specified application locations.	Full Compliance	CSMF, SSF, SOPMS, TBS
REMM	Contamination	C3	Where data from the additional data review (mitigation measure C1) or the Detailed Site Investigation (mitigation measure C2) confirms that contamination would have a moderate, high or very high risk, a Remediation Action Plan would be developed for the area of the construction footprint. Each Remediation Action Plan would detail the remediation works required to mitigate risks from contamination throughout and following completion of construction. The Remediation Action Plan would be prepared in accordance with relevant NSW EPA guidelines and where applicable, detail remediation methodologies in accordance with Australian Standards and other relevant government guidelines and codes of practice. Remediation would be performed as an integrated component of construction and to a standard commensurate with the proposed end use of the land. The sites requiring Remediation Action Plans and remediation would be confirmed following the additional data review (mitigation measure C1) and Detailed Site Investigation (mitigation measure C2), however on the basis of the Stage 1 assessment, it is anticipated that Remediation Action Plans and remediation could be required at the specified	Full Compliance	CSMF, SSF, SOPMS, TBS

			application locations.		
REMM	Contamination	C4	Where contamination is highly complex, such as significant groundwater contamination; contamination associated with vapour; contamination that requires specialised remediation techniques; or contamination that requires ongoing active management during and beyond construction, an accredited Site Auditor would review and approve the Remediation Action Plan, and would develop a Site Audit Statement and Site Audit Report upon completion of remediation. The sites requiring Site Audit Statements would be confirmed following the preparation of Remediation Action Plans (mitigation measure C3), however on the basis of the Stage 1 assessment, it is anticipated that Site Audit Statements would be required at the specified application locations.	Full Compliance	CSMF, SOPMS, TBS, and as applicable
REMM	Contamination	C5	Ongoing management and monitoring measures would be documented in an appropriate form and implemented for any areas where minor, residual contamination remains following construction.	Full Compliance	As applicable
REMM	Hydrology and flooding	HF1	Detailed construction planning would consider flood risk at construction sites. This would include: • Identification of measures to not worsen flood impacts on the community and on other property and infrastructure during construction up to and including the one per cent AEP flood event • Provide flood-proofing to excavations at risk of flooding or coastal inundation during construction, where feasible and reasonable, such as raised entry into shafts and/or pump-out facilities to minimise ingress of floodwaters into shafts and the dive structure • Review of site layout and staging of construction works to avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required. This includes design of site hoardings to minimise disruption to flow paths (if possible). Not worsen is defined as:	Not Applicable	PMS, CSMF, SSF, NSMS, TBS

			• A maximum increase in flood levels of 50mm in a one per cent AEP flood event • A maximum increase in time of inundation on one hour in a one per cent AEP flood event • No increase in potential soil erosion and scouring from any increase in flow velocity in a one per cent AEP flood event.		
REMM	Hydrology and flooding	HF2	Condition deleted	Not Applicable	N/A
REMM	Hydrology and flooding	HF3	Further design refinement at the Clyde stabling and maintenance facility construction site would occur during detailed design to mitigate the identified potential impacts including: • The increases in flood levels of up to 0.03 metres in Duck Creek and adjacent properties in the one per cent AEP flood event • Increases in flow velocities and the potential increased risk of scour at the proposed creek crossings and in the downstream channels • The potential flooding impacts from filled features	Not Applicable	CSMF
REMM	Hydrology and flooding	HF4	Drainage at construction sites would be designed, where feasible and reasonable, to mitigate potential alterations to local runoff conditions due to construction sites.	Full Compliance	All
REMM	Hydrology and flooding	HF5	Detailed construction planning for The Bays Station construction would aim to minimise changes to existing levels in relation to potential impacts on flood behaviour, along the north-western side of site adjacent to low-lying property, to minimise reduction in floodplain storage.	Not Applicable	TBS
REMM	Hydrology and flooding	HF6	Consultation would occur with the proponent of the Camellia Town Centre redevelopment to understand potential flood impacts from the redevelopment on Stage 1 and to identify any additional flood protection (if required).	Not Applicable	PMS
REMM	Hydrology and flooding	HF7	Construction planning regarding flooding matters would be carried out in consultation with the NSW State Emergency Service and the relevant local	Not Applicable	PMS, CSMF, TBS

			council.		
REMM	Hydrology and flooding	HF8	Detailed construction planning for The Bays Station construction site would aim to avoid conflicts with the potential construction of flood mitigation works in Robert Street, in consultation with Inner West Council.	Not Applicable	TBS
REMM	Biodiversity	B1	During construction, sufficient flow and fish passage would be maintained similar to current conditions during in-stream works where feasible and reasonable.	Full Compliance	CSMF
REMM	Biodiversity	B2	The A'Becketts Creek and Duck Creek crossings would be designed to: • Provide sufficient fish passage is accordance with Policy and guidelines for fish habitat conservation and management Update 2013 (DPI (Fisheries NSW) 2013) • Incorporate suitable scour protection • Avoid worsening existing flow velocities downstream from the crossing locations • Incorporate a vegetated riparian zone within the realigned open channel sections where feasible and reasonable.	Not Applicable	CSMF
REMM	Biodiversity	B3	Additional investigations and assessment would be completed to confirm the potential for impacts to groundwater dependent ecosystems due to groundwater drawdown, and to identify any required mitigation through design.	Not Applicable	WMS, PMS, CMSF, NSMS, BNS, FDS
REMM	Air quality	AQ1	The following best-practice dust management measures would be implemented during all construction works: • Regularly wet-down exposed and disturbed areas including stockpiles, especially during dry weather • Adjust the intensity of activities based on measured and observed dust levels and weather forecasts • Minimise the amount of materials stockpiled and position stockpiles away from surrounding receivers • Regularly inspect dust emissions and apply	Full Compliance	All

			additional controls as required • Consider all relevant measures listed in the UK IAQM corresponding to the highest level of risk determined around each Stage 1 construction site.		
REMM	Air quality	AQ2	Plant and equipment would be maintained in a proper and efficient manner. Visual inspections of emissions from plant would be carried out as part of pre-acceptance checks.	Full Compliance	All
REMM	Air quality	AQ3	The following best-practice odour management measures would be implemented during relevant construction works: • The extent of opened and disturbed contaminated soil at any given time would be minimised • Temporary coverings or odour suppressing agents would be applied to excavated areas where appropriate • Regular monitoring would be conducted during excavation to verify that no offensive odours are detected beyond the site boundary.	Full Compliance	All
REMM	Spoil, waste management and resource use	WR1	All waste would be assessed, classified, managed, transported and disposed of in accordance with the Waste Classification Guidelines and the Protection of the Environment Operations (Waste) Regulation 2014.	Full Compliance	All
REMM	Spoil, waste management and resource use	WR2	A hazardous material survey would be completed for those buildings and structures suspected of containing hazardous or special waste materials (particularly asbestos) prior to their demolition. If hazardous waste or special waste (e.g. asbestos) is encountered, it would be handled and managed in accordance with relevant legislation, codes of practice and Australian standards.	Full Compliance	All
REMM	Spoil, waste management and resource use	WR3	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Full Compliance	All
REMM	Spoil, waste management and resource use	WR4	Waste streams would be segregated to avoid cross-contamination of materials and maximise reuse and recycling opportunities.	Full Compliance	All

REMM	Reuse on Sydney Metro West sites	WR5	A materials tracking system would be implemented for material transferred between Sydney Metro West sites and to offsite locations such as licensed waste management facilities.	Full Compliance	All
REMM	Hazards	HA1	The method for delivery of explosives would be developed prior to the commencement of blasting (if proposed) in consultation with the Department of Planning, Industry and Environment and be timed to avoid the need for on-site storage.	Not Applicable	All
REMM	Hazards	HA2	Dial before you dig searches and non-destructive digging would be carried out to identify the presence of underground utilities.	Full Compliance	All
REMM	Hazards	HA3	Ongoing consultation would be carried out with utility providers for high pressure gas or petroleum pipelines to identify appropriate construction methodologies to be implemented. Any interaction with high pressure gas or petroleum pipelines would comply with the relevant standards, including AS 2885 Pipelines – Gas and Liquid Petroleum.	Full Compliance	All
REMM	Sustainability and climate change	SCC1	Sustainability initiatives would be incorporated into the detailed design and construction to support the achievement of the Sydney Metro West sustainability objectives.	Full Compliance	All
REMM	Sustainability and climate change	SCC2	Best practice level of performance would be achieved using market leading sustainability rating tools during design and construction.	Not Applicable	All
REMM	Sustainability and climate change	SCC3	Climate change risk treatments would be confirmed and incorporated into the detailed design.	Not Applicable	All
REMM	Sustainability and climate change	SCC4	An iterative process of greenhouse gas assessments and design refinements would be carried out during detailed design and construction to identify opportunities to minimise greenhouse gas emissions. Performance would be measured in terms of a percentage reduction in greenhouse gas emissions from a baseline inventory calculated at the detailed design stage.	Full Compliance	All
REMM	Sustainability and climate change	SCC5	25 per cent of the greenhouse gas emissions associated with consumption of electricity during	Full Compliance	All

			construction would be offset.		
REMM	Occurrence of cumulative impacts	CI1	Co-ordination and consultation with the following stakeholders would occur where required to manage the interface of projects under construction at the same time: • Other parts of Transport for NSW including Transport Coordination • Department of Planning, Industry and Environment • Sydney Trains • NSW Trains • Sydney Buses • Sydney Water • Port Authority of NSW • Sydney Motorways Corporation • Emergency service providers • Utility providers • Construction contractors. Co-ordination and consultation with these stakeholders would include: • Provision of regular updates to the detailed construction program, construction sites and haul routes • Identification of key potential conflict points with other construction projects • Developing mitigation strategies in order to manage conflicts. Depending on the nature of the conflict, this could involve: • Adjustments to the Sydney Metro construction program, work activities or haul routes; or adjustments to the program, activities or haul routes of other construction projects • Co-ordination of traffic management arrangements between projects.	Full Compliance, except Sydney Metro will establish and lead a forum to co-ordinate and consult with stakeholders. The Principal Contractor would participate in this forum.	All

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