ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

PRELIMINARY SITE INVESTIGATION AT 505 WILSON STREET EVELEIGH

TRANSPORT FOR NSW

29 JULY 2022
122040_VAR1
VERSION 1

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

29 July 2022

Transport for NSW
680 George Street
Sydney NSW 2000

Attention: **Demos Avramidis**
Development Manager

Preliminary site investigation at 505 Wilson Street, Eveleigh, NSW

Please find enclosed a copy of our report entitled as above. Thank you for the opportunity to undertake this work.

Should you have any queries, please do not hesitate to contact us on (02) 9922 1777.

For and on behalf of
Environmental Earth Sciences NSW

Project Manager / Proposal Author
Claude Platell
Environmental Scientist

Project Director / Internal Reviewer
James Barwood
Principal Environmental Scientist

122040RP01V01

EXECUTIVE SUMMARY

Introduction and objectives

Environmental Earth sciences was engaged by Transport for NSW (TfNSW) to conduct a preliminary site investigation (PSI) with targeted intrusive soil sampling and analysis at 505 Wilson street, Eveleigh, NSW, formally identified as the chief mechanical engineers building (CME building) which is a part of Lot 5 development plan (DP) 1175706, (the site). **Figure 1** outlines the area to be investigated under the PSI.

The objective of the PSI with targeted soil sampling is to assess whether contamination has the potential to exist at the site and where further investigation is necessary prior to development.

Scope of work

The scope of work included a review of site history information (including past reports), site inspection and an intrusive investigation with soil sampling and laboratory analysis, and the preparation of this report on the findings of the assessment.

Findings

Based on the results of the assessment, the following conclusions were made:

- The site history review indicated that the site has been owned by the Rail Corporation New South Wales from 1880 to 2020, when it was acquired by the Transport Asset Holding Entity of New South Wales. The CME building was identified in its current position in the first available historical aerial photograph from the 1930's, with the CME building constructed in 1887.
- The site is boarded to the south by the Redfern railway corridor which includes warehouses, repair bays and storage areas.
- There is no indication that the site has been used for industrial purposes such as manufacturing or bulk storage of chemicals etc.
- Lead containing paints were identified throughout the building interior and exterior in (ADE, 2022). The paint was in fair to poor condition with flaking noted in serval locations. Lead paint flakes has built up on the floors. Lead containing dusts was identified within the building interior. Lead dust needs to be remediated and appropriately cleared.
- Environmental cleaning was undertaken onsite in May 2022 (Environmental Earth Sciences, 2022), to remove some of the built up lead paint from floors and surfaces to reduce the risk during site access. Lead paint and dust remains within the building, this risk can only be fully mitigated through the removal of all wall and ceiling coverings which contain lead paint, removal of all paint from door and window frames or sealing with new paint and stripping and revarnishing of timber floor or covering with new floor finishes. No

renovation works should be undertaken until all lead-based paint has been stripped and removed from the building.

- The site covers 2500m^2 with 930m^2 covered by the CME building. The area south and west of the CME building is covered by asphalt hardstand. East of the CME building is a small area of open garden, North of the CME building are landscaped garden beds.
- The site is underlain by various fill layers consisting of brown Sand with igneous gravel and charcoal fragments, loose dry Sand and areas of light brown Clay and Clay loam material. No asbestos containing material was identified or any hydrocarbon staining or odours noted during the investigation.
- Laboratory results indicated high levels of lead at BH2_0.0-0.1 being 3,570 mg/kg which exceeded the lead HIL of 1,500 mg/kg. The high concentration of lead is likely due to lead paint fragments present in the soil, which originated from the CME building (the entrance to the building is adjacent to the sample location).
- Laboratory results indicated high levels of benzo(a)pyrene at BH1_0.0-0.05 being 2.4 mg/kg and BH2_0.0-0.1 being 6.2 mg/kg, which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.

Based on the results of the assessment, Environmental Earth Sciences considers the site can be made suitable for the proposed land use on the basis that the recommendations (refer **Section 14**) are implemented.

- Hazardous building materials are remediated before renovation works commence. Works must be appropriately validated before renovation works commences.
- Lead impacted material is removed from the area surrounding BH2.

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1 INTRODUCTION AND BACKGROUND

Environmental Earth sciences was engaged by Transport for NSW (TfNSW) to conduct a preliminary site investigation (PSI) with targeted intrusive soil sampling and analysis at 505 Wilson Street, Eveleigh, NSW formally identified as the chief mechanical engineers building (CME building) which is a part of Lot 5 development plan (DP) 1175706, (the site). **Figure 1** outlines the area to be investigated under the PSI.

The site is on the northern edge of the Redfern train line and associated infrastructure. The site covers 2,500 m^2 with 930 m^2 covered by the CME building. This PSI is required to fulfill the Critical State Significant Infrastructure Standard Secretary's Environmental Assessment Requirements (SEARs) as part of the State Significant Development Application (SSDA) for the site. TfNSW is proposing to renovate the chief mechanical engineers building into office space.

This report is to be read with reference to the variation issued for this work (PO122033_VAR3 date 17 June 2022) for this work as well as project specific assumptions and general limitations at the end of this report.

2 OBJECTIVES

The objective of the PSI with targeted soil sampling is to assess whether contamination has the potential to exist at the site and where further investigation is necessary prior to development.

3 SCOPE OF WORK

The scope of work consisted of the following.

- Desktop study including review of:
    - Published maps of related to the environmental setting of the site including topography, soil landscape, geology, hydrogeology, hydrology, potential acid sulphate soils (PASS), and salinity potential.
    - Available NSW Water records of registered groundwater bores within 500 m of the site, to assess likely aquifer types, probable groundwater depths and water quality information (if available).
    - Available historical aerial photographs (one per 10-15 years post 1940).
    - NSW Environment Protection Authority (EPA) search of register of notified properties under the *Contaminated Land Management Act 1997* (CLM Act) subject to investigation / remediation orders as well as the Public register under the *Protection of the Environment Operations Act 1997* (POEO Act).

  - Historical land title certificates.
  - SafeWork NSW Site search for Schedule 11 hazardous chemicals on premises.
- Site inspection was undertaken to:
  - Identify site features and any potential activities of environmental concern; and
  - Document evidence of contaminating uses and/or contamination (e.g. staining, odours, stockpiles of unknown origin, potential asbestos-containing materials (PACM etc)).
- Targeted soil sampling and analysis as follows:
  - Prepare a safe work method statement (SWMS)
  - Excavate eight boreholes up to 1.0 metres (m) below ground level (mBGL) to retrieve soil samples.
  - Submit selected soil samples for laboratory analysis of contaminants of potential concern (COPC).
- Preparation of this report to document the following:
  - Findings from the desktop review and site inspection.
  - Development of initial CSM and risk linkage evaluation.
  - Preparation of site plans showing potential areas of concern and the extent of any contamination observed.
  - Summary of assessment works, sampling and laboratory analytical program undertaken.
  - Results of laboratory analyses with comparison to adopted ‘Tier 1’ threshold concentrations for appropriate for the land use.
  - Field and data QA/QC evaluation.
  - Conclusion on suitability of the site for the proposed use based upon soil assessment, with recommendations for additional assessment and/ or remediation.

4 SITE IDENTIFICATION

Site identification detailed are provided in **Table 1**.

Table 1: Site Identification

Item	Details
Address	505 Wilson Street, Eveleigh, NSW - chief mechanical engineers building
Current owners	Transport Asset Holding Entity of New South Wales
Lot & Plan numbers	A portion of lot 5 in Deposited Plan (DP) 1175706 identified in **Figure 1**
Site Area	0.25 ha
Current land use/ zoning	D – Business Zone – mixed use (Precincts – Eastern Harbour City) 2021
Proposed land use/ zoning	D – Business Zone – mixed use (Precincts – Eastern Harbour City) 2021
Local Government Authority	Sydney local government area
Site Location and Layout	**Figure 1** (site location) and **Figure 2** (sample locations)

5 SITE HISTORY

5.1 Historical aerial photograph review

A review of historical aerial imagery for the site is presented in **Table 2**. Copies of aerial photographs are provided in **Appendix A**.

Table 2: Review of aerial photographs

Years	Quality	Notes
1930	Poor, black and white	**Site:** The site is occupied by the CME building which covers 40% of the site. The eastern portion of the site appears to be open space. **Surrounding land:** the site is surrounding by the high density suburbs of Darlington (west), Chippendale (North) and Redfern (300 m east). South of the site is the Redfern train yards. Directly behind the site are train storage and maintenance areas. The main track is 80m south. Approximately 150 m south west of the site are warehouses and maintenance building.
1943	Poor, black and white	**Site:** The site looks to be largely unchanged. **Surrounding land:** 35m west of the site a large warehouse building has been constructed.
1951-1975	Poor, black and white	**Site:** The site looks to be largely unchanged. **Surrounding land:** Minor changes have been made to the warehouses and train maintenance buildings behind the site.

Years	Quality	Notes
1986	Colour	**Site:** The site looks to be largely unchanged. **Surrounding land:** 450m south of the site a large warehouse has been demolished.
1991	Colour	**Site:** The site looks to be largely unchanged. **Surrounding land:** 35m west of the site a warehouse building has been redeveloped into residential flats.
1994 **2019**	Colour	**Site:** The site looks to be largely unchanged. **Surrounding land:** the warehouses and train maintenance buildings behind the site have been demolished, the area is left vacant. 400m south of the site additional warehouses have been demolished. The area south of the trainline has been redeveloped into commercial business precent with office buildings and a public park being constructed.
2022	Colour	**Site:** The site looks to be largely unchanged. **Surrounding land:** The site looks to be largely unchanged. The area directly south of the site is being utilised as a construction site laydown area.

5.2 Historical report

5.2.1 Environmental cleaning summary letter

Environmental cleaning was undertaken on the site by Environmental Earth Sciences in May of 2022.

Environmental Earth Sciences (2022) – *Environmental cleaning summary letter at 505 Wilson Street, Eveleigh, NSW.* (ref: 122040L01V01, date: 08/07/2022)

The scope of works for the cleaning works covered:

- Provide appropriate safety information, licences, and insurances as well as SafeWork NSW notification prior to initiation of works.
- Conduct asbestos & lead dust removal to floor surfaces and depositional surfaces up to a height of 1.5 m from the floor over approximately 680 m^2 of the structure internal floor traffic areas.
    - Works to include vacuuming of floor surfaces as well as wall surfaces to indicated height. Vacuuming of walls does not include specific removal of flaking paint only incidental removal via vacuuming process.
    - Utilising HEPA Vacuums and appropriate personnel and equipment decontamination.
    - Includes disposal at Licensed EPA receiving facility and provision of tipping and tracking receipts.
    - Does not include removal of flaking wall paint above 1.5m.

- Conduct post-cleaning clearance of cleaned surfaces to produce certification of clean-up works. Works will include.
    - Collection of dust samples to verify whether asbestos of lead dusts are present within the cleaned areas.
    - Photographic documentation of post-cleaning condition.
    - Issue a clearance certificate for the cleaned areas.

The main conclusions and recommendations from the clearance report are as follows:

- Lead paint and dust remains within the building, this risk can only be fully mitigated through the removal of all wall and ceiling coverings which contain lead paint, removal of all paint from door and window frames or sealing with new paint and stripping and revarnishing of timber floor or covering with new floor finishes.
- Due to the poor condition of the building and presence of flaking paint on walls and ceilings has led to the accumulation of lead paint over time post cleaning.
- The risk of respirable asbestos fibres within the buildings has been deemed low.
- No renovation works should be undertaken until all lead-based paint has been stripped and removed from the building.
- Visiting the building should be avoid if entry to the site should be required full PPE including boot coveralls, P2 mask are required and touching any surfaces during their occupancy should be avoided.

5.2.2 Pre-refurbishment Hazardous Materials Survey Report

A hazardous materials survey was undertaken on the site by ADE Australia Pty Ltd (ADE) in 2012 which was undated in 2015 and 2022. Refer to **Appendix B** for the full hazardous materials register for the site:

> ADE consulting group (2022) – Re-Refurbishment Hazardous Materials Survey Report – 505 Wilson Street, North Eveleigh, NSW (Ref: 22.0684.00 / HMS1) (date: 26/07/2022)

The scope of works and key findings of the report are summarised below:

- Scope of works
    - Develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey;
    - Inspection of the areas of concern at the site;
    - Reinspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, lead containing dust;

- Collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses;
- Where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present);
- Provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical; and
- Prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation

- Hazardous materials findings
  - Bonded asbestos containing materials were noted onsite. Non friable asbestos was identified onsite.
  - Presumed synthetic mineral fibre (SMF) were identified onsite.
  - Polychlorinated biphenyls (PCBs) were not positively identified onsite but are presumed within light fittings.
  - Lead containing paints (lead detected above 1000mg/kg) were identified throughout the building interior and exterior. The paint was in fair to poor condition with flaking noted in serval locations. Lead paint flakes has built up on the floors.
  - Lead containing dusts (lead detected above 1500mg/kg) was identified within the building interior.
- Recommendations:
  - It is a requirement that all controllers of premises provide all occupiers of their place of work with a copy of the Hazardous Materials Register and all associated updates in accordance with the NSW Code of Practice: How to manage and control asbestos in the workplace (2019).
  - A copy of the Hazardous Materials Register should be made readily available to all contractors prior to conducting works on the premises/site.
  - Should works be undertaken in any inaccessible areas/voids or within areas not explicitly listed in this report any suspected asbestos materials encountered should be inspected and sampled by an experienced environmental consultant. Works in the area should be suspended until the results are made available.
  - Remove all hazardous materials identified prior to refurbishment / demolition of an area.

- Refer to **Appendix B** for full recommendations on identified Hazardous Building Materials.

5.3 Land title certificates

A summary of information from the review of historical land title certificates is presented in **Table 3**. Land title certificates are presented in **Appendix C**.

Table 3: Historical land title certificate information

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
01.07.1880 (1917 to 1935)	Her Most Gracious Majesty Queen Victoria	Book 219 No. 748
1880 to 2020	The Commissioner for Railways then Intervening Name Changes now Rail Corporation New South Wales	Intervening Titles Then 4/862514 Now 5/1175706
Circa 1887	Opening of Chief Mechanical Engineer's Building/Office	---
Unknown	Crown Plan 4719-3000 refers to the subject land being 'CMEs Office'	---
02.12.2020 (2020 to Date)	Transport Asset Holding Entity of New South Wales[1]	5/1175706

Notes
1. Denotes current registered proprietor

5.4 NSW EPA regulatory searches

5.4.1 POEO Public Register

A search of the NSW EPA POEO Public Register for Environmental Protection licences, applications, notices, audits, or pollution studies, and reduction within a 1 km radius was provided by Land Insight on 24 June 2022. Detailed results are provided in **Appendix D.**

The search results indicated that there are no sites that formerly or currently fall under the POEO Public register.

5.4.2 Contaminated Land Record

A search of the NSW EPA Contaminated Land Record for the suburb of Eveleigh was conducted by Land Insight on 24 June 2022, presented in **Table 4** and **Appendix D.**

Table 4: Contaminated Land Record of Notices

Site Name	Address	Distance / Direction from Site	Notices
Formerly: Gas N Go Alexandria Currently: Residential apartment (2016)	10-20 Botany Road, Alexandria (Area number 3401)	390 m / South-east	0 current, 3 former
Corner of Regent Street and Wellington Street, Chippendale	Wellington Street, Chippendale (Area number 3406)	~710 m / North-east	3 current, 7 former
MacDonald town Triangle	Burren Street, Eveleigh (Area number 3339)	~920 m / South-west	0 current, 2 former

5.4.3 Contaminated Sites Register

A search of the NSW EPA list of notified contaminated sites register was conducted by Land Insight on 24 June 2022, presented in **Table 5** and **Appendix D.**

Table 5: Contaminated site register

Site Name	Address	Distance / Direction	Contamination Activity	Management Class
Australian Technology Park	Henderson Road Eveleigh	134.2 / south-east	Other Industry	Regulation under CLM Act not required
BP Service Station	116 Regent Street Redfern	314.2 / south-east	Service Station	Regulation under CLM Act not required
Formerly Gas N Go Alexandria (fully redeveloped into residential apartment as of September 2016)	10-20 Botany Road Alexandria	388.3 / south-east	Service Station	Regulation under CLM Act not required
Cnr Regent Street & Wellington Street, Chippendale	Wellington Street Chippendale	707.0 / north-east	Chemical Industry	Contamination currently regulated under CLM Act
Alexandria Gardens	146-156 Wyndham Street & 146-156 Botany Road	853.0 / south	Unclassified	Regulation under CLM Act not required

Site Name	Address	Distance / Direction	Contamination Activity	Management Class
	Alexandria			
Macdonaldtown Triangle	Burren Street Eveleigh	919.8 / south-west	Gasworks	Contamination being managed via the planning process (EP&A Act)
Proposed Construction Site	2 John Street Waterloo	937.0 / south-east	Other Industry	Regulation under CLM Act not required

5.5 SafeWork NSW dangerous goods search

A Site Search for Schedule 11 Hazardous Chemicals on premises was conducted on 5 July 2022. The search did not locate any SafeWork NSW records pertaining to the site. Refer to **Appendix E** for confirmation email from SafeWork NSW.

5.6 Site history summary

Based on the results of the site history review, the site has been owned by the Rail Corporation New South Wales from 1880 to 2020, when it was acquired by the Transport Asset Holding Entity of New South Wales. The build is in its current location is identified in 1930's historical imagery with the building dated to 1887. The site is boarded to the south by the railway corridor which includes warehouse, repair bays and storage areas. There is no indication that the site has been used for industrial purposes such as manufacturing or bulk storage of chemicals etc.

6 SITE INFORMATION

6.1 Site inspection

A site inspection was undertaken by Claude Platell from Environmental Earth Sciences on 20 June 2022 to assess whether evidence of potentially contaminating activities or sources of contamination were visible on site.

Key findings from the inspection are summarised below with features presented in **Figure 2**. Photographs referred to below are presented in **Appendix F**.

The chief mechanical engineers building is a two story brick building built in the 1880s. The building covers 40% of the site. To the south of the building is a small amenity block, which was not part of this PSI.

Along Wilson Street is a landscaped garden bed which runs the length of the building. There is hardstand asphalt covering the west and south of the site, which is in poor condition. Immediately south of the site there is a steep drop off towards the train tracks.

To the east is a small section of garden vegetation east of the chief mechanical engineers building.

Evidence of gross contamination (including PACM) or staining was not evident at the sites surface. No evidence of potential sources of contamination such as fuel / chemical storage was observed.

6.2 Surrounding features

The site is in a high density residential area with the Redfern train lines to the south of the site. Features of surrounding land uses identified near the site are summarised in **Table 6**.

Table 6: Surrounding site uses

Direction	Description
North	Residential terrace properties. Redfern Community Centre Playground (north-east 165.9m)
East	Residential terrace properties. Little Eveleigh Street Reserve (85m)
South	Redfern trainline.
West	High density residential properties. Charles Keenan Reserve (111.8m)

7 ENVIRONMENTAL SETTING

Land Insight (2022) includes report maps, refer **Appendix D**, regarding environmental setting. A summary of pertinent information is provided in the following subsections.

7.1 Geology and soils

The underlying geology consists of Ashfield shale of the Wianamatta group. Ashfield shale is described as black to light grey shale and laminate.

The Blacktown soil landscape dominates the site. It is characterised by shallow to moderately deep hard setting mottled texture contrast soils with yellow podzolic soils on lower slopes and in drainage lines with slow water infiltration.

7.2 Natural Hazards

Natural hazards, including acid sulfate soils, salinity, flood, and erosion are provide in **Table 7**.

Table 7: Natural Hazards

Landform	Risk	Comment
Acid sulfate soils	Low	Not identified onsite or within 500 m. ASS is only likely in lakes, waterway, wetlands, and riparian zones, none of which are nearby.
Salinity	Low	---
Floor	Low	Flooding has to potential to occur within buffer areas.
Erosion	Moderate	---

7.3 Topography and surface water

The topography of Eveleigh can generally be described as broad rounded crests and ridges with gently included slope with local relief to 30m slopes usually greater than 5%.

The site is located at an elevation of 26 – 28 metres Australian Heigh Datum (m AHD) along a slight ridge running east to west along the centre line of the site. Rainwater at the site would infiltrate the ground to the point of saturation and then flow north towards Wilson street or south towards the train tracks.

7.4 Hydrogeology

Groundwater within Ashfield unit is unconfined along structures (bedding, joints, faults) in the fractured bedrock. Lateral flow occurs through alluvial sediments on slopes and plains. The aquifer is described as porous and highly productive.

Groundwater systems are local with short flow lengths and are loosely defined by topographic catchments. Water quality within these systems is brackish to saline. Water table depths are intermediate.

7.5 Registered groundwater bores

There are 246 registered groundwater bores within a 2-kilometre (km) radius of the site, but no bore is located closer than about 700 metres. To obtain the greatest representative information, only groundwater bores sitting between 700m and 1km radius, with registered lithology were presented in **Table 8**. Refer to Land Insight (2022) report **Appendix D** for further details.

Table 8: Registered groundwater bores

Registered Bore ID	Direction from site	Distance from site (m)	Depth of bore (mBGL)	SWL (m)	Aquifer lithology	Authorised purpose
GW106192	South	735.5	6	4	Sand (0.3-2.2mBGL) Coffee rock (2.2-2.3mBGL) Sand (2.3-6mBGL)	Household
GW110247	West	793.2	210	31	Clay (0-4.5mBGL)	Household

Registered Bore ID	Direction from site	Distance from site (m)	Depth of bore (mBGL)	SWL (m)	Aquifer lithology	Authorised purpose
					Shale (4.5-33mBGL) Sandstone (33-210mBGL)	
GW071907	South-east	877.1	180	11.6	Clay (0-8.5mBGL) Shale (8.5-24mBGL) Sandstone (24-180mBGL)	Recreation
GW114895	South-east	903.0	6	4.2	Concrete/fill (0-1.2mBGL) Sand (1.2-6mBGL)	Monitoring
GW109646	North	928.8	8.2	5.93	Clay (0.8-2.8mBGL) Sand (2.8-8mBGL) Sandstone (8-8.2mBGL)	Monitoring
GW109648	North	971.6	6.2	5.23	Fill (0-2.9mBGL) Clay (2.9-4.9mBGL) Sand (4.9-5.8mBGL) Sandstone (5.8-6.2mBGL)	Monitoring
GW109649	North	988.3	7.2	2.95	Fill (0-4.8mBGL) Sand (4.8-5.9mBGL) Sandstone (5.9-7.2mBGL)	Monitoring

7.6 Preliminary conceptual site model

7.6.1 Potential sources and mechanisms of contamination

A key component of the investigation/ risk assessment process is the development of a Conceptual Site Model (CSM) as this drives the risk management and remediation process. This identifies potential sources of contamination, potential migration pathways along which identified contaminants could migrate and potential receptors which may become exposed.

The CSM considers plausible pollutant linkages associated with the identified contamination. By evaluating these linkages proposed controls can be outlined and recommendations developed for appropriate remediation or management.

The potential sources of soil and groundwater contamination, mechanism(s) of contamination and contaminants of potential concern (CoPC) are summarised in **Table 9**.

Table 9: Potential contamination sources, mechanisms, affected media and contaminants of potential concern

Potential Sources of Contamination	Mechanisms of Contamination	Likely Affected Media	Contaminants of Potential Concern
Contaminated fill that may have been imported onto the site.	Material used to raise or stabilise the site. Downward migration of leachable contaminants.	Soil	A broad range of organic and inorganic contaminants depending on source, but often comprising heavy metals, TRH, PAH, PCBs, and asbestos.
Hazardous building materials (e.g., asbestos) associated with former infrastructure.	Mobilisation during historical construction and/or demolition activities.	Soil	Asbestos, lead paint, lead dust, synthetic mineral fibres and PCBs
Miscellaneous storage associated with trainyard land use.	Contamination of near-surface soil in unsealed areas depending on the nature/condition of stored items.	Soil	Heavy metals, TRH

Notes

1. Heavy metals denote arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc
2. TRH denotes total recoverable hydrocarbons
3. PAH denotes polycyclic aromatic hydrocarbons
4. OCP denotes organochlorine pesticides
5. OPP denotes organophosphorus pesticides
6. PCBs denotes polychlorinated biphenyls

7.6.2 Preliminary exposure assessment

Based on the potential land use for commercial purposes, the following land use scenarios have been considered:

- Current and potential future intrusive maintenance and construction workers - these receptors are anticipated to be exposed via the following exposure pathways:
    - Dermal contact with and incidental ingestion of soils during excavation works
    - Inhalation of site-derived dust in outdoor air
    - Inhalation of soil derived vapours in outdoor air/ trench air, including consideration of the potential for ground gas migration into open excavations
- Potential future child and adult visitors at the site – these receptors are anticipated to be exposed via the following exposure pathways:
    - Dermal contact with and incidental ingestion of soils
    - Inhalation of site-derived dust in outdoor air
    - Inhalation of soil derived vapours/ gases in indoor and outdoor air
- Ecological receptors associated with areas of waterways and public open space – these receptors are anticipated to be exposed via the following exposure pathways:
    - Dermal contact with and incidental ingestion of soils
    - Dermal contact with and incidental ingestion of impacted surface water.

It is noted that groundwater extraction at the site is highly unlikely based on the natural salinity of the groundwater plus availability of domestic supply, therefore groundwater users are not considered a relevant receptor. In addition, in view of the expected depth to groundwater (>5 m bgl), direct exposure to groundwater during construction or general land use is unlikely.

8 METHODOLOGY

8.1 Intrusive investigation

8.1.1 Contamination investigation

A limited soil investigation was completed to target potential sources of contamination and provide coverage to identify gross/ significant contamination. The contamination investigation was limited by high voltage Sydney Trains assets beneath a portion of the site, proposed locations in this area were abandoned, refer to **Appendix G**. The sampling program is below the specified number of locations within *Sampling Design Guidelines* (NSW EPA 1995).

Six boreholes, identified as BH1 through BH6, were excavated at the site to a maximum depth of 1.0 m BGL, refer **Figure 2**.

The intrusive soil investigation was undertaken on 30 June 2022 using a hand auger. Logging of soil profiles was undertaken at locations where soil characteristics were described including lithology, extent of lithology, colour, odour, and other inclusions.

Representative soil samples were collected directly form the excavator bucket using a fresh pair of disposable nitrile gloves, changed between each location, to prevent potential cross-contamination.

The samples were placed into laboratory supplied glass jars and transported to the laboratory in a chilled container under full chain-of-custody documentation. The laboratory was accredited with the National Association of Testing Authorities (NATA) for each analytical method used. Sampling of soil was conducted in accordance with the following:

- Standards Australia (1999) - *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 2: Volatile substances* (AS 4482.2), Standards Australia, Homebush, NSW
- Standards Australia (2005) - *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds* (AS 4482.1), Standards Australia, Sydney, NSW
- Environmental Earth Sciences NSW (2010) - *Procedures for field, laboratory and reporting quality assurance and quality control manual*.
- Environmental Earth Sciences (2011) - *Soil, gas and groundwater sampling manual*, 7th Edition (Unpublished).

8.2 Laboratory analysis

Eight primary soil samples were submitted to Australian Laboratory Services (ALS) and Envirolab Services (Envirolab) for chemical testing. The laboratories are NATA accredited for the methods used.

The soil samples were submitted to the laboratory for the following analysis:

- Heavy metals (As, Cd, Cu, Cr_{TOTAL}, Pb, Hg, Ni, Zn)
- Total Recoverable Hydrocarbons (TRH) (Fractions C_6-C_{40})
- Benzene, Toluene, Ethylbenzene and Total xylenes (BTEX)
- Polycyclic Aromatic Hydrocarbons (PAH)
- Asbestos (presence / absence in soil).

8.3 Procedures for quality control and quality assurance

Quality control (QC) is achieved by using NATA accredited laboratories using approved methods supported by internal duplicates, the checking of high, abnormal or otherwise anomalous results against background and other chemical results for the sample concerned.

Quality assurance (QA) is achieved by confirming that field results, or anticipated results based upon comparison with field observations, are consistent with laboratory results. Also, that sampling methods are uniform, and decontamination is thorough. In addition, the laboratory undertakes additional duplicate analysis as part of their internal quality assurance program based on one duplicate analysis for every 20 samples analysed.

Field observations are compared with laboratory results when they are not as expected. Confirmation, re-sampling and re-analysis of a sample are undertaken if the results are not consistent with field observations and/or measurements. In addition, field duplicate sample results must be within the acceptable range of reproducibility.

The quality assurance/ quality control programme consisted of:

- one intra- and one inter-laboratory soil samples analysed for heavy metals, TRH, BTEX and PAH to assess repeatability of laboratory results.
- one trip spike and one trip blank sample analysed for BTEXN and C_6-C_{10} TRH to assess potential volatile loss during sample transport and holding.

9 INVESTIGATION CRITERIA

Given the land use permissible by the zoning, soil analytical results were tabulated and compared to investigation and screening level for the commercial / industrial (HIL D) of Schedule B(1) *Guideline on the investigation levels for soil and groundwater* from the ASC NEPM (2013). Typically for contaminant concentration to be considered acceptable for the respective land use criteria, the data set must conform to the following requirements:

- No single sample analytical result is greater than 250% of the site criteria.

- The 95% upper confidence limit (UCL) of the arithmetic mean of analytical results is below the site criteria.
- The arithmetic (or geometric in cases where the data is log-normally distributed) mean is below the site criteria.
- The standard deviation is less than 50% of the site criteria.

9.1.1 Health investigation levels (HILs)

Health investigation levels (HILs) for soil contaminants have been adopted from *Table 1A(1)* of *Schedule B1 Guideline on Investigation Levels for Soil and Groundwater* of the ASC NEPM (2013) are presented in **Table 10**.

Table 10: Health investigation level threshold criteria

Analytes	Health Investigation Level[1] (mg/kg)
	Commercial / industrial Setting D
Metals and Inorganics	
Arsenic [2]	3,000
Cadmium	900
Chromium (VI)	3,600
Copper	240,000
Lead [3]	1,500
Mercury (inorganic)	730
Nickel	6,000
Zinc	400,000
Polycyclic Aromatic Hydrocarbons (PAHs)	
Carcinogenic PAHs (as BaP TEQ) [4]	40
Total PAHs [5]	4,000

Notes:

1. Generic land uses are described in detail in Schedule B7 Section 3 of ASC NEPM (2013). HIL D - Commercial/industrial, includes premises such as shops, offices, factories and industrial sites.
2. Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability may be important and should be considered where appropriate (refer Schedule B7).
3. Lead: HIL is based on blood lead models (IEUBK for HILs A, B and C and adult lead model for HIL D where 50% oral bioavailability has been considered. Site-specific bioavailability may be important and should be considered where appropriate.
4. Carcinogenic PAHs: HIL is based on the 8 carcinogenic PAHs and their TEFs (potency relative to B(a)P) adopted by CCME 2008 (refer Schedule B7). The B(a)P TEQ is calculated by multiplying the concentration of each carcinogenic PAH in the sample by its B(a)P TEF, given below, and summing these products.
5. Total PAHs: HIL is based on the sum of the 16 PAHs most commonly reported for contaminated sites (WHO 1998). The application of the total PAH HIL should consider the presence of carcinogenic PAHs and naphthalene (the most volatile PAH). Carcinogenic PAHs reported in the total PAHs should meet the B(a)P TEQ HIL. Naphthalene reported in the total PAHs should meet the relevant HSL.

PAH species	TEF	PAH species	TEF
Benzo(a)anthracene	0.1	Benzo(g,h,i)perylene	0.01
Benzo(a)pyrene	1	Chrysene	0.01
Benzo(b+j)fluoranthene	0.1	Dibenz(a,h)anthracene	1
Benzo(k)fluoranthene	0.1	Indeno(1,2,3-c,d)pyrene	0.1

9.1.2 Health screening levels (HSLs)

Health Screening Levels (HSLs) for hydrocarbons in soil have been adopted from *Table 1A(3)* of *Schedule B1 Guideline on Investigation Levels for Soil and Groundwater* of the ASC NEPM (2013). The HSLs for hydrocarbons are based on vapour intrusion risk associated with petroleum hydrocarbon contamination.

HSLs are for assessing human health risk associated with inhalation, and depend on specific soil properties and depths, types of land use and characteristics of buildings for each land use scenario. The material type adopted was clay based on the soil encountered during fieldwork for application of the HSLs which are provided in **Table 11**.

Table 11: Health screening level threshold criteria

Analyte	Soil type	0 m to <1 m	1 m to <2 m
F1 (C_6-C_{10}) (minus BTEX)	Clay	310	480
F2 (>C_{10}-C_{16}) (minus naphthalene	Clay	NL	NL
Benzene	Clay	4	6
Toluene	Clay	NL	NL
Ethylbenzene	Clay	NL	NL
Total xylenes	Clay	NL	NL

Notes:
mg/kg Milligrams per kilogram
NL Not limiting as the soil vapour concentration could not exceed a level that would result in the maximum allowable vapour risk.

9.1.3 Management limits

The adopted management limits (MLs) and health screening levels (HSLs) for hydrocarbons in soil for public open space will be applied for potential direct contact by maintenance workers involved in subsurface works (from Friebel & Nadebaum 2011) in a commercial / industrial land use scenario. Refer to **Table 12** for a summary of these ML threshold concentrations.

Table 12: Site-specific management limits

Analyte	Soil texture	Management limits for Commercial / industrial land use
		mg/kg
TRH (C_6-C_{10}) (F1)	Fine	800
TRH (>C_{10}-C_{16}) (F2)	Fine	1,000
TRH (>C_{16}-C_{34}) (F3)	Fine	5,000
TRH (>C_{34}-C_{40}) (F4)	Fine	10,000

Note: fine textured soils adopted based upon the predominantly clay materials encountered at the site.

9.1.4 Asbestos health-based screening levels (HSLs – asbestos)

Health screening levels for asbestos in soil have been adopted from Table 7 of Schedule B1 Guideline on Investigation Levels for Soil and Groundwater of the ASC NEPM (2013). Asbestos HSL for recreational land use are provided in **Table 13**.

Table 13: HSLs for asbestos in soil

HSL concentration (%w/w)	Commercial / industrial D
Bonded ACM	0.05 % w/w
FA and AF (friable asbestos)	0.001 % w/w
ACM on surface	Any visible asbestos

Notes:
FA Friable asbestos
AF Asbestos fines

The screening level of 0.001% w/w asbestos in soil for FA and AF (i.e. non-bonded/friable asbestos) only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres.

9.2 Ecological

9.2.1 Ecological investigation levels

The ecological investigation levels (EILs) assigned by ASC NEPM (2013) – *Schedule B5a: Guideline on Ecological Risk Assessment* are adopted for this assessment. This guideline presents the methodology for deriving terrestrial EILs using both fresh and aged (i.e. >2 years old) contamination for soil with the following land use types:

- Areas of ecological significance.
- Urban residential/ public open space.
- Commercial / industrial.

The methodology has been developed to protect soil processes, soil biota (flora and fauna) and terrestrial invertebrates and vertebrates. The proposed land use at the site is for public open space land use, as such the adopted EILs for this assessment will be protective of this scenario.

Applicable EILs comprise the sum of ambient background concentrations (ABCs) and added contaminant limits (ACL). As no data for ABC exist, the ABC was set to zero. The ACL concentrations were ascertained for representative locations based on site-specific results for either pH alone, or pH and cation exchange capacity (CEC) in accordance with procedures in *Schedule 5c: EILs for As Cr Cu DDT Pb Naphthalene Ni Zn* of the ASC NEPM (2013). Refer to a summary of site-specific EILs in **Table 14**.

Table 14: Generic EIL threshold criteria

Analyte	EIL for Commercial / industrial (mg/kg)
Naphthalene	370 [1]
Arsenic	160 [1]
Chromium (III)	310 [2]
Copper	280 [3]
Lead	1,800 [4]
Nickel	290 [5]
Zinc	620 [6]

Notes:
1. Generic EIL adopted
2. Chromium III ACL from *Table 87* of *Schedule B5c* of the ASC NEPM (2013), Site-specific derived EIL (using lowest % clay content)
3. Copper ACL from *Table 59* of *Schedule B5c* of the ASC NEPM (2013), Site-specific derived EIL (using a pH of 6)
4. Lead ACL from Table 68 of Schedule B5c of the ASC NEPM (2013)
5. Nickel ACL from *Table 81* of *Schedule B5c* of the ASC NEPM (2013), Site-specific derived EIL (using a CEC of 10)
6. Zinc ACL from *Table 26* of *Schedule B5c* of the ASC NEPM (2013) Site-specific derived EIL (using a CEC of 10 and a pH of 6)

9.2.2 Ecological screening levels

For petroleum hydrocarbons, ESLs have been derived in ASC NEPM (2013) based upon fraction ranges of hydrocarbons, BTEXN component and benzo(a)pyrene (BaP) together with soil texture classes. These ESLs are of low reliability except for the volatile and semi-volatile hydrocarbon fractions which are of moderate reliability. Nonetheless the ESLs will be adopted for the investigation to be protective of soils in an urban residential and public open space land use scenario.

The adopted ESLs are designed to be protective of soil fauna, soil processes plants. The ASC NEPM (2013) states that these factors only apply within the rhizome (i.e. zone in the top two metres of soil) and as such ESL criteria need not be applied to chemical results below this depth. Criteria are summarised below in **Table 15**.

Table 15: Ecological screening level threshold criteria

Analyte	Commercial / industrial land use (mg/kg)
Fraction 1 (F1): C_6-C_{10} minus BTEX	215[1]
Fraction 2 (F2): >C_{10}-C_{16} minus naphthalene	170[1]
Fraction 3 (F3): >C_{16}-C_{34}	2,500
Fraction 4 (F4): >C_{34}-C_{40}	6,600
Benzene	95
Toluene	135
Ethylbenzene	185
Total Xylenes	95
Benzo(a)pyrene	172[2]

Notes:
1. ESLs are of low reliability except were indicated by * which indicates that the ESL is of moderate reliability
2. Threshold adopted from CRC Care (2017) Technical Paper No.39

10 RESULTS

10.1 Observations

The sample locations assessed are shown on **Figure 2** with photographs taken during fieldwork included in **Appendix F** and test pit logs provided in **Appendix H.** **Table 16** presents a summary of sub-soil stratigraphy at the site.

Table 16: Summary of subsoil stratigraphy

	Interval (mBGL)	Description	Locations
Fill material	0.0-0.6	Very loose/loose, black/brown SAND, with mixed gravels form sandstone, igneous, and charcoal, as well as clay clods.	BH2 to BH4
Fill material	0.6-1.0	Very loose/loose, dry, orange/brown, or black SAND, with dark inclusions.	BH3 to BH6
Asphalt fill	0.0-0.1	Asphalt hardstand.	BH05 and BH06
Fill material	0.1-0.6	Very loose/loose, black/brown SAND, with mixed gravels form sandstone, igneous, and charcoal, as well as clay clods.	BH05
Fill material	0.2-0.5	Very loose, dry, white SAND.	BH6
Fill material	0.0-0.4	Soft, dry, red brown to light brown CLAY, with fine brick gravels (1%), clay clods (1%).	BH1
Natural subsoil	0.7-1.0	Soft, moist, brown CLAY loam, with medium ironstone gravels (3%).	BH1

Note:
mBGL metres below ground level

10.2 Contamination assessment

A summary of laboratory results for chemical analysis against adopted site criteria is presented in **Table A** and laboratory certificates of analysis are provided in **Appendix I**.

The reported concentrations of TRH, BTEX, PAH, OCP, OPP, PCBs and heavy metals were below the laboratory's limit of reporting (LOR) and or the applicable health and ecologically based criteria except for the following:

- reported concentration of lead at BH2_0.0-0.1 being 3,570 mg/kg which exceeded the lead HIL of 1,500 mg/kg.

- Reported concentration of benzo(a)pyrene at BH1_0.0-0.05 being 2.4 mg/kg which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.
- Reported concentration of benzo(a)pyrene at BH2_0.0-0.1 being 6.2 mg/kg which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.

11 QUALITY CONTROL AND QUALITY ASSURANCE

The evaluate of data validation is provided in **Appendix J**. The overall assessment of the data quality is as follows:

- All samples were extracted and analysed within recommended holding times
- The trip spike recovery was within data quality indicators. Trip blank analyses was below detection limits across all analytes.
- Inter and intra laboratory duplicates relative percentage difference analyses did not exceed DQI.
- The dataset as a whole is considered reliable.

12 UPDATED CONCEPTUAL SITE MODEL

The preliminary CSM (refer **Section 7.6**) has been updated based on the results of the desktop review, site inspection and intrusive investigation as outlined below.

12.1 Sources of contamination

The primary source of contamination is considered to be weathered building materials from historical structures on the site which are now impacting soils as well as . Lead based paint used on the exteriors and interiors of the buildings has likely flaked off, with the flakes breaking down over time in the soil in addition to lead paint dust being tracked out of the building.

12.2 Contaminants of potential concern

Based on the results of the intrusive investigation, the main COPC is lead and PAH impacted fill material identified at the following three locations:

- Reported concentration of lead at BH2_0.0-0.1 being 3,570 mg/kg which exceeded the lead HIL of 1,500 mg/kg.
- Reported concentration of benzo(a)pyrene at BH1_0.0-0.05 being 2.4 mg/kg which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.

- Reported concentration of benzo(a)pyrene at BH2_0.0-0.1 being 6.2 mg/kg which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.

12.3 Pathways

The potential pathways for exposure and migration are:

- inhalation of asbestos fibres.
- inhalation and dermal contact with lead based paint.
- corrosion and migration with runoff to ground and or nearby surface water bodies and subsequent ingestion of lead impacted soil.

12.4 Receptors

Identified potential sensitive receptors are considered to be:

- Current and future site users
- Future construction and maintenance workers at the site
- Flora and fauna associated with the site and nearby surface water features.

12.5 Sources to receptor linkages

Based upon the results and findings of this assessment, a source-pathway-receptor risk-linkage analysis is presented in **Table 17**. Please note, it includes potential contamination sources identified as part of the preliminary CSM that have been discounted as a result of this investigation.

Table 17: Source pathway receptor analysis

Potential source	CoPC	Pathway	Receptor	Risk	Comments
Contaminated surface soils; **Surface soils impacted by lead paint**	TRH, BTEX, PAH, metals.	Direct contact; Ingestion; and Inhalation	**Human** – Current and future site users.	**HIGH**	Contamination reported within acceptable thresholds for human health for commercial and industrial land use except for BH2_0.0-0.1 exceedance of HIL (3,570 mg/kg) (Setting D) (ASC NEPM, 2013).
		Uptake / ingestion	**Ecological** – Soil processes, soil fauna, flora	**LOW**	Contamination reported within acceptable thresholds for human health for commercial and industrial land use except for ESL exceedance at BH1_0.0-0.05 and at BH2_0.0-0.1 which exceeded the ESL for (1.4mg/kg). (Setting D) (ASC NEPM, 2013). The PAH contamination is likely derived from coke ash from historical uses. such risk considered low.
		Percolation through of chemicals through soil strata	**Ecological** – Groundwater environment	**LOW**	Contamination reported within acceptable thresholds for human health for commercial and industrial land use except for ESL exceedance at BH1_0.0-0.05 and at BH2_0.0-0.1 which exceeded the ESL for (1.4mg/kg). (Setting D) (ASC NEPM, 2013). The PAH contamination is likely derived from coke ash from historical uses. such risk considered low.
Hazardous building materials	Asbestos , lead paint, lead dust,	Direct contact; Ingestion and Inhalation	**Human** – Current and future site users **Ecological** – Site fauna	**HIGH**	Lead paint has been used to construct buildings/ structures at the site per ADE (2022) Asbestos contamination may occur due to poor demolition practices.

Potential source	CoPC	Pathway	Receptor	Risk	Comments
	synthetic mineral fibres and PCBs	Plant uptake	**Ecological** – Site flora	**LOW**	The reported concentration of Lead at location BH1 exceeds the lead EIL. The lead is likely present due to corrosion of lead-based which coated the adjacent building. lead impact due to corrosion is typically surficial meaning it is likely to be limited to the topsoil/ upper 0.1-0.2 m. This topsoil/ upper 0.1-0.2 m is likely to be removed during site preparation, which would result in removing the lead exceedance. Furthermore, there evidence of stressed vegetation at, near, the location was not noted.

Notes:
HIGH RISK - desktop review and site inspection have identified potentially contaminating site activities and intrusive works must be carried out to remediate.
MODERATE RISK - desktop review and site inspection cannot rule out the presence of potentially contaminating site activities without undertaking recommended intrusive works
LOW RISK - desktop review and site inspection have not identified any potentially contaminating site activities

13 CONCLUSIONS

Based on the results of the assessment, the following conclusion are made:

- The site has been owned by the Rail Corporation New South Wales from 1880 to 2020, when it was acquired by the Transport Asset Holding Entity of New South Wales. The CME building was constructed in 1887 and appears unchanged since the 1930s.
- The site is boarded to the south by the Redfern railway corridor which includes warehouses, repair bays and storage areas.
- There is no indication that the site has been used for industrial purposes such as manufacturing or bulk storage of chemicals etc.
- Lead containing paints were identified throughout the building interior and exterior in (ADE, 2022). The paint was in fair to poor condition with flaking noted in serval locations. Lead paint flakes has built up on the floors. Lead containing dusts was identified within the building interior. Lead dust needs to be remediated and appropriately cleared.
- Environmental cleaning was undertaken onsite in May 2022 (Environmental Earth Sciences, 2022), to remove some of the built up lead paint from floors and surfaces to reduce the risk during site access. Lead paint and dust remains within the building, this risk can only be fully mitigated through the removal of all wall and ceiling coverings which contain lead paint, removal of all paint from door and window frames or sealing with new paint and stripping and revarnishing of timber floor or covering with new floor finishes. No renovation works should be undertaken until all lead-based paint has been stripped and removed from the building.
- The site covers 2500 m^2 with 930 m^2 covered by the CME building. The area south and west of the CME building is covered by asphalt hardstand. East of the CME building is a small area of open garden, north of the CME building are landscaped garden beds.
- The site is underlain by various fill layers consisting of brown Sand with igneous gravel and charcoal fragments, loose dry Sand and areas of light brown Clay and Clay loam material. No asbestos containing material was identified or any hydrocarbon staining or odours.
- Laboratory results indicated high levels of lead at BH2_0.0-0.1 being 3,570 mg/kg which exceeded the lead HIL of 1,500 mg/kg. The lead is likely due to flakes of lead-based paint or tracked lead dust from the CME building (the entrance to the building is adjacent to the sample location).
- Laboratory results indicated high levels of benzo(a)pyrene at BH1_0.0-0.05 being 2.4 mg/kg and BH2_0.0-0.1 being 6.2 mg/kg which exceeded the benzo(a)pyrene ESL of 1.4 mg/kg.

Based on the results of the assessment, Environmental Earth Sciences considers the site can be made suitable for the proposed land use on the basis that the recommendations (refer **Section 14**) are implemented.

14 RECOMMENDATIONS

14.1 Hazardous building materials

Hazardous buildings materials have been identified throughout the CME building. Materials include lead based paint, lead dust, bonded asbestos and lead paint flakes which have built up on surfaces and floors.

Refer to ADE 2022 and **Appendix B** for detailed findings and recommendations on Hazardous materials onsite. All Hazardous materials identified in the Hazardous materials register need to me removed from site or appropriately encapsulated.

- A clearance certificate be obtained to ensure lead risk and other hazards materials has been removed appropriately and that no lead based paint remains within the building.
- Confirmatory sampling and analysis for lead of the building be conducted to evaluate the presence of lead contamination post remediation.

Confirmatory sampling and analysis of lead in surface soils should be undertaken post remediation to ensure lead has not migrated out of the building during remediation.

14.2 Impacted fill material

Surface fill material along Wilson street including material within BH2 cannot remain onsite it will need to be disposed to an appropriate facility. The anticipated volume of material to be managed will be 4 m^3 in a 20m^2 area within the garden bed surrounding BH2. Additional laboratory testing will be required to classify the material in accordance with the *Waste Classification Guidelines* (NSW EPA 2014).

14.3 Unexpected finds

During any proposed redevelopment there is a potential for unexpected subsurface finds (as is the case for any site), and consequently Environmental Earth Sciences recommends that a construction environmental management plan (CEMP) be prepared to manage these occurrences. This would include procedures for:

- management of soil including environmental controls for mitigation of erosion, sedimentation, dust generation;
- excavation management;
- onsite / off-site soil material tracking;
- soil/ spoil stockpile management;

- procedures for soil disposal and waste classification in accordance with NSW EPA (2014), if required;
- unexpected finds protocol (UFP) procedure for managing instances where gross contamination and/or hazardous materials are encountered, with appropriate consideration of WH&S controls for mitigating risk to construction workers.

15 LIMITATIONS

This report has been prepared by Environmental Earth Sciences NSW ACN 109 404 006 in response to and subject to the following limitations:

1. The specific instructions received from Transport for NSW;
2. The specific scope of works set out in Variation 1 of PO122033_V2 issued by Environmental Earth Sciences for and on behalf of Transport for NSW, is included in Section 3 (Scope of Work) of this report;
3. May not be relied upon by any third party not named in this report for any purpose except with the prior written consent of Environmental Earth Sciences NSW (which consent may or may not be given at the discretion of Environmental Earth Sciences NSW);
4. This report comprises the formal report, documentation sections, tables, figures and appendices as referred to in the index to this report and must not be released to any third party or copied in part without all the material included in this report for any reason;
5. The report only relates to the site referred to in the scope of works being located at 505 Wilson Street, Eveleigh (“the site”);
6. The report relates to the site as at the date of the report as conditions may change thereafter due to natural processes and/or site activities;
7. No warranty or guarantee is made in regard to any other use than as specified in the scope of works and only applies to the depth tested and reported in this report;
8. Fill, soil, groundwater and rock to the depth tested on the site may be fit for the use specified in this report. Unless it is expressly stated in this report, the fill, soil and/or rock may not be suitable for classification as clean fill, excavated natural material (ENM) or virgin excavated natural material (VENM) if deposited off site;
9. This report is not a geotechnical or planning report suitable for planning or zoning purposes; and
10. Our General Limitations set out at the back of the body of this report.\

16 REFERENCES

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Standards Australia 2005, Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds (AS 4482.1).

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ENVIRONMENTAL EARTH SCIENCES GENERAL LIMITATIONS

Scope of services
The work presented in this report is Environmental Earth Sciences response to the specific scope of works requested by, planned with and approved by the client. It cannot be relied on by any other third party for any purpose except with our prior written consent. Client may distribute this report to other parties and in doing so warrants that the report is suitable for the purpose it was intended for. However, any party wishing to rely on this report should contact us to determine the suitability of this report for their specific purpose.

Data should not be separated from the report
A report is provided inclusive of all documentation sections, limitations, tables, figures and appendices and should not be provided or copied in part without all supporting documentation for any reason, because misinterpretation may occur.

Subsurface conditions change
Understanding an environmental study will reduce exposure to the risk of the presence of contaminated soil and or groundwater. However, contaminants may be present in areas that were not investigated, or may migrate to other areas. Analysis cannot cover every type of contaminant that could possibly be present. When combined with field observations, field measurements and professional judgement, this approach increases the probability of identifying contaminated soil and or groundwater. Under no circumstances can it be considered that these findings represent the actual condition of the site at all points.

Environmental studies identify actual sub-surface conditions only at those points where samples are taken, when they are taken. Actual conditions between sampling locations differ from those inferred because no professional, no matter how qualified, and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden below the ground surface. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from that predicted. Nothing can be done to prevent the unanticipated. However, steps can be taken to help minimize the impact. For this reason, site owners should retain our services.

Problems with interpretation by others
Advice and interpretation is provided on the basis that subsequent work will be undertaken by Environmental Earth Sciences NSW. This will identify variances, maintain consistency in how data is interpreted, conduct additional tests that may be necessary and recommend solutions to problems encountered on site. Other parties may misinterpret our work and we cannot be responsible for how the information in this report is used. If further data is collected or comes to light we reserve the right to alter their conclusions.

Obtain regulatory approval
The investigation and remediation of contaminated sites is a field in which legislation and interpretation of legislation is changing rapidly. Our interpretation of the investigation findings should not be taken to be that of any other party. When approval from a statutory authority is required for a project, that approval should be directly sought by the client.

Limit of liability
This study has been carried out to a particular scope of works at a specified site and should not be used for any other purpose. This report is provided on the condition that Environmental Earth Sciences NSW disclaims all liability to any person or entity other than the client in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by any such person in reliance, whether in whole or in part, on the contents of this report. Furthermore, Environmental Earth Sciences NSW disclaims all liability in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by the client, or any such person in reliance, whether in whole or any part of the contents of this report of all matters not stated in the brief outlined in Environmental Earth Sciences NSW's proposal number and according to Environmental Earth Sciences general terms and conditions and special terms and conditions for contaminated sites.

To the maximum extent permitted by law, we exclude all liability of whatever nature, whether in contract, tort or otherwise, for the acts, omissions or default, whether negligent or otherwise for any loss or damage whatsoever that may arise in any way in connection with the supply of services. Under circumstances where liability cannot be excluded, such liability is limited to the value of the purchased service.

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FIGURES

Ref. NSW Spatial Information Exchange SIX. website image. 20122

Scale (approximate) 0 10 20 30metres

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Client: Transport for NSW

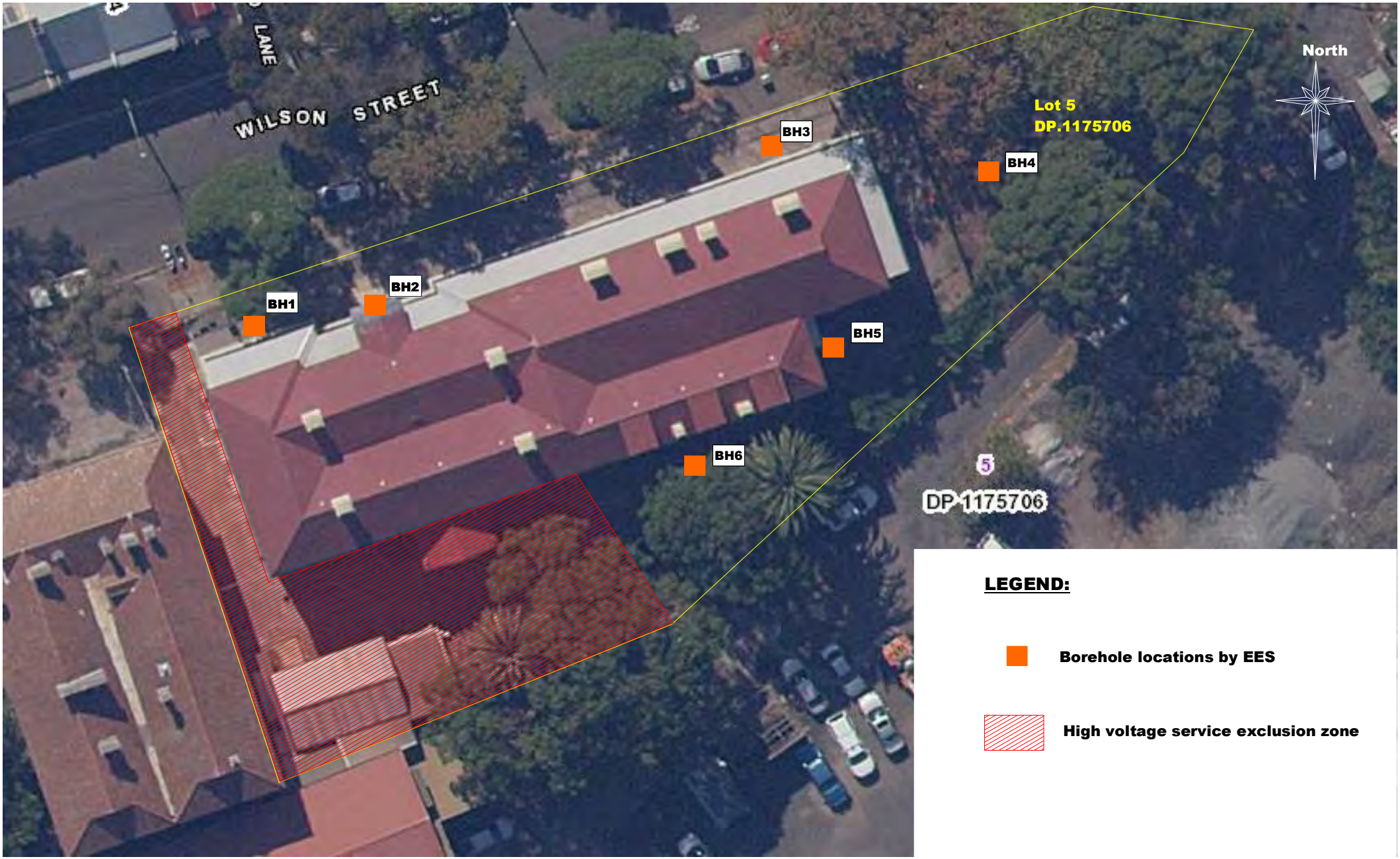
Title: Site Locality Plan

Location: 505 Wilson Street. Eveleigh, NSW

Job No. 122040 | Date: 26 June 2022

Drawn by: TRJ | Proj. Man. CP | Scale: As shown

Figure 1



Ref. NSW Spatial Information Exchange SIX. website image. 20122

0 10 20metres

Scale (approximate)

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CONTAMINATION RESOLVED

Client: Transport for NSW

Title: Borehole Locations

Location: 505 Wilson Street. Eveleigh, NSW

Job No. 122040 | Date: 15 July 2022

Drawn by: TRJ | Proj. Man. CP | Scale: As shown

Figure 2

TABLES

Table A - Laboratory Results Summary Table

Job Number: 122040
Location: 505 Wilson Street, Eveleigh, NSW

							Field ID:	**BH1_0.0-0.05**	**BH1_0.1-0.2**	**BH2_0.0-0.1**	**BH3_0.2-0.3**	**BH4_0.3-0.4**	**BH5_0.4-0.5**	**BH6_0.1-0.2**	**BH6_0.5-0.6**
							Lab Report Number	ES2223348	ES2223348	ES2223348	ES2223348	ES2223348	ES2223348	ES2223348	ES2223348
							Date	**30/06/2022**	**30/06/2022**	**30/06/2022**	**30/06/2022**	**30/06/2022**	**30/06/2022**	**30/06/2022**	**30/06/2022**
	Unit	EQL	NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Fine Soil	NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay (0-1m)	NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind	NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil	NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								
Asbestos															
Asbestos (Trace)	**Fibres**	5						0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]
Asbestos Type	**Detect**							No	No	No	No	No	No	No	No
Asbestos fibres	**g/kg**							0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]	0[#1]
BTEX															
Naphthalene (VOC)	**mg/kg**	1			370			*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*
Benzene	**mg/kg**	0.2		4		95		*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*
Toluene	**mg/kg**	0.5				135		*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Ethylbenzene	**mg/kg**	0.5				185		*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Xylene (m & p)	**mg/kg**	0.5						*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Xylene (o)	**mg/kg**	0.5						*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Xylene Total	**mg/kg**	0.5				95		*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Total BTEX	**mg/kg**	0.2						*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*
TRH															
C6-C10 Fraction (F1)	**mg/kg**	10	800					*<10*	*<10*	*<10*	*<10*	*<10*	*<10*	*<10*	*<10*
C6-C10 (F1 minus BTEX)	**mg/kg**	10		310		215		*<10*	*<10*	*<10*	*<10*	*<10*	*<10*	*<10*	*<10*
>C10-C16 Fraction (F2)	**mg/kg**	50	1,000			170		*<50*	*<50*	*<50*	*<50*	*<50*	*<50*	*<50*	*<50*
>C10-C16 Fraction (F2 minus Naphthalene)	**mg/kg**	50				170		*<50*	*<50*	*<50*	*<50*	*<50*	*<50*	*<50*	*<50*
>C16-C34 Fraction (F3)	**mg/kg**	100	5,000			2,500		120	*<100*	420	*<100*	*<100*	*<100*	*<100*	*<100*
>C34-C40 Fraction (F4)	**mg/kg**	100	10,000			6,600		*<100*	*<100*	130	*<100*	*<100*	*<100*	*<100*	*<100*
>C10-C40 Fraction (Sum)	**mg/kg**	50						120	*<50*	550	*<50*	*<50*	*<50*	*<50*	*<50*
Metals															
Arsenic	**mg/kg**	5			160		3,000	*<5*	*<5*	6	*<5*	*<5*	*<5*	*<5*	*<5*
Cadmium	**mg/kg**	1					900	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*
Chromium (III+VI)	**mg/kg**	2			310			90	10	35	4	3	5	7	7
Copper	**mg/kg**	5			280		240,000	43	10	60	6	22	*<5*	*<5*	*<5*
Lead	**mg/kg**	5			1800		1,500	552	132	3,570	74	136	6	21	*<5*
Mercury	**mg/kg**	0.1					730	0.2	*<0.1*	0.6	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.1*
Nickel	**mg/kg**	2			290		6,000	32	5	9	2	*<2*	*<2*	2	4
Zinc	**mg/kg**	5					400,000	222	89	971	109	73	*<5*	7	*<5*
PAH															
Acenaphthene	**mg/kg**	0.5						*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Acenaphthylene	**mg/kg**	0.5						*<0.5*	*<0.5*	2.3	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Anthracene	**mg/kg**	0.5						0.6	*<0.5*	4.7	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Benzo(a)anthracene	**mg/kg**	0.5						1.8	*<0.5*	6.6	*<0.5*	0.8	*<0.5*	*<0.5*	*<0.5*
Benzo(a) pyrene	**mg/kg**	0.5				1.4		2.4	0.5	6.2	0.6	1.1	*<0.5*	*<0.5*	*<0.5*
Benzo(b+j)fluoranthene	**mg/kg**	0.5						2.1	*<0.5*	6.4	0.5	1.0	*<0.5*	*<0.5*	*<0.5*
Benzo(g,h,i)perylene	**mg/kg**	0.5						1.3	*<0.5*	2.9	*<0.5*	0.7	*<0.5*	*<0.5*	*<0.5*
Benzo(k)fluoranthene	**mg/kg**	0.5						0.8	*<0.5*	2.5	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Chrysene	**mg/kg**	0.5						1.9	*<0.5*	5.5	*<0.5*	0.8	*<0.5*	*<0.5*	*<0.5*
Dibenz(a,h)anthracene	**mg/kg**	0.5						*<0.5*	*<0.5*	1.0	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Fluoranthene	**mg/kg**	0.5						4.1	0.7	14.7	1.2	1.8	*<0.5*	1.1	*<0.5*
Fluorene	**mg/kg**	0.5						*<0.5*	*<0.5*	0.5	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Indeno(1,2,3-c,d)pyrene	**mg/kg**	0.5						1.2	*<0.5*	2.8	*<0.5*	0.6	*<0.5*	*<0.5*	*<0.5*
Naphthalene	**mg/kg**	0.5			370			*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
Phenanthrene	**mg/kg**	0.5						2.2	*<0.5*	15.6	0.8	0.8	*<0.5*	0.8	*<0.5*
Pyrene	**mg/kg**	0.5						4.1	0.8	11.8	1.1	1.8	*<0.5*	1.0	*<0.5*
PAHs (Sum of total)	**mg/kg**	0.5					4,000	22.5	2.0	83.5	4.2	9.4	*<0.5*	2.9	*<0.5*

Notes:

BTEX: Benzene, Toluene, Ethylbenzene, Xylene
EQL: Estimated Quantitation Limit
ESL: Ecological screening levels
HIL: Health investigation levels
HSL: Health screening levels
NL: Non-limiting
PAH: Polycyclic aromatic hydrocarbons
TPH: Total petroleum hydrocarbons
TRH: Total recoverable hydrocarbons
PCBs: Polychloronated Biphenyls

Comments
#1 No
#2 -

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Fine Soil
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay
2013, NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Fine Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil

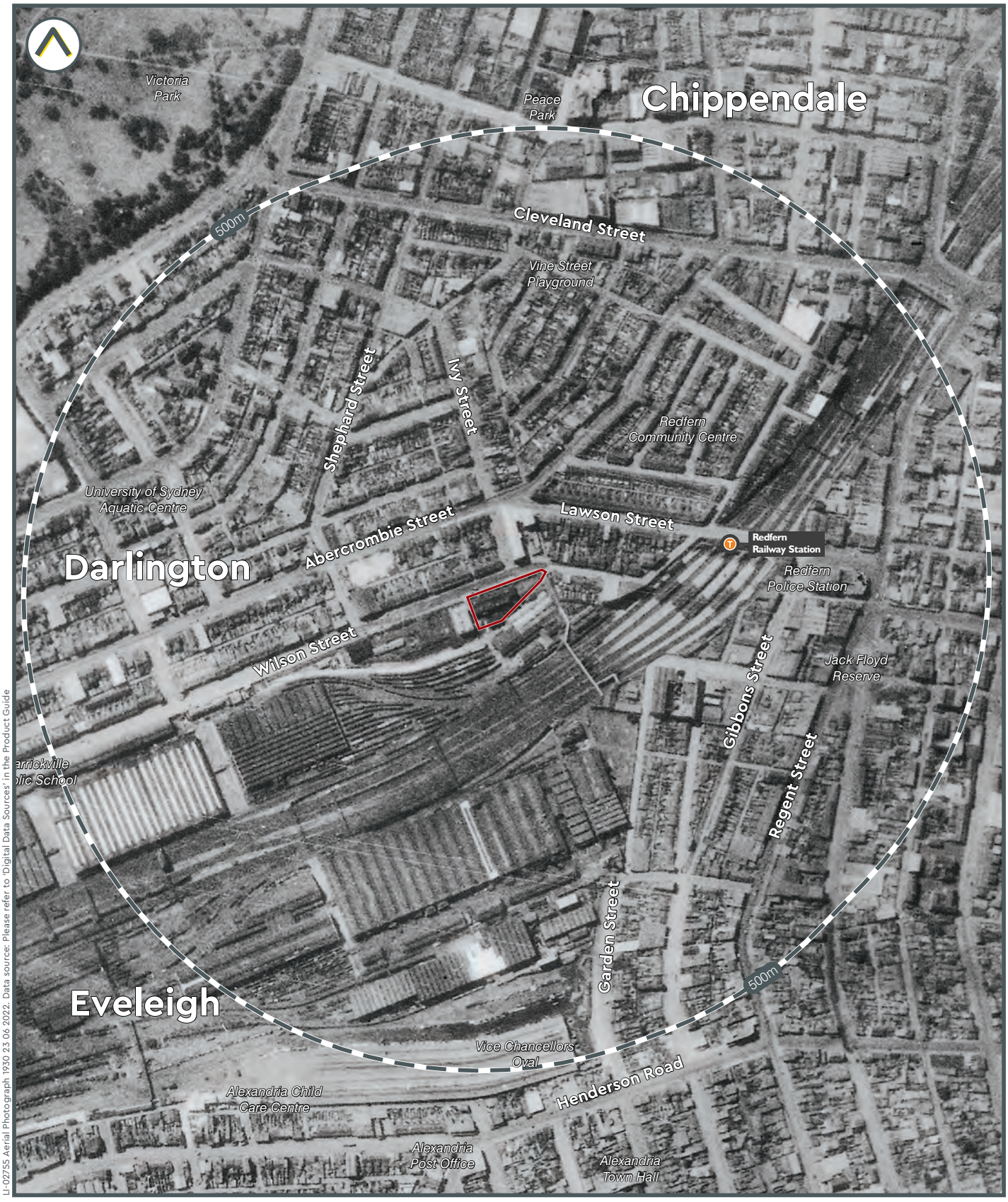
APPENDIX A: HISTORICAL AERIAL IMAGERY

Appendix B

HISTORIC IMAGERY

505 Wilson Street
Eveleigh, NSW

Historic Aerial Photograph - 1930



Subject area

0 200m

LI-02755 Aerial Photograph 1930 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

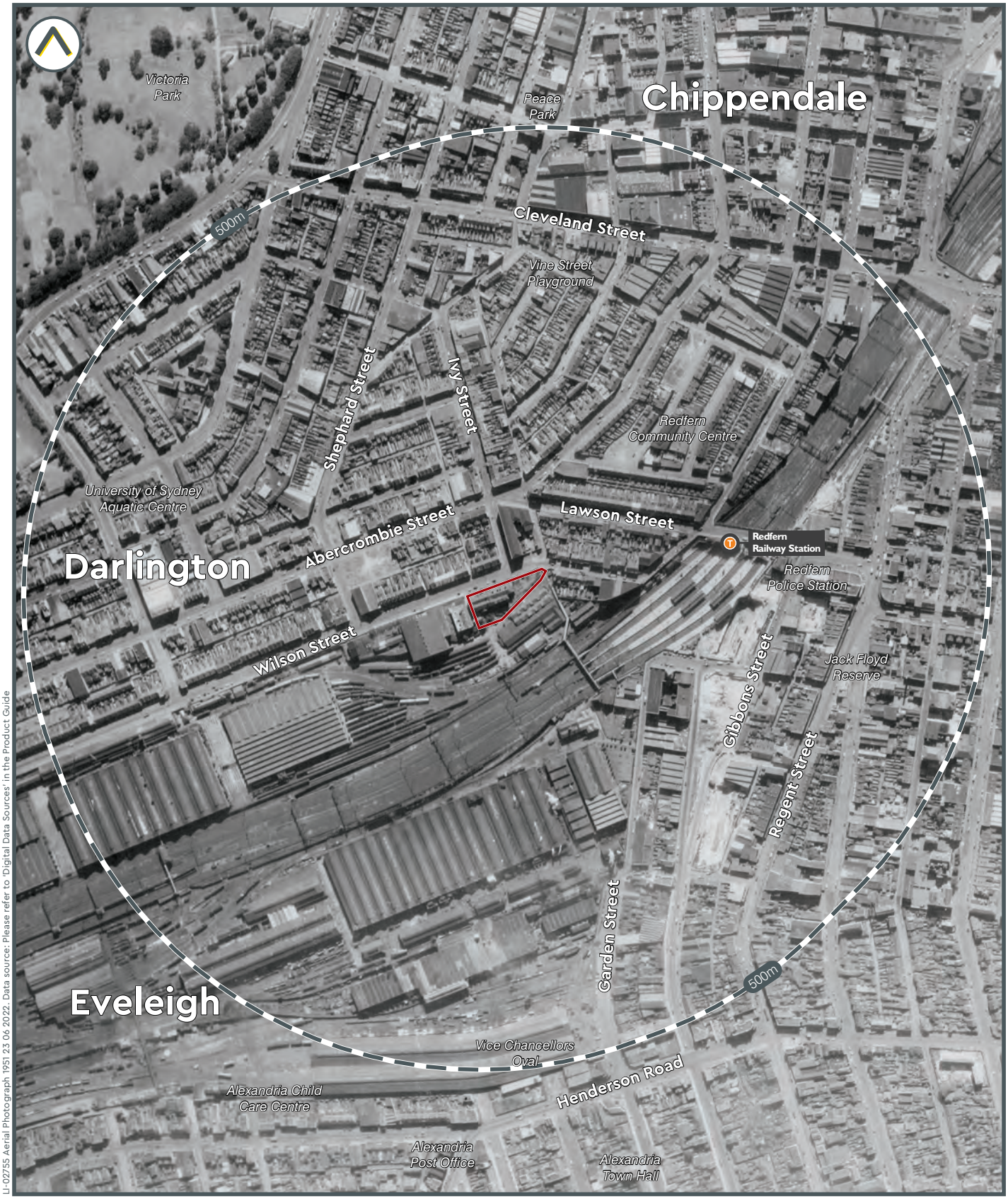
Historic Aerial Photograph - 1943

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 1951

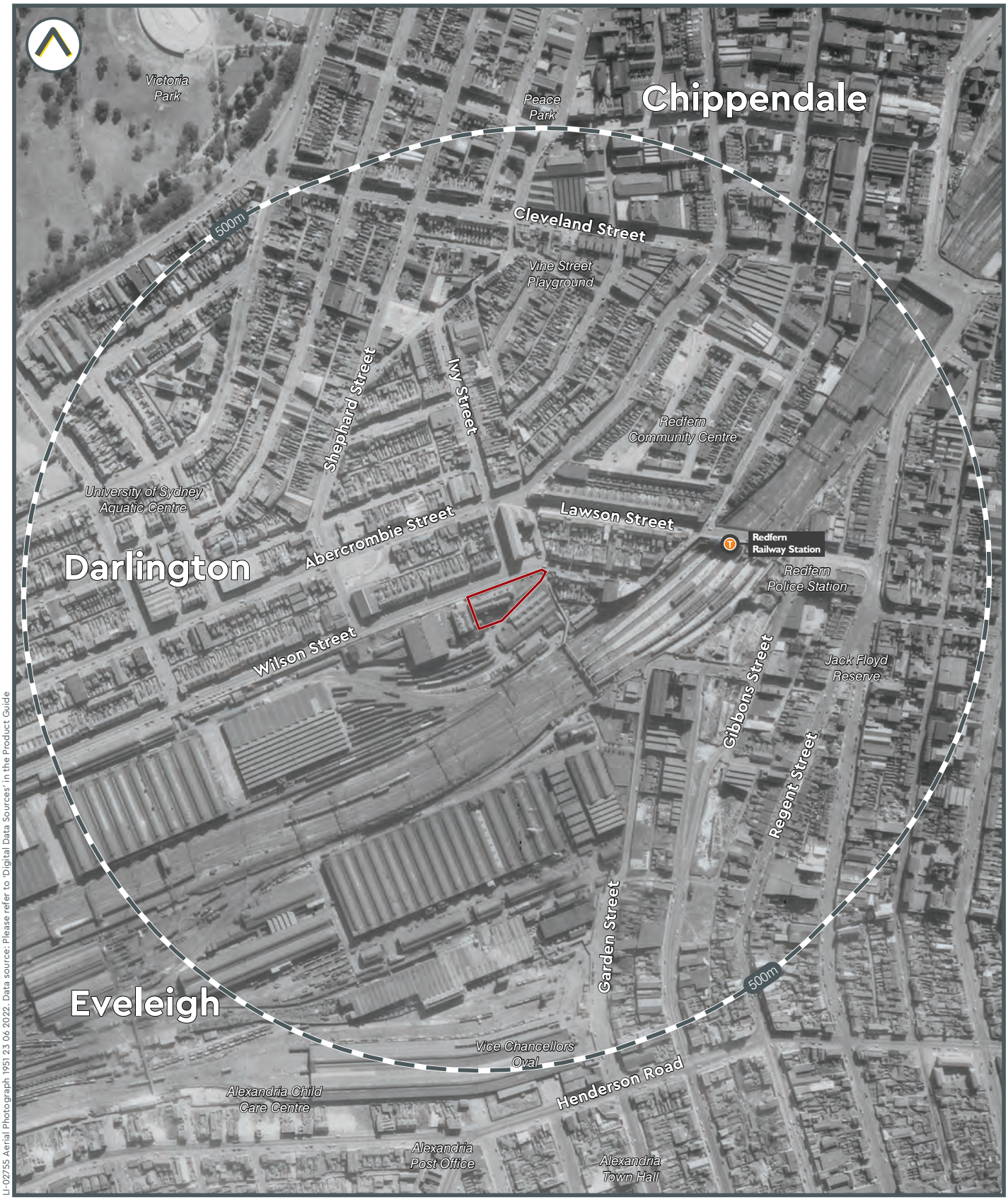


Subject area

0 200m

Land Insight

Historic Aerial Photograph - 1955



Subject area

0 200m

Land Insight

Historic Aerial Photograph - 1965

Subject area

0 200m

LI-02755 Aerial Photograph 1965 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 1970

Subject area

0 200m

LI-02755 Aerial Photograph 1970 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 1975

Subject area

0 200m

LI-02755 Aerial Photograph 1970 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 1986

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 1991

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 1994

Subject area

0 200m

LI-02755 Aerial Photograph 1994 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 1998

Subject area

0 200m

LI-02755 Aerial Photograph 1998 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 2004

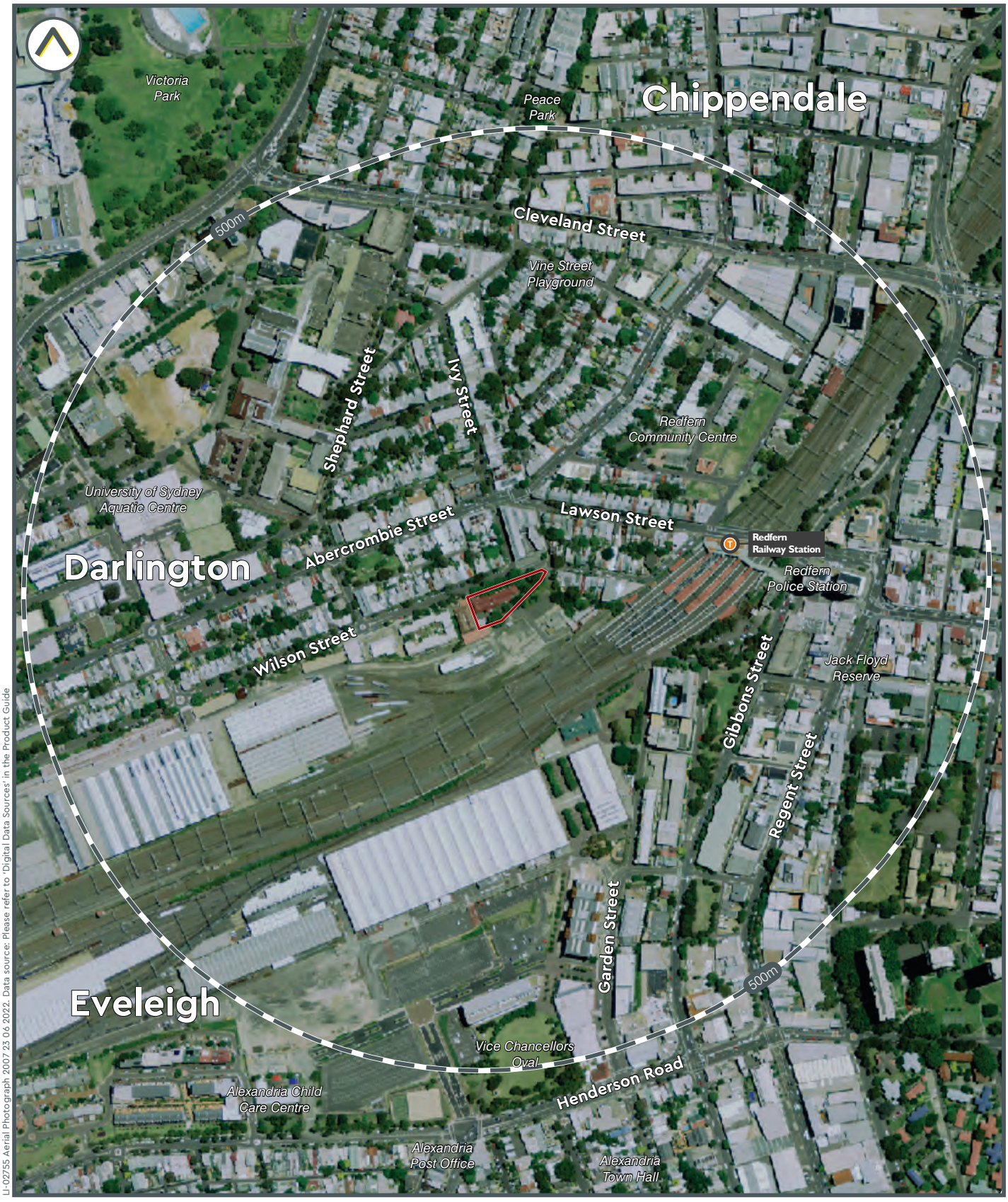
LI-02755 Aerial Photograph 2004 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 2007



Subject area

0 200m

Land Insight

Historic Aerial Photograph - 2010

LI-02755 Aerial Photograph 2010 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 2013

Subject area

0 200m

LI-02755 Aerial Photograph 2013 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

Historic Aerial Photograph - 2016

LI-02755 Aerial Photograph 2016 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 200m

Land Insight

Historic Aerial Photograph - 2019

Subject area

0 200m

Land Insight

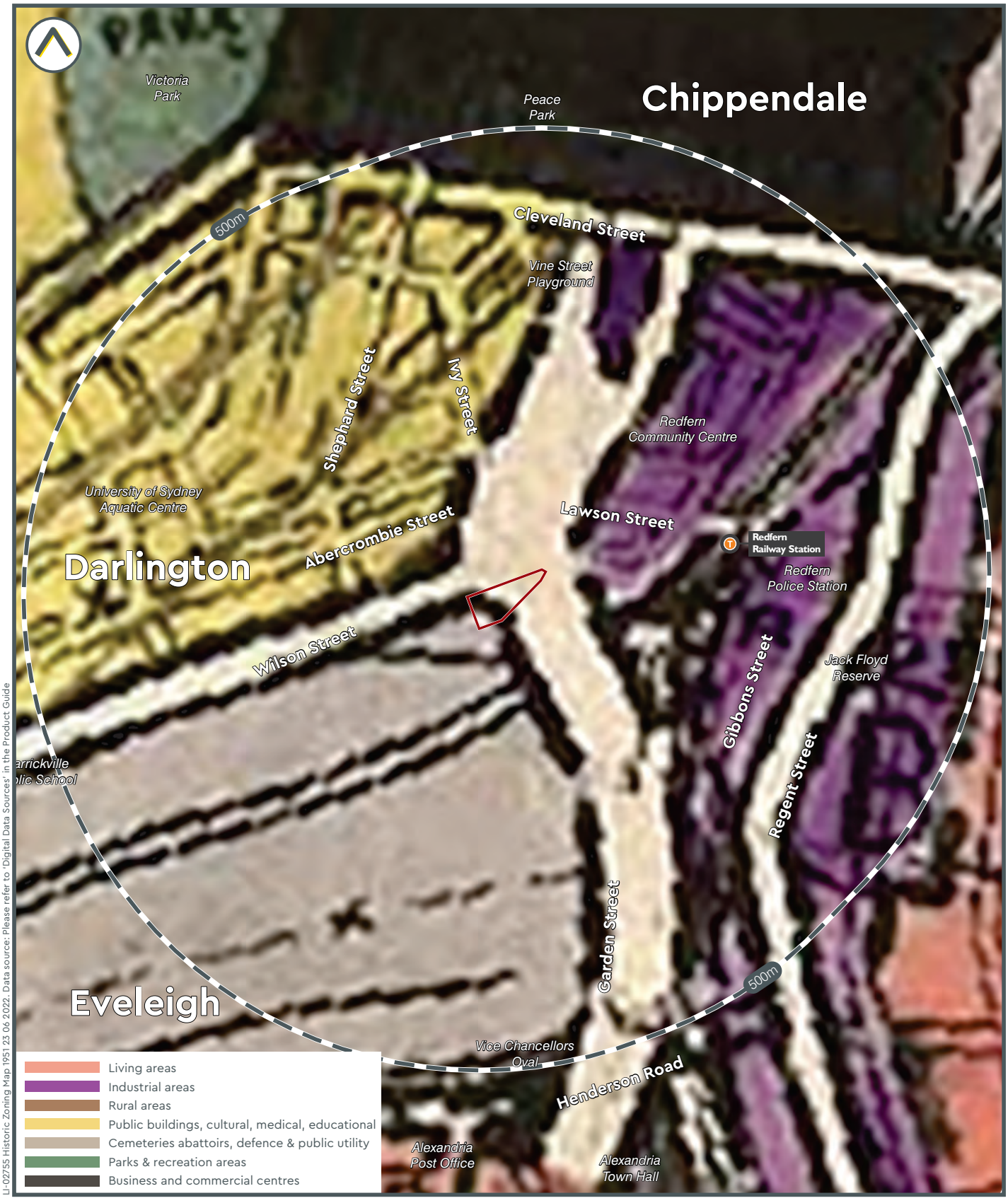
Historic Aerial Photograph - 2022

Subject area

0 200m

Land Insight

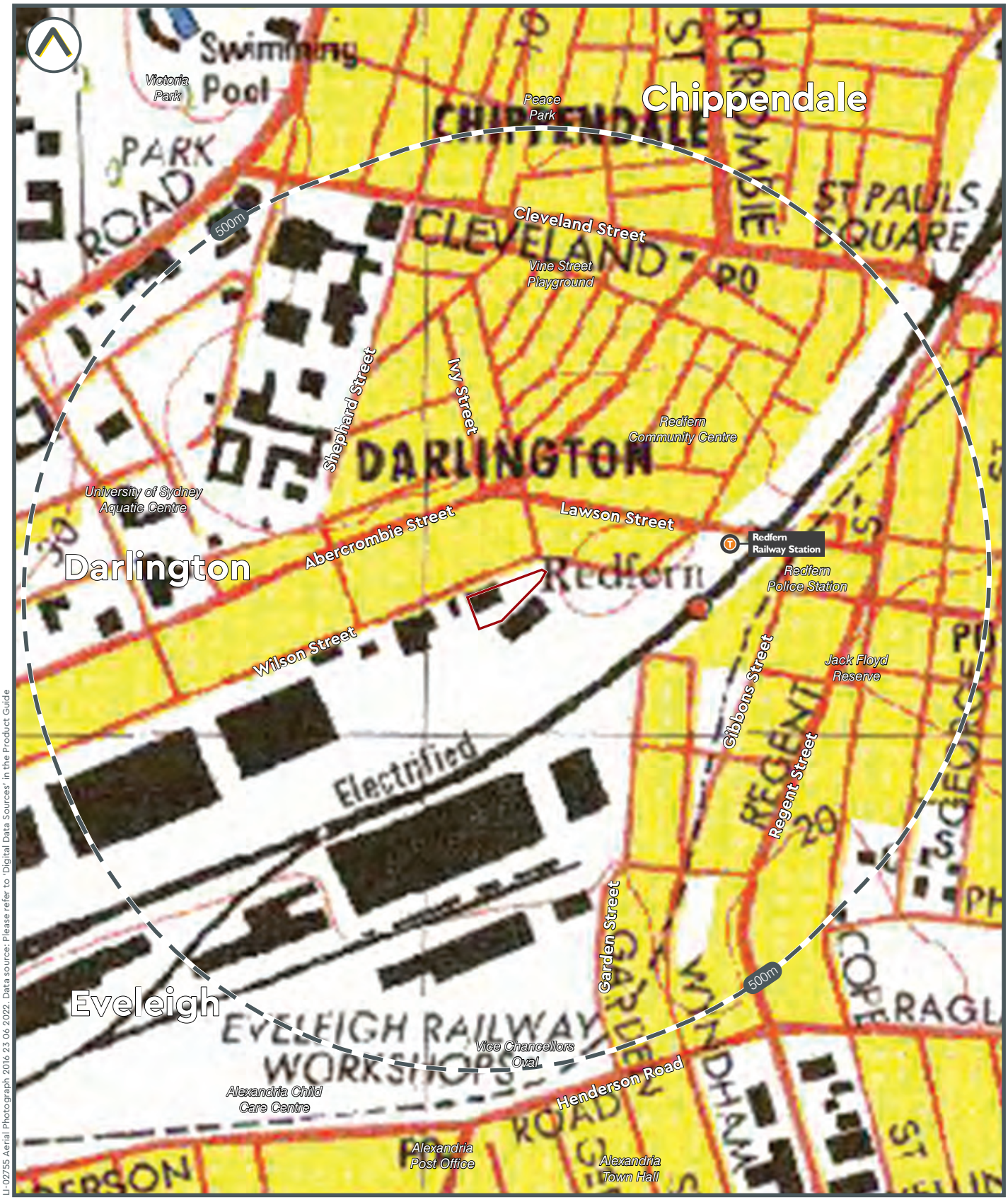
County Of Cumberland Planning Scheme - 1951



LI-02755 Historic Zoning Map 1951 23 06 2022. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Land Insight

1969-1991 1:25,000 Topographic Map (Botany Bay 9130-3S)



Subject area

0 200m

Land Insight

Land
Insight

APPENDIX B: HAZARDOUS MATERIALS REGISTER

Hazardous Materials Register - Chief Mechanical Engineers Building

Address: 505 Wilson Street, North Eveleigh NSW

Hygienist: Charly Golding
Hygienist: Siddhartha Sapkota

Inspection date:
Reinspection date:

Inaccessible Areas: Surface above 3m height
Building exterior, behind boarded windows
Building exterior, roof top
Roof space located within kitchenette
Building exterior, underneath building
Limited inspection throughout subfloor / floor void

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
Chief Mechanical Engineers Building Exterior																	
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Western exterior	Eaves	White lead paint system	10	sq. m	Same as: 5457-Pb3	N/A	229,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Eaves	FC eaves	50	Linear m	Unable to sample due to height	9	Presumed asbestos containing	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
21.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Window frames surround	White lead paint system	60	sq. m	Pb1	10	47320 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				
21.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Walls and metal rain water goods	Beige lead paint system	400	sq. m	Pb2	11	80850 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				
21.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Metal support poles to awning	Green lead paint system	40	Linear m	Pb3	12	8895 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				
21.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Window frame	Green lead paint system	80	Linear m	Pb4	10	14685 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Windowsills	Light brown lead paint system	40	sq. m	Rpb4	1	3,248 mg/kg	Good	Low	Paint removal is not required. Maintain in current condition if to remain in situ, otherwise it is recommended to stabilise the surfaces by overpainting with a lead-free product prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Western exterior	Throughout	Lead containing soil	Throughout	N/A	8828-CME-Pb5	N/A	3,200 mg/kg	Poor	High	Restrict access. Remove lead containing soil as soon as practicable. Wear appropriate PPE when handling lead soil. Conduct airborne lead monitoring during removal works. Presumed to still remain within the building surround no clearance provided.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Western exterior	FC flue pipe	Presume high level FC flue	1	sq. m	Unable to sample due to height	8	Presumed asbestos containing	Good	Low	Label the item in line with the Asbestos Management Plan (AMP) and the SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019). Reinspect periodically. Maintain in current condition if to remain in situ, otherwise remove before refurbishment or demolition following the SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Eaves	White lead paint system	60	Linear m	Same as: 5457-Pb3	N/A	229,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Throughout exterior	Timber fascia	White lead paint system	40	Linear m	Same as: 5457-Pb3	N/A	229,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	South eastern exterior	Eastern and southern exterior, top of floor	Lead containing soil	Throughout	N/A	8828-CME-Pb3	9	11,000 mg/kg	Poor	High	Restrict access. Remove lead containing soil as soon as practicable. Wear appropriate PPE when handling lead soil. Conduct airborne lead monitoring during removal works. Presumed to still remain within the building surround no clearance provided.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	South eastern exterior (sun room)	Ceiling lining	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
04.07.2022	Chief Mechanical Engineers Building exterior	South east entrance (sunroom)	Ceiling lining	FC ceiling	6	sq.m	Rasb8	N/A	No asbestos detected	Good	Negligible	No asbestos detected. No further action required.	N/A				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Southern exterior	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Roof	High level panels to roofline	FC panels	6	sq.m	Unable to sample due to height	9	Presumed asbestos containing	Good	Low	Label the item in line with the Asbestos Management Plan (AMP) and the SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019). Reinspect periodically. Maintain in current condition if to remain in situ, otherwise remove before refurbishment or demolition following the SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building exterior	Southern exterior	Metal pipe	Bitumen wrap	2	Linear m	Rasb9	N/A	No asbestos detected	Good	Negligible	No asbestos detected. No further action required.	N/A				
04.07.2022	Chief Mechanical Engineers Building exterior	North western balcony	Balcony doors and windows	Putty	4	Linear m	Rasb7	N/A	No asbestos detected	Good	Negligible	No asbestos detected. No further action required.	N/A				
Chief Mechanical Engineers Building Interior, Ground Level																	

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
06.03.2015	Chief Mechanical Engineers Building interior, ground level	Throughout ground floor	Top of floor	Lead containing dust	Throughout	N/A	Same as: 5457-Pb8	10	3,100 mg/kg	Poor	High	Restrict access. Remove lead containing dust as soon as practicable. Wear appropriate PPE when handling lead dust. Conduct airborne lead monitoring during removal works.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Throughout ground floor	Internal doors	Pink lead paint system	50	sq.m	Same as: Rpb4	15	3,248 mg/kg	Fair	Medium	Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
04.07.2022	Chief Mechanical Engineers Building interior, ground level	Throughout ground floor	Within accessible subfloor	Lead containing dust	Throughout	N/A	Rpb1	10	17,000 mg/kg	Poor	High	Restrict access. Remove lead containing dust as soon as practicable. Wear appropriate PPE when handling lead dust. Conduct airborne lead monitoring during removal works.	Prior to refurbishment				
04.10.2012 / 06.03.2015	Chief Mechanical Engineers Building interior, ground level	1	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
04.10.2012 / 06.03.2015	Chief Mechanical Engineers Building interior, ground level	1	All walls (upper)	Beige lead paint system	100	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	1	All walls (lower)	Turquoise lead paint system	30	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	1	Window trim	White lead paint system (undercoat)	30	sq.m	Same as: 5457-Pb6	N/A	353,300	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	1	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	1	Safe internal insulation	Presumed asbestos internal insulation	1	count	No sample possible due to electrical hazard	7	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	2	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	2	Ceiling lining (second ceiling)	SMF containing ceiling tiles	2	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	2	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	2	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	3	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	3	Ceiling lining (second ceiling)	SMF containing ceiling tiles	2	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tiles are still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	3	Fluorescent light fittings	Presumed PCBs	6	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	3	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	4	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	4	Ceiling lining (second ceiling)	SMF containing ceiling tiles	1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	4	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	4	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	5	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	5	Ceiling lining (second ceiling)	SMF containing ceiling tiles	2	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	5	Ceiling lining (second ceiling)	SMF containing ceiling tiles	~~20~~ 1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	5	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	5	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	Ceiling lining (second ceiling)	SMF containing ceiling tiles	2	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tiles are still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	7	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	6	Electrical wiring	Cable wrap	20	Linear m	Rasb2	N/A	No asbestos detected	Good	Negligible	No asbestos detected. No further action required.	N/A				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	7	Ceiling lining (second ceiling)	SMF containing ceiling tiles	1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	7	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	7	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	8	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	8	Ceiling lining (second ceiling)	SMF containing ceiling tiles	1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, subfloor	Throughout ground floor	Damp proof course	Slate	50	sq.m	Rasb7	N/A	No asbestos detected	Fair	Negligible	No asbestos detected. No further action required.	N/A				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	8	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	8	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	9	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	9	Ceiling lining (second ceiling) and top of floor	SMF containing ceiling tiles	1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	9	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	9	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Southern rear entrance room	Ceiling lining	White lead paint system	5	sq. m	5457-Pb6	3	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Southern rear entrance room	Entrance door	Green lead paint system (white undercoat)	2	sq. m	Same as: 8828-CME-Pb1	N/A	>50,000 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				

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	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Southern rear entrance room	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Southern rear entrance room	All walls	Beige lead paint system	10	sq.m	5457-Pb7	3	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Male toilet adjacent southern rear entrance room	Ceiling lining	White lead paint system	5	sq. m	Same as: 5457-Pb6	3	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Male toilet adjacent southern rear entrance room	All walls	Beige lead paint system	10	sq.m	Same as: 5457-Pb7	3	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Female toilet adjacent southern rear entrance room	Ceiling lining	White lead paint system	5	sq. m	Same as: 5457-Pb6	3	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Female toilet adjacent southern rear entrance room	All walls	Beige lead paint system	10	sq.m	Same as: 5457-Pb7	3	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Storeroom beneath stairs	Ceiling lining, walls	Yellow (various undercoat) lead paint system	5	sq. m	Same as: 5457-Pb4	N/A	37,600 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

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	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	10	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	10	Ceiling lining (second ceiling)	SMF containing ceiling tiles	~~20~~ 2	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tiles are still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	10	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	10	All walls, timber trim	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	10	Power distribution board	Presumed asbestos containing electrical backing board	1	sq.m	N/A	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	11	Ceiling lining	White lead paint system	30	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	11	Hot water cylinder	Presumed SMF	1	Count	Presumed SMF	N/A	Presumed SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				

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	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	11	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	11	All walls	Beige lead paint system	60	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	11	Floor (carpet)	Lead containing dust	30	sq.m	Same as: 5457-Pb8	N/A	3,100 mg/kg	Poor	High	Remove or thoroughly clean lead dust and associated materials ASAP. Conduct Airborne Lead Monitoring during removal works. Wear appropriate PPE if accessing room and handling lead products. Visual inspection on 06.03.2015 by ADE reveals that the carpet had been removed but lead containing dust is still remaining on top of floor.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	12	Ceiling lining	White lead paint system	30	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	12	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	12	All walls	Beige lead paint system	60	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13	Ceiling lining	White lead paint system	30	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13	Fluorescent light fittings	Presumed PCBs	8	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13	All walls	Beige lead paint system	60	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13	Power distribution board	Presumed asbestos containing electrical backing board	1	sq.m	unable to sample due to electrical hazard	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13	Floor	Paper back vinyl	1	sq.m	Rasb10	N/A	No asbestos detected	Good	Negligible	No asbestos detected. No further action required.	N/A				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13a	Ceiling lining	White lead paint system	10	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13a	Fluorescent light fittings	Presumed PCBs	2	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	13a	All walls	Beige lead paint system	25	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Hallway adjacent to room 13 (east-west)	Ceiling lining	SMF containing ceiling tiles	10	sq.m	Same as: 5457-Asb3	3	SMF	Poor	~~High~~	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 01.07.2022 by ADE reveals that the SMF containing ceiling tiles had been removed.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Hallway adjacent to room 13 (east-west)	All walls	Turquoise lead paint system	40	sq.m	Same as: 5457- Pb5	N/A	377,300	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Hallway adjacent to room 13 (east-west)	Floor (carpet)	Lead containing dust	30	sq.m	5457-Pb8	4	3,100 mg/kg	Poor	High	Remove or thoroughly clean lead dust and associated materials ASAP. Conduct Airborne Lead Monitoring during removal works. Wear appropriate PPE if accessing room and handling lead products. Visual inspection on 06.03.2015 by ADE reveals that the carpet had been removed but lead containing dust is still remaining on top of floor.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North western front entrance	Ceiling lining	Beige lead paint system	10	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North western front entrance	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Throghout ground floor	Window trim	White lead paint system (undercoat)	80	Linear m	Same as: 5457-Pb6	N/A	353300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North western front entrance	All walls/ timber trim	Turquoise lead paint system	30	sq.m	Same as: 5457- Pb5	N/A	377300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Toilet adjacent north western front entrance	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North-south hallway via northern entrance (northern section only)	Ceiling lining	Beige lead paint system	40	sq.m	Same as: 5457-Pb7	N/A	93100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North-south hallway via northern entrance (northern section only)	Fluorescent light fittings	Presumed PCBs	2	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North-south hallway via northern entrance (northern section only)	All walls	Turquoise lead paint system	30	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North eastern front entrance	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North eastern front entrance	All walls	Turquoise lead paint system	30	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead products.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	North eastern front entrance	Ceiling lining	Beige lead paint system	10	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Toilet adjacent to north eastern enterance	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Main hallway	Ceiling lining	Beige lead paint system	100	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	~~Fair~~ Poor	~~Medium~~ High	~~Seal flaking edges , Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.~~ Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Main hallway	Ceiling lining (second ceiling)	SMF containing ceiling tiles	40	sq.m	Same as: 5457-Asb3	3	SMF	Poor	~~High~~	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoring during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the SMF containing ceiling tiles had been removed.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Main hallway	Fluorescent light fittings	Presumed PCBs	7	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Main hallway	All walls	Turquoise lead paint system	200	sq.m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, ground level	Main hallway	Power distribution board	Presumed asbestos containing electrical backing board	1	sq.m	N/A	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
Chief Mechanical Engineers Building Interior, Level 1																	
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Throughout level 1	Top of floor	Lead containing dust	Throughout	N/A	Same as: 5457-Pb8	N/A	3,100 mg/kg	Poor	High	Restrict access. Remove lead containing dust as soon as practicable. Wear appropriate PPE when handling lead dust. Conduct airborne lead monitoring during removal works.	Prior to refurbishment				
04.07.2022	Chief Mechanical Engineers Building interior, ground level	Throughout first floor	Within accessible subfloor	Lead containing dust	Throughout	N/A	Rpb1	10	15,000 mg/kg	Poor	High	Restrict access. Remove lead containing dust as soon as practicable. Wear appropriate PPE when handling lead dust. Conduct airborne lead monitoring during removal works.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Throughout first floor	Internal doors	Pink lead paint system	30	sq.m	Same as Rpb4	15	3,248 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Ceiling lining	Beige lead paint system	70	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Fluorescent light fittings	Presumed PCBs	8	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Walls	Beige lead paint system	100	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Walls	Turquoise lead paint system (undercoat)	100	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Timber trim, skirting	Turquoise lead paint system (undercoat)	20	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	14 and 15	Air conditioning system (interior)	Presumed to contain SMF insulation	2	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway adjacent to room 14	Power distribution board	Presumed asbestos containing electrical backing board	1	sq.m	N/A	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway adjacent to room 14	Ceiling lining	White lead paint system	15	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway adjacent to room 14	Skirting	Turquoise lead paint system	10	sq. m	Same as: 5457- Pb5	15	377,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway adjacent to room 14	Walls	Beige lead paint system	30	sq.m	Same as: 5457-Pb7	15	93,100 mg/kg	Fair	Medium	Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway adjacent to room 14	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	16	Ceiling lining	White lead paint system	15	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				

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	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	16	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	16	Bottom walls / skirting	Turquoise lead paint system	20	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	16	Top walls	Beige lead paint system	40	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	16	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	17	Ceiling lining	Beige lead paint system	30	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	17	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	17	Bottom walls / skirting	Turquoise lead paint system	20	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead products.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	17	Top walls	Beige lead paint system	40	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead products.	Prior to refurbishment				

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	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	17	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	18	Ceiling lining	Beige lead paint system	30	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	18	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	18	Walls	Beige lead paint system	80	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	18	Timber trim, skirting, walls	Turquoise lead paint system	80	sq. m	Same as: 5457- Pb5	N/A	377,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Air conditioning system (interior)	Presumed to contain SMF insulation	2	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Ceiling lining	White lead paint system	30	sq.m	Same as: 5457-Pb6	N/A	377,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Walls	Beige lead paint system	80	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Timber trim, skirting	Beige lead paint system	10	sq. m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19	Power distribution board	Presumed asbestos containing electrical backing board	1	sq.m	N/A	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Ceiling lining	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Ceiling lining (second ceiling)	SMF containing ceiling tiles	20	sq.m	Same as: 5457-Asb3	3	SMF	Poor	~~High~~	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the SMF containing ceiling tiles had been removed.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Walls	Beige lead paint system	20	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Timber trim to windows, doors and skirting	White lead paint system	10	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Fluorescent light fittings	Presumed PCBs	2	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19a	Floor covering	Paper back vinyl	1	sq.m	Rasb4	N/A	No asbestos detected SMF identified	Good	Low	No asbestos detected. Remove prior to demolition or refurbishment.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19b	Ceiling lining	SMF containing ceiling tiles	~~20~~ 1	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tile is still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19b	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19b	Walls	Beige lead paint system	40	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	19b	Timber trim	White lead paint system	5	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	20	Ceiling lining	Beige lead paint system	30	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	20	Fluorescent light fittings	Presumed PCBs	4	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	20	Walls	Turquoise lead paint system	80	sq. m	Same as: 5457- Pb5	N/A	353,300 mg/kg	~~Fair~~ Poor	~~Medium~~ High	~~Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.~~ Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	20	Timber trim, skirting	Turquoise lead paint system	10	sq. m	Same as: 5457- Pb5	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Air conditioning system (interior)	Presumed to contain SMF insulation	1	count	No sample possible due to electrical hazard	N/A	Presumed to contain SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Ceiling lining	Beige lead paint system	400	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Ceiling lining (second ceiling)	SMF containing ceiling tiles	~~20~~ 5	sq.m	Same as: 5457-Asb3	3	SMF detected	Fair	Medium	~~Restrict access. Remove ASAP. Conduct Airborne SMF Monitoirng during removal. Wear appropriate PPE when handling SMF.~~ Reinspection on 06.03.2015 by ADE reveals that the all SMF containing ceiling tiles had not been removed. SMF containing ceiling tiles are still present on site. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Fluorescent light fittings	Presumed PCBs	60	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Walls	Beige lead paint system	200	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	~~Fair~~ Poor	~~Medium~~ High	~~Seal flaking edges . Conduct Airborne Lead Monitoring during encapsulation works. Wear appropriate PPE when handling lead.~~ Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	High level wall lining	FC wall lining	30	sq.m	Rasb5	4	Chrysotile & Crocidolite asbestos detected	Fair	Medium	Remove or label and enclose/encapsulate in line with the Asbestos Management Plan (AMP) by a Class A or B licensed asbestos removal contractor or remove prior to refurbishment or demolition.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Northern room (kitchenette)	High level wall lining	FC wall lining	8	sq.m	Rasb6	2	Chrysotile asbestos detected	Fair	Medium	Remove or label and enclose/encapsulate in line with the Asbestos Management Plan (AMP) by a Class A or B licensed asbestos removal contractor or remove prior to refurbishment or demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	21	Skirting and doors	Pink lead paint system	30	sq.m	Rpb4	N/A	3,248 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Hallway	Power distribution board	Presumed asbestos containing electrical backing board	2	sq.m	N/A	N/A	Presumed asbestos	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Wall lining	Pink lead paint system	30	sq.m	Rpb4	N/A	3,248 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Ceiling lining	White lead paint system	10	sq. m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Fluorescent light fittings	Presumed PCBs	2	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 2	Ladies toilet	Water Heater	Presumed SMF	1	Count	N/A	N/A	Presumed SMF	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Walls, timber	Pink lead paint system	12	sq. m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Walls	White lead paint system	40	sq. m	Rpb3	N/A	4,935 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Ladies toilet	Water tank	Presumed SMF	1	Count	6	N/A	Presumed PCBs	Good	Low	Maintain in current condition. Remove prior to demolition or refurbishment.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Top of stairway	Ceiling lining	Beige lead paint system	10	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Top of stairway	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Top of stairway	Walls	Turquoise lead paint system	20	sq. m	Same as: 5457- Pb5	15	377,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Northern room (kitchenette)	Ceiling lining	White lead paint system	10	sq.m	Same as: 5457-Pb6	N/A	353,300 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Northern room (kitchenette)	Fluorescent light fittings	Presumed PCBs	1	Count	N/A	N/A	Presumed PCBs	Good	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against ANECC1997 prior to demolition which may disturb presumed PCBs. Remove prior to demolition.	Prior to refurbishment				

Date	LOCATION			MATERIAL DESCRIPTION							RISK MANAGEMENT			CORRECTIVE ACTIONS			
	Building	Room	Surface	Material Application	Quantity	Units	Sample ID No.	Photo No.	Analytical Result	Material Condition as Surveyed	Risk Status	Control Recommendations/ Comments	Review date	Consultant/ Hygienist Name	Control Action Taken	Date actioned	Contractor details
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Northern room (kitchenette)	Walls	Beige lead paint system	30	sq.m	Same as: 5457-Pb7	N/A	93,100 mg/kg	Fair	Medium	It is recommended to remove flaking areas and stabilize the paint system by overpaint using a lead-free product prior to refurbishment or demolition	Prior to refurbishment				
01.07.2022 / 04.07.2022	Chief Mechanical Engineers Building interior, level 1	Northern room (kitchenette)	Archway	Turquoise lead paint system	2	sq. m	Same as: 5457- Pb5	15	353,300 mg/kg	Poor	High	Seal and encapsulate flaking edges or remove ASAP. Conduct Airborne Lead Monitoring during encapsulation or removal works. Wear appropriate PPE when handling lead.	Prior to refurbishment				

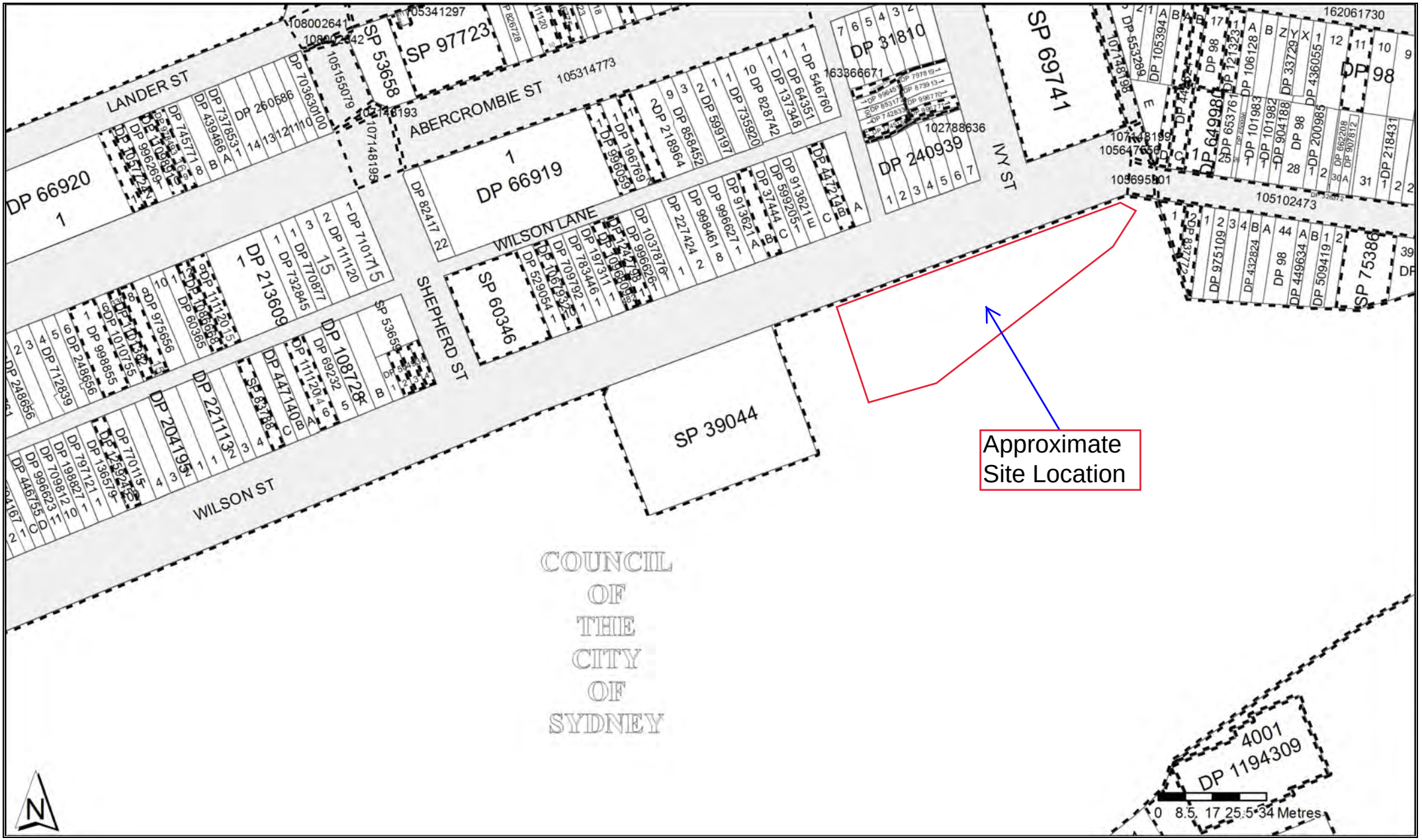
ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX C: LAND TITLE RESULTS


DP 240939
DP 447214
DP 913621
DP 599205
DP 37444
DP 913621
DP 998461
DP 996627
DP 227424
DP 1175706
SP 39044
DP 837772
DP 975109
DP 432824
DP 98
DP 449634
DP 653761
DP 101983
DP 101982
DP 904188
DP 200985

Cadastral Records Enquiry Report : SP 39044

Locality : DARLINGTON
Parish : PETERSHAM
LGA : SYDNEY
County : CUMBERLAND

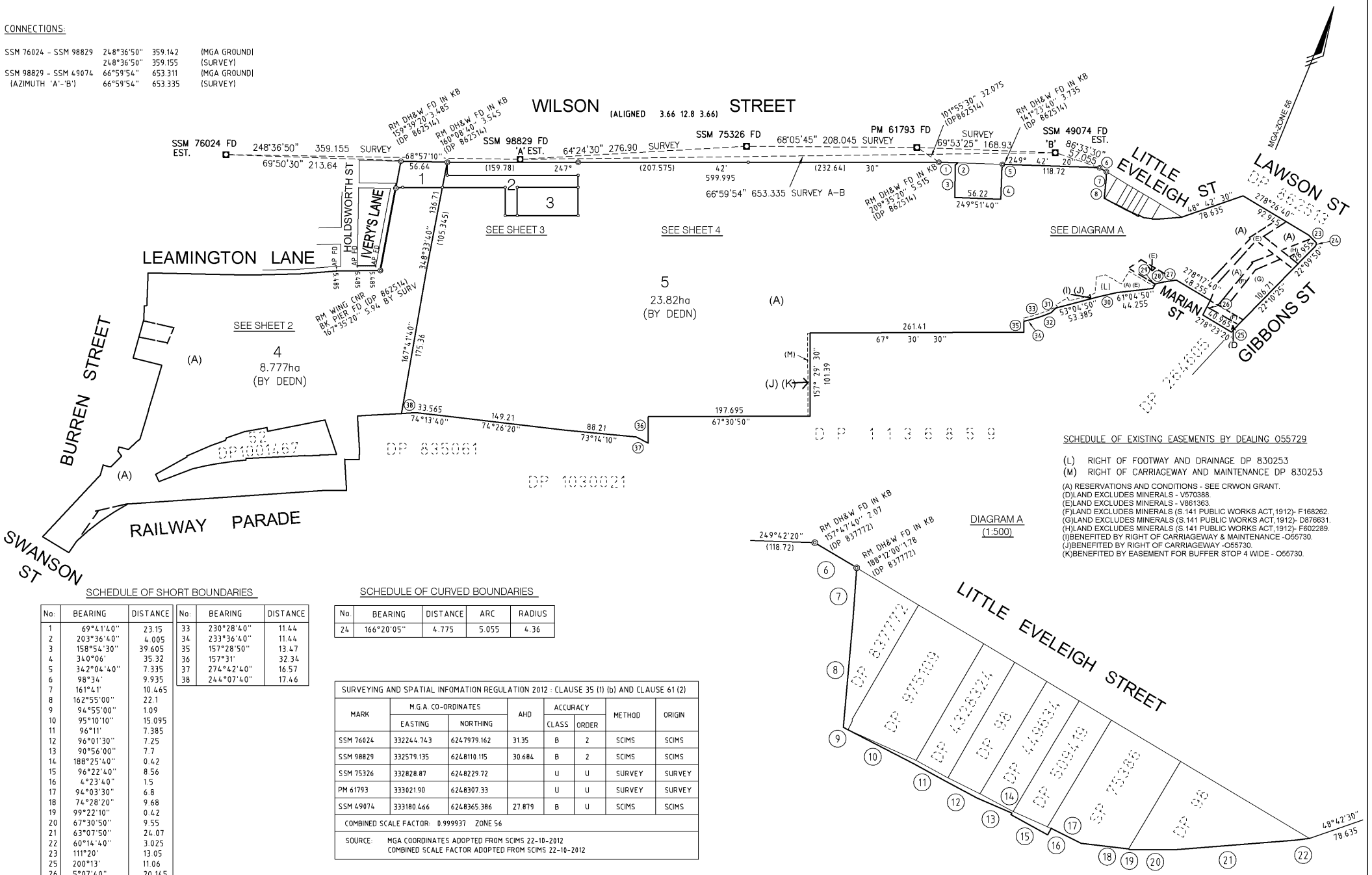


This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps

	Status	Surv/Comp	Purpose
DP837772			
Lot(s): 1, 2			
DP1156742	REGISTERED	SURVEY	RESUMPTION OR ACQUISITION
NSW GAZ. 15-11-2002 Folio : 9702			
ACQUIRED FOR THE PURPOSES OF THE ELECTRICITY SUPPLY ACT, 1995 STRATUM LAND AFFECTING LOTS 1-2 DP837772, LOTS A-D DP442824, LOT 1 DP649980, LOT 17 DP98, LOT 1 DP121323 AND PART OF LITTLE EVELEIGH STREET - SEE AG415360			
DP913621			
Lot(s): B			
CA87767 - LOT B DP913621			
DP975656			
Lot(s): 8 Section : 15			
CA95350 - LOT 8 SECTION 15 DP975656			
DP978493			
Lot(s): 9 Section : 16			
DP1278202	WITHDRAWN	SURVEY	DELIMITATION
CA96540 - LOT 9 SECTION 16 DP978493			
DP996059			
Lot(s): 1			
DP1124775	REJECTED	SURVEY	REDEFINITION
DP996771			
Lot(s): 1			
CA96720 - LOT 1 DP996771			
DP998855			
Lot(s): 1			
DP1256921	UNREGISTERED	SURVEY	DELIMITATION
DP1057724			
Lot(s): 1, 2			
DP87785	HISTORICAL	SURVEY	UNRESEARCHED
DP1067932			
Lot(s): 10			
DP996625	HISTORICAL	COMPILATION	DEPARTMENTAL
CA88319 - LOT 1 DP996625			
DP1086668			
Lot(s): 12			
CA95540 - LOT 12 DP1086668			
DP1096809			
Lot(s): 482			
CA98703 - LOT 482 DP1096809			
DP1101382			
Lot(s): 330			
CA99391 - LOT 330 DP1101382			
DP1109891			
Lot(s): 10			
DP1278202	WITHDRAWN	SURVEY	DELIMITATION
CA103785 - LOT 10 DP1109891			
DP1175706			
Lot(s): 5			
DP862514	HISTORICAL	SURVEY	SUBDIVISION
DP1192489	REGISTERED	SURVEY	EASEMENT
DP1194309	REGISTERED	SURVEY	SUBDIVISION
DP1275585	REGISTERED	SURVEY	EASEMENT
DP1194309			
Lot(s): 4001			
DP859192	HISTORICAL	SURVEY	SUBDIVISION
DP1033739	HISTORICAL	SURVEY	RESUMPTION OR ACQUISITION
DP1136859	HISTORICAL	SURVEY	SUBDIVISION
DP1239650	PRE-ALLOCATED	UNAVAILABLE	EASEMENT
NSW GAZ. 15-11-2002 Folio : 9702			
PART ACQUIRED FOR THE PURPOSES OF THE ELECTRICITY SUPPLY ACT, 1995			

CONNECTIONS:

SSM 76024 - SSM 98829	248°36'50"	359.142	(MGA GROUND)
	248°36'50"	359.155	(SURVEY)
SSM 98829 - SSM 49074	66°59'54"	653.311	(MGA GROUND)
(AZIMUTH 'A'-'B')	66°59'54"	653.335	(SURVEY)



SCHEDULE OF EXISTING EASEMENTS BY DEALING O55729

(L) RIGHT OF FOOTWAY AND DRAINAGE DP 830253
(M) RIGHT OF CARRIAGEWAY AND MAINTENANCE DP 830253

(A) RESERVATIONS AND CONDITIONS - SEE CRWON GRANT.
(D)LAND EXCLUDES MINERALS - V570388.
(E)LAND EXCLUDES MINERALS - V861363.
(F)LAND EXCLUDES MINERALS (S.141 PUBLIC WORKS ACT,1912)- F168262.
(G)LAND EXCLUDES MINERALS (S.141 PUBLIC WORKS ACT,1912)- D876631.
(H)LAND EXCLUDES MINERALS (S.141 PUBLIC WORKS ACT,1912)- F602289.
(I)BENEFITED BY RIGHT OF CARRIAGEWAY & MAINTENANCE -O55730.
(J)BENEFITED BY RIGHT OF CARRIAGEWAY -O55730.
(K)BENEFITED BY EASEMENT FOR BUFFER STOP 4 WIDE - O55730.

DIAGRAM A (1:500)

SCHEDULE OF SHORT BOUNDARIES

No:	BEARING	DISTANCE
1	69°41'40"	23.15
2	203°36'40"	4.005
3	158°54'30"	39.605
4	340°06'	35.32
5	342°04'40"	7.335
6	98°34'	9.935
7	161°41'	10.465
8	162°55'00"	22.1
9	94°55'00"	1.09
10	95°10'10"	15.095
11	96°11'	7.385
12	96°01'30"	7.25
13	90°56'00"	7.7
14	188°25'40"	0.42
15	96°22'40"	8.56
16	4°23'40"	1.5
17	94°03'30"	6.8
18	74°28'20"	9.68
19	99°22'10"	0.42
20	67°30'50"	9.55
21	63°07'50"	24.07
22	60°14'40"	3.025
23	111°20'	13.05
25	200°13'	11.06
26	5°07'40"	20.145
27	60°01'50"	15.42
28	234°47'	10.345
29	186°16'40"	6.515
30	54°51'	23.82
31	202°18'20"	8.485
32	227°21'	11.44

No:	BEARING	DISTANCE
33	230°28'40"	11.44
34	233°36'40"	11.44
35	157°28'50"	13.47
36	157°31'	32.34
37	274°42'40"	16.57
38	244°07'40"	17.46

SCHEDULE OF CURVED BOUNDARIES

No.	BEARING	DISTANCE	ARC	RADIUS
24	166°20'05"	4.775	5.055	4.36

SURVEYING AND SPATIAL INFOMATION REGULATION 2012 : CLAUSE 35 (1) (b) AND CLAUSE 61 (2)

MARK	M.G.A. CO-ORDINATES		AHD	ACCURACY		METHOD	ORIGIN
	EASTING	NORTHING		CLASS	ORDER		
SSM 76024	332244.743	6247979.162	31.35	B	2	SCIMS	SCIMS
SSM 98829	332579.135	6248110.115	30.684	B	2	SCIMS	SCIMS
SSM 75326	332828.87	6248229.72		U	U	SURVEY	SURVEY
PM 61793	333021.90	6248307.33		U	U	SURVEY	SURVEY
SSM 49074	333180.466	6248365.386	27.879	B	U	SCIMS	SCIMS

COMBINED SCALE FACTOR: 0.999937 ZONE 56

SOURCE: MGA COORDINATES ADOPTED FROM SCIMS 22-10-2012
COMBINED SCALE FACTOR ADOPTED FROM SCIMS 22-10-2012

IT IS INTENDED TO ACQUIRE LOTS 1 – 3

Surveyor : CAMPBELL KENT BURROWS
Date of Survey : 21 DECEMBER 2012
Surveyor's Ref : C641-DP6
CAD Ref : C641-DP6-007

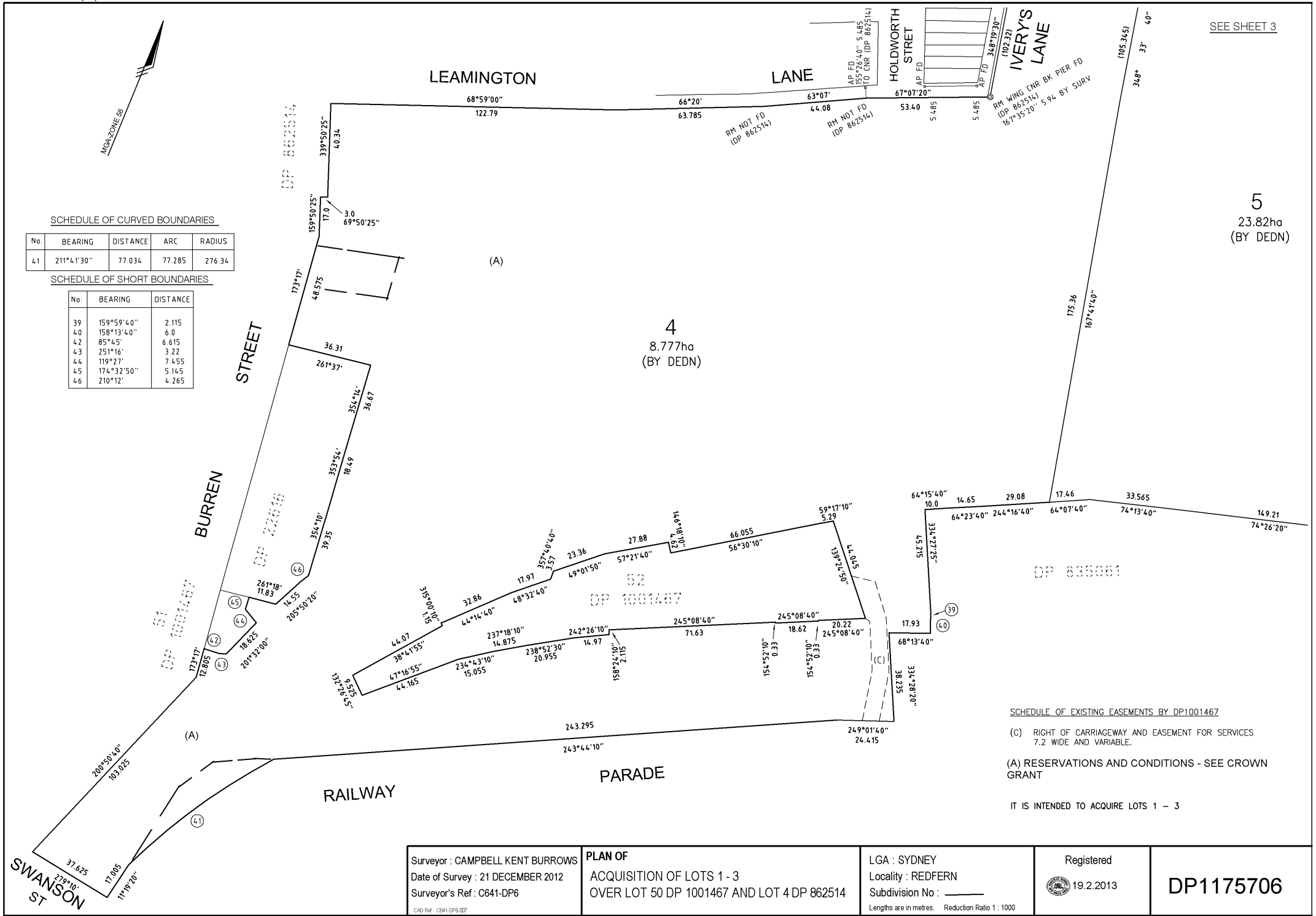
PLAN OF
ACQUISITION OF LOTS 1 - 3
OVER LOT 50 DP 1001467 AND LOT 4 DP 862514

LGA : SYDNEY
Locality : REDFERN
Subdivision No : ——
Lengths are in metres. Reduction Ratio 1 : 3000

Registered 19.2.2013

DP1175706

00 10 20 30 40 50 60 Table of mm 90 100 110 120 130 140



SCHEDULE OF CURVED BOUNDARIES

No.	BEARING	DISTANCE	ARC	RADIUS
41	211°41'30"	77.034	77.285	276.34

SCHEDULE OF SHORT BOUNDARIES

No:	BEARING	DISTANCE
39	159°59'40"	2.115
40	158°13'40"	6.0
42	85°45'	6.615
43	251°16'	3.22
44	119°27'	7.455
45	174°32'50"	5.145
46	210°12'	4.265

SCHEDULE OF EXISTING EASEMENTS BY DP1001467

(C) RIGHT OF CARRIAGEWAY AND EASEMENT FOR SERVICES 7.2 WIDE AND VARIABLE.

(A) RESERVATIONS AND CONDITIONS - SEE CROWN GRANT

IT IS INTENDED TO ACQUIRE LOTS 1 – 3

Surveyor : CAMPBELL KENT BURROWS Date of Survey : 21 DECEMBER 2012 Surveyor's Ref : C641-DP6 CAD Ref : C641-DP6-007	**PLAN OF** ACQUISITION OF LOTS 1 - 3 OVER LOT 50 DP 1001467 AND LOT 4 DP 862514	LGA : SYDNEY Locality : REDFERN Subdivision No : —— Lengths are in metres. Reduction Ratio 1 : 1000	Registered 19.2.2013	DP1175706

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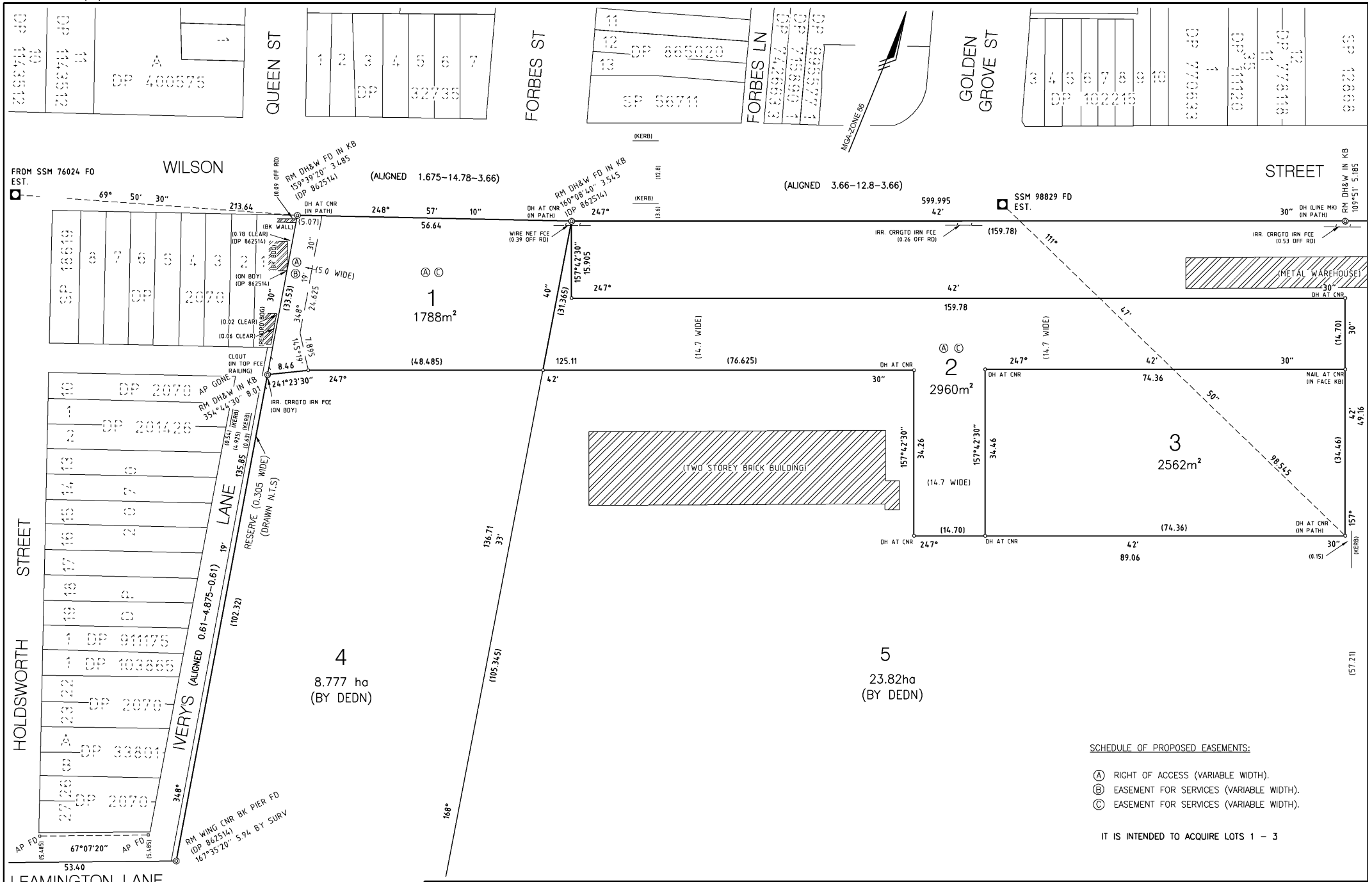
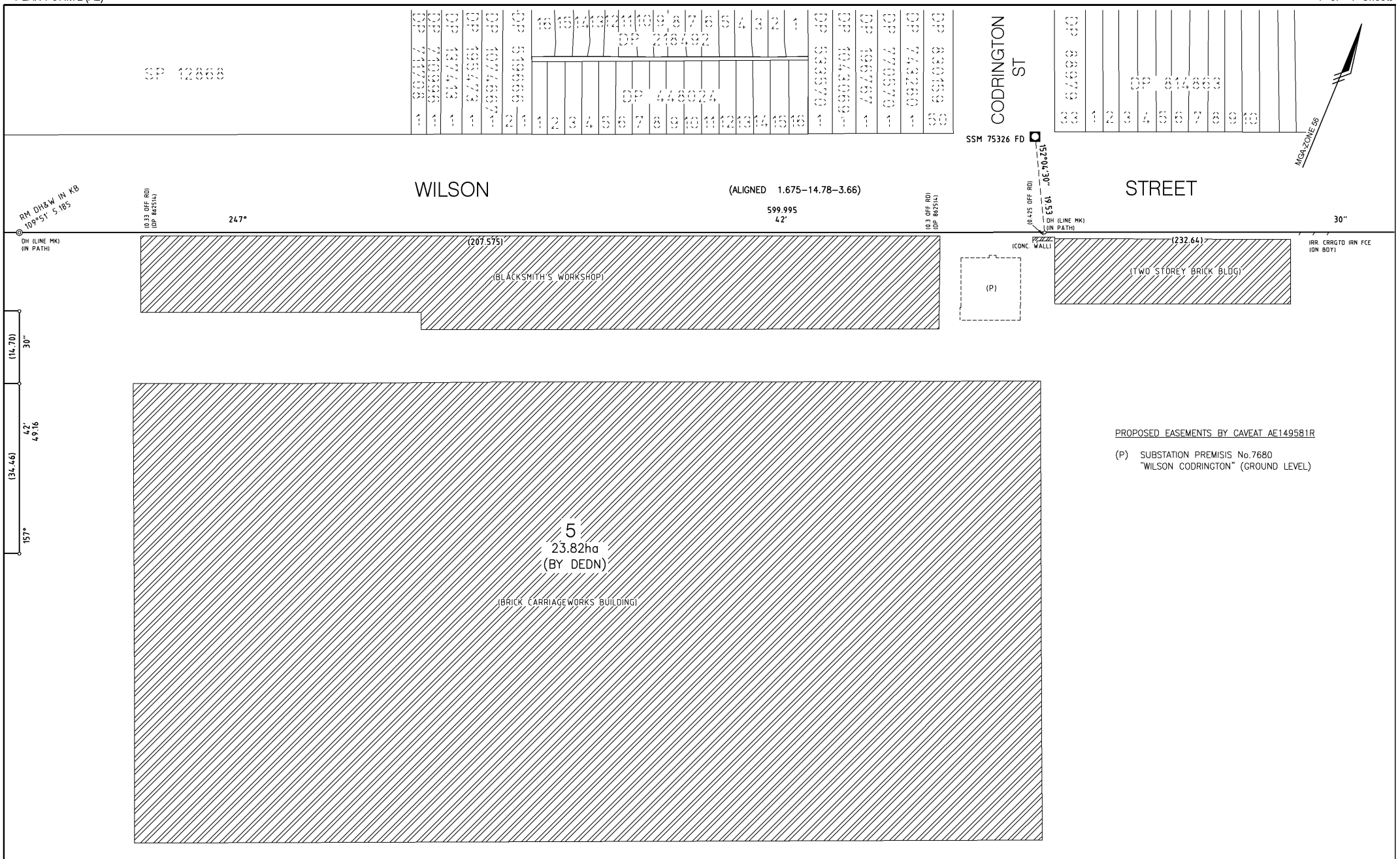


SCHEDULE OF PROPOSED EASEMENTS:

- (A) RIGHT OF ACCESS (VARIABLE WIDTH).
- (B) EASEMENT FOR SERVICES (VARIABLE WIDTH).
- (C) EASEMENT FOR SERVICES (VARIABLE WIDTH).

IT IS INTENDED TO ACQUIRE LOTS 1 – 3

Surveyor : CAMPBELL KENT BURROWS Date of Survey : 21 DECEMBER 2012 Surveyor's Ref : C641-DP6 CAD Ref : C641-DP6-007	**PLAN OF** ACQUISITION OF LOTS 1 - 3 OVER LOT 50 DP 1001467 AND LOT 4 DP 862514	LGA : SYDNEY Locality : REDFERN Subdivision No : — Lengths are in metres. Reduction Ratio 1 : 500	Registered 19.2.2013	DP1175706



PROPOSED EASEMENTS BY CAVEAT AE149581R

(P) SUBSTATION PREMISIS No.7680
"WILSON CODRINGTON" (GROUND LEVEL)

IT IS INTENDED TO ACQUIRE LOTS 1 – 3

Surveyor : CAMPBELL KENT BURROWS Date of Survey : 21 DECEMBER 2012 Surveyor's Ref : C641-DP6 CAD Ref : C641-DP6-007	**PLAN OF** ACQUISITION OF LOTS 1 - 3 OVER LOT 50 DP 1001467 AND LOT 4 DP 862514	LGA : SYDNEY Locality : REDFERN Subdivision No : —— Lengths are in metres. Reduction Ratio 1 : 500	Registered 19.2.2013	DP1175706

00 10 20 30 40 50 60 Table of mm 90 100 110 120 130 140

PLAN FORM 6 (2012) WARNING : Creasing or folding will lead to rejection ePlan

DEPOSITED PLAN ADMINISTRATION SHEET

Office Use Only

Registered : 19.2.2013

Title System : TORRENS

Purpose : ACQUISITION

Office Use Only

DP1175706

PLAN OF

ACQUISITION OF LOTS 1 - 3 OVER
LOT 50 DP 1001467 AND LOT 4 DP 862514

LGA : SYDNEY

Locality : REDFERN

Parish : PETERSHAM & ALEXANDRIA

County : CUMBERLAND

Crown Lands NSW / Western Lands Office Approval

I, ... (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.

Signature: .....

Date: .....

File Number: .....

Office: .....

Subdivision Certificate

I, ...

*Authorised Person/*General Manager/*Accredited Certifier, certify that the provisions of the s.109J of the *Environmental Planning and Assessment Act 1979* have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.

Signature: .....

Accreditation number: .....

Consent Authority : .....

Date of endorsement: .....

Subdivision Certificate number: .....

File number: .....

*Strike through if inapplicable.

Survey Certificate

I, CAMPBELL KENT BURROWS of WHELANS INSITES DX 288 SYDNEY

a surveyor registered under the *Surveying and Spatial Information Act 2002*, certify that:

~~*(a) The land shown in the plan was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012* , is accurate and the survey was completed on .....~~

*(b) The part of the land shown in the plan (*being/*~~excluding~~ ^ LOTS 1 - 3 INCLUSIVE) was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012* , is accurate and the survey was completed on, 19-12-2012 the part not surveyed was compiled in accordance with that Regulation.

~~*(c) The land shown in this plan was compiled in accordance with the *Surveying and Spatial Information Regulation 2012* .~~

Signature: ..... Dated: 21-12-2012

Surveyor ID: 8784

Datum Line: 'A' - 'B'

Type: *Urban /~~*Rural~~

The terrain is *Level-Undulating / ~~Steep Mountainous.~~

*Strike through if inapplicable.

^ Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.

Statements of intention to dedicate public roads, public reserves and drainage reserves.

IT IS INTENDED TO ACQUIRE LOTS 1 - 3 INCLUSIVE FOR ROAD AND ASSOCIATED PUBLIC INFRASTRUCTURE

Plans used in the preparation of survey/~~compilation~~

DP 862514
DP 1001467

If space is insufficient continue on PLAN FORM 6A

Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A

Surveyor's Reference : C641-DP6

CAD Ref: C641-DP6-006

PLAN FORM 6A (2012) WARNING : Creasing or folding will lead to rejection ePlan

DEPOSITED PLAN ADMINISTRATION SHEET

Office Use Only

Registered: 19.2.2013

Office Use Only

DP1175706

PLAN OF

ACQUISITION OF LOTS 1 - 3 OVER
LOT 50 DP 1001467 AND LOT 4 DP 862514

Subdivision Certificate number: .....

Date of Endorsement: .....

This sheet is for the provision of the following information as required:

- A schedule of lots and addresses - See 60(c) *SSI Regulation 2012*
- Statements of intention to create and release affecting interests in accordance with section 88B *Conveyancing Act 1919*
- Signatures and seals - see 195D *Conveyancing Act 1919*
- Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.

NO SCHEDULE OF ADDRESS IS AVAILABLE FOR THE SURVEYED LOTS HEREIN

If space is insufficient use additional annexure sheet

Surveyor's Reference: C641-DP6

CAD Ref: C641-DP6-006

PLAN FORM 2

Plan Drawing only to appear in this space

* OFFICE USE ONLY

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads or to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants.

SCHEDULE OF SHORT BOUNDARIES

No.	BEARING	DISTANCE	No.	BEARING	DISTANCE	ARC	RADIUS
1	99° 41' 20"	9.935	13	95° 10' 50"	6.8		
2	162° 48' 20"	10.465	14	75° 35' 40"	9.68		
3	164° 02' 20"	22.1	15	100° 29' 30"	0.42		
4	96° 02' 20"	1.09	16	68° 38' 10"	9.55		
5	184° 50' 20"	1.815	17	61° 22' 00"	3.925		
6	164° 57' 20"	0.61	18	49° 49' 50"	3.995		
7	97° 18' 20"	7.385	19	112° 27' 20"	13.05		
8	97° 08' 50"	7.25	20	167° 27' 25"	4.775	5.055	4.36
9	92° 03' 20"	7.70	21	201° 20' 20"	11.06		
10	189° 33' 00"	0.42	22	241° 09' 10"	15.42		
11	97° 30' 00"	8.56	23	235° 54' 20"	10.345		
12	5° 31' 00"	1.50	24	187° 24' 00"	6.515		

SURVEY PRACTICE REGULATIONS 1990 : CLAUSE 32(2)

MARK	I.S.G. CO-ORDINATES		ZONE	ACC.
	EASTING	NORTHING		
PM 46916	318 575.82	1 248 665.888	56/1	2
PM 53329	318 193.365	1 248 243.198	56/1	2
SSM 25357	316 641.956	1 247 717.561	56/1	2

COMBINED SEA LEVEL SCALE FACTOR = 0.99994

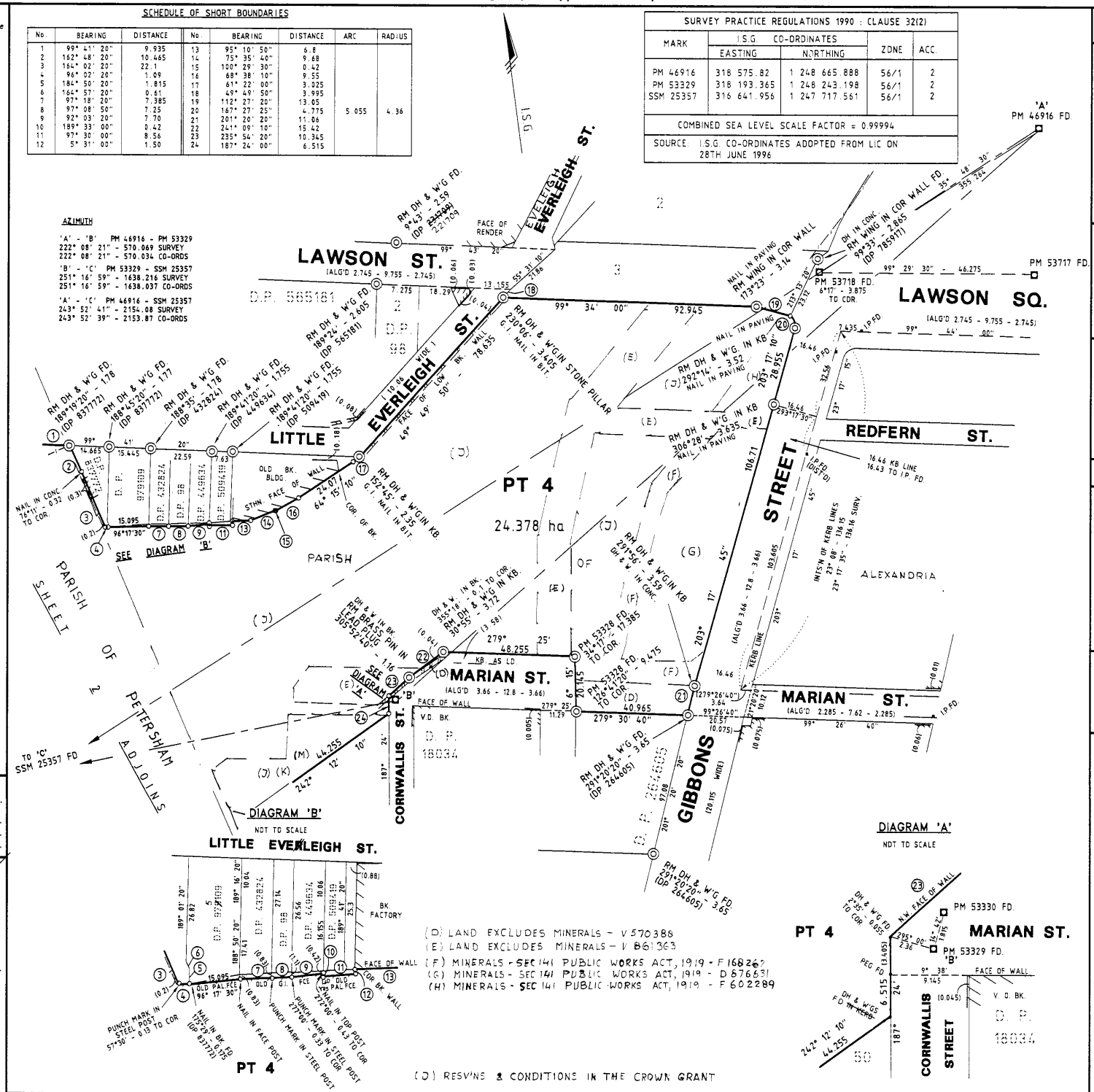
SOURCE: I.S.G. CO-ORDINATES ADOPTED FROM LIC ON 28TH JUNE 1996

AZIMUTH

'A' - 'B' PM 46916 - PM 53329
222° 08' 21" - 570.069 SURVEY
222° 08' 21" - 570.034 CO-ORDS

'B' - 'C' PM 53329 - SSM 25357
251° 16' 59" - 1638.216 SURVEY
251° 16' 59" - 1638.037 CO-ORDS

'A' - 'C' PM 46916 - SSM 25357
243° 52' 41" - 2154.08 SURVEY
243° 52' 39" - 2153.87 CO-ORDS



Crown Lands Office Approval

PLAN APPROVED .....
Authorised Officer
Land District .....
Paper No. .....
Field Book ..... pages .....

Council's Certificate

I hereby certify that –

(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b) the requirements of † Part 3 Division 2 of the Water Board Act 1987, or † Part 5 Division 7 of the Hunter Water Board (Corporatisation) Act 1991,

have been complied with by the applicant in relation to the proposed .....
(insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No. .....
Date .....
(Signature) .....
General Manager/Authorised Person
Council File No. .....

* This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Water Board and the Hunter Water Corporation Ltd.

† Delete if inapplicable.

SURVEYOR'S REFERENCE: 6205–11 (CHECK LIST)

D.P. 862514 (E)

Registered: 21-5-1997

C.A.:

Title System: TORRENS & OLD SYSTEM

Purpose: SUBDIVISION

Ref. Map: SOUTH SYDNEY SHT 4*
PH ALEXANDRIA SHT 7*
PH PETERSHAM SHT 7
U 0945 - RE 2056*

Last Plan: (DP4209) (DP 7328*) DP 80* (SEE BELOW)

PLAN OF CONSOLIDATION OF LAND IN CONVEYANCES No.359 BOOK 624, No 382 BOOK 624, No 803 BOOK 298, No 674 & 455 BOOK 202, No 793 BOOK 19, No 478 BOOK 4067, No 748 BOOK 219, No 31 BOOK 441, No 978 BOOK 365, No 44 BOOK 75 No 52 BOOK 22, No 472 BOOK 21, No 372 BOOK 28, CERTIFICATES OF TITLE ~~VOL 734 FOL 178~~. (CONT'D ON SHEET 2)

Lengths are in metres. Reduction Ratio 1: 1000

LGA: SOUTH SYDNEY

Locality: REDFERN
ALEXANDRIA & (1)

Parish: ~~ST ANDREWS~~
PETERSHAM (40)

County: CUMBERLAND

This is sheet of my plan in 4 sheets.

I, ...JOHN NELSON PETERSEN.....
of .....WHELANS DX 288 SYDNEY.....
a surveyor registered under the Surveyors Act 1929, hereby certify that the survey represented in this plan is accurate, has been made in accordance with the Survey Practice Regulation 1990 and was completed on # 20/8/97 & 3/2/97

(Signature) .....
Surveyor registered under the Surveyors Act 1929.

Datum Line of Azimuth: 'A'–'B'–'C'

insert date of survey.

Plans used in preparation of survey/compilation.
DP 80, DP 4209, DP 434648, DP 220633, DP 68943, DP 264605, DP 60497, DP 98, ~~DP 68943~~, DP 730379, DP 565897, DP 2070, DP 565181, DP 837772, DP 640178, DP 61531, DP 780402, DP 201426, DP 975109,
(CONT'D ON SHEET 2)

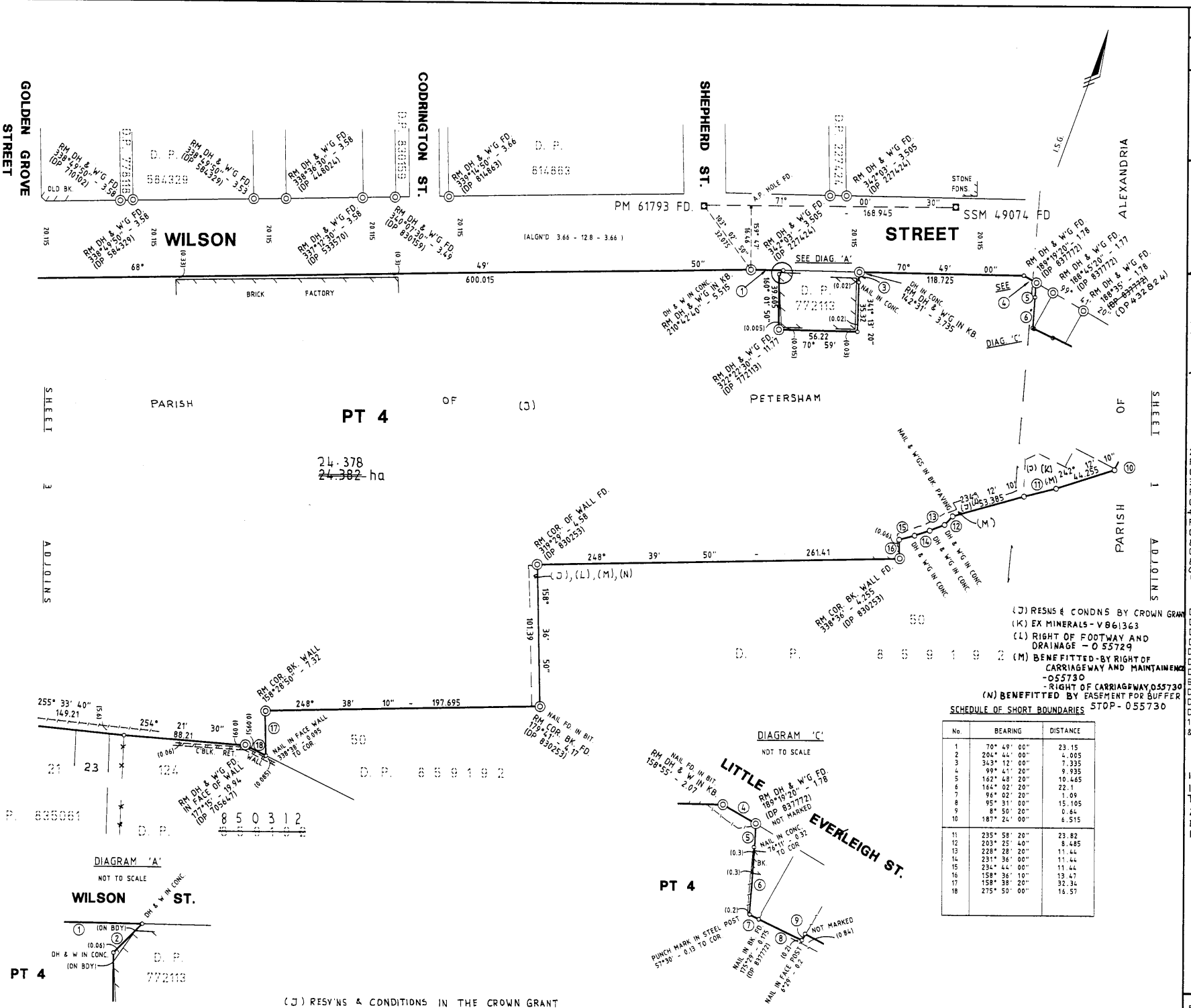
PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants.

LAST PLANS: (CONT)
DP56826 DP66962 DP119262
DP185913 DP198863 DP434648
DP650485 DP650486 DP780402
DP798449 DP798450 DP780404
DP906998 DP911664 DP911665
DP975394 DP911622

PLAN AMENDED IN LTO AT SURVEYOR'S REQUEST

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

PLAN FORM 3 — To be used in conjunction with Plan Form 2 — WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION — * OFFICE USE ONLY



SCHEDULE OF SHORT BOUNDARIES

No.	BEARING	DISTANCE
1	70° 49' 00"	23.15
2	204° 44' 00"	4.005
3	343° 12' 00"	7.335
4	99° 41' 20"	9.935
5	162° 48' 20"	10.465
6	164° 02' 20"	22.1
7	96° 02' 20"	1.09
8	95° 31' 00"	15.105
9	8° 50' 20"	0.64
10	187° 24' 00"	6.515
11	235° 58' 20"	23.82
12	203° 25' 40"	8.485
13	228° 28' 20"	11.44
14	231° 36' 00"	11.44
15	234° 44' 00"	11.44
16	158° 36' 10"	13.47
17	158° 38' 20"	32.34
18	275° 50' 00"	16.57

D.P. 862514

Registered: 21-5-1997

This is sheet 2 of my plan in 4 sheets. dated 20/8/96 & 3/2/97

John A Pearson

Surveyor registered under the Surveyors Act, 1929.

This is sheet of the plan of sheets covered by my Certificate No. of

General Manager/Authorised Person

For use where space is insufficient in any panel on Plan Form 2.

(CONT'D FROM SHEET 1)
~~VOL 131 FOLS 87 & 89, VOL 149 FOL 126, VOL 126 FOL 146, VOL 695 FOL 144,~~ VOL 2462 FOL 220, ~~VOL 980 FOL 203, VOL 526 FOL 127, VOL 129 FOL 64, VOL 131 FOL 93, VOL 552 FOL 54, VOL 526 FOL 128~~, VOL 15541 FOL 39, VOL 887 FOL ~~188~~ 188 FOLID IDENTIFIERS 1/911664 (VOL 980 FOL 188) 1/185913 (VOL 4672 FOL 149), 1/434648 (VOL 6184 FOL 58), 25/650485 (VOL 974 FOL 225), 26/650486 (VOL 977 FOL 180), 1/66962 (VOL 2193 FOL 10), 1/798449 , 1/780402 (VOL 1897 FOL 226), 1/198863 & ~~1/798449~~ AND LAND PROCLAIMED IN GOV GAZ 25-6-1948 FOLS 1545/6, GOV GAZ 18-6-1948 FOL 1451, ~~GOV GAZ 14-12-1951 FOL 3693,~~ GOV GAZ 12-9-1924 FOL 4328, GOV GAZ 3-6-1949 FOL 1543, GOV GAZ 4-1-1911 FOLS 36/7, GOV GAZ 1-3-1911 FOLS 1253/4, GOV GAZ 29-3-1911 FOLS 1752/4, ~~GOV GAZ 47-11-1915 FOL 2067,~~ GOV GAZ 23-12-1949 FOL 3963, GOV GAZ 6-4-1882 FOL 1989 & CONFIRMED IN GOV GAZ 19-5-1882 FOL 2797 & GOV GAZ No 67 OF 21-5-1850 FOL 834. GOV GAZ No 87 OF 10-8-1956 FOL 2307 & GOV GAZ No 59 OF 28-5-1948. CONVEYANCES NO 979 BOOK 458, NO 695 BOOK 1412, NO 990 BOOK 1083. CONT'D BELOW

(CONT'D FROM SHEET 1)
DP 432824, DP 449634, DP 509419, DP 56826, DP 33801, DP 439063, DP 517373, DP 859192, DP 106867, DP 584329, DP 814863, DP 192805, DP 830159, DP 778118, DP 772113, DP 32735, DP 780404, DP 830253, DP 518593, DP 612546 DP 835395, DP 705647, DP 835061, DP 224350 DP 228671, DP 850321, DP 859191, DP 850312, ~~DP 780404~~, DP 228148, DP 734708, DP 22616, DP 579632, DP 908862, DP 79745, DP 847759, DP 66962, DP 798450, ~~DP 798449~~, DP 198863, DP 798449, DP 975394, DP 799076, DP 772906 19-1911, 13-1911, 2-1698, 9-1698, 7020-1603, & 12910-1603.

CONT. FROM ABOVE
1/906998, 27-30/2/80, 31/119262, 1/911665, 1-2/798450, CERTIFICATE OF TITLE VOL 728 FOL 187, 22/830253, 23/830253, GOV GAZ. 28.5.1948 FOL.1290/1 NO GOV. GAZ. 10.8.1956 FOL.2307

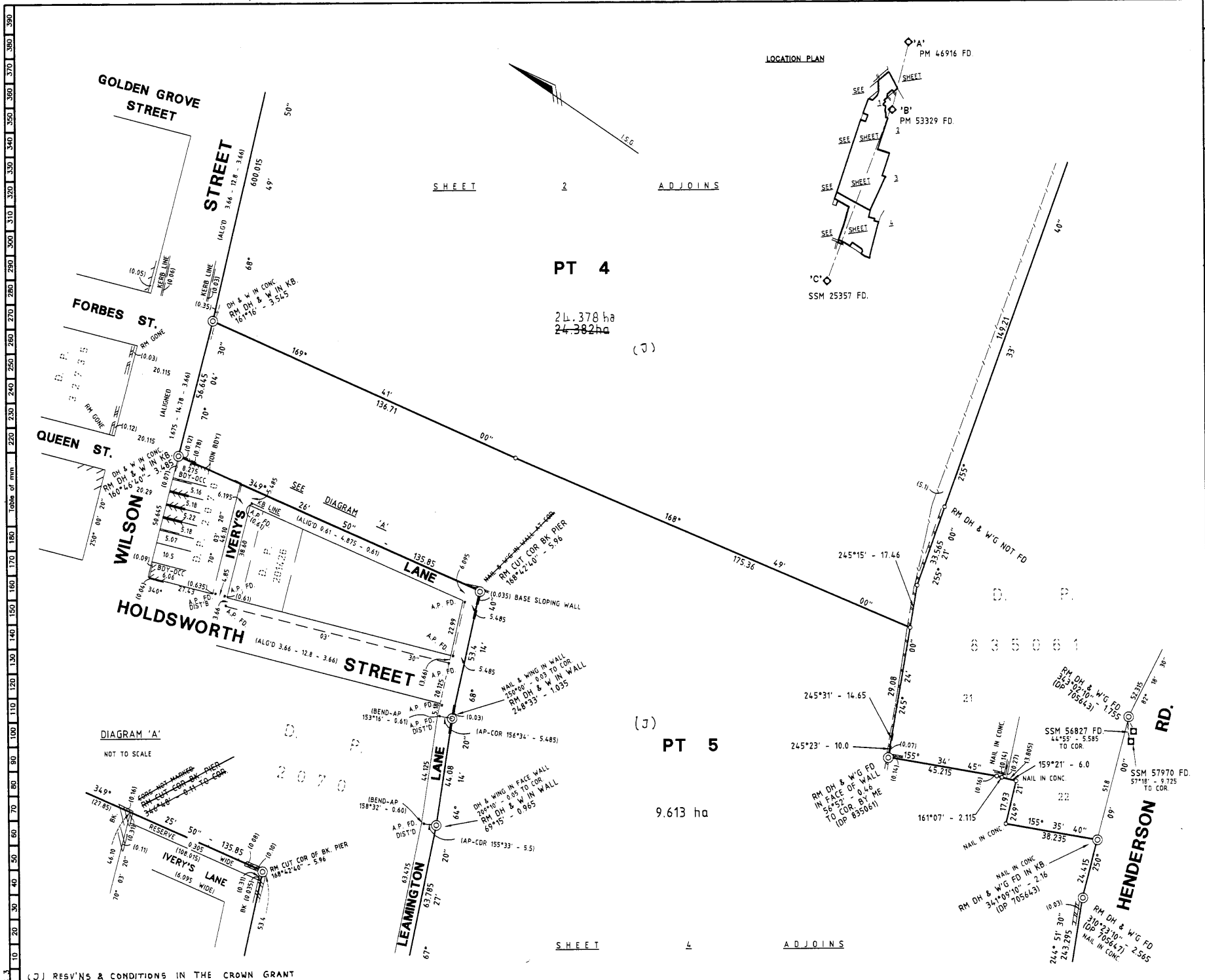
Reduction Ratio 1: 1800

Plan Drawing only to appear in this space

SURVEYOR'S REFERENCE: 6205/9

R27785 2/4

PLAN FORM 3 — To be used in conjunction with Plan Form 2 — WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION — * OFFICE USE ONLY



D.P. 862514

Registered: 21-5-1997

This is sheet 3 of my plan in 4 sheets. dated 20/8/96 & 5/2/97

John M Peterson

Surveyor registered under the Surveyors Act, 1929.

This is sheet of the plan of sheets covered by my Certificate No. of

General Manager/Authorised Person

For use where space is insufficient in any panel on Plan Form 2.

Reduction Ratio 1: 1000

Plan Drawing only to appear in this space

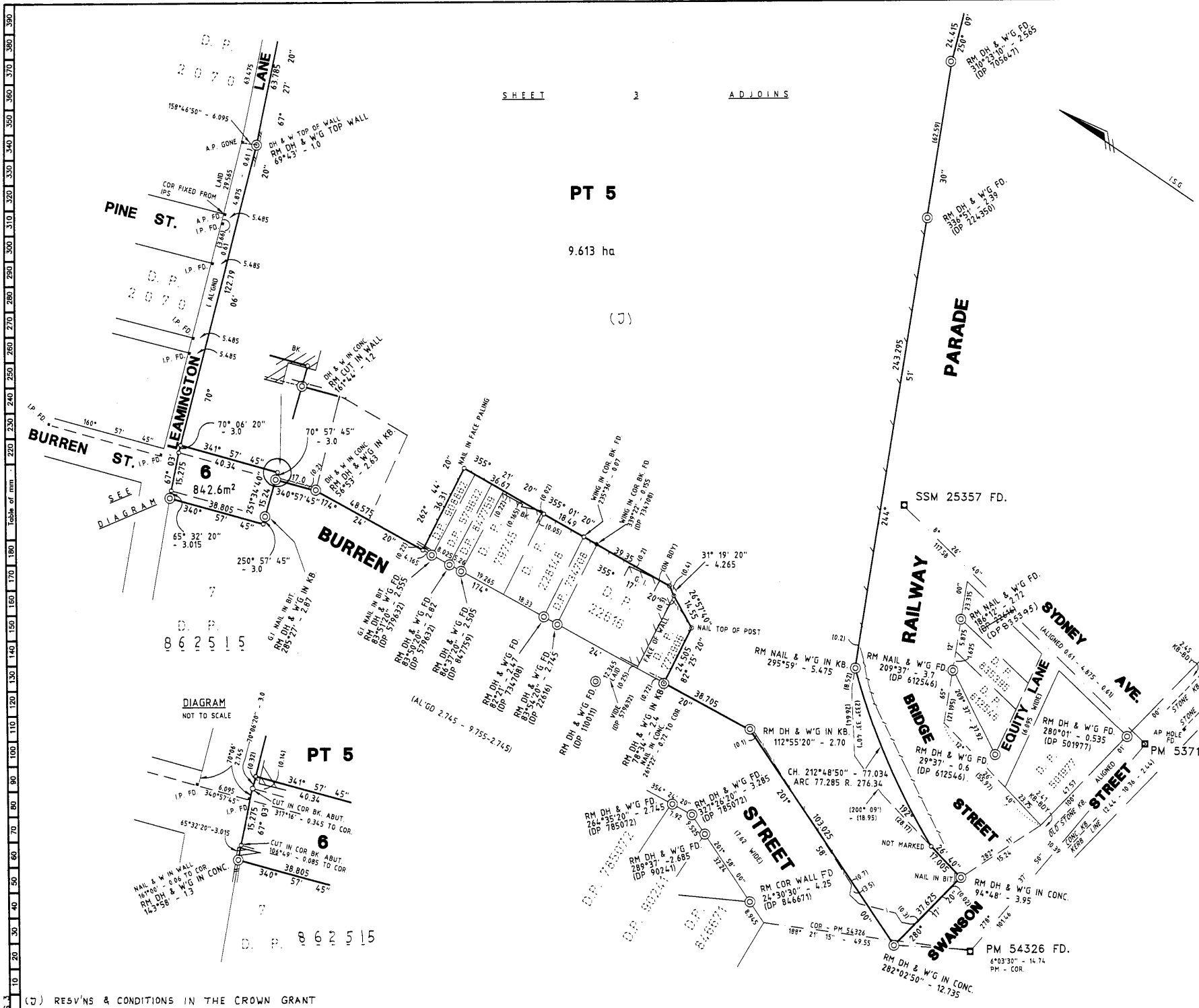
SURVEYOR'S REFERENCE: 6205—8

R27785 3/4

PLAN FORM 3 To be used in conjunction with Plan Form 2

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

* OFFICE USE ONLY



D.P. 862514

Registered: 21-5-1997

This is sheet 4 of my plan in 4 sheets.
dated 20/8/96 & 3/2/97

Surveyor registered under the Surveyors Act, 1929.

This is sheet of the plan of sheets covered by my Certificate No. of

General Manager/Authorised Person

For use where space is insufficient in any panel on Plan Form 2.

Reduction Ratio 1: 1000

Plan Drawing only to appear in this space

SURVEYOR'S REFERENCE: 6205-12

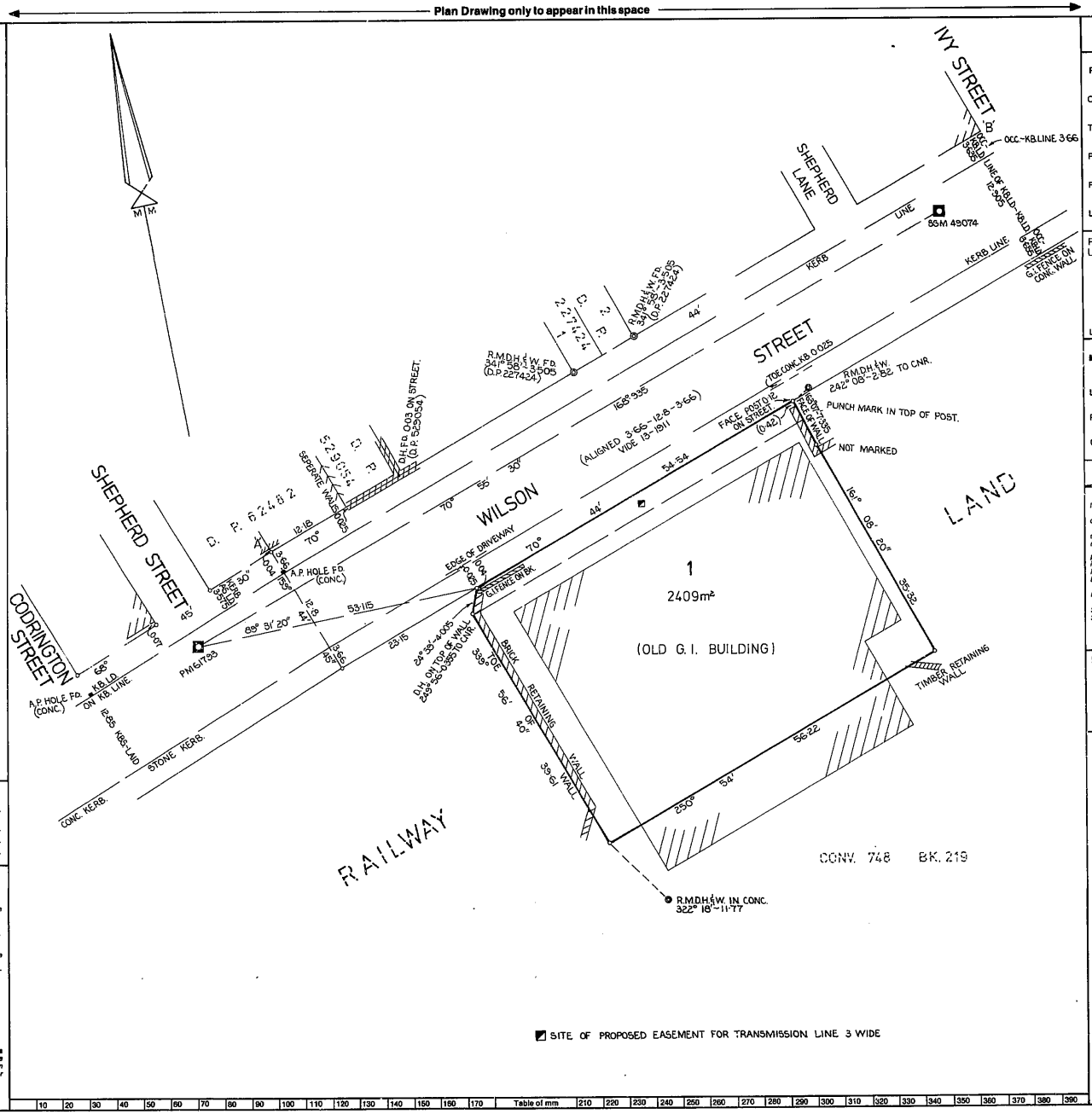
R27785 4/4

PLAN FORM 2

Plan Drawing only to appear in this space

*OFFICE USE ONLY

SIGNATURE AND SEALS ONLY.



10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 Table of mm 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390

DP 772113

Registered: 22-12-1987

C.A.:

Title System: OLD SYSTEM

Purpose: SUBDIVISION

Ref. Map: SOUTH SYDNEY SH 6

Last Plan: SOUTH SYDNEY SH 6

PLAN OF SUBDIVISION OF PART OF THE LAND WITHIN CONV. 748 BOOK 219

Lengths are in metres. Reduction Ratio 1:400

~~Mun./Shire~~ City: SYDNEY

Locality: REDFERN

Parish: PETERSHAM

County: CUMBERLAND

This is sheet 1 of my plan in sheets. (Delete if inapplicable).

I, IAN STUART JONES of WAY & WORKS BR-SRA OF NSW

a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan is accurate and has been made in accordance with the Survey Practice Regulations, 1933 and any special requirements of the Department of Lands, and was completed on # 19-11-1987

Signature ..... Surveyor registered under the Surveyors Act, 1929, as amended. Datum Line of Azimuth: A-B #insert date of survey.

Plans used in preparation of survey/~~compilation~~.
D.P. 227424, D.P. 525054, D.P. 62482.

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that —

(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b) the requirements of section 34B of the † Metropolitan Water, Sewerage and Drainage Act, 1924, as amended, † Hunter District Water, Sewerage, and Drainage Act, 1938, as amended

have been complied with by the applicant in relation to the proposed ..... (Insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No. .....

Date .....

(Signature) ..... Council Clerk

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.

† Delete if inapplicable.

FILE 261787

SURVEYOR'S REFERENCE: FIELD SHEETS M 1590 197-479

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

10 20 30 40 50 60 70 Table of mm 110 120 130 140

This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day.

23rd December, 1987

Plan Form No 5 (for Appns etc)

MN

F P 80188

6

Municipality of Redfern
Shire of
P.A. 30188

PLAN

of part of James Chisholm's 57 acres Grant
Parish of Petersham County of Cumberland

Scale 20 feet to an Inch.

Wilson Aligned 12'-42'-12' St

6' Sited A.P. Kerb

6' line to A.P.

21' Eveleigh Aligned 6'-21'-6' St 21'

Kerb laid A Site of A.P. 90° 00' Kerb

Kerb laid line B A.P.

6' 12' 6' 6'

31'9" O.R.P. 8'7½ 333° 07' 135'4" 38'6" Yer. 74'8¾" 25'0" 25'0½" 25'0½" 25'3"

No 157 No 155 Yer. Br. Br. Br. W.B. W.B.

Brick Br. 18' 47

48 James Chisholm's 57 acres Grant 24' 96'10½ 334°21' Applicant (own) 45' 38½" 98'10½ 72'6" fence Railway 98 S.P. 88'10" 4 ins. or gutter E. face of Wall Wood

7½ 3" 3'5" 72'4" fence 266 old 23'7"

Commissioners of N.S.W (own & occ)

I, Delman Francis Weingarth
of Sydney
Licensed Surveyor specially licensed under the Real Property Act, 1900, do hereby solemly and sincerely declare (a) that all boundaries and measurements shown on this plan are correct, (b) that all survey marks found and relevant physical objects on or adjacent to the boundaries are correctly represented, (c) that all physical objects indicated actually exist in the positions shown, (d) that the whole of the material facts in relation to the land are correctly represented, (e) that the survey has been made *under my immediate supervision and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act, 1900.

I, of
Licensed Surveyor, specially Licensed under the Real Property Act do hereby solemnly and sincerely declare that the boundaries and measurements shown in this Plan are correct for the purposes of the said Act and that the survey of the land to which the plan relates has been made*
and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1900

D. Weingarth
Licensed Surveyor

Subscribed and declared before me at
this 17th day of April A.D. 1926
J.P.

Licensed Surveyor

Date of Survey January 1926

Datum line of Azimuth A.B

* Here add by me or under my immediate supervision as the case may be

BK 738 F 65 RDC 2/5/34 LG 1.5.30

BK 802 P 53 LG 28-11-30 RDC 28/11/36

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 98

FEET	INCHES	METRES
7	6	2.285
8	3	2.515
9	3	2.82
9	6	2.895
11	-	3.355
11	6	3.505
14	6	4.42
19	6	5.945
21	6	6.555
22	-	6.705
23	6	7.165
25	-	7.62
25	6	7.77
26	-	7.925
27	-	8.23
28	-	8.535
29	-	8.84
30	-	9.145
31	-	9.45
33	-	10.06
33	9	10.285
39	6	12.04
50	-	15.24
53	-	16.155
55	-	16.765
60	-	18.29
61	6	18.745
68	-	20.725
70	-	21.335
71	-	21.64
74	-	22.555
74	6	22.71
81	-	24.69
83	-	25.3
85	-	25.91
86	-	26.215
87	-	26.52
88	-	26.82
88	9	27.05
89	-	27.125
89	6	27.28
90	-	27.43
92	-	28.04
94	-	28.65
95	-	28.955
95	6	29.11
96	6	29.415

AC	RD	P	SQ M
-	-	5 3/4	145.4
-	-	6	151.8
-	-	6 1/4	158.1
-	-	7	177
-	-	7 1/4	183.4
-	-	7 1/2	189.7
-	-	7 3/4	196
-	-	8	202.3
-	-	8 1/4	208.7
-	-	8 1/2	215

DP 98 (E)

DP 98

Subdivision

— Part ~~Portion~~ — of — Block D Chippendale Estate

— Parish of Redfern Eveleigh Alexandria —

— Case — No. 2861 —

COPY MADE A.M.L. 5.9.94

EXAMINED A.M.L. 11.10.94

Block C

Thos Broughton & G W Lord Owners

Alexandria St

To Cleveland St

Wells Street 50 Feet wide

East

T 9064 T 9038 T 10514 T 9127 T 9040 T 9067 T 9060 T 9069 T 9056 T 9098 T 9039 T 9069

T 9109

T 9093

T 9035 T 9039 T 9036 T 9057 T 9052 T 9059 T 9055 T 9429

East

Eveleigh

East

T 9081 T 9053 T 9054 T 9066 T 9068 T 9126 T 9037 T 9058 T 9070 T 9093

Railway Reserve

Mary Chisholm Occupier

J D Sly

All of 42 N

Scale 10 Feet to 1 Inch

Cheque does not transfer

Come in

M Bishop

This reservation is not undertaken

A Hurlstone

J P E Thompson

11/2/93

Great Southern Railway

Sydney

From Newtown

No. 98

95 ac. Wm Chippendale 31st Aug

I certify that the above diagram is correct for the purpose of the accompanying application of — — — under the Real Property Act

J W Reeves

Licensed Surveyor

142 Pitt Street

Sydney

1/11/93

Extract from Crown Plan 4719-3000

N. S. W. R.

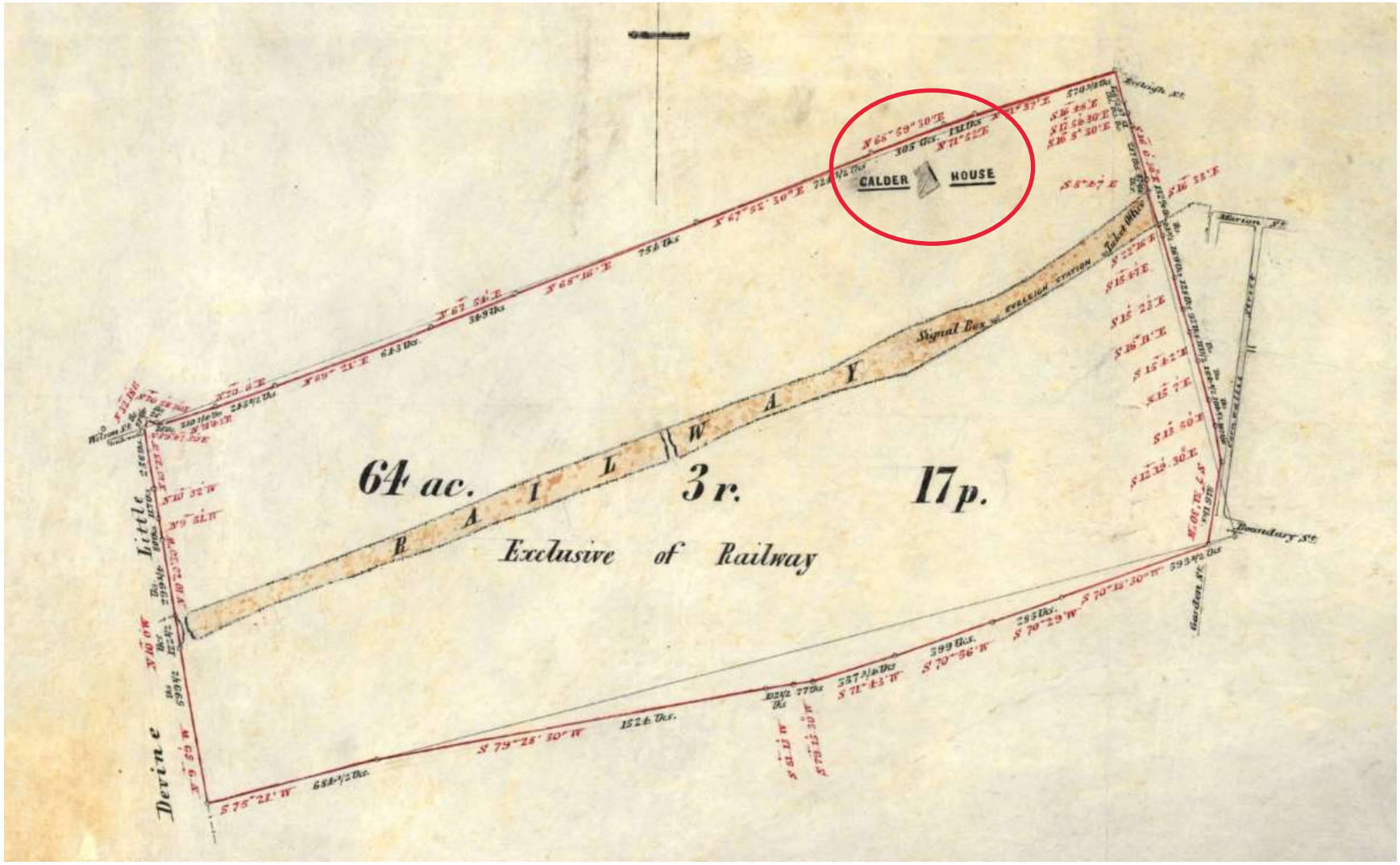
EVELEIGH YARD

Scale 2 Chs = 1 Inch.

GOODS SHED
PATTERN SHOP
FOUNDRY
ERECTING SHOP
STEAM HAMMER SHOP
WORK SHOPS
ERECTING SHOPS
FOUNDRY
ENGINE SHED
STORE
OFFICE
COAL STAGE
CARRIAGE SHED
CRS WORKS
COAL BUNKER
PLATFORM
MACDONALDTOWN STATION
PAINT SHOP
CAR & WAGGON SHOPS
CAR & WAGGON SHOP
TIMBER SHED
GENERAL STORE
BLACKSMITHS SHOP
IRON RACK
SPRING STORE
OIL STORE
LOCO PAINT SHOP
ELECTRICAL WORKSHOP
TARPAULIN SHED
WORKSHOPS
C.M.E.E. OFFICE
REDFERN STATION
ERSKINEVILLE STATION
Henderson Road
Carlton St
Wellington St
Hellis St
Burren St
Nilson Street
To Erskineville

4719-3000

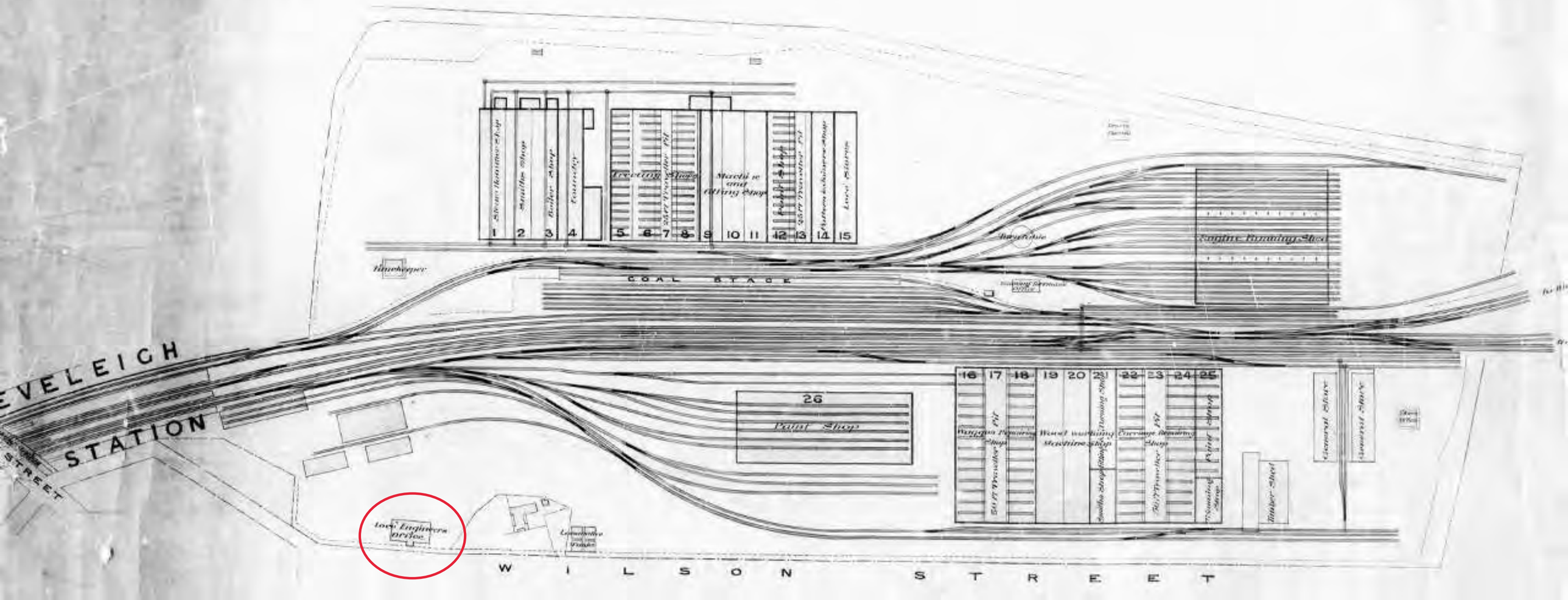
Extract from Book 219 No. 748



N.S.W.R.

DIAGRAM OF WORKSHOPS

EVELEIGH



Chief Mechanical Engineer's Building

505 WILSON STREET

EVELEIGH NSW 2015

LEASING OPPORTUNITY - REGISTRATION OF INTEREST

Welcome

TO THE CHIEF MECHANICAL ENGINEER’S BUILDING

Built in 1887, the Chief Mechanical Engineer's building is a landmark state heritage-listed former engineer's office located just metres from the inner city station of Redfern. The building is a two storey period structure offering approximately 1,200 square metres of net lettable area, boasting character and grandeur rarely seen in the market.

Poised for refurbishment to enable a new and innovative use of this space, on completion the building will be suited to a range of commercial uses.

For around 100 years, the Chief Mechanical Engineer's building was the headquarters of the Eveleigh Railway Yards, which employed over 10,000 people to manufacture, maintain and repair steam locomotives, passenger carriages and freight wagons.

The building reflects the significance of engineers in the development of the NSW railway network. It was these engineers who were amongst the few whose pioneering efforts contributed to the improved capability of locomotive performance in NSW.

The rear of the Chief Mechanical Engineer's building faces the heart of the Eveleigh industrial workshops while the front elevation faces leafy Wilson street.

Chief Mechanical Engineer’s Building early 1900’s. www.centraltoeveleigh.com.au

Framing The Future

AN INNOVATIVE PRECINCT INSPIRED BY THE FABRIC OF A HISTORIC LANDMARK

Located three kilometres south west of Sydney CBD, the Chief Mechanical Engineer's Building sits at the centre of diverse communities, bustling retail areas, commercial centres and educational institutions.

It is well connected to the broader Sydney area by the adjacent Redfern Station and forms part of Tech Central, the Camperdown-Ultimo Collaboration Area, and the historic Eveleigh Railway Workshops.

The Chief Mechanical Engineer's building will be a key component in the future of Sydney, with strong links to tell the past innovation story. The surrounding proposed Redfern North Eveleigh Precinct will be a connected centre for living, creativity and employment opportunities that support the jobs of the future.

The renewal will create a place which celebrates Australia's rich diversity and Aboriginal history as well as offering a mix of shared residential and commercial spaces, community facilities, public open space, events and retail opportunities.

The Chief Mechanical Engineer's building will form part of the Tech Central vision and the Redfern North Eveleigh precinct renewal.

Now is your opportunity to register your interest to lease this unique building and be part of this exciting precinct activation.

WILSON STREET

Redfern North Eveleighs Chief Mechancial Engineer's Building is located at 505 Wilson Street within the heart of the Tech Central. A place where research, ambition and technology collide to spark ideas that will change the world.

Artist impression: the renders in this document are for illustrative purposes only, both the precinct and property are subject to planning approval. The design and integration of the building into the precinct has not been finalised and maybe subject to change.

Rich History
Rare Leasing opportunity

PRECINCT VISION

The Chief Mechanical Engineer's building forms part of the proposed Redfern North Eveleigh Precinct Renewal. For more information, please visit: Redfern North Eveleigh Precinct Renewal | Transport for NSW

Culture and History

Ensure history and culture come to life as part of the urban fabric of the Precinct, creating a connection to the evolving story of the place.

Creative

Incorporate public, community and cultural art into the streetscape and street furniture to create a unique identity, a sense of community ownership and collective design input.

Jobs for the future

Create active street frontages with a mix of uses, to provide space for a vibrant local economy with diverse employment opportunities.

Connected people and places

Create a highly connected Precinct that is accessible by all modes of transport.

Great place for community

Create well-designed buildings and spaces that draw people into the Precinct, enabling the renewal to meet social and environmental changes into the future.

Aboriginal past, present and future

Reinforce a sense of belonging for the Aboriginal community through the provision of considered design and cultural spaces, achieved through ongoing engagement with local Aboriginal communities.

Tech Central

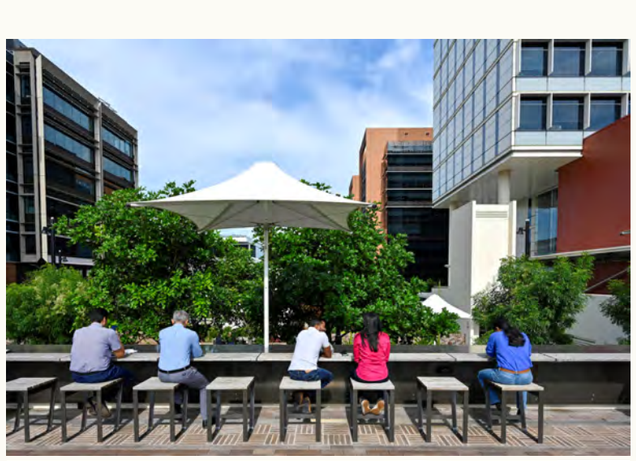
The Chief Mechanical Engineers Building is located in the NSW Government's innovation and technology district, known as Tech Central – Australia's innovation engine.

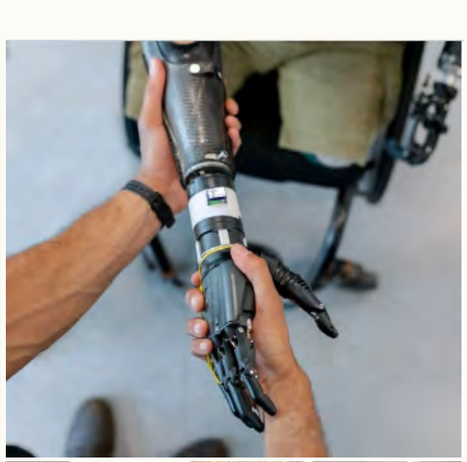
Tech Central covers an area of over 6 square kilometres that connects research centres, universities, hospitals and globally-successful firms with the startups and scaleups that are needed to drive innovation and technological development. Tech Central will provide up to 250,000 square metres of space for technology companies, including 50,000 square metres at affordable rates for startups and scaleups, in a connected location brimming with heritage, culture and activity.

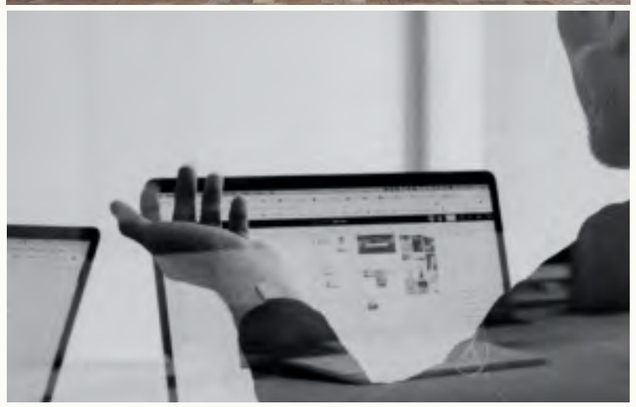
From deep tech and quantum computing to AI and applied robotics, Tech Central is home to the imaginative, the inventive, and the industrious, bound by a collective mission to push boundaries, challenge the everyday and change tomorrow for the better. Tech Central brings together six key industries that have the highest potential to turbocharge our society and economy. These include; Medtech, Digital Creatives, Artificial Intelligence, Quantum Technologies, Applied Robotics and Cyber Security.

THE VISION

By 2023, the NSW Government will have catalysed this innovation ecosystem - Tech Central – connecting organisations to create a globally renowned community that pulses with inspiration and draws top tech talent from across the world to do their best work.







LOCATION

Anchored by the best-connected transport interchange in the country, Tech Central's unique geographic footprint allows the resources and ingenuity of universities, hospitals, startups, scaleups, research institutes and globally-successful firms to collide.

This confluence of industriousness and imagination, combined with amenity and a vibrant arts and cultural scene, sparks curiosity and fuels innovation. It brings together six neighbourhoods in Sydney which are already home to some of Australia's most exciting startups and innovative institutions:

- Surry Hills
- Haymarket
- Camperdown
- Ultimo
- South Eveleigh
- Darlington North Eveleigh

To find out more, www.tc.sydney

REDFERN NORTH EVELEIGH PRECINCT RENEWAL

VICTORIA PARK

CENTRAL PARK

UTS

CENTRAL STATION

THE QUANTUM TERMINAL

UNIVERSITY OF SYDNEY

CHIEF MECHANICAL ENGINEER'S BUILDING

PRINCE ALFRED PARK

SYDNEY CRICKET GROUND

ROYAL PRINCE ALFRED HOSPITAL

CARRIAGEWORKS

REDFERN STATION

REDFERN

WILSON ST

Paintshop Sub-Precinct

Carriageworks Sub-Precinct

Clothing Store Sub-Precinct

MACDONALDTOWN STATION

SOUTH EVELEIGH

SEAMLESSLY CONNECTED

The Chief Mechanical Engineer's building embraces connectivity to the surrounding Eveleigh, Redfern and Waterloo communities, offering a unique opportunity for future commercial tenants seeking to embrace the unique identity attributed to its period charm and heritage features.

The Chief Mechanical Engineer's Building is located in the heart of the Tech Central precinct and close to Carriageworks, one of Sydney's premier cultural institutions, hosting exhibitions, events and weekly farmers markets. Well-known destinations surround the building including University of Sydney, Victoria Park, Broadway, Central Park and Prince Alfred Park. Surrounded by Wilson Street and adjacent to Redfern, Darlington, Newtown, Chippendale and Alexandria, the Chief Mechanical Engineer's building sits at a key point between Sydney CBD and the Inner West

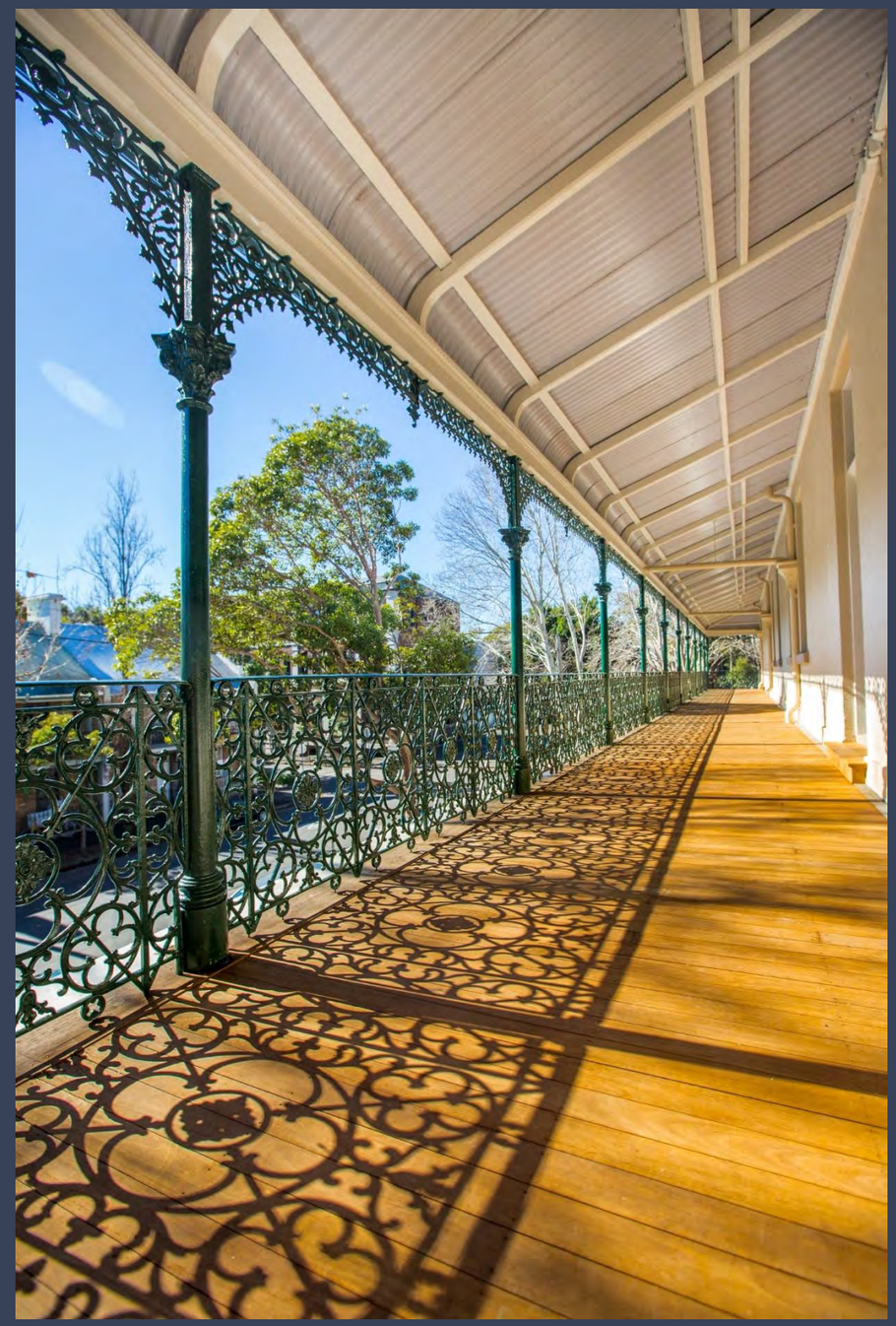
Innovative Character Awaits

HERITAGE CONSERVATION WORKS

The Chief Mechanical Engineer's building will be refurbished to embrace the heritage and cultural attributes of this State Heritage asset. Focusing on adaptive reuse to produce an innovative and modern commercial opportunity.

The Leasing Opportunity:

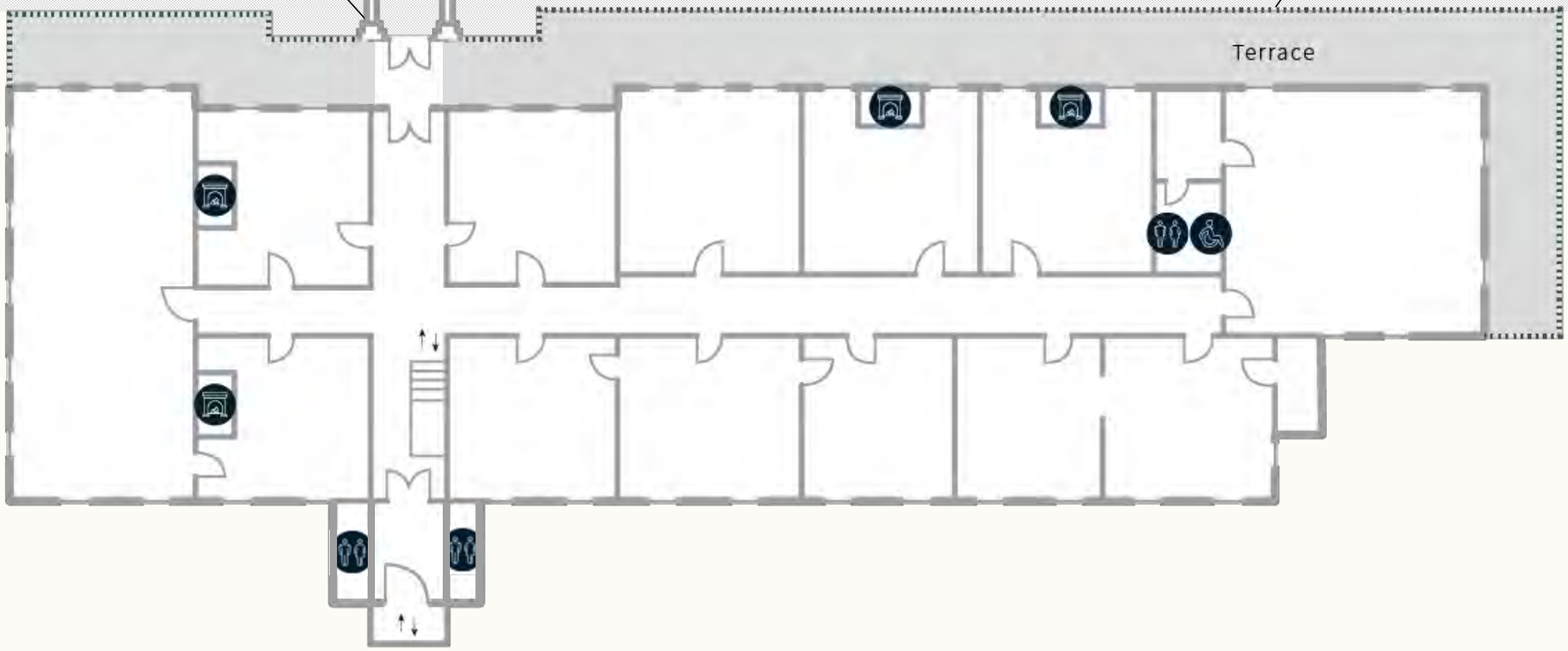
- Targeting completion in 2024
- Layout incorporates single and adjoining character office spaces as well as flexible commercial layouts
- North west facing front terrace and veranda
- Complete building refurbishment of a significant State Heritage building
- Accessible to people with a disability or with limited mobility
- Modern amenities, breakout areas and spaces
- Base building lighting, communications and security upgrades
- Air-conditioning throughout
- Lift access to the second floor



Ground Floor Plan

505 WILSON ST EVELEIGH DRAFT INDICATIVE FLOOR PLAN*

The building is a two storey period building offering approximately 1,200 square metres of net lettable area, boasting character and grandeur rarely seen in the market.



FEATURES

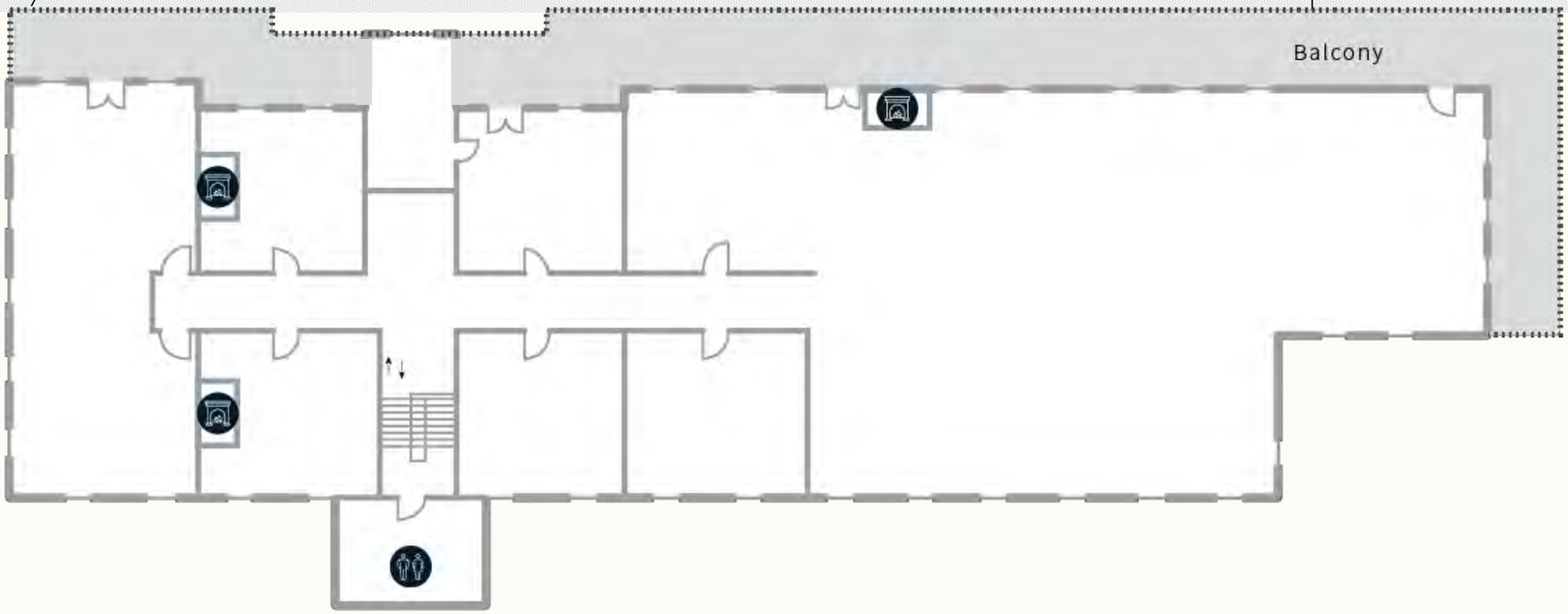
- Suitable for a variety of commercial uses
- North west facing front terrace and veranda
- Character office spaces offering singular, adjoining and flexible layouts space
- Complete building refurbishment of a significant State Heritage building

*Subject to planning approval

First Floor Plan

505 WILSON ST EVELEIGH DRAFT INDICATIVE FLOOR PLAN*

The building is a two storey period building offering approximately 1,200 square metres of net lettable area, boasting character and grandeur rarely seen in the market.



FEATURES

- Suitable for a variety of commercial uses
- North west facing front terrace and veranda
- Character office spaces offering singular, adjoining and flexible layouts space
- Complete building refurbishment of a significant State Heritage building

*Subject to planning approval

How to Register Your Interest

To enquiry about leasing this unique heritage building,
please register your interest at the JLL leasing page below.

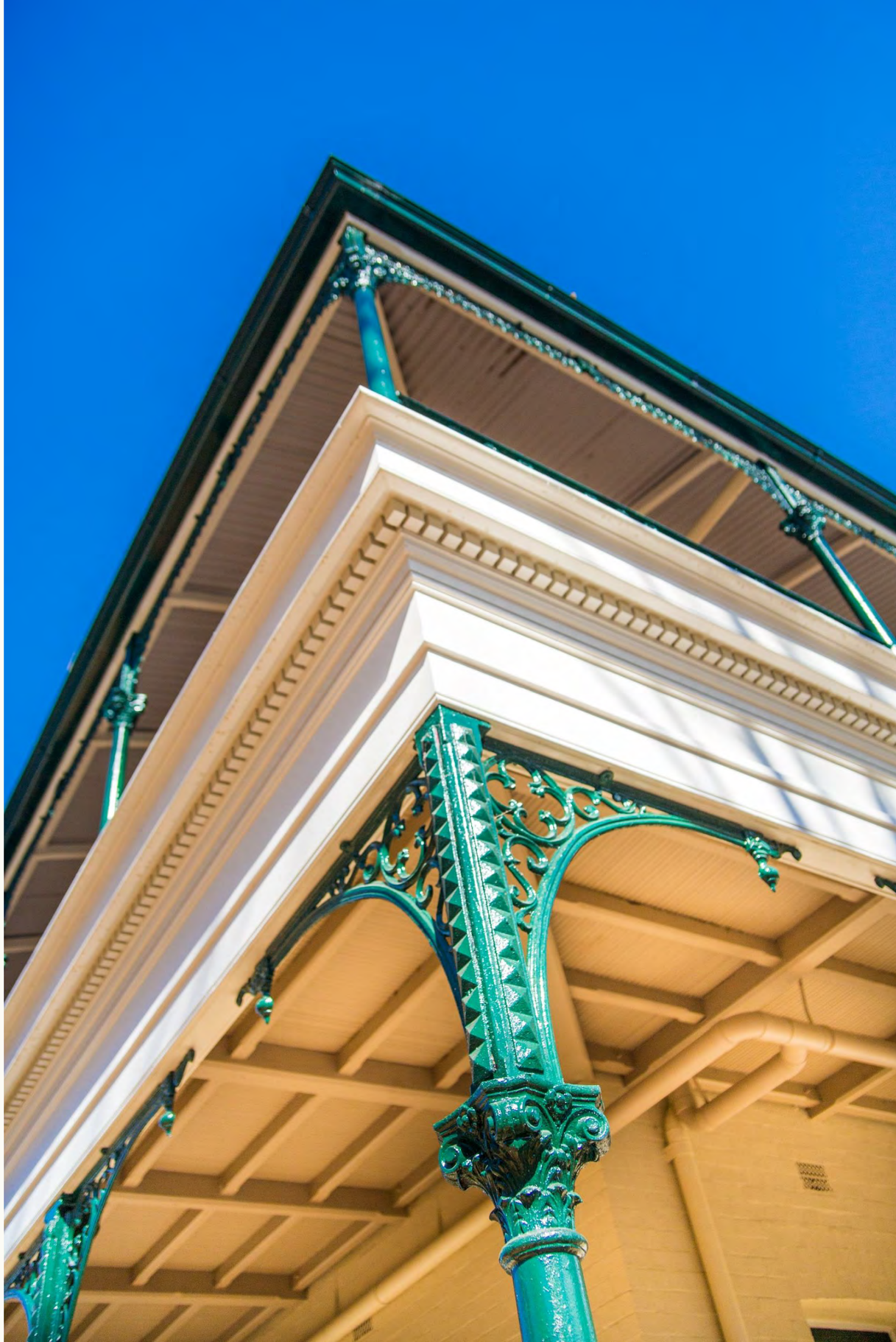
www.jll.com.au/CMEbuilding

CONTACT US TODAY

Email address: tahe.csc@ap.jll.com

Phone number: 1300 086 679

NSW GOVERNMENT



DISCLAIMER

The renders in this document are for illustrative purposes only, both the precinct and property are subject to planning approval. The design and integration of the building into the precinct has not been finalised and maybe subject to change.

The photos provided on page/s 1, 9, 10, 11, 12 were taken by photographer Angie Burgess (http://angieburgess.com/).

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

30/6/2022 7:45AM

FOLIO: 4/862514

First Title(s): OLD SYSTEM
Prior Title(s): 27-30/2/80 31/119262
1/185913 1/434648
25/650485 26/650486
22-23/830253 1/906998
1/911664 1/911665
VOL 728 FOL 187 VOL 2462 FOL 220
CA70728

Recorded	Number	Type of Instrument	C.T. Issue
28/5/1997	CA70728	CONVERSION ACTION	FOLIO CREATED EDITION 1
14/9/2000	7089785	DEPARTMENTAL DEALING	
19/9/2001	7809011	WITHDRAWN - LEASE	
18/6/2003	9666304	LEASE	EDITION 2
10/11/2003	AA142692	DEPARTMENTAL DEALING	
14/3/2004	AA472866	DEPARTMENTAL DEALING	
9/6/2004	AA669786	LEASE	EDITION 3
4/10/2007	AD355019	APPLICATION	EDITION 4
21/8/2008	AE149581	CAVEAT	
25/10/2011	AG577739	DEPARTMENTAL DEALING	
5/6/2012	AH26678	DEPARTMENTAL DEALING	
29/11/2012	AH400738	DEPARTMENTAL DEALING	
29/11/2012	AH400722	UNNECESSARY - DEPARTMENTAL DEALING	
19/2/2013	DP1175706	DEPOSITED PLAN	
8/10/2013	AI2234	TRANSFER	FOLIO CANCELLED
8/10/2013	AI2235	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2236	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2237	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2239	TRANSFER GRANTING EASEMENT	

END OF PAGE 1 - CONTINUED OVER

SEARCH DATE
30/6/2022 7:45AM

FOLIO: 4/862514 PAGE 2

Recorded	Number	Type of Instrument	C.T. Issue
8/10/2013	AI2240	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2241	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2242	TRANSFER GRANTING EASEMENT	
8/10/2013	AI2243	POSITIVE COVENANT	
8/10/2013	AI2244	POSITIVE COVENANT	
8/10/2013	AI2245	CAVEAT	

*** END OF SEARCH ***

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
30/6/2022 7:45AM

FOLIO: 5/1175706

First Title(s): OLD SYSTEM
Prior Title(s): 4/862514

Recorded	Number	Type of Instrument	C.T. Issue
19/2/2013	DP1175706	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
~~9/10/2013~~	~~AI2234~~	~~TRANSFER~~	FOLIO CREATED EDITION 1
6/2/2014	AI356768	DEPARTMENTAL DEALING	
6/2/2014	DP1192489	DEPOSITED PLAN	EDITION 2
17/9/2015	DP1194309	DEPOSITED PLAN	EDITION 3
4/3/2019	AP43632	LEASE	EDITION 4
2/12/2020	AQ589323	APPLICATION TO RECORD A NEW REGISTERED PROPRIETOR	EDITION 5
30/9/2021	DP1275585	DEPOSITED PLAN	EDITION 6

*** END OF SEARCH ***

Received: 30/06/2022 07:45:07

Form: 01T
Licence: 05-11-638
Licensee: Softdocs

(3)

TRANSFER

New South Wales
Real Property Act 1900

AI2234L

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

Office of State Revenue
NSW Treasury
Client No: 3323749 1786
Duty: EXEMPT Trans No: 2245173
Asst details: S308

STAMP DUTY Office of State Revenue use only

(A) TORRENS TITLE Part 50/1001467 + 4/862514 5cm
Folio Identifiers 1/1175706, 2/1175706 and 3/1175706
5cl 4cl 4

RELODGED

(B) LODGED BY

Document Collection Box	Name, Address or DX, Telephone, and Customer Account Number if any	CODES
124E	LLPN : 123820V LegalinX Pty Ltd Level 3, 175 Castlereagh Street SYDNEY 2000 Ph: (02) 9230 6900 Reference (optional): MADD: 14589545	T TW

4 OCT 2013

3

TIME

(C) TRANSFEROR RAIL CORPORATION NEW SOUTH WALES ABN 59 325 778 353

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of $ 3,078,000.00 and as regards the land

(E) ESTATE specified above transfers to the transferee an estate in fee simple.

(F) SHARE TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEREE URBANGROWTH NSW DEVELOPMENT CORPORATION ABN 79 268 260 688

(I) TENANCY:

DATE ..... / ..... / .....

(J) I certify I am an eligible witness and that the authorised officer of the transferor signed this dealing in my presence. [See note* below]

Signature of witness: I. Glavinic
Name of witness: IVAN GLAVINIC
Address of witness: L.21/477 PITT ST SYDNEY

Certified correct for the purposes of the Real Property Act 1900 by the authorised officer named below.

Signature of authorised officer:
Authorised officer's name: KEVIN EYKES
Authority of officer: GENERAL MANAGER PROPERTY
Signing on behalf of: RAIL CORPORATION NEW SOUTH WALES ABN 59 325 778 353

I certify I am an eligible witness and that the authorised officer of the transferee signed this dealing in my presence. [See note* below]

Signature of witness:
Name of witness: ELIZABETH THOMAS
Address of witness: 6a Hilder Rd ERMINGTON 2115

Certified correct for the purposes of the Real Property Act 1900 by the authorised officer named below.

Signature of authorised officer:
Authorised officer's name: SEAN O'TOOLE
Authority of officer: CEO
Signing on behalf of: URBANGROWTH NSW DEVELOPMENT CORPORATION ABN 79 268 260 688

(K) The transferee's solicitor certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. 484654 Full Name: John Andrew Douglas Signature: .....

*s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.

ALL HANDWRITING MUST BE IN BLOCK CAPITALS

Number additional pages sequentially

Part 50/1001467 being 4/862514 & 1/1175706 being 2/1175706 & 3/1175706 (See Annexure 'B')

tim Wirth

URGENT

Maddocks

Contact John Douglas
Direct 02 9291 6166
Email john.douglas@maddocks.com.au
Partner Patrick Ibbotson
Our Ref PNI:JAD:5882012.001

Lawyers
Level 27, Angel Place
123 Pitt Street
Sydney New South Wales 2000 Australia
GPO Box 1692
Sydney New South Wales 2001

Telephone 61 2 9291 6100
Facsimile 61 2 9221 0872

info@maddocks.com.au
www.maddocks.com.au

DX 10284 Sydney Stock Exchange

4/10/2013

Supervisor, Client Services
NSW Land and Property Information
1 Prince Albert Road
Sydney NSW 2000

Reply to requisitions (Your Ref: AI2234:1)

We refer to the above matter. We make the following comments regarding the requisitions raised on 18 September 2013.

1. Requisitions 1

We have amended the relevant dealings as required by requisition number 1.

2. Requisition number 2

In answer to requisition number 2, we confirm that the proposed lots affect the current lots as follows:

Proposed lot	Current lot
Lot 1 in DP 1175706	Lot 50 in DP 1001467
Lot 2 in DP 1175706	Lot 4 in DP 862514
Lot 3 in DP 1175706	Lot 4 in DP 862514
Lot 4 in DP 1175706	Lot 50 in DP 1001467
Lot 5 in DP 1175706	Lot 4 in DP 862514

3. Requisition number 3

We have amended dealings AI2236 TG, AI2237 TG, AI2239 TG and AI2240 TG as required by requisition number 3. We note that AI2238 TG (referred to in requisition number 3) is an easement in gross. Therefore, we assume that no amendment to item (G) is required.

We enclose a cheque in the amount of $418 in favour of 'Land and Property Information' in satisfaction of the multiple instrument fee.

4. Requisitions 4

We have amended the relevant dealings as required by requisition number 4.

5. Requisition number 5

In answer to requisition number 5, we confirm that the original certificates of title for lots 1, 2, 3, 4 and 5 in deposited plan 1175706 are to be distributed as follows:

5.1.1 certificates of title for lots 1, 2 and 3 in deposited plan 1175706 to be returned to:

Maddocks
C/o LegalinX
Delivery Box 124E

5.1.2 certificates of title for lots 4 and 5 in deposited plan 1175706 to be returned to:

Minter Ellison
Delivery Box 599D

6. Requisition number 6

We (through our agent, LegalinX) have been informed Land and Property Information does not require any action to be taken in relation to this requisition.

If you have any questions in relation to this matter, please contact John Douglas on 02 9291 6166.

Yours faithfully

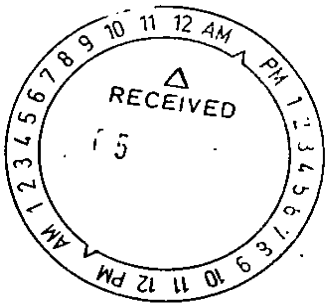
Maddocks

enc

MinterEllison
LAWYERS

21 August 2013

LEVEL 19 AURORA PLACE 88 PHILLIP STREET SYDNEY
GPO BOX 521 SYDNEY NSW 2001 AUSTRALIA
DX 117 SYDNEY www.minterellison.com
T +61 2 9921 8888 F +61 2 9921 8123



BY HAND

Land and Property Information
1 Prince Albert Road
SYDNEY NSW 2000

Dear Registrar

UrbanGrowth Development Corporation acquisition of land from Rail Corporation New South Wales under plan of acquisition
Land being acquired under plan of acquisition: Proposed lots 1, 2 and 3 in Deposited Plan 1175706
Current description of land being acquired: Part Folio Identifiers 4/862514 and 50/1001467

We act for Rail Corporation New South Wales, the registered proprietor of Folio Identifiers 4/862514 and 50/1001467.

Land being acquired under plan of acquisition

UrbanGrowth Development Corporation is acquiring land from Rail Corporation New South Wales under plan of acquisition, being proposed lots 1, 2 and 3 in Deposited Plan 1175706.

Order of registration

We are instructed to request the that the **enclosed** dealings are registered in the following order:

1. **Firstly**, Form 01T – Transfer (together with certificates of title for folio identifiers 50/1001467 and 4/862514);

2. **Secondly**,

   (a) Transfer granting easement (right of access – A1);

   (b) Transfer granting easement (right of access – A2);

   (c) Transfer granting easement (services – B1);

   (d) Transfer granting easement (services – C1);

   (e) Transfer granting easement (services – C2);

(f) Transfer granting easement (railway infrastructure – in gross);

(g) Transfer granting easement (services – in gross);

(h) Transfer granting easement (noise, vibration and electrolysis – in gross);

(i) Positive covenant (drainage);

(j) Positive covenant (building work); and

3. **Thirdly**, Form 08X – Caveat.

Return of certificates of title

Following registration of each of the abovementioned dealings, the original certificates of title for lots 1, 2, 3, 4 and 5 in Deposited Plan 1175706 are to be distributed as follows:

1. certificates of title for lots 1, 2 and 3 in Deposited Plan 1175706 to be returned to:

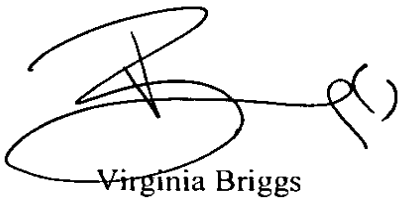
   Maddocks
   C/o LegalinX
   Delivery Box 124E

2. certificates of title for lots 4 and 5 in Deposited Plan 1175706 to be returned to:

   Minter Ellison
   Delivery Box 599D

Please do not hesitate to contact Kiri Purdy if you have any queries.

Yours faithfully
MINTER ELLISON



Virginia Briggs
Partner

Contact:	Kiri Purdy Direct phone: +61 2 9921 8538 Direct fax: +61 2 9921 8092
Email:	kiri.purdy@minterellison.com
Partner responsible:	Virginia Briggs Direct phone: +61 2 9921 8750
Our reference:	BLM:VXB 20-7210866

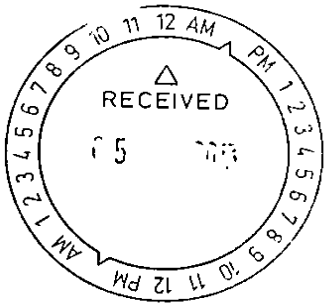
enclosure

Bartier Perry Pty Ltd
10 / 77 Castlereagh Street
Sydney NSW 2000
www.bartier.com.au

DX 109 Sydney
PO Box 2631
Sydney NSW 2001

Tel +61 2 8281 7800
Fax +61 2 8281 7838
ABN 30 124 690 053

Bartier Perry



The Registrar General
Land and Property Information
Queens Square
SYDNEY NSW 2000

5 September 2013

Our ref: PLC 121284

Dear Registrar General

CAVEATS AE149581, AH830556
REGISTERED PROPRIETOR: RAIL CORPORATION NEW SOUTH WALES
CAVEATOR: AUSGRID
PROPERTY: FOLIO IDENTIFIERS 4/862514, 50/1001467

We are the solicitors for Ausgrid, the caveator under caveats AE149581 and AH830556.

Our client understands that:

1. the Registered Proprietor intends to transfer its title in the Land to UrbanGrowth Development Corporation (**UGDC**); and

2. once this transfer is complete, UGDC intends to lodge a number of dealings with NSW Land and Property Information for registration.

We **enclose** copies of:

1. transfer;

2. caveat;

3. transfer granting easement (right of access – A1);

4. transfer granting easement (right of access – A2);

5. transfer granting easement (services – B1);

6. transfer granting easement (services – C1);

7. transfer granting easement (services – C2);

8. transfer granting easement (railway infrastructure – in gross);

9. transfer granting easement (services – in gross);

10. transfer granting easement (noise, vibration and electrolysis – in gross);

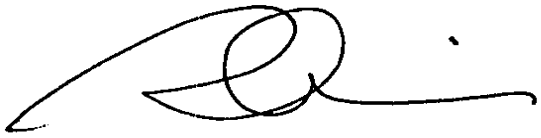
11. positive covenant (drainage); and

12. positive covenant (building work),

(**Dealings**).

The Caveator hereby consents to the registration of the Dealings.

Yours faithfully
Bartier Perry



Pas Crino | Consultant
D +612 8281 7807 **F** +612 8281 7805
pcrino@bartier.com.au

CC Glenn Elmore, Ausgrid ref 2013/6505

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 5/1175706

SEARCH DATE	TIME	EDITION NO	DATE
30/6/2022	7:44 AM	6	30/9/2021

LAND

LOT 5 IN DEPOSITED PLAN 1175706
AT EVELEIGH
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF PETERSHAM COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1175706

FIRST SCHEDULE

TRANSPORT ASSET HOLDING ENTITY OF NEW SOUTH WALES (RP AQ589323)

SECOND SCHEDULE (27 NOTIFICATIONS)

---

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM - SEE CROWN GRANT
2 D876631 LAND EXCLUDES MINERALS (S141 PUBLIC WORKS ACT, 1912)AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
3 F168262 LAND EXCLUDES MINERALS (S.141 PUBLIC WORKS ACT, 1912) AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
4 F602289 LAND EXCLUDES MINERALS (S.141 PUBLIC WORKS ACT, 1912) AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
5 V570388 LAND EXCLUDES MINERALS AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
6 V861363 LAND EXCLUDES MINERALS AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
7 O55729 RIGHT OF FOOTWAY & DRAINAGE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
8 O55729 RIGHT OF CARRIAGEWAY & MAINTENANCE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
9 O55730 RIGHT OF CARRIAGEWAY & MAINTENANCE APPURTENANT TO THE PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM AFFECTING LOT 21 DP830253
AG462122 EASEMENT RELEASED IN SO FAR AS IT AFFECTS LOT 14 IN DP1136859
DP1194309 EASEMENT RELEASED IN SO FAR AS IT AFFECTS THE PART DESIGNATED (YY) IN DP1194309
10 O55730 RIGHT OF CARRIAGEWAY APPURTENANT TO THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM AFFECTING LOT 21 DP830253

END OF PAGE 1 - CONTINUED OVER

SECOND SCHEDULE (27 NOTIFICATIONS) (CONTINUED)

DP1194309 EASEMENT RELEASED IN SO FAR AS IT AFFECTS THE PART DESIGNATED (B) IN DP1194309

11 O55730 EASEMENT FOR BUFFER STOP APPURTENANT TO THE PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM AFFECTING LOT 21 DP830253

12 AI2236 EASEMENT FOR SERVICES VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED AFFECTING THE PART DESIGNATED (C) IN DP1175706

13 AI2237 EASEMENT FOR RIGHT OF ACCESS VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED AFFECTING THE PART SHOWN DESIGNATED (A) IN DP1175706

14 AI2239 RIGHT OF ACCESS VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED AFFECTING THE PART DESIGNATED (A) IN DP1175706

15 AI2240 EASEMENT FOR SERVICES VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED AFFECTING THE PART DESIGNATED (C) IN DP1175706

16 DP1192489 RIGHT OF WAY VARIABLE WIDTH AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1192489

17 DP1194309 EASEMENT FOR OVERHANG VARIABLE WIDTH REFERRED TO AND NUMBERED (10) IN THE S.88B INSTRUMENT AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1194309

18 DP1194309 RIGHT OF CARRIAGEWAY VARIABLE WIDTH (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED

19 DP1194309 EASEMENT FOR MAINTENANCE 6 METRE(S) WIDE AND VARIABLE (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED

DP1275585 EASEMENT RELEASED IN SO FAR AS IT AFFECTS 4072/1229090

20 DP1194309 EASEMENT TO PERMIT ENCROACHING STRUCTURE TO REMAIN VARIABLE WIDTH REFERRED TO AND NUMBERED (13) IN THE S.88B INSTRUMENT AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1194309

21 DP1194309 EASEMENT FOR BUFFER STOP VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED

22 DP1194309 EASEMENT TO PERMIT ENCROACHING STRUCTURE TO REMAIN VARIABLE WIDTH REFERRED TO AND NUMBERED (15) IN THE S.88B INSTRUMENT APPURTENANT TO THE LAND ABOVE DESCRIBED

23 DP1194309 EASEMENT TO MAINTAIN BOLLARDS VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED

24 DP1194309 EASEMENT FOR MAINTENANCE VARIABLE WIDTH AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1194309

25 DP1194309 RIGHT OF FOOTWAY VARIABLE WIDTH (LIMITED IN STRATUM) REFERRED TO AND NUMBERED (18) IN THE S.88B INSTRUMENT APPURTENANT TO THE LAND ABOVE DESCRIBED

END OF PAGE 2 - CONTINUED OVER

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SECOND SCHEDULE (27 NOTIFICATIONS) (CONTINUED)

26	AP43632	LEASE TO RAIL CORPORATION NEW SOUTH WALES OF THE PREMISES KNOWN AS "BRICK CARRIAGE WORKS BUILDING", "BLACKSMITH'S WORKSHOP BUILDING" AND "SUBSTATION BUILDING" AS SHOWN IN PLAN WITH AP43632. EXPIRES: 29/9/2114.
27	DP1275585	EASEMENT FOR MAINTENANCE 6 METRE(S) WIDE AND VARIABLE (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX D: DUE DILIGENCE REPORT

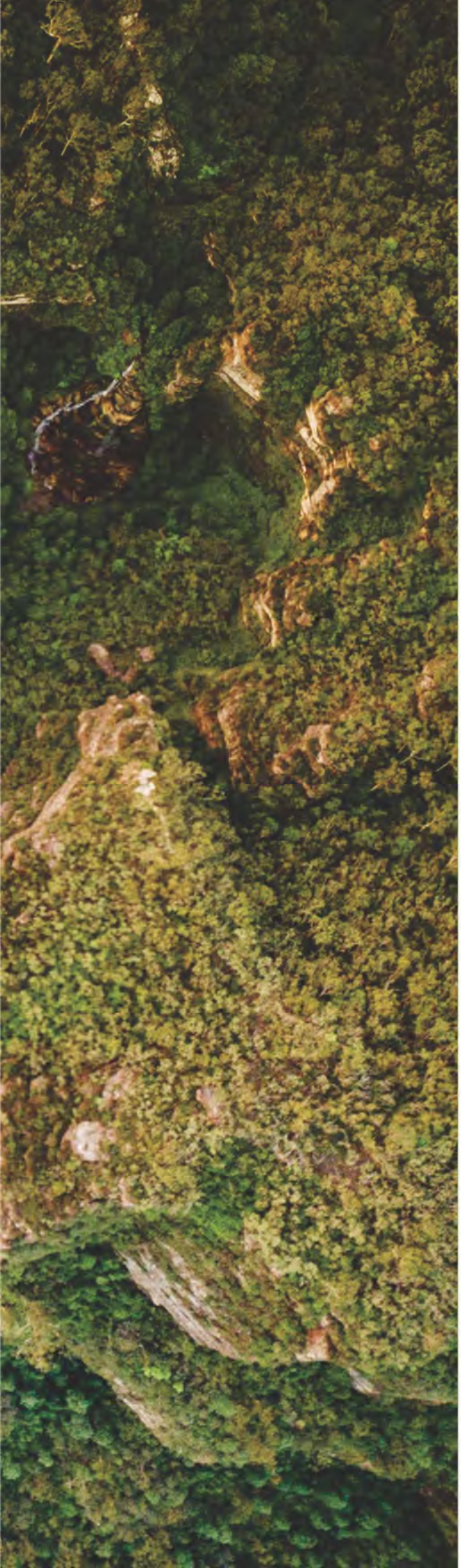
Land Insight

Due Diligence Insight Report

505 Wilson Street
Eveleigh, NSW

24 June 2022

Report nº:
LI-02755 DDR



Understanding your report

Your Report has been produced by Land Insight and Resources (Land Insight).

Your Report is based on information available from public databases and sources at the date of reporting. The information gathered relates to land that is within a 200 to 2000m radius (buffer zone) from the boundaries of the Property. A smaller or larger radius may be applied for certain records (as listed under records and as shown in report maps).

While every effort is made to ensure the details in your Report are correct, Land Insight cannot guarantee the accuracy or completeness of the information or data provided.

The report provided by Land Insight includes data listed on page 4 (table of contents). All sources of data and definitions are provided in the Product Guide (Attached). For a full list of references, metadata, publications or additional information not provided in this report, please contact info@landinsight.co

The report does not include title searches; dangerous good searches or; property certificates (unless requested); or information derived from a physical inspection, such as hazardous building materials, areas of infilling or dumping/spilling of potentially contaminated materials. It is important to note that these documents and an inspection can contain information relevant to contamination that may not be identified by this Report.

Due to the ongoing nature of database development and frequency of updates provided by various state government regulators the data displayed within this report is only current from date of production.

This Report, and your use of it, is regulated by Land Insight's Terms and Conditions (See Land Insight's Product Guide).

Index

SUMMARY

Section 1	**PROPERTY SETTING**	**Identified**
Sensitive Receptors Planning Control Heritage Soil and Land Information Geology and Topography		

Section 2	**HYDROGEOLOGY**	**Identified**
Aquifer Groundwater Bores and Other Borehole investigations Groundwater Dependent Ecosystems (GDE) Hydrogeology Units Wetlands		

Section 3	**ENVIRONMENTAL REGISTERS LICENCES AND INCIDENTS**	**Identified**
Contaminated Land Public Register Sites Regulate by Other Jurisdictional Body (Former Gaswork sites / PFAS sites) Licensing and Regulated Sites National Pollutant Inventory (NPI)		

Section 4	**POTENTIALLY CONTAMINATED AREAS**	**Identified**
Former Potentially Contaminated Land Current and Historical Potentially Contaminating activities (PCA)		

Section 5	**NATURAL HAZARDS**	**Identified**
Erosion risk Bushfire prone land Fire history Flood hazards		

Section 1 Property Setting

1.1 SENSITIVE RECEPTORS

Map 1.1 (200m Buffer)

Sensitive receptor	Category	Distance (m)	Direction
Charles Keenan Reserve	Parks	111.8	West
Redfern Community Centre Playground	Parks	165.9	North-east

1.2 PLANNING CONTROLS

Map 1.2 (onsite)

Zoning

Code	Zoning	Details
D	Business Zone - Mixed Use	State Environmental Planning Policy (Precincts—Eastern Harbour City) 2021

Environmental Planning Instruments

Type	Category	Details
Not identified	-	-

Other Planning Information

Type	Category	Details
Not identified	-	-

1.3 HERITAGE

Map 1.3 (200m Buffer)

State and Local Heritage

Site ID	Site Name	Type	Details	Distance (m)	Direction
9	Chief Mechanical Engineer's Office Building	Item - General	State	0.0	Onsite
C18	Golden Grove	Conservation Area - General	Local	0.0	North
8	Scientific Services Building No.1	Item - General	State	1.2	West
C19	Darlington	Conservation Area - General	Local	9.1	East
I2245	Former McMurtrie, Kellermann & Co Factory	Item - General	Local	19.9	North
10	Telecommunications Equipment Centre	Item - General	State	55.2	South-east
I517	Terrace group	Item - General	Local	59.9	North
I1322	Terrace house 'Waratah'	Item - General	Local	136.7	East
3	Works Manager's Office	Item - General	State	139.6	South-east
I518	Terrace house	Item - General	Local	142.3	West
1	Locomotive Workshop	Item - General	State	171.9	South
2	New Locomotive Workshop	Item - General	State	172.7	South-east
7	Paint Shop	Item - General	State	183.8	South-west
11	Redfern Station Booking Office	Item - General	State	194.1	East
1140	Eveleigh Railway Workshops	State Heritage Register	Complex / Group	0.0	Onsite
1139	Eveleigh Chief Mechanical Engineers Office	State Heritage Register	Built	0.0	Onsite
1234	Redfern Railway Station group	State Heritage Register	Built	69.7	South-east

Australian Heritage Database

Site ID	Site Name	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-	-

Commonwealth Heritage List, National Heritage List and World Heritage Area.

1.4 SOIL AND LAND USE INFORMATION

Map 1.4a/1.4b (onsite)

Soil Landscape

Soil Landscape	REbt	Blacktown	**Soil Group**	Residual
Description	"Landscape—gently undulating rises on Wianamatta Group shales. Local relief to 30 m, slopes usually >5%. Broad rounded crests and ridges with gently inclined slopes. Cleared Eucalypt woodland and tall open-forest (dry schlerophyll forest). Soils—shallow to moderately deep (>100 cm) hardsetting mottled texture contrast soils, red and brown podzolic soils (Dr3.21, Dr3.31, Db2.11, Db2.21) on crests grading to yellow podzolic soils (Dy2.11, Dy3.11) on lower slopes and in drainage lines. Limitations—localised seasonal waterlogging, localised water erosion hazard, moderately reactive highly plastic subsoil, localised surface movement potential."			

Salinity

Salinity Hazard	Not identified	-

Radon

Radon Level	Bq/m³	7

Typical radon levels in Australia are low and the values shown are the average values for each census district. For specific location, factors such as the local geology and house type could lead to different values. (ARPANSA).

Acid Sulfate Soil

ASS Risk Map *(Table 1.4.1)*	**On the Property?**	**Within Buffer?**
Class 5	Not identified	Yes

National Acid Sulfate Soils Atlas

Atlas of Australian ASS *(Table 1.4.2)*	Cq(p4)	ASS in inland lakes, waterways, wetlands and riparian zones	**Probability of Occurrence**	Extremely low probability of occurrence

Table 1.4.1. Classification scheme in the ASS Planning Maps

Class of Land as shown on ASS Planning Maps	
1	Any works.
2a	Works below the natural ground surface. Works by which the watertable is likely to be lowered.
2b	Works other than ploughing below the natural ground surface. Works by which the watertable is likely to be lowered.
3	Works more than 1 metre below the natural ground surface. Works by which the watertable is likely to be lowered more than 1 metre below the natural ground surface.
4	Works more than 2 metres below the natural ground surface. Works by which the watertable is likely to be lowered more than 2 metres below the natural ground surface.
5	Works within 500 metres of adjacent Class 1, 2a, 2b, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2a, 2b, 3 or 4 land.

For each class of land, the maps identify the type of works likely to present an environmental risk if undertaken in the particular class of land. If these types of works are proposed, further investigation is required to determine if ASS are actually present and whether they are present in such concentrations as to pose a risk to the environment.

Table 1.4.2. Atlas of Australian Acid Sulfate Soils1 (ASRIS) (CSIRO/NatCASS)	
Probability of Occurrence of ASS[1]	
A	**High Probability of occurrence -** (>70% chance of occurrence in mapping unit)
B	**Low Probability of occurrence** - (6-70% chance of occurrence in mapping unit)
C	**Extremely low probability of occurrence** - (1-5% chance of occurrence in mapping unit)
D	**No probability of occurrence** - (<1% chance of occurrence in mapping unit)
x	**Disturbed ASS[1] terrain -** (ASS[1] material present below urban development).
u	**Unclassified** - (Insufficient information to classify map unit)
Zones	
a	Potential acid sulfate soil material and/or Monosulfidic Black Ooze (MBO).
b, c	Potential acid sulfate soil generally within upper 1 m.
c, d, e	ASS[1] generally within upper 1 m.
f	ASS[1] generally below 1 m from the surface
g	ASS[1], generally below 3 m from the surface.
h	ASS[1] generally within 1 m of the surface.
i, j	ASS[1] generally below 1 m of the surface.
k	ASS[1] material and/or Monosulfidic Black Ooze (MBO).
l, m, n, o, p, q	ASS[1] generally within upper 1 m in wet / riparian areas.
Subscripts to codes	
(a)	Actual acid sulfate soil (AASS) = sulfuric material.
(p)	Potential acid sulfate soil (PASS) = sulfidic material.
(q)	Monosulfidic Black Ooze (MBO) is organic ooze enriched by iron monosulfides.
Confidence levels	
(1)	All necessary analytical and morphological data are available
(2)	Analytical data are incomplete but are sufficient to classify the soil with a reasonable degree of confidence
(3)	No necessary analytical data are available, but confidence is fair, based on a knowledge of similar soils in similar environments
(4)	No necessary analytical data are available, and classifier has little knowledge or experience with ASS, hence classification is provisional

[1]*Acid Sulfate Soils (ASS) are all those soils in which sulfuric acid may be produced, is being produced, or has been produced in amounts that have a lasting effect on main soil characteristics (Pons 1973). Acid sulfate soil (ASS) may include PASS or AASS + PASS. Potential acid sulfate soil (PASS) = sulfidic material. Actual acid sulfate soil (AASS) = sulfuric material.*

1.5 GEOLOGY AND TOPOGRAPHY

Map 1.5 (onsite)

Geology

Map Sheet	Code	Formation	Age	Group	Dominant Lithology	Description
Sydney 1:100,000 Geological Sheet	Twia	Ashfield Shale	Middle Triassic	Wianamatta Group	Shale	Black to light grey shale and laminite.

Naturally Occurring Asbestos Potential (NOA)

Category	On the Property?	Within Buffer?
Not identified	-	-

Topography

Topography	26-28 mAHD

Section 2 Hydrogeology

2.1 HYDROGEOLOGY AND GROUNDWATER BORES

Map 2.1 (2000m Buffer)

	On the Property?	Within Buffer?
Aquifer Type	Porous, extensive highly productive aquifers	Porous, extensive highly productive aquifers
Drinking Water Catchments	Not identified	Not identified
Protected Riparian Corridor	Not identified	Not identified
UPSS Environmentally Sensitive Zone	Sydney Coast-Georges River	Sydney Coast-Georges River
Wetlands	Not identified	Estuarine Wetland

Groundwater Bores

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
99	GW113862	Monitoring	28/07/2003	3.8	3.8	<Null>	<Null>	<Null>	702.1	North-east
100	GW113863	Monitoring	16/09/2003	4.6	4.6	<Null>	<Null>	<Null>	705.1	North-east
101	GW113864	Monitoring	22/07/2003	4.5	4.5	<Null>	<Null>	<Null>	708.7	North-east
102	GW113865	Monitoring	21/07/2003	6.5	6.5	<Null>	<Null>	<Null>	711.3	North-east
103	GW113866	Monitoring	18/02/2003	3.0	3.0	<Null>	<Null>	<Null>	713.5	North-east
74	GW109503	Monitoring	1/03/2007	5.2	5.2	2.24	<Null>	<Null>	714.4	North
104	GW113867	Monitoring	22/07/2003	3.5	3.5	<Null>	<Null>	<Null>	716.2	North-east

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
117	GW113880	Monitoring	20/08/2004	5.0	5.0	<Null>	<Null>	<Null>	717.1	North-east
105	GW113868	Monitoring	18/02/2014	3.7	3.7	<Null>	<Null>	<Null>	719.7	North-east
106	GW113869	Monitoring	29/07/2003	6.0	6.0	<Null>	<Null>	<Null>	722.4	North-east
107	GW113870	Monitoring	7/11/2003	4.8	4.8	<Null>	<Null>	<Null>	726.4	North-east
108	GW113871	Monitoring	8/11/2003	6.0	6.0	<Null>	<Null>	<Null>	729.1	North-east
109	GW113872	Monitoring	16/09/2003	8.0	8.0	<Null>	<Null>	<Null>	735.0	North-east
15	GW106192	Household	10/12/2004	6.0	6.0	4	Good	0.5	735.5	South
113	GW113876	Monitoring	25/07/2003	7.8	7.8	<Null>	<Null>	<Null>	737.8	North-east
98	GW113861	Monitoring	30/07/2003	6.5	6.5	<Null>	<Null>	<Null>	740.5	North-east
114	GW113877	Monitoring	28/07/2003	5.5	5.5	<Null>	<Null>	<Null>	741.1	North-east
115	GW113878	Monitoring	7/11/2003	7.0	7.0	<Null>	<Null>	<Null>	743.7	North-east
123	GW113886	Monitoring	1/10/2004	5.8	5.8	<Null>	<Null>	<Null>	749.2	North-east
96	GW113859	Monitoring	15/09/2003	6.1	6.1	<Null>	<Null>	<Null>	749.9	North-east
118	GW113881	Monitoring	20/08/2004	6.1	6.1	<Null>	<Null>	<Null>	750.1	North-east
119	GW113882	Monitoring	20/08/2004	6.1	6.1	<Null>	<Null>	<Null>	751.6	North-east
78	GW109502	Monitoring	1/03/2007	6.4	6.4	2.18	<Null>	<Null>	751.8	North
124	GW113887	Monitoring	5/10/2004	5.7	5.7	<Null>	<Null>	<Null>	753.8	North-east
127	GW113890	Monitoring	9/10/2005	6	6	<Null>	<Null>	<Null>	754.0	North-east
122	GW113885	Monitoring	20/08/2004	7	7	<Null>	<Null>	<Null>	756.3	North-east
128	GW113891	Monitoring	9/10/2005	6.8	6.8	<Null>	<Null>	<Null>	756.3	North-east
129	GW113892	Monitoring	9/10/2005	7	7	<Null>	<Null>	<Null>	758.2	North-east
125	GW113888	Monitoring	5/10/2004	5.5	5.5	<Null>	<Null>	<Null>	758.6	North-east
126	GW113889	Monitoring	5/10/2004	6.7	6.7	<Null>	<Null>	<Null>	759.4	North-east
120	GW113883	Monitoring	20/08/2004	6.1	6.1	<Null>	<Null>	<Null>	759.9	North-east
130	GW113893	Monitoring	11/10/2005	8.5	8.5	<Null>	<Null>	<Null>	760.0	North-east
95	GW113858	Monitoring	19/09/2003	6.3	6.3	<Null>	<Null>	<Null>	762.5	North-east
94	GW113857	Monitoring	23/07/2003	6	6	<Null>	<Null>	<Null>	762.7	North-east
112	GW113875	Monitoring	30/07/2003	7.5	7.5	<Null>	<Null>	<Null>	763.1	North-east
121	GW113884	Monitoring	20/08/2004	6.8	6.8	<Null>	<Null>	<Null>	763.1	North-east
77	GW109500	MonitoringITORING BORE	1/03/2007	4.8	4.8	2.3	<Null>	<Null>	763.3	North-east
93	GW113856	Monitoring	23/07/2003	6.2	6.2	<Null>	<Null>	<Null>	766.0	North-east

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
111	GW113874	Monitoring	19/09/2003	7	7	<Null>	<Null>	<Null>	766.1	North-east
110	GW113873	Monitoring	26/07/2003	6	6	<Null>	<Null>	<Null>	767.1	North-east
92	GW113855	Monitoring	22/07/2003	5	5	<Null>	<Null>	<Null>	767.3	North-east
97	GW113860	Monitoring	16/09/2003	6.5	6.5	<Null>	<Null>	<Null>	773.2	North-east
3	GW105938	Unknown	20/05/2005	<Null>	<Null>	<Null>	<Null>	<Null>	790.8	South-west
116	GW113879	Monitoring	25/07/2003	5.3	5.3	<Null>	<Null>	<Null>	791.7	North-east
30	GW110247	Household	16/07/2009	210	210	31	4400 mg/L	0.13	793.2	West
73	GW109501	Monitoring	1/03/2007	6	6	2.3	<Null>	<Null>	814.9	North
5	GW071907	Recreation	15/05/2008	180	180	11.6	345 mg/L	0.1	877.1	South-east
239	GW115632	Null	N/A	0	6.5	5.2	<Null>	<Null>	891.2	South
61	GW114895	Monitoring	8/02/2013	6	6	4.2	<Null>	<Null>	903.0	South-east
32	GW109646	Monitoring	3/05/2008	8.2	8.2	5.93	<Null>	1	928.8	North
38	GW109648	Monitoring	3/05/2008	6.2	6.2	5.23	<Null>	0.5	971.6	North
40	GW109649	Monitoring	3/05/2008	7.2	7.2	2.95	<Null>	1	988.3	North
60	GW111958	Monitoring	27/04/2012	6	6	3.49	<Null>	<Null>	1013.9	South
91	GW113039	Monitoring	17/10/2013	5	5	<Null>	<Null>	<Null>	1128.3	South
89	GW113037	Monitoring	17/11/2008	5	5	<Null>	<Null>	<Null>	1135.6	South
90	GW113038	Monitoring	17/02/2009	5	5	<Null>	<Null>	<Null>	1139.4	South
88	GW113036	Monitoring	17/11/2008	4	4	<Null>	<Null>	<Null>	1153.4	South
87	GW113035	Monitoring	17/11/2008	5	5	<Null>	<Null>	<Null>	1169.0	South
240	GW116421	Null	N/A	5.3	5.3	<Null>	<Null>	0.25	1179.3	North-west
241	GW116422	Null	N/A	5.3	5.3	<Null>	<Null>	0.25	1181.1	North-west
242	GW116424	Null	N/A	5	5	<Null>	<Null>	0.25	1181.8	North-west
76	GW110351	Recreation	1/01/1975	<Null>	60	25	<Null>	1	1192.4	South-west
43	GW109730	Monitoring	28/08/2003	6.5	6.5	1	1000 mg/L	<Null>	1264.2	South-west
37	GW109733	Monitoring	5/09/2003	2.4	2.4	1.4	1000 mg/L	<Null>	1271.8	South-west
42	GW109729	Monitoring	2/09/2003	6	6	1.4	1000 mg/L	<Null>	1273.4	South-west
11	GW105317	Monitoring	21/03/2003	6.5	6.5	1.7	<Null>	<Null>	1281.2	West
35	GW109732	Monitoring	2/09/2003	4.3	4.3	1.5	1000 mg/L	<Null>	1282.2	South-west
36	GW109731	Monitoring	28/08/2003	6	6	1.1	1000 mg/L	<Null>	1283.8	South-west
68	GW102358	Monitoring	1/01/1998	6	6	1.63	<Null>	<Null>	1307.1	South

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
70	GW102357	Monitoring	1/01/1998	6	6	2.69	<Null>	<Null>	1309.7	South
71	GW102362	Monitoring	1/01/1998	3	3	1.75	<Null>	<Null>	1337.3	South
63	GW102363	Monitoring	1/01/1998	3	3	1.82	<Null>	<Null>	1337.9	South
67	GW102364	Monitoring	1/01/1998	3	3	1.82	<Null>	<Null>	1337.9	South
64	GW102356	Monitoring	1/01/1998	6	6	3.32	<Null>	<Null>	1338.9	South
55	GW111408	Monitoring	5/02/2011	4.4	4.4	2.07	<Null>	<Null>	1350.3	North-west
131	GW113802	Monitoring	22/01/2010	6.1	6.1	<Null>	<Null>	<Null>	1366.4	South
66	GW102365	Monitoring	1/01/1998	6	6	3.66	<Null>	<Null>	1368.7	South
132	GW113803	Monitoring	22/01/2010	5.8	5.8	<Null>	<Null>	<Null>	1381.3	South
81	GW112127	Monitoring	3/10/2001	4.5	4.5	<Null>	<Null>	<Null>	1387.0	South-east
82	GW112128	Monitoring	3/10/2001	5.5	5.5	<Null>	<Null>	<Null>	1397.8	South-east
65	GW102359	Monitoring	1/01/1998	6	6	0.83	<Null>	<Null>	1399.5	South
69	GW102361	Monitoring	1/01/1998	6	6	0.79	<Null>	<Null>	1399.5	South
133	GW113804	Monitoring	22/01/2010	6	6	<Null>	<Null>	<Null>	1402.7	South
83	GW112129	Monitoring	3/10/2001	5.5	5.5	<Null>	<Null>	<Null>	1405.5	South-east
191	GW114398	Monitoring	28/07/2009	4.2	4.2	<Null>	<Null>	<Null>	1405.7	South-east
52	GW111016	Monitoring	30/01/2004	4.5	4.4	<Null>	<Null>	<Null>	1415.7	South-east
169	GW113467	Monitoring	18/01/2007	3.4	3.4	<Null>	<Null>	<Null>	1415.8	South-east
192	GW114399	Monitoring	28/07/2009	4.2	4.2	<Null>	<Null>	<Null>	1419.5	South-east
17	GW109744	Monitoring	2/08/2002	4	4	<Null>	<Null>	<Null>	1419.7	South-east
138	GW111959	Monitoring	7/08/2012	6	6	2.6	1077 mg/L	<Null>	1421.6	South-east
190	GW113793	Monitoring	4/05/2006	4.1	4.1	<Null>	<Null>	<Null>	1424.8	South-east
22	GW109751	Monitoring	5/08/2002	3.5	3.5	<Null>	<Null>	<Null>	1426.7	South-east
187	GW113796	Monitoring	14/06/2006	11.05	11.05	<Null>	<Null>	<Null>	1427.2	South-east
195	GW114393	Monitoring	28/07/2009	4.2	4.2	<Null>	<Null>	<Null>	1428.5	South-east
186	GW113795	Monitoring	4/05/2006	3.9	3.9	<Null>	<Null>	<Null>	1428.9	South-east
196	GW114396	Monitoring	28/07/2009	5.2	5.2	<Null>	<Null>	<Null>	1429.2	South-east
134	GW113815	Monitoring	22/01/2010	6.1	6.1	<Null>	<Null>	<Null>	1429.7	South
145	GW102360	Monitoring	1/01/1998	<Null>	6	1.173	<Null>	<Null>	1430.3	South
170	GW113468	Monitoring	18/01/2007	3.5	3.5	<Null>	<Null>	<Null>	1433.3	South-east
189	GW114400	Monitoring	27/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1433.7	South-east

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
193	GW113792	Monitoring	4/05/2006	3.7	3.7	<Null>	<Null>	<Null>	1437.5	South-east
194	GW114390	Monitoring	28/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1441.8	South-east
19	GW109746	Monitoring	2/08/2002	4.2	4.2	<Null>	<Null>	<Null>	1442.8	South-east
185	GW113791	Monitoring	4/05/2006	4	4	<Null>	<Null>	<Null>	1443.9	South-east
166	GW112715	Monitoring	29/11/2010	4.1	4.1	<Null>	<Null>	<Null>	1448.7	South-east
229	GW113824	Monitoring	22/01/2010	0	3.05	<Null>	<Null>	<Null>	1449.5	South
165	GW112714	Monitoring	29/11/2010	4.1	4.1	<Null>	<Null>	<Null>	1449.8	South-east
18	GW109745	Monitoring	2/08/2002	3.5	3.5	<Null>	<Null>	<Null>	1453.9	South-east
168	GW113258	Monitoring	29/11/2010	4.1	4.1	<Null>	<Null>	<Null>	1454.6	South-east
160	GW113469	Monitoring	19/01/2007	3.1	3.1	<Null>	<Null>	<Null>	1454.7	South-east
200	GW114391	Monitoring	28/07/2009	4.2	4.2	<Null>	<Null>	<Null>	1455.3	South-east
174	GW113794	Monitoring	8/06/2006	11.15	11.15	<Null>	<Null>	<Null>	1455.6	South-east
164	GW112713	Monitoring	29/11/2010	4.05	4.05	<Null>	<Null>	<Null>	1456.5	South-east
188	GW114397	Monitoring	27/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1457.0	South-east
20	GW109747	Monitoring	2/08/2002	3.8	3.8	<Null>	<Null>	<Null>	1459.4	South-east
197	GW113790	Monitoring	3/05/2006	5.85	5.85	<Null>	<Null>	<Null>	1460.6	South-east
159	GW113256	Monitoring	29/11/2010	4.05	4.05	<Null>	<Null>	<Null>	1466.0	South-east
140	GW111960	Monitoring	7/08/2012	6	6	3.52	1124 mg/L	3.52	1466.9	South-east
176	GW114403	Monitoring	5/08/2009	2.2	2.2	<Null>	<Null>	<Null>	1467.5	South-east
167	GW113257	Monitoring	29/11/2010	4.1	4.1	<Null>	<Null>	<Null>	1467.9	South-east
24	GW109749	Monitoring	5/08/2002	4.5	4.5	<Null>	<Null>	<Null>	1468.2	South-east
201	GW114394	Monitoring	28/07/2009	4.2	4.2	<Null>	<Null>	<Null>	1468.3	South-east
198	GW114386	Monitoring	27/07/2009	5.2	5.2	<Null>	<Null>	<Null>	1470.6	South-east
228	GW113823	Monitoring	22/01/2010	0	3.2	<Null>	<Null>	<Null>	1471.9	South
25	GW109750	Monitoring	5/08/2002	3.5	3.5	<Null>	<Null>	<Null>	1474.3	South-east
199	GW114388	Monitoring	28/07/2009	5.2	5.2	<Null>	<Null>	<Null>	1475.6	South-east
21	GW109748	Monitoring	2/08/2002	3.8	3.8	<Null>	<Null>	<Null>	1477.1	South-east
156	GW112712	Monitoring	29/11/2010	4	4	<Null>	<Null>	<Null>	1478.6	South-east
158	GW113255	Monitoring	29/11/2010	4	4	<Null>	<Null>	<Null>	1482.7	South-east
183	GW114395	Monitoring	27/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1484.0	South-east
149	GW113474	Monitoring	7/07/2009	6	6	<Null>	<Null>	<Null>	1485.1	South-east

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
150	GW113475	Monitoring	7/07/2009	6	6	<Null>	<Null>	<Null>	1485.9	South-east
157	GW113254	Monitoring	29/11/2010	3.6	3.6	<Null>	<Null>	<Null>	1486.0	South-east
155	GW112711	Monitoring	30/11/2010	3.6	3.6	<Null>	<Null>	<Null>	1486.8	South-east
202	GW114387	Monitoring	27/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1489.2	South-east
23	GW109752	Monitoring	5/08/2002	3.4	3.4	<Null>	<Null>	<Null>	1490.6	South-east
171	GW113782	Monitoring	17/11/2000	8	8	<Null>	<Null>	<Null>	1491.7	South-east
172	GW113785	Monitoring	22/11/2000	4	4	<Null>	<Null>	<Null>	1491.7	South-east
173	GW113788	Monitoring	10/02/2014	11	11	<Null>	<Null>	<Null>	1491.7	South-east
175	GW114402	Monitoring	5/08/2009	2.2	2.2	<Null>	<Null>	<Null>	1492.3	South-east
161	GW113780	Monitoring	16/11/2000	8	8	<Null>	<Null>	<Null>	1493.1	South-east
142	GW113783	Monitoring	22/11/2000	4.6	<Null>	<Null>	<Null>	<Null>	1494.7	South-east
182	GW114392	Monitoring	27/07/2009	2.4	2.4	<Null>	<Null>	<Null>	1494.9	South-east
203	GW114389	Monitoring	27/07/2009	3.2	3.2	<Null>	<Null>	<Null>	1495.1	South-east
163	GW113797	Monitoring	5/05/2006	4.13	4.13	<Null>	<Null>	<Null>	1496.5	South-east
80	GW111407	Monitoring	15/10/2010	<Null>	4.8	<Null>	<Null>	<Null>	1496.6	South-east
54	GW111405	Monitoring	16/07/2010	4.8	4.8	<Null>	<Null>	<Null>	1500.9	South-east
217	GW113811	Monitoring	22/01/2010	0	5.4	<Null>	<Null>	<Null>	1501.5	South
178	GW113786	Monitoring	2/05/2006	3	3	<Null>	<Null>	<Null>	1502.4	South-east
219	GW113813	Monitoring	22/01/2010	0	6.1	<Null>	<Null>	<Null>	1504.7	South
162	GW113784	Monitoring	22/11/2000	7	7	<Null>	<Null>	<Null>	1505.2	South-east
209	GW113800	Monitoring	22/01/2010	0	4.6	<Null>	<Null>	<Null>	1506.0	South
179	GW113787	Monitoring	2/05/2006	4.8	4.8	<Null>	<Null>	<Null>	1506.8	South-east
181	GW113798	Monitoring	10/02/2014	4.8	4.8	<Null>	<Null>	<Null>	1506.8	South-east
56	GW111406	Monitoring	16/07/2010	4.8	4.8	<Null>	<Null>	<Null>	1508.8	South-east
213	GW113807	Monitoring	22/01/2010	0	4.2	<Null>	<Null>	<Null>	1509.5	South
51	GW111014	Monitoring	18/12/2003	6.5	6.5	<Null>	<Null>	<Null>	1509.7	South-east
180	GW113789	Monitoring	3/02/2006	10.95	10.95	<Null>	<Null>	<Null>	1511.8	South-east
184	GW114401	Monitoring	5/08/2009	2.2	2.2	<Null>	<Null>	<Null>	1514.5	South-east
154	GW113779	Monitoring	13/11/2000	9	9	<Null>	<Null>	<Null>	1515.6	South-east
208	GW113799	Monitoring	22/01/2010	0	4.1	<Null>	<Null>	<Null>	1516.8	South
218	GW113812	Monitoring	22/01/2010	0	6.1	<Null>	<Null>	<Null>	1517.3	South

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
53	GW111164	Household	22/10/2010	8	8	<Null>	<Null>	<Null>	1517.7	South
210	GW113801	Monitoring	22/01/2010	0	4.5	<Null>	<Null>	<Null>	1518.3	South
153	GW113778	Monitoring	13/11/2000	5	5	<Null>	<Null>	<Null>	1519.8	South-east
79	GW111082	Monitoring	2/09/2006	<Null>	4	<Null>	<Null>	<Null>	1522.0	South-east
136	GW114919	Monitoring	11/01/2012	3	3	<Null>	<Null>	<Null>	1525.3	South-west
75	GW109230	Monitoring	18/08/2008	<Null>	1.8	<Null>	<Null>	<Null>	1527.4	North-west
214	GW113808	Monitoring	22/01/2010	0	4.2	<Null>	<Null>	<Null>	1532.7	South
46	GW111081	Monitoring	2/09/2006	4	4	<Null>	<Null>	<Null>	1534.2	South-east
151	GW113473	Monitoring	7/07/2000	3	3	<Null>	<Null>	<Null>	1534.8	South-east
227	GW113822	Monitoring	22/01/2010	0	1.86	<Null>	<Null>	<Null>	1536.0	South
152	GW113777	Monitoring	13/11/2000	6	6	<Null>	<Null>	<Null>	1538.7	South-east
50	GW111015	Monitoring	18/02/2003	7	7	<Null>	<Null>	<Null>	1542.3	South-east
48	GW111080	Monitoring	2/09/2006	5	5	<Null>	<Null>	<Null>	1543.1	South-east
72	GW109231	Monitoring	18/08/2008	<Null>	3.2	<Null>	<Null>	<Null>	1544.3	North-west
215	GW113809	Monitoring	22/01/2010	0	4.5	<Null>	<Null>	<Null>	1547.6	South
177	GW113781	Monitoring	17/11/2000	4.5	4.5	<Null>	<Null>	<Null>	1549.5	South-east
9	GW111433	Monitoring	24/01/2011	7	6.3	<Null>	<Null>	<Null>	1560.0	East
223	GW113818	Monitoring	22/01/2010	0	4.4	<Null>	<Null>	<Null>	1560.2	South
8	GW111434	Monitoring	24/01/2011	8	8	<Null>	<Null>	<Null>	1565.7	South-east
216	GW113810	Monitoring	22/01/2010	0	4.6	<Null>	<Null>	<Null>	1572.8	South
206	GW113472	Monitoring	11/02/2008	6.2	6.2	<Null>	<Null>	<Null>	1573.8	South-east
205	GW113471	Monitoring	11/02/2008	<Null>	4.5	<Null>	<Null>	<Null>	1575.2	South-east
84	GW114167	Monitoring	26/08/2010	5.5	5.5	<Null>	<Null>	<Null>	1578.0	South-east
86	GW114169	Monitoring	11/03/2014	9.8	9.8	<Null>	<Null>	<Null>	1580.1	South-east
204	GW113470	Monitoring	11/02/2008	5.7	5.7	<Null>	<Null>	<Null>	1583.7	South-east
211	GW113805	Monitoring	22/01/2010	0	4.6	<Null>	<Null>	<Null>	1586.4	South
4	GW017684	Manufacturing and industry	1/09/1947	14.9	14.9	<Null>	<Null>	<Null>	1593.7	South
85	GW114168	Monitoring	26/08/2010	8.7	8.7	<Null>	<Null>	<Null>	1601.2	South-east
226	GW113821	Monitoring	22/01/2010	0	4.6	<Null>	<Null>	<Null>	1603.3	South
212	GW113806	Monitoring	22/01/2010	0	4.1	<Null>	<Null>	<Null>	1605.6	South
224	GW113819	Monitoring	22/01/2010	0	3.25	<Null>	<Null>	<Null>	1615.2	South

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
246	GW116869	Null	N/A	3.5	3.5	2.5	<Null>	<Null>	1616.4	South
12	GW017342	Manufacturing and industry	1/12/1946	15.5	15.5	<Null>	<Null>	<Null>	1618.2	South
225	GW113820	Monitoring	22/01/2010	5	5	<Null>	<Null>	<Null>	1620.3	South
245	GW116868	Null	N/A	3.5	3.5	<Null>	<Null>	<Null>	1627.0	South
222	GW113817	Monitoring	22/01/2010	0	3.7	<Null>	<Null>	<Null>	1639.2	South
62	GW114986	Monitoring	21/06/2011	6	6	<Null>	<Null>	<Null>	1642.1	South-west
220	GW113814	Monitoring	22/01/2010	0	3.8	<Null>	<Null>	<Null>	1642.4	South
135	GW114984	Monitoring	9/09/2011	6	6	2.7	<Null>	<Null>	1650.6	South-west
244	GW116867	Null	N/A	3.6	3.6	2.5	<Null>	<Null>	1651.5	South
237	GW115552	Null	N/A	0	4.5	<Null>	<Null>	<Null>	1659.1	South-east
243	GW116820	Null	N/A	3.5	3.5	2.5	<Null>	<Null>	1662.6	South
207	GW114985	Monitoring	21/06/2011	6	6	<Null>	<Null>	<Null>	1662.7	South-west
221	GW113816	Monitoring	22/01/2010	0	5.75	<Null>	<Null>	<Null>	1666.1	South
235	GW115550	Null	N/A	0	9.5	<Null>	<Null>	<Null>	1676.4	South-east
234	GW115549	Null	N/A	0	6.8	<Null>	<Null>	<Null>	1693.3	South-east
144	GW102476	Monitoring	1/01/1999	<Null>	4	<Null>	<Null>	<Null>	1702.9	East
1	GW037956	Manufacturing and industry	1/04/1972	21.1	<Null>	6.4	invalid code	<Null>	1711.8	South-east
238	GW115553	Null	N/A	0	10.5	<Null>	<Null>	<Null>	1723.2	South-east
39	GW109789	Monitoring	21/03/2004	5	5	<Null>	<Null>	<Null>	1727.4	South
236	GW115551	Null	N/A	0	6.6	<Null>	<Null>	<Null>	1736.5	South-east
233	GW115548	Null	N/A	0	4.5	<Null>	<Null>	<Null>	1745.1	South-east
143	GW065460	Manufacturing and industry	9/01/1992	<Null>	12	3.9	Good	<Null>	1747.7	South-east
31	GW109792	Monitoring	17/04/2004	4.2	4.2	<Null>	<Null>	<Null>	1758.7	South
41	GW109790	Monitoring	27/03/2004	4	4	<Null>	<Null>	<Null>	1771.5	South
34	GW109791	Monitoring	17/04/2004	4.1	4.1	<Null>	<Null>	<Null>	1771.9	South
141	GW105525	Household	18/11/2003	5.49	5.49	2.745	<Null>	1	1792.6	East
13	GW017869	Manufacturing and industry	1/01/1955	18	17.9	4.7	Good	<Null>	1806.3	East
2	GW106046	Unknown	7/06/2005	<Null>	<Null>	<Null>	<Null>	<Null>	1810.0	South
16	GW108245	Recreation	21/09/2006	20.8	20.8	5.8	198 mg/L	1.5	1815.4	South-east
47	GW111350	Monitoring	23/10/2007	7.5	7.5	<Null>	<Null>	<Null>	1840.0	West
45	GW111352	Monitoring	24/10/2007	8	8	7.7	<Null>	<Null>	1855.5	West

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity (mg/l)	Yield (L/s)	Distance (m)	Direction
58	GW112479	Monitoring	15/02/2011	7	7	5.1	613.00 mg/L	<Null>	1859.6	South
28	GW110371	Monitoring	24/04/2001	4	4	0.7	<Null>	<Null>	1859.6	North
27	GW110372	Monitoring	24/04/2001	4	4	0.6	<Null>	<Null>	1862.5	North
44	GW111351	Monitoring	23/10/2007	9	9	<Null>	<Null>	<Null>	1863.5	West
49	GW111353	Monitoring	24/10/2007	7	7	2.5	<Null>	<Null>	1863.9	West
29	GW110374	Monitoring	24/04/2001	4	4	<Null>	<Null>	<Null>	1864.5	North
6	GW017340	Manufacturing and industry	1/06/1958	18.6	18.5	4.2	Good	<Null>	1865.4	East
14	GW017870	Manufacturing and industry	1/03/1955	18	17.9	<Null>	Good	<Null>	1865.6	South-east
33	GW110370	Monitoring	24/04/2001	4	4	0.6	<Null>	<Null>	1867.1	North
230	GW114563	Monitoring	6/12/2013	0	4	2.92	<Null>	<Null>	1869.9	South
57	GW112478	Monitoring	15/02/2011	4.5	4.5	3.7	369.00 mg/L	<Null>	1872.3	South
26	GW110373	Monitoring	24/04/2001	4	4	0.6	<Null>	<Null>	1872.7	North
59	GW112480	Monitoring	15/02/2011	7	7	5.5	584.00 mg/L	<Null>	1877.4	South
139	GW114561	Monitoring	6/12/2013	4	4	2.92	<Null>	<Null>	1881.4	South
137	GW114562	Monitoring	6/12/2013	0	4	2.513	<Null>	<Null>	1885.7	South
231	GW115447	Null	N/A	0	10	4.19	<Null>	0.5	1909.5	South
146	GW104133	Recreation	28/07/2000	<Null>	20.5	5.5	Fresh	<Null>	1924.5	East
232	GW115448	Null	N/A	0	13.6	<Null>	<Null>	8.92	1930.4	South-east
10	GW104266	Monitoring	11/04/2002	35.6	22.8	9	<Null>	9	1936.6	South-east
148	GW200690	Household	20/12/2007	<Null>	6	<Null>	<Null>	<Null>	1951.0	North-east
7	GW048937	Recreation	1/06/1974	24.4	24.4	4.7	<Null>	<Null>	1974.1	South-east
147	GW104131	Recreation	3/08/2000	<Null>	20	7	<Null>	<Null>	1975.5	East

Groundwater Bores Driller Lithology Details

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW113862	#N/A	702.1	North-east
GW113863	#N/A	705.1	North-east
GW113864	#N/A	708.7	North-east
GW113865	#N/A	711.3	North-east
GW113866	#N/A	713.5	North-east
GW109503	#N/A	714.4	North
GW113867	#N/A	716.2	North-east
GW113880	#N/A	717.1	North-east
GW113868	#N/A	719.7	North-east
GW113869	#N/A	722.4	North-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW113870	#N/A	726.4	North-east
GW113871	#N/A	729.1	North-east
GW113872	#N/A	735.0	North-east
GW106192	0m-0.3m Topsoil 0.3m-2.2m Sand, yellow 2.2m-2.3m Rock, coffee 2.3m-4.5m Sand, brown 4.5m-6m Sand, grey	735.5	South
GW113876	#N/A	737.8	North-east
GW113861	#N/A	740.5	North-east
GW113877	#N/A	741.1	North-east
GW113878	#N/A	743.7	North-east
GW113886	#N/A	749.2	North-east
GW113859	#N/A	749.9	North-east
GW113881	#N/A	750.1	North-east
GW113882	#N/A	751.6	North-east
GW109502	#N/A	751.8	North
GW113887	#N/A	753.8	North-east
GW113890	#N/A	754.0	North-east
GW113885	#N/A	756.3	North-east
GW113891	#N/A	756.3	North-east
GW113892	#N/A	758.2	North-east
GW113888	#N/A	758.6	North-east
GW113889	#N/A	759.4	North-east
GW113883	#N/A	759.9	North-east
GW113893	#N/A	760.0	North-east
GW113858	#N/A	762.5	North-east
GW113857	#N/A	762.7	North-east
GW113875	#N/A	763.1	North-east
GW113884	#N/A	763.1	North-east
GW109500	#N/A	763.3	North-east
GW113856	#N/A	766.0	North-east
GW113874	#N/A	766.1	North-east
GW113873	#N/A	767.1	North-east
GW113855	#N/A	767.3	North-east
GW113860	#N/A	773.2	North-east
GW105938	#N/A	790.8	South-west
GW113879	#N/A	791.7	North-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW110247	0m-2m Clay brown 2m-4.5m Clay grey 4.5m-22m Shale grey 22m-23m Shale soft 23m-33m Shale hard 33m-74m Sandstone grey 74m-76m Sandstone and quartz fine 76m-134m Sandstone grey 134m-135.5m Sandstone quartz fine 135.5m-153.5m Sandstone grey 153.5m-154m Sandstone quartz fine 154m-168m Sandstone grey 168m-170m Sandstone shale bedding 170m-188m Sandstone grey 188m-188.5m Sandstone quartz 188.5m-210m Sandstone grey	793.2	West
GW109501	#N/A	814.9	North
GW071907	0m-3m Sandy clay 3m-8.5m Clay 8.5m-24m Shale 24m-24.5m Sandstone grey 24.5m-24.7m Sandstone grey fractured 24.7m-44m Sandstone grey 44m-55m Sandstone quartz 55m-55.5m Sandstone grey fractured 55.5m-82m Sandstone grey 82m-85m Sandstone quartz 85m-128m Sandstone grey 128m-130m Sandstone quartz 130m-138m Sandstone grey 138m-154m Sandstone quartz 154m-180m Sandstone grey	877.1	South-east
GW115632	#N/A	891.2	South
GW114895	0m-0.15m Concrete 0.15m-1.2m Fill; Sandy Clay/Clay Sand With Gravels, Brown/Black, Medium Grained Sand, Gravel (5-50Mm, 10-20%), Medium Dense To Dens 1.2m-1.8m Sand, Yellow/White, Medium Grained, Loose 1.8m-2.4m Sand, Yellow, Medium Grained, Medium Dense 2.4m-2.9m Sand; Light Brown, Medium Grained, Medium Dense 2.9m-6m Sand; Grey Whtie, Becoming Saturated At 4.5M, Medium Dense - Dense	903.0	South-east
GW109646	0m-0.8m Fill,lt grey,sand,concrete,brick,metal frag. 0.8m-2.8m Silty clay,brown,grey,med plasticity 2.8m-5m Clayey sand,grey/dark grey 5m-8m Silty sand,lt grey/red 8m-8.2m Sandstone,red,brown,weathered,clay bands	928.8	North
GW109648	0m-2.9m Fill,brown/grey,loose gravel,concrete,sand 2.9m-4.9m Silty clay,lt grey,mott.brown high plasticity 4.9m-5.8m Silty sand,lt grey,med course grained 5.8m-6.2m Sandstone,red,brown,weathered,clay bands	971.6	North
GW109649	0m-4.8m Fill,grey,brown,gravel,clay,silt 4.8m-5.9m Silty sand,lt grey,red,med coarse grained 5.9m-7.2m Sandstone red brown,weathered with clay bands	988.3	North
GW111958	0m-0.32m Concrete 0.32m-1.4m Fill, Loose,Dark Grey/Black Clayey Sand And Sandstone 1.4m-6m Sand, Loose White Fine Grained	1013.9	South
GW113039	#N/A	1128.3	South
GW113037	#N/A	1135.6	South
GW113038	#N/A	1139.4	South
GW113036	#N/A	1153.4	South
GW113035	#N/A	1169.0	South

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW116421	#N/A	1179.3	North-west
GW116422	#N/A	1181.1	North-west
GW116424	#N/A	1181.8	North-west
GW110351	#N/A	1192.4	South-west
GW109730	0m-0.5m Topsoil 0.5m-1m Clay orange,moist,firm, moderate plasticity 1m-1.5m Clay,orange/grey,very stiff,moderate plasticity 1.5m-2m Clay,orange/grey,very stiff,moderate plasticity3 2m-3m Clay,grey,red,vry stiff,non plastic,damp 3m-4m Clay,grey,red,vry stiff,non plastic 4m-4.5m Clay,grey/red,some gravel,non plastic,damp 4.5m-5m Clay,water at 4.5m 5m-5.5m Clay,gravelly,grey/red,wet,non plastic,heterogenous,stiff 5.5m-6.5m Clay,brown,grey,wet,homogenous	1264.2	South-west
GW109733	0m-0.8m Fill,clay,silty soil,cement,gravels,hard in ground,dry,no odour 0.8m-1.5m Clay,black/grey smearing and staining in soil,high plasticity 1.5m-2m Clay,natural red colouring becoming apparaent in soil,dry 2m-2.4m Clay,red soil colouring,no odour	1271.8	South-west
GW109729	0m-0.2m Pavers,concrete 0.2m-0.7m Fill,clay,silty soil, brown,black,hard in ground,dry,no odour 0.7m-1.8m Clay,tight,light brown,high plasticity,dry,no odour 1.8m-3m Clay,red colour,no odour,dry 3m-4m Clay,no odour,dry 4m-6m Clay,very homogeneous	1273.4	South-west
GW105317	0m-1.1m Fill,silty, sandy clay 1.1m-6.5m Silty clay,high plasticity	1281.2	West
GW109732	0m-0.1m Topsoil,silty,black,loose,fine grain,dry,no odour 0.1m-1.2m Clay,light brown,sticky,stiff,high plasticity,no odour 1.2m-2m Clay,red,orange,stiff,moderate plasticity,dry,no odour 2m-3.3m Clay becoming less plastic,brittle and dry with depth 3.3m-4.3m Clay,grey,with ironstone bands, soft, stiff,high plasticity,grey clay	1282.2	South-west
GW109731	0m-0.5m Topsoil,brown,dry,heterogenous 0.5m-1m Fill.slag,black,residual white clay. 1m-1.5m Clay,brown,red,stiff,non plastic,damp 1.5m-2m Clay, red/brown,stiff,;non plastic 2m-2.5m Clay,red/grey,stiff,plastic, damp 2.5m-3m Clay,red/grey,stiff,non plastic 3m-4m Clay,red/grey,stiff,non plastic 4m-5m Clay,red/grey,stiff,on plastic 5m-5.5m Clay,very stiff,non plastic. 5.5m-6m Clay,brown,loose,soft,moist	1283.8	South-west
GW102358	#N/A	1307.1	South
GW102357	#N/A	1309.7	South
GW102362	#N/A	1337.3	South
GW102363	#N/A	1337.9	South
GW102364	#N/A	1337.9	South
GW102356	#N/A	1338.9	South
GW111408	0m-0.22m Concrete slab 0.22m-0.5m Gravel roadbase 0.5m-1.1m Filling,grey brown and grey,silty clay 1.1m-4.4m Clay,grey,silty with trace of ironstone,gravel,damp	1350.3	North-west
GW113802	#N/A	1366.4	South
GW102365	#N/A	1368.7	South

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW113803	#N/A	1381.3	South
GW112127	#N/A	1387.0	South-east
GW112128	#N/A	1397.8	South-east
GW102359	#N/A	1399.5	South
GW102361	#N/A	1399.5	South
GW113804	#N/A	1402.7	South
GW112129	#N/A	1405.5	South-east
GW114398	#N/A	1405.7	South-east
GW111016	0m-0.2m Concrete 180 mm 0.2m-1m Sand,gravelly clayey,fill,sandstone 1m-3.4m Sand,silty,medium,dense,moist 3.4m-3.5m Sand,dense,saturated,yellow,minor clay 3.5m-4.4m Sand,clayey,loose to med.dense 4.4m-4.5m Clay,gravelly silty,firm,very moist	1415.7	South-east
GW113467	#N/A	1415.8	South-east
GW114399	#N/A	1419.5	South-east
GW109744	0m-0.6m Sandy gravel,fill,black,red,brown,loose,moist/brick/sandstone 0.6m-0.8m Silty sand,black,loose,moist 0.8m-2m Sand,grey/brown,loose,moist to saturated,well rounded 2m-3.6m Silty sand,orange,brown to black,saturated,with peat 3.6m-4m Sandy clay,light grey,moist,high plasticity	1419.7	South-east
GW111959	#N/A	1421.6	South-east
GW113793	#N/A	1424.8	South-east
GW109751	0m-0.1m Concrete 120mm 0.1m-0.9m Sandy gravel,fill,brown,loose,slightly moist 0.9m-1.5m Sand,grey to brown,loose to dense,moist to very moist 1.5m-1.9m Humic cemented sand (coffee rock) 1.9m-3.2m Sand,red,brown to brown,loose todense,v/moist to saturated 3.2m-3.5m Clay,yellow brown,very stiff,moist,m/to high plasticity/sand	1426.7	South-east
GW113796	#N/A	1427.2	South-east
GW114393	#N/A	1428.5	South-east
GW113795	#N/A	1428.9	South-east
GW114396	#N/A	1429.2	South-east
GW113815	#N/A	1429.7	South
GW102360	#N/A	1430.3	South
GW113468	#N/A	1433.3	South-east
GW114400	#N/A	1433.7	South-east
GW113792	#N/A	1437.5	South-east
GW114390	#N/A	1441.8	South-east
GW109746	0m-1m Gravely sand,fill,brown/red,loose,moist,concrete,sandstone 1m-2.4m Sand,grey to orange, brown,loose,moist to saturated 2.4m-2.8m Silty sand,black,loose,saturated	1442.8	South-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
	2.8m-3.8m Sand,brown,loose,saturated,well rounded,well graded 3.8m-4.2m Clay,grey,very stiff,slightly moist to moist, low plasticity.		
GW113791	#N/A	1443.9	South-east
GW112715	#N/A	1448.7	South-east
GW113824	#N/A	1449.5	South
GW112714	#N/A	1449.8	South-east
GW109745	0m-1.2m Sandy gravel,black,white,orange,loose,moist with ash,concrete,brick and sandstone 1.2m-2.8m Sand,grey to orange,brown,loose to dense,moist to saturated,well graded 2.8m-3m Clayey sand,orange,brown,dense,saturated,well graded 3m-3.5m Clay,grey/red,very stiff,moist,low plasticity.	1453.9	South-east
GW113258	#N/A	1454.6	South-east
GW113469	#N/A	1454.7	South-east
GW114391	#N/A	1455.3	South-east
GW113794	#N/A	1455.6	South-east
GW112713	#N/A	1456.5	South-east
GW114397	#N/A	1457.0	South-east
GW109747	0m-0.1m Concrete 140mm 0.1m-0.3m Sandy clay with gravel,fill,light brown,soft,moist 0.3m-0.5m Concrete 130mm 0.5m-0.7m Sandy clay with gravel,fill,brown,orange,red,soft,moist 0.7m-3.2m Sand,grey,loose,moist to saturated,well rounded,well graded 3.2m-3.4m Sandy clay,yellow,brown,soft,saturated 3.4m-3.8m Clay,grey,red,stiff,slightly moist,low platicity,minor sand	1459.4	South-east
GW113790	#N/A	1460.6	South-east
GW113256	#N/A	1466.0	South-east
GW111960	#N/A	1466.9	South-east
GW114403	#N/A	1467.5	South-east
GW113257	#N/A	1467.9	South-east
GW109749	0m-1m Sandy gravel (fill),black/brown,loose,moist 1m-2.5m Sand,grey,loose,very moist to saturated well rounded & graded 2.5m-3.3m Silty sand,brown,to grey,very dense,saturated 3.3m-4.2m Sand,very dense,brown,saturated,coffee rock 4.2m-4.5m Silty clay,dark grey,very stiff,moist,low plasticity	1468.2	South-east
GW114394	#N/A	1468.3	South-east
GW114386	#N/A	1470.6	South-east
GW113823	#N/A	1471.9	South
GW109750	0m-0.1m Concrete 150mm 0.1m-0.3m Sandy gravel,loose,slightly moist 0.3m-3m Sand,grey,loose,moist to saturated,well,rounded and graded 3m-3.5m Clay,light grey,very stiff,slightly moist to moist,m/h plasticity	1474.3	South-east
GW114388	#N/A	1475.6	South-east
GW109748	0m-0.2m Concrete 160mm 0.2m-0.4m Sandy silt with gravel,fill,brown,soft,slightly moist to moist 0.4m-3.2m Sand,yellow,brown,loose,moist to saturated,well rounded	1477.1	South-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
	3.2m-3.8m Clay,grey,red,soft to stiff,moist, low to medium plasticity,with minor sand		
GW112712	#N/A	1478.6	South-east
GW113255	#N/A	1482.7	South-east
GW114395	#N/A	1484.0	South-east
GW113474	#N/A	1485.1	South-east
GW113475	#N/A	1485.9	South-east
GW113254	#N/A	1486.0	South-east
GW112711	#N/A	1486.8	South-east
GW114387	#N/A	1489.2	South-east
GW109752	0m-0.8m Sandy silt with gravel,black,brown,red,soft,slightly moist 0.8m-1m Black stained fill 1m-2.8m Sand,brown,loose to dense,very moist to saturated,well rounded and graded 2.8m-3.4m Clay,light grey,very stiff,moist,m/h plasticity,minor sand	1490.6	South-east
GW113782	#N/A	1491.7	South-east
GW113785	#N/A	1491.7	South-east
GW113788	#N/A	1491.7	South-east
GW114402	#N/A	1492.3	South-east
GW113780	#N/A	1493.1	South-east
GW113783	#N/A	1494.7	South-east
GW114392	#N/A	1494.9	South-east
GW114389	#N/A	1495.1	South-east
GW113797	#N/A	1496.5	South-east
GW111407	#N/A	1496.6	South-east
GW111405	0m-0.13m Concrete slab 0.13m-0.25m Sand fill, light orange brown 0.25m-0.85m Gravelly sand,fill,black,moist,very dense 0.85m-1.1m Gravelly clay (fill) 1.1m-1.2m Sand fill red brown 1.2m-2.3m Silty sand,fill,minor clay 2.3m-3.3m Sand,dark brown,saturated,m/grained 3.3m-4m Silty sand light grey 4m-4.8m Clay light grey,moist,med.to high plasticity	1500.9	South-east
GW113811	#N/A	1501.5	South
GW113786	#N/A	1502.4	South-east
GW113813	#N/A	1504.7	South
GW113784	#N/A	1505.2	South-east
GW113800	#N/A	1506.0	South
GW113787	#N/A	1506.8	South-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW113798	#N/A	1506.8	South-east
GW111406	0m-0.12m Concrete slab 0.12m-0.6m Gravelly silt,dark brown,dry,loose 0.6m-1.2m Gravelly clay,fill,orange brown 1.2m-2.3m Silty sand,light grey/brown 2.3m-2.6m Clay dark grey,very moist 2.6m-3.4m Sandy clay dark grey 3.4m-4.5m Clay light brown,to l/grey 4.5m-4.8m Clay red brown,moist,l/plasticity,hard	1508.8	South-east
GW113807	#N/A	1509.5	South
GW111014	0m-0.2m Concrete 0.2m-3.7m Sand 3.7m-6.1m Silty sand 6.1m-6.5m Clay,gravelly,sandy,moist,ironstone,gravel	1509.7	South-east
GW113789	#N/A	1511.8	South-east
GW114401	#N/A	1514.5	South-east
GW113779	#N/A	1515.6	South-east
GW113799	#N/A	1516.8	South
GW113812	#N/A	1517.3	South
GW111164	0m-8m Sand	1517.7	South
GW113801	#N/A	1518.3	South
GW113778	#N/A	1519.8	South-east
GW111082	#N/A	1522.0	South-east
GW114919	#N/A	1525.3	South-west
GW109230	#N/A	1527.4	North-west
GW113808	#N/A	1532.7	South
GW111081	0m-0.25m Concrete slab 0.25m-0.9m Sand, fill,dry,grey,no odour 0.9m-2.8m Silty sand,gravel bits,very moist,brown 2.8m-3.4m Sandy silt, gravel bits 3.4m-4m Sandy silt,moist,dark brown	1534.2	South-east
GW113473	#N/A	1534.8	South-east
GW113822	#N/A	1536.0	South
GW113777	#N/A	1538.7	South-east
GW111015	0m-0.3m Concrete 0.3m-1m Sand,gravelly,silty,sandstone and ash 1m-3.5m Sand, silty,m/dense 3.5m-4.4m Sand,gravelly,dense,saturated,yellow 4.4m-4.8m Silty sand 4.8m-5.4m Sand,gravelly,dense,saturated,yellow 5.4m-6.6m Sand,clayey, medium dense,pale,grey 6.6m-7m Clay,sandy,silty,stiff,moist	1542.3	South-east
GW111080	0m-0.2m Concrete slab 0.2m-0.6m Sand,fill,moist,brown 0.6m-2m Silty sand,moist,brown,slight odour 2m-4m Sandy silt,saturated,l/plasticity,grey black 4m-4.5m Sandy clay,moist,m/plasticity 4.5m-5m Clay,high plasticity,very moist,grey	1543.1	South-east

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW109231	#N/A	1544.3	North-west
GW113809	#N/A	1547.6	South
GW113781	#N/A	1549.5	South-east
GW111433	0m-2m Fill,silty,gravelly sand 2m-7m Sand, light brown,grey,brown	1560.0	East
GW113818	#N/A	1560.2	South
GW111434	0m-0.5m Fill, silty sand,fine to medium grained 0.5m-2m Sand,fine to medium grained,brown,tace of silt 2m-8m Sand fine to medium grained,brown	1565.7	South-east
GW113810	#N/A	1572.8	South
GW113472	#N/A	1573.8	South-east
GW113471	#N/A	1575.2	South-east
GW114167	#N/A	1578.0	South-east
GW114169	#N/A	1580.1	South-east
GW113470	#N/A	1583.7	South-east
GW113805	#N/A	1586.4	South
GW017684	0m-2.43m Sand peaty fossils:peat 2.43m-6.4m Sand white water supply 6.4m-6.7m Sand hard cemented 6.7m-10.05m Sand light yellow water supply 10.05m-10.66m Clay white grey 10.66m-11.58m Sand grey water supply 11.58m-12.19m Clay grey some peaty 12.19m-14.93m Sand grey water supply	1593.7	South
GW114168	#N/A	1601.2	South-east
GW113821	#N/A	1603.3	South
GW113806	#N/A	1605.6	South
GW113819	#N/A	1615.2	South
GW116869	#N/A	1616.4	South
GW017342	0m-0.3m Made ground 0.3m-2.74m Sand peaty 2.74m-2.89m Peat 2.89m-7.31m Sand grey oozy wet 7.31m-10.05m Sand water supply 10.05m-13.25m Sand grey water supply 13.25m-14.17m Peat 14.17m-14.32m Clay grey 14.32m-15.54m Sand grey water supply	1618.2	South
GW113820	#N/A	1620.3	South
GW116868	#N/A	1627.0	South
GW113817	#N/A	1639.2	South
GW114986	0m-0.1m Concrete 0.1m-0.5m Sands Dark Grey Possible Mixed With Fill 0.5m-0.7m Sands Light Grey Fine 0.7m-1.1m Sands Dark Brown Peaty 1.1m-1.6m Sands Orange To White	1642.1	South-west

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
	1.6m-2.8m Converted To A Groundwater Monitoring Well 2.8m-6m Converted To A Groundwater Monitoring Well		
GW113814	#N/A	1642.4	South
GW114984	#N/A	1650.6	South-west
GW116867	#N/A	1651.5	South
GW115552	#N/A	1659.1	South-east
GW116820	#N/A	1662.6	South
GW114985	#N/A	1662.7	South-west
GW113816	#N/A	1666.1	South
GW115550	#N/A	1676.4	South-east
GW115549	#N/A	1693.3	South-east
GW102476	#N/A	1702.9	East
GW037956	0m-2.59m Made ground 2.59m-3.04m Sand grey 3.04m-5.02m Sand yellow clean 5.02m-6.4m Sand yellow clean wet 6.4m-7.84m Sand hard cemented very fine 7.84m-7.92m Sand hard cemented 7.92m-10.51m Sand yellow water supply 10.51m-11.73m Sand dirty water supply 11.73m-11.81m Sand hard cemented 11.81m-13.56m Sand grey dirty water supply 13.56m-15.24m Sand yellow clean 15.24m-15.84m Clay organic 15.84m-18.13m Sand grey water supply 18.13m-20.11m Sand white clean water supply 20.11m-21.1m Clay dark grey water supply	1711.8	South-east
GW115553	#N/A	1723.2	South-east
GW109789	0m-0.1m Concrete 0.1m-2m Fill,mainly gravel,coarse sand and silty clay 2m-3m Clay,silty,grey,green, soft, damp, low plasticity 3m-5m Weathered shale,grey,dark red,firm, damp	1727.4	South
GW115551	#N/A	1736.5	South-east
GW115548	#N/A	1745.1	South-east
GW065460	#N/A	1747.7	South-east
GW109792	0m-0.2m Concrete 0.2m-1m Fill,bricks,sand,gravels,damp-wet 1m-1.5m Fill,mainly sand,brown,loose,damp 1.5m-2.5m Fill,sand,gravel,brown, damp to mois 2.5m-3.5m Silt,sandy,grey,damp,soft 3.5m-4.2m Clay,reddish brown,damp,firm,medium plasticity	1758.7	South
GW109790	0m-0.1m Concrete ,two layers 0.1m-1m Fill,various colours/materials,damp,gravelly sand 1m-2m Fill,various materials,dark grey,damp to moist 2m-3m Clay,light brown,grey,damp,firm to soft 3m-4m Weathered shale.grey/dark red,damp,firm	1771.5	South
GW109791	0m-0.2m Concrete 0.2m-2m Fill,mainly sand,some brick and gravel 2m-3m Fill,mainly sand, some clay, brownish yellow to black 3m-4.1m Clay,yellowish brown,damp,firm,medium platicity	1771.9	South
GW105525	0m-2.745m Sandy clay,soil land fill 2.75m-5.49m Unconsolidated all sands	1792.6	East

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW017869	0m-1.82m Made ground 1.82m-3.65m Sand dry water supply 3.65m-10.97m Sand water supply 10.97m-11.58m Clay sandy peat 11.58m-12.19m Sand grey water supply 12.19m-12.8m Sand grey dirty water supply 12.8m-13.71m Sand grey peaty water supply 13.71m-14.93m Sand dirty water supply 14.93m-16.15m Sand water supply clay peat 16.15m-16.45m Sand water supply 16.45m-16.76m Clay water supply 16.76m-17.37m Sand grey clean water supply 17.37m-17.98m Peat	1806.3	East
GW106046	#N/A	1810.0	South
GW108245	0m-0.75m Sandstone rocks & fill 0.75m-2m Sand and rubbish 2m-5m Sand and heavy peat 5m-13m Sand 13m-19.9m Sand with peat layers 19.9m-20.8m Sandstone grey	1815.4	South-east
GW111350	0m-0.1m Concrete 0.1m-0.5m Sand fine to medium 0.5m-3m Clay brown mottled 3m-4m Shale,weathered,dry,firm 4m-5m Shale extrem.weathered,grey 5m-7.5m Shale, weathered,.grey,red coloured	1840.0	West
GW111352	0m-0.1m Concrete 0.1m-4m Clay,bricks,gravels,fine sand,shale 4m-8m Shale,dark brown,weathered,moist	1855.5	West
GW112479	0m-3.7m Fill; Gravelly Clayey Sand, Grey-Brown, Fine-Medium Grained, Poorly Sorted 3.7m-5.5m Fill; Sand, Dark Grey, Fine-Medium Grained, Well Sorted, Homogenous 5.5m-7m Clay, Silty; Mottled Grey & Brown, Stiff, High Plasticity, Homogenous	1859.6	South
GW110371	0m-2.5m Fill,sandy clay 2.5m-3.1m Silt,saturated black 3.1m-4m Silty sand	1859.6	North
GW110372	0m-2.2m Fill,silty clay 2.2m-2.7m Sandy clay 2.7m-3.3m Silt,soft black 3.3m-4m Silty sand	1862.5	North
GW111351	0m-0.1m Concrete 0.1m-3.5m Clay mottled with grey,brick red coloured 3.5m-7.5m Shale grey,light brown,semi weathered 7.5m-9m Shale,highly weathered,clayey,dark brown	1863.5	West
GW111353	0m-0.1m Concrete 0.1m-4m Clay,brown,red,grey,hard, moist 4m-7m Shale,grey ,dark brown,weathered,no colour	1863.9	West
GW110374	0m-0.8m Silty sand with minor clay 0.8m-2.8m Clayey sand,with minor gravel 2.8m-4m Sandy clay with minor shells	1864.5	North
GW017340	0m-15.24m Made ground sand 15.24m-18.59m Clay water supply sand peaty	1865.4	East
GW017870	0m-5.18m Made ground 5.18m-6.7m Sand dry packed 6.7m-8.83m Sand white water supply 8.83m-10.05m Sand 10.05m-10.97m Sand hard cemented 10.97m-13.1m Sand dirty water supply 13.1m-14.63m Sand grey water supply 14.63m-14.93m Sand grey peaty 14.93m-16.76m Sand grey water supply 16.76m-17.98m Clay	1865.6	South-east
GW110370	0m-2.1m Fill,sandy clay 2.1m-3.3m Silt,black 3.3m-3.5m Sand clayey 3.5m-4m Clay sandy	1867.1	North

Groundwater Bore ID	From Depth – To Depth (m) Lithology	Distance (m)	Direction
GW114563	#N/A	1869.9	South
GW112478	0m-1.8m Fil; Grey-Brown, Fine-Medium Graied, Gravelly Sand 1.8m-4.5m Clay; Sandy, Grey-Brown, Stiff, High Plasticity	1872.3	South
GW110373	0m-1.6m Fill,sandy clay 1.6m-3.4m Silt,saturated black 3.4m-3.7m Silty sand 3.7m-4m Sandy clay	1872.7	North
GW112480	0m-3.2m Fill; Gravelly Clayey Sand, Grey-Brown, Heterogeneous, Damp, Fine-Medium Grained, Poorly Sorted 3.2m-4.6m Fill; Sand, Grey-Rown, Homogenous, Damp, Fine-Medium Grained, Well Sorted 4.6m-7m Clay, Silty; Grey & Brown, Mottled, Homogenous, Stiff, High Plasticity	1877.4	South
GW114561	#N/A	1881.4	South
GW114562	#N/A	1885.7	South
GW115447	#N/A	1909.5	South
GW104133	#N/A	1924.5	East
GW115448	#N/A	1930.4	South-east
GW104266	0m-2.6m Black sandy clay/rock fill 2.6m-4.6m Dark grey sandy clay/gravel 4.6m-6.6m Lt. brown fine sand 6.6m-8.6m Light brown fine sand 8.6m-10.6m White fine sand 10.6m-12.6m White fine sand 12.6m-14.6m White sandy clay 14.6m-16.6m Brown sandy clay 20% 16.6m-18.6m Brown sandy clay 50% 18.6m-20.6m Brown sandy clay 70% 20.6m-22.6m Peat 22.6m-24.6m Dense peat 24.6m-26.6m Dense peat 26.6m-28.6m Light peat 28.6m-30.6m Grey clay 30.6m-32.6m Grey clay 32.6m-34.6m Sandy clay 34.6m-35.6m Weathered grey to hard sandstone	1936.6	South-east
GW200690	#N/A	1951.0	North-east
GW048937	0m-2.74m Made ground 2.74m-12.19m Sand light brown water supply 12.19m-13.72m Sand dirty water supply 13.72m-16.76m Sand dirty clay bands interlayere water supply 16.76m-17.98m Sand water supply 17.98m-22.71m Sand white water supply 22.71m-24.38m Clay grey	1974.1	South-east
GW104131	#N/A	1975.5	East

2.2 HYDROGEOLOGY AND OTHER BOREHOLES

Map 2.2 (500m Buffer)

	On the Property?	Within Buffer?
Groundwater Vulnerability	Not identified	Not identified
Groundwater Exclusion Zones[1,2]	Not identified	Botany Groundwater Management Zone 2
Hydrogeologic Unit	Late Permian/Triassic sediments (porous media - consolidated)	Late Permian/Triassic sediments (porous media - consolidated)

[1] - Botany Groundwater Management Zones (BGMZ): Zone 1 – the use of groundwater remains banned; Zones 2 to 4 – domestic groundwater use is banned, especially for drinking water, watering gardens, washing windows and cars, bathing, or to fill swimming pools.

[2] - Williamtown Groundwater Management Zones (WGMZ): Primary Management Zone – this area has significantly higher levels of PFAS detected and therefore, the strongest advice applies. Secondary Management Zone – this area has some detected levels of PFAS; Broader Management Zone – the topography and hydrology of the area means PFAS detections could occur now and into the future.

Groundwater Dependent Ecosystems (GDE)

	On the Property?	Within Buffer?
Aquatic	Not identified	Not identified
Terrestrial	Not identified	Not identified

Aquatic - Ecosystems that rely on the Surface expression of groundwater.
Terrestrial - Ecosystems that rely on the Subsurface expression of groundwater.

Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes)

Borehole ID	Purpose	Project	Client/ License	Date Drilled	Depth (m)	Distance (m)	Direction
D13	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	36.0	2.5	North
D13	<Null>	SydneyMetroDatabase	<Null>	28/05/1998	36.0	2.5	North
R187_BH20	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	4.2	South-east
R187_BH19B	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	50.4	South-east
R187_BH19A	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	0.8	50.8	South
R187_BH17	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	4.5	55.1	South-west
R187_BH18	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	97.8	South-west
R187_TP102	Test Pit	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	0.6	135.9	South-west
R187_TP101	Test Pit	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	0.8	155.4	South-west
D14	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	30.0	156.9	South
D14	<Null>	SydneyMetroDatabase	<Null>	13/10/2007	30.0	156.9	South
D10	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	44.0	160.3	North-east
D10	<Null>	SydneyMetroDatabase	<Null>	05/06/2008	44.0	160.3	North-east
R187_BH15	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	3.0	169.0	West
R187_BH16	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	4.5	177.8	South-west
R187_TP103	Test Pit	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	1.2	232.2	South-west

Borehole ID	Purpose	Project	Client/ License	Date Drilled	Depth (m)	Distance (m)	Direction
R187_BH13	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	4.5	237.5	West
R187_BH14	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	262.4	South-west
R221_BH1	Borehole	R221_Proposed Commercial Development RSL Redfern	DeiCorp Pty Ltd	19/02/2009	39.5	291.5	East
NWRL_R221	<Null>	NWRL_R221_Proposed Commercial Development RSL Redfern	DeiCorp Pty Ltd	01/03/2009	0.0	292.7	East
R467_GAB8	Borehole	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	12.0	297.8	South
GAB8	BH	SydneyMetroDatabase	<Null>	01/01/1995	10.3	297.8	South
R467_GAB16	Borehole	Additional GI: Proposed Hotel Australian Technology Park: Redfern	Ipandco (Aust) Ltd	18/06/1999	19.9	299.4	South
GAB16	BH	SydneyMetroDatabase	<Null>	13/10/2007	19.9	300.1	South
R467_GAB7	Borehole	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	13.0	316.8	South
GAB7	BH	SydneyMetroDatabase	<Null>		13.0	317.9	South
R467_GAB14	Borehole	Additional GI: Proposed Hotel Australian Technology Park: Redfern	Ipandco (Aust) Ltd	18/06/1999	20.3	318.0	South
R467_GAC5	CPT	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	10.2	318.6	South
R467_GAB15	Borehole	Additional GI: Proposed Hotel Australian Technology Park: Redfern	Ipandco (Aust) Ltd	18/06/1999	17.3	318.6	South
GAB14	BH	SydneyMetroDatabase	<Null>	3/08/2015	20.2	319.3	South
R187_BH11	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	319.8	West
GAB15	BH	SydneyMetroDatabase	<Null>	18/09/2015	17.3	321.5	South
R467_GAC4	CPT	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	6.0	322.6	South
D2	<Null>	SRT_External_Boreholes	<Null>	1/01/1995	30.0	324.3	South
D2	BH	SydneyMetroDatabase	<Null>	2/05/2018	30.0	324.3	South
R187_BH12	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	7.5	325.2	South-west
BH104 / MW104	Borehole	BP Connect Redfern	BP Australia	10/12/2008	6.0	331.1	South-east
R467_GATP10	Test Pit	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	18/09/1997	3.1	332.1	South
R467_GATP9	Test Pit	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	2.2	339.1	South
BH103 / MW103	Borehole	BP Connect Redfern	BP Australia	10/12/2008	6.1	340.6	South-east
BH102 / MW102	Borehole	BP Connect Redfern	BP Australia	10/12/2008	8.0	340.6	South-east
Trans05	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	28.2	341.1	South
Trans05	BH	SydneyMetroDatabase	<Null>		28.2	341.1	South

Borehole ID	Purpose	Project	Client/ License	Date Drilled	Depth (m)	Distance (m)	Direction
R467_GAB17	Borehole	Additional GI: Proposed Hotel Australian Technology Park: Redfern	Ipandco (Aust) Ltd	18/06/1999	19.9	342.5	South
R467_GAC2	CPT	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	4.0	346.4	South
BH101 / MW 101	Borehole	BP Connect Redfern	BP Australia	11/12/2008	5.5	347.6	South-east
GAB17	BH	SydneyMetroDatabase	<Null>	05/06/2008	19.9	352.5	South
R467_GAB3	Borehole	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	8.5	360.6	South
R467_GATP11	Test Pit	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	18/09/1997	1.0	361.0	South
R467_GAB13	Borehole	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	0.0	363.7	South
GAB3	BH	SydneyMetroDatabase	<Null>	1/08/2006	8.5	363.8	South
R467_GATP12	Test Pit	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	18/09/1997	0.7	365.0	South
R467_GAB6	Borehole	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	12.0	369.7	South
R467_GAC1	CPT	GI: Proposed Eco-Techno Habitat Hotel Development Australian Technology Park	Ipandco (Aust) Ltd	17/09/1997	5.3	374.7	South
GAB6	BH	SydneyMetroDatabase	<Null>	1/08/2006	8.8	376.4	South
R187_BH9	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	409.7	West
R187_BH10	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	6.0	410.5	South-west
NWRL_R222	<Null>	NWRL_R222_Commerical and Student Accomodation	Hudson Square Pty Ltd	10/03/2010	0.0	410.8	North-east
<Null>	<Null>	NWRL_R222_Commerical and Student Accomodation	Hudson Square Pty Ltd	10/03/2010	0.0	410.8	North-east
R253_DDH1	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	1317.3	416.0	South-west
R253_DDH1	BH	SydneyMetroDatabase	<Null>	18/09/2015	1317.3	416.0	South-west
PET_HAWKEE-1	Coal seam methane	DPI Minerals Borehole Register - Pacific Power,	Pacific Power,	2/05/2018	1317.0	416.3	South-west
389	Coal seam methane	Hawkesbury Eveleigh	Pacific Power	1/01/1995	1317.3	416.4	South-west
Hawkesbury-Eveleigh-1-2	BH	Dataset of the 2019 Geological Survey of NSW Geoscience catalogue held in the DIGS (Digital Imaging of Geological Systems) Database. This is a public, online archive that provides access to non confidential reports and other important documentary materi	R00029995, R00059701, R00002580	1/01/1995	1317.3	416.4	South-west
BHC7	<Null>	NWRL_R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.9	427.8	North-east
R337_BHC7	Borehole	R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.9	427.8	North-east
BHC8	<Null>	NWRL_R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.6	427.9	North-east

Borehole ID	Purpose	Project	Client/ License	Date Drilled	Depth (m)	Distance (m)	Direction
R337_BHC8	Borehole	R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.6	427.9	North-east
R337_BHC10	Borehole	R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	8.2	429.4	North-east
BHC9	<Null>	NWRL_R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.2	433.5	North-east
R337_BHC9	Borehole	R337_Redfern Station_Wet Weather Overflow Reduction	Agility	13/10/2007	9.2	433.5	North-east
RTD_BH2	Borehole	Illawarra Dives Track Drainage	Sydney Trains	2/05/2018	5.0	442.7	North-east
SRT BH302	Borehole	Sydney Metro 2015	Sydney Metro	13/10/2007	47.9	471.2	North-west
5-113	Borehole	North Eveleigh Affordable Housing Project	<Null>	5/06/2008	2.4	474.9	South-east
R187_BH8	Borehole	Proposed Development, Eveleigh Rail Yards	Sydney Trains	28/05/1998	1.2	474.9	South-west
5-114	Borehole	North Eveleigh Affordable Housing Project	<Null>	5/06/2008	2.4	478.8	South-east
ST01	<Null>	Sydney Yard Overhead Wiring Modernisation	Sydney Trains	18/09/2015	0.0	481.3	North-east
BH04	Borehole	Sydney Yard Overhead Wiring Modernisation	Sydney Trains	3/08/2015	8.0	481.3	North-east
<Null>	<Null>	Sydney Yard Overhead Wiring Modernisation	Sydney Trains	18/09/2015	0.0	481.3	North-east
R242_Shaft_Log	<Null>	SRT_External_Boreholes	<Null>	13/10/2007	0.0	487.3	South
R242_Shaft_Log	shaft	SydneyMetroDatabase	<Null>	5/06/2008	0.0	487.3	South
NWRL_R254	<Null>	NWRL_R254_Remediation Action Plan Development Parcel B, Australian Technology Park Eveleigh	Sydney Broadcast Property Pty Ltd	1/08/2006	0.0	489.5	South-west
<Null>	<Null>	NWRL_R254_Remediation Action Plan Development Parcel B, Australian Technology Park Eveleigh	Sydney Broadcast Property Pty Ltd	1/08/2006	0.0	489.5	South-west
J1	<Null>	DeptOfCommerceBoreholesSydney	<Null>	02/05/2018	0.0	497.0	South-east
J4489	<Null>	DeptOfCommerceBoreholesSydney	<Null>	1/01/1995	0.0	497.0	South-east
RTD_BH1	Borehole	Illawarra Dives Track Drainage	Sydney Trains	2/05/2018	4.6	497.6	North-east

Section 3 Environmental Registers, Licences and Incidents

3.1 CONTAMINATED LAND PUBLIC REGISTER

Map 3.1 (1000m Buffer)

Sites Notified as Contaminated to the EPA

Site Name	Address	Activity that caused Contamination	EPA Site Management Class *(Table 3.1.1)*	Distance (m)	Direction
Australian Technology Park	Henderson ROAD EVELEIGH	Other Industry	Regulation under CLM Act not required	134.2	South-east
BP Service Station	116 Regent STREET REDFERN	Service Station	Regulation under CLM Act not required	314.2	South-east
Formerly Gas N Go Alexandria (fully redeveloped into residential apartment as of September 2016)	10-20 Botany ROAD ALEXANDRIA	Service Station	Regulation under CLM Act not required	388.3	South-east
Cnr Regent Street & Wellington Street, Chippendale	Wellington STREET CHIPPENDALE	Chemical Industry	Contamination currently regulated under CLM Act	707.0	North-east
Alexandria Gardens	146-156 Wyndham Street & 146-156 Botany ROAD ALEXANDRIA	Unclassified	Regulation under CLM Act not required	853.0	South
Macdonaldtown Triangle	Burren STREET EVELEIGH	Gasworks	Contamination being managed via the planning process (EP&A Act)	919.8	South-west
Proposed Construction Site	2 John STREET WATERLOO	Other Industry	Regulation under CLM Act not required	937.0	South-east

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Contaminated Land Record of Notices

Site Name	Area n°	Address	Notices	Distance (m)	Direction
Formerly Gas N Go Alexandria (fully redeveloped into residential apartment as of September 2016)	3401	10-20 Botany ROAD,ALEXANDRIA	Notices relating to this site (3 former)	388.3	South-east
Cnr Regent Street & Wellington Street, Chippendale	3406	Wellington STREET,CHIPPENDALE	Notices relating to this site (3 current and 7 former)	707.0	North-east
Macdonaldtown Triangle	3339	Burren STREET,EVELEIGH	Notices relating to this site (2 former)	919.8	South-west

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Table 3.1.1 EPA Site Management Class Explanation	
EPA Site Management Class	
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.
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.
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.
Contamination currently regulated under the 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.
Contamination currently regulated under the 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 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 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 by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A 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.

The EPA maintains a record of sites that have been notified to the EPA by owners or occupiers as contaminated land. The sites notified to the EPA are recorded on the register at various stages of the assessment and/or remediation process.

3.2 LICENCES, APPROVALS & ASSESSMENTS

Map 3.2 (500m Buffer)

Licences

Licence N°	Licence holder	Location Name	Premise Address	Fee Based Activity	Distance (m)*	Direction
12208	Sydney Trains	Sydney Trains	Sydney Trains, Haymarket NSW	Railway infrastructure operations, Rolling stock operations	Not mapped	Not mapped
13421	John Holland Rail Pty Ltd	John Holland Rail Network	John Holland Rail Network, Parramatta NSW	Railway infrastructure operations	Not mapped	Not mapped

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Other Licences still Regulated by EPA

Licence N°	Licence holder	Location Name	Premise Address	Fee Based Activity	Status	Distance (m)*	Direction
12389	Rail Corporation New South Wales	Xplorer Service Centre	Henderson Road (Off), EVELEIGH NSW	Hazardous, Industrial or Group A Waste Generation or Storage	Delicensed	0.0	Onsite
10046	Johnson & Johnson Research Pty Ltd	Australian Technology Park, Level 4	1 Central Avenue, Eveleigh, Nsw, 1430	Hazardous, Industrial or Group A Waste Generation or Storage	Surrendered	134.2	South-east
12070	The University Of Sydney	The University Of Sydney	Camperdown & Darlington Campuses, Sydney University, NSW, 2006	Hazardous, Industrial or Group A Waste Generation or Storage	Delicensed	197.6	North-west
11472	Intec Ltd	Intec Ltd	Room 427, Building J01, Maze Crescent, the University of Sydney, DARLINGTON NSW	Hazardous, Industrial or Group A Waste Generation or Storage	Delicensed	291.9	North-west
20362	John Holland Pty Ltd	University Of Sydney Darlington Campus	University of Sydney Darlington Campus	Land-based extractive activity	Surrendered	371.1	West
20971	John Holland Pty Ltd	locations between Chatswood railway station and Sydenham railway station	locations between Chatswood railway station and Sydenham railway station, SYDNEY	"Concrete works Railway infrastructure construction (>=50,000T & track to be constructed>10km & <30km)"	Surrendered	Not mapped	Not mapped

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Clean Up and Penalty Notices

Location ID	Notice Type	Notice N°	Licence holder	Location Name	Premise Address	Distance (m)*	Direction
Not identified	-	-	-	-	-	-	-

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

3.3 SITES REGULATED BY OTHER JURISDICTIONAL BODY

Map 3.3 (2000m Buffer)

Defence, Military Sites and UXO Areas

Site name	Type*	Details	Distance (m)	Direction
Darlington Depot	Defence Area / Military Sites	Darlington Depot was re-housed on university-owned land after the regiment's campus headquarters was destroyed by fire. The site houses the Sydney University Regiment (SUR)	197.6	North-west
DSTO Eveleigh	Defence Area / Military Sites	Science and technology facilities - Research Centre	289.7	South
Darlington; GRES parade facility (L)	Defence Area / Military Sites	Former Darlington GRES parade facility used as a training area for Army reserve troops and ceremonial military parade purposes	1426.2	West
RAN Band – Sydney Detachment (Waterloo) Facility	Defence Area / Military Sites	Waterloo Navy Band	1496.6	South-east
(former) Zetland; stores depot	Defence Area / Military Sites	The site has historic significance through its long association with Defence as a rifle range, as an instructional centre and as a major logistics support area.	1789.4	South-east
Forest Lodge; GRES training depot	Defence Area / Military Sites	Asset surplus to requirements, property sold in 1998/1999	1845.4	North-west

**RCIP (Regional Contamination Investigation Program). UXO (Unexploded Ordnance Areas)*

Former Gasworks Sites

Site name	Description	Distance (m)	Direction
Macdonaldtown Gaswork	The triangular-shaped site is located to the east of Burren Street, between the Macdonaldtown Stabling Yard and the railway tracks of the Illawarra Corridor i.e. the rail corridor which goes through Erskineville railway station. The site, which cannot be accessed by the general public, is managed by RailCorp, a statutory authority of the State of New South Wales and custodian of railway real estate, infrastructure and trains.	919.8	South-west
Former Central Station Gasworks	Three railway associated gasworks in operation between 1878 and 1905. Location of former infrastructure is approximate based on historical report. Gasworks 1, western most location. Gasworks 2, immediately south west of platforms 14 & 15. Gasworks 3 approximately 150m southwest of Gasworks 2.	926.5	North-east
The Australian Gaslight Yard Co Former Gaswork	Four large brick piers together with part of the area of the backfilled tank and concentric circles of timbers laid at the base of the tank were found.	1486.0	North-east
Former Gaswork	One of the first gas holders to be erected for the Australian Gas Company at the rear of Haymarket Anthony Hordern's Store on 689 George Street	1516.6	North-east

PFAS Sites

Site name	Description	Source	Distance (m) *	Direction
Fire and Rescue Alexandria	Investigations detected PFAS in storm water drainage channels. The detection of PFAS is not unexpected due to the historical use of PFAS-containing fire-fighting foams at the site.	Fire and Rescue NSW	1450.6	South

National Pollutant Inventory (NPI)

Facility name	Address	Primary ANZSIC Class	Latest report	Distance (m)	Direction
State Rail Xplorer Endeavour Service Centre	Railway Parade, Erskenville	Railway Rolling Stock Manufacturing and Repair Services	2001/2002	0.0	Onsite
CUB Kent Brewery	26 Broadway, Sydney	Beer Manufacturing	2003/2004	700.5	North-east
Viridian Alexandria	8-40 Euston Road, Alexandria	Glass and Glass Product Manufacturing	2008/2009	1364.2	South
George Weston Foods Camperdown Bakery	4 Lyons Road, Camperdown	Cake and Pastry Manufacturing (Factory based)	2002/2003	1660.3	North-west
Kraft Foods Limited	56-60 O'Dea Avenue, Waterloo	Other Food Product Manufacturing n.e.c.	2002/2003	1983.4	South-east

Section 4 Potentially Contaminated Areas

4.1 FORMER POTENTIALLY CONTAMINATED LAND

Map 4.1 (500m Buffer)

Contaminated Legacy Areas

Site Name	Description	Distance (m)	Direction
Not identified	-	-	-

Includes known contaminated areas such as James Hardies Asbestos waste legacy areas, Pasminco Smelter and Uranium processing site.

Derelict Mines and Quarries

Site name	Description	Distance (m)	Direction
Not identified	-	-	-

Historical Landfills

Site name	Description	Distance (m)	Direction
Not identified	-	-	-

4.2 POTENTIALLY CONTAMINATING ACTIVITIES (PCA) Map 4.2 (200m Buffer)

Industries, businesses and activities that may cause contamination

ID	Site name	Category	Location	Status*	Distance (m)	Direction
2	Coin-op Laundrette	Dry Cleaners	270 Abercrombie St, Darlington NSW 2008,	Current	54.1	North
29	Rail Corridor	Rail Industry and Associated Activities	Eveleigh New South Wales 2015	Current	59.9	South
27	Symbiotic Research	Hospitals and Research Facilities	1 Central Ave Australia Technology Park EVELEIGH 2015 NSW	Current	166.0	South
17	Calumino	Manufacturing - Other	Suite 145 4 Cornwallis St National Innovation Cent EVELEIGH 2015 NSW	Current	169.0	South-east
21	Neuclone	Hospitals and Research Facilities	4 Cornwallis St EVELEIGH 2015 NSW	Current	169.0	South-east

**Status:*
Data is current as when this report was created.
The operational status of the business is determined using the available data sources and does not indicate real-time conditions at the site.
Current: business is operating on the day this report was issued.
Former: business that have been closed or discontinued within 2 years from the date of this report.

Categories included in this search.		
Abattoirs	Explosives and Dangerous Goods	Paint Industries
Abrasive Blasting	Extractive Industries	Petrol Stations
Agriculture / Horticulture	Fire and Rescue	Pharmaceuticals
Airports	Food Manufacturing	Port and Marina Operations
Asbestos	Foundry, Smelting or Refining	Power Plants
Asphalt or Bitumen	Fuel Terminals & Depots	Printing and Photography
Batteries	Glass, Ceramics and Plastic	Rail Industry and Associated Activities
Breweries / Distilleries	Gun, Pistol or Rifle Ranges	Rubber and Tyre
Cement, Concrete or Lime	Hospitals and Research Facilities	Storage Tanks
Cemeteries	Landfill Sites	Substations and Switching Stations
Chemicals	Livestock Dips	Textiles and Tannery
Coal Yards	Mechanical and Automotive	Timber, Pulp and Paper Works
Depots and Storage Yards	Metal Fabrication and Treatments	Waste and Recycling Facilities
Dry Cleaners	Oil and Gas	Wastewater Treatment Facilities
Electrical or Electrical Components	Other Infrastructure Facilities	-

Industries, businesses, and activities identified as having an increased likelihood of causing contamination.

The industries and business activities listed above have been identified as having an increased likelihood of causing contamination and have been identified through published state and national guidelines and regulations. These industries are noted due to their potential to store or use substances that could cause contamination to the surrounding environment if not managed appropriately. The identification of these activities does not imply the presence of contamination at the site.

The records identified are based on the reported business activity and have not been assessed based on any current or previous site inspection. Please note that records not identified within this section (due to error or unforeseen omission) does not necessarily mean that the screened area is not potentially contaminated or free of any risks.

4.3 HISTORICAL BUSINESS DIRECTORIES (not mapped)

1930 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Nickel & Alloy Products - W/Salers & Suppliers	Kookaburra Products (Manufacturers of aluminium, solders etc)	61 Lander Street, Redfern,NSW	Address	190.1	North-west
Sheet Metal Workers	Fulham Edw.	60 Lander street, Redfern,NSW	Address	190.1	North-west

1940 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Gas Appliances & Equipment New & Reconditioned	Parkinson&Cowan (A/asia)	181 Lawson Street, Redfern,NSW	Address	49.0	North
Coopers & Barrels	Slattery F M	276 Abercrombie Street, Redfern,NSW	Address	74.6	North-west
Car Wholesaling	ADAIR J W A & SONS PTY LTD	15-21 Abercrombie Street, Sydney,NSW	Address	106.1	North
Career Guidance Consultants	ADAIR J W A & SONS PTY LTD	15-21 Abercrombie Street, Sydney,NSW	Address	106.1	North
Wood - Turning & Turners	ADAIR J W A & SONS PTY LTD	15-21 Abercrombie Street, Sydney,NSW	Address	106.1	North
Sheet Metal Workers	Goodall W	14 Ivy Street, Darlington,NSW	Address	135.7	North
Television & Radio Schools	Augustus Frank J	45 Caroline Street, Redfern,NSW	Address	150.5	North-east
Merchants - General	Stuart J	120 Lawson Street, Redfern,NSW	Address	157.5	North-east
Carriers - Light Transportation	Linfoot J	21 Ivy,Darlington,NSW	Address	175.0	North
Car Wholesaling	Whiteman F	44 Lander Street, Redfern,NSW	Address	176.8	North-west
Sheet Metal Workers	Fulham E	60 Lander Street, Redfern,NSW	Address	190.1	North-west
Electric Hand Dryers	Jeeves (1938) Pty Ltd	Ivy & Rose Streets, Darlington,NSW	Street		North
Engineers - General	Ricketts W E&Sons Pty Ltd	Ivy Lane, Chippendale,NSW	Street		North
Meat Processing	KENNETT L T	Darlington, Sydney,NSW	Street		North
Printers - General	BUTTERFIELD & LEWIS PTY LTD	Marian & Cornwallis Streets, Redfern,NSW	Street		South-east

1950 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Gas Appliances & Equipment New & Reconditioned	Parkinson&Cowan (A/sia) Pty Ltd	181 Lawson Road, Redfern,NSW	Address	49.0	North
Boxes & Cartons - Cardboard New	Firth P J Pty Ltd	254 Abercrombie Street, Redfern,NSW	Address	72.7	North
Paper & Plastic Container M/Factrs & Supplies	Firth P J Pty Ltd	254 Abercrombie Street, Redfern,NSW	Address	72.7	North
Paper Bags M/Factrs & Suppliers	Firth P J Pty Ltd	254 Abercrombie Street, Redfern,NSW	Address	72.7	North
Paper Merchants	Firth P J Pty Ltd	254 Abercrombie Street, Redfern,NSW	Address	72.7	North

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Printers - General	Firth P J Pty Ltd	254 Abercombie,Redfern,NSW	Address	72.7	North
Rope Twine Lashings & Webbing Suppliers	Firth P J Pty Ltd	254 Abercrombie Street,Redfern,NSW	Address	72.7	North
Furniture - M/Factrs &/Or W/Salers	Dixee Cot Mfrs	276 Abercrombie Street,Redfern,NSW	Address	74.6	North-west
Air Conditioning - Domestic	Garvan H C	14 Ivy Street,Darlington,NSW	Address	135.7	North
Air Conditioning - Domestic	H.C. Garvan	14 Ivy Street,Darlington,NSW	Address	135.7	North
Fans & Blowers - Commercial/Industrial	Garvan H C	14 Ivy Street,Darlington,NSW	Address	135.7	North
Spring M/Factrs & W/Salers	Precision Springs	16 Ivy Street,Redfern,NSW	Address	137.8	North
Leather M/Factrs & Suppliers	British United Shoe Machinery Co of Aust Pty Ltd The	230 Abercrombie Street,Redfern,NSW	Address	170.9	North-east
Pig Breeders & Dealers	British United Shoe Machinery Co of Australia Pty Ltd The	230 Abercrombie Street,Redfern,NSW	Address	170.9	North-east
Carriers - Heavy Industrial Transportation	Globe Carrying Co	98 Rose,Darlington,NSW	Address	172.7	North
Electrical Appliances & Products - Retail	Hoelle J J & Co	47-49 Alma Street,Darlington,NSW	Address	172.7	North
Engineers - Plastics & Toolmakers	Laminated & Chemical Products Pty Ltd	31 Alma,Darlington,NSW	Address	172.7	North
Furniture - M/Factrs &/Or W/Salers	Olympic Woodcraft Co Pty Ltd	63 Lander Street,Redfern,NSW	Address	190.1	North-west
Sheet Metal Workers	Fulham E	60 Lander,Redfern,NSW	Address	190.1	North-west
Electric Hand Dryers	Lawrence Dry Cleaners	218 Abercrombie Street,Darlington,NSW	Address	193.4	North-east
Electric Hand Dryers	Jeeves (1938) Pty Ltd	Ivy & Rose Streets,Darlington,NSW	Street		North
Engineers - General	Ricketss W E&Sons Pty Ltd	Ivy Lane,Chippendale,NSW	Street		North
Steel Merchant	Hoadley H&Sons Pty Ltd	Caroline Street,Redfern,NSW	Street		North-east

1965 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Cabinetry Makers' Equipment	Parkinson Industries Pty Ltd	181,Lawson,NSW	Address	49.0	North
Gas Appliances & Equipment New & Reconditioned	EMAIL LTD	181,LawsonSt,NSW	Address	49.0	North
Gas Appliances & Equipment New & Reconditioned	PARKINSON INDUSTRIES PTY LTD	181,LawsonSt,NSW	Address	49.0	North
Washers	Royal Manufacturing Co	138,Eveleigh,NSW	Address	75.9	East
Sporting Goods - M/Factrs &/Or W/Salers	Seehoe Barry	143,Lawson,NSW	Address	93.4	North-east
Engineers - Motor & Repairers	McCotter T	253,Abercrombie,NSW	Address	94.6	North
Electrical Appliances & Products - Retail	Arrow Switches (Aust) Pty Ltd	125,Eveleigh,NSW	Address	95.1	East

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Electrical Switches & Control Equipment & Machinery	ARROW SWITCHES(AUST) PTY LTD	125,Eveleigh,NSW	Address	95.1	East
Foundry Supplies	GIBSON ENGINEERING (SALES) PTY LTD	466-470,Wilson,NSW	Address	113.8	West
Engineers - General	Hills&Willis Pty Ltd	241-243,Abercrombie,NSW	Address	117.9	North
Aprons	CHARLSAM PRODUCTS	252,AbercrombieSt,NSW	Address	119.2	North
Aprons	Koss C&Co Pty Ltd	252,Abercrombie,NSW	Address	119.2	North
Buckle & Button - M/Factrs & W/Salers	ASTOR BASE METALS PTY LTD	252,AbercrombieSt,NSW	Address	119.2	North
Jewellers	"ADAM" JEWELLERY FOR MEN	252,Abercrombie,NSW	Address	119.2	North
Jewellers	Astor Base Metals Pty Ltd	252,Abercrombie,NSW	Address	119.2	North
Jewellers	STEFANY FASHION JEWELLERY	252,Abercrombie,NSW	Address	119.2	North
Name Plates - Brass	ASTOR BASE METALS PTY LTD	252,AbercrombieSt,NSW	Address	119.2	North
Motor Garage Equipment & Supplies	R.V.M. Engineering	239,Abercrombie,NSW	Address	125.0	North
Carriers - Light Transportation	Caroline Taxi Trucks	65,Caroline,NSW	Address	132.7	North-east
Taxi - Truck Service	Kingsgrove Central Taxi Trucks	65,Caroline,NSW	Address	132.7	North-east
Chimney Cleaning & Sweepers	SCARAB SWEEPERS	233,Abercrombie,NSW	Address	137.2	North
Metal - Sprayers	Allspray Co	233,Abercrombie,NSW	Address	137.2	North
Panel Beaters & Automotive Painting	ALLSPRAY CO	233,Abercrombie,NSW	Address	137.2	North
Advertising - Aerial Display	Craftsman Displays	293-295,Abercrombie,NSW	Address	147.5	North-west
Signwriters	SHEEDY PTY LTD	293-295,Abercrombie,NSW	Address	147.5	North-west
Butchers	Boulas Butchery	227,Abercrombie,NSW	Address	152.2	North
Engineers - Heating & Combustion	Read N H	38,Lander,NSW	Address	165.3	North-west
Heating Appliances & Systems - Service & Repairs	READ N H	38,LanderSt,NSW	Address	165.3	North-west
Plumbers & Gasfitters	READ N H	38,LanderSt,NSW	Address	165.3	North-west
Leather M/Factrs & Suppliers	LION & MOSELY PTY LTD	316,AbercrombieSt,NSW	Address	187.9	West
Roof Repairs & Roof Cleaning & Maintenance	Tangye K J	72,Lander,NSW	Address	190.1	North-west
Swimming Pool - Construction & Installation	Greer J J&Son Pty Ltd	49,CalderRd,NSW	Address	197.9	North-west

1970 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Belts (Clothing) - M/Factrs &/Or W/Salers	Consolidated Plastic Industries Pty. Ltd.,	181 Lawson St.,NSW	Address	49.0	North
Engineers - Consultants	Parkinson Industries Pty. Ltd.,	181 Lawson St.. Redfern,NSW	Address	49.0	North
Handbag M/Factrs &/Or W/Salers	Consolidated Plastic Industries Pty. Ltd.,	181 Lawson St.,NSW	Address	49.0	North
Plastic - Equipment & Machinery	Consolidated Plastic Industries Pty. Ltd.,	181 Lawson St.,NSW	Address	49.0	North
Plastic - Fabricators	Consolidated Plastic Industries Pty Ltd	181 Lawson Street,Redfern,NSW	Address	49.0	North
Plumbing Goods Wholesaling	Rolis Luggage Pty Ltd	181 Lawson Street,Redfern,NSW	Address	49.0	North
Valuers - General	Consolidated Plastic Industries Pty. Ltd.,	181 Lawson St.,NSW	Address	49.0	North
Bakery & Pastry Cooks' Supplies	Allan & Co.,	270-272 Abercrombie St.,NSW	Address	72.4	North
Car & Truck Body Builders	Abercrombie Panel Coy.,	288 Abercrombie St.,Chippendale	Address	79.3	North-west
Car & Truck Body Builders	McCotter, T. Pty. Ltd.,	251-255 Abercrombie St.,Chippendale	Address	94.6	North
Engineers - Motor & Repairers	McCotter T Pty Ltd	253 Abercrobie Street,Chippendale,NSW	Address	94.6	North
Panel Beaters & Automotive Painting	McCotter, T. Pty. Ltd,	251-255 Abercrombie St.,Chippendale	Address	94.6	North
Printers - General	McCotter, T. Pty. Ltd,	251-255 Abercrombie St.,Chippendale	Address	94.6	North
Engineers - Consultants	Gibson, W. A.,	466 Wilson St.,NSW	Address	113.8	West
Foundry Supplies	Gibson Engrg. Sales Pty. Ltd.,	466-470 Wilson St.,NSW	Address	113.8	West
Book Manufacturers	B.B. Chemical Co. of Aust. Pty. Ltd.,	267 Abercrombie St.,NSW	Address	117.6	North-west
Materials Handling Equipment & Storage	Samco-Strong Machinery Pty Ltd	267 Abercrombie Street,Chippendale,NSW	Address	117.6	North-west
Electroplating Services	Hills & Willis Pty. Ltd.,	241- 243 Abercrombie St.,NSW	Address	117.9	North
Engineers - Electronic	Hills & Wills Pty. Ltd.,	241-243 Abercrombie St.,NSW	Address	117.9	North
Engineers - Mechanical	Hills & Willis Pty. Ltd.,	241-243 Abercrombie St.,NSW	Address	117.9	North
Belts (Clothing) - M/Factrs &/Or W/Salers	Charlsam Products,	252 Abercrombie St.,Chippendale	Address	119.2	North
Belts (Clothing) - M/Factrs &/Or W/Salers	Koss&Fisher Pty. Ltd.,	252 Abercrombie St.,Chippendale	Address	119.2	North
Car Wholesaling	Koss & Fisher Pty Ltd	252 Abercrombie Street,Chippendale,NSW	Address	119.2	North
Dental Equipment & Supplies	Astor Base Metals Pty. Ltd.,	252 Abercrombie St.,Chippendale	Address	119.2	North
Jewellers	Astor Base Metals Pty. Ltd.,	252 Abercrombie St.,Chippendale	Address	119.2	North
Plastic Product Retailers	Astor Base Metals Pty Ltd	252 Abercrombie Street,Chippendale,NSW	Address	119.2	North
Printed Circuits Equipment & Supplies	Artronic Productions Pty Ltd	252 Abercrombie Street,Chippendale,NSW	Address	119.2	North

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Protective Personal & Industrial Clothing & Equipment	Charisam Products	252 Abercrombie Street,Chippendale,NSW	Address	119.2	North
Car Wholesaling	Charlsam Products	257 Abercrombie Street,Chippendale,NSW	Address	120.5	North
Car Wholesaling	Hills & Willis Pty Ltd	239 Abercrombie Street,Redfern,NSW	Address	125.0	North
Porcelain Products	Star Enamellers	14 Ivy Lane,Chippendale,NSW	Address	135.7	North
Chimney Cleaning & Sweepers	Scarab Sweeper Co	233 Abercrombie Street,Chippendale,NSW	Address	137.2	North
Display & Exhibition Equipment - New & Hire	Custom Display Industries Pty Ltd	233 Abercrombie Street,Redfern,NSW	Address	137.2	North
Panel Beaters & Automotive Painting	Allspray Co	233 Abercrombie Street,Chippendale,NSW	Address	137.2	North
Panel Beaters & Automotive Painting	Circular Quay West Body Repairs Pty Ltd	233 Abercrombie Street,Chippendale,NSW	Address	137.2	North
Printers - General	All-Spray Co..	233 Abercrombie St.. Redfern,NSW	Address	137.2	North
Advertising - Aerial Display	Sheedy Pty. Ltd.,	295 Abercrombie St.,NSW	Address	147.5	North-west
Display Homes	Craftsman Displays,	293 Abercrombie St.,NSW	Address	147.5	North-west
Printers - General	Craftsman Displays,	293 Abercrombie St.,NSW	Address	147.5	North-west
Signs & Signage - Electronic	Sheedy Pty Ltd	295 Abercrombie Street,Redfern,NSW	Address	147.5	North-west
Signwriters	Sheedy Pty Ltd	295 Abercrombie Street,Redfern,NSW	Address	147.5	North-west
Veterinary Pharmaceutical and Medicinal Product Manufacturing	Craftsman Displays,	293 Abercrombie St.,NSW	Address	147.5	North-west
Veterinary Pharmaceutical and Medicinal Product Manufacturing	Sheedy Pty. Ltd.,	295 Abercrombie St.,NSW	Address	147.5	North-west
Leather Clothing & Apparel - Retail	Centreproof Manufacturing Co	297 Abercrombie Street,Redfern,NSW	Address	154.2	North-west
Chemist - Industrial	Sterling Drug Co.,	32 Ivy St.,Chippendale	Address	172.2	North
Carriers - Heavy Industrial Transportation	Mandla AK	20B Rose,Darlington,NSW	Address	172.7	North
Motor Cycle - New Parts & Accessories Retail	Massey, C. E.,	56 Alma St.,Darlington	Address	172.7	North
Couriers	Papandreou, E.,	215 Abercrombie St.,Chippendale	Address	184.3	North
Taxi - Truck Service	Papandreou, E.,	215 Abercrombie St.,Chippendale	Address	184.3	North
Facsimile Equipment Supplies & Repairs	Lion & Mosely Pty. Ltd.,	316 Abercrombie St.,NSW	Address	187.9	West
Furriers - Retail	Levy Furs Pty Ltd	G17 Centrepoint,Sydney,NSW	Address	187.9	West
Carriers - Heavy Industrial Transportation	Bilken Industries Pty Ltd	Abercrombie Street,Toongabbie,NSW	Street		North-west
Engineers - Mechanical	Ricketts, W. E. & Sons Pty. Ltd.,	Ivy Lane,Chippendale	Street		North
Engineers - Precision	Ricketts, W. E.&Sons Pty. Ltd.,	Ivy Lane,Chippendale	Street		North
Leather Goods & Accessories - Retail	Ashenden Leather Goods	Corner Marian & Cornwallis Streets,Redfern,NSW	Street		South-east

1980 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Leather Goods & Accessories - M/Factrs & W/Salers	Rolis Luggages Pty Ltd	181 Lawson St.,Redfern,NSW	Address	49.0	North
Packing & Filling Contractors	Consolidated Plastic Sales Pty Ltd	181 Lawson St.,Redfern,NSW	Address	49.0	North
Plastic - Fabricators	Arnold Plastics	181 Lawson St.,Redfern,NSW	Address	49.0	North
Plastic - Fabricators	Consolidated Plastic Sales Pty Ltd	181 Lawson St.,Redfern,NSW	Address	49.0	North
Plastic Products M/Factrs & W/Salers	Arnold Plastics	181 Lawson St.,Redfern,NSW	Address	49.0	North
Plastic Products M/Factrs & W/Salers	Consolidated Plastic Sales Pty Ltd	181 Lawson St.,Redfern,NSW	Address	49.0	North
Stationery - M/Factrs & W/Sale	Arnold Plastics	181 Lawson St.,Redfern,NSW	Address	49.0	North
Stationery - M/Factrs & W/Sale	Consolidated Plastic Sales Pty Ltd	181 Lawson St.,Redfern,NSW	Address	49.0	North
Laundries - Commercial/Industrial	Abercrombie Street Laundrette	270 Abercrombie St.,Redfern,NSW	Address	72.4	North
Car & Truck Body Trimmers	Ryan Ross	288 Abercrombie St.,Chippendale,NSW	Address	79.3	North-west
Panel Beaters & Automotive Painting	Lowry Smash Repairs	288 Abercrombie St.,Chippendale,NSW	Address	79.3	North-west
Engineers - Motor & Repairers	McCotter T Pty Ltd	253 Abercrombie St.,Chippendale,NSW	Address	94.6	North
Panel Beaters & Automotive Painting	McCotter T Pty Ltd	253 Abercrombie St.,Chippendale,NSW	Address	94.6	North
Conveying & Elevating Equipment & Systems	Conveyor & Hoist Rentals	470 Wilson Street,Chippendale,NSW	Address	109.5	West
Materials Handling Equipment & Storage	Conveyor & Hoist Rentals	470 Wilson Street,Chippendale,NSW	Address	109.5	West
Tip Truck Hire Or Contractors	Conveyor & Hoist Rentals	470 Wilson Street,Chippendale,NSW	Address	109.5	West
Tip Truck Hire Or Contractors	Coveyor & Hoist Rentals	470 Wilson Street,Chippendale,NSW	Address	109.5	West
Builder Handyman Contractor Equipment Sale/ Hire	A C Hoist Hire Services	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Builder Handyman Contractor Equipment Sale/ Hire	Conveyor & Hoist Removals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Crane & Travel Tower Hire Or Servicing	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Electric Hoist Equipment & Machinery	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Electrical W/Salers	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Factory & Workshop Equipment Hire	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Hoisting & Rigging Equipment Sales Or Hire	A C Hoist Hire Services	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Hoisting & Rigging Equipment Sales Or Hire	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Materials Handling Equipment & Storage	A C Hoist Hire Services	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Winches & Hoists	Conveyor & Hoist Rentals	470 Wilson St.,Chippendale,NSW	Address	113.8	West
Belts (Clothing) - M/Factrs &/Or W/Salers	Motoman Industrial Wear	252 Abercrombie St.,Chippendale,NSW	Address	119.2	North

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Printed Circuits Equipment & Supplies	Artronic Productions Pty Ltd	252 Abercrombie St.,Chippendale,NSW	Address	119.2	North
Protective Personal & Industrial Clothing & Equipment	Motoman Industrial Wear	252 Abercrombie St.,Chippendale,NSW	Address	119.2	North
Toys - W/Salers	Motoman Industrial Wear	252 Abercrombie St.,Chippendale,NSW	Address	119.2	North
Metal - Spraying Equipment	Star Enamellers	14 Ivy Lane,Chippendale,NSW	Address	135.7	North
Engineers - Motor & Repairers	Allspray Co	233 Abercrombie St.,Chippendale,NSW	Address	137.2	North
Advertising - General	Sheedy Pty Ltd	295 Abercrombie St.,Chippendale,NSW	Address	147.5	North-west
Signwriters	Sheedy Pty Ltd	295 Abercrombie St.,Chippendale,NSW	Address	147.5	North-west
Engineers - Electronic	Megatronics Electronics Devices	27 Ivy St.,Redfern,NSW	Address	186.5	North
Electricity Suppliers	Lion & Mosely Pty Ltd	316 Abercrombie St.,Chippendale,NSW	Address	187.9	West
Chemist & Pharmaceutical Supplies	Railway Pharmacy	Lawson St.,Redfern,NSW	Street		East
Electrical W/Salers	Ashenden Leather Goods Pty Ltd	Cnr. Marian & Cornwallis Sts.,Redfern,NSW	Street		South-east
Furniture - M/Factrs &/Or W/Salers	Spanish Décor	Cnr. Marian & Cornwallis Sts.,Redfern,NSW	Street		South-east
Leather Goods & Accessories - M/Factrs & W/Salers	Ashenden Leather Goods Pty Ltd	Cnr. Marian & Cornwallis Sts.,Redfern,NSW	Street		South-east
Picture Framing Supplies	A Swan Picture Frame Pty Ltd	Cnr. Thomas St. & Ivy Lane,Chippendale,NSW	Street		North
Shop & Office Fitting Design & Fit-Outs	Cole & McDiarmid Pty Ltd	Cnr. Marian & Cornwallis Sts.,Redfern,NSW	Street		South-east

1990 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Laundries - Commercial/Industrial	Abercrombie Street Laundrette	270 Abercrombie,Redfern,NSW	Address	72.4	North
Spray Painting - Products & Services	Star Enamellers	14 Ivy Lane,Chippendale,NSW	Address	135.7	North
Printers - General	Posh Printing	297 Abercrombie,Chippendale,NSW	Address	154.2	North-west

2005 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Painters' & Decorators' Supplies	Prompt Painting Quality Finishers	504 Wilson St, DARLINGTON,NSW,2008	Address	37.1	North-west
Pre-Press Production Services	Fontshop Australia	146 Little Eveleigh St, REDFERN,NSW,2016	Address	57.5	East
Model Makers	Tid Bit Constructions	137 Little Eveleigh St, REDFERN,NSW,2016	Address	59.3	East
Quarries	Abercrombie Street Laundrette	270 Abercrombie St, REDFERN,NSW,2016	Address	72.4	North
Display & Exhibition Equipment - New & Hire	Funky D Signs & Displays, Redfern	138 Little Eveleigh St, REDFERN,NSW,2016	Address	75.9	East

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Sculptor	Funky D Signs & Displays	138 Little Eveleigh St, REDFERN,NSW,2016	Address	75.9	East
Advertising - General	Five Ways Price & Ross	102/27 Abercrombie St, CHIPPENDALE,NSW,2008	Address	94.8	North
Pens & Pencils - Specialists & Repairs	Pol Equipment Pty Ltd	125 Little Eveleigh St, REDFERN,NSW,2016	Address	104.0	East
Chair M/Factrs	Wallace Furniture	466 Wilson St, DARLINGTON,NSW,2008	Address	113.8	West
Dress Fabrics & Materials	Whiteline, Chippendale	293 Abercrombie St, CHIPPENDALE,NSW,2008	Address	147.5	North-west
Butchers	M & A Quality Meats	227 Abercrombie St, CHIPPENDALE,NSW,2008	Address	152.2	North
Printers - General	Paper Tiger Printing	297 Abercrombie St, CHIPPENDALE,NSW,2008	Address	154.2	North-west
Television - Rentals	Advanced Antenna & Satellite Systems	37 Caroline St, REDFERN,NSW,2016	Address	156.1	North-east
Electrical Contractors & Consultants	Herbert Jones Pty Ltd	158 Shepherd St, DARLINGTON,NSW,2008	Address	184.2	North-west
Electrical Contractors & Consultants	J Herbert Jones Pty Ltd	158 Shepherd St, CHIPPENDALE,NSW,2008	Address	184.2	North-west

2010 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Laundries - Commercial/Industrial	Abercrombie Street Laundrette	270 Abercrombie St REDFERN 2016 NSW	Address	72.4	North
Mobile Telephones - Service & Repairs	Mo's Mobiles Darlington Pty Ltd	272 Abercrombie St DARLINGTON 2008 NSW	Address	73.3	North
Furniture Storage & Removals	Btt Taxi Trucks & Removals	499 Wilson St DARLINGTON 2008 NSW	Address	86.5	West
Builder Handyman Contractor Equipment Hire	Pol Equipment Pty Ltd	125-127 Little Eveleigh St REDFERN 2016 NSW	Address	104.0	East
Chair M/factrs	Wallace Furniture	466-470 Wilson St DARLINGTON 2008 NSW	Address	113.8	West
Printers - General	Paper Tiger Printing	297 Abercrombie St CHIPPENDALE 2008 NSW	Address	154.2	North-west
Printers - General	Renshaw Sports Pty Ltd	297 Abercrombie St CHIPPENDALE 2008 NSW	Address	154.2	North-west

2015 Historical Business Data

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Carpet Furniture & Upholstery Cleaning	Always Fresh Carpet Cleaning	490 Wilson St Darlington NSW 2008	Address	57.7	West
Mobile Telephones - Service & Repairs	Mo's Mobiles Darlington Pty Ltd	272 Abercrombie St Darlington NSW 2008	Address	68.0	North
Photocopiers New & Reconditioned	Accurate Office Technologies Pty Ltd	Unit WA60 87-103 Epsom Rd Rosebery NSW 2018	Address	75.9	North
Rubbish & Waste Removal	1300 Rubbish	87- 103 Epsom Rd Roseberry NSW 2474	Address	75.9	North
Laundries - Commercial/Industrial	Abercrombie Street Laundrette	270 Abercrombie St Redfern NSW 2016	Address	92.4	North

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Pens & Pencils - M/Factrs & W/Salers	Pol Equipment Pty Ltd	125- 127 Little Eveleigh St Redfern NSW 2016	Address	95.8	East
Chair M/Factrs	Wallace Furniture	466 Wilson St Darlington NSW 2008	Address	109.7	West
Laser Equipment	Warsash Scientific	7/ 1 Marian St Redfern NSW 2016	Address	197.4	South-east

Land Insight uses a number of address geocoding techniques and has characterised them based on completeness (match rates) and positional accuracy. When a historical street address is incomplete or a match is not found, a record identified as being in the surrounding area will be included for reference and the accuracy of the data is approximate only. An explanation of the positional accuracy records is defined in the table below.

Historical data positional accuracy and georeferencing results explanation

Positional accuracy	Georeferenced	Description
Address	Located to the address level	*When street address and names fully match.*
Street	Located to the street centroid	*When street names match but no exact address was found. Location is approximate.*
Place	Located to the structure, building or complex	*When building, residential complex or structure name match but no exact address was found. Location is approximate.*
Suburb	Located to the suburb area	*When suburb name match but no exact address was found. Location is approximate.*

The data used in this section was extracted from range of historical commercial trade directories and business listings. The business addresses were geocoded using historical information and the accuracy of the data may vary due to changes to the physical address at a given locality over time or the quality of the original records. From 2005, the historical business records in this section are considered more accurate as information was extracted from digital directories with geographic coordinate location information available. On this basis, reliance on the historic listing data should be considered when assessing the risk of contamination from an activity at the site. The presence of a business listing does not definitively confirm the actual activity that has occurred at the site. For more information on how these records were geocoded and the methodology used by Land Insight, contact us at info@landinsight.co.

Historical business directory listings have been filtered to match activities and industries identified as PCAs in Section 4.2. Please note that any record not identified within this section (due to error or unforeseen omission) does not necessarily mean that the screened area is not potentially contaminated or free of any risks.

Section 5 Natural Hazards

5.1 Natural Hazards

Map 5.1 (500m Buffer)

Erosion Risk

Category	On the Property?	Within Buffer?
Erosion Hazard	Minor to moderate	Minor to moderate

Fire Hazard

Category	On the Property?	Within Buffer?
Bush Fire Prone Land (BLP)	-	-
Fire History	-	-

Flood Hazard

Category	On the Property?	Within Buffer?
Probable Maximum Flood (PMF)	-	Yes

Land Insight

Tower Three, Level 24
300 Barangaroo Avenue
Sydney NSW 2000 Australia
02 8067 8870
info@landinsight.co
www.landinsight.co

Appendix A

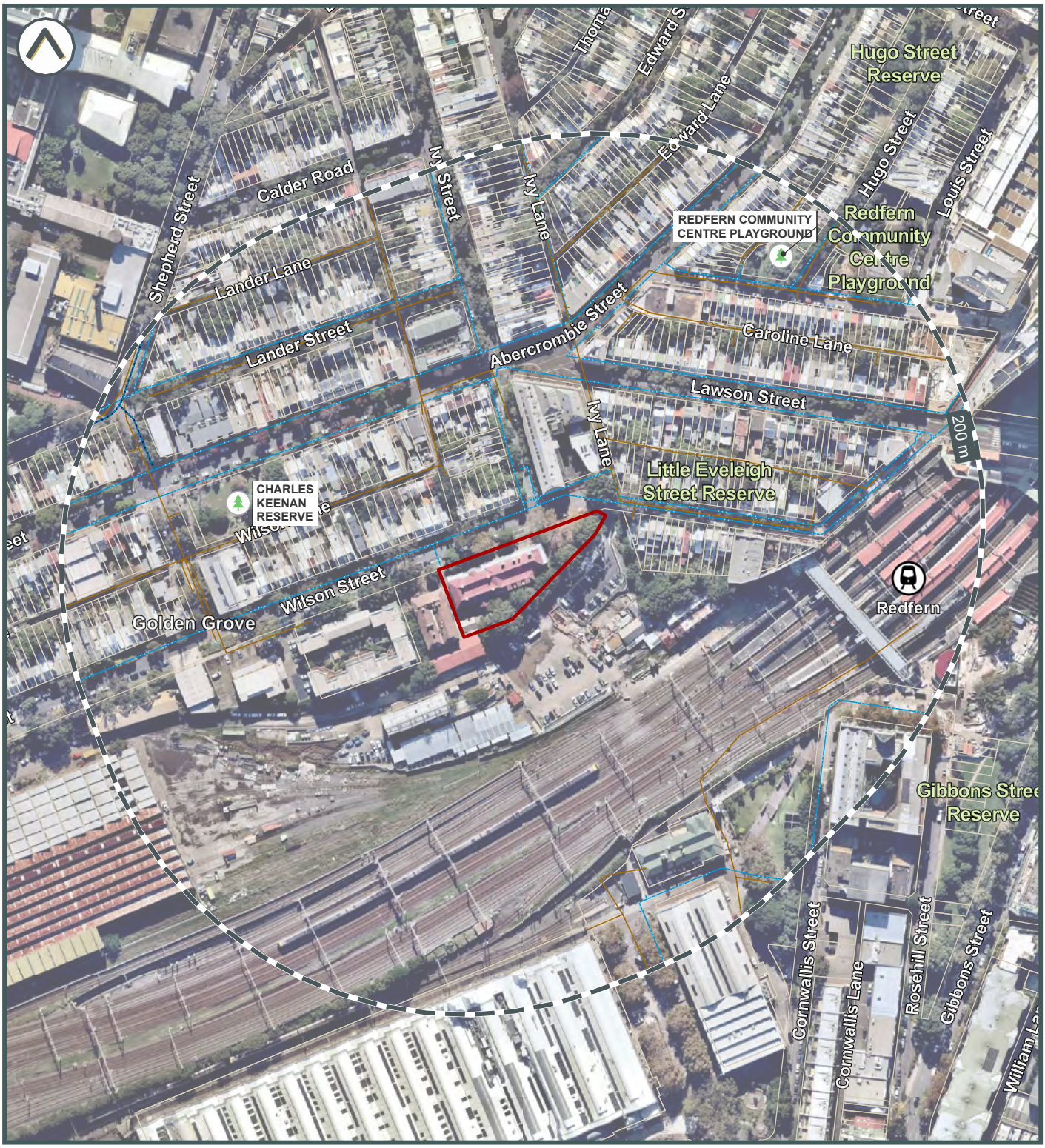
REPORT MAPS

505 Wilson Street
Eveleigh, NSW

PROPERTY SETTING

MAP 1.1

Subject Area and Sensitive Receptors



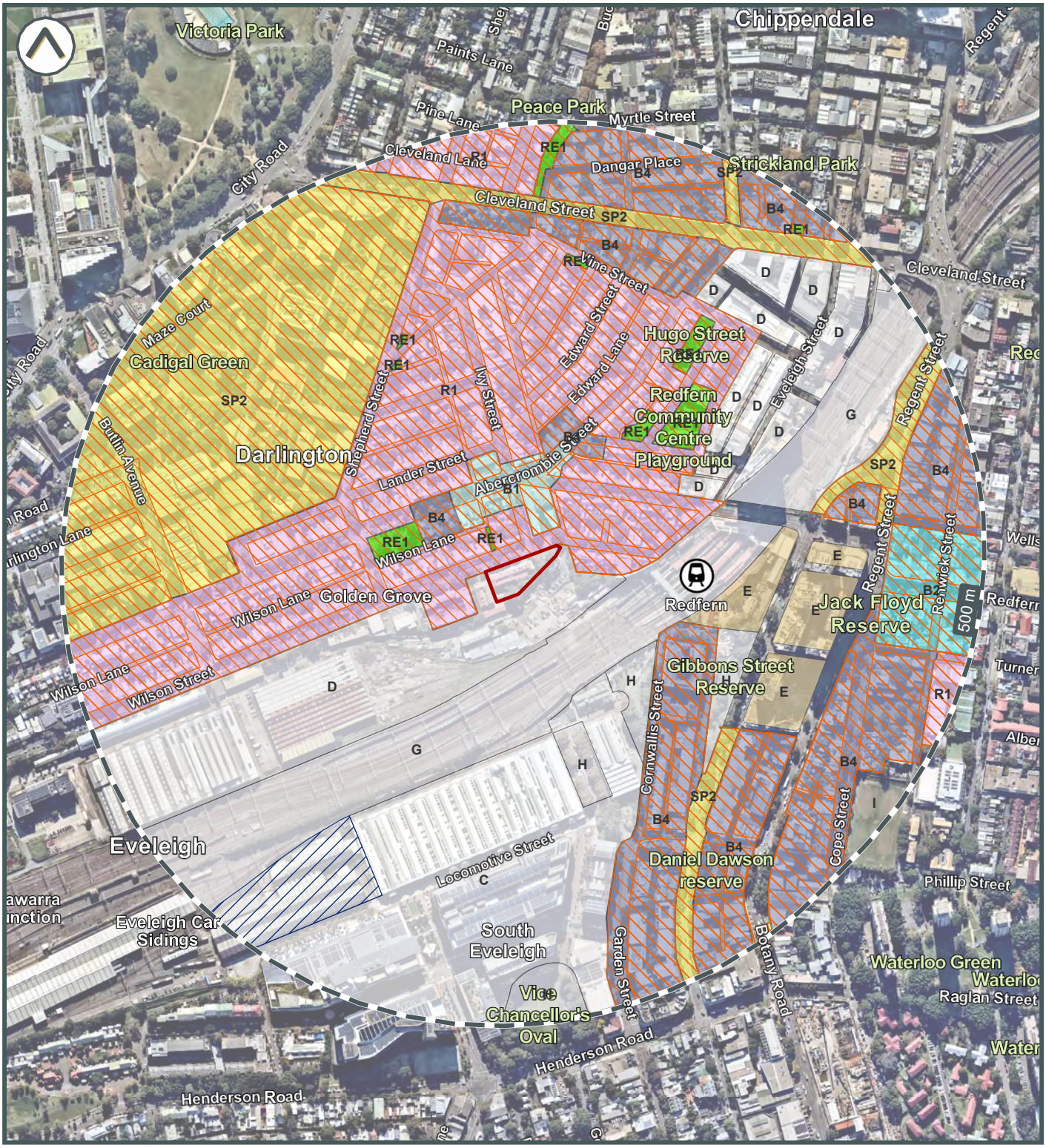
Subject area
Parks
Stormwater channel
Sewer main
Water main

0 25 50 75 100 125m

Land Insight

MAP 1.2

Planning Controls



Subject area
Additional Permitted Land Uses
Local Provisions

Land Zoning

- B1 | Neighbourhood Centre
- B2 | Local Centre
- B4 | Mixed Use
- E | Business Zone – Commercial Core
- R1 | General Residential
- RE1 | Public Recreation
- SP2 | Special Purposes Zone – Infrastructure
- C | Business Zone – Business Park
- D | Business Zone – Mixed Use
- G | Special Purposes Zone – Infrastructure
- H | Recreation Zone – Public Recreation

0 50 100 150 200 250m

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PROPERTY SETTING

Heritage

MAP 1.3

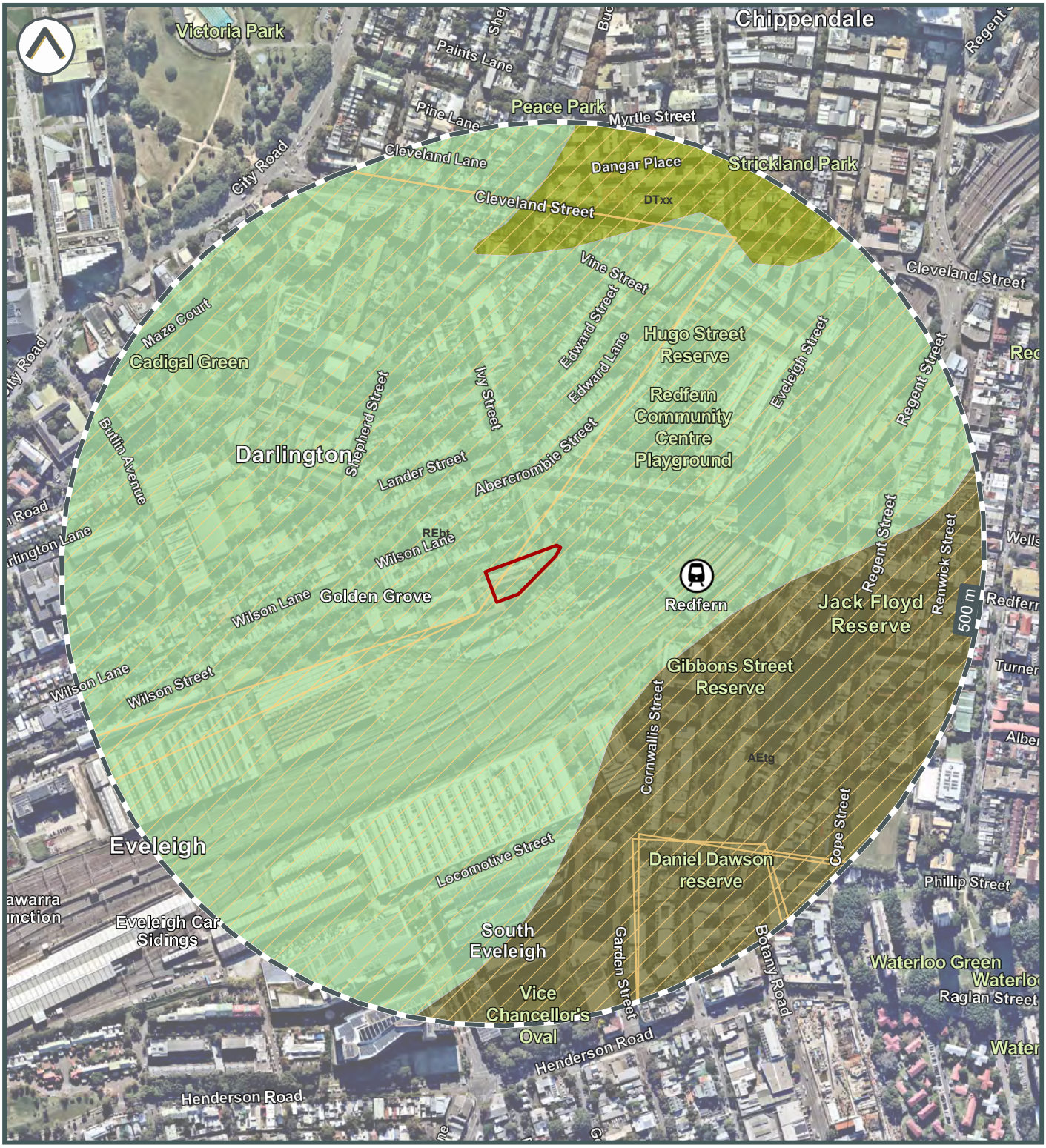
Subject area
Heritage Item (LEP)
State Heritage Register
Commonwealth Heritage List (CHL)
National Heritage List (NHL)
World Heritage Area (WHA)

0 25 50 75 100 125m

Land Insight

MAP 1.4a

Soil Landscape and Salinity



Subject area

Radon Level (Bq/m3)
5–19

Soil Landscape
AEtg,Aeolian
DTxx,Disturbed terrain
REbt,Residual

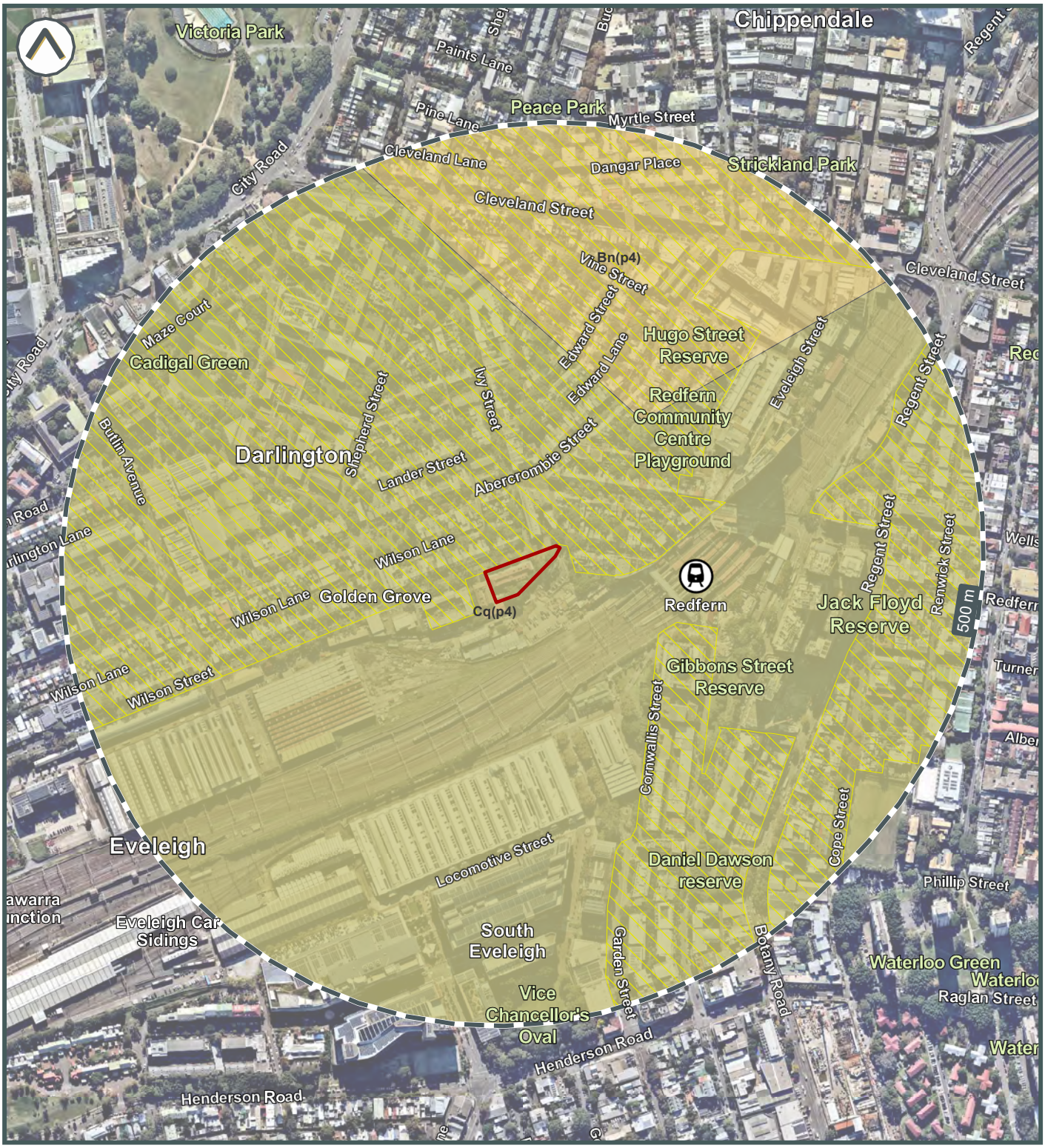
0 50 100 150 200 250m

Land Insight

PROPERTY SETTING

Acid Sulfate Soils

MAP 1.4b



Subject area

Acid Sulfate Soil Risk
Class 5

ASRIS Atlas of Australian Sulfate Soils
Bn(p4) | ASS in inland lakes, waterways, wetlands and riparian zones
Cq(p4) | ASS in inland lakes, waterways, wetlands and riparian zones

0 50 100 150 200 250m

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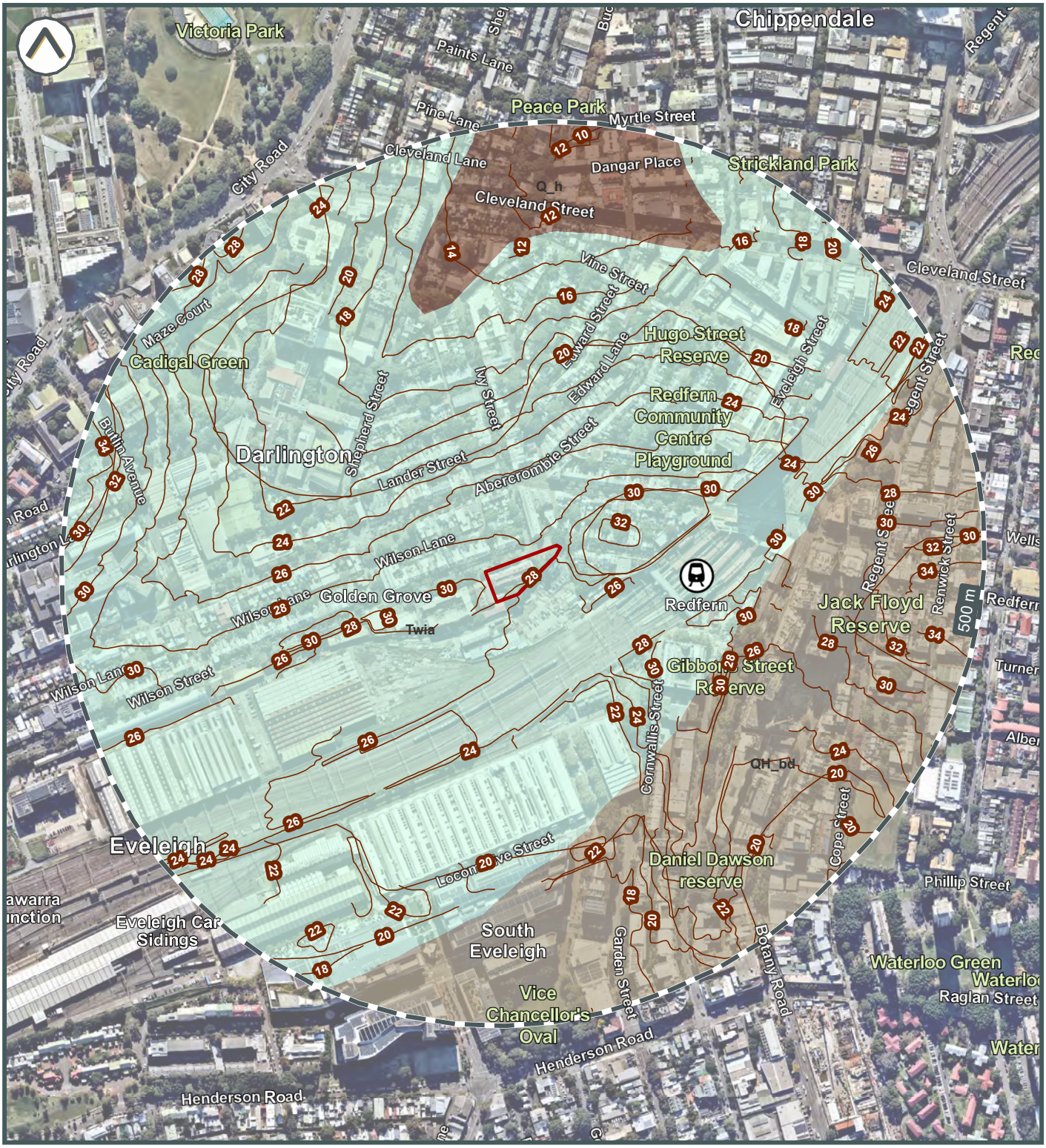
MAP 1.5

Geology and Topography



Subject area
Topographic contour (m)

Cenozoic Sedimentary Province
QH_bd
Q_h

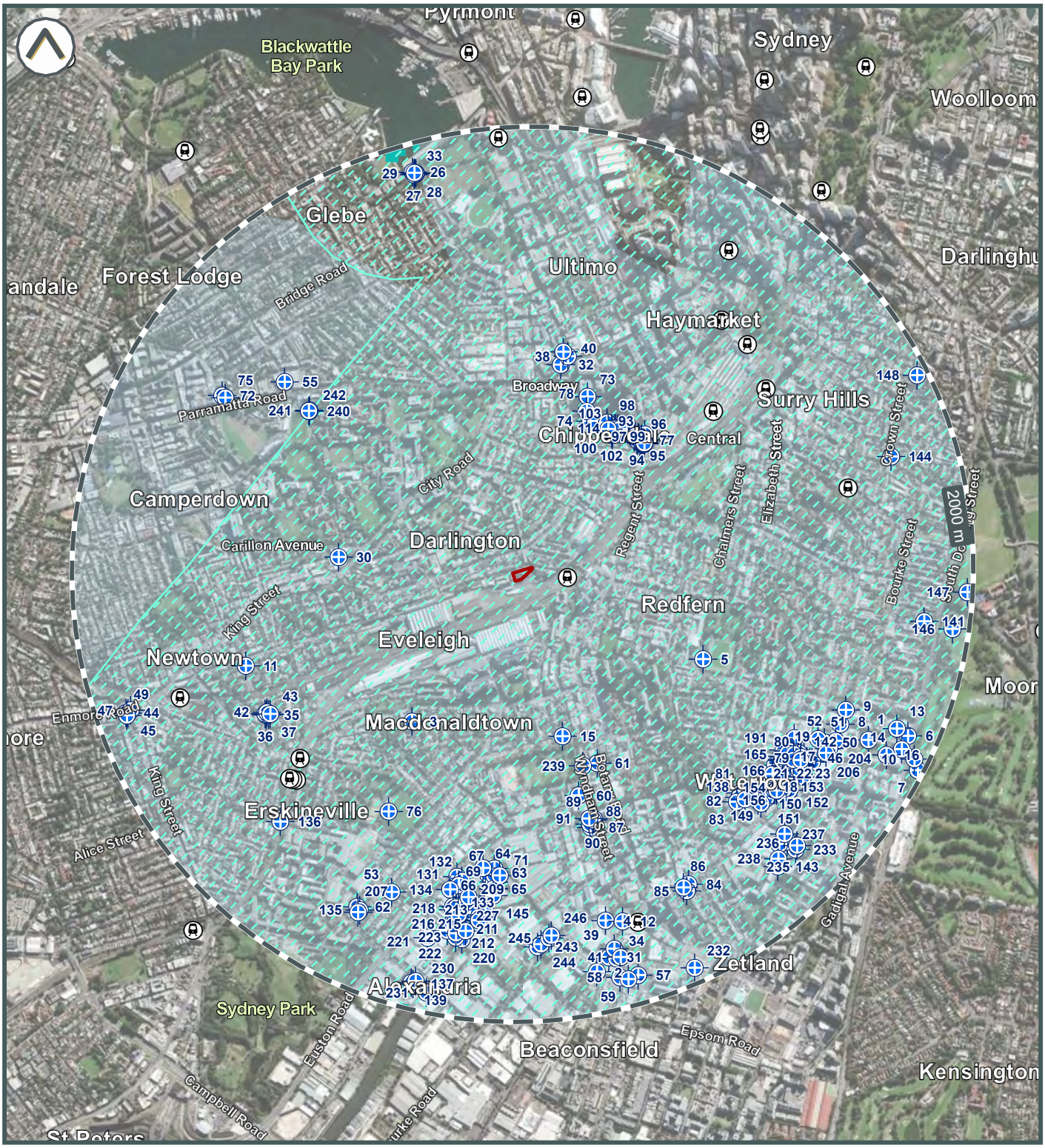
PERMO-TRIASSIC BASINS
Twia

0 50 100 150 200 250m

Land Insight

MAP 2.1

Hydrogeology and Groundwater Boreholes



Subject area

Groundwater bores

UPSS Environmentally Sensitive Zone

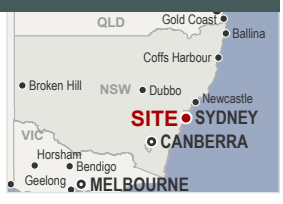
Wetlands

Aquifer type

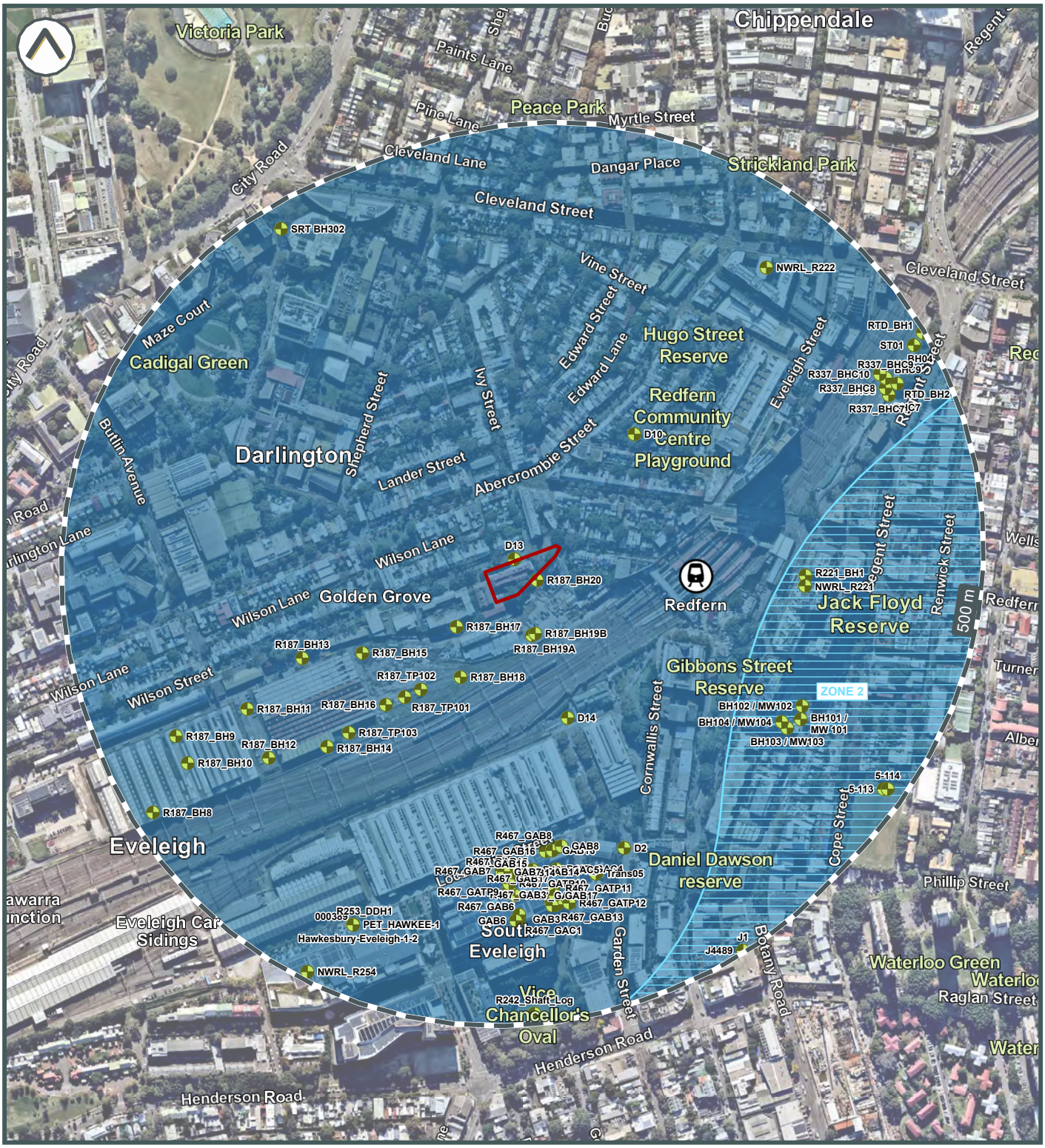
Porous, extensive highly productive aquifers

0 200 400 600 800 1,000m

Land Insight



Hydrogeology and Other Boreholes



Subject area

Other borehole/monitoring well location

Botany Groundwater Management Zone 2

Hydrogeologic Unit

Late Permian/Triassic sediments (porous media – consolidated)

0 50 100 150 200 250m

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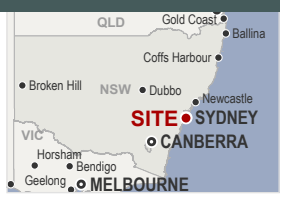
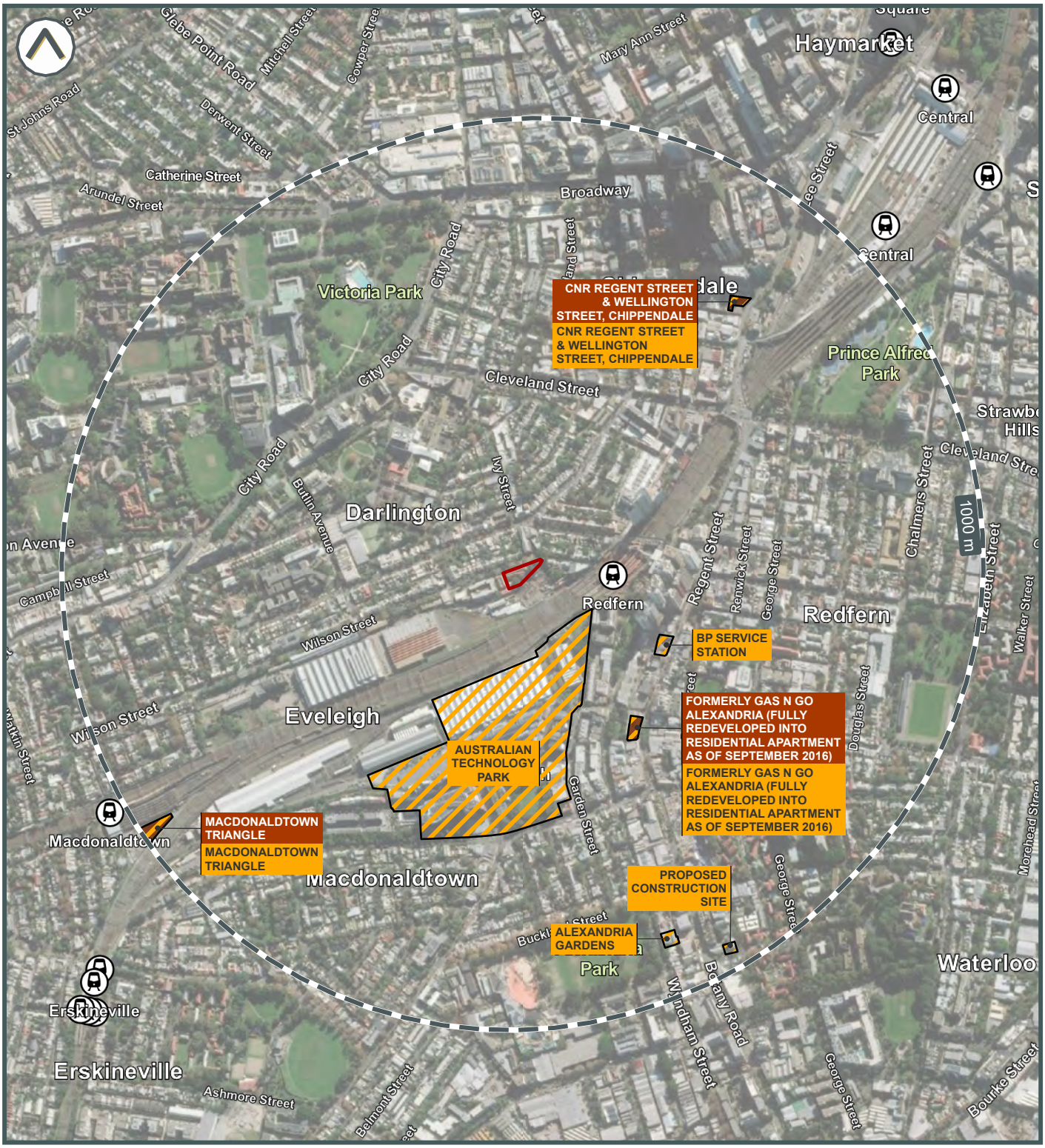


ENVIRONMENTAL REGISTERS LICENSES AND INCIDENTS

MAP 3.1

Contaminated Land Public Register



Subject area

Contaminated Land Register (EPA)
Sites Notified as Contaminated to the EPA
Contaminated Land Record of Notices

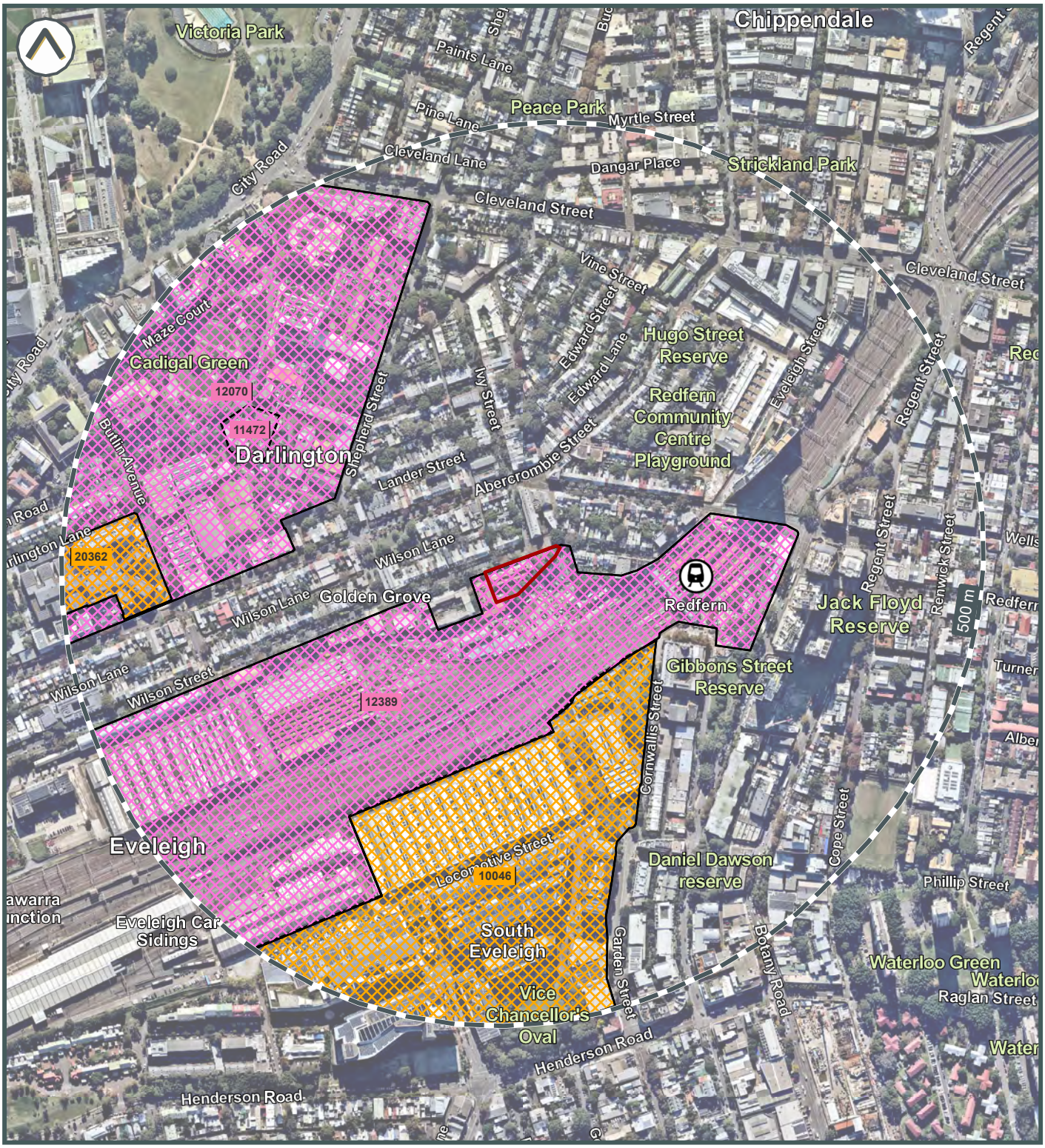
0 100 200 300 400 500m

Land Insight

ENVIRONMENTAL REGISTERS LICENSES AND INCIDENTS

MAP 3.2

Licences, Approvals & Assessments



Subject area

POEO Licences
- Issued
- Surrendered / Suspended / Revoked
- Delicensed / No longer in force

Clean Up and Penalty Notices

0 50 100 150 200 250m

Land Insight

Sites Regulated by Other Jurisdictional Body

Subject area

PFAS sites
NPI Facilities
Former Gasworks
Defence Area / Military Sites
Defence Controlled Area

Unexploded Ordnance (UXO) Areas
Substantial Potential
Slight potential
Sea Dumping of Depth Charges
Sea Dumping of Depth Charges (Chemical munitions sea dumping)
Other Sea Dumping Sites

Other

0 200 400 600 800 1,000m

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POTENTIALLY CONTAMINATED AREAS

Former Potentially Contaminated Land

MAP 4.1

Subject area

James Hardie Asbestos Legacy Sites
Contaminated Legacy Areas
Historical (legacy) Landfill Sites

Derelict Mines
Derelict Quarries

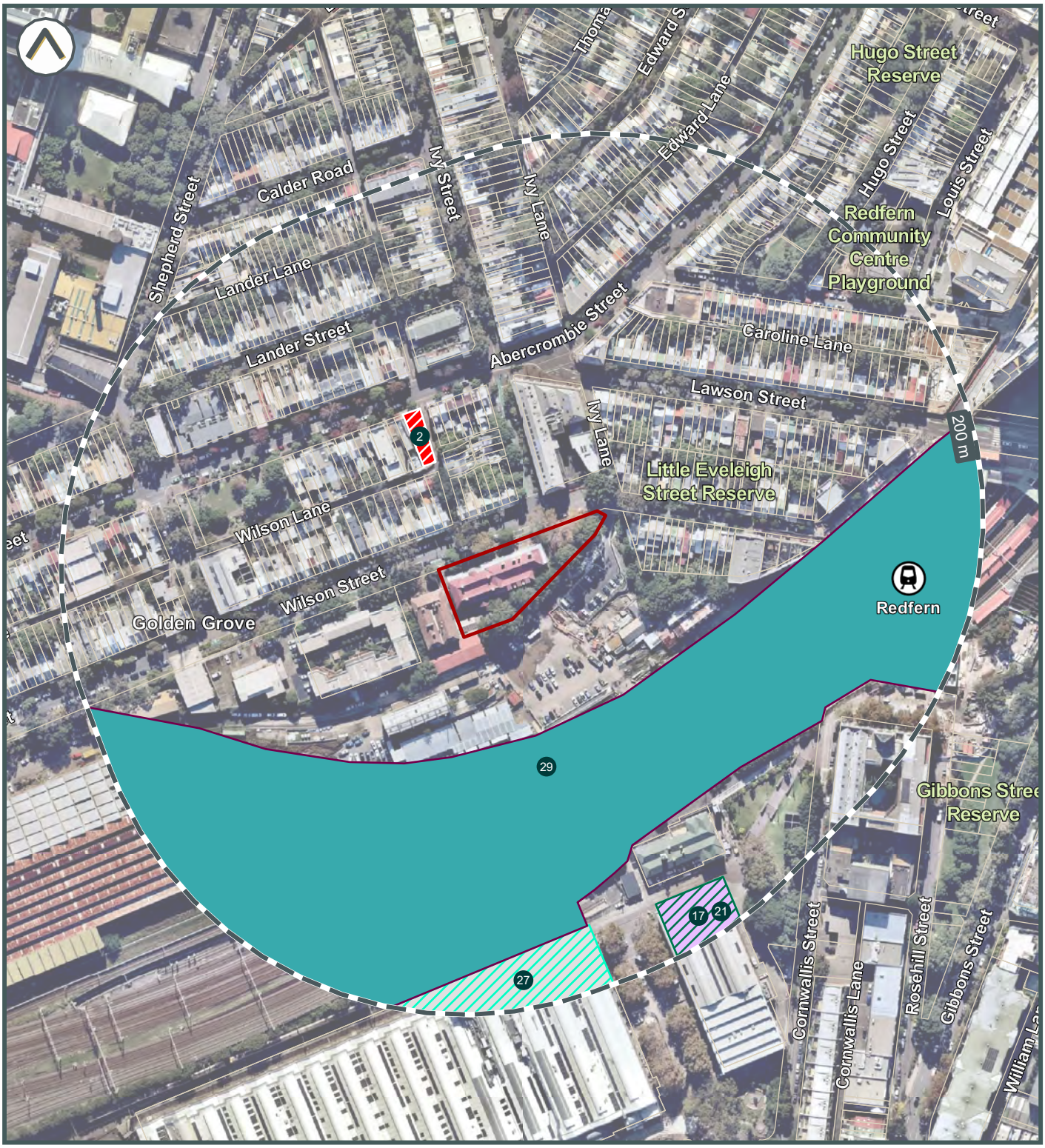
0 50 100 150 200 250m

Land Insight

POTENTIALLY CONTAMINATED AREAS

MAP 4.2

Current Potentially Contaminating Activities (PCAs)



- Subject area
- Dry Cleaners
- Hospitals and Research Facilities
- Manufacturing – Other
- Rail Industry and Associated Activities
- Extractive Industries (Mineral and Mining)
- Extractive Industries (Quarrying)
- Landfill Sites

Data is current as when this report was created. However due to the turnover of business locations, some addresses may be former.

0 25 50 75 100 125m

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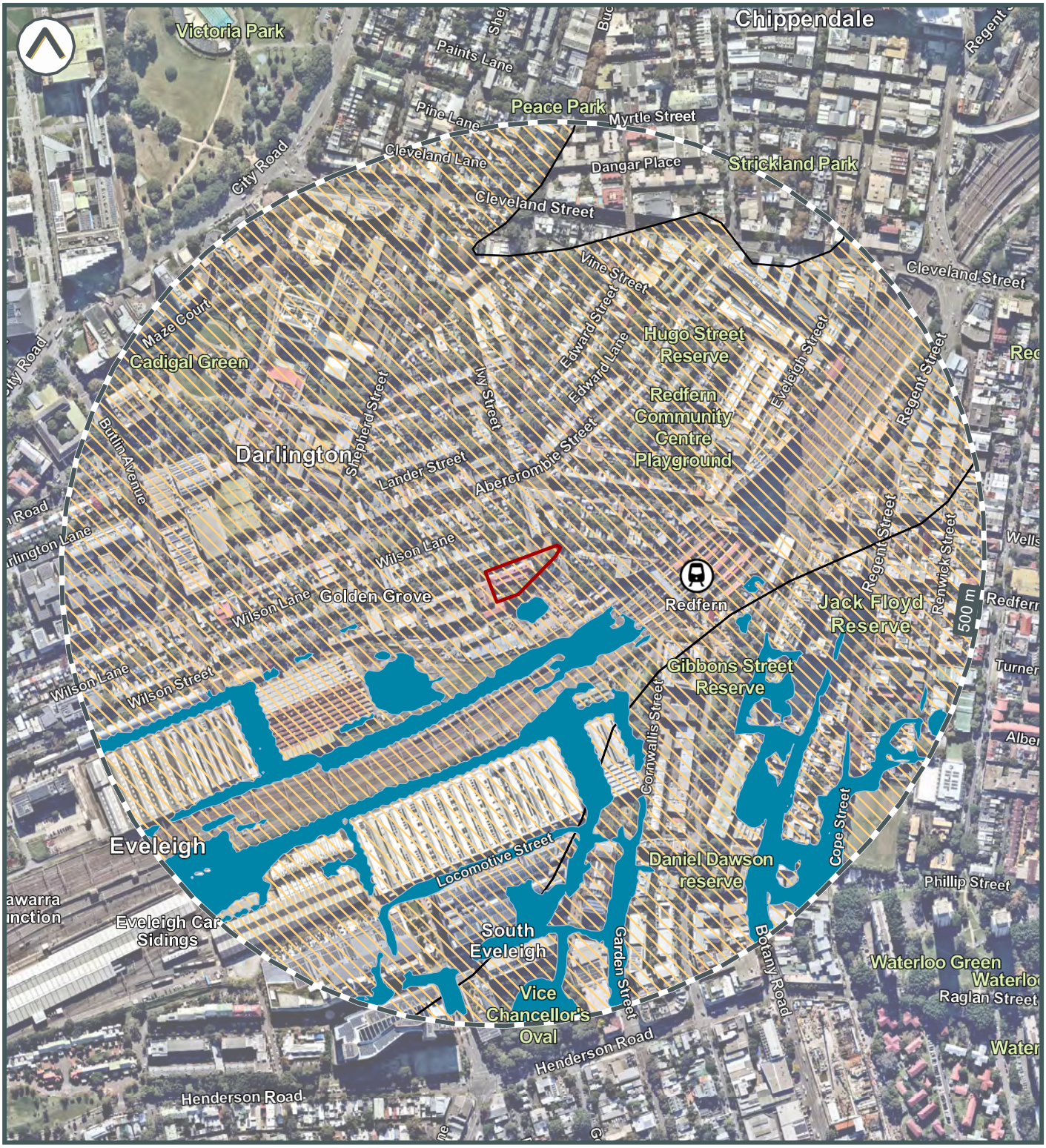
NATURAL HAZARDS

MAP 5.1

Fire and Flood Hazards



Subject area

Erosion Hazard
Minor to moderate

Flood Hazard
Probable Maximum Flood (PMF)

0 50 100 150 200 250m

Land Insight

Land Insight

APPENDIX E: SCHEDULE 11 HAZARDOUS CHEMICALS SEARCH

Claude Platell

From: Tim Osborne <tim.osborne@landinsight.co>
Sent: Tuesday, 5 July 2022 9:06 AM
To: Claude Platell
Subject: FW: SafeWork NSW: 00717361 –Site Search application – Result not found [ref:_00D281hl6J._5004a8cJgM:ref]

Follow Up Flag: Follow up
Flag Status: Flagged

Morning Claude

Please see results email for the DG search out at Eveleigh

Many thanks

Tim Osborne
COO | Co-founder

M 0407 232 689
P 02 8067 8871
Level 24, Three International Towers,
300 Barangaroo Avenue, Sydney
NSW 2000 Australia

landinsight.co
Website | LinkedIn | Twitter

From: Licensing <licensing@safework.nsw.gov.au>
Sent: Tuesday, 5 July 2022 9:03 AM
To: Tim Osborne <tim.osborne@landinsight.co>
Subject: SafeWork NSW: 00717361 –Site Search application – Result not found [ref:_00D281hl6J._5004a8cJgM:ref]

Security Classification: Sensitive Personal
Please do not amend the subject line of this email

Dear Tim

Re: Site Search for Schedule 11 Hazardous Chemicals on premises Application – Result not found

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises for the following site: 505 Wilson Road Eveleigh NSW.

A search of the records held by SafeWork NSW has not located any records pertaining to the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 00717361

- Email: licensing@safework.nsw.gov.au
- Phone: 13 10 50

Kind regards

Gabriela Draper
Licensing Representative
SafeWork NSW | Better Regulation Division
Department of Customer Service
p- 13 10 50
e- licensing@safework.nsw.gov.au | www.customerservice.nsw.gov.au
Level 3, 32 Mann Street, Gosford, NSW 2250

ref:_00D281hl6J._5004a8cJgM:ref

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX F: PHOTOGRAPHIC PLATES

Photo Plate 1: Front of CME building. Photo taken from Wilson Street.

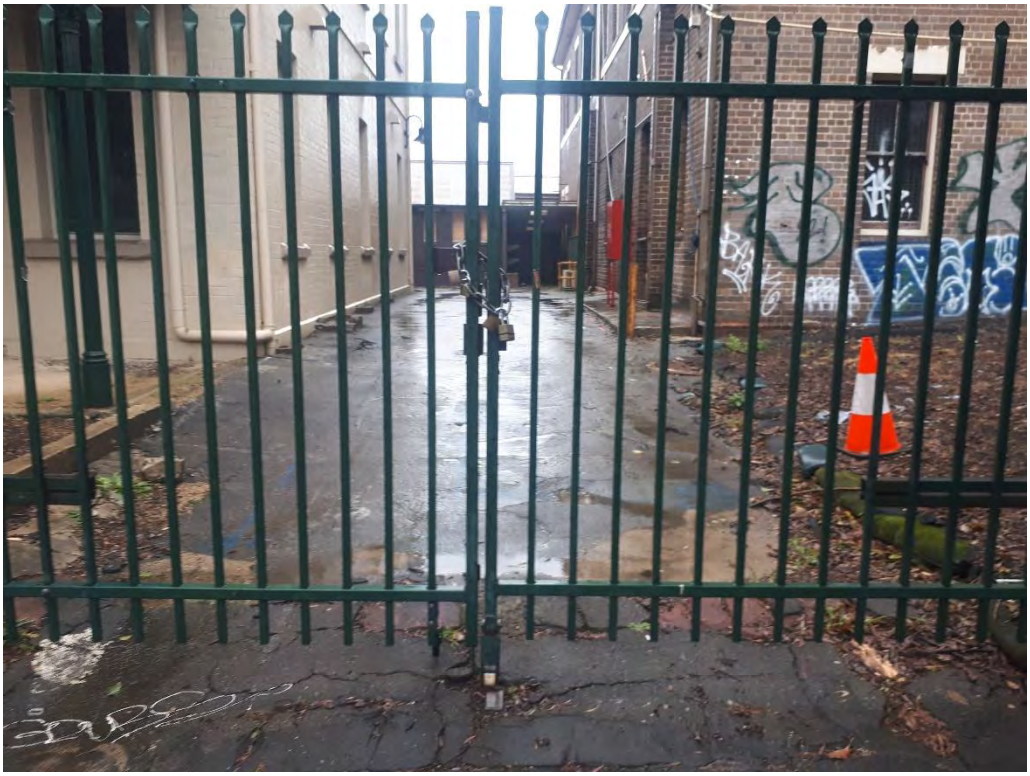


Photo Plate 2: Entrance on the Western end of the site. Photo taken from Wilson Street.

Photo Plate 3: BH 1, 2 & 3 were positioned along this strip at the front of CME building. Wilson street seen on the right of the image.

Photo Plate 4: Leaf, mulch and light grass covered area on eastern side of CME building. BH4 located here at pink flag seen in photo.

Photo Plate 5: Asphalt covered area behind the BME building. White service locator paint indicating position of BH5.

Photo Plate 6: Asphalt covered area behind the BME building. White service locator paint indicating position of BH6.

Photo Plate 7: Partially Augured BH2

Photo Plate 8: Representative varying fill material observed at BH1

Photo Plate 9: Representative varying fill material observed at BH1

Photo Plate 10: Representative natural material found beyond 0.7mBGL at BH1

Photo Plate 11: Representative material of BH2

Photo Plate 12: Representative material of BH3

Photo Plate 13: Augured hole from BH4. Dry leaf and mulch coverage observed.

Photo Plate 14: Representative material of BH4

Photo Plate 17: Asphalt core of BH5 removed for soil material to be hand augured

Photo Plate 18: Representative material of BH5

Photo Plate 19: Asphalt core of BH6 removed for soil material to be hand augured

Photo Plate 20: Representative material of BH6

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX G: COMMUNICATION FROM SYDNEY TRAINS

Claude Platell

From: Gurpreet Bhatti <GURPREET.BHATTI@transport.nsw.gov.au>
Sent: Friday, 1 July 2022 7:07 AM
To: Claude Platell
Subject: FW: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)
Attachments: Photos DBYD 213062521 505 Wilson street, Eveleigh.pdf; GIS DBYD 213062521 505 Wilson street, Eveleigh.pdf; Drawing DBYD 213062521 505 Wilson street, Eveleigh.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hi Claude,

As requested initial investigation have been carried out by Sydney Trains cable team. It has been determined that there are no feeders/HV cables within 3m of your proposed works.
As far as DBYD investigation is concerned, concurrence is given to proceed with caution. If anything unforeseen is discovered on site please contact us immediately.

Regards,

Gurpreet Bhatti (She/Her)
Asset Interface Manager, External Interface (North and West Region)
Engineering & Maintenance Interface, Asset Management
Sydney Trains
Transport for NSW

M 0476 832 352 **E** gurpreet.bhatti@transport.nsw.gov.au

transport.nsw.gov.au

Level 2, 36-46 George Street
Burwood NSW 2134

NSW GOVERNMENT Transport for NSW

I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

From: Christian Fazon <CHRISTIAN.FAZON@transport.nsw.gov.au>
Sent: Friday, 1 July 2022 5:58 AM
To: Gurpreet Bhatti <GURPREET.BHATTI@transport.nsw.gov.au>
Cc: Vince Felicetti <VINCE.FELICETTI@transport.nsw.gov.au>; Joshua Gibbs <Joshua.Gibbs2@transport.nsw.gov.au>; Vincentas Varnas <VINCENTAS.VARNAS@transport.nsw.gov.au>; Angelo Saitaris <ANGELO.SAITARIS@transport.nsw.gov.au>
Subject: RE: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hi Gurpreet,

The cable team has investigated the works at 505 Wilson St, Eveleigh for the purposes manual excavation.
The client has indicated that the excavation which were going to be near to the STHV are not required and the other excavations will be more than 3m from STHV. Please see our findings below.

1. Is there cables in the vicinity of the works area (within 3 m)? No
2. Any feeder number (within 3 m)? No
   Live -
   OOS/Abandoned -
3. Any tunnel under the work scope No
4. Please supply the photos appropriate to the site showing Sydney Trains cables, the proposed works area marked on site with approximate distances between the areas. Please see attached photos, drawings and GIS for reference.

For any more information or clarification please contact our team.

Regards

Christian Fazon
HV Cables 3
The Hub
146 Manchester Rd, Auburn
M 0428 753 028
E Christian.fazon@transport.nsw.gov.au

Transport Sydney Trains NSW

From: Gurpreet Bhatti
Sent: Wednesday, 29 June 2022 11:09 AM
To: Vince Felicetti <VINCE.FELICETTI@transport.nsw.gov.au>; Vincentas Varnas <VINCENTAS.VARNAS@transport.nsw.gov.au>; Christian Fazon <CHRISTIAN.FAZON@transport.nsw.gov.au>; Joshua Gibbs <Joshua.Gibbs2@transport.nsw.gov.au>
Cc: Adam Hughan <ADAM.HUGHAN@transport.nsw.gov.au>
Subject: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hi Team,

See below marked location of boreholes and attached DBYD documents. They indented to work tomorrow but I have requested them to wait till we investigate.

Can you please arrange for the Cable Team to contact a representative from the external company and site walk the route if required so to determine the proposed work areas and how it interfaces with our cables.

1. Is there cables in the vicinity of the works area (within 3 m)?
2. Any feeder number (within 3 m)?
   Live -
   OOS/Abandoned -
3. Any tunnel under the work scope
4. Please supply the photos appropriate to the site showing Sydney Trains cables, the proposed works area marked on site with approximate distances between the areas.

Regards,

Gurpreet Bhatti (She/Her)
Asset Interface Manager, External Interface (North and West Region)
Engineering & Maintenance Interface, Asset Management
Sydney Trains
Transport for NSW

M 0476 832 352 **E** gurpreet.bhatti@transport.nsw.gov.au

transport.nsw.gov.au

Level 2, 36-46 George Street
Burwood NSW 2134

NSW GOVERNMENT Transport for NSW

I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

From: Claude Platell <cplatell@eesigroup.com>
Sent: Wednesday, 29 June 2022 9:39 AM
To: Gurpreet Bhatti <GURPREET.BHATTI@transport.nsw.gov.au>
Subject: RE: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hi Gurpreet,

Samples are marked below.

All samples will be located by a qualified service locator. No locations will be advanced if they are within 5m of the cable.

Excavation is manual to 0.75mBGL.

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

Claude Platell –
Environmental Scientist
82-84 Dickson
Ave Artarmon NSW 2064
P: +61 2 9922 1777
M: +61 409 818 221
cplatell@eesigroup.com
www.eesigroup.com

From: Gurpreet Bhatti
Sent: Wednesday, 29 June 2022 9:07 AM
To: Claude Platell <cplatell@eesigroup.com>
Subject: RE: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hi Claude,

Can you mark your work location.

Regards,

Gurpreet Bhatti (She/Her)
Asset Interface Manager, External Interface (North and West Region)
Engineering & Maintenance Interface, Asset Management
Sydney Trains
Transport for NSW

M 0476 832 352 **E** gurpreet.bhatti@transport.nsw.gov.au

transport.nsw.gov.au

Level 2, 36-46 George Street
Burwood NSW 2134

NSW GOVERNMENT
Transport for NSW

I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

From: Claude Platell <cplatell@eesigroup.com>
Sent: Wednesday, 29 June 2022 9:00 AM
To: Gurpreet Bhatti <GURPREET.BHATTI@transport.nsw.gov.au>
Subject: RE: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hi Gurpreet,

Thank you for the quick response. Documentation has been attached. What is the next step?

Kind regards,

Claude.

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

Claude Platell –
Environmental Scientist
82-84 Dickson
Ave Artarmon NSW 2064
P: +61 2 9922 1777
M: +61 409 818 221
cplatell@eesigroup.com
www.eesigroup.com

From: Gurpreet Bhatti
Sent: Wednesday, 29 June 2022 8:58 AM
To: Claude Platell <cplatell@eesigroup.com>; DBYD - Stage 2 works (Site investigations, supervision) <DBYD-Stage2works@transport.nsw.gov.au>
Subject: URGENT: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)
Importance: High

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi Claude,

Can you send the DBYD documents you have received. If the outcome says " AFFECTED" please do not procced with any work as there is a possibility of live high voltage cables buried in your work area.

Regards,

Gurpreet Bhatti (She/Her)
Asset Interface Manager, External Interface (North and West Region)
Engineering & Maintenance Interface, Asset Management
Sydney Trains
Transport for NSW

M 0476 832 352 **E** gurpreet.bhatti@transport.nsw.gov.au

transport.nsw.gov.au

Level 2, 36-46 George Street
Burwood NSW 2134

Transport for NSW

I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

From: Claude Platell <cplatell@eesigroup.com>
Sent: Wednesday, 29 June 2022 8:49 AM
To: DBYD - Stage 2 works (Site investigations, supervision) <DBYD-Stage2works@transport.nsw.gov.au>
Subject: 505 Wilson street, Eveleigh -DBYD ref 213062521 (122040)

Hello,

My site has been flagged as having Sydney trains HV cable running through it.

My scope is 8 boreholes to 0.75mBGL. using manual excavation methods. I will have a qualified service locator onsite and will ensure all boreholes are 5m from the asset.

Please contact me on 0409 818 221. Work is commencing tomorrow.

Kind regards,

Claude.

Claude Platell –
Environmental Scientist
82-84 Dickson
Ave Artarmon NSW 2064
P: +61 2 9922 1777
M: +61 409 818 221
cplatell@eesigroup.com
www.eesigroup.com

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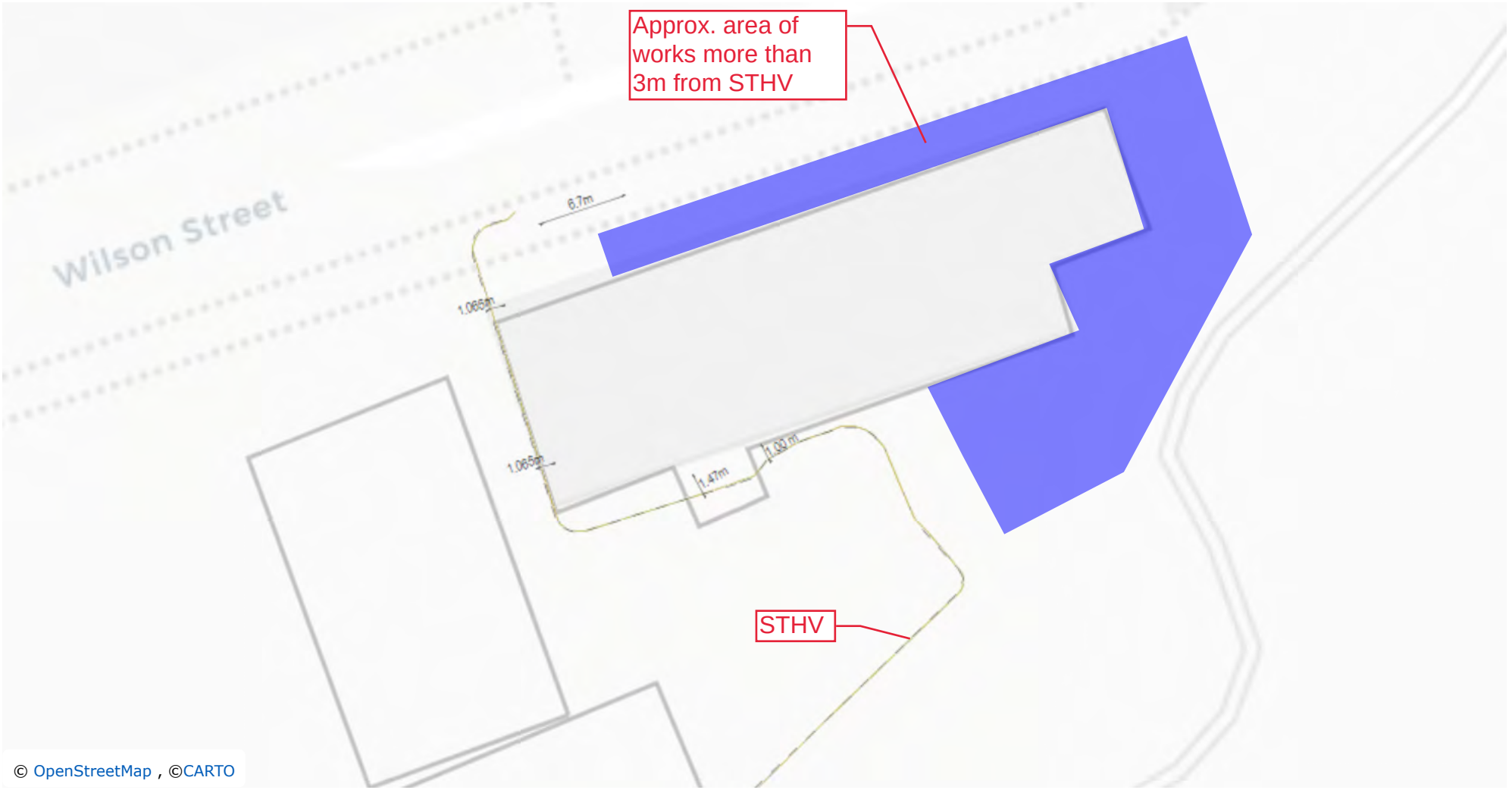
Consider the environment. Please don't print this e-mail unless really necessary.

OFFICIAL

505 Wilson street, Eveleigh



Transport Sydney Trains

Where Info... gis

DATA SOURCE: Sydney Trains GIS

Level 1 West,
36-46 George St.
Burwood, NSW 2134
Tel: (02) 9536 3200
Fax: (02) 9536 2699
Email: gis.support@transport.nsw.gov.au

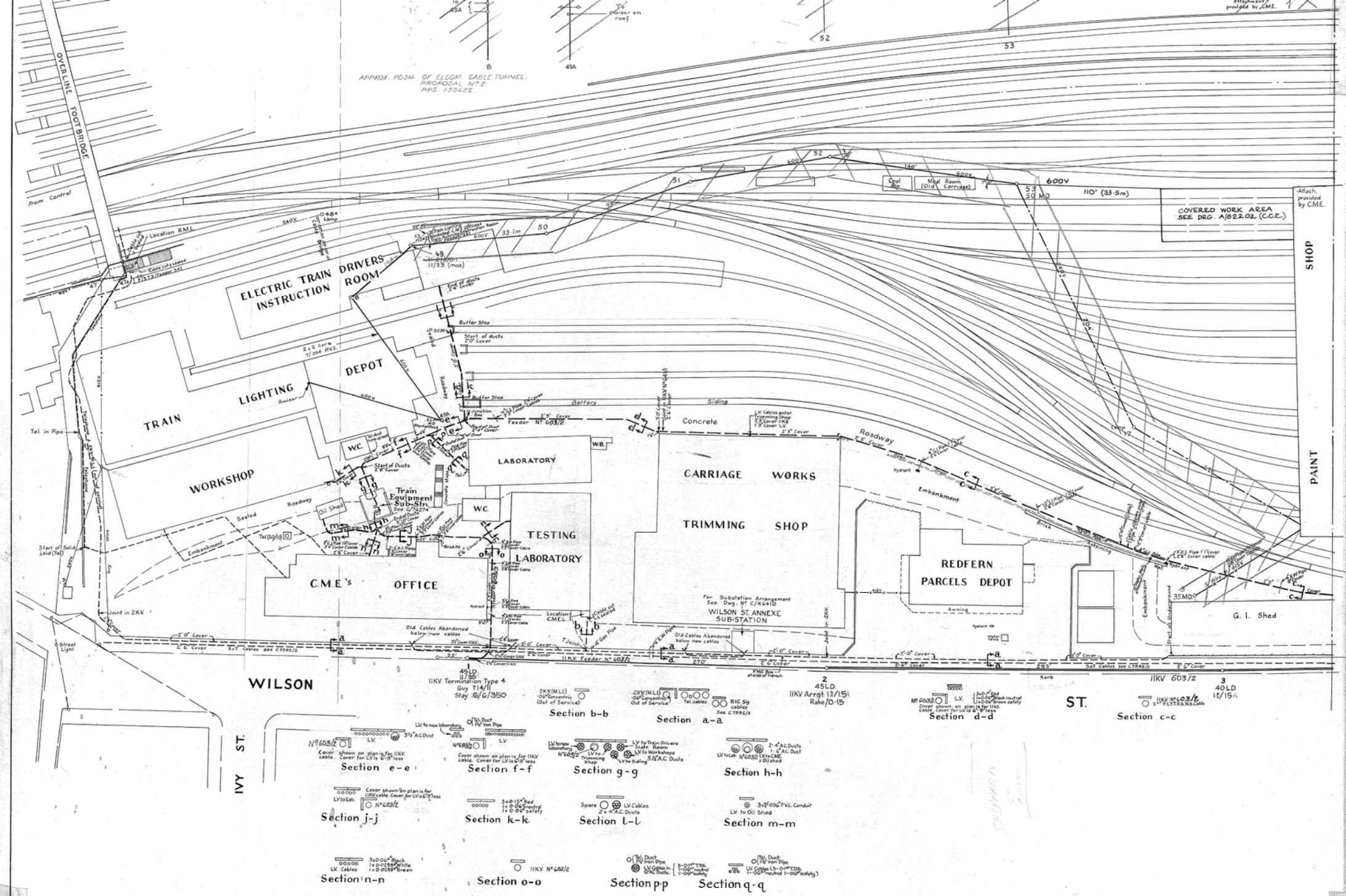
DBYD 213062521 505

Wilson street, Eveleigh

DATE: 1/7/2022 PLOTTED BY: WebGIS

10 m

NOTES: Data shown here may not have been field verified. Do not use for operational puposes without checking against a controlled document. Please contact the issuer for futher clarification.



WARNING SCANNED IMAGE
EDMS N° EL0046006

DEPT. OF RAILWAYS, NEW SOUTH WALES ELECTRICAL BRANCH	SCALE 33feet to an inch	W.D. Swaw 22-3-65. CHIEF ELECTRICAL ENGINEER
EVELEIGH		

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX H: BORELOGS

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH1**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Soft, dry, red-brown CLAY loam with inclusions of fine brick gravels (1%) and compacted areas of clay (1%).				BH1_0.0-0.05		Geofabric
FILL: Soft, dry, brown CLAY with fine brick gravels (1%).				BH1_0.1-0.2		
FILL: Medium-dense, dry, light brown CLAY with angular sandstone gravels (3%) and brown clay clods (1%).		0.2				
FILL: Loose, dry yellow SAND.		0.4		BH1_0.4-0.5		
NATURAL: ? Soft, moist, brown CLAY with red ironstone medium gravels (3%).		0.6				
EOH @ 1.0 mBGL Target depth reached.		0.8				
		1.0				
		1.2				
		1.4				
		1.6				
		1.8				
		2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH2**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Very loose, dry brown clayey SAND with inclusions of rounded igneous gravels (3%) and angular sandstone gravels (1%).		0.2		BH2_0.0-0.1		Geofabric
FILL: Very loose, moist yellow SAND with occasional darker compacted areas of sand.		0.4 0.6 0.8 1.0				
EOH @ 1.0 mBGL Target depth reached.		1.2 1.4 1.6 1.8 2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH3**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Very loose, dry, black/brown/yellow SAND with fine clay clods.		0.2		BH3_0.2-0.3		Geofabric
FILL: Very loose, dry brown SAND with inclusions of dark/black ash/charcoal gravels (1%).		0.4 0.6 0.8		BH3_0.7-0.8		
EOH @ 1.0 mBGL Target depth reached.		1.0 1.2 1.4 1.6 1.8 2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH4**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Mulch.						Geofabric
FILL: Very loose, dry black SAND with inclusions of fine ash/charcoal gravels (1%).		0.2				
		0.4		BH4_0.3-0.4		
		0.6				
		0.8				
		1.0				
EOH @ 1.0 mBGL Target depth reached.		1.2				
		1.4				
		1.6				
		1.8				
		2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH5**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Asphalt hardstand.						
FILL: Very loose, dry, grey SAND with inclusions of fine ash/charcoal gravels.		0.2		BH5_0.1-0.2		
FILL: Medium-dense, dry orange/brown SAND with compacted areas of black SAND.		0.4 0.6 0.8		BH5_0.4-0.5		
EOH @ 1.0 mBGL Target depth reached.		1.0 1.2 1.4 1.6 1.8 2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

Geological Borelog

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

LOCATION: 505 Wilson Street, Eveleigh		**Borehole Log: BH6**	**Logged by:** CP
SURFACE ELEVATION: -	**JOB NUMBER:** 122040		
GROUNDWATER: -	**DATUM:** -	**PROJECT:** PSI	**Proj. Manager:** CP
DRILL METHOD: Hand Auger	**DATE DRILLED:** 30/06/2022		

STRATIGRAPHY	GRAPHIC LOG	Depth (metres)	Sample Depth	Sample ID	Moisture Content	Comments
FILL: Asphalt hardstand.						
FILL: Loose, dry black SAND with inclusions of fine angular igneous gravels (2%), angular sandstone gravels (2%) and red clay clods (2%).		0.2		BH06_0.1-0.2		
FILL: Very loose, dry, white SAND.		0.4		BH06_0.5-0.6		
FILL: Medium-density, dry brown SAND with dark brown clayey sand clods.		0.6				
FILL: Very loose, dry orange/brown SAND with no inclusions.		0.8				
EOH @ 1.0 mBGL Target depth reached.		1.0				
		1.2				
		1.4				
		1.6				
		1.8				
		2.0				

NOTE: This bore log is for environmental purposes only and is not intended to provide geotechnical information.

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

APPENDIX I: LABORATORY CERTIFICATE OF ANALYSIS

CHAIN OF CUSTODY - ANALYSIS REQUEST FORM

Job No: 122040 Laboratory: ALS

Project Manager: CP Sampler: CP Site Location: 505 Wilson St, Eveleigh Sheet: 1 of 1

No. of samples	Sample ID/ Depth	Anticipated Result (PID)/EC reading	Date sampled	Time sampled	Sample Matrix: Soil	Water	Sediment	Analysis Required: S-26	* Asbestos	S-18	Hold.	Sample-specific instructions/ notes
1	BH1-0.0-0.05		30/08/22		X			X	X			
2	BH1_0.1-0.2				X			X	X			
3	BH1-0.4-0.5										X	
4	BH2-0.0-0.1							X	X			
5	BH3_0.2-0.3							X	X			
6	BH3-0.7-0.8										X	
7	BH4-0.3-0.4							X	X			
8	BH5_0.1-0.2										X	
9	BH5-0.4-0.5							X	X			
10	BH6-0.1-0.2							X	X			
11	BH6-0.5-0.6							X	X			
12	FD1							X				
13	ILD1							X				→ forward to envirolab for Combo 3 analysis.
14	TB									X		
15	TS 22		16/08/22							X		
	TOTAL							9	8	2	3	

Environmental Division Sydney
Work Order Reference
ES2223348

Telephone : +61-2-8784 8555

Turn Around *(circle)*: **NORMAL** / 3 DAYS / 48 HRS / 24 HRS *(confirm with lab in advance if quick turn-around is required)*

Lab Quotation No. *(if applicable)*:

Comments/ Instructions: Asbestos presence / absence

Send report to *(email address)*: cplatell@eesigroup.com, kjbarwood@eesigroup.com

Cc: invoice to *(email address)*: accounts@eesigroup.com

	Name	Signature	Date	Time
Sent off Site/Office by:	Claude Platell		4/07	
Receiving Lab:	Soogfyho	ALS	4/7/22	1500
Receiving Lab:				

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED
Phone: (0x) xxxx xxxx
Fax: (0x) xxxxx xxxx
PO Box: PO Box xx City State Postcode
Email: eesXXX@eesigroup.com

CHAIN OF CUSTODY - ANALYSIS REQUEST FORM

Job No: 122040 Laboratory: ALS

Project Manager: CP Sampler: CP Site Location: 505 Wilson St, Eveleigh Sheet: 1 of 1

No. of samples	Sample ID / Depth	Anticipated Result (PID/EC reading)	Date sampled	Time sampled	Sample Matrix: Soil	Water	Sediment	Analysis Required: S-26	* Asbestos	S-18	Hold.	Sample-specific instructions / notes
1	BH1 - 0.0-0.05		30/08/22		X			X	X			
2	BH1 - 0.1-0.2				X			X	X			
3	BH1 - 0.4-0.5										X	
4	BH2 - 0.0-0.1							X	X			
5	BH3 - 0.2-0.3							X	X			
6	BH3 - 0.7-0.8										X	
7	BH4 - 0.3-0.4							X	X			
8	BH5 - 0.0-0.1										X	
9	BH5 - 0.4-0.5							X	X			
10	BH6 - 0.1-0.2							X	X			
11	BH6 - 0.5-0.6							X	X			
12	FD1							X				
13	ELQ1				↓			X				→ forward to envirolab for combo 3 analysis.
14	TB		↓							X		
15	TS 22		16/08/22							X		
	TOTAL							9	8	2	3	

Environmental Division Sydney
Work Order Reference
ES2223348

Telephone : +61-2-8784 8555

Subcon / Forward Lab / Split WO:
Lab / Analysis: Newcastle → Asbestos
Organised By / Date: TU01 → Envirolab
Relinquished By / Date:
Consote / Courier:
WO No:
Attached By PO / Internal Sheet:

Turn Around *(circle)*: NORMAL / 3 DAYS / 48 HRS / 24 HRS *(confirm with lab in advance if quick turn-around is required)* Lab Quotation No: *(if applicable)*

Comments/ Instructions: Asbestos presence / absence

Send report to *(email address)*: cplatell@eesigroup.com // jbarwood@eesigroup.com

Cc: invoice to *(email address)*: accounts@eesigroup.com

	Name	Signature	Date	Time
Sent off Site/Office by:	Claude Platell		4/07	
Receiving Lab:	Soogfyho	ALS	4/7/22	1500
Receiving Lab:				

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED
Phone: (0x) xxxx xxxx
Fax: (0x) xxxxx xxxx
PO Box: PO Box xx City State Postcode
Email: eesXXX@eesigroup.com

CHAIN OF CUSTODY - ANALYSIS REQUEST FORM

Job No: 122040 Laboratory: ALS

Project Manager: CP. Sampler: CP Site Location: 505 Wilson St Gateshead Sheet: 1 of 1

No. of samples	Sample ID/ Depth	Anticipated Result (PID/EC reading	Date sampled	Time sampled	Sample Matrix: Soil	Water	Sediment	Analysis Required: S-18												Sample-specific instructions/ notes
1	TB				X			X												
2	TS. 10		4/07/22.		X			X												
2	TOTAL				2			2												

Environmental Division
Sydney
Work Order Reference
ES2223348

Telephone : +61-2-8784 8555

Turn Around *(circle)*: NORMAL / 3 DAYS / 48 HRS / 24 HRS *(confirm with lab in advance if quick turn-around is required)*

Lab Quotation No. *(if applicable)*:

Comments/ Instructions: Add to: ES2223348

Send report to *(email address)*: cplatell@eesigroup.com ljbarwood@eesigroup.com

Cc: invoice to *(email address)*: accounts@eesigroup.com

	Name	Signature	Date	Time
Sent off Site/Office by:	Claude Platell		7/07/22	
Receiving Lab:	~~Eco Sway~~	NES.	7/7/22	1530
Receiving Lab:				

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED
Phone: (0x) xxxx xxxx
Fax: (0x) xxxxx xxxx
PO Box: PO Box xx City State Postcode
Email: eesXXX@eesigroup.com

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2223348**

Client	: **ENVIRONMENTAL EARTH SCIENCES**	Laboratory	: Environmental Division Sydney
Contact	: CLAUDE PLATELL	Contact	: Khaleda Ataei
Address	: 82-84 DICKSON AVENUE ARTARMON NSW, AUSTRALIA 2064	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: cplatell@eesigroup.com	E-mail	: khaleda.ataei@alsglobal.com
Telephone	: ----	Telephone	: + 61 2 8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 122040	Page	: 1 of 3
Order number	: ----	Quote number	: ES2021ENVEAR0011 (EN/010/21)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: 505 Wilson St, Eveleigh		
Sampler	: CP		

Dates

Date Samples Received	: 04-Jul-2022 15:00	Issue Date	: 05-Jul-2022
Client Requested Due Date	: 11-Jul-2022	Scheduled Reporting Date	: **11-Jul-2022**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 5.2'C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 14 / 11

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Sample 'IL01' has been forwarded to Envirolab for analysis.**
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be conducted by ALS Newcastle.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	*Sampling date / time*	*Sample ID*	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200 Asbestos Identification in Soils -	SOIL - EP080 BTEXN	SOIL - S-18 (NO MOIST) TRH(C6-C9)/BTEXN with No Moisture for TBs	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2223348-001	30-Jun-2022 00:00	BH1_0.0-0.05		✓	✓			✓
ES2223348-002	30-Jun-2022 00:00	BH1_0.1-0.2		✓	✓			✓
ES2223348-003	30-Jun-2022 00:00	BH1_0.4-0.5	✓					
ES2223348-004	30-Jun-2022 00:00	BH2_0.0-0.1		✓	✓			✓
ES2223348-005	30-Jun-2022 00:00	BH3_0.2-0.3		✓	✓			✓
ES2223348-006	30-Jun-2022 00:00	BH3_0.7-0.8	✓					
ES2223348-007	30-Jun-2022 00:00	BH4_0.3-0.4		✓	✓			✓
ES2223348-008	30-Jun-2022 00:00	BH5_0.1-0.2	✓					
ES2223348-009	30-Jun-2022 00:00	BH5_0.4-0.5		✓	✓			✓
ES2223348-010	30-Jun-2022 00:00	BH6_0.1-0.2		✓	✓			✓
ES2223348-011	30-Jun-2022 00:00	BH6_0.5-0.6		✓	✓			✓
ES2223348-012	30-Jun-2022 00:00	FD1		✓				✓
ES2223348-013	30-Jun-2022 00:00	TB					✓	
ES2223348-014	16-May-2022 00:00	TS 22				✓		

Proactive Holding Time Report

The following table summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Client Sample ID(s)	Container	Due for extraction	Due for analysis	Samples Received		Instructions Received	
				Date	Evaluation	Date	Evaluation
EP080: TRH Volatiles/BTEX							
TS 22	Soil Glass Jar - Unpreserved	30-May-2022	30-May-2022	04-Jul-2022	✘	----	----

Requested Deliverables

ACCOUNTS PAYABLE (EESI GROUP)

- A4 - AU Tax Invoice (INV)	Email	accounts@eesigroup.com

ALL INVOICES MELB ADDRESS

- A4 - AU Tax Invoice (INV)	Email	accounts@eesigroup.com

CLAUDE PLATELL

- *AU Certificate of Analysis - NATA (COA)	Email	cplatell@eesigroup.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	cplatell@eesigroup.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	cplatell@eesigroup.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	cplatell@eesigroup.com
- Chain of Custody (CoC) (COC)	Email	cplatell@eesigroup.com
- EDI Format - ENMRG (ENMRG)	Email	cplatell@eesigroup.com
- EDI Format - ESDAT (ESDAT)	Email	cplatell@eesigroup.com

JAMES BARWOOD

- *AU Certificate of Analysis - NATA (COA)	Email	jbarwood@eesigroup.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	jbarwood@eesigroup.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	jbarwood@eesigroup.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	jbarwood@eesigroup.com
- Chain of Custody (CoC) (COC)	Email	jbarwood@eesigroup.com
- EDI Format - ENMRG (ENMRG)	Email	jbarwood@eesigroup.com
- EDI Format - ESDAT (ESDAT)	Email	jbarwood@eesigroup.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2223348**	Page	: 1 of 10
Client	: **ENVIRONMENTAL EARTH SCIENCES**	Laboratory	: Environmental Division Sydney
Contact	: CLAUDE PLATELL	Contact	: Khaleda Ataei
Address	: 82-84 DICKSON AVENUE ARTARMON NSW, AUSTRALIA 2064	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: + 61 2 8784 8555
Project	: 122040	Date Samples Received	: 04-Jul-2022 15:00
Order number	: ----	Date Analysis Commenced	: 05-Jul-2022
C-O-C number	: ----	Issue Date	: 12-Jul-2022 17:32
Sampler	: CP		
Site	: 505 Wilson St, Eveleigh		
Quote number	: EN/010/21		
No. of samples received	: 17		
No. of samples analysed	: 12		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Jake Spooner	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG035: Positive Mercury result ES2223348 #4 has been confirmed by reanalysis.
- EP080: The trip spike and its control have been analysed for volatile TPH and BTEXN only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained. Confirmed by re-extraction and re-analysis.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH1_0.0-0.05	BH1_0.1-0.2	BH2_0.0-0.1	BH3_0.2-0.3	BH4_0.3-0.4
			Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	ES2223348-001	ES2223348-002	ES2223348-004	ES2223348-005	ES2223348-007
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	15.0	7.0	12.2	11.7	5.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	No
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Asbestos Type	1332-21-4	-	--	-	-	-	-	-
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
Sample weight (dry)	----	0.01	g	142	205	208	137	403
APPROVED IDENTIFIER:	----	-	--	J.SPOONER	J.SPOONER	J.SPOONER	J.SPOONER	J.SPOONER
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	90	10	35	4	3
Copper	7440-50-8	5	mg/kg	43	10	60	6	22
Lead	7439-92-1	5	mg/kg	552	132	3570	74	136
Nickel	7440-02-0	2	mg/kg	32	5	9	2	<2
Zinc	7440-66-6	5	mg/kg	222	89	971	109	73
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	<0.1	0.6	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	2.3	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	2.2	<0.5	15.6	0.8	0.8
Anthracene	120-12-7	0.5	mg/kg	0.6	<0.5	4.7	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	4.1	0.7	14.7	1.2	1.8
Pyrene	129-00-0	0.5	mg/kg	4.1	0.8	11.8	1.1	1.8
Benz(a)anthracene	56-55-3	0.5	mg/kg	1.8	<0.5	6.6	<0.5	0.8
Chrysene	218-01-9	0.5	mg/kg	1.9	<0.5	5.5	<0.5	0.8
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	2.1	<0.5	6.4	0.5	1.0
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	0.8	<0.5	2.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	2.4	0.5	6.2	0.6	1.1
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	1.2	<0.5	2.8	<0.5	0.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH1_0.0-0.05	BH1_0.1-0.2	BH2_0.0-0.1	BH3_0.2-0.3	BH4_0.3-0.4
			Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	ES2223348-001	ES2223348-002	ES2223348-004	ES2223348-005	ES2223348-007
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	**1.0**	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	**1.3**	<0.5	**2.9**	<0.5	**0.7**
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	**22.5**	**2.0**	**83.5**	**4.2**	**9.4**
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	**3.0**	**0.5**	**9.1**	**0.6**	**1.4**
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**3.3**	**0.8**	**9.1**	**1.0**	**1.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**3.5**	**1.2**	**9.1**	**1.3**	**1.9**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	**300**	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	**180**	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	**480**	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	**120**	<100	**420**	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	**130**	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	**120**	<50	**550**	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**84.5**	**86.9**	**83.8**	**89.0**	**88.0**
2-Chlorophenol-D4	93951-73-6	0.5	%	**90.4**	**93.2**	**88.2**	**93.3**	**90.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH1_0.0-0.05	BH1_0.1-0.2	BH2_0.0-0.1	BH3_0.2-0.3	BH4_0.3-0.4
				Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		ES2223348-001	ES2223348-002	ES2223348-004	ES2223348-005	ES2223348-007
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2.4.6-Tribromophenol	118-79-6	0.5	%		79.3	80.7	89.1	87.1	84.2
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		100	103	101	105	104
Anthracene-d10	1719-06-8	0.5	%		106	108	93.4	112	112
4-Terphenyl-d14	1718-51-0	0.5	%		91.7	92.0	89.9	95.2	93.1
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		78.3	85.5	78.5	82.0	84.5
Toluene-D8	2037-26-5	0.2	%		74.1	91.6	78.2	79.5	76.9
4-Bromofluorobenzene	460-00-4	0.2	%		85.4	101	90.0	92.1	88.4

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH5_0.4-0.5	BH6_0.1-0.2	BH6_0.5-0.6	FD1	TB
			Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	06-Jul-2022 00:00
Compound	CAS Number	LOR	Unit	ES2223348-009	ES2223348-010	ES2223348-011	ES2223348-012	ES2223348-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	19.0	11.2	11.6	19.1	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	----	----
Asbestos Type	1332-21-4	-	--	-	-	-	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	----	----
Organic Fibre	----	0.1	g/kg	No	No	No	----	----
Sample weight (dry)	----	0.01	g	172	293	309	----	----
APPROVED IDENTIFIER:	----	-	--	J.SPOONER	J.SPOONER	J.SPOONER	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	5	7	7	4	----
Copper	7440-50-8	5	mg/kg	<5	<5	<5	6	----
Lead	7439-92-1	5	mg/kg	6	21	<5	63	----
Nickel	7440-02-0	2	mg/kg	<2	2	4	2	----
Zinc	7440-66-6	5	mg/kg	<5	7	<5	102	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	0.8	<0.5	0.7	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.1	<0.5	1.0	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	1.0	<0.5	1.0	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH5_0.4-0.5	BH6_0.1-0.2	BH6_0.5-0.6	FD1	TB
				Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	06-Jul-2022 00:00
Compound	CAS Number	LOR	Unit		ES2223348-009	ES2223348-010	ES2223348-011	ES2223348-012	ES2223348-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	**2.9**	<0.5	**3.2**	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	**0.5**	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.8**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**90.7**	**85.0**	**88.5**	**86.6**	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**96.7**	**89.7**	**93.0**	**92.3**	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH5_0.4-0.5	BH6_0.1-0.2	BH6_0.5-0.6	FD1	TB
				Sampling date / time	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	30-Jun-2022 00:00	06-Jul-2022 00:00
Compound	CAS Number	LOR	Unit		ES2223348-009	ES2223348-010	ES2223348-011	ES2223348-012	ES2223348-015
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2.4.6-Tribromophenol	118-79-6	0.5	%		85.1	76.2	81.1	77.0	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		93.6	105	100	104	----
Anthracene-d10	1719-06-8	0.5	%		109	109	110	108	----
4-Terphenyl-d14	1718-51-0	0.5	%		96.9	94.3	94.6	93.9	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		83.6	76.2	90.5	80.4	83.5
Toluene-D8	2037-26-5	0.2	%		77.7	76.9	93.7	76.6	92.2
4-Bromofluorobenzene	460-00-4	0.2	%		91.9	85.2	103	90.6	104

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS	TSC-10	----	----	----
			Sampling date / time	04-Jul-2022 00:00	04-Jul-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2223348-016	ES2223348-017	--------	--------	--------
				Result	Result	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	**5.5**	**6.7**	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	**1.5**	**1.9**	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	**8.1**	**10.0**	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	**3.7**	**4.7**	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	**18.8**	**23.3**	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	**11.8**	**14.7**	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**86.4**	**91.4**	----	----	----
Toluene-D8	2037-26-5	0.2	%	**100**	**105**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**103**	**108**	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH1_0.0-0.05 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH1_0.1-0.2 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH2_0.0-0.1 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH3_0.2-0.3 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH4_0.3-0.4 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH5_0.4-0.5 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH6_0.1-0.2 - 30-Jun-2022 00:00	Soil sample.
EA200: Description	BH6_0.5-0.6 - 30-Jun-2022 00:00	Soil sample.

Surrogate Control Limits

Sub-Matrix: **SOIL**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2223348**	Page	: 1 of 9
Client	: **ENVIRONMENTAL EARTH SCIENCES**	Laboratory	: Environmental Division Sydney
Contact	: CLAUDE PLATELL	Contact	: Khaleda Ataei
Address	: 82-84 DICKSON AVENUE ARTARMON NSW, AUSTRALIA 2064	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: + 61 2 8784 8555
Project	: 122040	Date Samples Received	: 04-Jul-2022
Order number	: ----	Date Analysis Commenced	: 05-Jul-2022
C-O-C number	: ----	Issue Date	: 12-Jul-2022
Sampler	: CP		
Site	: 505 Wilson St, Eveleigh		
Quote number	: EN/010/21		
No. of samples received	: 17		
No. of samples analysed	: 12		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Jake Spooner	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4443900)									
ES2223277-021	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	17	17	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	11	11	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	13	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	11	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	51	50	0.0	0% - 50%
ES2223348-001	BH1_0.0-0.05	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	90	77	15.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	32	29	9.0	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	43	40	6.8	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	552	589	6.6	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	222	188	16.5	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4443903)									
ES2223277-023	Anonymous	EA055: Moisture Content	----	0.1	%	19.0	18.9	0.7	0% - 50%
ES2223348-005	BH3_0.2-0.3	EA055: Moisture Content	----	0.1	%	11.7	12.8	9.5	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4443901)									
ES2223348-001	BH1_0.0-0.05	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.2	0.2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4442937)									
ES2223337-001	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4442937) - continued									
ES2223337-001	Anonymous	EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2223348-011	BH6_0.5-0.6	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4442936)									
ES2223337-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	140	110	25.3	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	140	160	12.2	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4442936) - continued									
ES2223337-001	Anonymous	EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2223348-011	BH6_0.5-0.6	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4443065)									
ES2223259-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2223337-003	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4447394)									
ES2223133-023	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2223816-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4442936)									
ES2223337-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	250	240	6.8	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2223348-011	BH6_0.5-0.6	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4443065)									
ES2223259-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2223337-003	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4447394)									
ES2223133-023	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	16	19	16.8	No Limit
ES2223816-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 4443065)									
ES2223259-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2223337-003	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4447394)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4447394) - continued									
ES2223133-023	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2223816-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4443900)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	105	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	102	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	119	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	111	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	114	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	112	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	96.2	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4443901)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	98.8	70.0	125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4442937)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	96.3	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	105	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	104	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	106	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	99.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	106	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	105	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	93.4	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	99.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.6	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	105	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	100	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	99.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	98.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4442936)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	86.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	99.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.6	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4443065)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	101	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4447394)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4447394) - continued								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	112	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4442936)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	91.9	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	100	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	99.8	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4443065)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	100	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4447394)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	112	68.4	128
EP080: BTEXN (QCLot: 4443065)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	95.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	92.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	89.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	90.2	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	91.1	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	81.3	63.0	119
EP080: BTEXN (QCLot: 4447394)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	107	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	108	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	105	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	110	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	108	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	98.0	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4443900)							
ES2223277-021	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	93.9	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	99.6	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	97.1	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4443900) - continued							
ES2223277-021	Anonymous	EG005T: Lead	7439-92-1	250 mg/kg	98.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	97.8	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.3	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4443901)							
ES2223348-001	BH1_0.0-0.05	EG035T: Mercury	7439-97-6	5 mg/kg	98.5	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4442937)							
ES2223337-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	94.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	100	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4442936)							
ES2223337-001	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	113	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	118	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	123	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4443065)							
ES2223259-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	86.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4447394)							
ES2223816-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	113	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4442936)							
ES2223337-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	99.3	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	124	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4443065)							
ES2223259-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	96.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4447394)							
ES2223816-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	108	70.0	130
EP080: BTEXN (QCLot: 4443065)							
ES2223259-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	83.8	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	85.3	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	86.4	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	88.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	89.6	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	89.3	70.0	130
EP080: BTEXN (QCLot: 4447394)							
ES2223816-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	99.9	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	100	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	103	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 4447394) - continued							
ES2223816-001	Anonymous	EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	105	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	103	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	86.5	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2223348**	Page	: 1 of 6
Client	: **ENVIRONMENTAL EARTH SCIENCES**	Laboratory	: Environmental Division Sydney
Contact	: CLAUDE PLATELL	Telephone	: + 61 2 8784 8555
Project	: 122040	Date Samples Received	: 04-Jul-2022
Site	: 505 Wilson St, Eveleigh	Issue Date	: 12-Jul-2022
Sampler	: CP	No. of samples received	: 17
Order number	: ----	No. of samples analysed	: 12

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**----**	----	----	**06-Jul-2022**	14-Jul-2022	✓
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6	**30-Jun-2022**	**----**	----	----	**05-Jul-2022**	27-Dec-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**07-Jul-2022**	27-Dec-2022	✓	**07-Jul-2022**	27-Dec-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**07-Jul-2022**	28-Jul-2022	✓	**07-Jul-2022**	28-Jul-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**07-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	16-Aug-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
TB	**06-Jul-2022**	**08-Jul-2022**	20-Jul-2022	✓	**09-Jul-2022**	20-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**06-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	14-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**07-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	16-Aug-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
TB	**06-Jul-2022**	**08-Jul-2022**	20-Jul-2022	✓	**09-Jul-2022**	20-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**06-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	14-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
BH1_0.0-0.05, BH1_0.1-0.2, BH2_0.0-0.1, BH3_0.2-0.3, BH4_0.3-0.4, BH5_0.4-0.5, BH6_0.1-0.2, BH6_0.5-0.6, FD1	**30-Jun-2022**	**07-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	16-Aug-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN								
Soil Glass Jar - Unpreserved (EP080)								
TS,	TSC-10	**04-Jul-2022**	**08-Jul-2022**	18-Jul-2022	✓	**09-Jul-2022**	18-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP080)								
TB		**06-Jul-2022**	**08-Jul-2022**	20-Jul-2022	✓	**09-Jul-2022**	20-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP080)								
BH1_0.0-0.05,	BH1_0.1-0.2,	**30-Jun-2022**	**06-Jul-2022**	14-Jul-2022	✓	**08-Jul-2022**	14-Jul-2022	✓
BH2_0.0-0.1,	BH3_0.2-0.3,							
BH4_0.3-0.4,	BH5_0.4-0.5,							
BH6_0.1-0.2,	BH6_0.5-0.6,							
FD1								

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

CHAIN OF CUSTODY - ANALYSIS REQUEST FORM

Job No: 122040 Laboratory: ALS

Project Manager: CP Sampler: CP Site Location: 505 Wilson St Eveleigh Sheet: 1 of 1

No. of samples	Sample ID/ Depth	Anticipated Result (PID)/EC reading	Date sampled	Time sampled	Sample Matrix: Soil	Water	Sediment	Analysis Required: S-26	* Asbestos	S-18	Hold.	Sample-specific instructions/ notes
1	BH1 - 0.0-0.05		30/08/22		X			X	X			
2	BH1 - 0.1-0.2							X	X			
3	BH1 - 0.4-0.5										X	
4	BH2 - 0.0-0.1							X	X			
5	BH3 - 0.2-0.3							X	X			
6	BH3 - 0.7-0.8										X	
7	BH4 - 0.3-0.4							X	X			
8	BH5 - 0.1-0.2										X	
9	BH5 - 0.4-0.5							X	X			
10	BH6 - 0.1-0.2							X	X			
11	BH6 - 0.5-0.6							X	X			
12	FD1							X				
13	ELD1				↓			X				→ forward to envirolab for Combo 3 analysis.
19	TB		↓							X		
14	TS 22		16/08/22							X		
	TOTAL							9	8	2	3	

(1)

Environmental Division Sydney
Work Order Reference
ES2223348

Telephone : + 61-2-8784 8555

Subcon / Forward Lab / Split WO:
Lab / Analysis: Newcastle → Asbestos
Organised By / Date: TJD1 → Envirolab
Relinquished By / Date:
Connote / Courier:

WO No: Lab Quotation No. (if applicable):
Attached By PO / Internal Sheet: Send report to (email address):

Turn Around (circle): **NORMAL / 3 DAYS / 48 HRS / 24 HRS** (confirm with lab in advance if quick turn-around is required)

Comments/ Instructions: Asbestos presence / absence

cplatell@eesigroup.com, mjbarnwood@eesigroup.com

Cc: invoice to (email address): accounts@eesigroup.com

	Name	Signature	Date	Time
Sent off Site/Office by:	Claude Platell		4/07	
Receiving Lab:	Courier	ALS	5/7/22	1500
Receiving Lab:				

ENVIRONMENTAL EARTH SCIENCES CONTAMINATION RESEARCH
ENVIROLAB
Phone: (0x) xxxx xxxx
Fax: (0x) xxxx xxxx
PO Box: PO Box xx City State Postcode
Email: eesXXX@eesigroup.com

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 199694

Date Received: 5.7.2022
Time Received: 1500
Received by: TJHAW
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

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	Environmental & Earth Sciences
Attention	Claude Platell

Sample Login Details

Your reference	122040, 505 Wilson St, Everleigh
Envirolab Reference	299694
Date Sample Received	05/07/2022
Date Instructions Received	05/07/2022
Date Results Expected to be Reported	12/07/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
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	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil
ILD1	✓	✓	✓	✓

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.

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 299694

Client Details

Client	Environmental & Earth Sciences
Attention	Claude Platell
Address	PO Box 380, North Sydney, NSW, 2059

Sample Details

Your Reference	**122040, 505 Wilson St, Eveleigh**
Number of Samples	1 Soil
Date samples received	05/07/2022
Date completed instructions received	05/07/2022

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	12/07/2022
Date of Issue	12/07/2022

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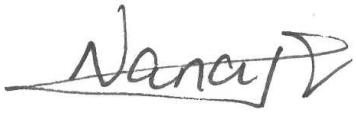
Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Greta Petzold, Assistant Operation Manager
Hannah Nguyen, Metals Supervisor
Kyle Gavrily, Senior Chemist

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		299694-1
Your Reference	UNITS	ILD1
Date Sampled		30/06/2022
Type of sample		Soil
Date extracted	-	06/07/2022
Date analysed	-	07/07/2022
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	83

svTRH (C10-C40) in Soil		
Our Reference		299694-1
Your Reference	UNITS	ILD1
Date Sampled		30/06/2022
Type of sample		Soil
Date extracted	-	06/07/2022
Date analysed	-	12/07/2022
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	80

PAHs in Soil		
Our Reference	UNITS	299694-1
Your Reference		ILD1
Date Sampled		30/06/2022
Type of sample		Soil
Date extracted	-	06/07/2022
Date analysed	-	06/07/2022
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.3
Anthracene	mg/kg	0.1
Fluoranthene	mg/kg	0.6
Pyrene	mg/kg	0.6
Benzo(a)anthracene	mg/kg	0.3
Chrysene	mg/kg	0.3
Benzo(b,j+k)fluoranthene	mg/kg	0.5
Benzo(a)pyrene	mg/kg	0.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.3
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	0.2
Total +ve PAH's	mg/kg	3.5
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.6
Surrogate p-Terphenyl-d14	%	88

Acid Extractable metals in soil		
Our Reference		299694-1
Your Reference	UNITS	ILD1
Date Sampled		30/06/2022
Type of sample		Soil
Date prepared	-	08/07/2022
Date analysed	-	08/07/2022
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	3
Copper	mg/kg	6
Lead	mg/kg	67
Mercury	mg/kg	<0.1
Nickel	mg/kg	2
Zinc	mg/kg	83

Moisture		
Our Reference		299694-1
Your Reference	UNITS	ILD1
Date Sampled		30/06/2022
Type of sample		Soil
Date prepared	-	06/07/2022
Date analysed	-	07/07/2022
Moisture	%	9.8

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			06/07/2022	[NT]	[NT]	[NT]	[NT]	06/07/2022	[NT]
Date analysed	-			07/07/2022	[NT]	[NT]	[NT]	[NT]	07/07/2022	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	100	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	94	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	99	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	106	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	89	[NT]	[NT]	[NT]	[NT]	87	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			06/07/2022	[NT]	[NT]	[NT]	[NT]	06/07/2022	[NT]
Date analysed	-			12/07/2022	[NT]	[NT]	[NT]	[NT]	12/07/2022	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	91	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	91	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
Surrogate o-Terphenyl	%		Org-020	80	[NT]	[NT]	[NT]	[NT]	104	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			06/07/2022	[NT]	[NT]	[NT]	[NT]	06/07/2022	[NT]
Date analysed	-			06/07/2022	[NT]	[NT]	[NT]	[NT]	06/07/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	114	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	95	[NT]	[NT]	[NT]	[NT]	96	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			08/07/2022	[NT]	[NT]	[NT]	[NT]	08/07/2022	[NT]
Date analysed	-			08/07/2022	[NT]	[NT]	[NT]	[NT]	08/07/2022	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	99	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	99	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	105	[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.

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APPENDIX J: QUALITY ASSURANCE AND QUALITY CONTROL

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DATA VALIDATION APPENDIX – PRELIMINARY SITE INVESTIGATION AT 505 WILSON STREET, EVELEIGH, NSW

TRANSPORT FOR NSW

29 JULY 2022
122040
V1

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1 INTRODUCTION

The objective of this data assessment is to evaluate the quality of soil data gathered on 30 June 2022 to assess whether the sample data is of a suitable standard to be utilised in this report. The assessment was completed in general accordance with *Appendix C: Assessment of data quality* of *Schedule B2: Site Characterisation* of the National Environment Protection (Assessment of Site Contamination) Measure 1999 published by the National Environment Protection Council (NEPC 2013).

The general principles that were considered as part of the data validation process were:

- Accuracy – what is the closeness of reported data to the true value?
- Completeness – did the data points provide a suitable spatial assessment of the land surface under investigation?
- Comparability – was the sample methodology consistent across sampling events, what abiotic factors may have influenced the outcomes of the assessment?
- Representativeness – was the media sampled and analysed in accordance with the sampling plan such that samples collected can be considered suitably representative of the environment in the area from which they were obtained?
- Precision – was the laboratory data of a suitable quality to be relied upon for interpretation purpose.

Table 1 provides a summary of the assessments undertaken to enable an assessment of the data based on the above considerations. Overall, it is concluded that the data are of sufficient quality to form the basis of decision making.

Table 1: Summary of Quality Assurance Evaluation

QA Item	Data Quality Indicator	Acceptability Limits	Comment	Appropriate
Completeness				
Soil sampling locations	All critical sample locations sampled.	Potential sources of contamination targeted and sufficient sampling locations to determine magnitude and extent of impact.	Preliminary soil sampling and analysis to target potential sources was completed.	Yes
Sampling Procedures	Standard operating procedures as documented in the body report appropriate and complied with.	Appropriate procedures complied with.	Standard sampling procedures as documented in the body report were complied with.	Yes
Personnel	Experienced sampler utilised.	Sampling undertaken by appropriately trained personnel.	Sampling was undertaken by experienced Environmental Scientists.	Yes
Field Records	Use of standardised field forms including a soil profile logs and COC documentation	Fields records used and appropriately completed.	Samples were sent to the laboratory with appropriate COC documentation, and a sample receipt notice was provided.	Yes
Sample tracking	Appropriate documentation to verify that samples have been appropriately transported from site to the laboratory.	COC documentation and sample receipt notices utilised and appropriately completed.	Samples were sent to the laboratory with appropriate COC documentation, and a sample receipt notice was provided.	Yes
Samples analysed	All critical samples analysed	Samples with evidence of contamination should be analysed for relevant parameters e.g. samples with elevated PID and/or organic odours to be analysed for volatile contaminants.	All critical samples were analysed. No field samples were observed with organic odours or staining.	Yes
Analytical Suite	Samples analysed for CoPCs in accordance with DQOs and CSM.	As per DQI	Samples were analysed for the CoPCs identified in the initial CSM in accordance with the DQOs.	Yes
Laboratory methods	Analytical methods in accordance with ASC NEPM and NATA accredited where possible	Laboratory reports should denote methodologies applied and include a NATA accreditation stamp. Any non-NATA accredited methods must be noted and implications considered.	Samples were directly sent to ALS Environmental and Envirolab. They are NATA accredited laboratory for the methods used, and samples were analysed in accordance with ASC NEPM (2013).	Yes
Laboratory detection limits	Set below the guideline values for all analytes, or sufficient to accurately quantify detectable contaminants.	As per DQI	Laboratory detection limits are sufficient to accurately quantify detectable contaminants.	Yes
Holding times	Sample times complied with as denoted in laboratory reports	As specified for each analyte	All samples were analysed within holding times.	Yes
Consistency of findings	The identification of contamination should accord with field indicators of contamination	Volatile results should be consistent with PID readings/presence of odour/sheen. TDS results should be consistent with electrical conductivity/cation/anions	Results are consistent with field observations as hydrocarbon impact was not identified in the field.	Yes
Comparability				
Sampling Methodology	Same sampling methodology used for each monitoring events for each media type.	Utilisation of similar sampling methods during all test pit sampling events	Bore holes was conducted on the same day, 30 June 2022.	Yes
Decontamination procedures	Equipment in contact with samples sufficiently cleaned to prevent cross contamination	Field and laboratory blank samples below detection limits	Sampling was completed by hand, wearing new gloves, to reduce potential cross contamination. Non-single use items were decontaminated between locations.	Yes
Personnel	Experienced sampler utilised	Sampling undertaken by appropriately trained personnel	Sampling undertaken by suitably qualified environmental consultants	Yes
Climate	Temperature, rainfall, wind, barometric pressure and similar are unlikely to exert a significant influence between sampling events.	Potential effect of rainfall, wind, temperature and barometric pressure considered in interpretation between soil sampling events.	The potential effect of climatic variation is minimal as climatic conditions did not change significant during the sample event.	Yes
Sample handling	Samples collected and handled in the same manner	Samples placed in appropriate containers with appropriate laboratory supplied preservatives.	Samples were collected in laboratory supplied glass jars and containers. Upon collection, samples were immediately placed	Yes

QA Item	Data Quality Indicator	Acceptability Limits	Comment	Appropriate
		Sample retained at temperature of 0 – 4ºC (or as specified for analytical methods).	in a chilled esky and to lower the temperature to below 4₀C before delivery to the laboratory.	
Laboratory methods and PQLs	Same analytical methods used between sampling events PQLs set to allow identification of analytes between sampling events	As per DQI	Sample laboratory methods undertaken.	Yes
Laboratories	Same laboratories between sampling events	As per DQI where possible	The same laboratories were used for each sampling event.	Yes
Units	Analytes are measured in the same units between sampling events	As per DQI	The analytes were measured in the same units.	Yes
Representativeness				
Media sampled	Appropriate media sampled according to DQOs, CSM and sampling methodology	Samples collected to reflect the characteristics of the medium. Appropriate collection, handling, storage and preservation	Soil samples taken were appropriate according to DQOs, CSM, and sampling methodology.	Yes
Media analysed	All samples analysed according to sampling methodology	Samples analysed to reflect properties of field samples	Samples were chosen to reflect properties of field samples.	Yes
Homogeneity	Samples representative of media assessed	Homogeneity assessed by consideration of data variability, including statistics	Homogeneity has been assessed by consideration of data variability and the inherent heterogeneity in shallow fill which was present at all locations.	Yes
Precision				
Sampling Procedures	Standard operating procedures as documented in the sampling methodology appropriate and complied with.	Appropriate procedures complied with	Standard operating procedures as documented in the sampling methodology were appropriate and complied with.	Yes
Laboratory duplicates	RPDs within acceptable ranges	RPDs >35% may compromise the data for duplicate soil samples	No laboratory duplicates outliers occur.	Yes
Field QC – field duplicate frequency	Duplicate frequencies in accordance with the ASC NEPM and AS4482.1-2005	Field split duplicate soil samples will be collected at a frequency of approximately 5% of the primary samples analysed at the primary laboratory. Field blind replicate samples will be collected at a frequency of approximately 5% of the total number of primary samples.	One field split duplicate and one blind replicate were collected for the 8 primary samples which is a rate of 12.5%.	Yes
Field duplicate results	RPDs within acceptable ranges	RPDs >50% may compromise the data for inorganic analytes. RPDs >70% may compromise the data for organic analytes. The level of error must be considered when interpreting the data set relevant to the RPDs	RPD results are within acceptable limits and are presented in **Table F1**.	Yes
Accuracy (bias)				
Sampling Procedures	Standard operating procedures as documented in sampling methodology appropriate and complied with.	Appropriate procedures complied with.	Standard operating procedures as documented in sampling methodology were appropriate and complied with	Yes
Field QC –trip blank samples	Analytes not detected	Contaminants of concern should not be detected or should not be present above background concentrations.	Trip blank collected and analysed. Results presented in **Table F2**.	Yes
Laboratory reagent blanks	Analytes not detected	Method blanks should not return any positives on analysis	No method blank value outliers occur.	Yes
Laboratory method blanks	Analytes not detected	Method blanks should not return any positives on analysis	No method blank value outliers occur.	Yes
Matrix spike samples	Recoveries within acceptable ranges for matrix spikes undertaken on site derived samples.	Control samples should generally give a recovery of 75-125%, depending on the chemical and medium	No Matrix spike value outliers occur.	Yes
Laboratory surrogate spike samples	Recoveries within acceptable ranges	Control samples should generally give a recovery of 75-125%, depending on the chemical and medium	No surrogate recovery outliers occur.	Yes

QA Item	Data Quality Indicator	Acceptability Limits	Comment	Appropriate
Laboratory duplicate samples	RPDs within acceptable ranges	RPDs >35% may compromise the data for duplicate soil samples	No laboratory duplicates outliers occur.	Yes
Laboratory Control Spikes	Recoveries within acceptable ranges	Control samples should generally give a recovery of 75-125%, depending on the chemical and medium	No laboratory control outliers occur.	Yes

Table 2: Data quality indicators (DQI)

Parameter	Procedure	Minimum Frequency	Criteria	
			(5 to 10x LOR[4])	>10x LOR
Precision	Field Duplicates	1 in 20 - metals	<80 RPD	<50 RPD
		1 in 20 - semi-volatiles	<100 RPD	<80 RPD
		1 in 20 - volatiles	<150 RPD	<130 RPD
	Lab Replicate*	1 in 20	<50 RPD	<30 RPD
Accuracy*	Reference Material	1 in 10	60% to 140%R	80% to 120%R
	Matrix spikes			
	Surrogate spikes			
Representativeness*	Reagent Blanks	1 per batch	No detection	
	Holding Times*	Every sample	-	
Blanks**	Trip Blank	1 per batch	No detection	
	Rinsate Blanks			
Sensitivity	Limit of Reporting	Every sample	LOR < ½ site criteria	

Notes:
1. RPD – relative percentage difference;
2. %R – percent recovery;
3. LOR – limit of reporting;
4. no limit at <5x LOR;
5. * the MDQI is usually specified in the standard method. If not, use the default values set out in this table; and
6. ** only necessary when measuring dissolved metals and volatile organic compounds in water samples.

2 FIELD QA/QC

2.1 Field Duplicate Samples

Results for split duplicate and blind replicate samples are presented in **Table F1** for soil in the body report. Reported concentrations in primary samples were compared to those reported in split duplicate and blind replicate samples and relative percent difference (RPDs) were calculated using the following equation:

$$RPD = \frac{(a-b)}{((a+b) \div 2)} \times 100$$

RPDs reported outside the acceptable range (as outlined in **Error! Reference source not found.**) have been further assessed in **Table 3**.

Table 3: Summary and Evaluation of the RPD Discrepancies

Analyte	Primary Sample ID	Sample Data	Primary Sample (mg/kg)	Blind Replicate (mg/kg)	Primary/ Blind RPD (%)	Split Duplicate (mg/kg)	Primary/ Split RPD (%)	Comment
Phenanthrene	ALS ES2223348	30/06/2022	0.8	0.7	13	0.3	91	Below DQO of 100%

Bold RPDs exceed the adopted acceptance criteria of 50% for inorganic compounds and 70% for organic compounds.
N/A – where one sample is reported to contain concentrations below the laboratory limit of reporting it is not considered possible to calculate an RPD.

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Table F1 - QAQC Intra & Interlab Duplicates

Job Number: 122040
Location: 505 Wilson Street, Eveleigh, NSW

Field ID:	BH3_0.2-0.3	FD1	RPD	BH3_0.2-0.3	ILD1	RPD
Sample Type:	Primary	Intra-Lab		Primary	Inter-Lab	
Medium:	Soil	Soil		Soil	Soil	
Date /Time:	30/06/2022 15:00	30/06/2022 15:00		30/06/2022 15:00	30/06/2022	
Lab Report Number:	ALS ES2223348	ALS ES2223348	Intra-Lab	ALS ES2223348	Envirolab 299694	Inter-Lab

ChemName	Unit	EQL						
BTEX								
Naphthalene (VOC)	mg/kg	1	<1	<1	NC	<1	<1	NC
Benzene	mg/kg	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC
Toluene	mg/kg	0.5	<0.5	<0.5	NC	<0.5	<0.5	NC
Ethylbenzene	mg/kg	0.5	<0.5	<0.5	NC	<0.5	<1	NC
Xylene (m & p)	mg/kg	0.5	<0.5	<0.5	NC	<0.5	<2	NC
Xylene (o)	mg/kg	0.5	<0.5	<0.5	NC	<0.5	<1	NC
Xylene Total	mg/kg	0.5	<0.5	<0.5	NC	<0.5	<1	NC
Total BTEX	mg/kg	0.2	<0.2	<0.2	NC	<0.2		
TRH								
C6-C10 Fraction (F1)	mg/kg	10	<10	<10	NC	<10	<25	NC
C6-C10 (F1 minus BTEX)	mg/kg	10	<10	<10	NC	<10	<25	NC
>C10-C16 Fraction (F2)	mg/kg	50	<50	<50	NC	<50	<50	NC
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg	50	<50	<50	NC	<50	<50	NC
>C16-C34 Fraction (F3)	mg/kg	100	<100	<100	NC	<100	<100	NC
>C34-C40 Fraction (F4)	mg/kg	100	<100	<100	NC	<100	<100	NC
>C10-C40 Fraction (Sum)	mg/kg	50	<50	<50	NC	<50	<50	NC
Inorganics								
Moisture Content	%	0.1	11.7	19.1	48	11.7	9.8	18
Metals								
Arsenic	mg/kg	4	<5	<5	NC	<5	<4	NC
Cadmium	mg/kg	0.4	<1	<1	NC	<1	<0.4	NC
Chromium (III+VI)	mg/kg	1	4	4	NC	4	3	29
Copper	mg/kg	1	6	6	NC	6	6	NC
Lead	mg/kg	1	74	63	16	74	67	10
Mercury	mg/kg	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC
Nickel	mg/kg	1	2	2	NC	2	2	NC
Zinc	mg/kg	1	109	102	7	109	83	27
PAH								
Benzo(b+j+k)fluoranthene	mg/kg	0.2					0.5	
Acenaphthene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	<0.1	NC
Acenaphthylene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	<0.1	NC
Anthracene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	0.1	NC
Benzo(a)anthracene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	0.3	NC
Benzo(a) pyrene	mg/kg	0.05	0.6	0.5	18	0.6	0.4	40
Benzo(b+j)fluoranthene	mg/kg	0.5	0.5	<0.5	NC	0.5		
Benzo(g,h,i)perylene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	0.2	NC
Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	NC	<0.5		
Chrysene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	0.3	NC
Dibenz(a,h)anthracene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	<0.1	NC
Fluoranthene	mg/kg	0.1	1.2	1.0	18	1.2	0.6	67
Fluorene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	<0.1	NC
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	0.3	NC
Naphthalene	mg/kg	0.1	<0.5	<0.5	NC	<0.5	<0.1	NC
Phenanthrene	mg/kg	0.1	0.8	0.7	13	0.8	0.3	91
Pyrene	mg/kg	0.1	1.1	1.0	10	1.1	0.6	59
PAHs (Sum of total)	mg/kg	0.5	4.2	3.2	27	4.2		
PAHs (Sum of positives)	mg/kg	0.05					3.5	
TPH								
C6-C9 Fraction	mg/kg	10	<10	<10	NC	<10	<25	NC
C10-C14 Fraction	mg/kg	50	<50	<50	NC	<50	<50	NC
C15-C28 Fraction	mg/kg	100	<100	<100	NC	<100	<100	NC
C29-C36 Fraction	mg/kg	100	<100	<100	NC	<100	<100	NC
C10-C36 Fraction (Sum)	mg/kg	50	<50	<50	NC	<50	<50	NC

Notes:

BTEX: Benzene, Toluene, Ethylbenzene, Xylene
EQL: Estimated Quantitation Limit
NL: Non-limiting
PAH: Polycyclic aromatic hydrocarbons
TPH: Total petroleum hydrocarbons
TRH: Total recoverable hydrocarbons
RPD: Relative Percentage Difference
NT: Not Tested
NC: Not Calculated
FAIL

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 80 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 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

Table F2 - QAQC Trip Blank & Trip spike recovery

Job Number: 122040
Location:505 Wilson Street, Eveleigh, NSW

Field ID:	TB	TS20	TC	Spike recovery (percentage)
Sample Type:	Trip Blank	Trip spike	trip control	
Media:	Soil	Soil	Soil	
Sampled Date:	19/04/2022	29/04/2022	29/04/2022	
Laboratory Report ID:	ES2214737-039	ES2214737-038	ES2214737-040	

Chem_Group	ChemName	Units	EQL				
TRH	C6-C10	mg/kg	10	*<10*	NT	NT	NT
	C6-C10 (F1 minus BTEX)	mg/kg	10	*<10*	NT	NT	NT
BTEX	Naphthalene (VOC)	mg/kg	0.2	*<1*	*<1*	*<1*	*NC*
	Benzene	mg/kg	0.5	*<0.2*	*<0.2*	*<0.2*	*NC*
	Toluene	mg/kg	0.5	*<0.5*	5.5	6.7	82.09
	Ethylbenzene	mg/kg	0.5	*<0.5*	1.5	1.9	78.947
	Xylene (m & p)	mg/kg	0.5	*<0.5*	8.1	10.0	81
	Xylene (o)	mg/kg	0.5	*<0.5*	3.7	4.7	78.723
	Xylene Total	mg/kg	0.2	*<0.5*	11.8	14.7	80.272
	Total BTEX	mg/kg	0.5	*<0.2*	18.8	23.3	80.687

Notes:

NT: Not Tested
BTEX: Benzene, Toluene, Ethylbenzene, Xylene
EQL: Estimated Quantitation Limit
NL: Non-limiting
TPH: Total petroleum hydrocarbons
TRH: Total recoverable hydrocarbons