
**Report on a Preliminary Site Investigation
(Contamination) with Limited Sampling**

**Proposed Wollongong Private Hospital
Expansion**

**366 - 368 Crown Street & 15 - 23 Urunga
Parade, Wollongong NSW**

Prepared for AA Crown Holdings Pty Ltd

Project 73522.15

18 October 2025

Document History

Details

Project No.	73522.12
Document Title	Report on Preliminary Site Investigation (Contamination) with Limited Sampling
Site Address	366 - 368 Crown Street & 15 - 23 Urunga Parade, Wollongong NSW
Report Prepared For	AA Crown Holdings Pty Ltd
Filename	73522.15.R.001.Rev0

Status and Review

Status	Prepared by	Reviewed by	Date issued
Revision 0	Zachariah Kraich	Glyn Eade / Kenton Horsley	18 October 2025

Distribution of Copies

Status	Issued to
Revision 0	AA Crown Holdings Pty Ltd, Mr Jack Ramirez

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

Signature

Date

Author		18 October 2025
Reviewer	 For G. Eade (CEnvP SC961)	18 October 2025

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Proposed Wollongong Private Hospital Expansion

366 - 368 Crown Street & 15 - 23 Urunga Parade, Wollongong NSW

1. Introduction

Douglas Partners Pty Ltd (Douglas) has been engaged by 360 Property Agency on behalf of AA Crown Holdings Pty Ltd to prepare this preliminary site investigation (contamination) (PSI) for the proposed Wollongong Private Hospital Expansion (WPHE) located at 366 – 368 Crown Street & 15 – 23 Urunga Parade, Wollongong NSW (hereinafter referred to as ‘the site’). The site is shown on Figure 1, overleaf, and Drawing 1 provided in Appendix A.

The investigation was commissioned in an email dated 29 September 2025 by Marcelo Ramirez of 360 Property Agency on behalf of AA Crown Holdings Pty Ltd and was undertaken in general accordance with Douglas’ email proposal dated 8 August 2025.

It should be further noted that this PSI incorporates relevant information from and supersedes previous contaminated investigations undertaken by Douglas on the site, specifically Douglas reports 73522.08.R.001.Rev1 dated 22 April 2022 and 73522.12.R.001.Rev0 dated 31 March 2025.

The objective of the PSI is to provide preliminary information on sub-surface conditions at the site to assist in determining the compatibility of the site for the proposed development and whether further investigation and/or management is required. It is understood that the report will be used for preliminary design and to support a state significant development application to the NSW Department of Planning and Environment.

This report must be read in conjunction with all appendices including the notes provided in Appendix B.

The following key guidelines were consulted in the preparation of this report:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [the ‘NEPM’] (NEPC, 2013); and
- NSW EPA *Guidelines for Consultants Reporting on Contaminated Land* (NSW EPA, 2020).

The PSI was undertaken in conjunction with a preliminary geotechnical investigation and preliminary hydrogeological investigation, the findings of which are reported under separate covers.

2. Proposed development

The information provided by the client indicates that the proposed WPHE, a state significant development application (SSDA), will comprise a twelve-storey building over 5 – 6 basement levels that includes car parking and an oncology section in Basement Level 6.

Based on the Wollongong Private Hospital Master Plan prepared by Conybeare Morrison International Pty Ltd dated 18 August to 2 September 2025, the proposed building and basement footprint is mostly located in the lots adjacent to Urunga Parade and extends into the rear part of the lots adjacent to Crown Street (i.e., the footprint doesn't extend into the heritage buildings located in the Crown Street lots). The proposed excavation will be set back approximately 0.5 m to 1.5 m from Urunga Parade pavement, approximately 5.8 m to 10.3 m from the western site boundary with 25 Urunga Parade, 2.8 m to 3.8 m from southern and western site boundaries with 370 Crown Street, and about 42 m from the Crown Street pavement. The proposed excavation abuts and ties into the existing basement for the current WPH site.

The plans show that the finished floor levels for Basement Levels 5 and 6 will be RL 26.9 and RL 20.9, respectively. To achieve the proposed finished floor levels, excavation depths in the range of about 6 m to 11 m for Basement Level 5 and 11.5 m to 23.5 m for Basement Level 6 (oncology) are anticipated.

3. Scope of work

The scope of work for the PSI comprised:

- Review of previous Douglas investigations undertaken on the site and adjacent site;
- Review of site information comprising published maps of acid sulfate soil (ASS) potential, geological and topographical maps/drawings and groundwater bores registered with WaterNSW;
- Review of readily available site history information including:
 - o Available historical and recent aerial photographs;
 - o Historical titles and deposited plans;
 - o Public databases held under the *Contaminated Land Management Act 1997* (the 'CLM Act') and the *Protection of the Environment Operations Act 1997* (the 'POEO Act'); and
 - o The Section 10.7 (2) and (5) Planning Certificate.
- Conduct a site walkover to observe surface conditions / situations that indicate a potential for contamination and identify human and / or environmental receptors;
- Obtaining Before You Dig Australia (BYDA) service plans to identify underground services prior to intrusive investigation works;
- Drill one borehole (Bore 401) using a Hanjin 8D track-mounted purpose-built soil sampling and drilling rig to a depth of 15.6 m below ground level (bgl);
- Logging of the soil and rock profile encountered by an experienced geo-environmental engineer;

- Collection of three primary soil samples from Bore 401. Soil samples were collected at regular depth intervals, change in strata or indications of potential contamination. Each soil sample comprised one 250 mL soil jar and one 500 mL plastic bag for asbestos analysis;
- Collection and testing of replicate samples for volatile organic compounds (VOCs) using a calibrated photo-ionisation detector (PID), in the field, of all soil samples collected;
- Laboratory analysis of selected soil samples at a National Association of Testing Authorities (NATA) accredited laboratory (Envirolab Services) for various combinations of the following contaminants of potential concern (CoPC):
 - o Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
 - o Polycyclic aromatic hydrocarbons (PAH);
 - o Total recoverable hydrocarbons (TRH);
 - o Benzene, toluene, ethylbenzene and xylene (BTEX);
 - o Phenols;
 - o Organochlorine pesticides (OCP) and organophosphorus pesticides (OPP);
 - o Polychlorinated biphenyls (PCB); and
 - o Asbestos (fibrous asbestos (FA), asbestos fines (AF) and identification (ID)).
- Analysis of two selected soil samples for pH and cation exchange capacity (CEC) for the purposes of deriving site-specific ecological investigation levels (EILs);
- Field sampling and laboratory analysis in compliance with standard environmental protocols, including a Quality Assurance/Quality Control (QA/QC) plan consisting of approximately 10% replicate sampling and appropriate Chain of Custody (CoC) procedures and in-house laboratory QA/QC testing; and
- Preparation and provision of this report detailing the methodology and results of the limited intrusive investigation and providing comment on:
 - o Identifying observed potential sources of contamination and associated potential contaminants;
 - o The compatibility of the site for the proposed development; and
 - o Recommendations for further work if considered necessary.

4. Background

Douglas has previously completed the following relevant works adjacent to the site:

- *Douglas Report on Virgin Excavated Natural Material Assessment and In Situ Waste Classification, 360 – 364 Crown Street, Wollongong*, Project 73522.01 dated 12 August 2013 (Douglas, 2013a); and
- *Douglas Memorandum on Groundwater Sampling Results, 360 – 364 Crown Street, Wollongong*, Project 73522.01 dated 12 August 2013 (Douglas, 2013b).

Douglas (2013a) was conducted to preliminary classify approximately 3,600 m³ of fill material for off-site disposal and to determine whether the underlying natural clays were classifiable as virgin excavated natural material (VENM). Bores 201 to 203 were drilled to 15 m and groundwater

monitoring wells were installed as part of a concurrent geotechnical investigation, and subsequently environmental groundwater sampling and analysis was conducted, and the results reported in Douglas (2013b).

The intrusive works undertaken as part of Douglas (2013a) comprised the excavation of 14 test pits in a grid-based pattern across the Douglas (2013a) site. Fifteen fill samples and three natural clay samples were submitted to a NATA accredited laboratory for analysis of the following CoPC: metals, PAH, TRH, BTEX, OCP and OPP, phenols, PCB and asbestos.

All contaminants were reported with results within the contaminant thresholds (CTI) and/or specific contaminant concentrations (SCCI) for General Solid Waste (GSW) except for lead. Three samples, 208/0-0.1, 209/0-0.1 and 215/0-0.1 exceeded the GSW guideline (CTI/SCCI) for lead of 100 mg/kg, with respective reported concentrations of 160 mg/kg, 130 mg/kg and 210 mg/kg.

Due to the fill being treated as one material during the proposed excavation, and through applying statistical analysis of the exceedances, Douglas (2013a) was able to calculate the 95% upper confidence limit of the mean contaminant concentration for lead as 93.95 mg/kg, which is within the CTI guideline for GSW.

Douglas (2013a) further classified the underlying natural material as VENM due to no chemical exceedances, absence of apparent signs of contaminants and / or anthropogenic material.

Douglas (2013b) presented the groundwater sampling procedure and a summary of the analytical groundwater results from the environmental groundwater monitoring well installed at Bore 203 comprising 3 m of screened PVC pipe and 3 m of solid PVC pipe to surface.

Monitoring well 203 was developed using a PVC bailer within a week of installation and contained 15 litres of water before it was bailed dry.

At the time of sampling groundwater from monitoring well 203, the groundwater level was recorded as being at 1.5 m bgl. Chemical concentrations in the groundwater sample collected indicated cadmium and zinc were present at low levels and below the groundwater investigation levels for freshwater. Nickel and copper concentrations were recorded as 0.018 mg/L and 0.008 mg/L, respectively exceeding the appropriate investigation levels for freshwater being 0.011 mg/L and 0.0014 mg/L, respectively.

5. Site information

Site address	366 - 368 Crown Street & 15 - 23 Urunga Parade, Wollongong NSW
Legal description	Lot A Deposited Plan 343680 Lot B Deposited Plan 343680 Lot NULL Strata Plan 73256 Lot D Deposited Plan 402234 Lot 9 Deposited Plan 5507 Lot 46 Deposited Plan 5507 Lot 47 Deposited Plan 5507

Area	4,415 m ²
Zoning	Zone SPI Special Activities
Local Council Area	Wollongong City Council (WCC)
Current use	Residential
Surrounding uses	North – Urunga Parade, then residential beyond East – Industrial (Wollongong Private Hospital) South – Crown Street, then commercial (food shop and Caltex petrol station (down-gradient)), then residential beyond West – Residential

The site locality boundary is shown on Figure 1.



Figure 1: Site location (red) and lot layout

6. Environmental setting

6.1 Topography

The regional topography generally slopes in an easterly direction towards the Tasman Sea.

The surface of the site slopes in a general westerly / north westerly direction with an approximate change in elevation of 5 m, with the highest point of approximately 44 m relative to the Australian Height Datum (AHD) present in the mid-eastern portion of the site, with the lowest point of approximately 39 m AHD occurring in the north-western corner of the site.

6.2 Site geology

Reference to the Wollongong-Port Hacking 1:100 000 Soil Landscape Sheet (SCS, 1990) indicates that the site is located in an area mapped as foot slopes of the Illawarra Escarpment, with a local relief of 10-70 m, comprising broad to moderately round ridges and gently to steeply inclined slopes.

Reference to the NSW Seamless Geology mapping (GSNSW, 2023) indicates the site is underlain by red-brown or green-grey, lithic to feldspathic sandstone with minor interbedded siltstone of the Budgong Sandstone Formation.

6.3 Acid sulfate soils

Reference to the NSW Acid Sulfate Soils Risk Map indicates that the site is not located in an area mapped as requiring investigations for acid sulfate soils marked as “*no known occurrence*”. The site is located approximately 1.7 km west of an area mapped as “*high probability of occurrence*” of acid sulfate soils. Further commentary on acid sulfate soils is given in the geotechnical report.

6.4 Surface water and groundwater

The site does not contain any surface water bodies. Surface water runoff is presumed to follow local topography.

A search of the WaterNSW Groundwater boreholes database was conducted on 3 February 2025. The results of the search indicate that there are no registered groundwater bores within a 500 m radius of the site or within the site boundary. The nearest registered wells appear to be approximately 700 m south-east of the site.

7. Site history

7.1 Historical aerial photography

Several historical aerial photographs were obtained from public databases. The aerial photographs are provided in Appendix C. A summary of the key features observed for the site and surrounding land is presented in Table 1.

Table 1: Summary of historical aerial photographs

Year	Site	Surrounding land use
1938	Likely residential dwellings are visible in the southern and north-western portions of the site, as well as shed-like structures visible in the central northern and western portions. A	The surrounding land appeared to be primarily developed for residential purposes. The Wollongong Hospital is observed east of the site.

Year	Site	Surrounding land use
	photographic reflection in the south-western corner suggests a hardstand area may be visible. Most of the site appears mostly absent of vegetation, with some trees and shrubs visible in the north-western portion.	
1948	Two likely residential structures are visible in the northern portion of the site, adjacent to Urunga Parade.	Some residential development has occurred in the surrounding land, however, it appeared to be mostly unchanged.
1961	Likely residential structures and sheds are now visible in the north-western and south-western corners of the site. The south-western dwelling appeared to replace the likely hardstand area. The remainder of the site appeared to be relatively unchanged.	Some residential development has occurred in the surrounding land, however, it appeared to be mostly unchanged.
1977	A likely residential structure with a hardstand driveway connecting to Urunga Parade is now visible in the mid-northern portion of the site. A hardstand carpark is also observed to the rear of the dwelling in the south-western corner.	The likely residential structure south-east of the site appeared to have been demolished and removed from site. Land disturbance is visible across the vacant lot. A likely residential structure to the south of the site has been demolished and replaced with a likely commercial structure (location of current Ampol petrol station). The surrounding land appeared to be relatively unchanged.
1986	Hardstand accessway and carparking has been developed around the north-eastern residential structure. Based on the size of the carpark and number of vehicles observed (four), the structure in the south-western corner is likely of commercial use.	The structure to the east of the site appeared to have expanded into the former vacant land. Hardstand accessway appears to connect Crown Street to Urunga Parade via the expanded development. The surrounding area appeared to be relatively unchanged.
1993	The likely residential structure in the north-western portion of the site appears to have been demolished and replaced with a multi-storey likely residential structure, with a hardstand driveway. The remainder of the site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.
2001	The site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.
2008	The site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.

Year	Site	Surrounding land use
2012	The site appeared to be relatively unchanged.	The structures adjacent to the eastern boundary have all been demolished and cleared from site. Soil disturbance and sporadic refuse is visible on the surface of the vacant area. The remainder of the surrounding land appeared to be relatively unchanged.
2014	The site appeared to be relatively unchanged.	The Wollongong Private Hospital, east of the site, appeared to be under construction.
2016	The site appeared to be relatively unchanged.	The Wollongong Private Hospital developed appears to have been completed. The remainder of the surrounding area appeared to be relatively unchanged.
2018	The site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.
2022	The site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.
2024	The site appeared to be relatively unchanged.	The surrounding area appeared to be relatively unchanged.

7.2 Title deeds

A historical title deeds search was used to obtain ownership and occupancy information including company names and the occupations of individuals. The title information can assist in the identification of previous land uses by the company names or the site owners and can, therefore, assist in establishing whether there were potentially contaminating activities occurring at the site. The results of the title deed search are provided in Appendix D. A summary of the title deeds is described below.

Lot A has been privately owned by individuals between 1928 and 1953 prior to being transferred to The Victoria Insurance Company Limited in 1953 and owned until 1971 after which was owned by a Clerk until 1985. From 1985 until present (then 2022) the New South Wales Land and Housing Corporation have owned this land.

Lot B was privately owned by an individual until 1960, from which it was acquired by Crownarch Investments Pty Ltd and owned until 1981. Lot B has been privately owned by individuals until 1998 when Canray Holdings Pty Ltd acquired the lot and retained ownership until present (then 2022).

Lot D had previously been divided into two sublots between the years 1928 and 1974. Both sublots had common family ownership until the 1974 amalgamation by the McLeod family. Between 1981 and 1984 Lot D was owned by Medical Practitioners. AA Crown Holdings Pty Ltd acquired this land in 2015 and hold present ownership.

Like Lot D, from 1928 S.P.73256 had previously been divided into two sublots prior to amalgamation in 1960. S.P.73256 had been privately owned by various individuals until 2022

where Blue River Developments acquired the lot. From 2022 to date (then 2022), proprietary has been given to the strata owners of the common property.

Lot 46 was privately owned by individuals between 1913 and 1986 prior to being transferred to Pakeezah Pty Ltd in 1986 and owned until 2023. From 2023, AA Crown Holdings Pty Ltd have owned this land.

7.3 Public registers and planning records

EPA Notices available under Section 58 of the Contaminated Land Management Act (CLM Act)	There were no records of notices for the site or adjacent sites. The following site (200 m down-gradient of the site) has a current EPA Notice: Metro Petroleum – 394 to 396 Crown Street, Wollongong (under assessment). Database searched 3 February 2025
Sites notified to EPA under Section 60 of the CLM Act	The adjacent site was listed as a notified contaminated site. Woolworths Service Station – 425 Crown Street, Wollongong [south] – Contamination formerly regulated under the CLM Act. Database searched 3 February 2025
Licences listed under Section 308 of the Protection of the Environment Operations Act 1997 (POEO Act)	There were no records issued to the site or adjacent sites. Database searched 3 February 2025
PFAS Investigation Sites listed on the EPA website	The site was not listed or adjacent to a site listed under: NSW EPA PFAS Investigation Program; Defence PFAS Investigation Program; Defence PFAS Management Program; and Airservices Australia National PFAS Management Program
Planning Certificate(s)	Section 10.7 (2) and (5) Planning Certificates were previously obtained for 366 - 368 Crown Street & 15 – 21 Urunga Parade on 1 March 2022 and 23 Urunga Parade on 25 February 2025. No information relevant to contaminated land at the site was included. The Section 10.7 (2) and (5) Certificates are provided in Appendix E.
Council Records	A search of WCC records relevant to the site, accessible under the Government Information (Public Access) Act 2009 (GIPA Act) was undertaken for 366 - 368 Crown Street & 15 - 21 Urunga Parade on 25 January 2022 and 23 Urunga Parade on 14 January 2025. Various records including construction

certificates, development applications and subdivisional consent were recorded between the year 1963 and 2004. No information relevant to contaminated land at the site was included.

7.4 Site history integrity assessment

The information used to establish the history of the site was sourced from reputable and reliable reference documents, many of which were official records held by Government departments/agencies. The databases maintained by various Government agencies potentially can contain high quality information, but some of these do not contain any data.

In particular, aerial photographs can provide high quality information that is generally independent of memory or documentation. They are only available at intervals of several years, so some gaps exist in the information from this source. The observed site features are open to different interpretations and can be affected by the time of day and/or year at which they were taken, as well as specific events, such as flooding. Care has been taken to consider different possible interpretations of aerial photographs and to consider them in conjunction with other lines of evidence.

7.5 Summary of site history

Development of the site first occurred prior to the 1938 aerial photograph and developed progressively until 1977. Analysis of historical titles suggests the site was predominately developed / occupied for residential purposes. Lot B currently operates as a medical practitioner with the remaining lots being utilised as single and multistorey residential dwellings.

8. Site walkover

8.1 Observations

A site walkover was undertaken by an environmental engineer on 13 February 2025. The general site topography was consistent with that described in Section 6.1. The site layout appears to have remained unchanged from the 2024 aerial photograph. The following key site features pertinent to the PSI were observed (refer to the photographs provided in Appendix F).

- The Crown Street side of the site was occupied by two separate structures. The structures appeared to be disused medical practitioners, with vacancy likely occurring sometime after January 2022. The surface level of adjacent structures observed indicated that site cut and fill may be present. Both structures were surrounded by asphaltic and/or concrete hardstand used for car parking purposes;
- Lot D was occupied by a single storey residential structure that was currently occupied. The backyard consisted of a concrete hardstand carpark with some vegetation around the perimeter of the property;
- S.P 73526 was occupied by a three-storey residential apartment complex with ground floor carparking. Concrete hardstand access was located on the eastern side of the structure. The backyard consisted of an under covered and grassed areas;

- Lot A was occupied by a two-storey residential structure with ground level car parking. The front yard was grassed, and a concrete hardstand walking path was observed along the eastern boundary of the lot;
- Lot 46 was occupied by a single storey brick residential structure. The structure appeared to be vacant and in a dilapidated condition. The front yard was grassed and also comprised a concrete driveway leading from Urunga Parade to a garage located in the southeastern corner of the lot. The backyard consisted of a grassed area as well as a brick outhouse and garage. Potential asbestos containing materials (PACM) were observed as packing material in the front fence, in the eaves of the dwellings and as wall panels in the rear dilapidated shed structure;
- Lot 47 was occupied by a two-storey brick residential dwelling with ground level car parking. The back yard comprised a paved terrace, a garden shed and was grassed; and
- Lot 9 was occupied by a single storey, brick, converted residential building previously been utilized as a medical centre. A concrete driveway and vacant carpark were observed around the west and north of the structure. Comparing the surface levels of the adjacent lots, it is evident the site had either been cut or filled to existing design levels.

9. Preliminary conceptual site model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site may become contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e. it enables an assessment of the potential source – pathway – receptor linkages (complete pathways).

Based on the current investigation / previous reports, the following potential sources of contamination and associated CoPC have been identified and summarised in Table 2.

Table 2: Summary of potential sources

Potential sources and associated CoPC
On site sources
S1: Fill: Associated with levelling and creation of building footprints; Various CoPC can be associated with fill and may include metals, TRH, BTEX, PAH, PCB, OCP, OPP, phenols and asbestos S2: Hazardous building materials (HBM) associated with current and former site structures. Various CoPC which may include asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB.
Off-site sources
Given that both identified petrol stations are topographically down-gradient, no off-site sources of contamination have been identified.

The following potential human and environmental receptors, along with relevant potential pathways, have been identified and summarised in Table 3.

Table 3: Summary of potential receptors and pathways

Potential human receptors
HR1: Current users [residential] HR2: Construction and maintenance workers HR3: End users [hospital employees / users] HR4: Adjacent site users [residential / commercial]
Potential environmental receptors
ER1: Surface water [receiving waterbodies via stormwater system] ER2: Groundwater and groundwater dependent ecosystems (GDEs) ER3: Terrestrial ecosystems
Potential pathways to human receptors
HP1: Ingestion and dermal contact HP2: Inhalation of dust, vapours and/or asbestos fibres
Potential pathways to environmental receptors
EP1: Surface water run-off EP2: Leaching of contaminants and vertical migration into groundwater EP3: Lateral migration of groundwater providing base flow to water bodies EP4: Inhalation, ingestion and absorption

Summary of potentially complete exposure pathways

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S2) and receptors are provided in below Table 4.

Table 4: Summary of potentially complete exposure pathways

Source and CoPC	Exposure pathway	Receptor	Risk management action
S1: Fill: metals, PFAS, TRH, BTEX, PAH, PCB, OCP, phenols and asbestos S2: Former buildings: asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB	HP1: Ingestion and dermal contact HP2: Inhalation of dust, vapours and/or asbestos fibres	HR1: Current users [residential] HR2: Construction and maintenance workers HR3: End users [hospital employees / users]	An intrusive soil investigation is recommended to assess the contamination status of soils across accessible portions of the site. The findings of the soil investigation will inform the requirements for groundwater investigation.
	HP2: Inhalation of dust, vapours and/or asbestos fibres	HR4: Adjacent site users [residential / commercial]	
	EP1: Surface water run-off EP3: Lateral migration of groundwater providing base flow to water bodies	ER1: Surface water	
	EP2: Leaching of contaminants and vertical migration into groundwater	ER2: Groundwater and GDEs	
	EP4: Inhalation, ingestion and absorption	ER3: Terrestrial ecosystems	

10. Sampling and analysis plan

10.1 Data quality objectives

The investigation was devised with reference to the seven-step data quality objectives (DQO) process which is provided in Appendix B Schedule B2, NEPC (2013). The DQO process is provided in Appendix G.

10.2 Soil sampling and analysis rationale

The former and current preliminary site investigation with limited sampling were undertaken concurrently with preliminary geotechnical investigation, reported under a separate cover. Given the occupancy of the residential structures along Urunga Parade in March 2022 (date of initial investigation), the borehole locations were largely limited to accessible areas of the site (ie, front yards / driveways). Borehole locations are shown on Drawing 1, Appendix A.

Soil samples were collected from each borehole at depths of approximately 0.1 m, 0.5 m, 1.0 m and every 0.5 m thereafter, and changes in lithology or signs of contamination.

The general sampling methods are described in the field work methodology provided in Appendix H.

Samples were selected for analysis based upon field observations and PID screening results, and to provide lateral and vertical coverage of the site. The selected samples were analysed for the CoPC in the CSM and for the physical parameters, cation exchange capacity (CEC) and pH.

11. Site assessment criteria

The site assessment criteria (SAC) applied in the current investigation are informed by the CSM (Section 9) which identified human and environmental receptors to potential contamination on the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The investigation and screening levels applied in the current investigation comprised levels adopted for a generic residential with minimal access to soils land use scenario given the proposed end-use is likely to be frequented by more sensitive groups (i.e., children and the elderly) than would be expected in a commercial / industrial land use. The derivation of the SAC is provided in Appendix I and the adopted SAC are listed on the summary analytical results tables provided in Appendix J.

12. Results

12.1 Field work results

The borehole logs for this investigation are provided in Appendix K. The logs recorded the following general sub-surface profile:

HARDSTAND:	Concrete was observed in Bores 301 to 303 to depths of between 0.09 m and 0.2 m below ground level (bgl). An asphaltic hardstand was observed in Bore 304 to a depth of 0.04 m bgl.
FILL (HARSTAND SUBGRADE)	Generally comprising a sand and gravel mixture in all test locations other than Bore 303 and 401, to depths of between 0.08 m and 0.25 m bgl.
FILL:	Generally comprising brown to dark brown silty / sandy clay or sandy silt in all borehole locations to depths of between 0.6 m and 1.4 m bgl.
CLAY:	Generally comprising orange brown mottled grey and/or red sandy / silty clay of low to medium plasticity in all borehole locations to depths of between 1.9 m and 4.8 m bgl.
SANDSTONE:	All boreholes were terminated in sandstone at depths of between 11.55 m and 16.75 m bgl.

No obvious visual or olfactory evidence (e.g. staining, odours or free phase product) was observed during the investigations to suggest the presence of contamination within the soils or groundwater at the site.

The PID screening indicated that the sub-surface conditions were generally absent of VOC with most recorded values of less than 2 ppm. The highest recorded value was 4 ppm at Bore 301 at a depth of 1.5 m bgl.

No free groundwater was observed during drilling of boreholes. It should be noted that drilling techniques required the addition of water for lubrication and cooling. As such, groundwater levels were unable to be differentiated. It should be noted that groundwater levels are affected by climatic conditions and soil permeability and will therefore vary spatially, and with time.

Monitoring wells were installed in Bores 301 – 303 and Bore 401. Groundwater levels were gauged on 21 February 2025 using an electric oil/water interface meter. The measured water levels are shown in Table 5.

Table 5: Summary of groundwater level measurements on 21 February 2025

Well ID	Ground level * m (AHD)	SWL m (bgl)	SWL m (AHD)
301	40.8	5.05	35.75
302	41.7	9.47	32.23
303	43.0	6.58	36.42
401	40.0	4.51	35.49

Notes:

*Surveyed by dGPS

AHD – Australian Height Datum

SWL – standing water level

bgl – below ground level

Based on the groundwater level measurements, groundwater is interpreted to be flowing to the north-east towards the Tasman Sea.

12.2 Laboratory analytical results

The results of laboratory analysis are summarised in the following tables provided in Appendix J:

- Table J1: Summary of results of soil results (metals, PAH, TRH and BTEX)
- Table J2: Summary of results of soil results (phenols, OCP, OPP, PCB and Asbestos)
- Table J3: Summary of results – Preliminary in-situ waste classification

The laboratory certificates of analysis together with the chain of custody and sample receipt information are provided in Appendix L.

12.3 Data quality assurance and quality control

The data quality assurance and quality control (QA/QC) results are provided in Appendix M. Based on the results of the field QA and field and laboratory QC, and evaluation against the data quality indicators (DQI) it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

13. Discussion

13.1 Soils

Based on the site history desktop study and site walkover, two sources of contamination were identified, being uncontrolled fill and old buildings potentially containing HBM. It is understood that the fill was associated with uncontrolled filling during construction of the residential / commercial structures and driveway / carpark areas.

The objective of the PSI was to ascertain the preliminary contamination status of the fill in the accessible parts of the site. All of the soil laboratory results were within the relevant SAC and no hazardous building materials (including asbestos) were encountered in the fill.

13.2 Preliminary in-situ waste classification

13.2.1 Fill

The following Table 6 presents the results of the six-step procedure outlined in NSW EPA (2014) for determining the type of waste and the waste classification. This process applies to the fill (including surface soils) at the site.

Table 6: Six step classification procedure

No.	Item	Comment	Rationale
1.	Is the waste special waste?	No	No asbestos-containing materials (ACM), clinical or related waste, or waste tyres were observed in the test pits. Asbestos was not detected by the analytical laboratory.
2.	Is the waste liquid waste?	No	The fill comprised a soil matrix.
3.	Is the waste "pre-classified"?	No	The fill is not pre-classified with reference to NSW EPA (2014). The natural soil, if classified as VENM, is pre-classified as general solid waste (non-putrescible).
4.	Does the waste possess hazardous waste characteristics?	No	The fill was not observed to contain or considered at risk to contain explosives, gases, flammable solids, oxidising agents, organic peroxides, toxic substances, corrosive substances, coal tar, batteries, lead paint or dangerous goods containers.
5.	Determining a wastes classification using chemical assessment.	Conducted	Refer to attached Table J3, Appendix J.
6.	Is the waste putrescible or non-putrescible? ¹	Non-putrescible	The fill does not contain materials considered to be putrescible.

Notes:

1. Wastes that are generally not classified as putrescible include soils, timber, garden trimmings, agricultural, forestry and crop materials, and natural fibrous organic and vegetative materials (NSW EPA, 2014).

The field and laboratory data quality assurance and quality control results for the samples have been reviewed and are considered to be acceptable. The laboratory certificates are provided in Appendix L.

As shown in Table J3, Appendix J all contaminant concentrations for the analysed fill samples were below the contaminant thresholds (CTI) for General Solid Waste except for:

- Lead in sample 303/0.2-0.3 (and its blind duplicate sample, BD1) at laboratory reported concentrations of 270 mg/kg and 300 mg/kg, respectively exceeding the CTI criteria concentration of 100 mg/kg.

Bore 303 was drilled and sampled in 2022, no toxicity characteristic leaching procedure (TCLP) testing was conducted on sample 303/0.2-0.3. In the absence of TCLP data, the silty clay fill material extending from 0.2 m to 0.8 m surrounding Bore 303 is preliminary classified as Hazardous Waste. It should be noted that there does exist a potential for TCLP to reduce this classification to General Solid Waste, which could be undertaken following demolition and removal of overlying hardstand material.

13.2.2 Natural soil and rock

The following Table 6 presents the results of the assessment of natural soil and rock at the site with reference to the virgin excavated natural material (VENM) definition in the POEO Act and the [EPA website](#).

Table 7: VENM classification procedure

No.	Item	Comment	Rationale
1.	Is the material natural?	Yes	Natural soil and rock logged in the test pits as orange brown mottled grey and/or red sandy / silty clay of low to medium plasticity and sandstone of various colour and strength. These materials underlie the fill at the site.
2.	Are manufactured chemicals or process residues present?	No	There were no apparent visual or olfactory indicators of chemical contamination of the materials in the test pits. Concentrations of contaminants were considered to be typical of background concentrations (Tables J1 and J2, Appendix J).
3.	Are sulfidic ores or soils present?	No	Refer to Section 6.3.
4.	Are there current or previous land uses that have (or may	No	Previous land uses may have impacted on surface soils overlying the materials.

No.	Item	Comment	Rationale
	have) contaminated the materials?		Low chemical concentrations indicate no likely impact on the natural materials.

As shown in the attached Table J3, Appendix J, all contaminant concentrations for the analysed natural soil samples were within the typical background concentrations. Based on the outcomes presented in Table 6, the natural soils and bedrock described as orange brown mottled grey and/or red sandy / silty clay of low to medium plasticity and sandstone of various colour and strength, within the assessment area as shown on Drawing 1, are classified as VENM.

The soils and rock classified as VENM are pre-classified as general solid waste (non-putrescible) under NSW EPA (2014). Furthermore, VENM may be applied to land in an off-site location without the requirement of a licence under the POEO Act.

13.2.3 Conditions

This preliminary classification is not to be used for waste disposal. Further work is required before a formal classification suitable for waste disposal can be provided. The waste classification is to be confirmed by a qualified environmental consultant including visual and analytical assessments.

If any fill / soil / rock is encountered which is different to that sampled and tested or exhibit signs of potential contamination (e.g. anthropogenic inclusions, staining or odours) this waste classification does not apply and the advice of a qualified environmental consultant should be sought.

If during excavation the natural in situ soil / rock is found to contain possible signs of contamination or is cross-contaminated with any non-VENM soil or rock the excavated natural soil / rock cannot be classified as VENM. In this regard, it is recommended that care should be taken during the bulk excavation of the VENM to prevent cross contamination between the VENM and non-VENM materials.

Both the receiving site and the site disposing of the fill / soil / rock should satisfy the requirements of the licence of the receiving site before disposal of the fill / soil / rock is undertaken. Note that appropriate prior arrangement with the receiving site/relevant authorities should be obtained prior to the disposal of any fill / soil / rock off site. The receiving site should check to ensure that the fill / soil / rock received matches the description provided in this report and contains no cross contamination. The handling, transport and disposal of the waste should be conducted in accordance with regulatory and statutory requirements.

13.3 Data Quality Assurance and Quality Control

The data quality assurance and quality control (QA/QC) results are included in Appendix M. Based on the results of the field QA and field laboratory QC, and evaluation against the data quality indicators (DQI) it is concluded that the field and laboratory test data obtained are reliable and useable for this investigation.

14. Conclusions and recommendations

Based on the results of this PSI, no contamination has been identified within samples analysed which would preclude the proposed development.

Given the identification of PACM in No. 23 Urunga Parade shed, eaves and front fence it is recommended that a hazardous building material survey be undertaken on existing site structures prior to their demolition.

Following demolition of site structures, it is recommended that a site inspection of the footprint of the buildings be undertaken to visually assess for possible HBM impact from the demolition process or for other potential for contamination to be present in these areas.

Given the proposed development will comprise the construction of a six-storey basement car park / oncology over most of the site, a waste classification will need to be conducted on all materials to be disposed off-site. Based on the preliminary results obtained in the PSI most of the fill identified on site may be classifiable as general solid waste and the underlying fill may be classifiable as virgin excavated natural material (VENM). In absence of further TCLP testing, the fill surrounding Bore 302 is preliminary classified as Hazardous Waste. Further sampling and analysis is required to provide a final waste classification of on-site materials.

Subject to the removal of overlying fill material from the site as part of the proposed development the site is considered suitable for the proposed private hospital expansion from the contaminated land perspective in the context of Clause 4.6 of State Environmental Planning Policy (Resilience and Hazards) 2021.

As a matter of due diligence, it is recommended that an unexpected finds protocol (UFP) be included and implemented as part of the site management plan during earthworks detailing the process by which any unexpected finds of potential environmental concern will be managed.

15. References

CRC CARE. (2017). *Risk-based Management and Remediation Guidance for Benzo(a)pyrene*. Technical Report no. 39: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

Douglas. (2013a). *Report on Virgin Excavated Natural Material Assessment and In Situ Waste Classification, 360 – 364 Crown Street, Wollongong*.

Douglas. (2013b). *Memorandum on Groundwater Sampling Results, 360 – 364 Crown Street, Wollongong*.

GSNSW. (2023). *NSW Seamless Geology*. Geological Survey NSW Web Map Service.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

NSW EPA. (2020). *Guidelines for Consultants Reporting on Contaminated Land*. Contaminated Land Guidelines: NSW Environment Protection Authority.

NSW EPA. (2022). *Contaminated Sites, Sampling Design Guidelines*. NSW Environment Protection Authority.

SCS. (1990). *Soil Landscapes of Wollongong – Port Hacking 1:100 000 Series Sheet 9029*. Soil Conservation Service of NSW.

16. Limitations

Douglas Partners Pty Ltd (Douglas) has prepared this report for this project at 366 - 368 Crown Street & 15 - 23 Urunga Parade, Wollongong NSW in line with Douglas' email proposal dated 8 August 2025 and acceptance received from Marcelo Ramirez of 360 Property Agency on behalf of AA Crown Holdings Pty Ltd dated 29 September 2025. The work was carried out under Douglas' Engagement Terms. This report is provided for the exclusive use of AA Crown Holdings Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Douglas, does so entirely at its own risk and without recourse to Douglas for any loss or damage. In preparing this report Douglas has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after Douglas' field testing has been completed.

Douglas' advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by Douglas in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

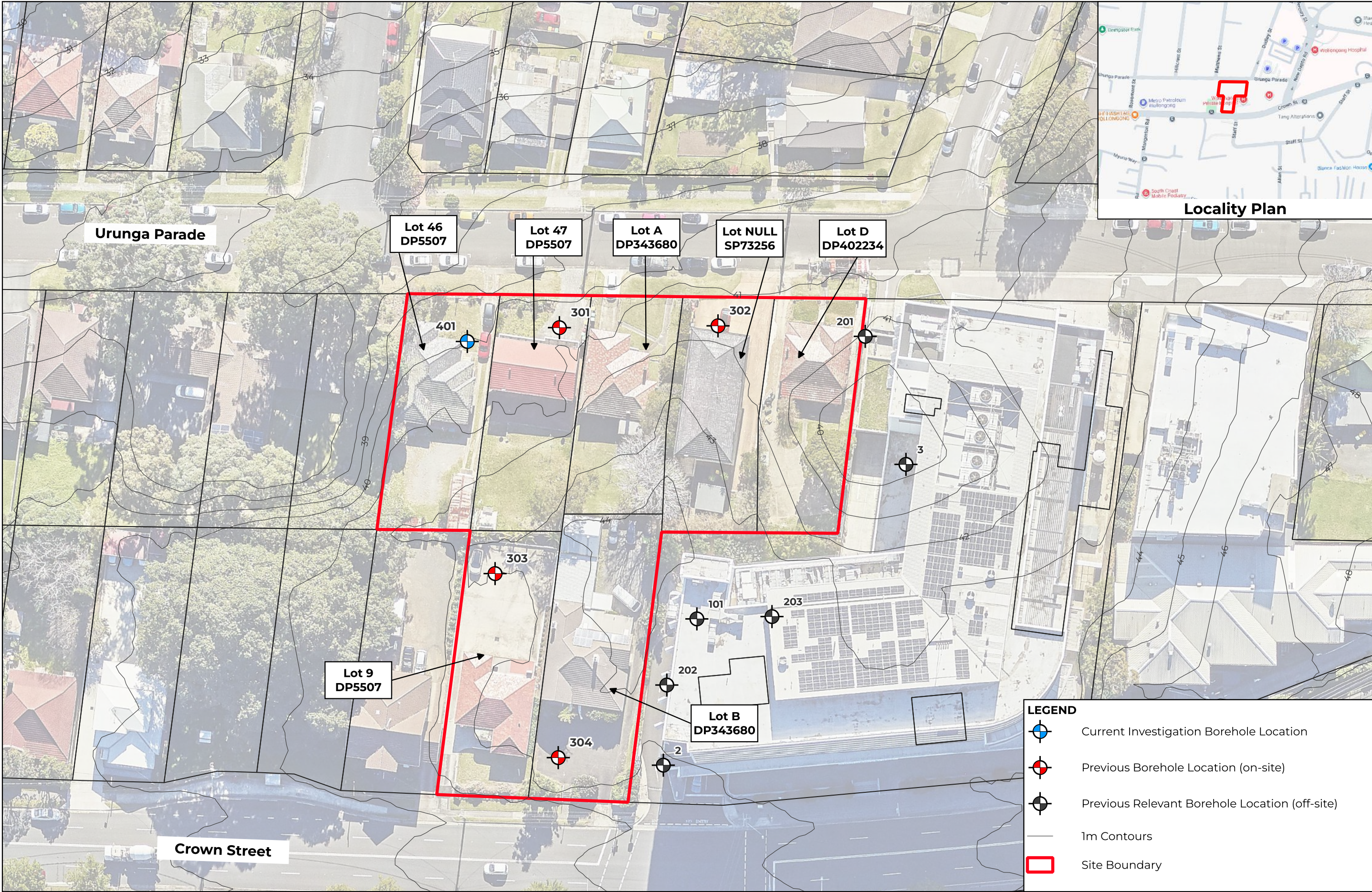
The assessment of atypical safety hazards arising from this advice is restricted to the environmental components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. Douglas cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by Douglas. This is because this report has been written as advice and opinion rather than instructions for construction.

Appendix A

Drawings



REV	DESCRIPTION/COMMENT	DATE	DRAWN BY
0	73522.15.R.001.Rev0	16.10.2025	ZAK
0 5 10 15 20 25 30 35 1:600 @ A3			



Douglas
PARTNERS

OFFICE: Wollongong
1 Luso Drive, Unanderra NSW
(02) 4271 1836

CLIENT:
AA Crown Holdings Pty Ltd

NOTE:
1: Basemap from Metromap.com (Dated 24.06.2024)

COORDINATE REFERENCE SYSTEM: GDA2020, MGA ZONE 56

PROJECT NAME:
Wollongong Private Hospital
Expansion

PROJECT ADDRESS:
366-368 Crown Street & 15-23
Urunga Parade, Wollongong

DRAWING TITLE:
Borehole Location Plan

PROJECT NO:
73522.15

DRAWING NO:
R.001.Rev0

REVISION:
0

Appendix B

About this Report

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at

the time of construction as are indicated in the report; and

- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

continued next page

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

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Introduction to Terminology, Symbols and Abbreviations

Douglas Partners' reports, investigation logs, and other correspondence may use terminology which has quantitative or qualitative connotations. To remove ambiguity or uncertainty surrounding the use of such terms, the following sets of notes pages may be attached Douglas Partners' reports, depending on the work performed and conditions encountered:

- Soil Descriptions;
- Rock Descriptions; and
- Sampling, insitu testing, and drilling methodologies

In addition to these pages, the following notes generally apply to most documents.

Abbreviation Codes

Site conditions may also be presented in a number of different formats, such as investigation logs, field mapping, or as a written summary. In some of these formats textual or symbolic terminology may be presented using textual abbreviation codes or graphic symbols, and, where commonly used, these are listed alongside the terminology definition. For ease of identification in these note pages, textual codes are presented in these notes in the following style **XW**. Code usage conforms with the following guidelines:

- Textual codes are case insensitive, although herein they are generally presented in upper case; and
- Textual codes are contextual (i.e. the same or similar combinations of characters may be used in different contexts with different meanings (for example `PL` is used for plastic limit in the context of soil moisture condition, as well as in `PL(A)` for point load test result in the testing results column)).

Data Integrity Codes

Subsurface investigation data recorded by Douglas Partners is generally managed in a highly structured database environment, where records "span" between a top and bottom depth interval. Depth interval "gaps" between records are considered to introduce ambiguity, and, where appropriate, our practice guidelines may require contiguous data sets. Recording meaningful data is not always appropriate (for example assigning a "strength" to a concrete pavement) and the following codes may be used to maintain contiguity in such circumstances.

Term	Description	Abbreviation Code
Core loss	No core recovery	KL
Unknown	Information was not available to allow classification of the property. For example, when auguring in loose, saturated sand auger cuttings may not be returned.	UK
No data	Information required to allow classification of the property was not available. For example if drilling is commenced from the base of a hole predrilled by others	ND
Not Applicable	Derivation of the properties not appropriate or beyond the scope of the investigation. For example providing a description of the strength of a concrete pavement	NA

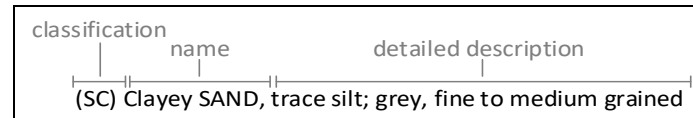
Graphic Symbols

Douglas Partners' logs contain a "graphic" column which provides a pictorial representation of the basic composition of the material. The symbols used are directly representing the material name stated in the adjacent "Description of Strata" column, and as such no specific graphic symbology legend has been provided in these notes.

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Introduction

All materials which are not considered to be “in-situ rock” are described in general accordance with the soil description model of AS 1726-2017 Part 6.1.3, and can be broken down into the following description structure:



The “classification” comprises a two character “group symbol” providing a general summary of dominant soil characteristics. The “name” summarises the particle sizes within the soil which most influence its behaviour. The detailed description presents more information about composition, condition, structure, and origin of the soil.

Classification, naming and description of soils require the relative proportion of particles of different sizes within the whole soil mixture to be considered.

Particle size designation and Behaviour Model

Solid particles within a soil are differentiated on the basis of size.

The engineering behaviour properties of a soil can subsequently be modelled to be either “fine grained” (also known as “cohesive” behaviour) or “coarse grained” (“non cohesive” behaviour), depending on the relative proportion of fine or coarse fractions in the soil mixture.

Particle Size Designation	Particle Size (mm)	Behaviour Model	
		Behaviour	Approximate Dry Mass
Boulder	>200	Excluded from particle behaviour model as “oversize”	
Cobble	63 - 200		
Gravel ¹	2.36 - 63	Coarse	>65%
Sand ¹	0.075 - 2.36		
Silt	0.002 - 0.075	Fine	>35%
Clay	<0.002		

¹ – refer grain size subdivision descriptions below

The behaviour model boundaries defined above are not precise, and the material behaviour should be assumed from the name given to the material (which considers the particle fraction which dominates the behaviour, refer “component proportions” below), rather than strict observance of the proportions of particle sizes. For example, if a material is named a “Sandy CLAY”, this is indicative that the material exhibits fine grained behaviour, even if the dry mass of coarse grained material may exceed 65%.

Component proportions

The relative proportion of the dry mass of each particle size fraction is assessed to be a “primary”, “secondary”, or “minor” component of the soil mixture, depending on its influence over the soil behaviour.

Component Proportion Designation	Definition ¹	Relative Proportion	
		In Fine Grained Soil	In Coarse Grained Soil
Primary	The component (particle size designation, refer above) which dominates the engineering behaviour of the soil	The clay/silt component with the greater proportion	The sand/gravel component with the greater proportion
Secondary	Any component which is not the primary, but is significant to the engineering properties of the soil	Any component with greater than 30% proportion	Any granular component with greater than 30%; or Any fine component with greater than 12%
Minor ²	Present in the soil, but not significant to its engineering properties	All other components	All other components

¹ As defined in AS1726-2017 6.1.4.4

² In the detailed material description, minor components are split into two further sub-categories. Refer “identification of minor components” below.

Composite Materials

In certain situations, a lithology description may describe more than one material, for example, collectively describing a layer of interbedded sand and clay. In such a scenario, the two materials would be described independently, with the names preceded or followed by a statement describing the arrangement by which the materials co-exist. For example, “INTERBEDDED Silty CLAY AND SAND”.

Classification

The soil classification comprises a two character group symbol. The first character identifies the primary component. The second character identifies either the grading or presence of fines in a coarse grained soil, or the plasticity in a fine grained soil. Refer AS1726-2017 6.1.6 for further clarification.

Soil Name

For most soils, the name is derived with the primary component included as the noun (in upper case), preceded by any secondary components stated in an adjective form. In this way, the soil name also describes the general composition and indicates the dominant behaviour of the material.

Component ¹	Prominence in Soil Name
Primary	Noun (eg "CLAY")
Secondary	Adjective modifier (eg "Sandy")
Minor	No influence

¹ – for determination of component proportions, refer component proportions on previous page

For materials which cannot be disaggregated, or which are not comprised of rock or mineral fragments, the names "ORGANIC MATTER" or "ARTIFICIAL MATERIAL" may be used, in accordance with AS1726-2017 Table 14.

Commercial or colloquial names are not used for the soil name where a component derived name is possible (for example "Gravelly SAND" rather than "CRACKER DUST").

Materials of "fill" or "topsoil" origin are generally assigned a name derived from the primary/secondary component (where appropriate). In log descriptions this is preceded by uppercase "FILL" or "TOPSOIL". Origin uncertainty is indicated in the description by the characters (?), with the degree of uncertainty described (using the terms "probably" or "possibly" in the origin column, or at the end of the description).

Identification of minor components

Minor components are identified in the soil description immediately following the soil name. The minor component fraction is usually preceded with a term indicating the relative proportion of the component.

Minor Component Proportion Term	Relative Proportion	
	In Fine Grained Soil	In Coarse Grained Soil
With	All fractions: 15-30%	Clay/silt: 5-12% sand/gravel: 15-30%
Trace	All fractions: 0-15%	Clay/silt: 0-5% sand/gravel: 0-15%

The terms "with" and "trace" generally apply only to gravel or fine particle fractions. Where cobbles/boulders are encountered in minor proportions (generally less than about 12%) the term "occasional" may be used. This term describes the sporadic distribution of the material within the confines of the investigation excavation only, and there may be considerable variation in proportion over a wider area which is difficult to factually characterise due to the relative size of the particles and the investigation methods.

Soil Composition

Plasticity

Descriptive Term	Laboratory liquid limit range	
	Silt	Clay
Non-plastic materials	Not applicable	Not applicable
Low plasticity	≤50	≤35
Medium plasticity	Not applicable	>35 and ≤50
High plasticity	>50	>50

Note, Plasticity descriptions generally describe the plasticity behaviour of the whole of the fine grained soil, not individual fine grained fractions.

Grain Size

Type	Particle size (mm)	
	Gravel	Sand
Gravel	Coarse	19 - 63
	Medium	6.7 - 19
	Fine	2.36 - 6.7
Sand	Coarse	0.6 - 2.36
	Medium	0.21 - 0.6
	Fine	0.075 - 0.21

Grading

Grading Term	Particle size (mm)
Well	A good representation of all particle sizes
Poorly	An excess or deficiency of particular sizes within the specified range
Uniformly	Essentially of one size
Gap	A deficiency of a particular size or size range within the total range

Note, AS1726-2017 provides terminology for additional attributes not listed here.

Soil Condition

Moisture

The moisture condition of soils is assessed relative to the plastic limit for fine grained soils, while for coarse grained soils it is assessed based on the appearance and feel of the material. The moisture condition of a material is considered to be independent of stratigraphy (although commonly these are related), and this data is presented in its own column on logs.

Applicability	Term	Tactile Assessment	Abbreviation code
Fine	Dry of plastic limit	Hard and friable or powdery	w<PL
	Near plastic limit	Can be moulded	w=PL
	Wet of plastic limit	Water residue remains on hands when handling	w>PL
	Near liquid limit	"oozes" when agitated	w=LL
	Wet of liquid limit	"oozes"	w>LL
Coarse	Dry	Non-cohesive and free running	D
	Moist	Feels cool, darkened in colour, particles may stick together	M
	Wet	Feels cool, darkened in colour, particles may stick together, free water forms when handling	W

The abbreviation code **NDF**, meaning "not-assessable due to drilling fluid use" may also be used.

Note, observations relating to free ground water or drilling fluids are provided independent of soil moisture condition.

Consistency/Density/Compaction/Cementation/Extremely Weathered Material

These concepts give an indication of how the material may respond to applied forces (when considered in conjunction with other attributes of the soil). This behaviour can vary independent of the composition of the material, and on logs these are described in an independent column and are generally mutually exclusive (i.e it is inappropriate to describe both consistency and compaction at the same time). The method by which the behaviour is described depends on the behaviour model and other characteristics of the soil as follows:

- In fine grained soils, the "consistency" describes the ease with which the soil can be remoulded, and is generally correlated against the materials undrained shear strength;
- In granular materials, the relative density describes how tightly packed the particles are, and is generally correlated against the density index;
- In anthropogenically modified materials, the compaction of the material is described qualitatively;
- In cemented soils (both natural and anthropogenic), the cemented "strength" is described qualitatively, relative to the difficulty with which the material is disaggregated; and
- In soils of extremely weathered material origin, the engineering behaviour may be governed by relic rock features, and expected behaviour needs to be assessed based the overall material description.

Quantitative engineering performance of these materials may be determined by laboratory testing or estimated by correlated field tests (for example penetration or shear vane testing). In some cases, performance may be assessed by tactile or other subjective methods, in which case investigation logs will show the estimated value enclosed in round brackets, for example **(VS)**.

Consistency (fine grained soils)

Consistency Term	Tactile Assessment	Undrained Shear Strength (kPa)	Abbreviation Code
Very soft	Extrudes between fingers when squeezed	<12	VS
Soft	Mouldable with light finger pressure	>12 - ≤25	S
Firm	Mouldable with strong finger pressure	>25 - ≤50	F
Stiff	Cannot be moulded by fingers	>50 - ≤100	St
Very stiff	Indented by thumbnail	>100 - ≤200	VSt
Hard	Indented by thumbnail with difficulty	>200	H
Friable	Easily crumbled or broken into small pieces by hand	-	Fr

Relative Density (coarse grained soils)

Relative Density Term	Density Index	Abbreviation Code
Very loose	<15	VL
Loose	>15 - ≤35	L
Medium dense	>35 - ≤65	MD
Dense	>65 - ≤85	D
Very dense	>85	VD

Note, tactile assessment of relative density is difficult, and generally requires penetration testing, hence a tactile assessment guide is not provided.

Compaction (anthropogenically modified soil)

Compaction Term	Abbreviation Code
Well compacted	WC
Poorly compacted	PC
Moderately compacted	MC
Variably compacted	VC

Cementation (natural and anthropogenic)

Cementation Term	Abbreviation Code
Moderately cemented	MOD
Weakly cemented	WEK

Extremely Weathered Material

AS1726-2017 considers weathered material to be soil if the unconfined compressive strength is less than 0.6 MPa (i.e. less than very low strength rock). These materials may be identified as “extremely weathered material” in reports and by the abbreviation code **XWM** on log sheets. This identification is not correlated to any specific qualitative or quantitative behaviour, and the engineering properties of this material must therefore be assessed according to engineering principles with reference to any relic rock structure, fabric, or texture described in the description.

Soil Origin

Term	Description	Abbreviation Code
Residual	Derived from in-situ weathering of the underlying rock	RS
Extremely weathered material	Formed from in-situ weathering of geological formations. Has strength of less than ‘very low’ as per as1726 but retains the structure or fabric of the parent rock.	XWM
Alluvial	Deposited by streams and rivers	ALV
Fluvial	Deposited by channel fill and overbank (natural levee, crevasse splay or flood basin)	FLV
Estuarine	Deposited in coastal estuaries	EST
Marine	Deposited in a marine environment	MAR
Lacustrine	Deposited in freshwater lakes	LAC
Aeolian	Carried and deposited by wind	AEO
Colluvial	Soil and rock debris transported down slopes by gravity	COL
Slopewash	Thin layers of soil and rock debris gradually and slowly deposited by gravity and possibly water	SW
Topsoil	Mantle of surface soil, often with high levels of organic material	TOP
Fill	Any material which has been moved by man	FILL
Littoral	Deposited on the lake or seashore	LIT
Unidentifiable	Not able to be identified	UID

Cobbles and Boulders

The presence of particles considered to be “oversize” may be described using one of the following strategies:

- Oversize encountered in a minor proportion (when considered relative to the wider area) are noted in the soil description; or
- Where a significant proportion of oversize is encountered, the cobbles/boulders are described independent of the soil description, in a similar manner to composite soils (described above) but qualified with “MIXTURE OF”.

intentionally blank



Rock Strength

Rock strength is defined by the unconfined compressive strength, and it refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects.

The Point Load Strength Index $I_{s(50)}$ is commonly used to provide an estimate of the rock strength and site specific correlations should be developed to allow UCS values to be determined. The point load strength test procedure is described by Australian Standard AS4133.4.1-2007. The terms used to describe rock strength are as follows:

Strength Term	Unconfined Compressive Strength (MPa)	Point Load Index ¹ $I_{s(50)}$ MPa	Abbreviation Code
Very low	0.6 - 2	0.03 - 0.1	VL
Low	2 - 6	0.1 - 0.3	L
Medium	6 - 20	0.3 - 1.0	M
High	20 - 60	1 - 3	H
Very high	60 - 200	3 - 10	VH
Extremely high	>200	>10	EH

¹ Rock strength classification is based on UCS. The UCS to $I_{s(50)}$ ratio varies significantly for different rock types and specific ratios may be required for each site. The point load Index ranges shown above are as suggested in AS1726 and should not be relied upon without supporting evidence.

The following abbreviation codes are used for soil layers or seams of material “within rock” but for which the equivalent UCS strength is less than 0.6 MPa.

Scenario	Abbreviation Code
The material encountered has an equivalent UCS strength of less than 0.6 MPa, and therefore is considered to be soil (as per Note 1 of Table 20 of AS 1726-2017). The properties of the material encountered over this interval are described in the “Description of Strata” and soil properties columns.	SOIL
The material encountered has an equivalent UCS strength of less than 0.6 MPa, and therefore is considered to be soil (as per Note 1 of Table 20 of AS 1726-2017). The prominence of the material is such that it can be considered to be a seam (as defined in Table 22 of AS1726-2017) and the properties of the material are described in the defect column.	SEAM

Degree of Weathering

The degree of weathering of rock is classified as follows:

Weathering Term	Description	Abbreviation Code
Residual Soil ¹	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are no longer visible, but the soil has not been significantly transported.	RS
Extremely weathered ¹	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are still visible	XW
Highly weathered	The whole of the rock material is discoloured, usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable. Rock strength is significantly changed by weathering. Some primary minerals have weathered to clay minerals. Porosity may be increased by leaching or may be decreased due to deposition of weathering products in pores.	HW
Moderately weathered	The whole of the rock material is discoloured, usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable but shows little or no change of strength from fresh rock.	MW
Slightly weathered	Rock is partially discoloured with staining or bleaching along joints but shows little or no change of strength from fresh rock.	SW
Fresh	No signs of decomposition or staining.	FR
Note: If HW and MW cannot be differentiated use DW (see below)		
Distinctly weathered	Rock strength usually changed by weathering. The rock may be highly discoloured, usually by iron staining. Porosity may be increased by leaching or may be decreased due to deposition of weathered products in pores.	DW

¹ The parent rock type, of which the residual/extremely weathered material is a derivative, will be stated in the description (where discernible).

Degree of Alteration

The degree of alteration of the rock material (physical or chemical changes caused by hot gasses or liquids at depth) is classified as follows:

Term	Description	Abbreviation Code
Extremely altered	Material is altered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are still visible.	XA
Highly altered	The whole of the rock material is discoloured, usually by staining or bleaching to the extent that the colour of the original rock is not recognisable. Rock strength is changed by alteration. Some primary minerals are altered to clay minerals. Porosity may be increased by leaching or may be decreased due to precipitation of secondary materials in pores.	HA
Moderately altered	The whole of the rock material is discoloured, usually by staining or bleaching to the extent that the colour of the original rock is not recognisable but shows little or no change of strength from fresh rock.	MA
Slightly altered	Rock is slightly discoloured but shows little or no change of strength from fresh rock	SA
Note: If HA and MA cannot be differentiated use DA (see below)		
Distinctly altered	Rock strength usually changed by alteration. The rock may be highly discoloured, usually by staining or bleaching. Porosity may be increased by leaching or may be decreased due to precipitation of secondary minerals in pores.	DA

Degree of Fracturing

The following descriptive classification apply to the spacing of natural occurring fractures in the rock mass. It includes bedding plane partings, joints and other defects, but excludes drilling breaks. These terms are generally not required on investigation logs where fracture spacing is presented as a histogram, and where used are presented in an unabbreviated format.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with occasional fragments
Fractured	Core lengths of 30-100 mm with occasional shorter and longer sections
Slightly Fractured	Core lengths of 300 mm or longer with occasional sections of 100-300 mm
Unbroken	Core contains very few fractures

Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$RQD \% = \frac{\text{cumulative length of 'sound' core sections} > 100 \text{ mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or stronger. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e., drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

Stratification Spacing

These terms may be used to describe the spacing of bedding partings in sedimentary rocks. Where used, these terms are generally presented in an unabbreviated format

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

Rock Descriptions

Terminology
Symbols
Abbreviations

Defect Descriptions

Defect Type

Term	Abbreviation Code
Bedding plane	B
Cleavage	CL
Crushed seam	CS
Crushed zone	CZ
Drilling break	DB
Decomposed seam	DS
Drill lift	DL
Extremely Weathered seam	EW
Fault	F
Fracture	FC
Fragmented	FG
Handling break	HB
Infilled seam	IS
Joint	JT
Lamination	LAM
Shear seam	SS
Shear zone	SZ
Vein	VN
Mechanical break	MB
Parting	P
Sheared Surface	S

Rock Defect Orientation

Term	Abbreviation Code
Horizontal	H
Vertical	V
Sub-horizontal	SH
Sub-vertical	SV

Rock Defect Coating

Term	Abbreviation Code
Clean	CN
Coating	CT
Healed	HE
Infilled	INF
Stained	SN
Tight	TI
Veneer	VNR

Rock Defect Infill

Term	Abbreviation Code
Calcite	CA
Carbonaceous	CBS
Clay	CLAY
Iron oxide	FE
Manganese	MN
Pyrite	Py
Secondary material	MS
Silt	M
Quartz	Qz
Unidentified material	MU

Rock Defect Shape/Planarity

Term	Abbreviation Code
Curved	CU
Discontinuous	DIS
Irregular	IR
Planar	PR
Stepped	ST
Undulating	UN

Rock Defect Roughness

Term	Abbreviation Code
Polished	PO
Rough	RF
Smooth	SM
Slickensided	SL
Very rough	VR

Defect Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

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Sampling and Testing

A record of samples retained, and field testing performed is usually shown on a Douglas Partners' log with samples appearing to the left of a depth scale, and selected field and laboratory testing (including results, where relevant) appearing to the right of the scale, as illustrated below:

SAMPLE			DEPTH (m)	TESTING	
SAMPLE REMARKS	TYPE	INTERVAL		TEST TYPE	RESULTS AND REMARKS
	SPT		1.0 1.45	SPT	4,9,11 N=20

Sampling

The type or intended purpose for which a sample was taken is indicated by the following abbreviation codes.

Sample Type	Code
Auger sample	A
Acid Sulfate sample	ASS
Bulk sample	B
Core sample	C
Disturbed sample	D
Environmental sample	ES
Gas sample	G
Piston sample	P
Sample from SPT test	SPT
Undisturbed tube sample	U ¹
Water sample	W
Material Sample	MT
Core sample for unconfined compressive strength testing	UCS

¹ – numeric suffixes indicate tube diameter/width in mm

The above codes only indicate that a sample was retained, and not that testing was scheduled or performed.

Field and Laboratory Testing

A record that field and laboratory testing was performed is indicated by the following abbreviation codes.

Test Type	Code
Pocket penetrometer (kPa)	PP
Photo ionisation detector (ppm)	PID
Standard Penetration Test x/y = x blows for y mm penetration HB = hammer bouncing HW = fell under weight of hammer	SPT
Shear vane (kPa)	V
Unconfined compressive strength, (MPa)	UCS

Field and laboratory testing (continued)

Test Type	Code
Point load test, (MPa), axial (A), diametric (D), irregular (I)	PLT(L)
Dynamic cone penetrometer, followed by blow count penetration increment in mm (cone tip, generally in accordance with AS1289.6.3.2)	DCP/150
Perth sand penetrometer, followed by blow count penetration increment in mm (flat tip, generally in accordance with AS1289.6.3.3)	PSP/150

Groundwater Observations

▷	seepage/inflow
▽	standing or observed water level
NFGWO	no free groundwater observed
OBS	observations obscured by drilling fluids

Drilling or Excavation Methods/Tools

The drilling/excavation methods used to perform the investigation may be shown either in a dedicated column down the left-hand edge of the log, or stated in the log footer. In some circumstances abbreviation codes may be used.

Method	Abbreviation Code
Direct Push	DP
Solid flight auger. Suffixes: /T = tungsten carbide tip, /V = v-shaped tip	AD ¹
Air Track	AT
Diatube	DT ¹
Hand auger	HA ¹
Hand tools (unspecified)	HAND
Existing exposure	X
Hollow flight auger	HSA ¹
HQ coring	HQ3
HMLC series coring	HMLC
NMLC series coring	NMLC
NQ coring	NQ3
PQ coring	PQ3
Predrilled	PD
Push tube	PT ¹
Ripping tyne/ripper	R
Rock roller	RR ¹
Rock breaker/hydraulic hammer	EH
Sonic drilling	SON ¹
Mud/blade bucket	MB ¹
Toothed bucket	TB ¹
Vibrocure	VC ¹
Vacuum excavation	VE
Wash bore (unspecified bit type)	WB ¹

¹ – numeric suffixes indicate tool diameter/width in mm

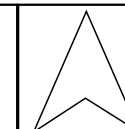
Appendix C

Historical Aerials

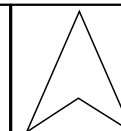


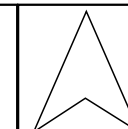




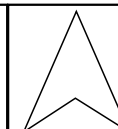




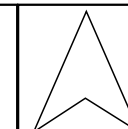




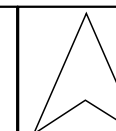














Appendix D

Title Deeds

		Status	Surv/Comp	Purpose
SP73256				
	DP402234	HISTORICAL	SURVEY	UNRESEARCHED
	DP1071461	HISTORICAL	SURVEY	REDEFINITION
SP99945				
	DP8682	HISTORICAL	SURVEY	UNRESEARCHED
	DP1262185	HISTORICAL	SURVEY	CONSOLIDATION
SP101932				
	DP335374	HISTORICAL	SURVEY	UNRESEARCHED
	DP1260950	HISTORICAL	SURVEY	REDEFINITION

Caution: 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.



G827759
NEGATIVE PREPARED



Copy of Jan 10/2/55

43267 L

FX



LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:17PM

FOLIO: D/402234

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 7462 FOL 36

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
17/1/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
16/7/1997	3238389	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 1
11/1/2000	6476379	TRANSFER	EDITION 2
6/10/2015	AJ873294	TRANSFER	
6/10/2015	AJ873295	MORTGAGE	EDITION 3
1/9/2018	AN678863	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
2/7/2019	AP364858	DISCHARGE OF MORTGAGE	
2/7/2019	AP364860	MORTGAGE	EDITION 5 CORD ISSUED

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Form: 97-011
Licence: 10V/0096/96
Edition: 49804

TRANSFER

New South Wales
Real Property Act 1900



STAMP DUTY

Office of State Revenue use only

NEW SOUTH WALES DUTY
22-12-1999 0000194472-001
TRANSFER - AGT FOR SALE OF LAND
DUTIABLE AMOUNT \$ *****210,000.00
DUTY \$ *****\$5,840.00

(A) TORRENS TITLE

If appropriate, specify the part or share transferred

IDENTIFIER D/402234

(B) LODGED BY

LTO Box

35D

Name, Address or DX and Telephone

MORRIS, HAYES & EDGAR

LAW STATIONERS

74 CASTLEREAGH ST., SYDNEY

Reference (optional):

DX 420 9232 2411

CODES

T
TS (\$713)
TW (Sheriff)

(C) TRANSFEROR

BRESABOL PTY LIMITED (ACN 002 318 309)

(D)

The transferor acknowledges receipt of the consideration of \$210,000.00 and as regards the land specified above transfers to the transferee an estate in fee simple.

(E)

Encumbrances (if applicable): 1. 2. 3.

(F) TRANSFEE

HARRY KOERNICKE and MIRJANA KOERNICKE

(G)

TENANCY: Joint Tenants

(H) We certify this dealing correct for the purposes of the Real Property Act 1900.

DATE: 22ND DECEMBER 1999

Signed in my presence by the transferor who is personally known to me.

Signature of witness: THE COMMON SEAL of BRESABOL Signature of transferor:

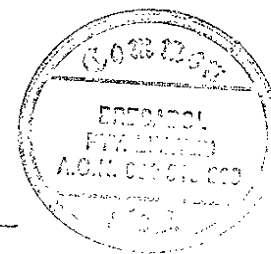
PTY. LIMITED was hereunto affixed by authority

Name of witness: of the Board of Directors previously
given and in the presence of:

Address of witness:

Sh. H. H.
SECRETARY

C. K. L.
DIRECTOR



Signed in my presence by the transferee who is personally known to me.

Signature of witness:

Signature of transferee: 's Solicitor

Name of witness:

F.G. McInerney

Address of witness:

F.G. McInerney, Wollongong

If signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name and capacity below:

All handwriting must be in block capitals.

A set of notes on this form (97-01T-2)

is available from the Land Titles Office.



LAND
REGISTRY
SERVICES

Title Search



NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: D/402234

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
3/2/2022	2:12 PM	5	2/7/2019

LAND

LOT D IN DEPOSITED PLAN 402234
LOCAL GOVERNMENT AREA WOLLONGONG
PARISH OF WOLLONGONG COUNTY OF CAMDEN
TITLE DIAGRAM DP402234

FIRST SCHEDULE

AA CROWN HOLDINGS PTY LTD (T AJ873294)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 AP364860 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.



LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:20PM

FOLIO: C/402234

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8483 FOL 42

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
30/8/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
6/10/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
12/9/1990	Z219601	TRANSMISSION APPLICATION	EDITION 1
23/11/2002	9153415	TRANSFER	
23/11/2002	9153416	MORTGAGE	EDITION 2
18/8/2004	DP1071461	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

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219601

RP3

STAMP DUTY



OFFICE OF STATE REVENUE
 (N.S.W. TREASURY)
 1990/91 W10
 STAMP DUTY
 \$10.00
 CHIEF COMMISSIONER

TRANSMISSION APPLICATION

TA

SECTION 93, REAL PROPERTY ACT, 1900

See Instructions for Completion on back of form

B. 1 of 1
 \$ 47
 R 1

DESCRIPTION
 OF LAND
 Note (a)

LAND of which deceased is registered proprietor		
Torrens Title reference	If Part Only, Define Whole and Give Details	Location
Volume 848 Folio 42	WHOLE NOW BEING OF LAND COMPRISED IN FOLIO 0402234	

REGISTERED
 DEALING
 Note (b)

LEASE, MORTGAGE, OR CHARGE of which deceased is registered proprietor			
Type of Dealing	Registered Number	Torrens Title Reference	Location

DECEASED
 REGISTERED
 PROPRIETOR
 Note (c)

ROSALIA BARANSKI

Note (d)

(the abovenamed DECEASED) is registered as proprietor of the land above described.
 above mentioned registered dealing. The APPLICANT

APPLICANT
 Note (e)

JOSEPH PERDA of 3/17 Urunga Parade, Wollongong	OFFICE USE ONLY S

ENTITLEMENT
 Note (f) and (j)

being entitled as Beneficiary of the will/estate of the abovenamed deceased
 Probate No 104469/90 of whose will was granted on 2nd May, 1990
~~Letters of Administration No~~ of whose estate was granted on
 to JOSEPH PERDA

Note (d)

hereby applies to be registered as proprietor of the estate or interest of the said deceased in the land above described.
 above mentioned registered dealing.

DATE 22 August 1990

I hereby certify this application to be correct for the purposes of the real Property Act, 1900
 Signed in my presence by the applicant who is personally known to me.

Signature of Witness

EXECUTION
 Note (g)

Name of Witness (BLOCK LETTERS): P. J. WELCH
SOLICITOR
WOLLONGONG
 Address and Occupation of Witness

Signature of Applicant
J. Perda

TO BE COMPLETED
 BY LODGING PARTY
 Notes (g) and (h)

LODGED BY V. J. RALPH & CO. LAW STATIONERS LEVEL 19, M.L.C. CENTRE MARTIN PLACE, SYDNEY DX 347 SYDNEY FAX: 233 8645 PH: 233 8088 38W		PROBATE No. LOCATION OF DOCUMENTS AND/OR OTHER DATE OF DEATH	
Ref:	CT	104469/90	Herewith.
Delivery Box Number	Signature Retained	2/11/89	In L.T.O. with
Produced by			
Checked	Passed	REGISTERED	Secondary Directions
Signed	Extra Fee	12 SEP 1990	Delivery Directions
			CT 38W

Form: 01T
Release: 2.1
www.lpi.nsw.gov.au

TRANSFER

New South Wales
Real Property Act 1900



9153415L

PRIVACY NOTE: this information is legally required and will be

STAMP DUTY

Office of State Revenue use only	NEW SOUTH WALES DUTY 22-10-2002 0001153364-001 SECTION 18(2) DUTY \$ *****2.00

(A) TORRENS TITLE

IDENTIFIER: C/402234

(B) LODGED BY

Delivery Box 45A	Name, Address or DX and Telephone NATIONAL AUSTRALIA BANK 197 Prospect Highway Seven Hills NSW 2147 45A Fax: 8825 0404 Reference: 526F6102	CODES T TW (Sheriff)

(C) TRANSFEROR

JOSEPH PERDA

(D) **CONSIDERATION** The transferor acknowledges receipt of the consideration of \$ 510,000.00 and as regards

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

(F) SHARE TRANSFERRED

(G) **Encumbrances (if applicable):**

(H) TRANSFEE

BLUE RIVER DEVELOPMENTS PTY LIMITED ACN 101 819 783

(I)

TENANCY:

(J) DATE

I certify that the person(s) signing opposite, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Signature of witness:

Name of witness:

Address of witness:

DAVID ARTHUR SWAN

LEVEL 4, 310 CROWN STREET,
WOLLONGONG, SOLICITOR

ARTHUR SWAN

CROWN STREET,
WOLLONGONG, SOLICITOR

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Signature of transferor:

Certified for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Signatory's name:
Signatory's capacity:

ANGELA McMINN
transferee's licensed conveyancer



LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:18PM

FOLIO: 1/1071461

First Title(s): OLD SYSTEM
Prior Title(s): C/402234

Recorded	Number	Type of Instrument	C.T. Issue
18/8/2004	DP1071461	DEPOSITED PLAN	FOLIO CREATED
18/8/2004	SP73256	STRATA PLAN	CT NOT ISSUED
			FOLIO CANCELLED

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

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LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:19PM

FOLIO: CP/SP73256

First Title(s): OLD SYSTEM

Prior Title(s): 1/1071461

Recorded	Number	Type of Instrument	C.T. Issue
18/8/2004	SP73256	STRATA PLAN	FOLIO CREATED EDITION 1
30/5/2019	AP280925	CHANGE OF ADDRESS OF ASSOCIATION/OWNERS CORPORATION	EDITION 2

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

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FOLIO: CP/SP73256

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
3/2/2022	2:13 PM	2	30/5/2019

LAND

THE COMMON PROPERTY IN THE STRATA SCHEME BASED ON STRATA PLAN 73256
WITHIN THE PARCEL SHOWN IN THE TITLE DIAGRAM

AT WOLLONGONG
LOCAL GOVERNMENT AREA WOLLONGONG
PARISH OF WOLLONGONG COUNTY OF CAMDEN
TITLE DIAGRAM SP73256

FIRST SCHEDULE

THE OWNERS - STRATA PLAN NO. 73256
ADDRESS FOR SERVICE OF DOCUMENTS:
C/- BCS STRATA MANAGEMENT PTY LTD
LOCKED BAG 22
HAYMARKET 1238

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 ATTENTION IS DIRECTED TO THE RESIDENTIAL SCHEMES MODEL BY-LAWS
CONTAINED IN THE STRATA SCHEMES MANAGEMENT REGULATION APPLICABLE
AT THE DATE OF REGISTRATION OF THE SCHEME
KEEPING OF ANIMALS - OPTION A HAS BEEN ADOPTED

SCHEDULE OF UNIT ENTITLEMENT (AGGREGATE: 4)

STRATA PLAN 73256

LOT	ENT	LOT	ENT	LOT	ENT	LOT	ENT
1	- 1	2	- 1	3	- 1	4	- 1

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022



LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:17PM

FOLIO: A/343680

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 5200 FOL 101

Recorded	Number	Type of Instrument	C.T. Issue
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
23/4/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
7/9/2001	7924099	LEASE	EDITION 1

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.



FOLIO: A/343680

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
3/2/2022	2:13 PM	1	7/9/2001

LAND

LOT A IN DEPOSITED PLAN 343680
AT WOLLONGONG
LOCAL GOVERNMENT AREA WOLLONGONG
PARISH OF WOLLONGONG COUNTY OF CAMDEN
TITLE DIAGRAM DP343680

FIRST SCHEDULE

NEW SOUTH WALES LAND AND HOUSING CORPORATION (T W68404)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 A163575 COVENANT
- 3 7924099 LEASE TO WOLLONGONG WOMEN'S HOUSING INC EXPIRES:
26/4/2006. OPTION OF RENEWAL: 5 YEARS.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022



LAND
REGISTRY
SERVICES

Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

3/2/2022 2:18PM

FOLIO: B/343680

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 5200 FOL 104

Recorded	Number	Type of Instrument	C.T. Issue
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
23/4/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
6/6/1990	Z43547	DISCHARGE OF MORTGAGE	
6/6/1990	Z43548	TRANSFER	
6/6/1990	Z43549	MORTGAGE	EDITION 1
21/9/1990	Z243005	MORTGAGE	EDITION 2
30/10/1995	0645024	DISCHARGE OF MORTGAGE	EDITION 3
22/12/1995	0792757	TRANSFER	EDITION 4
9/7/1998	5113712	DISCHARGE OF MORTGAGE	
9/7/1998	5113713	TRANSFER	EDITION 5

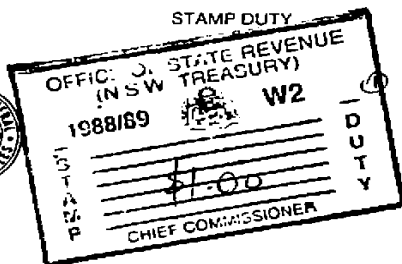
*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

RP 13

STAMP DUTY



WOLLONGONG



043548

TRANSFER

REAL PROPERTY ACT, 1900

T

2	2 of 3	X	R ² / ₃
\$	44		

DESCRIPTION
OF LAND
Note (a)

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
Volume 5200 Folio 104 Now being <u>whole</u> of land comprised in Cert. of Title, <u>B/343680</u>	WHOLE	at Wollongong

TRANSFEROR
Note (b)

WRANAL PTY. LIMITED

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$ 410,000-00
and transfers an estate in fee simple
in the land above described to the TRANSFEREE

TRANSFEREE
Note (d)

PETER CORNELIUS MOLONEY and DAVID EMILE SERISIER

OFFICE USE ONLY

TC 2

TENANCY
Note (e)

as joint tenants/tenants in common in equal shares

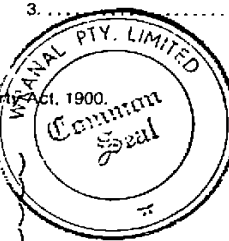
PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1.
2.
3.

DATE 22nd December 1989

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

Signed in my presence by the transferor who is personally known to me
THE COMMON SEAL OF WRANAL PTY. LIMITED
was hereunto affixed by authority of the
Board of Directors in the presence of:



Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Director

Secretary

D

(G. Hamilton)
Solicitor for Signature of Transferee / /1989

TO BE COMPLETED
BY LODGING PARTY
Notes (h)
and (i)

OFFICE USE ONLY

LODGED BY		LOCATION OF DOCUMENTS	
The Banking Corporation THE BANKING HOUSE, 220 PITT STREET SYDNEY 2000 PHONE: 226-2811 DELIVERY BOX NO. 37Y		CT	OTHER
Ref: Delivery Box Number		☒	☐ Herewith.
		☐	☐ In L.T.O. with
		☐	☐ Produced by
Checked EGW	Passed	REGISTERED	- -19
Signed	Extra Fee	- 6 JUN 1990	

Form: 97-01T

Licence: 026CN/0526/96

TRANSFER

New South Wales

Real Property Act 1900

Land Titles Office use only

5113713 D

Instructions for filling out
this form are available
from the Land Titles Office

Office of State Revenue use only



5140.00

00"015\$

10/864152006 40 2025 86/090

LAND TITLES "M" "S" "N"

- (A) **LAND TRANSFERRED**
Show no more than 20 titles.
If appropriate, specify the
share or part transferred.

FOLIO IDENTIFIER B/343680

- (B) **LODGED BY**

LTO Box

28A

Name, Address or DX and Telephone

GALLOWAY & CO.
Phone: (02) 9233 1011 Fax: (02) 9232 6491
DX 340, SYDNEY L.T.O. Delivery 28A

REFERENCE (15 character maximum): Devitt/Canray

- (C) **TRANSFEROR** PETER CORNELIUS MOLONEY

- (D) acknowledges receipt of the consideration of \$190,000.00
and as regards the land specified above transfers to the transferee an estate in fee simple.

- (E) Encumbrances (if applicable) 1. 2. 3.

- (F) **TRANSFEE**

T

TS

(s713

LGA)

TW

(Sheriff)

CANRAY HOLDINGS PTY LIMITED (ACN 001 829 330)

- (G)

TENANCY:

- (H) We certify this dealing correct for the purposes of the Real Property Act 1900. **DATE** 3 July 1998

Signed in my presence by the transferor who is personally known to me.

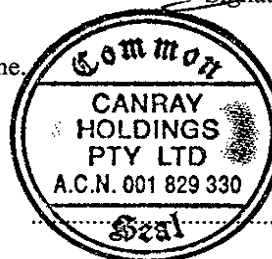
Lesley Graham
Signature of Witness

LESLEY GRAHAM
Name of Witness (BLOCK LETTERS)

6/17 Prince Edward Drive Dapto 2530
Address of Witness

P. Moloney
Signature of Transferor

Signed in my presence by the transferee who is personally known to me.



THE COMMON SEAL of CANRAY HOLDINGS)
PTY LIMITED (ACN 001 829 330) was hereunto)
affixed in accordance with its Articles of Association)
in the presence of:)

John
Director

S. S. S. S.
Secretary



LAND
REGISTRY
SERVICES

Title Search



NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: B/343680

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
3/2/2022	2:12 PM	5	9/7/1998

LAND

LOT B IN DEPOSITED PLAN 343680
AT WOLLONGONG
LOCAL GOVERNMENT AREA WOLLONGONG
PARISH OF WOLLONGONG COUNTY OF CAMDEN
TITLE DIAGRAM DP343680

FIRST SCHEDULE

CANRAY HOLDINGS PTY LIMITED (T 5113713)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 A163575 COVENANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Crown Street & Urunga Parade, Wollongong PRINTED ON 3/2/2022

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.



14
5/
9/4/9/00
[Signature]

DP 5507

ROSEMON

AT WO

Shewing subdivision of pa

Parish of Wollong

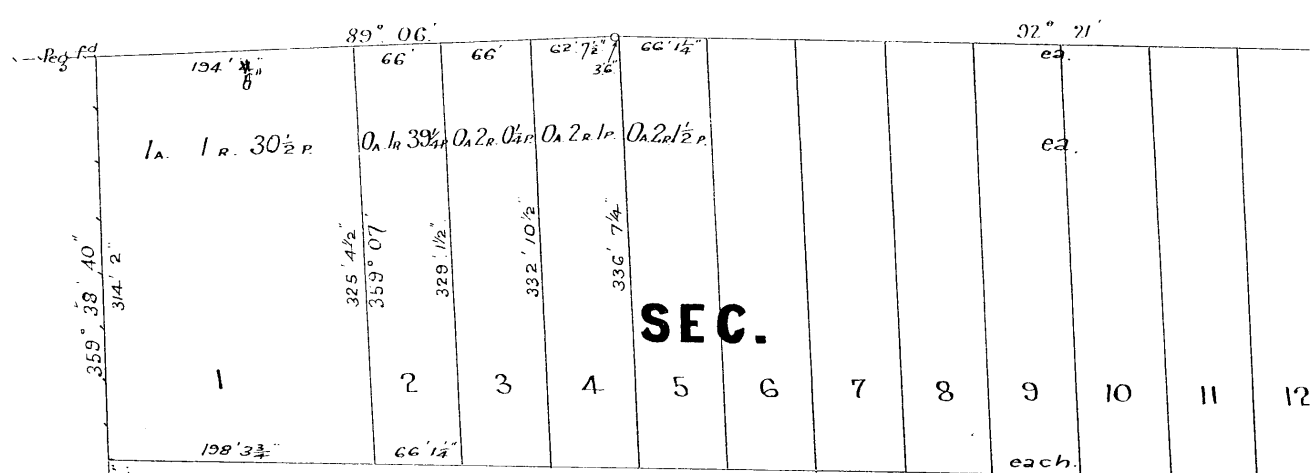
Scale 100

Appd 12255, Part of 640 ac. For 15

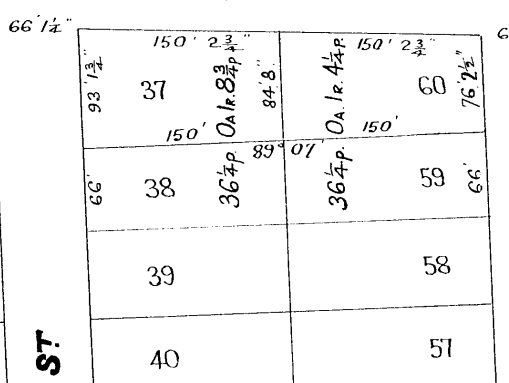
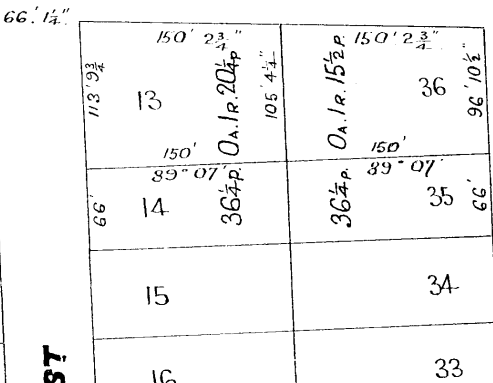
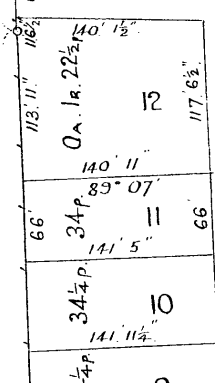
Fin C. { CT Vol
CT Vol

Mount

Keira



GREENACRE



DP 5507 (E)

WOLLONGONG

PLAN

OF

ROSEMONT ESTATE

AT WOLLONGONG

Shewing subdivision of part of John Osbornes 640 ac. G⁺ 48 P^b

Parish of Wollongong County of Camden

Scale 100 feet to an Inch.

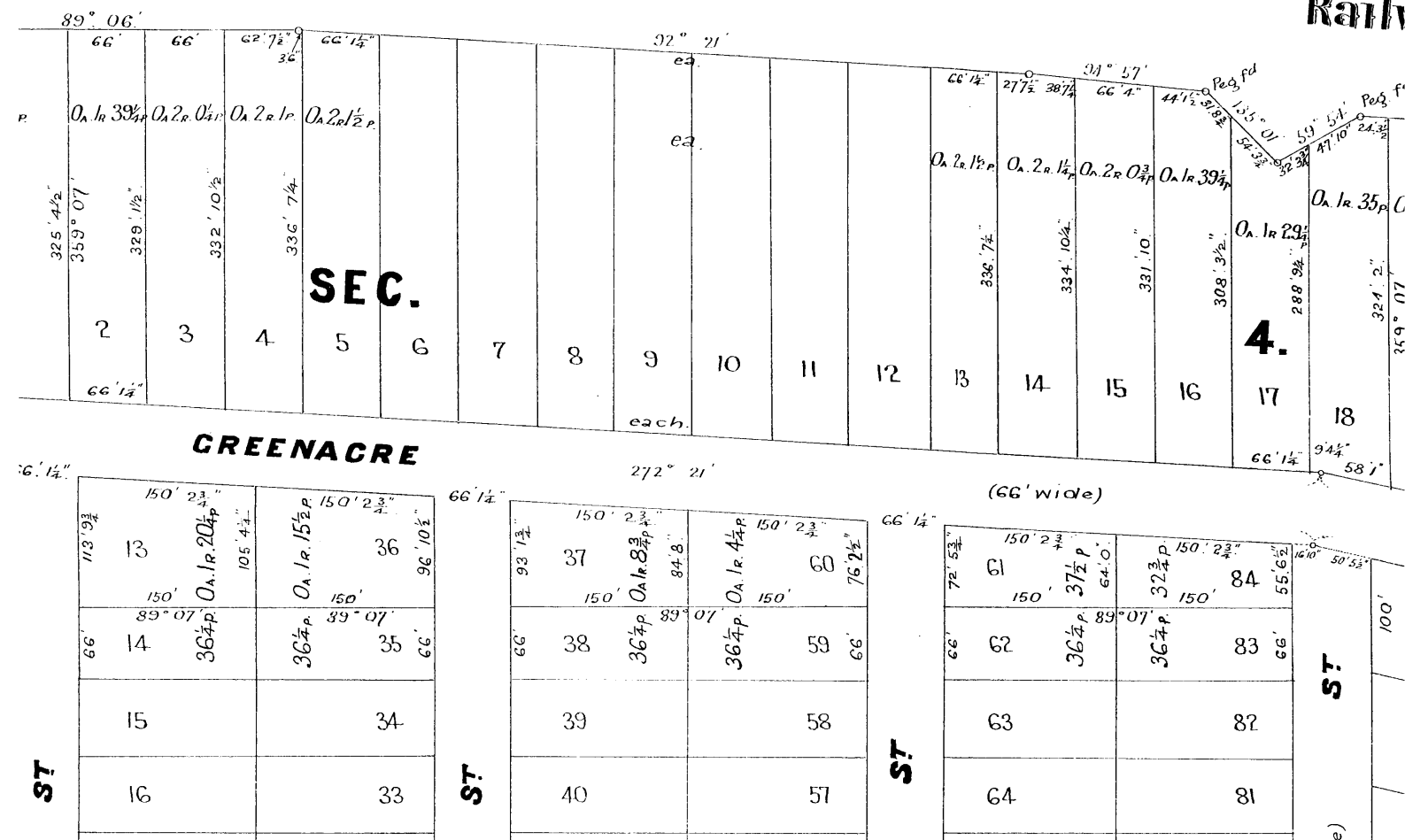
Appl 12755. Part of 640 ac. (Por. 18, P^b) Grant to John Osborn 13th October 1831.

Tr. C. { C.T. Vol. 1882. Fo. 177.
C.T. Vol. 1832. Fo. 178.

Mount

Keira

Rail



[illegible]

75

(66' wide)

ROSEMOND

359.07

Parade? Wollongong.		105	
11.	12.	13.	14.
130'	89° 07'	150'	39° 07'
66	14	36 1/2 P.	35
	15		34
	16		33
	17		32
SEC.			
	18		31
	19		30
	20		29
	21		28
	22		27
	23		26
	24	ea.	25
ea.	81 ^A		57 ^A ea.
	81		57
	80		58
	79		59
	78		60
	77		61
	76		62
SEC.			
	75		63
	74	36 1/2 P.	64
66	73	36 1/2 P.	65
132° 0"	72	132° 0"	132° 0"
150'	ea.	132° 0"	66
50'	29 1/2 P.	100'	26 P.
33 1/2 P.	ea.	150'	24 3/4 P.
32	152 1/2 P.	50'	23 3/4 P.
5' 0 1/4"		128° 10 1/2"	126° 1 1/4"

ST.

(66' wide)

359° 07'

HILLCREST

37	37	60
38	38	59
39		58
40		57
41		56
42		55
43		54
44		53
45		52
46		51
47		50
48		49
56 ^A	35 ^A	
56	35	
55	36	
54	37	
53	38	
52	39	
51	40	
50	41	
49	42	
48	43	
47	44	
46	45	

45

(66' wide)

359° 07'

MATTHEWS

66 '6'

ST

(66' wide)

359° 07'

ROSEMONT

1	150' 89° 07' 0A. 1R. 36 1/4 P.	10	150' 89° 07' 0A. 1R. 36 1/4 P.	96
14	36 1/4 P.	35	36 1/4 P.	66
15		34		
16		33		
17		32		
18		31		
19		30		
20		29		
21		28		
22		27		
23	ea.	26	ea.	
24	ea.	25	ea.	
81 ^A		57 ^A	ea.	
81		57		
80		58		
79		59		
78		60		
77		61		
76		62		
75		63		
74		64	66	
73	36 1/4 P.	65	132' 0"	
72	0A. 1R. 32 1/2 P.	66	132' 0"	
29 1/2	0A. 1R. 15 1/2 P.	26 1/2	138' 10 1/2"	
24 3/4	23 3/4	23 3/4	126' 7 1/2"	

SEC.

SEC.

ST

(66' wide)

359° 07'

HILLCREST

38	36 1/4 P.	59	36 1/4 P.	60
39		58		76 1/2
40		57		
41		56		
42		55		
43		54		
44		53		
45		52		
46		51		
47	ea.	50	ea.	
48	ea.	49	ea.	
56 ^A		35 ^A	ea.	
56		35		
55		36		
54		37		
53		38		
52		39		
51		40		
50		41		
49		42		
48		43		
47	36 1/4 P.	44	66	
0A. 2R. 16 1/2 P.		0A. 2R. 6 1/4 P.		
46		45		

ST

(66' wide)

359° 07'

MATTHEWS

61	150' 89° 07' 37 1/2 P.	84	150' 89° 07' 32 1/2 P.	150' 2 1/2"
62	36 1/4 P.	83	36 1/4 P.	55' 6 1/2"
63		82		
64		81		
65		80		
66	ea.	79	ea.	
67	ea.	78	ea.	
68		77		
69		76		
70		75		
71		74	66	
72	36 1/4 P.	73	39 P.	150' 68' 10 1/2"
34	0A. 3R. 26 1/4 P.	21	0A. 3R. 14 3/4 P.	220' 0"
33	0A. 2R. 9 1/4 P.	22	0A. 2R. 13 1/4 P.	132' 132' 8 1/4"
32	0A. 2R. 2 3/4 P.	23	0A. 2R. 5 1/4 P.	132' 132' 8 1/4"
31	0A. 1R. 36 P.	24	0A. 1R. 37 1/4 P.	150' 5 1/2"
29	34 1/2 P.	27	31 1/2 P.	49' 6"
28	33 3/4 P.	26	30 3/4 P.	49' 6"
27	33 3/4 P.	25	30 3/4 P.	52' 1 1/2"

SPERRY 89° 07'

DP 5507 (E)

ST

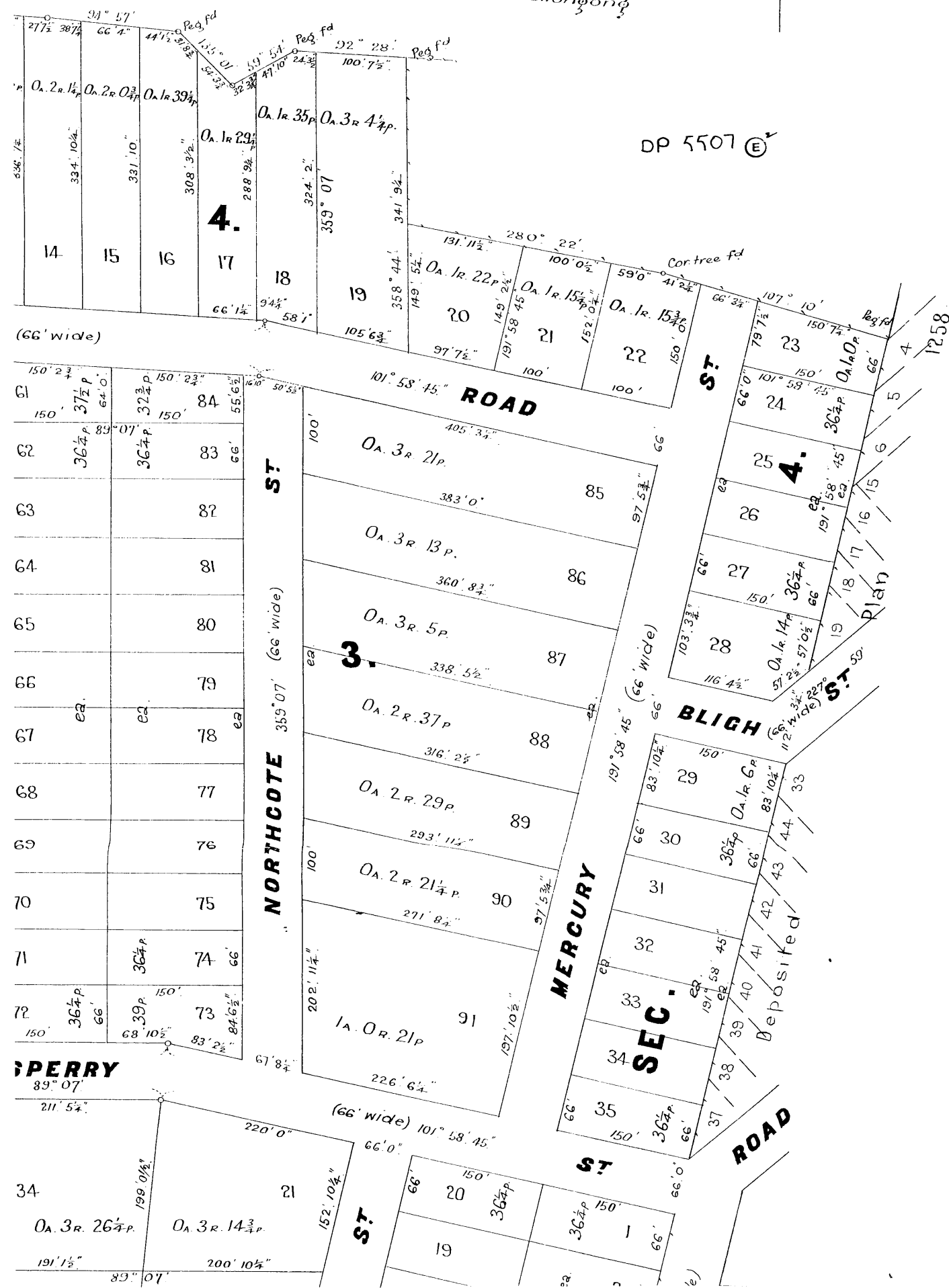
NORTHCOVE 359° 07' (66' wide)

DUDLEY

84	150' 89° 07' 32 1/2 P.	83	36 1/4 P.	55' 6 1/2"
82		81		
81		80		
80		79		
79		78		
78		77		
77		76		
76		75		
75		74	66	
74		73	39 P.	150' 68' 10 1/2"
21	0A. 3R. 14 3/4 P.	22	0A. 2R. 13 1/4 P.	132' 132' 8 1/4"
22	0A. 2R. 13 1/4 P.	23	0A. 2R. 5 1/4 P.	132' 132' 8 1/4"
23	0A. 2R. 5 1/4 P.	24	0A. 1R. 37 1/4 P.	150' 5 1/2"
24	0A. 1R. 37 1/4 P.	27	31 1/2 P.	49' 6"
27	31 1/2 P.	26	30 3/4 P.	49' 6"
26	30 3/4 P.	25	30 3/4 P.	52' 1 1/2"

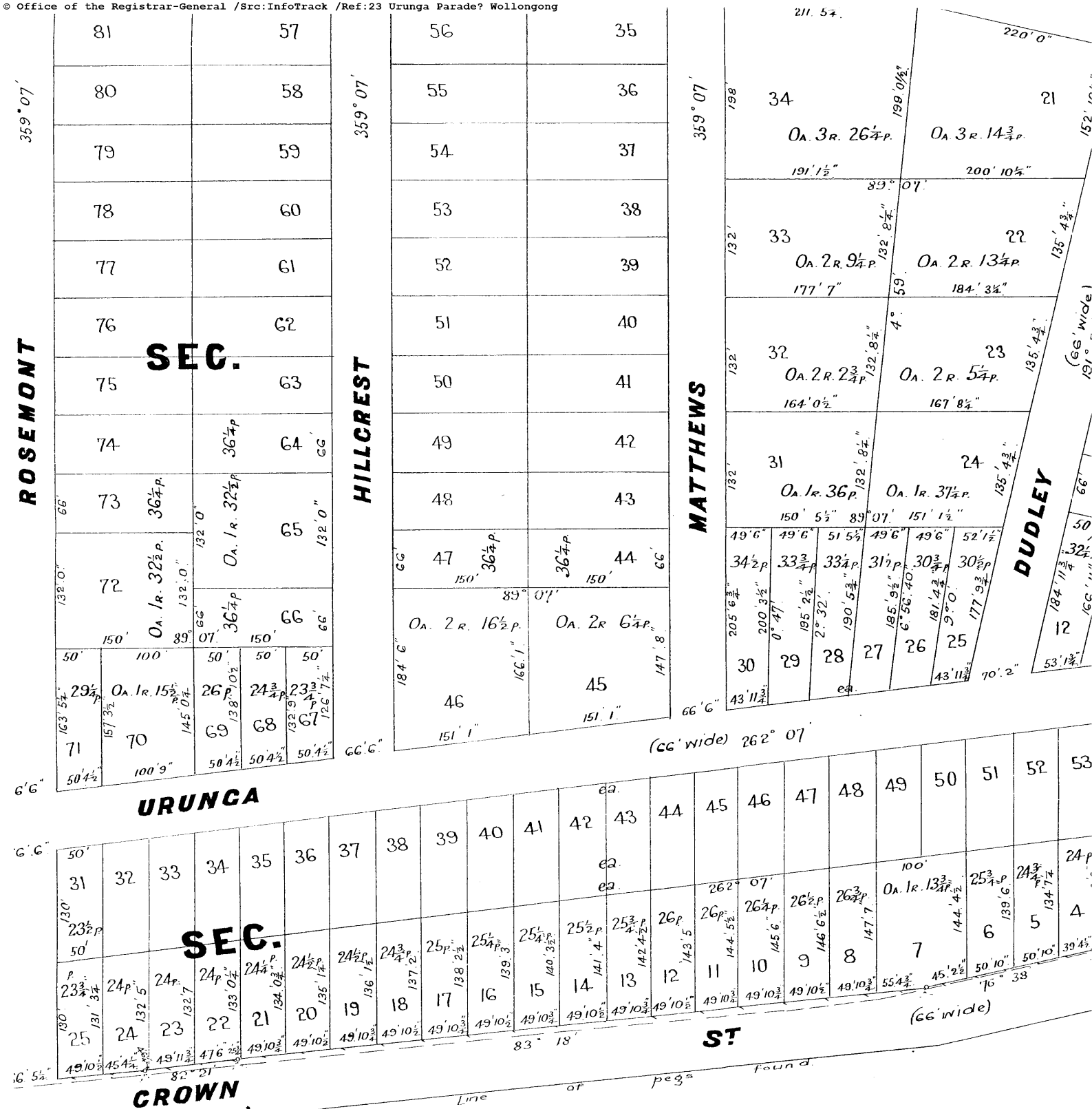
to Wollongong

DP 5507 (E)²



Alterations & additions made by me 24/4/69

DP 5507 (E)⁹

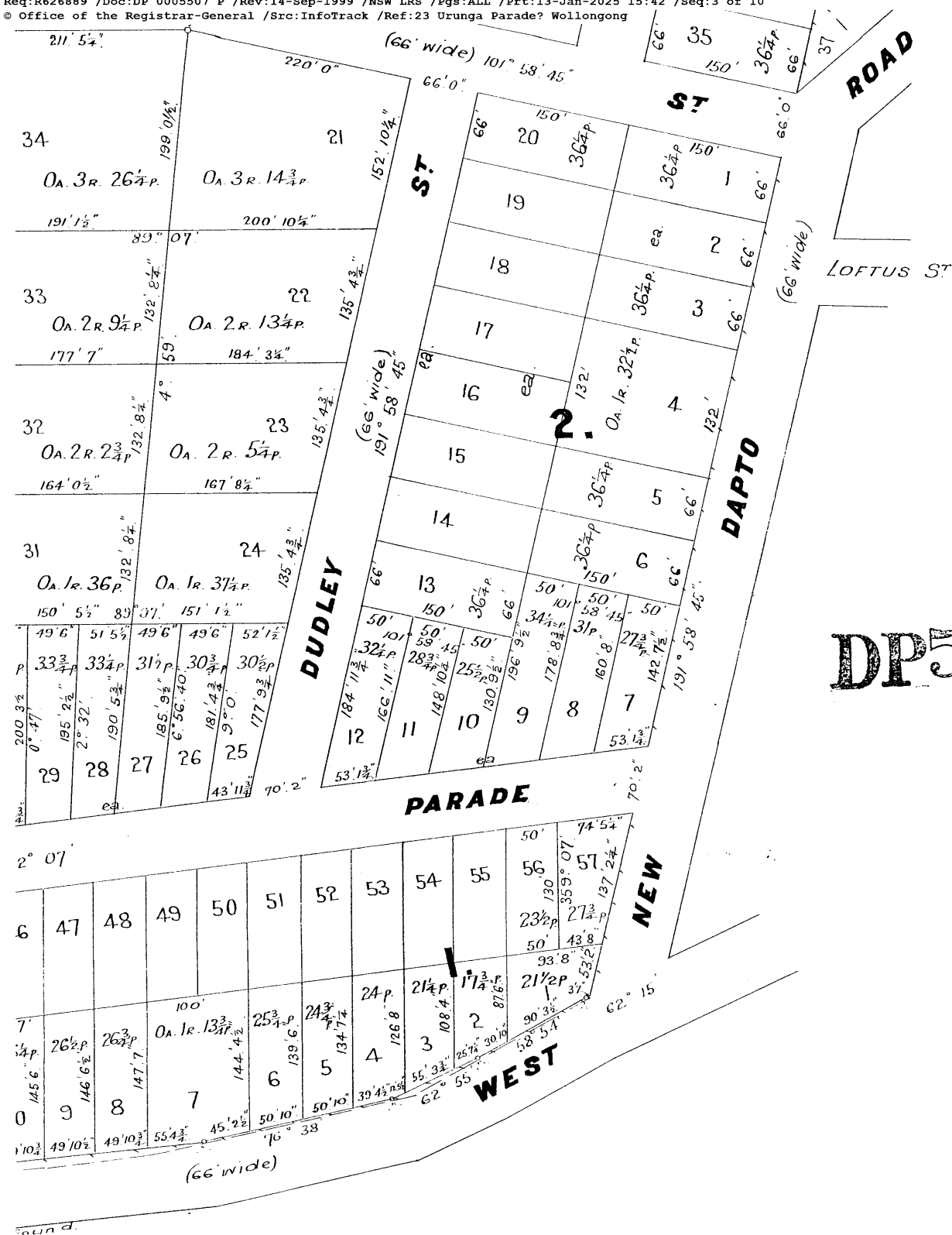


The Council of the Municipality of Wollongong hereby
 approves of this plan of Subdivision
 dated the Eleventh day of January 1900

W. H. H. H.
 Mayor.

Alterations & additions made by me 24/4/09

DP 5507 (E)



DP5507[©]

DECLARATION.

I, Edward Henry Cowdery, of Pitt Street, Sydney, Licensed Surveyor, specially Licensed under the Real Property Act, 1900, do hereby solemnly and sincerely declare that the boundaries and measurements shown on this plan are correct for the purposes of the said Act, and that the said plan and the survey of the land to which the same relates have been prepared and made by me, or 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 Oath's Act, 1900.

Subscribed and declared before me at Sydney

9th day of December A.D., 1908

Edward Henry Cowdery
 J.P.

Licensed Surveyor.

of Wollongong hereby
 Council
 1908
John Keaton
 Mayor.



SEARCH DATE

13/1/2025 3:42PM

FOLIO: 46/1/5507

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 2372 FOL 202

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
16/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
31/8/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
1/9/2018	AN678863	DEPARTMENTAL DEALING	EDITION 1 CORD ISSUED
20/12/2023	AT721167	DISCHARGE OF MORTGAGE	
20/12/2023	AT721168	TRANSFER	EDITION 2

*** END OF SEARCH ***

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:t_nsw18
ELN Document ID:2263364143
ELN NOS ID: 2263364144

TRANSFER
New South Wales
Real Property Act 1900

AT721168

Stamp Duty: 10806755-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General 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.

LODGED BY:

Responsible Subscriber: FOYE LEGAL PTY LTD ABN 68163187595
Address: L 3, 63 Market ST
Wollongong 2500
Email: terri@foyelegal.com
ELNO Subscriber Number: 26037
Customer Account Number: 504783B
Document Collection Box: 1W
Client Reference: 232858

LAND TITLE REFERENCE

46/1/5507

TRANSFEROR

PAKEEZAH PTY LIMITED ACN 001620980
Registered company

TRANSFeree

AA CROWN HOLDINGS PTY LIMITED ACN 122563133
Registered company
Tenancy: Sole Proprietor

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$1,800,000.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

I certify that:

- 1. The Certifier has taken reasonable steps to verify the identity of the transferor or his, her or its administrator or attorney.
- 2. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 3. The Certifier has retained the evidence supporting this Registry Instrument or Document.
- 4. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Party Represented by Subscriber:

PAKEEZAH PTY LIMITED

Signed By: William Thomas Ellicott
ELNO Signer Number: 7771637

Signer Capacity:Practitioner Certifier
Digital Signing Certificate Number:

Signed for
Subscriber: ACCESS LAW GROUP PTY LIMITED ABN 66660797722
ACCESS LAW GROUP

Subscriber Capacity:Representative Subscriber

ELNO Subscriber Number: 2500632

Customer Account Number:507855

Date: 20/12/2023

SIGNING FOR TRANSFEREE

I certify that:

1. The Certifier has taken reasonable steps to verify the identity of the transferee or his, her or its administrator or attorney.
2. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
3. The Certifier has retained the evidence supporting this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Party Represented by Subscriber:

AA CROWN HOLDINGS PTY LIMITED

Signed By:Diana-Maree Foye

Signer Capacity:Practitioner Certifier

ELNO Signer Number: 3871974

Digital Signing Certificate Number:

**Signed for
Subscriber:**

FOYE LEGAL PTY LTD ABN 68163187595

FOYE LEGAL PTY LTD

Subscriber Capacity:Representative Subscriber

ELNO Subscriber Number: 26037

Customer Account Number:504783

Date: 20/12/2023



FOLIO: 46/1/5507

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
13/1/2025	3:41 PM	2	20/12/2023

LAND

LOT 46 OF SECTION 1 IN DEPOSITED PLAN 5507
LOCAL GOVERNMENT AREA WOLLONGONG
PARISH OF WOLLONGONG COUNTY OF CAMDEN
TITLE DIAGRAM DP5507

FIRST SCHEDULE

AA CROWN HOLDINGS PTY LIMITED

(T AT721168)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 A27944 COVENANT AND IS SUBJECT TO CONDITIONS

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Appendix E

Section 10.7 (2 & 5) Planning Certificate

Zachariah Kraich

CERTIFICATE	202201013
Issued	1 March 2022
Certificate Type	Sections 10.7(2) & (5)
Fee	\$133.00
Your Reference	DOUGLAS PARTNERS:221452
Council Property Reference	300317

PLANNING CERTIFICATE

Issued Under Section 10.7 of the Environmental Planning and Assessment Act 1979

PROPERTY DETAILS	Legal Description	Lot B DP 343680
	Location	366 Crown Street WOLLONGONG NSW 2500

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

SECTION 10.7 (2) DETAILS

As at the date of this certificate, the following prescribed matters under section 10.7(2) of the Act relate to the abovementioned land:

1. NAMES OF RELEVANT PLANNING INSTRUMENTS & DEVELOPMENT CONTROL PLANS

(1) The name of each environmental planning instrument that applies to the carrying out of development on the land

Wollongong Local Environmental Plan 2009 **Error! Unknown op code for conditional.**

State Environmental Planning Policies

State Environmental Planning Policy (Planning Systems) 2021
 State Environmental Planning Policy (Biodiversity and Conservation) 2021
 State Environmental Planning Policy (Resilience and Hazards) 2021
 State Environmental Planning Policy (Transport and Infrastructure) 2021
 State Environmental Planning Policy (Industry and Employment) 2021
 State Environmental Planning Policy (Resources and Energy) 2021
 State Environmental Planning Policy (Primary Production) 2021
 State Environmental Planning Policy (Housing) 2021
 State Environmental Planning Policy (Precincts - Regional) 2021
 State Environmental Planning Policy (Exempt and Complying) 2008

CERTIFICATE

(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not yet been approved)

Draft State Environmental Planning Policy (Design and Place) 2021

(3) The name of each development control plan that applies to the carrying out of development on the land

Wollongong Development Control Plan 2009

Wollongong Development Control Plan 2009, contains detailed development controls which supplement the provisions of Wollongong Local Environmental Plan 2009.

Note: The Wollongong Development Control Plan 2009 should be consulted to ascertain its full effect on the land.

(4) In this clause, proposed environmental planning instrument includes a planning proposal for a Local Environmental Plan or a draft environmental planning instrument.

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Wollongong Local Environmental Plan 2009.

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy) that includes the land in any zone (however described):

- (a) the identity of the zone, whether by reference to a name (such as “Residential Zone” or “Heritage Area”) or by reference to a number (such as “Zone No 2(a)”)**

SP1 – Special Activities (Hospital and Medical Research and Development)

- (b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent**

Building identification signs; Business identification signs.

- (c) the purposes for which the instrument provides that development may not**

be carried out within the zone except with development consent

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Advertising structures; Centre-based child care facilities; Community facilities; Information and education facilities; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres.

Maps are available on the NSW Department of Planning website www.planning.nsw.gov.au

(d) the purposes for which the instrument provides that development is prohibited within the zone.

Any development not specified in subclause (2) or (3).

Note:For subdivision consent requirements see Clause 2.6, of Wollongong Local Environmental Plan 2009.

Demolition of a building or work requires consent see Clause 2.7, of Wollongong Local Environmental Plan 2009.

Development below the mean high water mark requires consent see Clause 5.7, of Wollongong Local Environmental Plan 2009.

Note: Wollongong Local Environmental Plan 2009 should be consulted to ascertain its full effect on the land.

(e) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling- house on the land, and if so, the minimum land dimensions so fixed

See Clauses 4.1, 4.1AA, 4.1A, 4.1B, 4.2 and 4.2A of the Local Environmental Plan

(f) Whether the land includes or comprises critical habitat

Nil

(g) Whether the land is in a conservation area (however described)

Nil.

(h) Whether an item of environmental heritage (however described) is situated on the land

The House is a Heritage Item listed in Schedule 5 Part 1 of Wollongong Local Environmental Plan 2009.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGIONAL GROWTH CENTRES) 2006

To the extent that the land is within any zone (however described) under:

- (a) Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or
- (b) a Precinct Plan (within the meaning of the 2006 SEPP),
- (c) a proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,

the particulars referred to in clause 2 (a) – (h) in relation to that land (with a reference to “the instrument” in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).

Not Applicable.

3. COMPLYING DEVELOPMENT

(1) The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1), (c3) and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

(2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

(3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

Error! Unknown op code for conditional.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

- (2) Complying development **may not** be carried out on the land to the extent that it is **wholly** identified as land that comprises, or on which there is an item of **Environmental Heritage or Draft Environmental Heritage** because of the provisions of clauses 1.17A, 1.18 or 1.19 of *State Environmental Planning Policy (Exempt and Complying Codes) 2008*

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

In relation to a coastal council- whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local

Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)

Note: “Existing coastal protection works” are works to reduce the impact of coastal hazards on the land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993

Not applicable

5. MINE SUBSIDENCE

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land is not proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

6. ROAD WIDENING AND ROAD REALIGNMENT

Whether or not the land is affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993 or**
- (b) Any environmental planning instrument or**
- (c) Any resolution of the council**

Council has no record that the land is affected by any Road Widening or Road Realignment under:

- a) Division 2 of Part 3 of the *Roads Act 1993*, or
- b) any environmental planning instrument, or
- c) any resolution of the Council.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy:

- a) adopted by the council, or**
- b) adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils or any other risk (other than flooding).**

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E12 Geotechnical Assessment”.

Council has adopted Acid Sulfate Maps, Wollongong Local Environmental Plan 2009 – Clause 7.5 Acid Sulfate Soils.

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E16 Bushfire Management”. The Rural Fire Service has endorsed the Bush Fire Prone Land map.

Unhealthy Building Land Policy, adopted by the Environmental Protection Authority.

Council has adopted Wollongong City Council Coastal Zone Study (Cardno, Lawson, Treloar 2010).

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) If the land or part of the land is within the flood planning area and is subject to flood related development controls

Council's current flood maps do not show that the land or part of the land is located within a flood planning area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path, the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) If the land or part of the land is between the flood planning area and probable maximum flood and is subject to flood related development controls.

Council's current flood maps do not show that the land or part of the land is between the flood planning area and probable maximum flood area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(3) In this clause -

Flood planning area has the same meaning as in the Floodplain Development Manual.

Floodplain Development Manual means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

Probable maximum flood has the same meaning as in the Floodplain Development Manual.

Further flood information relating to this parcel of land is available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

Please note that flood information may change due to Council's flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

8. LAND RESERVED FOR ACQUISITION

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

Nil.

9. CONTRIBUTION PLANS

The name of each contributions plan applying to the land.

Wollongong City Wide-Development Contributions Plan

This plan levies contributions under Section 7.12 of the *Environmental Planning and Assessment Act 1979 (NSW)*. The Contribution is calculated based on the proposed cost of carrying out development and, where applicable, the requirement to pay contributions will be included in any development consent or complying development certificate issued. Further information is available from Council's website.

9A. BIODIVERSITY CERTIFIED LAND

If the land biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

Note: Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.

Nil.

10. BIODIVERSITY STEWARDSHIP SITES

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Chief Executive of the Office of Environment and Heritage).

Note: Biodiversity stewardship agreements include bio-banking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardship agreements under Part 5 of the *Biodiversity Conservation Act 2016*.

Nil.

10A. NATIVE VEGETATION CLEARING SET ASIDES

If the land contains a set aside area under section 60ZC of the *Local Land Services Act 2013*, a statement to that effect (but only if the council has been notified of the existence of the set aside by Local Land Services or it is registered in the public register under that section).

Nil.

11. BUSH FIRE PRONE LAND

If any of the land is bush fire prone land (as defined in the Act), a statement that all or, as the case may be, some of the land is bush fire prone land.

If none of the land is bush fire prone land, a statement to that effect.

The land is not recorded in Council's records as bushfire prone land.

12. PROPERTY VEGETATION PLANS

If the land is land to which a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force), a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under the Act).

Council has not been notified that the land is affected by a Property Vegetation Plan issued under the Native Vegetation Act 2003.

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order)

Council has not been notified of an order.

14. STATE SIGNIFICANT DEVELOPMENT

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

STATE SIGNIFICANT INFRASTRUCTURE

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

If the land is land to which State Environmental Planning Policy (Housing) 2021 applies:

- (1) A statement of whether there is a current, site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:**

- (a) the period for which the certificate is current, and
- (b) that a copy may be obtained from the head office of the Department of Planning, and

- (2) A statement setting out any terms of a kind referred to in clause 38 of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land

State Environmental Planning Policy (Housing) 2021

Nil.

16. SITE COMPATIBILITY CERTIFICATE FOR INFRASTRUCTURE

A statement of whether there is a valid site compatibility certificate (infrastructure), or site compatibility certificate (schools or TAFE establishments) of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is valid, and
- (b) that a copy may be obtained from the head office of the Department.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Nil.

17. SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

- (1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is current, and
- (b) that a copy may be obtained from the head office of the Department.

- (2) A statement setting out any terms of a kind referred to in clause 38 of State Environmental Planning Policy (Housing) 2021 that have been imposed as a condition of consent to a development application in respect of the land.

State Environmental Planning Policy (Housing) 2021

Nil.

18. PAPER SUBDIVISION INFORMATION

- (1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to the consent ballot.

Nil

(2) The date of any subdivision order that applies to the land.

Not applicable

(3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

19. SITE VERIFICATION CERTIFICATES

A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:

(a) the matter certified by the certificate, and

Note: A site verification certificate sets out the Director-General's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land-see Division 3 of Part 4AA of State Environmental Planning Policy (Resources and Energy 2021).

(b) the date on which the certificate ceases to be current (if any), and

(c) that a copy may be obtained from the head office of the Department.

Nil

20. LOOSE-FILL ASBESTOS INSULATION REGISTER

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register, that is required to be maintained under that Division, a statement to that effect.

For register information contact www.fairtrading.nsw.gov.au

Nil.

21. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.

(2) A statement of:

(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and

(b) Whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

(3) In this clause: affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017. building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

Affected building notice has the same meaning as Part 4 of the [Building Products \(Safety\) Act 2017 No 69](#)

Building product rectification order has the same meaning as in the [Building Products \(Safety\) Act 2017 No 69](#)

Nil.

CONTAMINATED LAND MANAGEMENT ACT 1997

Note: The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated within the meaning of that Act- if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,**
- (b) that the land to which the certificate relates is subject to a management order within the meaning of the Act- if it is subject to such an order at the date when the certificate is issued,**
- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,**
- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,**
- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of the Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate**

Council has **not** been advised that:

- a) The land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997
- b) The land is subject to a management order within the meaning of the Contaminated Land Management Act 1997
- c) The land is subject to an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997
- d) The land is subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997
- e) The land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997.

SECTION 10.7 (5) DETAILS

As at the date of this certificate, the following additional information, provided in good faith pursuant to section 10.7 (5) of the Act, relate to the abovementioned land. Council has selected these matters as those most likely to be of concern but they do not comprise an exhaustive list of matters likely to affect the land.

When information pursuant to section 10.7 (5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7 (6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter referred to in this certificate.

RESOLUTION TO PREPARE PLANNING PROPOSAL

Council on 17 July 2017 resolved to commence the preparation of a draft Planning Proposal to introduce Housing Affordability provisions or SEPP 70 Housing Affordability provisions into the Wollongong Local Environmental Plan 2009. The form of the provisions will be subject to a future report and subsequent community consultation.

PROPOSED DRAFT DEVELOPMENT CONTROL PLANS

The following plans have been placed on exhibition pursuant to the provisions of section 3.43 of the Environmental Planning and Assessment Act 1979:

Draft Development Control Plan 2009 Review

The Wollongong Development Control Plan 2009 came into force on 3 March 2010. The following draft chapters are available for public exhibition.

D16 Draft Neighbourhood Plans for various lots – West Dapto Urban Release Area

E1 Access for people with a disability

C1 Advertising Signage and Structure

E23 – Riparian Land Management

LAND STABILITY

Council's land constraint/stability assessment maps do not show that the land is located in an area where landslip and/or subsidence have occurred, or where land instability is suspected. If you have any doubt as to whether the land is affected by landslip and/or subsidence the services of a suitably qualified engineer should be obtained.

Note: the advice provided by Council in respect of the stability of the land is based on information contained in Council's land constraint maps. The maps have been compiled from data received by Council and considered by Council to be reasonably reliable. Council does not warrant that its land constraint maps contain all information ever received by Council relating to the stability of the land.

FLOOD AND DRAINAGE

Council records indicate that this property is **Not Identified as Flood Affected**.

Council's flood maps do not show that the land is located in an area where flooding has occurred or

is suspected. If you have any doubt as to whether the land is affected by flooding the services of a suitably qualified engineer should be obtained.

Note 1: Some land may experience water inundation as a result of the creation of stormwater detention basins or channels or flow paths in the course of development of the land.

Note 2: Advice given by Council relating to the likelihood of land being flooded or the nature or extent of such flooding is based on information contained in Council's flood maps. The maps are compiled from data received by Council and/or studies prepared by Council and considered by Council to be reasonably reliable. Council does not warrant that its flood maps contain all information ever received by Council relating to the likelihood of land being flooded or the nature or extent of any such flooding.

Please note that flood information may change due to Council's flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

ACID SULFATE SOILS

Nil.

CONTAMINATED LAND

No advice provided.

STATE SIGNIFICANT DEVELOPMENT

Nil.

BUILDING LINES

Wollongong Development Control Plan 2009 details the setbacks applicable to the land.

OTHER HERITAGE MATTERS KNOWN TO COUNCIL

Aboriginal Heritage

All development within the Wollongong Local Government Area is subject to the Aboriginal Heritage requirements of the National Parks and Wildlife Act 1974. To determine if your property is affected by an Aboriginal Site, it is recommended that an Aboriginal Heritage Information Management System (AHIMS) search be undertaken by contacting the AHIMS Administrator on (02) 9995 5000. Further detail on Council's Aboriginal Heritage requirements for Development is contained within Chapter E10 of the Wollongong Development Control Plan 2009.

DEVELOPMENT HISTORY

Application may be made for a Building Certificate under section 10.7B of Environmental Planning and Assessment Act 1979 if written certification of existing buildings on the land is required.

The history of development consent approval applicable to the land may be obtained by consulting the Development Consent Register. Enquiries concerning the register may be made at Council's Customer Service Centre, 41 Burelli Street Wollongong during office hours.

LOOSE-FILL ASBESTOS

Council recommends you make your own enquiries as to the age of the buildings on the land to which this certificate relates and, if it contains a building constructed prior to 1980, the Council also strongly recommends that any potential purchaser obtain advice from a licensed asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the building's occupants.

Contact NSW Fair Trading for further information.

OTHER INFORMATION

Illawarra Shoalhaven Regional Plan

The Department of Planning, Industry and Environment released the Illawarra Shoalhaven Regional Plan 2041 and Special Infrastructure Contribution.

Bushfire

In accordance with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 Clause 1.19A any complying development (except under the Housing Alteration Code) may only be carried out on the lot if the development will not be carried out on any part of the lot that is in the bush fire attack level-40 (BAL- 40) or the flame zone (BAL-FZ). In addition, for development specified for the Rural Housing Code any associated access way to the development must be on land that is not in the BAL- 40 or BAL-FZ or grassland.

GENERAL INFORMATION

The following general information is brought to the attention of land owners.

1. Tree Management Policy

The Wollongong Tree Management Policy allows proper assessment to be made of the environmental importance and viability of trees before they are pruned, removed or damaged in any way. This Policy prohibits the ringbarking, cutting down, topping, lopping, removing, injuring or destruction of any tree except with the prior written consent of Council.

The Tree Management Policy applies to any tree that:

- Is 3 metres or more in height,
- Has a trunk diameter of 200mm or more at a height of 1 metre from the ground, or
- Has a branch spread of 3 metres or more

Please note that:

- A dead/dying tree is subject to the Tree Management Policy
- Pruning of major structural or anchor roots is also subject to the Tree Management Policy

Some trees may be exempt and do not require a permit to prune or remove them. Following is a list of the exempt tree species:

Common Name	Botanical Name
African fern pine, Yellowwood	<i>Afrocarpus falcatus</i> (Syn. <i>Nageia falcatus</i>)
African Olive	<i>Olea europaea</i> subsp. <i>cuspidata</i>
Alder	<i>Alnus</i> species
Black Locust	<i>Robinia pseudoacacia</i>
Box Elder	<i>Acer negundo</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Canary Island Date Palm	<i>Phoenix canariensis</i>
China Doll	<i>Radermachera sinica</i>
Chinese Tallow	<i>Triadica sebifera</i> [<i>Sapium sebiferum</i>]
Cocos or Queen Palm	<i>Syagrus romanzoffiana</i>
Common Hackberry	<i>Celtis occidentalis</i>
Coral Tree	<i>Erythrina x sykesii</i>
Cotoneaster	<i>Cotoneaster</i> species
Domestic Fruit Trees	
Golden Cypress Pine	<i>Cupressus macrocarpa</i> 'Brunniana'
Goldenrain Tree	<i>Koelreuteria paniculata</i>
Honey Locust	<i>Gleditsia triacanthos</i>
Kaffir Plum	<i>Harpephyllum caffrum</i>
Liquidambar	<i>Liquidambar</i> species
Norfolk Island Hibiscus/Itchy Pod Tree	<i>Lagunaria patersonii</i>
Oleander	<i>Nerium oleander</i>
Peppercorn, Pepper Tree	<i>Schinus areira</i>
Poplar	<i>Populus</i> species
Privet	<i>Ligustrum</i> species
Radiata Pine	<i>Pinus radiata</i>
Rubber Tree	<i>Ficus elastica</i>
Silky Oak	<i>Grevillea robusta</i>
Umbrella Tree	<i>Schefflera actinophylla</i>
Willow	<i>Salix</i> species

For the full list of other exemptions please refer to the Tree Management Policy document available via Council's website.

Any person acting on a permit issued under this Policy must comply with all conditions of that permit.

Any person who contravenes, or causes or permits the contravention of this Policy is guilty of an offence under the Environmental Planning and Assessment Act 1979.

Development Consents may contain restrictions relating to trees.

Further information regarding Council's Tree Management Policy including how to lodge an application can be made by contacting Council's Customer Service on telephone 4227 7111. Alternatively information can be obtained from Council's website via the following link <http://www.wollongong.nsw.gov.au/services/household/trees/Pages/Lodgeatmp.aspx>.

2. Termite Management for Buildings

Australian Standards 3660.1-2000 (New Buildings) AS 3660.2-2000 (Existing Buildings) Termite Management, recommends that buildings be inspected and be maintained in order to achieve termite management of buildings. Licensed Pest Control Contractors should be contacted to achieve necessary termite control.

3. Lead Paint and Building Renovations

Your attention is drawn to the hazards associated with lead-based paints during building renovation. Suitable precautions should be taken when removing flaking paint or sanding painted surfaces suspected to have been treated with lead-based paint to prevent contamination of the immediate environment and associated health risk from lead dust.

AS 4361 – Part 2 – Guide to Lead Paint Management – Residential and Commercial.

4. Sewage Management Systems

Where a property has on-site sewage management system (this includes septic tanks, disposal trenches, aerated waste water treatment systems, composting toilets and pump out systems) the new owner must obtain an “Approval to Operate” from Council within 3 months of land ownership being transferred or otherwise conveyed.

5. Asbestos

Exposure to asbestos is a serious health hazard. In Australia, asbestos was gradually phased out of building materials in the 1980s and the supply and installation of asbestos containing goods has been prohibited since 31 December 2003. However, asbestos legacy materials still exist in many homes, buildings and other assets and infrastructure.

Council on the 27 October 2014 adopted an Asbestos policy which states Council’s commitment to and responsibilities for safely managing asbestos, and provides information for Council and the local community on safely managing asbestos. The policy can be viewed on Council’s website: www.wollongong.nsw.gov.au.

6. Loose-Fill Asbestos Insulation

Some residential homes located in NSW have been identified as containing loose-fill asbestos insulation, for example in the roof space. NSW Fair Trading maintains a Register of homes that are affected by loose-fill asbestos insulation.

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates and if it contains a building constructed prior to 1980, the council strongly recommends that any potential purchaser obtain advice from a licenced asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the buildings occupants.

Contact NSW Fair Trading for further information.

7. Building Product Use Ban

On 10 August 2018, the Commissioner of Fair Trading, Department of Finance, Services and Innovation issued, by way of a notice, a Building Product Use Ban under Section 9(1) of the Building Products (Safety) Act 2017. This notice prohibited the use of Aluminium Composite Panels (ACPs) with a core of greater 30 percent Polyethylene (PE) by mass (“the building product”) in any external cladding, external wall, external insulation, faced or rendered finish in certain classes of buildings under the National Construction Code and subject to certain exceptions. The ban commenced operation on Wednesday 15 August 2018.

You should undertake your own inquiries as to whether any of the Panels referenced in the Building Product Use Ban have been utilised in the building.

This letter is authorised by:

Jamie Turner

LIS Information Officer Section 10.7 Planning Certificates

Wollongong City Council

Telephone (02) 4227 7111

Zachariah Zraich

CERTIFICATE	202201014
Issued	1 March 2022
Certificate Type	Sections 10.7(2) & (5)
Fee	\$133.00
Your Reference	DOUGLAS PARTNERS:221452
Council Property Reference	391977

PLANNING CERTIFICATE

Issued Under Section 10.7 of the Environmental Planning and Assessment Act 1979

PROPERTY DETAILS	Legal Description	Lot 1 SP 73256
	Location	1/17 Urunga Parade WOLLONGONG NSW 2500

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

SECTION 10.7 (2) DETAILS

As at the date of this certificate, the following prescribed matters under section 10.7(2) of the Act relate to the abovementioned land:

1. NAMES OF RELEVANT PLANNING INSTRUMENTS & DEVELOPMENT CONTROL PLANS

(1) The name of each environmental planning instrument that applies to the carrying out of development on the land

Wollongong Local Environmental Plan 2009

State Environmental Planning Policies

State Environmental Planning Policy (Planning Systems) 2021
State Environmental Planning Policy (Biodiversity and Conservation) 2021
State Environmental Planning Policy (Resilience and Hazards) 2021
State Environmental Planning Policy (Transport and Infrastructure) 2021
State Environmental Planning Policy (Industry and Employment) 2021
State Environmental Planning Policy (Resources and Energy) 2021
State Environmental Planning Policy (Primary Production) 2021
State Environmental Planning Policy (Housing) 2021
State Environmental Planning Policy (Precincts - Regional) 2021
State Environmental Planning Policy (Exempt and Complying) 2008

CERTIFICATE

(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not yet been approved)

Draft State Environmental Planning Policy (Design and Place) 2021

(3) The name of each development control plan that applies to the carrying out of development on the land

Wollongong Development Control Plan 2009

Wollongong Development Control Plan 2009, contains detailed development controls which supplement the provisions of Wollongong Local Environmental Plan 2009.

Note: The Wollongong Development Control Plan 2009 should be consulted to ascertain its full effect on the land.

(4) In this clause, proposed environmental planning instrument includes a planning proposal for a Local Environmental Plan or a draft environmental planning instrument.

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Wollongong Local Environmental Plan 2009.

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy) that includes the land in any zone (however described):

- (a) the identity of the zone, whether by reference to a name (such as “Residential Zone” or “Heritage Area”) or by reference to a number (such as “Zone No 2(a)”)**

SP1 – Special Activities (Hospital and Medical Research and Development)

- (b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent**

Building identification signs; Business identification signs.

- (c) the purposes for which the instrument provides that development may not be carried out within the zone except with development consent**

The purpose shown on the Land Zoning Map, including any development that is

ordinarily incidental or ancillary to development for that purpose; Advertising structures; Centre-based child care facilities; Community facilities; Information and education facilities; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres.

Maps are available on the NSW Department of Planning website
www.planning.nsw.gov.au

(d) the purposes for which the instrument provides that development is prohibited within the zone.

Any development not specified in subclause (2) or (3).

Note:For subdivision consent requirements see Clause 2.6, of Wollongong Local Environmental Plan 2009.

Demolition of a building or work requires consent see Clause 2.7, of Wollongong Local Environmental Plan 2009.

Development below the mean high water mark requires consent see Clause 5.7, of Wollongong Local Environmental Plan 2009.

Note: Wollongong Local Environmental Plan 2009 should be consulted to ascertain its full effect on the land.

(e) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling- house on the land, and if so, the minimum land dimensions so fixed

See Clauses 4.1, 4.1AA, 4.1A, 4.1B, 4.2 and 4.2A of the Local Environmental Plan

(f) Whether the land includes or comprises critical habitat

Nil

(g) Whether the land is in a conservation area (however described)

Nil.

(h) Whether an item of environmental heritage (however described) is situated on the land

Nil.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGIONAL GROWTH CENTRES) 2006

To the extent that the land is within any zone (however described) under:

- (a) Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or

- (b) a Precinct Plan (within the meaning of the 2006 SEPP),
- (c) a proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,

the particulars referred to in clause 2 (a) – (h) in relation to that land (with a reference to “the instrument” in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).

Not Applicable.

3. COMPLYING DEVELOPMENT

(1) The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1), (c3) and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

(2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

(3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

- (1) Subject to the terms of each code, and the zoning of the land, complying development **may be** carried out for the following codes to the extent that the land has no affectation.
 - Part 3 - Housing Code (R1, R2, R3, R4, RU5)
 - Part 3A - Rural Housing Code (RU1, RU2, RU3, RU4, RU6, R5)
 - Part 3B - Low Rise Housing Diversity Code (R1, R2, R3, RU5)
 - Part 4 - Housing Alterations Code
 - Part 4A - General Development Code
 - Part 5 – Industrial and Business Alterations Code
 - Part 5A - Industrial and Business Building Code
 - Part 5B - Container Recycling Facilities Code
 - Part 6 - Subdivisions Code
 - Part 7 - Demolition Code
 - Part 8 - Fire Safety Code

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

In relation to a coastal council- whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)

Note: “Existing coastal protection works” are works to reduce the impact of coastal hazards on the land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993

Not applicable

5. MINE SUBSIDENCE

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land is not proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

6. ROAD WIDENING AND ROAD REALIGNMENT

Whether or not the land is affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993 or**
- (b) Any environmental planning instrument or**
- (c) Any resolution of the council**

Council has no record that the land is affected by any Road Widening or Road Realignment under:

- a) Division 2 of Part 3 of the *Roads Act 1993*, or
- b) any environmental planning instrument, or
- c) any resolution of the Council.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy:

- a) adopted by the council, or**
- b) adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils or any other risk (other than flooding).**

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E12 Geotechnical Assessment”.

Council has adopted Acid Sulfate Maps, Wollongong Local Environmental Plan 2009 – Clause 7.5 Acid Sulfate Soils.

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E16 Bushfire Management”. The Rural Fire Service has endorsed the Bush Fire Prone Land map.

Unhealthy Building Land Policy, adopted by the Environmental Protection Authority.

Council has adopted Wollongong City Council Coastal Zone Study (Cardno, Lawson, Treloar 2010).

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) If the land or part of the land is within the flood planning area and is subject to flood related development controls

Council’s current flood maps do not show that the land or part of the land is located within a flood planning area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path, the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) If the land or part of the land is between the flood planning area and probable maximum flood and is subject to flood related development controls.

Council’s current flood maps do not show that the land or part of the land is between the flood planning area and probable maximum flood area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(3) In this clause -

Flood planning area has the same meaning as in the Floodplain Development Manual.

Floodplain Development Manual means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

Probable maximum flood has the same meaning as in the Floodplain Development Manual.

Further flood information relating to this parcel of land is available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

Please note that flood information may change due to Council’s flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

8. LAND RESERVED FOR ACQUISITION

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

Nil.

9. CONTRIBUTION PLANS

The name of each contributions plan applying to the land.

Wollongong City Wide-Development Contributions Plan

This plan levies contributions under Section 7.12 of the *Environmental Planning and Assessment Act 1979 (NSW)*. The Contribution is calculated based on the proposed cost of carrying out development and, where applicable, the requirement to pay contributions will be included in any development consent or complying development certificate issued. Further information is available from Councils website.

9A. BIODIVERSITY CERTIFIED LAND

If the land biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

Note: Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.

Nil.

10. BIODIVERSITY STEWARDSHIP SITES

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Chief Executive of the Office of Environment and Heritage).

Note: Biodiversity stewardship agreements include bio-banking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardship agreements under Part 5 of the *Biodiversity Conservation Act 2016*.

Nil.

10A. NATIVE VEGETATION CLEARING SET ASIDES

If the land contains a set aside area under section 60ZC of the *Local Land Services Act 2013*, a statement to that effect (but only if the council has been notified of the existence of the set aside by Local Land Services or it is registered in the public register under that section).

Nil.

11. BUSH FIRE PRONE LAND

If any of the land is bush fire prone land (as defined in the Act), a statement that all or, as the case may be, some of the land is bush fire prone land.

If none of the land is bush fire prone land, a statement to that effect.

The land is not recorded in Council's records as bushfire prone land.

12. PROPERTY VEGETATION PLANS

If the land is land to which a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force), a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under the Act).

Council has not been notified that the land is affected by a Property Vegetation Plan issued under the Native Vegetation Act 2003.

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order)

Council has not been notified of an order.

14. STATE SIGNIFICANT DEVELOPMENT

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

STATE SIGNIFICANT INFRASTRUCTURE

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

If the land is land to which State Environmental Planning Policy (Housing) 2021 applies:

- (1) A statement of whether there is a current, site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department of Planning, and
- (2) A statement setting out any terms of a kind referred to in clause 38 of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land

State Environmental Planning Policy (Housing) 2021

Nil.

16. SITE COMPATIBILITY CERTIFICATE FOR INFRASTRUCTURE

A statement of whether there is a valid site compatibility certificate (infrastructure), or site compatibility certificate (schools or TAFE establishments) of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is valid, and
- (b) that a copy may be obtained from the head office of the Department.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Nil.

17. SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

- (1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department.
- (2) A statement setting out any terms of a kind referred to in clause 38 of State Environmental Planning Policy (Housing) 2021 that have been imposed as a condition of consent to a development application in respect of the land.

State Environmental Planning Policy (Housing) 2021

Nil.

18. PAPER SUBDIVISION INFORMATION

(1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to the consent ballot.

Nil

(2) The date of any subdivision order that applies to the land.

Not applicable

(3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

19. SITE VERIFICATION CERTIFICATES

A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:

(a) the matter certified by the certificate, and

Note: A site verification certificate sets out the Director-General's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land-see Division 3 of Part 4AA of State Environmental Planning Policy (Resources and Energy 2021).

(b) the date on which the certificate ceases to be current (if any), and

(c) that a copy may be obtained from the head office of the Department.

Nil

20. LOOSE-FILL ASBESTOS INSULATION REGISTER

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register, that is required to be maintained under that Division, a statement to that effect.

For register information contact www.fairtrading.nsw.gov.au

Nil.

21. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.

(2) A statement of:

(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and

(b) Whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

(3) In this clause: affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017. building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

Affected building notice has the same meaning as Part 4 of the [Building Products \(Safety\) Act 2017 No 69](#)

Building product rectification order has the same meaning as in the [Building Products \(Safety\) Act 2017 No 69](#)

Nil.

CONTAMINATED LAND MANAGEMENT ACT 1997

Note: The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated within the meaning of that Act- if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,**
- (b) that the land to which the certificate relates is subject to a management order within the meaning of the Act- if it is subject to such an order at the date when the certificate is issued,**
- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,**
- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,**
- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of the Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate**

Council has **not** been advised that:

- a) The land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997
- b) The land is subject to a management order within the meaning of the Contaminated Land Management Act 1997
- c) The land is subject to an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997
- d) The land is subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997
- e) The land is the subject of a site audit statement within the meaning of the Contaminated

SECTION 10.7 (5) DETAILS

As at the date of this certificate, the following additional information, provided in good faith pursuant to section 10.7 (5) of the Act, relate to the abovementioned land. Council has selected these matters as those most likely to be of concern but they do not comprise an exhaustive list of matters likely to affect the land.

When information pursuant to section 10.7 (5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draw s you attention to section 10.7 (6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter referred to in this certificate.

RESOLUTION TO PREPARE PLANNING PROPOSAL

Council on 17 July 2017 resolved to commence the preparation of a draft Planning Proposal to introduce Housing Affordability provisions or SEPP 70 Housing Affordability provisions into the Wollongong Local Environmental Plan 2009. The form of the provisions will be subject to a future report and subsequent community consultation.

PROPOSED DRAFT DEVELOPMENT CONTROL PLANS

The following plans have been placed on exhibition pursuant to the provisions of section 3.43 of the Environmental Planning and Assessment Act 1979:

Draft Development Control Plan 2009 Review

The Wollongong Development Control Plan 2009 came into force on 3 March 2010. The following draft chapters are available for public exhibition.

D16 Draft Neighbourhood Plans for various lots – West Dapto Urban Release Area

E1 Access for people with a disability

C1 Advertising Signage and Structure

E23 – Riparian Land Management

LAND STABILITY

Council's land constraint/stability assessment maps do not show that the land is located in an area where landslip and/or subsidence have occurred, or where land instability is suspected. If you have any doubt as to whether the land is affected by landslip and/or subsidence the services of a suitably qualified engineer should be obtained.

Note: the advice provided by Council in respect of the stability of the land is based on information contained in Council's land constraint maps. The maps have been compiled from data received by Council and considered by Council to be reasonably reliable. Council does not warrant that its land constraint maps contain all information ever received by Council relating to the stability of the land.

FLOOD AND DRAINAGE

Council records indicate that this property is **Not Identified as Flood Affected**.

Council's flood maps do not show that the land is located in an area where flooding has occurred or is suspected. If you have any doubt as to whether the land is affected by flooding the services of a suitably qualified engineer should be obtained.

Note 1: Some land may experience water inundation as a result of the creation of stormwater detention basins or channels or flow paths in the course of development of the land.

Note 2: Advice given by Council relating to the likelihood of land being flooded or the nature or extent of such flooding is based on information contained in Council's flood maps. The maps are compiled from data received by Council and/or studies prepared by Council and considered by Council to be reasonably reliable. Council does not warrant that its flood maps contain all information ever received by Council relating to the likelihood of land being flooded or the nature or extent of any such flooding.

Please note that flood information may change due to Council's flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

ACID SULFATE SOILS

Nil.

CONTAMINATED LAND

No advice provided.

STATE SIGNIFICANT DEVELOPMENT

Nil.

BUILDING LINES

Wollongong Development Control Plan 2009 details the setbacks applicable to the land.

OTHER HERITAGE MATTERS KNOWN TO COUNCIL

Aboriginal Heritage

All development within the Wollongong Local Government Area is subject to the Aboriginal Heritage requirements of the National Parks and Wildlife Act 1974. To determine if your property is affected by an Aboriginal Site, it is recommended that an Aboriginal Heritage Information Management System (AHIMS) search be undertaken by contacting the AHIMS Administrator on (02) 9995 5000. Further detail on Council's Aboriginal Heritage requirements for Development is contained within Chapter E10 of the Wollongong Development Control Plan 2009.

DEVELOPMENT HISTORY

Application may be made for a Building Certificate under section 10.7B of Environmental Planning and Assessment Act 1979 if written certification of existing buildings on the land is required.

The history of development consent approval applicable to the land may be obtained by consulting the Development Consent Register. Enquiries concerning the register may be made at Council's Customer Service Centre, 41 Burelli Street Wollongong during office hours.

LOOSE-FILL ASBESTOS

Council recommends you make your own enquiries as to the age of the buildings on the land to which this certificate relates and, if it contains a building constructed prior to 1980, the Council also strongly recommends that any potential purchaser obtain advice from a licensed asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the building's occupants.

Contact NSW Fair Trading for further information.

OTHER INFORMATION

Illawarra Shoalhaven Regional Plan

The Department of Planning, Industry and Environment released the Illawarra Shoalhaven Regional Plan 2041 and Special Infrastructure Contribution.

Bushfire

In accordance with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 Clause 1.19A any complying development (except under the Housing Alteration Code) may only be carried out on the lot if the development will not be carried out on any part of the lot that is in the bush fire attack level-40 (BAL- 40) or the flame zone (BAL-FZ). In addition, for development specified for the Rural Housing Code any associated access way to the development must be on land that is not in the BAL- 40 or BAL-FZ or grassland.

GENERAL INFORMATION

The following general information is brought to the attention of land owners.

1. Tree Management Policy

The Wollongong Tree Management Policy allows proper assessment to be made of the environmental importance and viability of trees before they are pruned, removed or damaged in any way. This Policy prohibits the ringbarking, cutting down, topping, lopping, removing, injuring or destruction of any tree except with the prior written consent of Council.

The Tree Management Policy applies to any tree that:

- Is 3 metres or more in height,
- Has a trunk diameter of 200mm or more at a height of 1 metre from the ground, or
- Has a branch spread of 3 metres or more

Please note that:

- A dead/dying tree is subject to the Tree Management Policy
- Pruning of major structural or anchor roots is also subject to the Tree Management Policy

Some trees may be exempt and do not require a permit to prune or remove them. Following is a list of the exempt tree species:

Common Name	Botanical Name
African fern pine, Yellowwood	<i>Afrocarpus falcatus</i> (Syn. <i>Nageia falcatus</i>)
African Olive	<i>Olea europaea</i> subsp. <i>cuspidata</i>
Alder	<i>Alnus</i> species
Black Locust	<i>Robinia pseudoacacia</i>
Box Elder	<i>Acer negundo</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Canary Island Date Palm	<i>Phoenix canariensis</i>
China Doll	<i>Radermachera sinica</i>
Chinese Tallow	<i>Triadica sebifera</i> [<i>Sapium sebiferum</i>]
Cocos or Queen Palm	<i>Syagrus romanzoffiana</i>
Common Hackberry	<i>Celtis occidentalis</i>
Coral Tree	<i>Erythrina x sykesii</i>
Cotoneaster	<i>Cotoneaster</i> species
Domestic Fruit Trees	
Golden Cypress Pine	<i>Cupressus macrocarpa</i> 'Brunniana'
Goldenrain Tree	<i>Koelreuteria paniculata</i>
Honey Locust	<i>Gleditsia triacanthos</i>
Kaffir Plum	<i>Harpephyllum caffrum</i>
Liquidambar	<i>Liquidambar</i> species
Norfolk Island Hibiscus/Itchy Pod Tree	<i>Lagunaria patersonii</i>
Oleander	<i>Nerium oleander</i>
Peppercorn, Pepper Tree	<i>Schinus areira</i>
Poplar	<i>Populus</i> species
Privet	<i>Ligustrum</i> species
Radiata Pine	<i>Pinus radiata</i>
Rubber Tree	<i>Ficus elastica</i>
Silky Oak	<i>Grevillea robusta</i>
Umbrella Tree	<i>Schefflera actinophylla</i>
Willow	<i>Salix</i> species

For the full list of other exemptions please refer to the Tree Management Policy document available via Council's website.

Any person acting on a permit issued under this Policy must comply with all conditions of that permit.

Any person who contravenes, or causes or permits the contravention of this Policy is guilty of an offence under the Environmental Planning and Assessment Act 1979.

Development Consents may contain restrictions relating to trees.

Further information regarding Council's Tree Management Policy including how to lodge an application can be made by contacting Council's Customer Service on telephone 4227 7111. Alternatively information can be obtained from Council's website via the following link <http://www.wollongong.nsw.gov.au/services/household/trees/Pages/Lodgeatmp.aspx>.

2. Termite Management for Buildings

Australian Standards 3660.1-2000 (New Buildings) AS 3660.2-2000 (Existing Buildings) Termite Management, recommends that buildings be inspected and be maintained in order to achieve termite management of buildings. Licensed Pest Control Contractors should be contacted to achieve necessary termite control.

3. Lead Paint and Building Renovations

Your attention is drawn to the hazards associated with lead-based paints during building renovation. Suitable precautions should be taken when removing flaking paint or sanding painted surfaces suspected to have been treated with lead-based paint to prevent contamination of the immediate environment and associated health risk from lead dust.

AS 4361 – Part 2 – Guide to Lead Paint Management – Residential and Commercial.

4. Sewage Management Systems

Where a property has on-site sewage management system (this includes septic tanks, disposal trenches, aerated waste water treatment systems, composting toilets and pump out systems) the new owner must obtain an "Approval to Operate" from Council within 3 months of land ownership being transferred or otherwise conveyed.

5. Asbestos

Exposure to asbestos is a serious health hazard. In Australia, asbestos was gradually phased out of building materials in the 1980s and the supply and installation of asbestos containing goods has been prohibited since 31 December 2003. However, asbestos legacy materials still exist in many homes, buildings and other assets and infrastructure.

Council on the 27 October 2014 adopted an Asbestos policy which states Council's commitment to and responsibilities for safely managing asbestos, and provides information for Council and the local community on safely managing asbestos. The policy can be viewed on Council's website: www.wollongong.nsw.gov.au.

6. Loose-Fill Asbestos Insulation

Some residential homes located in NSW have been identified as containing loose-fill asbestos insulation, for example in the roof space. NSW Fair Trading maintains a Register of homes that are affected by loose-fill asbestos insulation.

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates and if it contains a building constructed prior to 1980, the council strongly recommends that any potential purchaser obtain advice from a licenced asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the buildings occupants.

Contact NSW Fair Trading for further information.

7. Building Product Use Ban

On 10 August 2018, the Commissioner of Fair Trading, Department of Finance, Services and Innovation issued, by way of a notice, a Building Product Use Ban under Section 9(1) of the Building Products (Safety) Act 2017. This notice prohibited the use of Aluminium Composite Panels (ACPs)

with a core of greater 30 percent Polyethylene (PE) by mass (“the building product”) in any external cladding, external wall, external insulation, faced or rendered finish in certain classes of buildings under the National Construction Code and subject to certain exceptions. The ban commenced operation on Wednesday 15 August 2018.

You should undertake your own inquiries as to whether any of the Panels referenced in the Building Product Use Ban have been utilised in the building.

This letter is authorised by

Margaret Kampen

LIS Information Officer Section 10.7 Planning Certificates

Wollongong City Council

Telephone (02) 4227 7111

Zachariah Kraich

CERTIFICATE	202201021
Issued	1 March 2022
Certificate Type	Sections 10.7(2) & (5)
Fee	\$133.00
Your Reference	DOUGLAS PARTNERS:221452
Council Property Reference	345113

PLANNING CERTIFICATE

Issued Under Section 10.7 of the Environmental Planning and Assessment Act 1979

PROPERTY DETAILS	Legal Description	Lot A DP 343680
	Location	19 Urunga Parade WOLLONGONG NSW 2500

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

SECTION 10.7 (2) DETAILS

As at the date of this certificate, the following prescribed matters under section 10.7(2) of the Act relate to the abovementioned land:

1. NAMES OF RELEVANT PLANNING INSTRUMENTS & DEVELOPMENT CONTROL PLANS

(1) The name of each environmental planning instrument that applies to the carrying out of development on the land

Wollongong Local Environmental Plan 2009Error! Unknown op code for conditional.

State Environmental Planning Policies

State Environmental Planning Policy (Planning Systems) 2021
State Environmental Planning Policy (Biodiversity and Conservation) 2021
State Environmental Planning Policy (Resilience and Hazards) 2021
State Environmental Planning Policy (Transport and Infrastructure) 2021
State Environmental Planning Policy (Industry and Employment) 2021
State Environmental Planning Policy (Resources and Energy) 2021
State Environmental Planning Policy (Primary Production) 2021
State Environmental Planning Policy (Housing) 2021
State Environmental Planning Policy (Precincts - Regional) 2021
State Environmental Planning Policy (Exempt and Complying) 2008

CERTIFICATE

(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not yet been approved)

Draft State Environmental Planning Policy (Design and Place) 2021

(3) The name of each development control plan that applies to the carrying out of development on the land

Wollongong Development Control Plan 2009

Wollongong Development Control Plan 2009, contains detailed development controls which supplement the provisions of Wollongong Local Environmental Plan 2009.

Note: The Wollongong Development Control Plan 2009 should be consulted to ascertain its full effect on the land.

(4) In this clause, proposed environmental planning instrument includes a planning proposal for a Local Environmental Plan or a draft environmental planning instrument.

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Wollongong Local Environmental Plan 2009.

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy) that includes the land in any zone (however described):

- (a) the identity of the zone, whether by reference to a name (such as “Residential Zone” or “Heritage Area”) or by reference to a number (such as “Zone No 2(a)”)**

SP1 – Special Activities (Hospital and Medical Research and Development)

- (b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent**

Building identification signs; Business identification signs.

- (c) the purposes for which the instrument provides that development may not**

be carried out within the zone except with development consent

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Advertising structures; Centre-based child care facilities; Community facilities; Information and education facilities; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres.

Maps are available on the NSW Department of Planning website www.planning.nsw.gov.au

(d) the purposes for which the instrument provides that development is prohibited within the zone.

Any development not specified in subclause (2) or (3).

Note:For subdivision consent requirements see Clause 2.6, of Wollongong Local Environmental Plan 2009.

Demolition of a building or work requires consent see Clause 2.7, of Wollongong Local Environmental Plan 2009.

Development below the mean high water mark requires consent see Clause 5.7, of Wollongong Local Environmental Plan 2009.

Note: Wollongong Local Environmental Plan 2009 should be consulted to ascertain its full effect on the land.

(e) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling- house on the land, and if so, the minimum land dimensions so fixed

See Clauses 4.1, 4.1AA, 4.1A, 4.1B, 4.2 and 4.2A of the Local Environmental Plan

(f) Whether the land includes or comprises critical habitat

Nil

(g) Whether the land is in a conservation area (however described)

Nil.

(h) Whether an item of environmental heritage (however described) is situated on the land

Nil.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGIONAL GROWTH CENTRES) 2006

To the extent that the land is within any zone (however described) under:

- (a) **Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or**
- (b) **a Precinct Plan (within the meaning of the 2006 SEPP),**
- (c) **a proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,**

the particulars referred to in clause 2 (a) – (h) in relation to that land (with a reference to “the instrument” in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).

Not Applicable.

3. COMPLYING DEVELOPMENT

(1) The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1), (c3) and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

(2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

(3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

Error! Unknown op code for conditional.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

- (1) Subject to the terms of each code, and the zoning of the land, complying development **may be** carried out for the following codes to the extent that the land has no affectation.
 - Part 3 - Housing Code (R1, R2, R3, R4, RU5)
 - Part 3A - Rural Housing Code (RU1, RU2, RU3, RU4, RU6, R5)
 - Part 3B - Low Rise Housing Diversity Code (R1, R2, R3, RU5)
 - Part 4 - Housing Alterations Code
 - Part 4A - General Development Code
 - Part 5 – Industrial and Business Alterations Code
 - Part 5A - Industrial and Business Building Code
 - Part 5B - Container Recycling Facilities Code
 - Part 6 - Subdivisions Code
 - Part 7 - Demolition Code
 - Part 8 - Fire Safety Code

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

In relation to a coastal council- whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)

Note: “Existing coastal protection works” are works to reduce the impact of coastal hazards on the land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993

Not applicable

5. MINE SUBSIDENCE

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land is not proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

6. ROAD WIDENING AND ROAD REALIGNMENT

Whether or not the land is affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993 or**
- (b) Any environmental planning instrument or**
- (c) Any resolution of the council**

Council has no record that the land is affected by any Road Widening or Road Realignment under:

- a) Division 2 of Part 3 of the *Roads Act 1993*, or
- b) any environmental planning instrument, or
- c) any resolution of the Council.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy:

- a) adopted by the council, or**
- b) adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that**

restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils or any other risk (other than flooding).

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E12 Geotechnical Assessment”.

Council has adopted Acid Sulfate Maps, Wollongong Local Environmental Plan 2009 – Clause 7.5 Acid Sulfate Soils.

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E16 Bushfire Management”. The Rural Fire Service has endorsed the Bush Fire Prone Land map.

Unhealthy Building Land Policy, adopted by the Environmental Protection Authority.

Council has adopted Wollongong City Council Coastal Zone Study (Cardno, Lawson, Treloar 2010).

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) If the land or part of the land is within the flood planning area and is subject to flood related development controls

Council’s current flood maps do not show that the land or part of the land is located within a flood planning area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path, the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) If the land or part of the land is between the flood planning area and probable maximum flood and is subject to flood related development controls.

Council’s current flood maps do not show that the land or part of the land is between the flood planning area and probable maximum flood area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(3) In this clause -

Flood planning area has the same meaning as in the Floodplain Development Manual.

Floodplain Development Manual means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

Probable maximum flood has the same meaning as in the Floodplain Development Manual.

Further flood information relating to this parcel of land is available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

Please note that flood information may change due to Council’s flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

8. LAND RESERVED FOR ACQUISITION

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

Nil.

9. CONTRIBUTION PLANS

The name of each contributions plan applying to the land.

Wollongong City Wide-Development Contributions Plan

This plan levies contributions under Section 7.12 of the *Environmental Planning and Assessment Act 1979 (NSW)*. The Contribution is calculated based on the proposed cost of carrying out development and, where applicable, the requirement to pay contributions will be included in any development consent or complying development certificate issued. Further information is available from Councils website.

9A. BIODIVERSITY CERTIFIED LAND

If the land biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

Note: Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.

Nil.

10. BIODIVERSITY STEWARDSHIP SITES

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Chief Executive of the Office of Environment and Heritage).

Note: Biodiversity stewardship agreements include bio-banking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardship agreements under Part 5 of the *Biodiversity Conservation Act 2016*.

Nil.

10A. NATIVE VEGETATION CLEARING SET ASIDES

If the land contains a set aside area under section 60ZC of the *Local Land Services Act 2013*, a statement to that effect (but only if the council has been notified of the existence of the set aside by Local Land Services or it is registered in the public register under that section).

Nil.

11. BUSH FIRE PRONE LAND

If any of the land is bush fire prone land (as defined in the Act), a statement that all or, as the case may be, some of the land is bush fire prone land.

If none of the land is bush fire prone land, a statement to that effect.

The land is not recorded in Council's records as bushfire prone land.

12. PROPERTY VEGETATION PLANS

If the land is land to which a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force), a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under the Act).

Council has not been notified that the land is affected by a Property Vegetation Plan issued under the Native Vegetation Act 2003.

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order)

Council has not been notified of an order.

14. STATE SIGNIFICANT DEVELOPMENT

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

STATE SIGNIFICANT INFRASTRUCTURE

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

If the land is land to which State Environmental Planning Policy (Housing) 2021 applies:

- (1) A statement of whether there is a current, site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department of Planning, and
- (2) A statement setting out any terms of a kind referred to in clause 38 of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land

State Environmental Planning Policy (Housing) 2021

Nil.

16. SITE COMPATIBILITY CERTIFICATE FOR INFRASTRUCTURE

A statement of whether there is a valid site compatibility certificate (infrastructure), or site compatibility certificate (schools or TAFE establishments) of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is valid, and
- (b) that a copy may be obtained from the head office of the Department.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Nil.

17. SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

- (1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department.
- (2) A statement setting out any terms of a kind referred to in clause 38 of State Environmental Planning Policy (Housing) 2021 that have been imposed as a condition of consent to a development application in respect of the land.

State Environmental Planning Policy (Housing) 2021

Nil.

18. PAPER SUBDIVISION INFORMATION

(1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to the consent ballot.

Nil

(2) The date of any subdivision order that applies to the land.

Not applicable

(3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

19. SITE VERIFICATION CERTIFICATES

A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:

(a) the matter certified by the certificate, and

Note: A site verification certificate sets out the Director-General's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land-see Division 3 of Part 4AA of State Environmental Planning Policy (Resources and Energy 2021).

(b) the date on which the certificate ceases to be current (if any), and

(c) that a copy may be obtained from the head office of the Department.

Nil

20. LOOSE-FILL ASBESTOS INSULATION REGISTER

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register, that is required to be maintained under that Division, a statement to that effect.

For register information contact www.fairtrading.nsw.gov.au

Nil.

21. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.

(2) A statement of:

(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and

(b) Whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

(3) In this clause: affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017. building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

Affected building notice has the same meaning as Part 4 of the [Building Products \(Safety\) Act 2017 No 69](#)

Building product rectification order has the same meaning as in the [Building Products \(Safety\) Act 2017 No 69](#)

Nil.

CONTAMINATED LAND MANAGEMENT ACT 1997

Note: The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated within the meaning of that Act- if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,**
- (b) that the land to which the certificate relates is subject to a management order within the meaning of the Act- if it is subject to such an order at the date when the certificate is issued,**
- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,**
- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,**
- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of the Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate**

Council has **not** been advised that:

- a) The land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997
- b) The land is subject to a management order within the meaning of the Contaminated Land Management Act 1997
- c) The land is subject to an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997
- d) The land is subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997
- e) The land is the subject of a site audit statement within the meaning of the Contaminated

SECTION 10.7 (5) DETAILS

As at the date of this certificate, the following additional information, provided in good faith pursuant to section 10.7 (5) of the Act, relate to the abovementioned land. Council has selected these matters as those most likely to be of concern but they do not comprise an exhaustive list of matters likely to affect the land.

When information pursuant to section 10.7 (5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7 (6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter referred to in this certificate.

RESOLUTION TO PREPARE PLANNING PROPOSAL

Council on 17 July 2017 resolved to commence the preparation of a draft Planning Proposal to introduce Housing Affordability provisions or SEPP 70 Housing Affordability provisions into the Wollongong Local Environmental Plan 2009. The form of the provisions will be subject to a future report and subsequent community consultation.

PROPOSED DRAFT DEVELOPMENT CONTROL PLANS

The following plans have been placed on exhibition pursuant to the provisions of section 3.43 of the Environmental Planning and Assessment Act 1979:

Draft Development Control Plan 2009 Review

The Wollongong Development Control Plan 2009 came into force on 3 March 2010. The following draft chapters are available for public exhibition.

D16 Draft Neighbourhood Plans for various lots – West Dapto Urban Release Area
E1 Access for people with a disability
C1 Advertising Signage and Structure
E23 – Riparian Land Management

LAND STABILITY

Council's land constraint/stability assessment maps do not show that the land is located in an area where landslip and/or subsidence have occurred, or where land instability is suspected. If you have any doubt as to whether the land is affected by landslip and/or subsidence the services of a suitably qualified engineer should be obtained.

Note: the advice provided by Council in respect of the stability of the land is based on information contained in Council's land constraint maps. The maps have been compiled from data received by Council and considered by Council to be reasonably reliable. Council does not warrant that its land constraint maps contain all information ever received by Council relating to the stability of the land.

FLOOD AND DRAINAGE

Council records indicate that this property is **Not Identified as Flood Affected**.

Council's flood maps do not show that the land is located in an area where flooding has occurred or is suspected. If you have any doubt as to whether the land is affected by flooding the services of a suitably qualified engineer should be obtained.

Note 1: Some land may experience water inundation as a result of the creation of stormwater detention basins or channels or flow paths in the course of development of the land.

Note 2: Advice given by Council relating to the likelihood of land being flooded or the nature or extent of such flooding is based on information contained in Council's flood maps. The maps are compiled from data received by Council and/or studies prepared by Council and considered by Council to be reasonably reliable. Council does not warrant that its flood maps contain all information ever received by Council relating to the likelihood of land being flooded or the nature or extent of any such flooding.

Please note that flood information may change due to Council's flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

ACID SULFATE SOILS

Nil.

CONTAMINATED LAND

No advice provided.

STATE SIGNIFICANT DEVELOPMENT

Nil.

BUILDING LINES

Wollongong Development Control Plan 2009 details the setbacks applicable to the land.

OTHER HERITAGE MATTERS KNOWN TO COUNCIL

Aboriginal Heritage

All development within the Wollongong Local Government Area is subject to the Aboriginal Heritage requirements of the National Parks and Wildlife Act 1974. To determine if your property is affected by an Aboriginal Site, it is recommended that an Aboriginal Heritage Information Management System (AHIMS) search be undertaken by contacting the AHIMS Administrator on (02) 9995 5000. Further detail on Council's Aboriginal Heritage requirements for Development is contained within Chapter E10 of the Wollongong Development Control Plan 2009.

DEVELOPMENT HISTORY

Application may be made for a Building Certificate under section 10.7B of Environmental Planning and Assessment Act 1979 if written certification of existing buildings on the land is required.

The history of development consent approval applicable to the land may be obtained by consulting the Development Consent Register. Enquiries concerning the register may be made at Council's Customer Service Centre, 41 Burelli Street Wollongong during office hours.

LOOSE-FILL ASBESTOS

Council recommends you make your own enquiries as to the age of the buildings on the land to which this certificate relates and, if it contains a building constructed prior to 1980, the Council also strongly recommends that any potential purchaser obtain advice from a licensed asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the building's occupants.

Contact NSW Fair Trading for further information.

OTHER INFORMATION

Illawarra Shoalhaven Regional Plan

The Department of Planning, Industry and Environment released the Illawarra Shoalhaven Regional Plan 2041 and Special Infrastructure Contribution.

Bushfire

In accordance with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 Clause 1.19A any complying development (except under the Housing Alternation Code) may only be carried out on the lot if the development will not be carried out on any part of the lot that is in the bush fire attack level-40 (BAL- 40) or the flame zone (BAL-FZ). In addition, for development specified for the Rural Housing Code any associated access way to the development must be on land that is not in the BAL- 40 or BAL-FZ or grassland.

GENERAL INFORMATION

The following general information is brought to the attention of land owners.

1. Tree Management Policy

The Wollongong Tree Management Policy allows proper assessment to be made of the environmental importance and viability of trees before they are pruned, removed or damaged in any way. This Policy prohibits the ringbarking, cutting down, topping, lopping, removing, injuring or destruction of any tree except with the prior written consent of Council.

The Tree Management Policy applies to any tree that:

- Is 3 metres or more in height,
- Has a trunk diameter of 200mm or more at a height of 1 metre from the ground, or
- Has a branch spread of 3 metres or more

Please note that:

- A dead/dying tree is subject to the Tree Management Policy
- Pruning of major structural or anchor roots is also subject to the Tree Management Policy

Some trees may be exempt and do not require a permit to prune or remove them. Following is a list of the exempt tree species:

Common Name	Botanical Name
African fern pine, Yellowwood	<i>Afrocarpus falcatus</i> (Syn. <i>Nageia falcatus</i>)
African Olive	<i>Olea europaea</i> subsp. <i>cuspidata</i>
Alder	<i>Alnus</i> species
Black Locust	<i>Robinia pseudoacacia</i>
Box Elder	<i>Acer negundo</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Canary Island Date Palm	<i>Phoenix canariensis</i>
China Doll	<i>Radermachera sinica</i>
Chinese Tallow	<i>Triadica sebifera</i> [<i>Sapium sebiferum</i>]
Cocos or Queen Palm	<i>Syagrus romanzoffiana</i>
Common Hackberry	<i>Celtis occidentalis</i>
Coral Tree	<i>Erythrina x sykesii</i>
Cotoneaster	<i>Cotoneaster</i> species
Domestic Fruit Trees	
Golden Cypress Pine	<i>Cupressus macrocarpa</i> 'Brunniana'
Goldenrain Tree	<i>Koelreutaria paniculata</i>
Honey Locust	<i>Gleditsia triacanthos</i>
Kaffir Plum	<i>Harpephyllum caffrum</i>
Liquidambar	<i>Liquidambar</i> species
Norfolk Island Hibiscus/Itchy Pod Tree	<i>Lagunaria patersonii</i>
Oleander	<i>Nerium oleander</i>
Peppercorn, Pepper Tree	<i>Schinus areira</i>
Poplar	<i>Populus</i> species
Privet	<i>Ligustrum</i> species
Radiata Pine	<i>Pinus radiata</i>
Rubber Tree	<i>Ficus elastica</i>
Silky Oak	<i>Grevillea robusta</i>
Umbrella Tree	<i>Schefflera actinophylla</i>
Willow	<i>Salix</i> species

For the full list of other exemptions please refer to the Tree Management Policy document available via Council's website.

Any person acting on a permit issued under this Policy must comply with all conditions of that permit.

Any person who contravenes, or causes or permits the contravention of this Policy is guilty of an offence under the Environmental Planning and Assessment Act 1979.

Development Consents may contain restrictions relating to trees.

Further information regarding Council's Tree Management Policy including how to lodge an application can be made by contacting Council's Customer Service on telephone 4227 7111. Alternatively information can be obtained from Council's website via the following link <http://www.wollongong.nsw.gov.au/services/household/trees/Pages/Lodgeatmp.aspx>.

2. Termite Management for Buildings

Australian Standards 3660.1-2000 (New Buildings) AS 3660.2-2000 (Existing Buildings) Termite Management, recommends that buildings be inspected and be maintained in order to achieve termite management of buildings. Licensed Pest Control Contractors should be contacted to achieve necessary termite control.

3. Lead Paint and Building Renovations

Your attention is drawn to the hazards associated with lead-based paints during building renovation. Suitable precautions should be taken when removing flaking paint or sanding painted surfaces suspected to have been treated with lead-based paint to prevent contamination of the immediate environment and associated health risk from lead dust.

AS 4361 – Part 2 – Guide to Lead Paint Management – Residential and Commercial.

4. Sewage Management Systems

Where a property has on-site sewage management system (this includes septic tanks, disposal trenches, aerated waste water treatment systems, composting toilets and pump out systems) the new owner must obtain an "Approval to Operate" from Council within 3 months of land ownership being transferred or otherwise conveyed.

5. Asbestos

Exposure to asbestos is a serious health hazard. In Australia, asbestos was gradually phased out of building materials in the 1980s and the supply and installation of asbestos containing goods has been prohibited since 31 December 2003. However, asbestos legacy materials still exist in many homes, buildings and other assets and infrastructure.

Council on the 27 October 2014 adopted an Asbestos policy which states Council's commitment to and responsibilities for safely managing asbestos, and provides information for Council and the local community on safely managing asbestos. The policy can be viewed on Council's website: www.wollongong.nsw.gov.au.

6. Loose-Fill Asbestos Insulation

Some residential homes located in NSW have been identified as containing loose-fill asbestos insulation, for example in the roof space. NSW Fair Trading maintains a Register of homes that are affected by loose-fill asbestos insulation.

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates and if it contains a building constructed prior to 1980, the council strongly recommends that any potential purchaser obtain advice from a licenced asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the buildings occupants.

Contact NSW Fair Trading for further information.

7. Building Product Use Ban

On 10 August 2018, the Commissioner of Fair Trading, Department of Finance, Services and Innovation issued, by way of a notice, a Building Product Use Ban under Section 9(1) of the Building

Products (Safety) Act 2017. This notice prohibited the use of Aluminium Composite Panels (ACPs) with a core of greater 30 percent Polyethylene (PE) by mass (“the building product”) in any external cladding, external wall, external insulation, faced or rendered finish in certain classes of buildings under the National Construction Code and subject to certain exceptions. The ban commenced operation on Wednesday 15 August 2018.

You should undertake your own inquiries as to whether any of the Panels referenced in the Building Product Use Ban have been utilised in the building.

This letter is authorised by:

Jamie Turner

LIS Information Officer Section 10.7 Planning Certificates

Wollongong City Council

Telephone (02) 4227 7111

Zachariah Kraich

CERTIFICATE	202201023
Issued	1 March 2022
Certificate Type	Sections 10.7(2) & (5)
Fee	\$133.00
Your Reference	DOUGLAS PARTNERS:221452
Council Property Reference	345115

PLANNING CERTIFICATE

Issued Under Section 10.7 of the Environmental Planning and Assessment Act 1979

PROPERTY DETAILS	Legal Description	Lot D DP 402234
	Location	15 Urunga Parade WOLLONGONG NSW 2500

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

SECTION 10.7 (2) DETAILS

As at the date of this certificate, the following prescribed matters under section 10.7(2) of the Act relate to the abovementioned land:

1. NAMES OF RELEVANT PLANNING INSTRUMENTS & DEVELOPMENT CONTROL PLANS

(1) The name of each environmental planning instrument that applies to the carrying out of development on the land

Wollongong Local Environmental Plan 2009 **Error! Unknown op code for conditional.**

State Environmental Planning Policies

State Environmental Planning Policy (Planning Systems) 2021
 State Environmental Planning Policy (Biodiversity and Conservation) 2021
 State Environmental Planning Policy (Resilience and Hazards) 2021
 State Environmental Planning Policy (Transport and Infrastructure) 2021
 State Environmental Planning Policy (Industry and Employment) 2021
 State Environmental Planning Policy (Resources and Energy) 2021
 State Environmental Planning Policy (Primary Production) 2021
 State Environmental Planning Policy (Housing) 2021
 State Environmental Planning Policy (Precincts - Regional) 2021
 State Environmental Planning Policy (Exempt and Complying) 2008

CERTIFICATE

(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not yet been approved)

Draft State Environmental Planning Policy (Design and Place) 2021

(3) The name of each development control plan that applies to the carrying out of development on the land

Wollongong Development Control Plan 2009

Wollongong Development Control Plan 2009, contains detailed development controls which supplement the provisions of Wollongong Local Environmental Plan 2009.

Note: The Wollongong Development Control Plan 2009 should be consulted to ascertain its full effect on the land.

(4) In this clause, proposed environmental planning instrument includes a planning proposal for a Local Environmental Plan or a draft environmental planning instrument.

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Wollongong Local Environmental Plan 2009.

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy) that includes the land in any zone (however described):

- (a) the identity of the zone, whether by reference to a name (such as “Residential Zone” or “Heritage Area”) or by reference to a number (such as “Zone No 2(a)”)**

SP1 – Special Activities (Hospital and Medical Research and Development)

- (b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent**

Building identification signs; Business identification signs.

- (c) the purposes for which the instrument provides that development may not**

be carried out within the zone except with development consent

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Advertising structures; Centre-based child care facilities; Community facilities; Information and education facilities; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres.

Maps are available on the NSW Department of Planning website www.planning.nsw.gov.au

(d) the purposes for which the instrument provides that development is prohibited within the zone.

Any development not specified in subclause (2) or (3).

Note:For subdivision consent requirements see Clause 2.6, of Wollongong Local Environmental Plan 2009.

Demolition of a building or work requires consent see Clause 2.7, of Wollongong Local Environmental Plan 2009.

Development below the mean high water mark requires consent see Clause 5.7, of Wollongong Local Environmental Plan 2009.

Note: Wollongong Local Environmental Plan 2009 should be consulted to ascertain its full effect on the land.

(e) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling- house on the land, and if so, the minimum land dimensions so fixed

See Clauses 4.1, 4.1AA, 4.1A, 4.1B, 4.2 and 4.2A of the Local Environmental Plan

(f) Whether the land includes or comprises critical habitat

Nil

(g) Whether the land is in a conservation area (however described)

Nil.

(h) Whether an item of environmental heritage (however described) is situated on the land

Nil.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGIONAL GROWTH CENTRES) 2006

To the extent that the land is within any zone (however described) under:

- (a) **Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or**
- (b) **a Precinct Plan (within the meaning of the 2006 SEPP),**
- (c) **a proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,**

the particulars referred to in clause 2 (a) – (h) in relation to that land (with a reference to “the instrument” in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).

Not Applicable.

3. COMPLYING DEVELOPMENT

(1) The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1), (c3) and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

(2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.

(3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

- (1) Subject to the terms of each code, and the zoning of the land, complying development **may** be carried out for the following codes to the extent that the land has no affectation.
 - Part 3 - Housing Code (R1, R2, R3, R4, RU5)
 - Part 3A - Rural Housing Code (RU1, RU2, RU3, RU4, RU6, R5)
 - Part 3B - Low Rise Housing Diversity Code (R1, R2, R3, RU5)
 - Part 4 - Housing Alterations Code
 - Part 4A - General Development Code
 - Part 5 – Industrial and Business Alterations Code
 - Part 5A - Industrial and Business Building Code
 - Part 5B - Container Recycling Facilities Code
 - Part 6 - Subdivisions Code
 - Part 7 - Demolition Code
 - Part 8 - Fire Safety Code

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

In relation to a coastal council- whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)

Note: “Existing coastal protection works” are works to reduce the impact of coastal hazards on the land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993

Not applicable

5. MINE SUBSIDENCE

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land is not proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

6. ROAD WIDENING AND ROAD REALIGNMENT

Whether or not the land is affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993 or**
- (b) Any environmental planning instrument or**
- (c) Any resolution of the council**

Council has no record that the land is affected by any Road Widening or Road Realignment under:

- a) Division 2 of Part 3 of the *Roads Act 1993*, or
- b) any environmental planning instrument, or
- c) any resolution of the Council.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy:

- a) adopted by the council, or**
- b) adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that**

restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils or any other risk (other than flooding).

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E12 Geotechnical Assessment”.

Council has adopted Acid Sulfate Maps, Wollongong Local Environmental Plan 2009 – Clause 7.5 Acid Sulfate Soils.

Council has adopted “Wollongong Development Control Plan 2009 – Chapter E16 Bushfire Management”. The Rural Fire Service has endorsed the Bush Fire Prone Land map.

Unhealthy Building Land Policy, adopted by the Environmental Protection Authority.

Council has adopted Wollongong City Council Coastal Zone Study (Cardno, Lawson, Treloar 2010).

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) If the land or part of the land is within the flood planning area and is subject to flood related development controls

Council’s current flood maps do not show that the land or part of the land is located within a flood planning area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path, the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) If the land or part of the land is between the flood planning area and probable maximum flood and is subject to flood related development controls.

Council’s current flood maps do not show that the land or part of the land is between the flood planning area and probable maximum flood area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(3) In this clause -

Flood planning area has the same meaning as in the Floodplain Development Manual.

Floodplain Development Manual means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

Probable maximum flood has the same meaning as in the Floodplain Development Manual.

Further flood information relating to this parcel of land is available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

Please note that flood information may change due to Council’s flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

8. LAND RESERVED FOR ACQUISITION

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

Nil.

9. CONTRIBUTION PLANS

The name of each contributions plan applying to the land.

Wollongong City Wide-Development Contributions Plan

This plan levies contributions under Section 7.12 of the *Environmental Planning and Assessment Act 1979 (NSW)*. The Contribution is calculated based on the proposed cost of carrying out development and, where applicable, the requirement to pay contributions will be included in any development consent or complying development certificate issued. Further information is available from Councils website.

9A. BIODIVERSITY CERTIFIED LAND

If the land biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

Note: Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.

Nil.

10. BIODIVERSITY STEWARDSHIP SITES

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Chief Executive of the Office of Environment and Heritage).

Note: Biodiversity stewardship agreements include bio-banking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardship agreements under Part 5 of the *Biodiversity Conservation Act 2016*.

Nil.

10A. NATIVE VEGETATION CLEARING SET ASIDES

If the land contains a set aside area under section 60ZC of the *Local Land Services Act 2013*, a statement to that effect (but only if the council has been notified of the existence of the set aside by Local Land Services or it is registered in the public register under that section).

Nil.

11. BUSH FIRE PRONE LAND

If any of the land is bush fire prone land (as defined in the Act), a statement that all or, as the case may be, some of the land is bush fire prone land.

If none of the land is bush fire prone land, a statement to that effect.

The land is not recorded in Council's records as bushfire prone land.

12. PROPERTY VEGETATION PLANS

If the land is land to which a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force), a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under the Act).

Council has not been notified that the land is affected by a Property Vegetation Plan issued under the Native Vegetation Act 2003.

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order)

Council has not been notified of an order.

14. STATE SIGNIFICANT DEVELOPMENT

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

STATE SIGNIFICANT INFRASTRUCTURE

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

Nil

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

If the land is land to which State Environmental Planning Policy (Housing) 2021 applies:

- (1) A statement of whether there is a current, site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department of Planning, and
- (2) A statement setting out any terms of a kind referred to in clause 38 of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land

State Environmental Planning Policy (Housing) 2021

Nil.

16. SITE COMPATIBILITY CERTIFICATE FOR INFRASTRUCTURE

A statement of whether there is a valid site compatibility certificate (infrastructure), or site compatibility certificate (schools or TAFE establishments) of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is valid, and
- (b) that a copy may be obtained from the head office of the Department.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Nil.

17. SITE COMPATIBILITY CERTIFICATE AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

- (1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
 - (a) the period for which the certificate is current, and
 - (b) that a copy may be obtained from the head office of the Department.
- (2) A statement setting out any terms of a kind referred to in clause 38 of State Environmental Planning Policy (Housing) 2021 that have been imposed as a condition of consent to a development application in respect of the land.

State Environmental Planning Policy (Housing) 2021

Nil.

18. PAPER SUBDIVISION INFORMATION

(1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to the consent ballot.

Nil

(2) The date of any subdivision order that applies to the land.

Not applicable

(3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

19. SITE VERIFICATION CERTIFICATES

A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:

(a) the matter certified by the certificate, and

Note: A site verification certificate sets out the Director-General's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land-see Division 3 of Part 4AA of State Environmental Planning Policy (Resources and Energy 2021).

(b) the date on which the certificate ceases to be current (if any), and

(c) that a copy may be obtained from the head office of the Department.

Nil

20. LOOSE-FILL ASBESTOS INSULATION REGISTER

If the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register, that is required to be maintained under that Division, a statement to that effect.

For register information contact www.fairtrading.nsw.gov.au

Nil.

21. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.

(2) A statement of:

(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and

(b) Whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.

(3) In this clause: affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017. building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

Affected building notice has the same meaning as Part 4 of the [Building Products \(Safety\) Act 2017 No 69](#)

Building product rectification order has the same meaning as in the [Building Products \(Safety\) Act 2017 No 69](#)

Nil.

CONTAMINATED LAND MANAGEMENT ACT 1997

Note: The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated within the meaning of that Act- if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,**
- (b) that the land to which the certificate relates is subject to a management order within the meaning of the Act- if it is subject to such an order at the date when the certificate is issued,**
- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,**
- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,**
- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of the Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate**

Council has **not** been advised that:

- a) The land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997
- b) The land is subject to a management order within the meaning of the Contaminated Land Management Act 1997
- c) The land is subject to an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997
- d) The land is subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997
- e) The land is the subject of a site audit statement within the meaning of the Contaminated

SECTION 10.7 (5) DETAILS

As at the date of this certificate, the following additional information, provided in good faith pursuant to section 10.7 (5) of the Act, relate to the abovementioned land. Council has selected these matters as those most likely to be of concern but they do not comprise an exhaustive list of matters likely to affect the land.

When information pursuant to section 10.7 (5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7 (6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter referred to in this certificate.

RESOLUTION TO PREPARE PLANNING PROPOSAL

Council on 17 July 2017 resolved to commence the preparation of a draft Planning Proposal to introduce Housing Affordability provisions or SEPP 70 Housing Affordability provisions into the Wollongong Local Environmental Plan 2009. The form of the provisions will be subject to a future report and subsequent community consultation.

PROPOSED DRAFT DEVELOPMENT CONTROL PLANS

The following plans have been placed on exhibition pursuant to the provisions of section 3.43 of the Environmental Planning and Assessment Act 1979:

Draft Development Control Plan 2009 Review

The Wollongong Development Control Plan 2009 came into force on 3 March 2010. The following draft chapters are available for public exhibition.

D16 Draft Neighbourhood Plans for various lots – West Dapto Urban Release Area
E1 Access for people with a disability
C1 Advertising Signage and Structure
E23 – Riparian Land Management

LAND STABILITY

Council's land constraint/stability assessment maps do not show that the land is located in an area where landslip and/or subsidence have occurred, or where land instability is suspected. If you have any doubt as to whether the land is affected by landslip and/or subsidence the services of a suitably qualified engineer should be obtained.

Note: the advice provided by Council in respect of the stability of the land is based on information contained in Council's land constraint maps. The maps have been compiled from data received by Council and considered by Council to be reasonably reliable. Council does not warrant that its land constraint maps contain all information ever received by Council relating to the stability of the land.

FLOOD AND DRAINAGE

Council records indicate that this property is **Not Identified as Flood Affected**.

Council's flood maps do not show that the land is located in an area where flooding has occurred or is suspected. If you have any doubt as to whether the land is affected by flooding the services of a suitably qualified engineer should be obtained.

Note 1: Some land may experience water inundation as a result of the creation of stormwater detention basins or channels or flow paths in the course of development of the land.

Note 2: Advice given by Council relating to the likelihood of land being flooded or the nature or extent of such flooding is based on information contained in Council's flood maps. The maps are compiled from data received by Council and/or studies prepared by Council and considered by Council to be reasonably reliable. Council does not warrant that its flood maps contain all information ever received by Council relating to the likelihood of land being flooded or the nature or extent of any such flooding.

Please note that flood information may change due to Council's flood study and Floodplain Risk Management Study currently being reviewed. As part of the review, design parameters for these studies are changing, and therefore the flood levels, velocities and flood risks may vary from the current flood study.

ACID SULFATE SOILS

Nil.

CONTAMINATED LAND

No advice provided.

STATE SIGNIFICANT DEVELOPMENT

Nil.

BUILDING LINES

Wollongong Development Control Plan 2009 details the setbacks applicable to the land.

OTHER HERITAGE MATTERS KNOWN TO COUNCIL

Aboriginal Heritage

All development within the Wollongong Local Government Area is subject to the Aboriginal Heritage requirements of the National Parks and Wildlife Act 1974. To determine if your property is affected by an Aboriginal Site, it is recommended that an Aboriginal Heritage Information Management System (AHIMS) search be undertaken by contacting the AHIMS Administrator on (02) 9995 5000. Further detail on Council's Aboriginal Heritage requirements for Development is contained within Chapter E10 of the Wollongong Development Control Plan 2009.

DEVELOPMENT HISTORY

Application may be made for a Building Certificate under section 10.7B of Environmental Planning and Assessment Act 1979 if written certification of existing buildings on the land is required.

The history of development consent approval applicable to the land may be obtained by consulting the Development Consent Register. Enquiries concerning the register may be made at Council's Customer Service Centre, 41 Burelli Street Wollongong during office hours.

LOOSE-FILL ASBESTOS

Council recommends you make your own enquiries as to the age of the buildings on the land to which this certificate relates and, if it contains a building constructed prior to 1980, the Council also strongly recommends that any potential purchaser obtain advice from a licensed asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the building's occupants.

Contact NSW Fair Trading for further information.

OTHER INFORMATION

Illawarra Shoalhaven Regional Plan

The Department of Planning, Industry and Environment released the Illawarra Shoalhaven Regional Plan 2041 and Special Infrastructure Contribution.

Bushfire

In accordance with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 Clause 1.19A any complying development (except under the Housing Alternation Code) may only be carried out on the lot if the development will not be carried out on any part of the lot that in the bush fire attack level-40 (BAL- 40) or the flame zone (BAL-FZ). In addition, for development specified for the Rural Housing Code any associated access way to the development must be on land that is not in the BAL- 40 or BAL-FZ or grassland.

GENERAL INFORMATION

The following general information is brought to the attention of land owners.

1. Tree Management Policy

The Wollongong Tree Management Policy allows proper assessment to be made of the environmental importance and viability of trees before they are pruned, removed or damaged in any way. This Policy prohibits the ringbarking, cutting down, topping, lopping, removing, injuring or destruction of any tree except with the prior written consent of Council.

The Tree Management Policy applies to any tree that:

- Is 3 metres or more in height,
- Has a trunk diameter of 200mm or more at a height of 1 metre from the ground, or

- Has a branch spread of 3 metres or more

Please note that:

- A dead/dying tree is subject to the Tree Management Policy
- Pruning of major structural or anchor roots is also subject to the Tree Management Policy

Some trees may be exempt and do not require a permit to prune or remove them. Following is a list of the exempt tree species:

Common Name	Botanical Name
African fern pine, Yellowwood	<i>Afrocarpus falcatus</i> (Syn. <i>Nageia falcatus</i>)
African Olive	<i>Olea europaea</i> subsp. <i>cuspidata</i>
Alder	<i>Alnus</i> species
Black Locust	<i>Robinia pseudoacacia</i>
Box Elder	<i>Acer negundo</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Canary Island Date Palm	<i>Phoenix canariensis</i>
China Doll	<i>Radermachera sinica</i>
Chinese Tallow	<i>Triadica sebifera</i> [<i>Sapium sebiferum</i>]
Cocos or Queen Palm	<i>Syagrus romanzoffiana</i>
Common Hackberry	<i>Celtis occidentalis</i>
Coral Tree	<i>Erythrina x sykesii</i>
Cotoneaster	<i>Cotoneaster</i> species
Domestic Fruit Trees	
Golden Cypress Pine	<i>Cupressus macrocarpa</i> 'Brunniana'
Goldenrain Tree	<i>Koelreuteria paniculata</i>
Honey Locust	<i>Gleditsia triacanthos</i>
Kaffir Plum	<i>Harpephyllum caffrum</i>
Liquidambar	<i>Liquidambar</i> species
Norfolk Island Hibiscus/Itchy Pod Tree	<i>Lagunaria patersonii</i>
Oleander	<i>Nerium oleander</i>
Peppercorn, Pepper Tree	<i>Schinus areira</i>
Poplar	<i>Populus</i> species
Privet	<i>Ligustrum</i> species
Radiata Pine	<i>Pinus radiata</i>
Rubber Tree	<i>Ficus elastica</i>
Silky Oak	<i>Grevillea robusta</i>
Umbrella Tree	<i>Schefflera actinophylla</i>
Willow	<i>Salix</i> species

For the full list of other exemptions please refer to the Tree Management Policy document available via Council's website.

Any person acting on a permit issued under this Policy must comply with all conditions of that permit.

Any person who contravenes, or causes or permits the contravention of this Policy is guilty of an offence under the Environmental Planning and Assessment Act 1979.

Development Consents may contain restrictions relating to trees.

Further information regarding Council's Tree Management Policy including how to lodge an application can be made by contacting Council's Customer Service on telephone 4227 7111. Alternatively information can be obtained from Council's website via the following link <http://www.wollongong.nsw.gov.au/services/household/trees/Pages/Lodgeatmp.aspx>.

2. Termite Management for Buildings

Australian Standards 3660.1-2000 (New Buildings) AS 3660.2-2000 (Existing Buildings) Termite Management, recommends that buildings be inspected and be maintained in order to achieve termite management of buildings. Licensed Pest Control Contractors should be contacted to achieve necessary termite control.

3. Lead Paint and Building Renovations

Your attention is drawn to the hazards associated with lead-based paints during building renovation. Suitable precautions should be taken when removing flaking paint or sanding painted surfaces suspected to have been treated with lead-based paint to prevent contamination of the immediate environment and associated health risk from lead dust.

AS 4361 – Part 2 – Guide to Lead Paint Management – Residential and Commercial.

4. Sewage Management Systems

Where a property has on-site sewage management system (this includes septic tanks, disposal trenches, aerated waste water treatment systems, composting toilets and pump out systems) the new owner must obtain an "Approval to Operate" from Council within 3 months of land ownership being transferred or otherwise conveyed.

5. Asbestos

Exposure to asbestos is a serious health hazard. In Australia, asbestos was gradually phased out of building materials in the 1980s and the supply and installation of asbestos containing goods has been prohibited since 31 December 2003. However, asbestos legacy materials still exist in many homes, buildings and other assets and infrastructure.

Council on the 27 October 2014 adopted an Asbestos policy which states Council's commitment to and responsibilities for safely managing asbestos, and provides information for Council and the local community on safely managing asbestos. The policy can be viewed on Council's website: www.wollongong.nsw.gov.au.

6. Loose-Fill Asbestos Insulation

Some residential homes located in NSW have been identified as containing loose-fill asbestos insulation, for example in the roof space. NSW Fair Trading maintains a Register of homes that are affected by loose-fill asbestos insulation.

You should make your own enquiries as to the age of the buildings on the land to which this certificate relates and if it contains a building constructed prior to 1980, the council strongly recommends that any potential purchaser obtain advice from a licenced asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the buildings occupants.

Contact NSW Fair Trading for further information.

7. Building Product Use Ban

On 10 August 2018, the Commissioner of Fair Trading, Department of Finance, Services and Innovation issued, by way of a notice, a Building Product Use Ban under Section 9(1) of the Building Products (Safety) Act 2017. This notice prohibited the use of Aluminium Composite Panels (ACPs) with a core of greater 30 percent Polyethylene (PE) by mass (“the building product”) in any external cladding, external wall, external insulation, faced or rendered finish in certain classes of buildings under the National Construction Code and subject to certain exceptions. The ban commenced operation on Wednesday 15 August 2018.

You should undertake your own inquiries as to whether any of the Panels referenced in the Building Product Use Ban have been utilised in the building.

This letter is authorised by:

Jamie Turner

LIS Information Officer Section 10.7 Planning Certificates
Wollongong City Council
Telephone (02) 4227 7111

Zachariah Kraich
1/1 Luso Drive
Unanderra NSW 2526

REFERENCE	CERT-2025/1185
Issued	25-Feb-2025
Certificate Type	Section 10.7(2) & (5)
Your Reference	73522.12
Council Property Reference	345111

PLANNING CERTIFICATE

Issued Under Section 10.7 of the Environmental Planning and Assessment Act 1979

PROPERTY DETAILS

Legal Description	Lot 46 Sec 1 DP 5507
Location	23 Urunga Parade WOLLONGONG NSW 2500

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

SECTION 10.7 (2) DETAILS

As at the date of this certificate, the following prescribed matters under section 10.7(2) of the Act relate to the abovementioned land:

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DEVELOPMENT CONTROL PLANS

(1) The name of each environmental planning instrument and development control plan that applies to the carrying out of development on the land

Wollongong Local Environment Plan 2009

Wollongong Development Control Plan 2009

State Environmental Planning Policies

State Environmental Planning Policy (Planning Systems) 2021

State Environmental Planning Policy (Biodiversity and Conservation) 2021

State Environmental Planning Policy (Resilience and Hazards) 2021

State Environmental Planning Policy (Transport and Infrastructure) 2021

State Environmental Planning Policy (Industry and Employment) 2021

State Environmental Planning Policy (Resources and Energy) 2021

State Environmental Planning Policy (Primary Production) 2021

State Environmental Planning Policy (Housing) 2021

State Environmental Planning Policy (Precincts - Regional) 2021

State Environmental Planning Policy (Exempt and Complying) 2008

State Environmental Planning Policy (Sustainable Buildings) 2023

(2) The name of each proposed environmental planning instrument and draft development control plan which is or has been subject to community consultation or public exhibition under the Act that will apply to the carrying out of development on the land.

Draft Development Control Plan 2009 Review

The Wollongong Development Control Plan 2009 came into force on 3 March 2010. The following draft chapters are available for public exhibition:

A1 Introduction

B4 Development in Business Zones – Wilga Street Block Corrimal

D16 Draft Neighbourhood Plans for various lots – West Dapto Urban Release Area

D16 Draft Neighbourhood Plan - Marshall Vale/Duck Ck

(3) Subsection (2) does not apply in relation to a proposed environmental planning instrument or draft development control plan if –

- (a) It has been more than 3 years since the end of the public exhibition period for the proposed instrument or draft plan, or
- (b) For a proposed environmental planning instrument, the Planning Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved.

(4) In this section –

***proposed environmental planning instrument* means a draft environmental planning instrument and includes a planning proposal for a Local Environmental Plan.**

2. ZONING AND LAND USE UNDER RELEVANT PLANNING INSTRUMENTS

The following matters for each environmental planning instrument or draft environmental planning instrument that includes the land in a zone, however described -

Wollongong Local Environment Plan 2009

The following matters for each environmental planning instrument or draft environmental planning instrument that includes the land in a zone, however described -

- a. the identity of the zone, whether by reference to
 - i. a name, such as “Residential Zone” or “Heritage Area”, or
 - ii. a number, such as “Zone No 2(a)”

SP1 Special Activities (Hospital and Medical Research and Development)

- b. the purposes for which development in the zone -

- i. may be carried out without development consent

Building identification signs; Business identification signs.

- ii. may not be carried out except with development consent

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Advertising structures; Centre-based child care facilities; Community facilities; Information and education facilities; Recreation areas; Recreation

facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres.

Maps are available on the NSW Department of Planning website www.planning.nsw.gov.au

iii. is prohibited

Any development not specified in subclause (i) or (ii).

Note: For subdivision consent requirements see Clause 2.6 of Wollongong Local Environmental Plan 2009.

Demolition of a building or work requires consent see Clause 2.7 of Wollongong Local Environmental Plan 2009.

Development below the mean high water mark requires consent see Clause 5.7 of Wollongong Local Environmental Plan 2009.

Note: Wollongong Local Environmental Plan 2009 should be consulted to ascertain its full effect on the land.

(c) Whether additional permitted uses apply to the land -

Nil

(d) Whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling- house on the land, and if so, the fixed minimum land dimensions

Refer to State Environmental Planning Policy applying to this land.

(e) Whether the land is in an area of outstanding biodiversity value under the Biodiversity Conservation Act 2016 -

Nil

(f) Whether the land is in a conservation area (however described)

Nil

(g) Whether an item of environmental heritage (however described) is situated on the land

Nil

3. CONTRIBUTION PLAN

(1) The name of each contributions plan under the Act, Division 7.1 applying to the land, including draft contributions plans;

Contributions Plan

Wollongong City-Wide Development Contributions Plan 2024

This plan levies contributions under Section 7.12 of the *Environmental Planning and Assessment Act 1979 (NSW)*. The contribution is calculated based on the proposed cost of carrying out development and the applicable percentage rate. Where applicable, the requirement to pay contributions will be included in any development consent or complying development certificate issued. Further information is available from Council's website.

Draft Contributions Plan

Nil

(2) If the land is in a region within the meaning of the Act, Division 7.1 Subdivision 4

(a) the name of the region, and

(b) the name of the Ministerial planning order in which the region is identified.

- (a) Illawarra-Shoalhaven region
 - (b) *Environmental Planning and Assessment (Housing and Productivity Contribution) Order 2023*
- (3) If the land is in special contributions area to which a continued 7.23 determination applies, the name of the area

Nil

- (4) In this section –

Continued 7.23 determination mean a 7.23 determination that –

- (a) has been continued in force by the Act, Schedule 4, Part 1 and
- (b) has not been repealed as provided by that part.

Note – The Act, Schedule 4, Part 1 contains other definitions that affect the interpretation of this section.

4. COMPLYING DEVELOPMENT

- (1) If the land is land on which complying development may be carried out under each of the complying development codes under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, because of that Policy, clause 1.17A(1)(c)–(e), (2), (3) or (4), 1.18(1)(c3) or 1.19.
- (2) If complying development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.
- (3) If the council does not have sufficient information to ascertain the extent to which complying Development may or may not be carried out on the land, a statement that—
 - (a) a restriction applies to the land, but it may not apply to all of the land, and
 - (b) the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.
- (4) If the complying development codes are varied, under that Policy, clause 1.12, in relation to the land.

Note: For land to which State Environmental Planning Policy (Transport and Infrastructure) 2021 – Chapter 5 Three Ports applies, Exempt and Complying Development is detailed under clauses 6.5 and 6.6 of this State Environmental Planning Policy.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

Subject to the terms of each code, and the zoning of the land, complying development may be carried out for the following codes to the extent that the land has no affectation.

- Part 3 Housing Code
- Part 3A - Rural Housing Code (RU1, RU2, RU3, RU4, RU6, R5)
- Part 3B - Low Rise Housing Diversity Code (R1, R2, R3, RU5)
- Part 4 - Housing Alterations Code
- Part 4A - General Development Code
- Part 5 - Industrial and Business Alterations Code

- Part 5A - Industrial and Business Buildings Code
- Part 5B - Container Recycling Facilities Code
- Part 6 - Subdivisions Code
- Part 7 - Demolition Code
- Part 8 - Fire Safety Code
- Part 9 – Agritourism and Farm Stay Accommodation Code

5. EXEMPT DEVELOPMENT

- (1) If the land is land on which exempt development may be carried out under each of the exempt development codes under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, because of that Policy, clause 1.16(1)(b1)–(d) or 1.16A.
- (2) If exempt development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.
- (3) If the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land, a statement that -
 - (a) a restriction applies to the land, but it may not apply to all of the land, and
 - (b) the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land.
- (4) If the exempt development codes are varied, under that Policy, clause 1.12, in relation to the land

Lot 46 Sec 1 DP 5507

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

- (1) Subject to the terms of each code, and the zoning of the land, exempt development may be carried out for the following codes to the extent that the land has no affectation.

Part 2 - Exempt Development Code

6. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

- (1) Whether the council is aware that -
 - (a) an affected building notice is in force in relation to the land, or
 - (b) a building product rectification order is in force in relation to the land that has not been fully complied with, or
 - (c) a notice of intention to make a building product rectification order given in relation to the land is outstanding.
- (2) In this section -

affected building notice has the same meaning as in the Building Products (Safety) Act 2017, Part 4.

building product rectification order has the same meaning as in the Building Products (Safety) Act 2017

Nil.

7. LAND RESERVED FOR ACQUISITION

Whether an environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

Nil

8. ROAD WIDENING AND ROAD REALIGNMENT

Whether the land is affected by road widening or road realignment under –

- (a) the Roads Act 1993, Part 3, Division 2, or
- (b) an environmental planning instrument, or
- (c) a resolution of the council

Council has no record that the land is affected by any Road Widening or Road Realignment under:

- a. Part 3 of Division 2 of the *Roads Act 1993*, or
- b. any environmental planning instrument, or
- c. any resolution of the Council.

9. FLOOD RELATED DEVELOPMENT CONTROLS

(1) If the land or part of the land is within the flood planning area and is subject to flood related development controls.

Lot 46 Sec 1 DP 5507

Council's current flood maps do not show that the land or part of the land is located within a flood planning area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path, the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) If the land or part of the land is between the flood planning area and the probable maximum flood and is subject to flood related development controls.

Lot 46 Sec 1 DP 5507

Council's current flood maps do not show that the land or part of the land is between the flood planning area and probable maximum flood area. If any aspect of the land, or part of it, includes such matters as the presence of a watercourse or overland flow path the services of a suitably qualified engineer should be obtained to determine if flood related controls apply. Further flood information relating to this land may be available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(3) In this clause -

flood planning area has the same meaning as in the Flood Risk Management Manual.

Floodplain Risk Management Manual means the *Flood Risk Management Manual*, ISBN 978-1-923076-17-4 published by the NSW Government in June 2023.

probable maximum flood has the same meaning as in the Flood Risk Management Manual.

Further flood information relating to this parcel of land is available by application under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

Please note that flood information may change following a review of Council's flood study and Floodplain Risk Management Study. As part of the review, design parameters for these studies may change, and therefore the flood levels, velocities and flood risks may vary from the current studies.

10. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(1) Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bush fire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding -

- Council has adopted Clause 7.10 of Wollongong Local Environmental Plan 2009 – Development in Areas subject to airport noise.
- Council has adopted “Wollongong Development Control Plan 2009 – Chapter E12 Geotechnical Assessment”.
- Council has adopted Acid Sulfate Maps.
- Council has adopted “Wollongong Development Control Plan 2009 – Chapter E16 Bushfire Management”. The Rural Fire Service has endorsed the Bush Fire Prone Land map.
- Unhealthy Building Land Policy, adopted by the Environmental Protection Authority.
- Council has adopted Wollongong City Council Coastal Zone Study (Cardno, Lawson, Treloar 2010).
- Council has adopted Chapter E20 of Wollongong Development Control Plan 2009 – Contaminated Land Management.

Note: Further information relating to potential contamination of this parcel of land is available under the section of this certificate titled CONTAMINATED LAND MANAGEMENT ACT 1997. Advice on other relevant matters affecting the land that Council is aware of (including contamination) may be available by application for a separate Planning Certificate issued under section 10.7(5) of the Environmental Planning & Assessment Act 1979.

(2) In this section - adopted policy means a policy adopted –

- (a) by the council, or
- (b) by another public authority, if the public authority has notified the council that the policy will be included in a planning certificate issued by the council.

11. BUSH FIRE PRONE LAND

- (1) If any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under the Act, section 10.3, a statement that all or some of the land is bush fire prone land
- (2) If none of the land is bush fire prone land, a statement to that effect

The land is **not** recorded in Council's records as bushfire prone land.

12. LOOSE-FILL ASBESTOS INSULATION

If the land includes residential premises, within the meaning of the *Home Building Act 1989*, Part 8, Division 1A, that are listed on the Register kept under that Division, a statement to that effect

For register information contact www.fairtrading.nsw.gov.au

Nil

13. MINE SUBSIDENCE

Whether the land is declared to be a mine subsidence district, within the meaning of the *Coal Mine Subsidence Compensation Act 2017*.

The land is not proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

14. PAPER SUBDIVISION INFORMATION

(1) The name of a development plan adopted by a relevant authority that—

- (a) applies to the land, or
- (b) is proposed to be subject to a ballot.

Nil

(2) The date of a subdivision order that applies to the land.

Not Applicable.

(3) Words and expressions used in this section have the same meaning as in this Regulation, Part 10 and the Act, Schedule 7.

15. PROPERTY VEGETATION PLANS

If the land is land in relation to which a property vegetation plan is approved and in force under the *Native Vegetation Act 2003*, Part 4, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

Council has not been notified that the land is affected by a Property Vegetation Plan issued under the *Native Vegetation Act 2003*.

16. BIODIVERSITY STEWARDSHIP SITES

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under the *Biodiversity Conservation Act 2016*, Part 5, a statement to that effect, but only if the council has been notified of the existence of the agreement by Biodiversity Conservation Trust.

Note - Biodiversity stewardship agreements include biobanking agreements under the Threatened Species Conservation Act 1995, Part 7A that are taken to be biodiversity stewardship agreements under the Biodiversity Conservation Act 2016, Part 5.

Nil

17. BIODIVERSITY CERTIFIED LAND

If the land is biodiversity certified land under the *Biodiversity Conservation Act 2016*, Part 8, a statement to that effect.

Note: Biodiversity certified land includes land certified under Part 7AA of the Threatened Species Conservation Act 1995 that is taken to be certified under the Biodiversity Conservation Act 2016, Part 8.

Nil

18. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006*, to carry out work in relation to a tree on the land, but only if the council has been notified of the order.

Council has not been notified of an order.

19. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

(1) If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

(2) In this section -

existing coastal protection works has the same meaning as in the *Local Government Act 1993*, section 553B.

Note: Existing coastal protection works are works to reduce the impact of coastal hazards on land, such as seawalls, revetments, groynes and beach nourishment, that existed before 1 January 2011.

Nil

20. STATE ENVIRONMENTAL PLANNING POLICY (WESTERN SYDNEY AEROTROPOLIS) 2020

Whether under State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 the land is -

- (a) in an ANEF or ANEC contour of 20 or greater, as referred to in that Policy, clause 19, or
- (b) shown on the Lighting Intensity and Wind Shear Map, or
- (c) shown on the Obstacle Limitation Surface Map, or
- (d) in the "public safety area" on the Public Safety Area Map, or
- (e) in the "3 kilometre wildlife buffer zone" or the "13 kilometre wildlife buffer zone" on the Wildlife Buffer Zone Map.

Not Applicable.

21. DEVELOPMENT CONSENT CONDITIONS FOR SENIORS HOUSING

If *State Environmental Planning Policy (housing) 2021*, chapter 3, Part 5 applied to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that policy, clause 88(2);

Nil

22. SITE COMPATIBILITY CERTIFICATES AND DEVELOPMENT CONSENT CONDITIONS FOR AFFORDABLE RENTAL HOUSING

- (1) Whether there is a current site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land and, if there is a certificate -
 - a) the period for which the certificate is current, and
 - b) that a copy may be obtained from the Department.
- (2) If *State Environmental Planning Policy (Housing) 2021*, Chapter 2, Part 2, Division 1 or 5 applies to the land, any conditions of a development consent in relation to the land that are of a kind referred to in that Policy, clause 21(1) or 40(1).
- (3) Any conditions of a development consent in relation to land that are of a kind referred to in *State Environmental Planning Policy (Affordable Rental Housing) 2009*, clause 17(1) or 38(1).
- (4) In this section— **former site compatibility certificate** means a site compatibility certificate issued under *State Environmental Planning Policy (Affordable Rental Housing) 2009*

Nil

23. WATER OR SEWERAGE SERVICES

If water or sewerage services are, or are to be, provided to the land under the *Water Industry Competition Act 2006*, a statement to that effect.

Nil

Note – A public water utility may not be the provider of some or all of the services to the land. If a water or sewerage service is provided to the land by a licensee under the *Water Industry Competition Act 2006*, a contract for the service will be deemed to have been entered into between the licensee and the owner of the land. A register relating to approvals and licences necessary for the provision of water or sewerage services under the *Water Industry Competition Act 2006* is maintained by the Independent Pricing and Regulatory Tribunal and provides information about the areas serviced, or to be serviced under that Act. Purchasers should check the register to understand who will service the property. Outstanding charges for water or sewerage provided under the *Water Industry Competition Act 2006* become the responsibility of the purchaser.

CONTAMINATED LAND MANAGEMENT ACT 1997

Note: The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated within the meaning of that Act- if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
- (b) that the land to which the certificate relates is subject to a management order within the meaning of the Act- if it is subject to such an order at the date when the certificate is issued,
- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,
- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of the Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate

Council has **not** been advised that:

- a. The land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997
- b. The land is subject to a management order within the meaning of the Contaminated Land Management Act 1997
- c. The land is subject to an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997
- d. The land is subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997
- e. The land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997.

SECTION 10.7 (5) DETAILS

As at the date of this certificate, the following additional information, provided in good faith pursuant to section 10.7 (5) of the Act, relate to the abovementioned land. Council has selected these matters as those most likely to be of concern but they do not comprise an exhaustive list of matters likely to affect the land.

When information pursuant to section 10.7 (5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7 (6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter referred to in this certificate.

RESOLUTION TO PREPARE PLANNING PROPOSAL

Council on 17 July 2017 resolved to commence the preparation of a draft Planning Proposal to introduce Housing Affordability provisions or SEPP 70 Housing Affordability provisions into the Wollongong Local Environmental Plan 2009. The form of the provisions will be subject to a future report and subsequent community consultation.

Council on 3 February 2025 resolved that a Planning Proposal be prepared to amend the Wollongong Local Environment Plan 2009 by including in Schedule 2 Exempt Development: Temporary events (commercial and community) on Council owned and/or managed land, including Crown Land and within the road reserve for which Council is the road authority, subject to being consistent with an adopted Plan of Management over the land where applicable.

LAND STABILITY

Council's land constraint/stability assessment maps do not show that the land is located in an area where landslip and/or subsidence have occurred, or where land instability is suspected. If you have any doubt as to whether the land is affected by landslip and/or subsidence the services of a suitably qualified engineer should be obtained.

Note: the advice provided by Council in respect of the stability of the land is based on information contained in Council's land constraint maps. The maps have been compiled from data received by Council and considered by Council to be reasonably reliable. Council does not warrant that its land constraint maps contain all information ever received by Council relating to the stability of the land.

FLOOD AND DRAINAGE

Council records indicate that this property is **Not Identified as Flood Affected**.

Council's flood maps do not show that the land is located in an area where flooding has occurred or is suspected. If you have any doubt as to whether the land is affected by flooding the services of a suitably qualified engineer should be obtained.

Note 1: Some land may experience water inundation as a result of the creation of stormwater detention basins or channels or flow paths in the course of development of the land.

Note 2: Advice given by Council relating to the likelihood of land being flooded or the nature or extent of such flooding is based on information contained in Council's flood maps. The maps are compiled from data received by Council and/or studies prepared by Council and considered by Council to be reasonably reliable. Council does not warrant that its flood maps contain all information ever received by Council relating to the likelihood of land being flooded or the nature or extent of any such flooding.

Please note that flood information may change following a review of Council's flood study and Floodplain Risk Management Study. As part of the review, design parameters for these studies may change, and therefore the flood levels, velocities and flood risks may vary from the current studies.

ACID SULFATE SOILS

Nil

CONTAMINATED LAND

No advice provided.

STATE SIGNIFICANT DEVELOPMENT

Nil

BUILDING LINES

Wollongong Development Control Plan 2009 details the setbacks applicable to the land.

OTHER HERITAGE MATTERS KNOWN TO COUNCIL

Aboriginal Heritage

All development within the Wollongong Local Government Area is subject to the Aboriginal Heritage requirements of the National Parks and Wildlife Act 1974. To determine if your property is affected by an Aboriginal Site, it is recommended that an Aboriginal Heritage Information Management System (AHIMS) search be undertaken by contacting the AHIMS Administrator on (02) 9995 5000. Further detail on Council's Aboriginal Heritage requirements for Development is contained within Chapter E10 of the Wollongong Development Control Plan 2009.

DEVELOPMENT HISTORY

Application may be made for a Building Certificate under section 10.7B of Environmental Planning and Assessment Act 1979 if written certification of existing buildings on the land is required.

The history of development consent approval applicable to the land may be obtained by consulting the Development Consent Register. Enquiries concerning the register may be made at Council's Customer Service Centre, 41 Burelli Street Wollongong during office hours.

LOOSE-FILL ASBESTOS

Council recommends you make your own enquiries as to the age of the buildings on the land to which this certificate relates and, if it contains a building constructed prior to 1980, the Council also strongly recommends that any potential purchaser obtain advice from a licensed asbestos assessor to determine whether loose-fill asbestos is present in any building on the land and, if so, the health risks (if any) this may pose for the building's occupants.

Contact NSW Fair Trading for further information.

OTHER INFORMATION

Illawarra Shoalhaven Regional Plan

The Department of Planning and Environment released the Illawarra Shoalhaven Regional Plan 2041.

Bushfire

In accordance with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 Clause 1.19A any complying development (except under the Housing Alternation Code) may only be carried out on the lot if the development will not be carried out on any part of the lot that in the bush fire attack level-40 (BAL- 40) or the flame zone (BAL-FZ). In addition, for development specified for the Rural Housing Code any associated access way to the development must be on land that is not in the BAL- 40 or BAL-FZ or grassland.

World Triathlon Championships 2025

The world's best triathletes will be heading to Wollongong in 2025 for the World Triathlon Championships Final. The event runs from 15 to 19 October 2025 and the racecourses vary each day, extending north from WIN Sports and Entertainment Centre to Towradgi and Corrimal. There will be an event precinct at Lang Park, with a bump in-out period of 6 to 26 October 2025.

The highly coordinated event will take place in Belmore Basin, the Wollongong Foreshore and on local streets. To meet safety standards, roads along the route will be temporarily closed while the races are in progress and there will be no parking on the course during road closures.

The Event Organisers and Wollongong City Council are working closely NSW Government agencies, traffic management experts and emergency services to ensure that locals can enjoy the event with minimal disruption. At different times throughout the event, access to residences, businesses and construction sites may be impacted around the route.

If you're likely to be undertaking a renovation or construction in October 2025, please be mindful of the planned parking restrictions, limited access and road closures for 15 to 19 October.

More information about this event will be shared in 2025. Further details [Home - 2025 World Triathlon Championship Wollongong](#)

GENERAL INFORMATION

The following general information is brought to the attention of land owners.

1. Tree Management Policy

Wollongong DCP Chapter E17 - Tree and Vegetation Management along with Council's Tree Management Policy outline Council's requirements for the preservation and management of trees and other vegetation within the Wollongong Local Government Area. A person must not undertake clearing, pruning or removal of a declared tree or vegetation without development consent through a Development Application, or a Permit granted by Council.

A declared tree is defined as -

- a) Five (5) metres or more in height; or
- b) Have a diameter of 30 cm (300mm) or more measured at ground level.

Please note that:

- A permit is also required for any dead or dying trees.
- Pruning of major structural roots or anchor roots are also subject to a Permit.

Some trees may be exempt and do not require a permit to prune and/or remove them.

Information on permit and development application requirements, including other exemptions please refer to the Wollongong Development Control Plan Chapter E17 – Tree and Vegetation Management.

Further information regarding a tree permit application process and trees and development can be obtained from Council's website: <http://www.wollongong.nsw.gov.au/trees> or by contacting Council's Customer Service on 4227 7111.

2. Termite Management for Buildings

Australian Standards 3660.1-2000 (New Buildings) AS 3660.2-2000 (Existing Buildings) Termite Management, recommends that buildings be inspected and be maintained in order to achieve termite management of buildings. Licensed Pest Control Contractors should be contacted to achieve necessary termite control.

3. Lead Paint and Building Renovations

Your attention is drawn to the hazards associated with lead-based paints during building renovation. Suitable precautions should be taken when removing flaking paint or sanding painted surfaces suspected to have been treated with lead-based paint to prevent contamination of the immediate environment and associated health risk from lead dust.

AS 4361 – Part 2 – Guide to Lead Paint Management – Residential and Commercial.

4. Sewage Management Systems

Where a property has on-site sewage management system (this includes septic tanks, disposal trenches, aerated waste water treatment systems, composting toilets and pump out systems) the new owner must obtain an “Approval to Operate” from Council within 3 months of land ownership being transferred or otherwise conveyed.

5. Asbestos

Exposure to asbestos is a serious health hazard. In Australia, asbestos was gradually phased out of building materials in the 1980s and the supply and installation of asbestos containing goods has been prohibited since 31 December 2003. However, asbestos legacy materials still exist in many homes, buildings and other assets and infrastructure.

Council on the 6 February 2023 adopted the Asbestos Management Policy, which states Council's commitment to and responsibilities for safely managing asbestos and provides information for Council and the local community on safely managing asbestos. The policy can be viewed on Council's website: www.wollongong.nsw.gov.au.

6. Building Product Use Ban

On 10 August 2018, the Commissioner of Fair Trading, Department of Finance, Services and Innovation issued, by way of a notice, a Building Product Use Ban under Section 9(1) of the Building Products (Safety) Act 2017. This notice prohibited the use of Aluminium Composite Panels (ACPs) with a core of greater 30 percent Polyethylene (PE) by mass (“the building product”) in any external cladding, external wall, external insulation, faced or rendered finish in certain classes of buildings under the National Construction Code and subject to certain exceptions. The ban commenced operation on Wednesday 15 August 2018.

You should undertake your own inquiries as to whether any of the Panels referenced in the Building Product Use Ban have been utilised in the building.

This document is authorised by:

LIS Information Officer - Section 10.7 Planning Certificates

Wollongong City Council

Telephone (02) 42277111

Appendix F

Site Photographs



Photo 1: Concrete coring of Bore 301.



Photo 2: General view of drillers augering through natural material, Bore 303.



Photo 3: General view of Lot 47, looking south.



Photo 4: View of reinstated Bore 304, looking west.

	CLIENT: AA Crown Holdings Pty Ltd		Site Photographs 1 to 4 Preliminary Site Investigation (Contamination) 366 - 368 Crown Street and 15 - 23 Urunga Parade, Wollongong	PROJECT No: 73522.15
	OFFICE: Wollongong	Prepared By: ZAK		PLATE No: 1
	SCALE: NTS	DATE: 16/10/2025		REVISION: 0



Photo 5: General view of No. 23 Urunga Parade driveway and residential entrance, looking south.



Photo 6: General view of shed structure to the rear of No. 23 Urunga Parade. Potential asbestos containing material (PACM) panels were observed on the walls.



Photo 7: General view of rear year of No. 23 Urunga Parade, looking north-east.



Photo 8: General view of Bore 401 with groundwater monitoring well installed after drilling, looking north.

	CLIENT: AA Crown Holdings Pty Ltd		Site Photographs 5 to 8 Preliminary Site Investigation (Contamination) 366 - 368 Crown Street and 15 - 23 Urunga Parade, Wollongong	PROJECT No: 73522.15
	OFFICE: Wollongong	Prepared By: ZAK		PLATE No: 2
	SCALE: NTS	DATE: 16/10/2025		REVISION: 0

Appendix G

Data Quality Objectives

1. Data quality objectives

The preliminary site investigation (Contamination) with limited sampling (PSI) has been devised broadly in accordance with the seven-step data quality objectives (DQO) process which is provided in Appendix B, Schedule B2 of NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [the 'NEPM']* (NEPC, 2013).

Table 1: Data quality objectives

Step	Summary
1: State the problem	The objective of the investigation is to assess the contamination status of the site with respect to the proposed land use. The report is being undertaken as the site is to be redeveloped. The requirements of the regulator, Wollongong City Council (Council), will also be considered by consulting their Development Control Plan (DCP), Local Environment Plan (LEP) and any other requirements based on our recent experience with Council on similar sites. A preliminary conceptual site model (CSM) has been prepared (Section 9) for the proposed development. The project team consisted of experienced environmental engineers and scientists working in the roles of Project Principal, Project Reviewer, Project Manager and field staff.
2: Identify the decisions / goal of the study	The site history has identified possible contaminating previous uses which are identified in the CSM (Section 9). The CSM identifies the associated contaminants of potential concern (CoPC) and the likely impacted media. The site assessment criteria (SAC) for each of the CoPC are detailed in Section 11, Appendix I and Appendix J. The decision is to establish whether or not the results fall below the SAC. On this basis, an assessment of the site's suitability from a contamination perspective will be derived and a decision made on whether (or not) further assessment and / or remediation will be required.
3: Identify the information inputs	Inputs will be the analytical results for the CoPC and media (identified in the CSM, Section 9) from a national association of testing authorities (NATA) accredited laboratory and methods, where possible. The SAC for each of the CoPC are detailed in Appendix I and Appendix J. Field results and observations such as photoionisation detector (PID) readings and observations of building debris, ash, odours, staining etc will be used to inform sample selection for laboratory analysis.
4: Define the study boundaries	The lateral boundaries of the investigation area are shown on Drawing 1, Appendix A. The vertical boundaries are to the extent of contamination impact as determined from the site history assessment and site observations. The assessment is limited to the timeframe over which the field works were undertaken. Constraints to the assessment are identified and discussed in the conclusions of the report.

Step	Summary
5: Develop the analytical approach (or decision rule)	The decision rule is to compare all analytical results with the SAC (Appendix I, based on NEPC (2013)). Where guideline values are absent, other sources of guideline values accepted by NEPC (2013) shall be adopted where available and warranted. Where a sample result exceeds the adopted criterion, a further site-specific assessment will be made as to the risk posed by the presence of that contaminant(s). Initial comparisons will be with individual results then, where required, summary statistics (including mean, standard deviation and 95% upper confidence limit (UCL) of the arithmetic mean (95% UCL)) to assess potential risks posed by the site contamination. Quality control (QC) results are to be assessed according to their relative percent difference (RPD) values. For field duplicates, triplicates and laboratory results, RPD values should generally be below 30%; for field blanks, results should be at or less than the limits of reporting (NEPC, 2013). The field and laboratory quality assurance assessment is included in Appendix M.
6: Specify the performance or acceptance criteria	Baseline condition: Contaminants at the site and/or statistical analysis of data (in line with NEPC (2013)) exceed the human health and environmental SAC and pose a potentially unacceptable risk to receptors (null hypothesis). Alternative condition: Contaminants at the site and statistical analysis of data (in line with NEPC (2013)) comply with the human health and environmental SAC and therefore, do not pose a potentially unacceptable risk to receptors (alternative hypothesis). Unless conclusive information from the collected data is sufficient to reject the null hypothesis, it is assumed that the baseline condition is true.
7: Optimise the design for obtaining data	As the purpose of the investigation is to assess the contamination status of the site, the sampling program is reliant on professional judgement to identify and sample the potentially affected areas. Further details regarding the proposed sampling plan are presented in Section 10.

2. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix H

Field Work Methodology

1. Guidelines

The following key guidelines were consulted for the field work methodology:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [the 'NEPM']* (NEPC, 2013).

2. Soil sampling

Soil sampling is carried out in accordance with Douglas' standard operating procedures. The general sampling and sample management procedures comprise:

- Collect soil samples directly from SPT sample tube and/or solid flight auger at the nominated sample depth;
- Transfer samples in laboratory-prepared glass jars with Teflon lined lids by hand, capping immediately and minimising headspace within the sample jar;
- Collect replicate samples in zip-lock bags for photoionisation detector (PID) screening;
- Collect ~500 ml samples for fibrous asbestos and asbestos fines (FA and AF) analysis;
- Collect ~40 g to 50 g samples in zip-lock bags for asbestos (presence / absence) analysis;
- Wear a new disposable nitrile glove for each sample point thereby minimising potential for cross-contamination;
- Collect 10% replicate samples for quality control (QC) purposes;
- Label sample containers with individual and unique identification details, including project number, sample location and sample depth (where applicable);
- Place samples into a cooled, insulated and sealed container for transport to the laboratory; and
- Use chain of custody documentation.

2.1 Field testing

Field testing is carried out in accordance with Douglas' standard operating procedures. The general sampling and sample management procedures comprise:

PID field test

- Calibrate the PID with isobutylene gas at 100 ppm and with fresh air prior to commencement of each successive day's field work;
- Allow the headspace in the PID zip-lock bag samples to equilibrate; and
- Screen using the PID.

3. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix I

Site Assessment Criteria

1. Introduction

1.1 Guidelines

The following key guidelines were consulted for deriving the site assessment criteria (SAC):

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [the 'NEPM'] (NEPC, 2013).
- CRC CARE *Health screening levels for petroleum hydrocarbons in soil and groundwater* (CRC CARE, 2011).

1.2 General

The SAC applied in the current investigation are informed by the conceptual site model (CSM) which identified human and environmental receptors to potential contamination at the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The following inputs are relevant to the selection and/or derivation of the SAC:

- Land use: residential (hospital being highly sensitive human receptors)
 - Corresponding to land use category 'A', residential with garden / accessible soil (home grown produce <10% fruit and vegetable intake, (no poultry)), also includes children's day care centres, preschools and primary schools.
- Soil type: silt / clay.

2. Soils

2.1 Health investigation and screening levels

The generic health investigation levels (HIL) and health screening levels (HSL) are considered to be appropriate for the assessment of human health risk via all relevant pathways of exposure associated with contamination at the site. The adopted soil HIL and HSL for the contaminants of concern are in Table 1 and Table 2.

Table 1: Health investigation levels (mg/kg)

Contaminant	HIL-A
Metals	
Arsenic	100
Cadmium	20
Chromium (VI)	100
Copper	6000
Lead	300
Manganese	3800
Mercury (inorganic)	40
Nickel	400
Zinc	7400
PAH	
B(a)P TEQ	3
Total PAH	300
Phenols	
Phenol	3000
Pentachlorophenol	100
OCP	
DDT+DDE+DDD	240
Aldrin and dieldrin	6
Chlordane	50
Endosulfan	270
Endrin	10
Heptachlor	6
HCB	10
Methoxychlor	300
OPP	
Chlorpyrifos	160
PCB	
PCB	1

Table 2: Health screening levels (mg/kg)

Contaminant	HSL-A&B	HSL-A&B
SILT	0 m to <1 m	1 m to <2 m
Benzene	0.6	0.7
Toluene	390	NL
Ethylbenzene	NL	NL
Xylenes	95	210
Naphthalene	4	NL
TRH F1	40	65
TRH F2	230	NL
CLAY	0 m to <1 m	1 m to <2 m
Benzene	0.7	1
Toluene	480	NL
Ethylbenzene	NL	NL
Xylenes	110	310
Naphthalene	5	NL
TRH F1	50	90
TRH F2	280	NL

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX

TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene

The soil saturation concentration (C_{sat}) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds C_{sat}, a soil vapour source concentration for a petroleum mixture could not exceed a level that would result in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'

The HSL for direct contact derived from CRC CARE (2011) are in Table 3.

Table 3: Health screening levels for direct contact (mg/kg)

Contaminant	DC HSL-A	DC HSL-IMW
Benzene	100	1100
Toluene	14 000	120 000
Ethylbenzene	4500	85 000
Xylenes	12 000	130 000
Naphthalene	1400	29 000
TRH F1	4400	82 000
TRH F2	3300	62 000
TRH F3	4500	85 000
TRH F4	6300	120 000

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX
 TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene
 IMW intrusive maintenance worker

2.2 Asbestos in soil

The HSL for asbestos in soil are based on likely exposure levels for different scenarios published in NEPC (2013) for the following forms of asbestos:

- Bonded asbestos containing material (ACM); and
- Fibrous asbestos and asbestos fines (FA and AF).

The HSL are in Table 4.

Table 4: Health screening levels for asbestos

Form of asbestos	HSL-A
ACM	0.01%
FA and AF	0.001%
FA and AF and ACM	No visible asbestos for surface soil *

Notes: Surface soils defined as top 10 cm.

* Based on site observations at the sampling points and the analytical results of surface samples.

2.3 Ecological investigation levels

Ecological investigation levels (EIL) and added contaminant limits (ACL), where appropriate, have been derived in NEPC (2013) for arsenic, copper, chromium (III), nickel, lead, zinc, DDT and naphthalene. The adopted EIL, derived using the interactive (excel) calculation spreadsheet on the NEPM toolbox website are shown in Table 6, with inputs into their derivation shown in Table 5.

Table 5: Inputs to the derivation of the ecological investigation levels

Variable	Input	Rationale
Age of contaminants	"Aged" (>2 years)	Potential historical sources only
pH	6.20	Average of results
CEC	8.20 cmol _e /kg	Average of results
Clay content	10%	Assumed
Traffic volumes	High	Residential / commercial car park
State / Territory	NSW	Location of site

Table 6: Ecological investigation levels (mg/kg)

Contaminant	EIL-A-B-C
Metals	
Arsenic	100
Copper	170
Nickel	110
Chromium III	410
Lead	1100
Zinc	420
PAH	
Naphthalene	170
OCP	
DDT	180

Notes:
 EIL-A-B-C urban residential and public open space

2.4 Ecological screening levels

Ecological screening levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. The adopted ESL are shown in Table 7.

Table 7: Ecological screening levels (mg/kg)

Contaminant	Soil type	ESL-A-B-C
Benzene	Fine	65
Toluene	Fine	105
Ethylbenzene	Fine	125
Xylenes	Fine	45
TRH F1	Coarse/ Fine	180*
TRH F2	Coarse/ Fine	120*
TRH F3	Fine	1300
TRH F4	Fine	5600
B(a)P	Fine	0.7

Notes: ESL are of low reliability except where indicated by * which indicates that the ESL is of moderate reliability

TRH F1 is TRH C₆-C₁₀ minus BTEX

TRH F2 is TRH >C₁₀-C₁₆ including naphthalene

ESL-A-B-C urban residential and public open space

2.5 Management limits

In addition to appropriate consideration and application of the HSL and ESL, there are additional considerations which reflect the nature and properties of petroleum hydrocarbons, including:

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

The adopted management limits are in Table 8.

Table 8: Management limits (mg/kg)

Contaminant	Soil type	ML-A-B-C
TRH F1	Coarse	700
TRH F2	Coarse	1000
TRH F3	Coarse	2500
TRH F4	Coarse	10 000
TRH F1	Fine	800
TRH F2	Fine	1000
TRH F3	Fine	3500
TRH F4	Fine	10 000

Notes: TRH F1 is TRH C₆-C₁₀ including BTEX
TRH F2 is TRH >C₁₀-C₁₆ including naphthalene
ML-A-B-C residential, parkland and public open space

3. References

CRC CARE. (2011). *Health screening levels for petroleum hydrocarbons in soil and groundwater*. Parts 1 to 3, Technical Report No. 10: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix J

Laboratory Summary Table



Table J1: Summary of Laboratory Results – Priority metals, Priority PAH, Priority TRH, BTEX

			Priority metals									Priority PAH				Priority TRH						BTEX			
			Total Arsenic	Cadmium	Total Chromium	Copper	Lead	Manganese	Mercury (inorganic)	Nickel	Zinc	^b Naphthalene	Benzo(a)pyrene (B(a)P)	Benzo(a)pyrene TEQ (B(a)P TEQ)	Total PAH	TRH C6 - C10	TRH >C10-C16	F1 ((C6-C10)-BTEx)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F4 (>C34-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes
		PQL	4	0.4	1	1	1	1	0.1	1	1	1	0.05	0.5	0.05	25	50	25	50	100	100	0.2	0.5	1	1
Sample ID	Depth	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
301	0.1 - 0.2 m	18/02/22	<4	<0.4	6	34	36	NT	0.1	2	180	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
301 - [TRIPLICATE]	0.1 - 0.2 m	18/02/22	11	<0.4	5	38	41	NT	<0.1	4	230	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
301	1 - 1.1 m	18/02/22	5	<0.4	14	6	16	NT	0.1	3	41	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
302	0.2 - 0.3 m	17/02/22	4	<0.4	5	14	5	NT	<0.1	1	14	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
303	0.2 - 0.3 m	10/02/22	10	<0.4	16	39	270	NT	0.1	6	190	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
BD1 - 11022022	0.2 - 0.3 m	11/02/22	9	<0.4	17	42	300	NT	0.1	5	200	<1	NT	NT	NT	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
304	0 - 0.1 m	11/02/22	16	<0.4	10	43	58	NT	<0.1	4	82	<1	0.07	<0.5	0.5	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
304	0.5 - 0.6 m	11/02/22	4	<0.4	7	10	13	NT	<0.1	2	11	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
401	0 - 0.1 m	13/02/25	7	<0.4	11	17	58	160	0.1	3	44	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
401	0.5 - 0.6 m	13/02/25	8	2	16	6	14	51	0.3	4	10	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
401	1 - 1.1 m	13/02/25	16	<0.4	28	1	11	5	0.2	<1	3	<1	<0.05	<0.5	<0.05	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45
BD1 - 13022025	1 - 1.1 m	13/02/25	12	<0.4	23	2	13	16	<0.1	1	5	<1	NT	NT	NT	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1
			500 100	150 NL	500 410	30,000 170	1,200 1,100	14,000 NL	120 NL	1,200 110	60,000 420	5 170	NL 0.7	4 NL	400 NL	NL NL	NL 120	50 180	280 NL	NL 1,300	NL 5,600	0.7 65	480 105	NL 125	110 45

Lab result

HIL/HSL value EIL/ESL/EGV value

HIL/HSL exceedance

EIL/ESL exceedance

HIL/HSL and EIL/ESL exceedance

ML exceedance

ML and HIL/HSL or EIL/ESL exceedance

Indicates that asbestos has been detected by the lab, refer to the lab report

Blue = DC exceedance

Red = EGV-indirect exceedance

HSL 0-<1 Exceedance

Bold = Lab detections

- = Not tested or No HIL/HSL/EIL/ESL (as applicable) or Not applicable

NL = Not limiting

NAD = No Asbestos detected

HIL = Health investigation level HSL = Health screening level (excluding DC) EIL = Ecological investigation level ESL = Ecological screening level EGV = Environmental Guideline Value ML = Management Limit DC = Direct Contact HSL

- Notes:**
- a QA/QC replicate of sample listed directly below the primary sample
 - b Naphthalene reported as highest detection from the BTEXN or PAH suite, or if both results <PQL as lowest PQL
 - c EIL criteria applies to DDT only

Site Assessment Criteria (SAC):

SAC based on generic land use thresholds for Residential B with minimal opportunities for soil access
Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:

HIL	HIL-B (NEPC, 2013 or HEPA, 2020 (PFAS only))	EGV	EGV, all land uses, direct exposure (HEPA, 2020)
HSL (vapour intrusion)	HSL-A/B (NEPC, 2013)	ESL	Urban Residential and Public Open Space (NEPC, 2013)
DC	Direct contact HSL B Residential (High density) (CRC CARE, 2011)	ML	Residential, Parkland and Public Open Space (NEPC, 2013)
		EGV-Indir	EGV, all land uses, Indirect exposure (HEPA, 2020)

Table J2: Summary of Laboratory Results – Priority Phenols, Priority OCP, Priority OPP, PCB, Asbestos

			Priority phenol	Priority OCP									Priority OPP	PCB	Asbestos		
			Total Phenolics	DDT+DDE+DDD ^c	Aldrin + Dieldrin	Total Chlordane	Total Endosulfan	Endrin	Heptachlor	Hexachlorobenzen ^e	Methoxychlor	Mirex	Chlorpyrifos	Total PCB	Asbestos ID in soil <0.1g/kg	Asbestos ID in soil >0.1g/kg	FA and AF Estimation
		PQL	5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			0.001
Sample ID	Depth	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	%(w/w)
301	0.1 - 0.2 m	18/02/22	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
301 - [TRIPLICATE]	0.1 - 0.2 m	18/02/22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
301	1 - 1.1 m	18/02/22	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
302	0.2 - 0.3 m	17/02/22	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
303	0.2 - 0.3 m	10/02/22	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
BD1 - 11022022	0.2 - 0.3 m	11/02/22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
304	0 - 0.1 m	11/02/22	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
304	0.5 - 0.6 m	11/02/22	NT	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
401	0 - 0.1 m	13/02/25	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
401	0.5 - 0.6 m	13/02/25	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
401	1 - 1.1 m	13/02/25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL
BD1 - 13022025	1 - 1.1 m	13/02/25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
			130 ^a NL	600 ^a 180 ^a	10 ^a NL	90 ^a NL	400 ^a NL	20 ^a NL	10 ^a NL	15 ^a NL	500 ^a NL	NL NL	340 ^a NL	1 ^a NL			0.001 ^a NL

Lab result

HIL/HSL value EIL/ESL/EGV value

Notes:

- a QA/QC replicate of sample listed directly below the primary sample
- b Naphthalene reported as highest detection from the BTEXN or PAH suite, or if both results <PQL as lowest PQL
- c EIL criteria applies to DDT only

Site Assessment Criteria (SAC):

SAC based on generic land use thresholds for Residential B with minimal opportunities for soil access

Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:

HIL

HSL (vapour intrusion)

DC

Table J3: Preliminary In-situ Waste Classification – Metals, TRH, BTEX, PAH, Phenols, OCP, OPP, PCB, Asbestos

			Metals						TRH		BTEX				PAH		Phenols	OCP		OPP	PCB	Asbestos			
			Total Arsenic	Cadmium	Total Chromium	Lead	Mercury (inorganic)	Nickel	TRH C6 - C9	TRH C10-C16	Benzene	Toluene	Ethylbenzene	Total Xylenes	Benzo(a)pyrene (BaP)	Total PAH	Total Phenolics	Total Endosulfan	Total Analysed OCP	Total Analysed OPP	Total PCB	Asbestos ID in soil >0.1g/kg	Asbestos ID in soil <0.1g/kg	FA and AF Estimation	
		PQL	4	0.4	1	1	0.1	1	25	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1			0.001	
Sample ID	Depth	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	%(w/w)	
301	0.1 - 0.2 m	18/02/22	<4	<0.4	6	36	0.1	2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
301 - [TRIPLICATE]	0.1 - 0.2 m	18/02/22	11	<0.4	5	41	<0.1	4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
301	1 - 1.1 m	18/02/22	5	<0.4	14	16	0.1	3	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	<0.1	<0.1	<0.1	NT	NT	NT	NT	
302	0.2 - 0.3 m	17/02/22	4	<0.4	5	5	<0.1	1	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
303	0.2 - 0.3 m	10/02/22	10	<0.4	16	270	0.1	6	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
BD1	0.2 - 0.3 m	11/02/22	9	<0.4	17	300	0.1	5	<25	<50	<0.2	<0.5	<1	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
304	0 - 0.1 m	11/02/22	16	<0.4	10	58	<0.1	4	<25	<50	<0.2	<0.5	<1	<1	0.07	0.5	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
304	0.5 - 0.6 m	11/02/22	4	<0.4	7	13	<0.1	2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	<0.1	<0.1	<0.1	NT	NT	NT	NT	
401	0 - 0.1 m	13/02/25	7	<0.4	11	58	0.1	3	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
401	0.5 - 0.6 m	13/02/25	8	2	16	14	0.3	4	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.001	
401	1 - 1.1 m	13/02/25	16	<0.4	28	11	0.2	<1	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NAD	NAD	NT	
BD1	0 m	13/02/25	12	<0.4	23	13	<0.1	1	<25	<50	<0.2	<0.5	<1	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Waste Classification Criteria ^f																									
CT1			100	20	100	100	4	40	650	10,000	10	288	600	1000	0.8	200	288	60	-	4	<50	-	-	-	
SCC1			500	100	1,900	1,500	50	1,050	650	10,000	18	518	1,080	1,800	10	200	518	108	-	7.5	<50	-	-	-	
TCLP1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CT2			400	80	400	400	16	160	2,600	40,000	40	1,152	2,400	4,000	3.2	800	1,152	240	-	16	<50	-	-	-	
SCC2			2,000	400	7,600	6,000	200	4,200	2,600	40,000	72	2,073	4,320	7,200	23	800	2,073	432	-	30	<50	-	-	-	
TCLP2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

 CT1 exceedance  TCLP1 and/or SCC1 exceedance  CT2 exceedance  TCLP2 and/or SCC2 exceedance  Asbestos detection

NT = Not tested, no criteria or not applicable NAD = no asbestos detected

Notes:

- a QA/QC replicate of sample listed directly below the primary sample
- b Total chromium used as initial screen for chromium(VI).
- c Total recoverable hydrocarbons (TRH) used as an initial screen for total petroleum hydrocarbons (TPH)
- d Criteria for scheduled chemicals used as an initial screen
- e Criteria for Chlorpyrifos used as initial screen
- f NSW EPA, 2014, Waste Classification Guidelines Part 1; Classifying Waste
- PQL Practical quantitation limit
- CT1 Maximum values of specific contaminant concentration (SCC) for classification without TCLP: General solid waste
- SCC1 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
- TCLP1 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
- CT2 Maximum values of specific contaminant concentration (SCC) for classification without TCLP: Restricted solid waste
- SCC2 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: Restricted solid waste
- TCLP2 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: Restricted solid waste

Appendix K

Borehole Logs

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd **SURFACE LEVEL:** 40.8 AHD **LOCATION ID:** 301
PROJECT: Wollongong Private Hospital Extension **COORDINATE:** E:305207.0, N:6188644.5 **PROJECT No:** 73522.07
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong **DATUM/GRID:** MGA94 Zone 56 **DATE:** 18/02/22
DIP/AZIMUTH: 90°/---° **SHEET:** 1 of 2

CONDITIONS ENCOUNTERED													SAMPLE		TESTING							
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE	
					ORIGIN(1)	CONSIS(1) DENSITY(1)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)									DEFECTS & REMARKS
No free groundwater observed during auger drilling 09/03/22	0.09	0.12	CONCRETE: grey, fine to coarse latite aggregates, <5% voids				NA								PID = 0.5	ES	0.10	PID	PID = 0.5ppm			
			FILL/Gravelly SAND SP: poorly graded, black, fine to coarse grained, with fine angular to subangular gravels, bedding sand.				NA	w<PL							PID = 1.2	ES	0.50	PID	PID = 1.2ppm			
		1	FILL/Sandy CLAY CL: low plasticity, dark brown, fine to medium sand, with trace fine angular to subrounded gravel.												PID = 1.4	ES	1.00	PID	PID = 1.4ppm			
		1.60	Sandy CLAY CL: low plasticity, orange brown mottled grey, fine to medium sand, with trace fine angular to subrounded gravel.				VSt	w<PL							PID = 4.0	ES	1.43	PID	PID = 4.0ppm			
		2	Sandy CLAY CL: low plasticity, orange brown mottled grey, fine to medium sand, with silt, residual.															2.00	SPT	6,9,17		
		2.70	Sandy CLAY CL: medium plasticity, red brown mottled pale grey and orange brown, with seams of highly weathered sandstone, extremely weathered sandstone.																			
		3																				
		3.66																				
		3.93																				
		4.23																				
		4.56																				
		5																				
		6.00	SANDSTONE: fine to medium grained, brown, thinly to medium bedded, low strength, highly weathered, fractured to slightly fractured, with extremely weathered seams, Broughton Formation																			
		6.50																				
		6.66																				
		6.68																				
		7	SANDSTONE: fine to medium grained, orange brown and grey, thickly bedded to massive, medium to high strength, moderately becoming slightly weathered, slightly fractured, trace coaly laminae, Broughton Formation																			
		8																				
		8.71																				
	9	9.22m: medium to coarse grained 9.22-9.60m																				

NOTES: # Soil origin is "probable" unless otherwise stated. "Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115 **OPERATOR:** South Coast Drilling **LOGGED:** ZK/SL
METHOD: Concrete coring to 0.09m, SFA (TC bit) to 2m, rotary (water) to 2.7m, coring (NMLC) to 12.79m. HV **CASING:** HWT to 2.6m
REMARKS: Standpipe installed: screen 0.65-12.65m, sand 0.5-12.65m, bentonite 0.2-0.5m, gatic cover

Refer to explanatory notes for symbol and abbreviation definitions

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong
SURFACE LEVEL: 40.8 AHD
COORDINATE: E:305207.0, N:6188644.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°
LOCATION ID: 301
PROJECT No: 73522.07
DATE: 18/02/22
SHEET: 2 of 2

CONDITIONS ENCOUNTERED														SAMPLE				TESTING				
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
					ORIGIN (#)	CONSIS. (%)	DENSITY (%)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)								
	30	11	SANDSTONE: fine grained, grey, massive, high strength, slightly weathered becoming fresh, slightly fractured becoming unbroken, trace coaly laminae, Broughton Formation.						FR													
	29	12	11.70m: medium to coarse grained 11.70-11.80m							11.70 11.80	M	100	93		10.87m: JT, 30-40° 11.10m: JT, 80-90°, IR, INF CA 3mm, healed				12	PLT	PL(A)=1.1MPa	
		13	Borehole discontinued at 12.79m depth. Limit of investigation.																	PLT	PL(A)=1.7MPa	
		14																				
		15																				
		16																				
		17																				
		18																				
		19																				

NOTES: ^aSoil origin is "probable" unless otherwise stated. ^bConsistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115
METHOD: Concrete coring to 0.09m, SFA (TC bit) to 2m, rotary (water) to 2.7m, coring (NMLC) to 12.79m. HV
REMARKS: Standpipe installed: screen 0.65-12.65m, sand 0.5-12.65m, bentonite 0.2-0.5m, gatic cover
OPERATOR: South Coast Drilling
LOGGED: ZK/SL
CASING: HWT to 2.6m

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 40.8 AHD
COORDINATE: E:305207.0, N:6188644.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 301
PROJECT No: 73522.07
DATE: 18/02/22
SHEET: 1 of 1



2.70-6.00 m depth



6.00-12.79 m depth

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd

PROJECT: Wollongong Private Hospital Extension

LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollong **DATUM/GRID:** MGA94 Zone 56

SURFACE LEVEL: 41.7 AHD

COORDINATE: E:305233.0, N:6188644.5

DATUM/GRID: MGA94 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: 302

PROJECT No: 73522.07

DATE: 17/02/22

SHEET: 1 of 2

CONDITIONS ENCOUNTERED															SAMPLE		TESTING				
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
				ORIGIN(%)	CONSIS.(%) DENSITY.(%)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)	DEFECTS & REMARKS								
RL (m)																					
0.15	0.25	CONCRETE: grey, fine to coarse latite aggregate, <5% voids			NA	NA								PID = 1.6	ES	0.20	PID	PID = 1.6ppm			
0.60	1	FILL/SAND SP: poorly graded, brown, fine to medium grained, with coarse subrounded gravel, trace brick and plastic.			NA	M								PID = 2.3	ES	0.50	PID	PID = 2.3ppm			
1	1.90	FILL/Sandy CLAY CL: low plasticity, brown mottled yellow brown, fine to coarse sand, with fine to medium subangular to subrounded gravel.			St	w<PL								PID = 2.8	SPT	1.00	PID	PID = 2.8ppm			
2.60	3	Silty CLAY CL: medium plasticity, orange brown mottled red brown, with fine to medium sand, trace fine subangular to subrounded gravel, residual.													ES	1.45	SPT	5,5,9			
3.66	4	SANDSTONE: fine to medium grained, red brown and grey, very low strength to low strength, highly weathered, Broughton Formation.													SPT	2.05	SPT	25/50			
4.25	4.35	SANDSTONE: fine to medium grained, grey orange brown and red brown, medium to thickly bedded, high strength, highly to slightly weathered, slightly fractured, Broughton Formation																			
4.54	5	SANDSTONE: fine to medium grained, orange brown and white, thinly to medium bedded, low to medium strength, highly to moderately weathered, slightly fractured, with extremely weathered seams, Broughton Formation																			
6.03	7	SANDSTONE: fine to medium grained, orange brown and pale grey, medium to thickly bedded, medium strength, highly to slightly weathered, slightly fractured, Broughton Formation																			
8.80	9	9.49m: coarse grain band from 9.49m - 9.60m																			
NOTES: #Soil origin is "probable" unless otherwise stated. *Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.																					

PLANT: Hanjin TD115

OPERATOR: South Coast Drilling

LOGGED: ZK/SL

METHOD: Concrete Core to 0.15m, SFA (TC bit) to 2m, rotary (water) to 2.6m, coring (NMLC) to 14.55m. HWT **CASING:** HWT to 2.6m

REMARKS: Standpipe installed: screen 2.55-14.55m, sand 1.10-14.55m, bentonite 0.2-1.1m, gatic cover

Refer to explanatory notes for symbol and abbreviation definitions



BOREHOLE LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong
SURFACE LEVEL: 41.7 AHD
COORDINATE: E:305233.0, N:6188644.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°
LOCATION ID: 302
PROJECT No: 73522.07
DATE: 17/02/22
SHEET: 2 of 2

CONDITIONS ENCOUNTERED														SAMPLE				TESTING				
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
					ORIGIN ^(#)	CONSIS. ^(*)	DENSITY. ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)								
	31	11	SANDSTONE: fine to medium grained, pale grey, massive, high becoming very high strength, fresh-stained becoming fresh, slightly fractured becoming massive, Broughton Formation						SW to FR		H	100	95				11	PLT	PL(A)=1.8MPa			
	30	12								11.42							12	PLT	PL(A)=3.0MPa			
	29	13								12.14		100	99									
	28	14	14.17m: cross bedding below 14.17m						FR		H to VH						13	PLT	PL(A)=3.0MPa			
										13.95		100	100				14	PLT	PL(A)=3.1MPa			
		15	Borehole discontinued at 14.61m depth. Limit of investigation.								VH							PLT	PL(A)=3.1MPa			
		16																				
		17																				
		18																				
		19																				

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115
METHOD: Concrete Core to 0.15m, SFA (TC bit) to 2m, rotary (water) to 2.6m, coring (NMLC) to 14.55m. HWT
REMARKS: Standpipe installed: screen 2.55-14.55m, sand 1.10-14.55m, bentonite 0.2-1.1m, gatic cover
OPERATOR: South Coast Drilling
LOGGED: ZK/SL
CASING: HWT to 2.6m

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 41.7 AHD
COORDINATE: E:305233.0, N:6188644.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 302
PROJECT No: 73522.07
DATE: 17/02/22
SHEET: 1 of 2



2.60-6.00 m depth



6.00-12.00 m depth

CORE PHOTO LOG

CLIENT: Erilyan Pty Ltd

PROJECT: Wollongong Private Hospital Extension

LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 41.7 AHD

COORDINATE: E:305233.0, N:6188644.5

DATUM/GRID: MGA94 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: 302

PROJECT No: 73522.07

DATE: 17/02/22

SHEET: 2 of 2



12.00-14.61 m depth

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 43.0 AHD
COORDINATE: E:305196.0, N:6188603.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 303
PROJECT No: 73522.07
DATE: 10/02/22
SHEET: 1 of 2

CONDITIONS ENCOUNTERED													SAMPLE			TESTING					
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
				ORIGIN(%)	CONSIS.(%)	DENSITY.(%)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)								
No free groundwater observed during auger drilling	0.10	CONCRETE: grey, fine to coarse latite aggregate, <5% voids		NA	NA	w<PL									PID = 0.2	ES	0.20	PID	PID = 0.2ppm		
	0.12	0.20													ASPHALTIC CONCRETE : dark grey to black, fine to coarse igneous aggregate, bituminous binder.	PID = 0.4	ES	0.50	PID		
	0.80	1	CONCRETE: grey, fine to coarse latite aggregate, <5% voids.	VSt	w<PL										PID = 0.7	ES	1.00	PID	PID = 0.7ppm		
	1.60	2	FILL/Silty CLAY CL: low plasticity, dark brown, with fine to coarse sand and fine to coarse subangular to subrounded gravel.												SPT	1.10	SPT	13,11,12			
	2.60	3	Sandy CLAY CL: low plasticity, orange brown mottled pale grey and red brown, fine to coarse sand, with silt, residual.	H	w<PL										SPT	2.00	SPT	12,20,24			
	3.60	4	Silty CLAY CL: medium plasticity, pale red brown mottled pale grey and brown, with fine to medium sand, extremely weathered sandstone.												SPT	3.00	SPT	13,22,26			
	4.80	5	SANDSTONE: fine to medium grained, orange brown mottled pale grey, fine to medium sand, extremely weathered sandstone.	H	w<PL										SPT	3.45	SPT				
	5.83	6	SANDSTONE: fine to medium grained, orange brown, medium to thickly bedded, low to medium and medium strength, highly to moderately weathered, slightly fractured, Broughton Formation.												SPT	4.00	SPT				
	6.03	7	SANDSTONE: fine to medium grained, orange brown, medium bedded, interbedded extremely low to medium strength, extremely to moderately weathered, fractured, Broughton Formation												C	4.80	PLT	PL(A)=0.30MPa			
	6.63	8	SANDSTONE: fine to medium grained, orange brown, medium bedded, interbedded extremely low to medium strength, extremely to moderately weathered, fractured, Broughton Formation												C	5.55	PLT	PL(A)=0.60MPa			
7.67	9	SANDSTONE: fine to medium grained, orange brown and pale grey, medium to thickly bedded, low to medium strength, moderately becoming slightly weathered, slightly fractured, with extremely low strength, extremely weathered seams, Broughton Formation												C	6.03m: B, 0-5° Clay 140mm 6.24m: B, 0-5° Clay 130mm 6.59m: B, 0-10° Clay 30mm	7	PLT	PL(A)=0.30MPa			
7.75	8													C	7.10m: JT, 45° 7.35m: B, 0-5° 30mm, EW 7.46m: JT, 20° 7.52m: B, 0-10° 30mm, EW	8	PLT	PL(A)=0.40MPa			
9.66														C	8.26m: JT, 10-15° 9.38m: B, 0-5° Clay 60mm 9.48m: B, 0-5° 10mm, EW	9	PLT	PL(A)=0.80MPa			
														C			PLT	PL(A)=1.4MPa			

NOTES: ^aSoil origin is "probable" unless otherwise stated. ^bConsistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: "H" Soil origin is "probable" unless otherwise stated. "Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115

OPERATOR: South Coast Drilling

LOGGED: ZK/AM

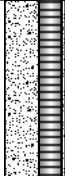
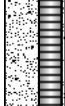
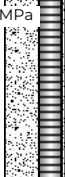
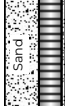
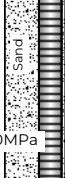
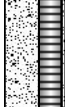
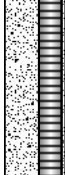
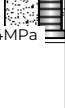
METHOD: Concrete Core to 0.10m, SFA (TC bit) to 2.6m, rotary (water) to 4.8m, coring (NMLC) to 16.78m. HV CASING: HWT to 4.6m

REMARKS: Standpipe installed: screen 1.75-16.75m, sand 1.00-16.75, bentonite 0.3-1.0m, gatic cover

Refer to explanatory notes for symbol and abbreviation definitions

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong
SURFACE LEVEL: 43.0 AHD
COORDINATE: E:305196.0, N:6188603.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°
LOCATION ID: 303
PROJECT No: 73522.07
DATE: 10/02/22
SHEET: 2 of 2

CONDITIONS ENCOUNTERED													SAMPLE				TESTING																			
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE														
					ORIGIN(¹)	CONSIS.(²)	DENSITY.(²)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)									DEFECTS & REMARKS													
	32	11	SANDSTONE: fine to medium grained, pale grey, massive, high becoming very high strength, slightly weathered becoming fresh stained, slightly fractured becoming unbroken, Broughton Formation						SW to FR	13.70	H	100	97	11.30m: JT, 10-40°				10.75	PLT	PL(A)=1.3MPa																
	31	12										100	100										15.71m: JT, 70°, INF CA 2mm, healed 15.79m JT x2, 10-20°	C	12	PLT	PL(A)=2.0MPa									
	30	13																												15	C	13	PLT	PL(A)=4.1MPa		
	29	14																																		
	28	15																					FR	14.89	VH	100	100			15	PLT	PL(A)=4.1MPa				
	27	16																																		
	17	16.78	Borehole discontinued at 16.78m depth. Limit of investigation.															PLT	PL(A)=3.4MPa																	
	18																																			
	19																																			

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: "Soil origin is "probable" unless otherwise stated. "Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115
METHOD: Concrete Core to 0.10m, SFA (TC bit) to 2.6m, rotary (water) to 4.8m, coring (NMLC) to 16.78m. HV
REMARKS: Standpipe installed: screen 1.75-16.75m, sand 1.00-16.75, bentonite 0.3-1.0m, gatic cover
OPERATOR: South Coast Drilling
LOGGED: ZK/AM
CASING: HWT to 4.6m

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: Erilyan Pty Ltd

PROJECT: Wollongong Private Hospital Extension

LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 43.0 AHD

COORDINATE: E:305196.0, N:6188603.5

DATUM/GRID: MGA94 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: 303

PROJECT No: 73522.07

DATE: 10/02/22

SHEET: 1 of 1



4.80-16.78 m depth

BOREHOLE LOG

CLIENT: Erilyan Pty Ltd

PROJECT: Wollongong Private Hospital Extension

LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollong **DATUM/GRID:** MGA94 Zone 56

SURFACE LEVEL: 43.2 AHD

COORDINATE: E:305206.0, N:6188572.5

DATUM/GRID: MGA94 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: 304

PROJECT No: 73522.07

DATE: 11/02/22

SHEET: 1 of 2

GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	CONDITIONS ENCOUNTERED										SAMPLE			TESTING		
				SOIL			WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)	DEFECTS & REMARKS	SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
				ORIGIN (#)	CONSIS. ⁽¹⁾	DENSITY ⁽¹⁾													
11/02/22 No free groundwater observed during auger drilling	0.04	ASPHALTIC CONCRETE: dark grey to black, fine to coarse igneous aggregate, bituminous binder, wearing course		NA	w<PL								PID = 12	ES	0.10	PID	PID = 12ppm		
	0.08																		
	0.80	FILL/gravelly SAND SP: poorly sorted, fine to medium angular to subangular gravel, fine to coarse sand.		St	w<PL							PID = 0.7	ES	0.50	PID	PID = 0.7ppm			
	1																		
	2	FILL/Sandy CLAY CL: low plasticity, dark brown, fine to medium sand, with silt.		St	w<PL							1.60m: , Unless otherwise stated, discontinuities comprises rough, planar, iron-stained near-horizontal bedding partings and moderately to steeply dipping joints	SPT	1.00	SPT	4,5,8			
	2																		
	2.60	Silty CLAY CL: medium plasticity, orange brown mottled red brown, with trace fine sand, residual.		St	w<PL								SPT	2.00	SPT	26/150			
	2.80																		
	2.95	Sandy CLAY CL: low plasticity, orange brown, fine to medium sand, with very low to medium strength seams, extremely weathered sandstone.		H		XW	SOIL	77	0	SOIL		2.64m: B, 0-5° Clay 70mm		3	PLT	PL(A)=0.30MPa			
	3.40																		
3.63	SANDSTONE: fine to medium grained, orange-brown,thinly bedded, low strength, highly weathered, fractured, with clay seams, Broughton Formation				HW	L			L		2.75m: B, 0-5° Clay 100mm		4	PLT	PL(A)=1.0MPa				
4																			
5.00	SANDSTONE: fine to medium grained, orange brown and pale grey, medium to thickly bedded, interbedded very low to medium strength, highly to moderately weathered, fractured to slightly fractured, with clay and extremely weathered seams, Broughton Formation				HW to MW	M	91	37	M		3.05m: B, 0-5° Clay 10mm		5						
5.10																			
6					HW to MW	M	100	30	M		3.12m: JT, 85°, EW		6						
6.79																			
7	SANDSTONE: fine to medium grained, pale grey and orange brown, thickly bedded, medium to high strength, slightly weathered to fresh stained, slightly fractured, Broughton Formation				SW to FR	M	100	97	M		3.20m: B, 0-5° Clay 20mm		7	PLT	PL(A)=0.50MPa				
8																			
9						M			M		3.25m: B, 0-5° Clay 20mm		8	PLT	PL(A)=1.1MPa				
						M			M		3.32m: JT, 70°		9	PLT	PL(A)=0.60MPa				

NOTES: ⁽¹⁾Soil origin is "probable" unless otherwise stated. ⁽²⁾Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115

OPERATOR: South Coast Drilling

LOGGED: ZK/AM

METHOD: SFA (TC bit) to 2.0m, rotary (water) to 2.6m, coring (NMLC) to 11.76m. HWT to 2.6m.

CASING: HWT to 2.6m

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions



BOREHOLE LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong
SURFACE LEVEL: 43.2 AHD
COORDINATE: E:305206.0, N:6188572.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°
LOCATION ID: 304
PROJECT No: 73522.07
DATE: 11/02/22
SHEET: 2 of 2

CONDITIONS ENCOUNTERED													SAMPLE				TESTING			
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
					ORIGIN (#)	CONSIS. ^(*)	DENSITY. ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
	33	10.30	[CONT] SANDSTONE: fine to medium grained, pale grey and orange brown, thickly bedded, medium to high strength, slightly weathered to fresh stained, slightly fractured, Broughton Formation																	
	32	11	SANDSTONE: fine to medium grained, pale grey and orange brown, thickly bedded, high strength, fresh stained, slightly fractured, Broughton Formation																	
		12																		
		13	Borehole discontinued at 11.76m depth. Limit of investigation.																	
		14																		
		15																		
		16																		
		17																		
		18																		
		19																		

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ° Soil origin is "probable" unless otherwise stated. ° Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin TD115
METHOD: SFA (TC bit) to 2.0m, rotary (water) to 2.6m, coring (NMLC) to 11.76m. HWT to 2.6m.
REMARKS:
OPERATOR: South Coast Drilling
LOGGED: ZK/AM
CASING: HWT to 2.6m

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: Erilyan Pty Ltd
PROJECT: Wollongong Private Hospital Extension
LOCATION: 366-368 Crown Street & 15-21 Urunga Parade, Wollongong

SURFACE LEVEL: 43.2 AHD
COORDINATE: E:305206.0, N:6188572.5
DATUM/GRID: MGA94 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 304
PROJECT No: 73522.07
DATE: 11/02/22
SHEET: 1 of 1



4.80-16.78 m depth

BOREHOLE LOG

CLIENT: AA Crown Holdings Pty Ltd

PROJECT: Proposed Wollongong Private Hospital Expansion

LOCATION: 366 - 368 Crown Street & 15 - 23 Urunga Parade,, WOLLONGONG NSW 2520

SURFACE LEVEL: 40.1 AHD

COORDINATE: E:305192.3, N:6188644.6

DATUM/GRID: MGA2020 Zone 56

DIP/AZIMUTH: 90°/---

LOCATION ID: 401

PROJECT No: 73522.11

DATE: 13/02/25

SHEET: 1 of 2

CONDITIONS ENCOUNTERED													SAMPLE		TESTING						
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
				ORIGIN ^(#)	CONSIS. ^(*)	DENSITY ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)								
	0.20	TOPSOIL / Sandy SILT (ML), trace rootlets: dark brown; low plasticity; fine to medium sand.												ES		0.10	PID	<1ppm			
	0.60			FILL										ES		0.50	PID	<1ppm			
	0.80	FILL / Sandy SILT (ML), with clay, with gravel: dark brown; low plasticity; fine to medium sand; fine to medium, sub-angular gravel.		RS	St											0.60					
	1.00			RS	St to VSt									D/ES		1.00					
	1.10													SPT/SPT		1.10	SPT	4,5,7 N=12			
	1.45															1.45	PID	<1ppm			
	1.50	Sandy CLAY (CI): grey brown; medium plasticity; fine to medium sand.		XWM	H																
	2.00	Silty CLAY (CI), trace sand: orange brown mottled red; medium plasticity; fine sand.												SPT/SPT		2.00	SPT	25/100 (HB)			
	2.10															2.10	PLT	PL(A)=1.6MPa			
	3.00	Sandy CLAY (CI), with gravel: orange brown mottled red and white; medium plasticity; fine to medium sand; fine to medium, angular to sub-angular gravel; extremely weathered sandstone.					SW														
	3.15																				
	3.29						XW	3.15													
	3.75							3.29	VL												
	3.75						SW														
	4.00	SANDSTONE: pale brown, brown, fine to coarse grained, granular																			
	4.70																				
	5.00	SANDSTONE: pale yellow, pale brown, mottled orange brown					HW														
	5.60	4.70m-5.60m: with 10-50mm bands of HW sandstone																			
	6.00	SANDSTONE: pale brown, brown, fine to medium grained, granular					HW	5.60													
	6.00							6.00	M												
	7.00																				
	8.00						MW														
	9.00																				
	9.31	SANDSTONE: grey, fine to medium grained, granular					MW SW	9.31													
							</														

NOTES: "Soil origin is 'probable' unless otherwise stated. "Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Hanjin 8D

METHOD: Auger/SPT to 2.0m. NMLC coring to 15.70m

REMARKS: BD1 = 0-0.1m

OPERATOR: SCD (Craig Martin)

LOGGED: ZAK/AR

CASING: HW to 2.1m

Refer to explanatory notes for symbol and abbreviation definitions

BOREHOLE LOG

CLIENT: AA Crown Holdings Pty Ltd

PROJECT: Proposed Wollongong Private Hospital Expansion

LOCATION: 366 - 368 Crown Street & 15 - 23 Urunga Parade,, WOLLONGONG

SURFACE LEVEL: 40.1 AHD

COORDINATE: E:305192.3, N:6188644.6

DATUM/GRID: MGA2020 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: 401

PROJECT No: 73522.11

DATE: 13/02/25

SHEET: 2 of 2

CONDITIONS ENCOUNTERED														SAMPLE			TESTING				
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	BACKFILL	WELL PIPE
				ORIGIN ^(#)	CONSIS. ^(*)	DENSITY. ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)								
	10.13	[CONT] SANDSTONE: grey, fine to medium grained, granular						MW	10.13	VL											
	10.43																				
	11																				
	12																				
	13									FR	13.30										
	14	Borehole discontinued at 15.70m depth. Limit of investigation.																			
	15																				
	16																				
	17																				
	18																				
	19																				

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

Appendix L

Laboratory Certificate of Analysis, Chain-of-Custody Documentation and Sample Receipt Advice

Rev5/February 2021

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley

Sample Login Details

Your reference	73522.08, Wollongong
Envirolab Reference	288956
Date Sample Received	16/02/2022
Date Instructions Received	16/02/2022
Date Results Expected to be Reported	23/02/2022

Sample Condition

Samples received in appropriate condition for analysis	Holding time exceedance
No. of Samples Provided	7 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	16
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Please contact the laboratory within 24 hours if you wish to cancel the aforementioned testing. Otherwise testing will proceed as per the COC and hence invoice accordingly.

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:



Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metals in soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
303-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	
303-0.5-0.6										✓
303-1.0-1.1										✓
304-0.0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	
304-0.5-0.6	✓	✓	✓	✓	✓		✓			
304-1.0-1.1										✓
BD1	✓	✓					✓			

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.

CERTIFICATE OF ANALYSIS 288956

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley
Address	Unit 1, 1 Luso Drive, Unanderra, NSW, 2526

Sample Details

Your Reference	<u>73522.08, Wollongong</u>
Number of Samples	7 Soil
Date samples received	16/02/2022
Date completed instructions received	16/02/2022

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.
Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	23/02/2022
Date of Issue	22/02/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

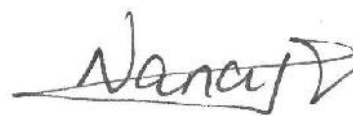
Asbestos Approved By

Analysed by Asbestos Approved Analyst: Panika Wongchanda
 Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By

Diego Bigolin, Inorganics Supervisor
 Dragana Tomas, Senior Chemist
 Hannah Nguyen, Metals Supervisor
 Lucy Zhu, Asbestos Supervisor
 Thomas Beenie, Lab Technician

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil

Our Reference		288956-1	288956-4	288956-5	288956-7
Your Reference	UNITS	303	304	304	BD1
Depth		0.2-0.3	0.0-0.1	0.5-0.6	-
Date Sampled		10/02/2022	11/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	89	94	81	91

svTRH (C10-C40) in Soil					
Our Reference		288956-1	288956-4	288956-5	288956-7
Your Reference	UNITS	303	304	304	BD1
Depth		0.2-0.3	0.0-0.1	0.5-0.6	-
Date Sampled		10/02/2022	11/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50
Surrogate o-Terphenyl	%	92	78	93	95

PAHs in Soil				
Our Reference		288956-1	288956-4	288956-5
Your Reference	UNITS	303	304	304
Depth		0.2-0.3	0.0-0.1	0.5-0.6
Date Sampled		10/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.2	<0.1
Pyrene	mg/kg	<0.1	0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.07	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	0.5	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	99	93	104

Organochlorine Pesticides in soil				
Our Reference		288956-1	288956-4	288956-5
Your Reference	UNITS	303	304	304
Depth		0.2-0.3	0.0-0.1	0.5-0.6
Date Sampled		10/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	82	91

Organophosphorus Pesticides in Soil				
Our Reference		288956-1	288956-4	288956-5
Your Reference	UNITS	303	304	304
Depth		0.2-0.3	0.0-0.1	0.5-0.6
Date Sampled		10/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	82	91

PCBs in Soil			
Our Reference		288956-1	288956-4
Your Reference	UNITS	303	304
Depth		0.2-0.3	0.0-0.1
Date Sampled		10/02/2022	11/02/2022
Type of sample		Soil	Soil
Date extracted	-	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	88	82

Acid Extractable metals in soil					
Our Reference		288956-1	288956-4	288956-5	288956-7
Your Reference	UNITS	303	304	304	BD1
Depth		0.2-0.3	0.0-0.1	0.5-0.6	-
Date Sampled		10/02/2022	11/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
Arsenic	mg/kg	10	16	4	9
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	10	7	17
Copper	mg/kg	39	43	10	42
Lead	mg/kg	270	58	13	300
Mercury	mg/kg	0.1	<0.1	<0.1	0.1
Nickel	mg/kg	6	4	2	5
Zinc	mg/kg	190	82	11	200

Misc Soil - Inorg			
Our Reference		288956-1	288956-4
Your Reference	UNITS	303	304
Depth		0.2-0.3	0.0-0.1
Date Sampled		10/02/2022	11/02/2022
Type of sample		Soil	Soil
Date prepared	-	18/02/2022	18/02/2022
Date analysed	-	18/02/2022	18/02/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5

Moisture					
Our Reference		288956-1	288956-4	288956-5	288956-7
Your Reference	UNITS	303	304	304	BD1
Depth		0.2-0.3	0.0-0.1	0.5-0.6	-
Date Sampled		10/02/2022	11/02/2022	11/02/2022	11/02/2022
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	18/02/2022	18/02/2022	18/02/2022	18/02/2022
Date analysed	-	21/02/2022	21/02/2022	21/02/2022	21/02/2022
Moisture	%	19	17	19	16

Asbestos ID - soils NEPM			
Our Reference		288956-1	288956-4
Your Reference	UNITS	303	304
Depth		0.2-0.3	0.0-0.1
Date Sampled		10/02/2022	11/02/2022
Type of sample		Soil	Soil
Date analysed	-	22/02/2022	22/02/2022
Sample mass tested	g	486.89	513.76
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	—	—
FA and AF Estimation*	g	—	—
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. NOTE #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) NOTE #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
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.

Method ID	Methodology Summary
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-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
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)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
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)-BTX 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-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	89	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	89	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	84	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	96	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	85	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	90	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	96	[NT]	[NT]	[NT]	[NT]	95	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	96	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	109	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	96	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	109	[NT]
Surrogate o-Terphenyl	%		Org-020	74	[NT]	[NT]	[NT]	[NT]	90	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[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]	107	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	118	[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]	119	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	117	[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]	75	[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]	120	[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	102	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	117	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	126	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	93	[NT]	[NT]	[NT]	[NT]	91	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	75	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Chlorpyrifos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	93	[NT]	[NT]	[NT]	[NT]	91	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: PCBs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	121	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-021	93	[NT]	[NT]	[NT]	[NT]	91	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	95	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	98	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Date analysed	-			18/02/2022	[NT]	[NT]	[NT]	[NT]	18/02/2022	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	96	[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.

Report Comments

Asbestos-ID in soil: NEPM

This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Project No: 73522.08				Suburb: Wollongong				To: Envirolab Services			
Project Manager: Kenton Horsley				Order Number:				Sampler: ZAK			
Email: kenton.horsley@douglaspartners.com.au								Attn: Sample Receipt			
Turnaround time: ☒ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day								Contact: (02) 9910 6200 samplereceipt@envirolab.com.au			
Prior Storage: ☒ Fridge ☐ Freezer ☒ Shelf				Do samples contain 'potential' HBM? ☒ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)							

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes										Notes/ Preservation/ Additional Requirements	
	Location / Other ID	Depth From	Depth To		S - soil W - water	G - glass P - plastic	Combo 8a (FA/AF)	Combo 5b										
1	301	0.1	0.2	18/02/22	S	G / P	X											
2	301	0.5	0.6	18/02/22	S	G / P												
3	301	1	1.1	18/02/22	S	G / P		X										
4	301	1.5	1.6	18/02/22	S	G / P												
5	302	0.2	0.3	17/02/22	S	G / P	X											
6	302	0.5	0.6	17/02/22	S	G / P												
7	302	1	1.1	17/02/22	S	G / P												

Metals to analyse:						LAB RECEIPT					
Number of samples in container:				Transported to laboratory by:				Lab Ref. No: 289364			
Send results to: Douglas Partners Pty Ltd								Received by: Ming Yan To.			
Address: 1/1 Luso Drive, Unanderra NSW 2526				Phone: (02) 4271 1836				Date & Time: 21/02/2022 17:00			
Relinquished by:				Date:				Signed: M7			

COC rec'd 01/03/2022 12:00

FPM - ENVID/Form COC 02

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley

Sample Login Details

Your reference	73522.08, Wollongong
Envirolab Reference	289364
Date Sample Received	21/02/2022
Date Instructions Received	01/03/2022
Date Results Expected to be Reported	08/03/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	7 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	16.2
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metals in soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
301-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
301-0.5-0.6										✓
301-1-1.1	✓	✓	✓	✓	✓		✓			
301-1.5-1.6										✓
302-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	
302-0.5-0.6										✓
302-1-1.1										✓

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.

CERTIFICATE OF ANALYSIS 289364

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley
Address	Unit 1, 1 Luso Drive, Unanderra, NSW, 2526

Sample Details

Your Reference	<u>73522.08, Wollongong</u>
Number of Samples	7 Soil
Date samples received	21/02/2022
Date completed instructions received	01/03/2022

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.
Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	08/03/2022
Date of Issue	08/03/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

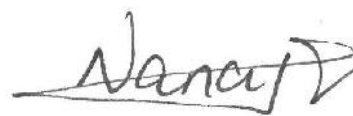
Asbestos Approved By

Analysed by Asbestos Approved Analyst: Nyovan Moonean
 Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By

Diego Bigolin, Inorganics Supervisor
 Dragana Tomas, Senior Chemist
 Hannah Nguyen, Metals Supervisor
 Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022	02/03/2022
TRH C ₆ - C ₉	mg/kg	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	91	100	93

svTRH (C10-C40) in Soil				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	03/03/2022	03/03/2022	03/03/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	97	90	88

PAHs in Soil				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022	02/03/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	110	106	105

Organochlorine Pesticides in soil				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022	02/03/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	95	93	88

Organophosphorus Pesticides in Soil				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022	02/03/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	95	93	88

PCBs in Soil			
Our Reference		289364-1	289364-5
Your Reference	UNITS	301	302
Depth		0.1-0.2	0.2-0.3
Date Sampled		18/02/2022	17/02/2022
Type of sample		Soil	Soil
Date extracted	-	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	95	88

Acid Extractable metals in soil					
Our Reference		289364-1	289364-3	289364-5	289364-8
Your Reference	UNITS	301	301	302	301 - [TRIPLICATE]
Depth		0.1-0.2	1-1.1	0.2-0.3	0.1-0.2
Date Sampled		18/02/2022	18/02/2022	17/02/2022	18/02/2022
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	02/03/2022	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022	02/03/2022	02/03/2022
Arsenic	mg/kg	<4	5	4	11
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	6	14	5	5
Copper	mg/kg	34	6	14	38
Lead	mg/kg	36	16	5	41
Mercury	mg/kg	0.1	0.1	<0.1	<0.1
Nickel	mg/kg	2	3	1	4
Zinc	mg/kg	180	41	14	230

Misc Soil - Inorg			
Our Reference		289364-1	289364-5
Your Reference	UNITS	301	302
Depth		0.1-0.2	0.2-0.3
Date Sampled		18/02/2022	17/02/2022
Type of sample		Soil	Soil
Date prepared	-	02/03/2022	02/03/2022
Date analysed	-	02/03/2022	02/03/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5

Moisture				
Our Reference		289364-1	289364-3	289364-5
Your Reference	UNITS	301	301	302
Depth		0.1-0.2	1-1.1	0.2-0.3
Date Sampled		18/02/2022	18/02/2022	17/02/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	02/03/2022	02/03/2022	02/03/2022
Date analysed	-	03/03/2022	03/03/2022	03/03/2022
Moisture	%	12	15	13

Asbestos ID - soils NEPM			
Our Reference		289364-1	289364-5
Your Reference	UNITS	301	302
Depth		0.1-0.2	0.2-0.3
Date Sampled		18/02/2022	17/02/2022
Type of sample		Soil	Soil
Date analysed	-	08/03/2022	08/03/2022
Sample mass tested	g	660.83	697.15
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	—	—
FA and AF Estimation*	g	—	—
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. NOTE #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) NOTE #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
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.

Method ID	Methodology Summary
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-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
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.
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.

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	93	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	93	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	86	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	101	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	87	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	95	[NT]
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	90	[NT]
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	92	1	91	97	6	103	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	03/03/2022	03/03/2022		02/03/2022	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	85	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	86	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	103	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	85	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	86	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	103	[NT]
Surrogate o-Terphenyl	%		Org-020	94	1	97	92	5	110	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	89	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	97	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	104	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	109	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	114	1	110	110	0	107	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	89	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	79	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	105	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	99	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	115	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	92	1	95	96	1	94	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	111	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	93	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	72	[NT]
Chlorpyrifos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	75	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	92	1	95	96	1	94	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: PCBs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	92	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	92	1	95	96	1	94	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Date analysed	-			02/03/2022	1	02/03/2022	02/03/2022		02/03/2022	[NT]
Arsenic	mg/kg	4	Metals-020	<4	1	<4	25	145	96	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	95	[NT]
Chromium	mg/kg	1	Metals-020	<1	1	6	8	29	92	[NT]
Copper	mg/kg	1	Metals-020	<1	1	34	78	79	93	[NT]
Lead	mg/kg	1	Metals-020	<1	1	36	68	62	95	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	1	0.1	0.2	67	95	[NT]
Nickel	mg/kg	1	Metals-020	<1	1	2	3	40	96	[NT]
Zinc	mg/kg	1	Metals-020	<1	1	180	430	82	94	[NT]

Client Reference: 73522.08, Wollongong

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			02/03/2022	[NT]	[NT]	[NT]	[NT]	02/03/2022	[NT]
Date analysed	-			02/03/2022	[NT]	[NT]	[NT]	[NT]	02/03/2022	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	106	[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.

Report Comments

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 289364-1 for Cu, Pb & Zn. Therefore a triplicate result has been issued as laboratory sample number 289364-8.

Asbestos-ID in soil: NEPM

This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

[illegible]

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley

Sample Login Details

Your reference	73522.08, Wollongong
Envirolab Reference	289364-A
Date Sample Received	21/02/2022
Date Instructions Received	14/03/2022
Date Results Expected to be Reported	17/03/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	7 Soil
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	16.2
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:

Sample ID	CEC	On Hold
301-0.1-0.2		✓
301-0.5-0.6		✓
301-1-1.1		✓
301-1.5-1.6	✓	
302-0.2-0.3		✓
302-0.5-0.6		✓
302-1-1.1	✓	

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.

CERTIFICATE OF ANALYSIS 289364-A

Client Details

Client	Douglas Partners Unanderra
Attention	Kenton Horsley
Address	Unit 1, 1 Luso Drive, Unanderra, NSW, 2526

Sample Details

Your Reference	<u>73522.08, Wollongong</u>
Number of Samples	7 Soil
Date samples received	21/02/2022
Date completed instructions received	14/03/2022

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.

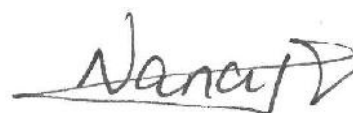
Report Details

Date results requested by	17/03/2022
Date of Issue	17/03/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Hannah Nguyen, Metals Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

CEC			
Our Reference		289364-A-4	289364-A-7
Your Reference	UNITS	301	302
Depth		1.5-1.6	1-1.1
Date Sampled		18/02/2022	17/02/2022
Type of sample		Soil	Soil
Date prepared	-	17/03/2022	17/03/2022
Date analysed	-	17/03/2022	17/03/2022
Exchangeable Ca	meq/100g	2.3	5.7
Exchangeable K	meq/100g	0.1	0.3
Exchangeable Mg	meq/100g	0.8	0.4
Exchangeable Na	meq/100g	<0.1	<0.1
Cation Exchange Capacity	meq/100g	3.3	6.5

Method ID	Methodology Summary
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-OES analytical finish.

QUALITY CONTROL: CEC					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			17/03/2022	[NT]	[NT]	[NT]	[NT]	17/03/2022	[NT]
Date analysed	-			17/03/2022	[NT]	[NT]	[NT]	[NT]	17/03/2022	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	124	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	116	[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.
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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.

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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.

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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.

CERTIFICATE OF ANALYSIS 373211

Client Details

Client	Douglas Partners Unanderra
Attention	Zachariah Kraich
Address	Unit 1, 1 Luso Drive, Unanderra, NSW, 2526

Sample Details

Your Reference	<u>73522.12, Wollongong</u>
Number of Samples	4 Soil
Date samples received	17/02/2025
Date completed instructions received	17/02/2025

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.
Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	24/02/2025
Date of Issue	24/02/2025
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Asbestos Approved By

Analysed by Asbestos Approved Analyst: Lucy Zhu
 Authorised by Asbestos Approved Signatory: Lucy Zhu

Authorised By

Nancy Zhang, Laboratory Manager

Results Approved By

Diego Bigolin, Inorganics Supervisor
 Giovanni Agosti, Group Technical Manager
 Liam Timmins, Organics Supervisor
 Lucy Zhu, Asbestos Supervisor
 Nancy Zhang, Laboratory Manager, Sydney
 Steven Luong, Senior Chemist

vTRH(C6-C10)/BTEXN in Soil

Our Reference		373211-1	373211-2	373211-3	373211-4
Your Reference	UNITS	401	401	401	BD1
Depth		0-0.1	0.5-0.6	1-1.1	-
Date Sampled		13/02/2025	13/02/2025	13/02/2025	13/02/2025
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	18/02/2025	18/02/2025	18/02/2025	18/02/2025
Date analysed	-	21/02/2025	21/02/2025	21/02/2025	21/02/2025
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	93	93	91	86

svTRH (C10-C40) in Soil					
Our Reference		373211-1	373211-2	373211-3	373211-4
Your Reference	UNITS	401	401	401	BD1
Depth		0-0.1	0.5-0.6	1-1.1	-
Date Sampled		13/02/2025	13/02/2025	13/02/2025	13/02/2025
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	18/02/2025	18/02/2025	18/02/2025	18/02/2025
Date analysed	-	20/02/2025	20/02/2025	20/02/2025	20/02/2025
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50
Surrogate o-Terphenyl	%	85	89	84	97

PAHs in Soil				
Our Reference		373211-1	373211-2	373211-3
Your Reference	UNITS	401	401	401
Depth		0-0.1	0.5-0.6	1-1.1
Date Sampled		13/02/2025	13/02/2025	13/02/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	18/02/2025	18/02/2025	18/02/2025
Date analysed	-	20/02/2025	20/02/2025	20/02/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	89	84	89

Organochlorine Pesticides in soil			
Our Reference		373211-1	373211-2
Your Reference	UNITS	401	401
Depth		0-0.1	0.5-0.6
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date extracted	-	18/02/2025	18/02/2025
Date analysed	-	20/02/2025	20/02/2025
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	95	99

Organophosphorus Pesticides in Soil			
Our Reference		373211-1	373211-2
Your Reference	UNITS	401	401
Depth		0-0.1	0.5-0.6
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date extracted	-	18/02/2025	18/02/2025
Date analysed	-	20/02/2025	20/02/2025
Dichlorvos	mg/kg	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	95	99

PCBs in Soil			
Our Reference		373211-1	373211-2
Your Reference	UNITS	401	401
Depth		0-0.1	0.5-0.6
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date extracted	-	18/02/2025	18/02/2025
Date analysed	-	20/02/2025	20/02/2025
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate 2-Fluorobiphenyl	%	100	100

Misc Soil - Inorg			
Our Reference		373211-1	373211-2
Your Reference	UNITS	401	401
Depth		0-0.1	0.5-0.6
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date prepared	-	18/02/2025	18/02/2025
Date analysed	-	19/02/2025	19/02/2025
Total Phenolics (as Phenol)	mg/kg	<5	<5

Acid Extractable metals in soil					
Our Reference		373211-1	373211-2	373211-3	373211-4
Your Reference	UNITS	401	401	401	BD1
Depth		0-0.1	0.5-0.6	1-1.1	-
Date Sampled		13/02/2025	13/02/2025	13/02/2025	13/02/2025
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	18/02/2025	18/02/2025	18/02/2025	18/02/2025
Date analysed	-	21/02/2025	21/02/2025	21/02/2025	21/02/2025
Arsenic	mg/kg	7	8	16	12
Cadmium	mg/kg	<0.4	2	<0.4	<0.4
Chromium	mg/kg	11	16	28	23
Copper	mg/kg	17	6	1	2
Lead	mg/kg	58	14	11	13
Manganese	mg/kg	160	51	5	16
Mercury	mg/kg	0.1	0.3	0.2	<0.1
Nickel	mg/kg	3	4	<1	1
Zinc	mg/kg	44	10	3	5

Moisture					
Our Reference		373211-1	373211-2	373211-3	373211-4
Your Reference	UNITS	401	401	401	BD1
Depth		0-0.1	0.5-0.6	1-1.1	-
Date Sampled		13/02/2025	13/02/2025	13/02/2025	13/02/2025
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	18/02/2025	18/02/2025	18/02/2025	18/02/2025
Date analysed	-	19/02/2025	19/02/2025	19/02/2025	19/02/2025
Moisture	%	14	16	14	14

Misc Inorg - Soil			
Our Reference		373211-1	373211-3
Your Reference	UNITS	401	401
Depth		0-0.1	1-1.1
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date prepared	-	20/02/2025	20/02/2025
Date analysed	-	20/02/2025	20/02/2025
pH 1:5 soil:water	pH Units	7.0	5.4

CEC			
Our Reference		373211-1	373211-3
Your Reference	UNITS	401	401
Depth		0-0.1	1-1.1
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date prepared	-	21/02/2025	21/02/2025
Date analysed	-	21/02/2025	21/02/2025
Exchangeable Ca	meq/100g	17	2.6
Exchangeable K	meq/100g	0.2	0.1
Exchangeable Mg	meq/100g	0.9	1.1
Exchangeable Na	meq/100g	<0.1	<0.1
Cation Exchange Capacity	meq/100g	19	3.9

Asbestos ID - soils NEPM			
Our Reference		373211-1	373211-2
Your Reference	UNITS	401	401
Depth		0-0.1	0.5-0.6
Date Sampled		13/02/2025	13/02/2025
Type of sample		Soil	Soil
Date analysed	-	19/02/2025	19/02/2025
Sample mass tested	g	625.82	519.59
Sample Description	-	Brown fine-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	—	—
FA and AF Estimation*	g	—	—
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001
Asbestos comments	-	Nil	Nil

Asbestos ID - soils		
Our Reference		373211-3
Your Reference	UNITS	401
Depth		1-1.1
Date Sampled		13/02/2025
Type of sample		Soil
Date analysed	-	20/02/2025
Sample mass tested	g	Approx. 70g
Sample Description	-	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	Nil
Trace Analysis	-	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. NOTE#1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF relative to the sample mass tested) NOTE#2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
	Total Phosphate determined stoichiometrically from Phosphorus (assumed to be present as Phosphate).
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-OES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.

Method ID	Methodology Summary
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-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
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.

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			21/02/2025	1	21/02/2025	21/02/2025		21/02/2025	21/02/2025
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	100	95
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	100	95
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	106	100
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	108	100
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	97	91
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	95	92
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	97	90
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	86	1	93	79	16	79	92

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			20/02/2025	1	20/02/2025	20/02/2025		20/02/2025	20/02/2025
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	98	111
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	94	107
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	100	136
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	98	111
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	94	107
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	100	136
Surrogate o-Terphenyl	%		Org-020	92	1	85	93	9	119	89

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			20/02/2025	1	20/02/2025	20/02/2025		20/02/2025	20/02/2025
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	92
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	72	78
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	82
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	76	90
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	74	84
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	90
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	104
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	76	80
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	86	1	89	95	7	77	88

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			20/02/2025	1	20/02/2025	20/02/2025		20/02/2025	20/02/2025
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	92
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	90
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	96
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	94
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	76	86
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	104
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	102
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	96
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	87	1	95	91	4	84	93

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			20/02/2025	1	20/02/2025	20/02/2025		20/02/2025	20/02/2025
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	102
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	74	86
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	64	82
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	98
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	76	88
Fenthion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	80
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	68	92
Phosalone	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	87	1	95	91	4	84	93

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: PCBs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date extracted	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			20/02/2025	1	20/02/2025	20/02/2025		20/02/2025	20/02/2025
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	92	80
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	93	1	100	101	1	87	100

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			19/02/2025	[NT]	[NT]	[NT]	[NT]	19/02/2025	[NT]
Date analysed	-			19/02/2025	[NT]	[NT]	[NT]	[NT]	19/02/2025	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	100	[NT]

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	373211-2
Date prepared	-			18/02/2025	1	18/02/2025	18/02/2025		18/02/2025	18/02/2025
Date analysed	-			21/02/2025	1	21/02/2025	21/02/2025		21/02/2025	21/02/2025
Arsenic	mg/kg	4	Metals-020	<4	1	7	7	0	97	95
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	91	87
Chromium	mg/kg	1	Metals-020	<1	1	11	11	0	91	91
Copper	mg/kg	1	Metals-020	<1	1	17	18	6	90	96
Lead	mg/kg	1	Metals-020	<1	1	58	61	5	92	91
Manganese	mg/kg	1	Metals-020	<1	1	160	170	6	99	79
Mercury	mg/kg	0.1	Metals-021	<0.1	1	0.1	0.2	67	121	102
Nickel	mg/kg	1	Metals-020	<1	1	3	3	0	90	89
Zinc	mg/kg	1	Metals-020	<1	1	44	46	4	90	83

Client Reference: 73522.12, Wollongong

QUALITY CONTROL: Misc Inorg - Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/02/2025	[NT]	[NT]	[NT]	[NT]	20/02/2025	[NT]
Date analysed	-			20/02/2025	[NT]	[NT]	[NT]	[NT]	20/02/2025	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: CEC					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			21/02/2025	[NT]	[NT]	[NT]	[NT]	21/02/2025	[NT]
Date analysed	-			21/02/2025	[NT]	[NT]	[NT]	[NT]	21/02/2025	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	98	[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.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

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.

Report Comments

Asbestos-ID in soil: NEPM

This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to ASB-001 asbestos subsampling procedure. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab/MPL recommends supplying 40-60g or 500ml of sample in its own container.

Note: Sample 373211-3 was sub-sampled from a bag provided by the client.

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Unanderra
Attention	Zachariah Kraich

Sample Login Details

Your reference	73522.12, Wollongong
Envirolab Reference	373211
Date Sample Received	17/02/2025
Date Instructions Received	17/02/2025
Date Results Expected to be Reported	24/02/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	4 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:

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Jacinta Hurst

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Analysis Underway, details on the following page:



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Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Acid Extractable metals in soil	Misc Inorg - Soil	CEC	Asbestos ID - soils NEPM	Asbestos ID - soils
401-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
401-0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓			✓	
401-1-1.1	✓	✓	✓					✓	✓	✓		✓
BD1	✓	✓						✓				

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.

[illegible]

Appendix M

Field and Laboratory Quality Assurance and
Quality Control

1. Field and laboratory data quality assurance and quality control

The field and laboratory data quality assurance and quality control (QA/QC) procedures and results are summarised in the following Table 1. Reference should be made to the field work methodology and the laboratory results / certificates of analysis for further details. The relative percentage difference (RPD) results, along with the other field QC samples are included at the end of this appendix.

Table 1: Field and laboratory quality control

Item	Evaluation / acceptance criteria	Compliance
Analytical laboratory used	National association of testing authorities (NATA) accreditation	C
Holding times	Various based on type of analysis	C
Intra-laboratory replicates	>10% of primary samples (being two intra-lab replicates for nine primary samples); <30% RPD	C
Laboratory / reagent blanks	One per batch; <practical quantitation limit (PQL)	C
Laboratory duplicate	One per lab batch; as laboratory certificate	C
Matrix spikes	One per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Surrogate spikes	All organics analysis; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Control samples	One per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Standard operating procedures (SOP)	Adopting SOP for all aspects of the sampling field work	C

Notes:

C = compliance; PC = partial compliance; NC = non-compliance

The RPD results were all within the acceptable range, except for those indicated in Table QA1 (results in bold). The exceedances are not, however, considered to be of concern given that:

- The actual differences in the concentrations of the replicate pairs where RPD exceedances occurred were typically low;
- The replicate pairs were collected from fill soils which by its nature are heterogeneous;
- Replicates, rather than homogenised duplicates, were used to minimise risk of volatile loss, hence greater analytical variability between replicate pairs can be expected;
- Most of the recorded concentrations were relatively close to the PQL;
- The majority of RPD results from a replicate pair were within the acceptable limits; and

- All other QA/QC parameters met the data quality indicators.

In summary, the QC data is determined to be of sufficient quality to be considered acceptable for the assessment.

2. Data quality indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQI) as outlined in NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [the 'NEPM']* (NEPC, 2013):

- Completeness: a measure of the amount of usable data from a data collection activity;
- Comparability: the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness: the confidence (qualitative) of data representativeness of media present on-site;
- Precision: a measure of variability or reproducibility of data; and
- Accuracy: a measure of closeness of the data to the 'true' value.

The results of the assessment are summarised in Table 2.

Table 2: Data quality indicators

Data quality indicator	Method(s) of achievement
Completeness	Systematic and selected target locations sampled.
	Preparation of borehole logs, sample location plan and chain of custody (COC) records.
	Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody.
	Samples analysed for contaminants of potential concern (CoPC) identified in the conceptual site model (CSM).
	Completion of chain of custody documentation.
	NATA accredited laboratory results certificates provided by the laboratory.
	Satisfactory frequency and results for field and laboratory quality control (QC) samples as discussed in Section 1.
Comparability	Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project.
	Experienced sampler used.

Data quality indicator	Method(s) of achievement
	Use of NATA registered laboratory, with test methods the same or similar between laboratories.
	Satisfactory results for field and laboratory QC samples.
Representativeness	Target media sampled.
	Sample numbers recovered and analysed are considered to be representative of the target media and complying with data quality objectives (DQO).
	Samples were extracted and analysed within holding times.
	Samples were analysed in accordance with the chain of custody.
Precision	Field staff followed standard operating procedures.
	Acceptable RPD between original samples and replicates.
	Satisfactory results for all other field and laboratory QC samples.
Accuracy	Field staff followed standard operating procedures.
	Satisfactory results for all field and laboratory QC samples.

Based on the above, it is considered that the DQI have generally been complied with.

3. Conclusion

Based on the results of the field QA and field and laboratory QC, and evaluation against the DQI it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

4. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.



Table QA1: Relative Percentage Difference Results – Soil Sampling

[illegible]