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Matthew c/-

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Coffs Harbour NSW 2450

Date: 27 June 2019

Ref: 2358 AC 270619sd

**Re: Phase 1 ESA for 7 Tasman Street, Corindi**

Dear Sir, please find attached a copy of the Phase 1 Environmental Site Assessment for 7 Tasman Street, Corindi.

In accordance with Coffs Harbour Shire Councils 2018 Contaminated Land Policy and Procedure (POL-018 and PRO-086), I certify the attached report and provide the following information:

| Criteria | Information |
|---|---|
| Contact Details | Unit 2 / 13 Industrial Drive, North Boambee Valley 2450<br>PO Box 23 Bellingen NSW 2454<br>strider@whiteheadenvironmental.com.au<br>ph 02-66511512 |
| Scope of Works | Historical review, site inspection and check sampling. |
| Qualifications | Member Australian Land & Groundwater Association<br>Member Geological Society of Australia<br>Member Environment Institute of Australia and New Zealand Inc<br>CEnvP (Contaminated Sites Specialist) Accredited (No. SC41100) |

| Criteria | Information |
|---|---|
| | |
| Past Professional Experience | Lakes Estate, North Boambee Valley<br>ESA for former batch plant at Pacific Highway Upgrade |
| References | Lakes Estate - Astoria Projects – Lisa 66519683<br>Wells Crossing - Doug O'Brien 07-32125000 |

For and on behalf of

Whitehead & Associates

Strider Duerinckx

Office Manager

Encl: 2358 PESA 270619sd

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# Phase 1 Environmental Site Assessment at 7 Tasman Street, Corindi

Prepared for John Matthews C/o- Graham Knight of DeGroot & Benson

Prepared by Strider Duerinckx & Mei Wong
Whitehead & Associates Environmental Consultants Pty Ltd

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# Document Control Sheet

| **Document and Project Details** | |
|---|---|
| ***Document Title:*** | Phase 1 Environmental Site Assessment for 7 Tasman Street, Corindi |
| ***Author:*** | Mei Wong and Strider Duerinckx |
| ***Project Manager:*** | Strider Duerinckx |
| ***Date of Issue:*** | 26 June 2019 |
| ***Job Reference:*** | 2358 PESA 260619sd |
| ***Synopsis:*** | This Phase 1 ESA presents the historical review and results of a site walkover and check sampling at 407 Tasman Street, Corindi to confirm if it is suitable for residential development. |
| **Client Details** | |
| ***Client:*** | John Matthews |
| ***Primary Contact:*** | Graham Knight of de Groot & Benson |

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**Document Verification**

| | |
|---|---|
| ***Checked by:***  | ***Issued by:***  |
| Bridget Whitehead | Strider Duerinckx |

# Disclaimer

The information contained in this report is based on independent research undertaken by Mei Wong and Strider Duerinckx of Whitehead & Associates Environmental Consultants Pty Ltd (W&A). To my knowledge, it does not contain any false, misleading or incomplete information. Recommendations are based on an appraisal of the site conditions subject to the limited scope and resources available for this project and follow relevant industry standards. The work performed by W&A included a desktop review only, and the conclusions and recommendations drawn in this report are based on the information gained and the assumptions as outlined.

# Copyright Note

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# 1 Introduction

## 1.1 Background

Whitehead and Associates Pty Limited (W&A) were engaged by John Matthews (the 'Client') to undertake a Preliminary Environmental Site Assessment (Phase 1 ESA) for the proposed residential development of 7 Tasman Street, Corindi (Lot 111 DP 730304), NSW (the 'Site') (Figure 1).

The investigation and reporting herein generally follows the requirements of NSW Office of SEPP55 and Environmental and Heritage (2011) Guidelines.

## 1.2 Objectives and Scope

The objectives of the Phase 1 ESA were to:

- Investigate the Site history and identify potentially contaminating activities that are currently being performed on the Site or that may have been performed on the Site in the past; and
- Make a preliminary assessment of potential contamination issues for residential development based on the Site history review.

The scope of work included:

- A Site history review and Site visit to identify potential AECs and COCs. The Site history review included:
    - Review of historical aerial photographs;
    - Review of the s10.7 certificate;
    - Review of NSW EPA notices and databases;
- A site inspection to assess surface conditions;
- Interview if available with previous owners/employees;
- Development of a Conceptual Site Model (CSM);
- Collection of six surface check samples for confirmation of the contamination status, and analysis for various suites including heavy metals, OCP/OPP pesticides, Total Recoverable Hydrocarbons (TRH), BTEX aromatic hydrocarbons, Polycyclic Aromatic Hydrocarbons (PAH), and asbestos; and
- Preparation of this report on the Site including recommendations for further investigations as considered necessary.

## 1.3 Site Identification

The Site details are provided in Table 1 (Figure 1).

**Table 1 - Site Identification**

| Address | Lot ID | Approx Area ($m^2$) |
|---|---|---|
| 7 Tasman Street | Lot 111 DP730304 | 43,200 |

## 1.4 Proposed Development

In anticipation of a proposal to develop 31 residential blocks on the southern two-thirds of the Site (Figure 2) (Ref: de Groot & Benson 17041 C01-C05 Amendment P1 dated 9/4/18), it is proposed to rezone the southern portion of the Site from RU2 Rural Landscape to R2 Low Density Residential.

The proposed development of the southern portion of the Site will include cutting of about 6,000m$^2$ of the northeastern area of the R2 development and filling of about 11,000m$^2$ area in the middle and southern area.

To allow for future opportunities to develop additional overnight (motel type) accommodation facilities in conjunction with Amble Inn, it is proposed to rezone the northern portion of the Site to R1 General Residential. There are no specific redevelopment plans for Amble Inn and surrounds, and as such this PESA provides preliminary advice and recommendations only.

# 2 Site Inspection

A site inspection was undertaken on 18$^{th}$ April 2019 by Mei Wong, and on 7$^{th}$ June 2019 by Strider Duerinckx (Figure 3). During the inspections it was noted that:

- The northern area of the Site contains an existing commercial building on concrete platform as a pub and drive through bottle shop;
- A large bitumen carpark is present to the east of the pub and slopes away to the east and southeast;
- The pub sits on a slightly levelled platform that was cut into the hillside. A slight mounding of soil near the fence on the western side of the pub and batter slope represent some of the cut and fill associated with this;
- The western rear side of the pub contains a working area with shipping containers, metal shed, recycled cardboard, wood piles, LPG gas bottles and minor construction materials;
- A dirt track passes from the western side of the pub then turns north and joins the intersection of Pacific Street and Coral Street;
- Near the dirt track in the north-western property boundary an overgrown stockpile around a tree stump is present. This stockpile covers an area of about 36m$^2$ and contains vegetation cuttings, PVC pipes, corflute signs, concrete slab pieces and pipes, no visible signs of Asbestos Containing Material (ACM) such as Fibro Cement sheeting (FC) was noted;
- Along the upper western boundary just east of the dirt track a possible illegal dumping area was visible within tall. This area was about 8m$^2$ and included domestic refuse, old white goods, plastics, and an upholstered couch and car seat. No visible FC or ACM was noted;
- A mostly natural landform is present for the remaining two thirds of the Site south of the buildings;

- An existing On-Site Sewerage Management System (OSMS) is present just off the centre of the western property boundary. The OSMS consists of a former treatment pond that has been replaced by an inground concrete tank with pump that pumps to sewer. Lush ground cover growth directly downgradient of the septic system and areas of saturated soils extending approximately 35-40m southwest towards the tree line and property boundary suggest that some pump failure and overflow is regularly occurring;
- Further south a small heaped grass covered mound and some electrical conduit plastics were present across a slightly disturbed zone;
- No other signs of disturbance were noted; and
- No chemical storage areas were visible.

**Photograph 1.** Looking west across the former pond towards the pump well.

**Photograph 2.** Looking southwest at existing septic tank and pump well. The tall grass ground cover is where effluent surface overflow is present.

**Photograph 3.** Looking south across southern portion of the Site.

**Photograph 4.** Looking north over fill slope with Amble Inn hotel in the background.

**Photograph 5.** Looking north across working area with shed, shipping containers and other work materials.

**Photograph 6.** Overgrown Stockpile near dirt track (AEC 5).

**Photograph 7.** Site of possible illegal rubbish dumping on north-western property boundary (AEC 6).

# 3 Site History Review

## 3.1 Interviews

The property has been in the current owners' family since his great-grandfather purchased it in the 1950's. The owner of the Site John Matthews was interviewed over the phone on the 06 May 2019 and indicated that:

- Since his grandfather's purchase of the land in the 1950's, the property has not left his family;
- Before that the land and the surrounding area of Corindi Beach were mostly owned by a wealthy Scottish lady with a family name of MacDougall;
- The Site has never been used for cultivated agriculture and has only had recreational livestock grazing throughout that time;

- Between 1984-1994 the current Amble Inn building was constructed with septic pond installed;
- Around the same time excess fill from the construction of the adjacent sewerage treatment plant west was reportedly deposited on the lower southern portion of the Site; and
- No other potentially contaminating activities were known to have taken place on Site.

## 3.2 Titles Search

A list of past registered proprietors of Lot 111 was obtained from the Land Titles Office from the present to 1956. Copies of these results are included in Appendix A and are summarised in Table 2.

**Table 2 - Summary of Previous Ownership**

| Year | Proprietor(s) |
|---|---|
| | **(Lot 111 DP 730304)** |
| 1986 – to date | Talita Pty. Limited |
| 1986-1986 | Arnold John Matthews, forestry employee |
| *(1986 – to date)* | *(various leases shown on Historical Folio 111/730304)* |
| | **(Lot 23 DP 219711 – CTVol 9679 Fol 250)** |
| 1972 – 1986 | Arnold John Matthews, forestry employee |
| 1964 – 1972 | John George Matthews, carpenter |
| | **(Lot 7 DP 214981 – CTVol 9329 Fol 202)** |
| 1962 – 1964 | John George Matthews, carpenter |
| | **(Part Portion 66 Parish Corindi – Area 208 Acres 36 ¾ Perches – CTVol 8044 Fol 132)** |
| 1960 – 1962 | John George Matthews, carpenter |
| | **(Part Portion 66 Parish Corindi – Area 214 Acres 2 Roods 38 Perches – CTVol 6708 Fol 113)** |
| 1953 – 1960 | John George Matthews, dairy farmer |
| | **(Portion 66 Parish Corindi – Area 215 Acres 1 Rood 14 Perches – CTVol 6104 Fol 176)** |
| 1950 – 1953 | Helen Stuart Macdougall, spinster, grantee<br>Jessie Macdougall, spinster, grantee |
| | **(Portion 66 Parish Corindi – Area 215 Acres 1 Rood 14 Perches)** |
| Prior – 1950 | Crown Land |
| *(1923 – 1950)* | *(Conditional Purchase 1923/36 Grafton to Alexander Simmons)* |
| *(1884 – 1923)* | *(Reserve No. 661 from sale for water supply and other public purposes vide Government Gazette 21st January 1884 Fol 519)* |

## 3.3 Council Records Search

CHCC holds historical records for Development Applications (DAs) and Building Applications (BAs). A search of the computer records indicated that in 2012 a 2 Lot subdivision was approved and in 2015 Hotel additions were approved.

## 3.4 Section 10.7 Planning Certificate

The Section 10.7 Certificate (Part 2 & 5) for the Site was obtained from Coffs Harbour City Council. A copy of the certificate is included in Appendix B. The Site is zoned RU2 Rural landscape. In relation to environmental aspects, the S10.7 Certificate notes that:

- State Environmental Planning Policy (SEPP) 55 (Remediation of Land) covers the Site. This policy is generally an outline of remediation strategies permissible on a site affected by contamination. The policy aims to promote remediation as a method of reducing risk to human health or the environment;
- The lot is not affected by mine subsidence;
- The lot is not affected by any road widening or realignment resolutions, instruments or acquisitions;
- The lot below 4.1mAHD is affected by the Flood Planning Controls as the 1in100 ARI across Tasman Street is 3.6mAHD;
- Part of the lot is identified as bushfire prone land;
- The lot contains an on-site sewage management system;
- There are no dwellings listed as containing loose asbestos insulation on the lot;
- Council has insufficient information to assess the potential for contamination of the lot;
- The Site is not significantly contaminated, subject to a management order, subject to an approved voluntary management proposal, subject to an ongoing maintenance order, or subject to a site audit statement within the meaning of and in accordance with the Contaminated Land Management Act 1997; and
- No development consent has been issued on the land within the past two years.

## 3.5 Lotsearch Contaminated Lands Database

A search of the Lotsearch company database was undertaken by W&A of the property (Appendix C). Lotsearch have compiled and provide up to date record summaries for historical landuses that may cause contamination.

Lotsearch identified that no NSW EPA contaminated sites, gasworks sites, PFAS investigation areas, no James Hardie asbestos manufacturing or waste disposal locations, waste management areas, defence contamination investigation sites, or radiological investigation areas are present within 1000m of the Site.

Lotsearch identified two (2) POEO licensed activities located within the 150m buffer of the Site as being a crushing/grinding construction processing plant related to the Pacific Highway upgrades (since physically removed?) and a CHCC Corindi sewerage treatment plant about 46-91m west of the Site.

Lotsearch identified no Cattle Tick Dips within the 150m buffer of the Site.

## 3.6 Lotsearch Business Directories Register

No businesses were registered on the Site in the business directories register database held by Lotsearch and accessed by W&A.

No onsite or nearby dry cleaners, service stations or motor garages have been listed in business directories from 1982, 1970, 1961 or 1950.

## 3.7 Aerial Photograph Review

Historical aerial photographs from 1956-2011 were purchased and reviewed by a W&A Environmental Scientist.

The results of the aerial photograph review are summarised in the following Table 3. The significant aerial photographs are presented in Appendix C.

**Table 3 - Aerial Photograph Review**

| Year | Site | Surrounding Land |
|---|---|---|
| 1956 | The Site has no development at present and is covered bushland grass and trees. A prominent track runs along the western border and a smaller one across the north can be seen.<br>No surrounding buildings or structures can be seen. | Undeveloped bushlands surround the Site. |
| 1964 | Similar to 1956 aerial with additional clearing visible for roads and lot separation of land to the south and east of the Site. Entire Site still covered in moderate tree density. | No visible signs of dwellings or built structures within the vicinity.<br>Pacific Street to the north has been constructed. |
| 1974 | The Site from the center to the northern portion has been extensively cleared. The southern half remains as yet mostly undisturbed, though some signs of tree thinning can be seen.<br>No built structures are visible on Site. | Extensive tree clearing on surrounding lots to the east, southeast, northeast and northwest.<br>Residential developments have appeared along Pacific Street to the north.<br>A building structure to the northwest across The Pacific Highway is also present. |
| 1984 | The Site is almost completely cleared of trees. Only a handful of trees now line the western property boundary and scattered in the upper northwest of the property.<br>A dwelling is now present just past the upper northeast corner of the property boundary along Pacific Street. | Land to the north, east and south are now completely cleared of large trees. A few new buildings have been constructed along the Pacific Street.<br>The Pacific Highway along the western boundary has been realigned.<br>Tasman Street has been |

| Year | Site | Surrounding Land |
|---|---|---|
| | | constructed. |
| 1994 | The Amble Inn building has been constructed in the upper northern portion, a pond wastewater treatment system is present to the south amongst the proposed redevelopment area. The immediate area surrounding the building has been levelled and concreted to serve as a parking lot.<br>A track is present from the Pacific Highway past the pond to the eastern boundary of the Site.<br>The remainder of the Site is grassed. A slightly different shaded area can be seen in the southern portion, possibly the fill placement from the sewage plant construction. | The dwellings to the north and northeast have remained mostly the same.<br>To the southwest across The Pacific Highway a market garden can be seen. |
| 2002 | Generally, as per 1994. No significant changes to the Site can be seen.<br>Slight increase in tree cover to the west and northwest boundaries.<br>The pond is still present but with two green stripes extending from the southeast corner of the pond. May indicate possible overflow from the pond confines.<br>The possible disturbed area along the south of the property is still visible as a discolored ring. | As per 1994.<br>The market garden rows are not visible to the west across the Pacific Highway. |
| 2011 | As per 2002 the building and carpark appear unchanged, but the rectangle pond is no longer in use as it is only faintly visible.<br>More prominent ground cover can be seen across the Site.<br>The pond has been decommissioned and pump well installed. | Between 2002-2011 the surrounding land to the north and east has experienced land rezoning and smaller lot subdivisions resulting in a substantial increase in residential development on adjacent lots. |
| 2013 (Nearmap) | As per 2011. Grass cover established of the whole Site.<br>The faint outline of the rectangle pond can still be seen with darker green growth in the area. | As per 2011 but a few more dwellings have been constructed east and southeast.<br>South, west and northwest has remained unchanged. |
| 2016 (Nearmap) | As per 2011 | As per 2011 with further development to the east and southeast resulting in new building developments. |
| 2019 (Nearmap) | As per 2016 | As per 2016 |

## 3.8 Historical Mapped Layout

W&A accessed a copy of 1942, 1974 and 2015 topographic maps of the area via the Lotsearch database:

- The 1942 topographic map shows the Site as cleared land with no structures.
- The 1974 topographic map shows a similar layout to 1942 but with increased number of structures (dwellings) along Pacific Street to the North; and
- The 2015 topographic map shows the sewage works to the west, Amble Inn building in the north of the Site, and small lot residential to the east and north.

## 3.9 Groundwater Resources

A NSW Office of Water Groundwater Bore Search was completed. The closest registered groundwater bore located approximately 109m northeast of the Site (GW060635). The bore was drilled in 1985 and dug to 28.7m depth, with a water bearing zone between 11-28.7m, and was licensed for domestic use.

Groundwater aquifers are mapped as porous, extensive and highly productive.

Regional groundwater is not expected to be impacted by historical activities on the Site, and contaminated groundwater is not expected to be flowing onto the Site from up hydraulic gradient sources.

## 3.10 Summary of Site History

The information obtained from the site history review can be summarised as follows:

- Prior to 1974 the Site was forested and was cleared then developed later in the mid-1980's;
- A commercial building was constructed on the northeast portion of the Site between 1984 and 1994.The property was purchased by the Matthews family in 1953 and is still controlled by the family;
- Initially the pub was serviced by a facultative pond located to the south-southwest of the building in the proposed redevelopment area. From between 2002-2011 the pond system was retired and upgraded to pump to sewer;
- In approximately 1984 the southern portion of the Site was reportedly thinly filled from excess spoil obtained from construction of the nearby sewerage treatment plant to the west; and
- No further major changes have occurred to present.

# 4 Gaps in the Site History

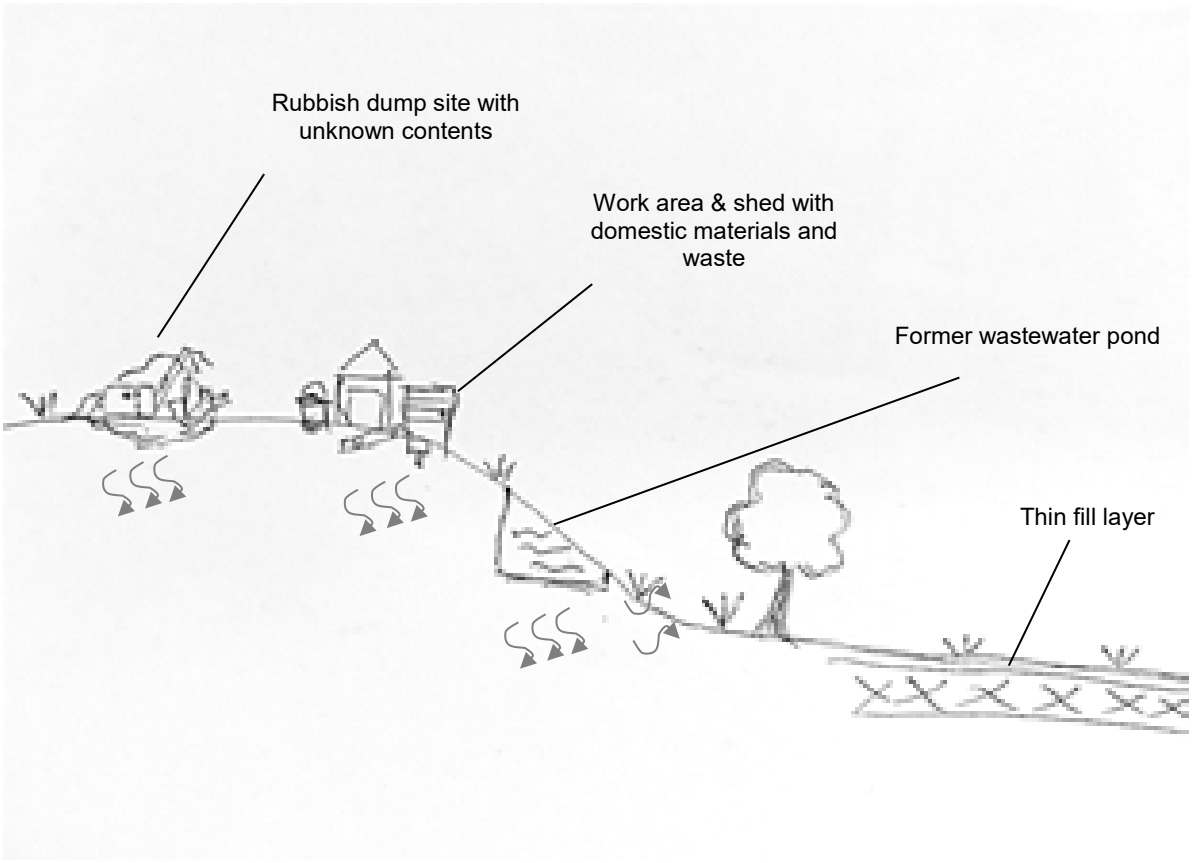
W&A were not able to confirm specific details of the depth, location and type of fill deposited. Given the age, source property and depth of excavation for a sewerage pond, it is expected that material comprised previously undisturbed clays and weathered bedrock, and there is a low risk of potential contamination from this material.

# 5 Conceptual Site Model

The Conceptual Site Model (CSM) for the Site is presented in Table 4 and Model 1.

**Table 4 - Conceptual Site Model**

| Element | Sub-Element | Comment |
|---|---|---|
| **Mechanism of Contamination** | | Near surface inorganic and organic contaminants may be present at locations associated with former on-site wastewater treatment and overflow, filling, and stormwater runoff from the Pub.<br>Anthropogenic material (aesthetic issues) may be incorporated into imported fill. |
| **Potentially Affected Media** | Soil | Yes, surface disturbed soils and fill. |
| | Sediment | No waterways pass through the Site. No residential development is proposed within 45m of the waterway. |
| | Groundwater | Groundwater is present at depth but unlikely to be affected. |
| | Surface Water | No waterways pass through the Site. |
| | Indoor | Volatile contamination is generally not expected at the Site. |
| | Ambient Air | Significant volatile contamination is generally not expected at the Site. |
| **Receptors** | Human | The primary human receptors are adults and children in future residences on the site. Given the block sizes and general footprint of dwellings, actual soil contact is expected to be minimal.<br>Short term exposure to workers is possible during the construction phase of the proposed development and future residences. |
| | Ecological | Minimal ecological exposure pathways are present and are limited to surface vegetation of garden residential plant species, and secondary fauna interactions (eg insects eating plants; birds eating insects). |
| **Exposure Pathways** | Potential | Potential exposure routes are primarily associated with exposure to soil, including inhalation during disturbance, ingestion and dermal routes of inorganics and organic contamination by workers and long-term residents. |
| | Complete | Complete human exposure routes have not been identified at this time. |




**Model 1. Conceptual Site Model**

# 6 Potential Areas and Chemicals of Concern

Based on the site history the AECs and associated COCs for the Site have been identified. These are presented in Table 5 and summarised in Figure 3.

**Table 5 - Potential AECs and COCs**

| AEC | Size ($m^2$) | Potential Contam. Activity | COCs | Likelihood of Contam. | Comment |
|---|---|---|---|---|---|
| **1** | 807 | Runoff and leaching from former pond, and current overflowing pump well. | Heavy Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc), OCP | Low | Heavy metals can be found in biosolids, but are usually not high in soils around small scale wastewater treatment areas of limited duration (20-30 years). |
| **2** | 8,300 | Filling in 1984. | Heavy Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc), OCP. | Low | Fill likely to be from depth in a previous grazing property converted to sewage treatment works.<br>Grazing land may occasionally contain residual heavy metals (eg arsenic) and OCP |

| AEC | Size ($m^2$) | Potential Contam. Activity | COCs | Likelihood of Contam. | Comment |
|---|---|---|---|---|---|
| | | | | | pesticides, though the risks are low. |
| **3** | 879 | Downslope runoff zone from carpark and Amble Inn, could include leached metals, fuels, PAH from bitumen. | Heavy Metals (arsenic, cadmium, chromium, lead, mercury, nickel and zinc), TRH, BTEX and PAH. | Low | Fill likely sourced onsite to balance cut/fill platform from pub construction but may have incorporated unidentified contamination from historical sources. |
| **4** | 441 | Commercial work zone on generally bare ground. Leached building materials, wastes, spilt chemicals. | Heavy Metals (arsenic, cadmium, chromium, lead, mercury, nickel and zinc), TRH, BTEX, PAH and OCP. | Moderate | Active storage of commercial materials with evidence of small burn piles and heavy degreasing in this area. |
| **5** | 152 | Stockpile of unknown contents and condition. | Heavy Metals (arsenic, cadmium, chromium, lead, mercury, nickel and zinc), TRH, BTEX, PAH and asbestos. | Moderate | Uncontrolled storage of construction and commercial wastes. |
| **6** | 56 | Illegal rubbish dump. | Heavy Metals (arsenic, cadmium, chromium, lead, mercury, nickel and zinc), TRH, BTEX, PAH and asbestos. | Moderate to High | Uncontrolled and active minor dumping of domestic white goods and household items as well as general waste in this area in recent years. |

# 7 Environmental Check Sampling

Six check samples were collected, one per AEC, and analysed for the COCs as shown in **Table 6**.

**Table 6 - Sampling Plan**

| Loc | Depth (m) | AEC | Heavy Metals | OCP/ OPP | BTEX, TRH, PAH | Asbestos |
|---|---|---|---|---|---|---|
| **S-1** | 0-0.15 | 1 | 1 | 1 | | |
| **S-2** | 0-0.15 | 2 | 1 | 1 | | |
| **S-3** | 0-0.15 | 3 | 1 | | 1 | |
| **S-4** | 0-0.15 | 4 | 1 | 1 | 1 | |
| **S-5** | 0-0.15 | 5 | 1 | | 1 | 1 |
| **S-6** | 0-0.15 | 6 | 1 | | 1 | 1 |

Environmental sampling activities were based on standard industry accepted standard practices and were undertaken by a trained W&A environmental scientist. The standard industry procedures included:

- Recording of samples in field notes during sample collection;
- Use of disposable nitrile gloves, changing between sample collection;
- Decontamination of sampling equipment between each sample collection by washing in water/soap, rinsing once more in water and allowing to air dry;
- Placement of samples into laboratory supplied Teflon-lined glass jars, and stored in chilled esky; and
- Carriage of samples under chain-of-custody conditions.

Samples were forwarded to Eurofins laboratory, an independent laboratory NATA accredited for the analytical methods used.

As only a preliminary sampling program was undertaken, field Quality Assurance and Quality Control (QA/QC) sampling was not undertaken.

Eurofins laboratory though is a reputable environmental laboratory which undertake analyses to NATA accredited analytical methodologies and participates in NATA endorsed laboratory round robin analyses.

## 7.1 Investigation Criteria

The National Environmental Protection (Assessment of Site Contamination) Amendment Measure 1999, was amended in 2013 (NEPC 2013) and has been accepted for use in NSW by the NSW EPA.

NEPM 2013 presents Health based Investigation levels (HIL) for different land uses (e.g. industrial/commercial, residential, recreational open space etc.) as well as provisional Ecological Investigation Levels (EIL), Ecological Screening Levels (ESL), Health Screening Levels (HSL) and Management Limits (ML).

The HILs, HSLs and MLs were developed from significant review of toxicological data and risk assessment modelling undertaken and originally published by the National Environmental Protection Council (NEPC) in the NEPM 1999 document.

"*The HILS are scientifically based, generic assessment criteria to be used in the first stage (Tier 1) of an assessment of potential risks to human health from chronic exposure to contaminants. They are intentionally conservative and are based on a reasonable worst-case scenario*".

"*HILS are investigation or screening levels, and are not clean-up or response levels, nor are they desirable soil quality criteria. They are intended to be used to trigger consideration of an appropriate site-specific risk-based approach or appropriate risk-based management options when they are exceeded*". (NEPC 2013 Schedule B1 p4).

As the southern portion of the Site is proposed for use as residential, the adopted screening/investigation levels for the Site are for "Residential A". The northern portion will also be rezoned for residential, though it is expected the actual use will continue as commercial, with short term accommodation added later (residential with minimal soil access). For the purposes of this PESA, the more restrictive Residential A exposure settings were utilised for all check sample results.

The NEPM 2013 provides EILs for common heavy metals including arsenic, chromium III, copper, lead, nickel, mercury and zinc in different landuse settings. The approach for deriving EILs for heavy metals is to combine background concentrations (i.e. naturally occurring) with an added contaminant limit (ACL), that is EIL = background + ACL. As background sampling was not undertaken, the adopted EILs for the Site included assumed background concentrations based on previous experience in the area. EILs for residential use were calculated and adopted.

Table 7 of Schedule B1 of the NEPM provides health screening levels for bonded asbestos, friable and asbestos fibres in soil. In addition, no free ACM should be visible in the upper 10cm of the soil surface.

The investigation criteria for the Site are included in the attached summary Table LR1.

## 7.2 Aesthetics

Section 3.6 of Schedule B1 of NEPM (NEPC 2013) provides for consideration of aesthetic issues in soil. No numeric guidelines are provided, instead aesthetic issues should consider soil discolouration, odours, quantity and nature of the inclusions in soil and final land use.

## 7.3 Surface conditions

The sample descriptions are presented in Table 7.

No suspected Asbestos Containing Materials (ACM) materials were observed. Some anthropogenic materials such as plastic/steel/wood were observed.

**Table 7 - Sample Details**

| Sample ID | Description |
|---|---|
| **S-1** | Brown clay with red & grey mottles |
| **S-2** | Brown clay loam to clay, some gravel with red & grey mottles |
| **S-3** | Black loam with gravel |
| **S-4** | Sandy loam |
| **S-5** | Brown Loam and clay |
| **S-6** | Red brown clay |

## 7.4 Analytical Results

The sampling locations are presented in Figure 3. The analytical results are summarised in Table LR1, and laboratory report is included in Appendix D. Comparison of soil concentrations to the investigation criteria indicated that:

- Concentrations of heavy metals were reported well below the HIL A and EIL investigation criteria in all samples;
- Concentrations of OCP, OPP and BTEX were reported below the laboratory Limit of Reporting (LOR) in the samples analysed. The LOR were all below the investigation criteria as available;
- Concentrations of PAH were reported below the laboratory LOR in samples S-3, S-4 and S-6, and a low but detectable Benzo(a)pyrene (BaP) and total PAH concentrations were reported above the laboratory LOR but well below the ESL A investigation criteria in sample S-5 (waste dump area); and
- Concentrations of TRH were reported below the laboratory LOR in samples S-4 and S-6, but were reported above the laboratory LOR in samples S-3 and S-5;
- Concentrations of TRH in S-3 (edge of carpark) were detectable but well below the investigation criteria;
- Concentrations of TRH C16-C34 in sample S-5 (rubbish pile) were reported above the ESL A and ML A investigation criteria for residential sites, but as a comparison, concentrations in this fraction range were reported marginally below the ML D criteria for commercial/industrial landuse. Concentrations of the remaining TRH fractions (C6-C10, >C10-C16 and >C34-C40) in sample S-5 were reported above the laboratory LOR but below the HSL A, ESL A and ML A investigation criteria as available; and
- Asbestos or respirable fibres were not detected in the two samples S-5 and S-6 analysed.

# 8 Discussion of Results

## 8.1 Proposed Southern R2 Zoned Land

The risks of contamination at the southern portion of the property from the previous and current activities are generally considered to be low.

In the southern portion at the proposed R2 zoning, given that the former treatment pond is expected to be cut as part of the proposed development the risks of residual contaminants in any thin relic sediments are expected to be reduced with disturbance and earthworks. Any pathogens or virus present would have been deactivated by time since cessation (soil effects), UV sunlight degradation, and would be further reduced by earthworks.

Similarly, the risks of contaminated fill being present from former filling in the lower southern portion of the Site that would affect the proposed residential development is considered low. This is due to the source location and time since placement over 30 years ago, that the fill is apparently thin as the groundsurface has no significant topographical changes, site observations of no anthropogenic pieces, and that the entire southern area is proposed to be further filled as part of the residential development.

The analytical results of check sampling in the area confirmed the conclusion of no significant risk, with concentrations of heavy metals, OCP and OPP reported well below the investigation criteria for residential sites.

## 8.2 Proposed Northern R1 Zoned Land

The risk of contamination in and around the area of the Amble Inn in the northern portion of the Site is higher. This is due to the area containing an active commercial enterprise, and presence of uncontrolled but small rubbish areas (AEC 5 and 6). This risk is offset by the proposed future motel type use of a portion as the actual exposure risk to short term occupants is much lower than permanent residential living due to the short duration and minimal to no exposed soil access.

Barely detectable concentrations of TRH hydrocarbons were reported in soils just off the bitumen carpark, likely caused by contaminated stormwater runoff from the bitumen itself or vehicles in poor maintenance. This contamination is well below residential criteria for vapour intrusion and direct access as well as ecological risks and not associated with elevated heavy metals, BTEX, or PAH hydrocarbons.

The working yard at the rear of Amble Inn reported not contamination in the check sample, though some slightly elevated copper and zinc as would be expected from leaching of building materials.

Though the uncontrolled access to the western rear of the property with a public access track poses a higher risk to the potential landuse of that portion of the property given the risk of illegal dumping of waste, it is unlikely that this area will actually be redeveloped for any motel type activities. Observations and samples from the area noted no ACM, and analytical results report no asbestos in soil, heavy metal or BTEX contamination.

Though no discolouration of soils or odours were noted at the time of sampled, heavy end C16-C34 TRH and associated PAH concentrations were reported in sample S-5 at the edge of a waste stockpile. As this stockpile appears to be waste from operations of Amble Inn, it is suspected that the contamination identified relates to a small volume of burnt hydrocarbon based waste that has been thrown there, such as a half empty outdoor fuel oil lantern, some kind of decking oil tin, or BBQ clean up residues. The footprint and depth of impact is expected to be localised and shallow.

The concentrations of TRH exceeded the MLs for residential, parklands and open spaces, but were marginally less than that of the ML for commercial/industrial landuse. MLs were devised to manage risks associated with formation of Light Non-Aqueous Phase Liquids (LNAPL) on groundwater, fire and explosive hazards, effects on buried infrastructure, and aesthetic considerations. Given the relatively unused portion of the Site that this stockpile is located in and the suspected contamination spread, further investigations at this time are not warranted, but the presence of vegetation in and around the stockpile means that the hydrocarbons could accelerate a bushfire if it were to develop in the area.

It is recommended that active management of the area is undertaken to limit current and future risks.

As the current business operations pose an ongoing contamination risk, it is difficult to make any firm conclusions of contamination risks for any future proposed developments without further proposed development plans and sampling investigations.

# 9 Conclusions and Recommendations

A Phase 1 Environmental Site Assessment has been undertaken at 7 Tasman Street, Corindi. The historical desktop review and site inspection shows that there is a low risk of significant contamination being present that would preclude the proposed R2 Low Density Residential landuse of the southern portion of the Site. No further environmental investigations at this time are required to allow the proposed residential rezoning of that portion of the Site.

The PESA did identify some historical, actual and ongoing risks for the proposed rezoning of the northern portion of the Site to R1 General Residential. The is concluded that the rezoning to R1 would be acceptable subject to the following caveats:

- The operation of a commercial enterprise forward in time means that there is a risk of contamination being generated on that portion of the Site which could impact future residential landuse (which is an acceptable use for the R1 zone as defined in the CHCC LEP 2013). As there is no plan for this landuse, no further investigations are required at this time, but it is recommended that any future DA’s for this portion of the Site refer to this PESA and undertake suitable additional investigations as required to confirm the particular land use exposure and placement on the Site is acceptable;
- The northwestern boundaries of the Site are fenced and bollarded to limit public access and thoroughfare; and
- The stockpiles at AEC 5 and AEC 6 are removed and disposed offsite to a licensed facility as appropriate for the material following sorting. To mitigate the

elevated TRH concentrations at the northern stockpile, surface soils are ripped with a toothed bucket to oxygenate the soils and facilitate natural bioremediation of the area. If discoloured or odorous soils are observed at that time these must be classified and disposed offsite to a licensed facility in accordance with the waste classification.

In addition, for the entire Site it is recommended that during development if previously unidentified materials such as odorous or discoloured soils, monolithic deposits or potential ACM are identified, the environmental consultant should be contacted to provide further advice.

# 10 References

DUAP & EPA (1998). *Managing Land Contamination – Planning Guidelines SEPP55 – Remediation of Land*. Department of Urban Affairs and Planning, and NSW Environment protection Authority.

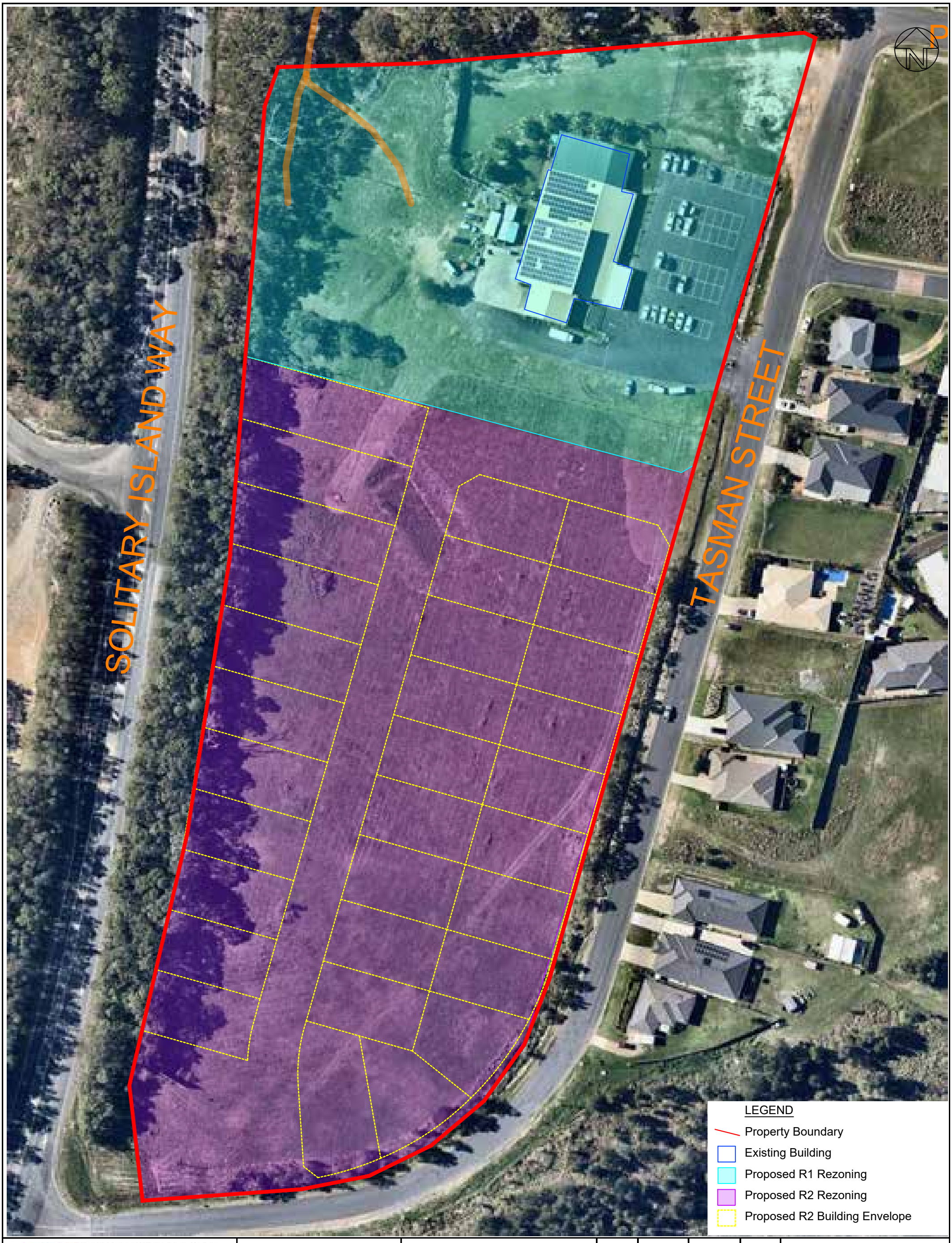
OE&H (2011). *Guidelines for Consultants Reporting on Contaminated Sites*. 3rd Print.

NEPC (2013). 2013 Amendment to the N*ational Environment Protection (Assessment of Site Contamination) Measure 1999*. National Environment Protection Council.

NSW EPA (2017). *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme*. Chatswood, NSW.

# Figures


| | | | | | |
|---|---|---|---|---|---|
| Whitehead & Associates Environmental Consultants | Client: JOHN MATTHEWS | Title: SITE LOCATION | Drawn: HM | Scale: 1:3000 @ A4 | Sheet: 1 of 1 |
| | Project: PRELIMINARY ESA FOR 7 TASMAN STREET, CORINDI | Source: CHCC, NEARMAP, DEGROOT & BENSON | Reviewed: SD | Job No: 2358 | Revision No: 1 |
| | Note: AERIAL PHOTOS & BOUNDARIES ARE INDICATIVE ONLY | | Approved: SD | Date: 16/05/19 | Drawing No: Figure 1 |




Whitehead & Associates
Environmental Consultants

Client: JOHN MATTHEWS

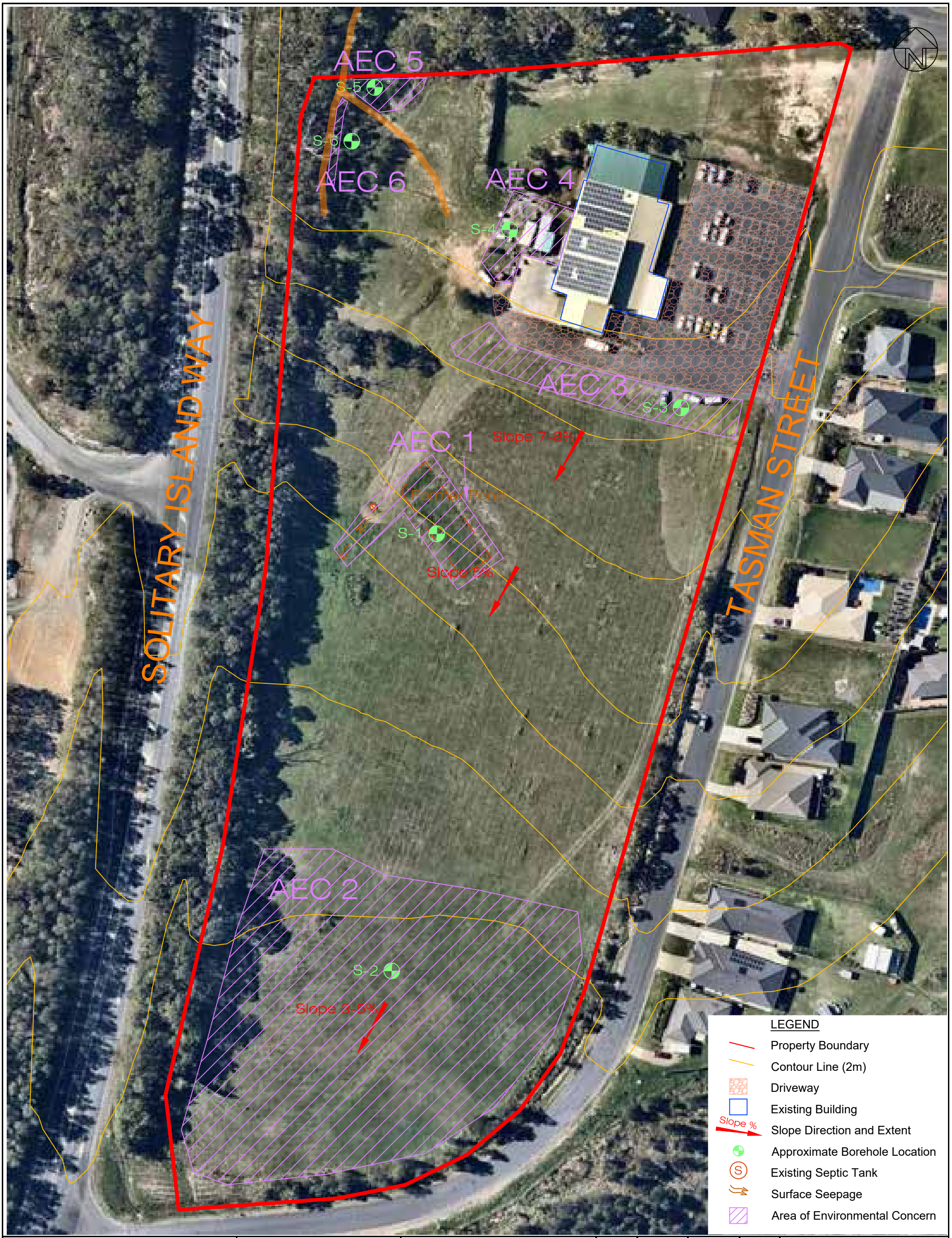
Project: PRELIMINARY ESA FOR 7 TASMAN STREET, CORINDI

Title: PROPOSED REZONING LAYOUT

Source: CHCC, NEARMAP, DEGROOT & BENSON

Note: AERIAL PHOTOGRAPHS & BOUNDARIES ARE INDICATIVE ONLY

| Drawn: | Reviewed: | Approved: | Date: | Scale: 1:1000 Approx @ A3 | |
|---|---|---|---|---|---|
| MW | SD | SD | 18/06/19 | Job No: 2358 | Sheet: 1 of 1 |
| All units in m unless otherwise specified | | | | Drawing No: Figure 2 | Revision No: 2 |




Whitehead & Associates Environmental Consultants

Client: JOHN MATTHEWS

Project: PRELIMINARY ESA FOR 7 TASMAN STREET, CORINDI

Title: EXISTING SITE LAYOUT & SAMPLE LOCATIONS

Source: CHCC, NEARMAP, DEGROOT & BENSON

Note: AERIAL PHOTOGRAPHS & BOUNDARIES ARE INDICATIVE ONLY

| Drawn: | Reviewed: | Approved: | Date: | Scale: 1:1000 Approx @ A3 | |
|---|---|---|---|---|---|
| MW | SD | SD | 18/06/19 | Job No: 2358 | Sheet: 1 of 1 |
| All units in m unless otherwise specified | | | | Drawing No: Figure 3 | Revision No: 2 |

# Tables

## Table LR1: Summary of Soil Analytical Results

| Sample ID | | | Investigation Criteria | | | | | | S-1 | S-2 | S-3 | S-4 | S-5 | S-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Sampled | | | | | | | | | 18/04/2019 | 18/04/2019 | 7/06/2019 | 7/06/2019 | 7/06/2019 | 7/06/2019 |
| Depth | | | | | | | | | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 |
| AEC | Units | LOR | (HIL A) | (EIL)* | (HSL A) | (ESL A) | (ML A)# | (ML D)# | 1 | 2 | 3 | 4 | 5 | 6 |
| | | | | | | | | | | | | | | |
| **Total Metals** | | | | | | | | | | | | | | |
| Arsenic | mg/kg | 2 | 100 | 100 | - | - | - | - | 5.2 | 6.6 | 6.7 | 9.6 | 4.3 | 7 |
| Cadmium | mg/kg | 0.4 | 20 | - | - | - | - | - | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 |
| Chromium Total | mg/kg | 5 | 100 | 480 | - | - | - | - | 11 | 23 | 5.4 | 8.2 | 16 | 15 |
| Copper | mg/kg | 5 | 6000 | 140 | - | - | - | - | < 5 | < 5 | 13 | 40 | < 5 | < 5 |
| Lead | mg/kg | 5 | 300 | 1100 | - | - | - | - | 15 | 21 | 24 | 6.8 | 15 | 13 |
| Mercury | mg/kg | 0.1 | 40 | - | - | - | - | - | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Nickel | mg/kg | 5 | 400 | 55 | - | - | - | - | < 5 | < 5 | 5.2 | < 5 | < 5 | < 5 |
| Zinc | mg/kg | 5 | 7400 | 210 | - | - | - | - | 23 | 22 | 67 | 73 | 42 | 69 |
| **Asbestos in Soil** | | | | | | | | | | | | | | |
| Asbestos | %w/w | 0.01 | - | - | 0.01% | - | - | - | - | - | - | - | <0.01 | <0.01 |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | | | | | | | | | | | |
| Naphthalene | mg/kg | 0.5 | - | 170 | 5 | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| TRH C6-C10 less BTEX (F1) | mg/kg | 20 | - | - | 50 | 180 | 800 | 800 | | | < 20 | < 20 | < 20 | < 20 |
| TRH >C10-C16 less Naphthalene (F2) | mg/kg | 50 | - | - | 280 | 120 | 1000 | 1000 | | | < 50 | < 50 | 66 | < 50 |
| TRH >C16-C34 | mg/kg | 100 | - | - | - | 1300 | 3500 | 5000 | | | 280 | < 100 | 4800 | < 100 |
| TRH >C34-C40 | mg/kg | 100 | - | - | - | 5600 | 10000 | 10000 | | | 110 | < 100 | 660 | < 100 |
| TRH >C10-C40 (total)* | mg/kg | 100 | - | - | - | - | - | - | | | 390 | < 100 | 5526 | < 100 |
| **BTEX** | | | | | | | | | | | | | | |
| Benzene | mg/kg | 0.1 | - | - | 0.7 | 65 | - | - | | | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Ethylbenzene | mg/kg | 0.1 | - | - | - | 125 | - | - | | | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| m&p-Xylenes | mg/kg | 0.2 | - | - | - | - | - | - | | | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| o-Xylene | mg/kg | 0.1 | - | - | - | - | - | - | | | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Toluene | mg/kg | 0.1 | - | - | 480 | 105 | - | - | | | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Xylenes - Total | mg/kg | 0.3 | - | - | 110 | 45 | - | - | | | < 0.3 | < 0.3 | < 0.3 | < 0.3 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | |
| Acenaphthene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Acenaphthylene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Anthracene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benz(a)anthracene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(a)pyrene | mg/kg | 0.5 | - | - | - | 1.4 | - | - | | | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| Benzo(a)pyrene TEQ (lower bound) * | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| Benzo(a)pyrene TEQ (medium bound) * | mg/kg | 0.5 | 3 | - | - | - | - | - | | | 0.6 | 0.6 | 1 | 0.6 |
| Benzo(a)pyrene TEQ (upper bound) * | mg/kg | 0.5 | - | - | - | - | - | - | | | 1.2 | 1.2 | 1.3 | 1.2 |
| Benzo(b&j)fluoranthene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(g.h.i)perylene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(k)fluoranthene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Chrysene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Dibenz(a.h)anthracene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Fluoranthene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Fluorene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Indeno(1.2.3-cd)pyrene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Naphthalene | mg/kg | 0.5 | - | 170 | 5 | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Phenanthrene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Pyrene | mg/kg | 0.5 | - | - | - | - | - | - | | | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Total PAH* | mg/kg | 0.5 | 300 | - | - | - | - | - | | | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| **Organochlorine Pesticides (OC)** | | | | | | | | | | | | | | |
| 4.4'-DDD | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| 4.4'-DDE | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| 4.4'-DDT | mg/kg | 0.05 | - | 180 | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| a-BHC | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Aldrin | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Aldrin and Dieldrin (Total)* | mg/kg | 0.05 | 6 | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| b-BHC | mg/kg | 0.05 | | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Chlordanes - Total | mg/kg | 0.1 | 50 | - | - | - | - | - | < 0.1 | < 0.1 | | < 0.1 | | |
| d-BHC | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| DDT + DDE + DDD (Total)* | mg/kg | 0.05 | 240 | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Dieldrin | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Endosulfan I | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |

## Table LR1: Summary of Soil Analytical Results

| Sample ID | | | Investigation Criteria | | | | | | S-1 | S-2 | S-3 | S-4 | S-5 | S-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Sampled | | | | | | | | | 18/04/2019 | 18/04/2019 | 7/06/2019 | 7/06/2019 | 7/06/2019 | 7/06/2019 |
| Depth | | | | | | | | | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 | 0-0.15 |
| AEC | Units | LOR | (HIL A) | (EIL)* | (HSL A) | (ESL A) | (ML A)# | (ML D)# | 1 | 2 | 3 | 4 | 5 | 6 |
| Endosulfan II | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Endosulfan sulphate | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Endrin | mg/kg | 0.05 | 10 | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Endrin aldehyde | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Endrin ketone | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| g-BHC (Lindane) | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Heptachlor | mg/kg | 0.05 | 6 | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Heptachlor epoxide | mg/kg | 0.05 | - | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Hexachlorobenzene | mg/kg | 0.05 | 10 | - | - | - | - | - | < 0.05 | < 0.05 | | < 0.05 | | |
| Methoxychlor | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | < 0.2 | | |
| Toxaphene | mg/kg | 1 | 20 | - | - | - | - | - | < 1 | < 1 | | < 1 | | |
| **Organophosphorus Pesticides (OP)** | | | | | | | | | | | | | | |
| Azinphos-methyl | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Bolstar | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Chlorfenvinphos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Chlorpyrifos | mg/kg | 0.2 | 160 | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Chlorpyrifos-methyl | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Coumaphos | mg/kg | 2 | - | - | - | - | - | - | < 2 | < 2 | | | | |
| Demeton-O | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Demeton-S | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Diazinon | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Dichlorvos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Dimethoate | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Disulfoton | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| EPN | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Ethion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Ethoprop | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Ethyl parathion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Fenitrothion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Fensulfothion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Fenthion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Malathion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Merphos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Methyl parathion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Mevinphos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Monocrotophos | mg/kg | 2 | - | - | - | - | - | - | < 2 | < 2 | | | | |
| Naled | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Omethoate | mg/kg | 2 | - | - | - | - | - | - | < 2 | < 2 | | | | |
| Phorate | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Pirimiphos-methyl | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Pyrazophos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Ronnel | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Terbufos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Tetrachlorvinphos | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Tokuthion | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |
| Trichloronate | mg/kg | 0.2 | - | - | - | - | - | - | < 0.2 | < 0.2 | | | | |

**Notes:**

Indicates sample concentration exceeds investigation criteria value

Indicates sample concentration exceeds investigation criteria value by >250%

Indicates sample concentration exceeds HSL A and ML A investigation criteria but within ML D limits

* EIL based on background concentrations from previous investigations in the region

\# ML A refers to Management limits for Residential, parkland and public space

# Appendix A
## Historical Titles

LAND REGISTRY SERVICES

# Cadastral Records Enquiry Report : Lot 111 DP 730304

**Ref :** NOUSER

**Locality :** CORINDI BEACH
**Parish :** CORINDI
**LGA :** COFFS HARBOUR
**County :** FITZROY





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

| | Status | Surv/Comp | Purpose |
|---|---|---|---|
| DP27209 | | | |
| Lot(s): 8, 9, 10, 11, 12 | | | |
| DP1117329 | REGISTERED | SURVEY | SUBDIVISION |
| DP219711 | | | |
| Lot(s): 10, 11 | | | |
| DP1133380 | REGISTERED | SURVEY | SUBDIVISION |
| Lot(s): 15, 16, 17 | | | |
| DP1117329 | REGISTERED | SURVEY | SUBDIVISION |
| DP806515 | | | |
| Lot(s): 6 | | | |
| NSW GAZ. 24-12-2014 Folio : 4739<br>ACQUIRED FOR COUNCIL PURPOSES<br>LOT 6 DP806515 AND LOT 27 DP1196296 | | | |
| DP1059403 | | | |
| Lot(s): 6, 7, 8, 9, 10, 11, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59 | | | |
| DP872357 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1117329 | | | |
| Lot(s): 152 | | | |
| DP808678 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1068769 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1077671 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1100809 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1168898 | | | |
| Lot(s): 100 | | | |
| DP806515 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1196296 | | | |
| Lot(s): 21, 22, 27 | | | |
| DP806515 | HISTORICAL | SURVEY | SUBDIVISION |
| Lot(s): 27 | | | |
| NSW GAZ. 24-12-2014 Folio : 4739<br>ACQUIRED FOR COUNCIL PURPOSES<br>LOT 6 DP806515 AND LOT 27 DP1196296 | | | |
| SP88296 | | | |
| DP872357 | HISTORICAL | SURVEY | SUBDIVISION |
| DP1059403 | HISTORICAL | SURVEY | SUBDIVISION |
| Road | | | |
| Polygon Id(s): 105064453 | | | |
| NSW GAZ. 26-04-1985 Folio : 1857<br>DEDICATED PUBLIC ROAD<br>LOT 9 DP255290 | | | |
| Polygon Id(s): 105335163 | | | |
| DP604260 | REGISTERED | SURVEY | RESUMPTION OR ACQUISITION |
| Polygon Id(s): 107071357 | | | |
| NSW GAZ. 24-10-2003 Folio : 10226<br>DEDICATED PUBLIC ROAD<br>LOT 11 DP255290 | | | |
| Polygon Id(s): 105122631, 105143682, 105335163 | | | |
| NSW GAZ. 24-10-2003 Folio : 10226<br>DEDICATED PUBLIC ROAD<br>LOT 13 DP604260 | | | |
| Polygon Id(s): 105023256, 105064453, 106759619, 107071356, 107071357 | | | |
| DP1224549 | REGISTERED | SURVEY | SURVEY INFORMATION ONLY |

# Cadastral Records Enquiry Report : Lot 111 DP 730304

**Ref :** NOUSER

**Locality :** CORINDI BEACH
**Parish :** CORINDI
**LGA :** COFFS HARBOUR
**County :** FITZROY

| Plan | Surv/Comp | Purpose |
|---|---|---|
| DP27209 | SURVEY | UNRESEARCHED |
| DP219711 | SURVEY | SUBDIVISION |
| DP260192 | SURVEY | SUBDIVISION |
| DP730304 | COMPILATION | SUBDIVISION |
| DP730305 | SURVEY | SUBDIVISION |
| DP806515 | SURVEY | SUBDIVISION |
| DP1059403 | SURVEY | SUBDIVISION |
| DP1117329 | SURVEY | SUBDIVISION |
| DP1152234 | SURVEY | ROADS ACT, 1993 |
| DP1168898 | SURVEY | ROADS ACT, 1993 |
| DP1196296 | SURVEY | ROADS ACT, 1993 |
| SP88296 | COMPILATION | STRATA PLAN |

M

NEW SOUTH WALES

(For Guarantee see reverse
prior to last edition and
Deposited Plan.

# TIFICATE OF TITLE

PERTY ACT, 1900, as amended.

09329282

Vol 9329 Fol 202

1st Edition Issued 5-12-1962

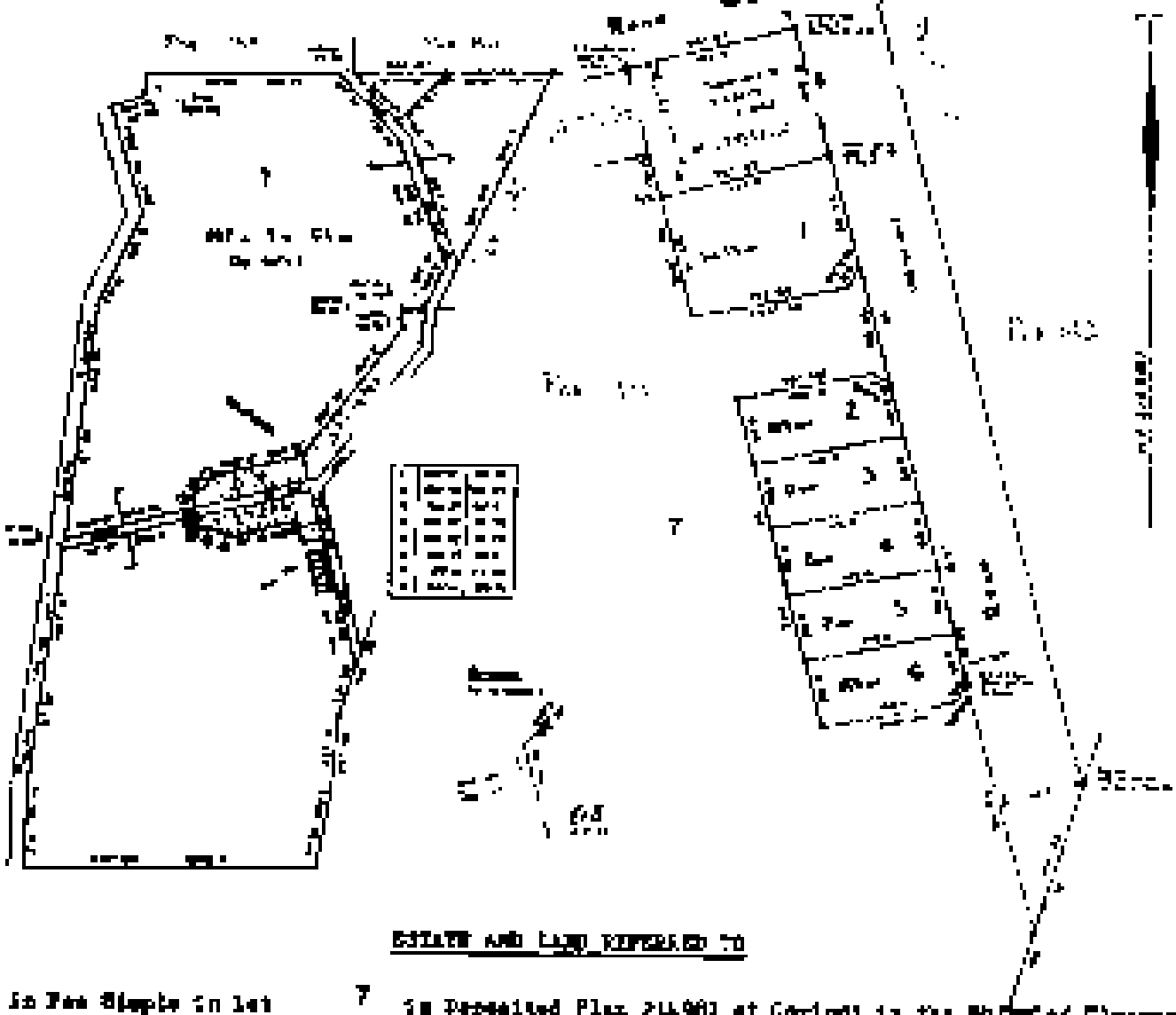
I certify that the person described in the First Schedule is the registered proprietor of the estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule

Witness

Registrar General

PLAN SHOWING LOCATION OF LAND

CANCELLED



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in lot 7 in Deposited Plan 214901 at Cordeaux in the Shire of Illawarra Parish of Cordeaux and County of Pitarmy excepting thereout the minerals reserved by the Crown Grant.

FIRST SCHEDULE (Continued overleaf)

JOHN CHARLES Matthews of Cordeaux-Clarendon, Carpenter.

Registrar General

SECOND SCHEDULE (Continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant(s) referred to in the said Deposited Plan.

Registrar General

2. Restrictions on transfer - See Section 272 Crown Lands Consolidation Act 1913.

Registrar General.

NOTE: ANYONE RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED.

## FIRST SCHEDULE (continued)

| REGISTERED PROPRIETOR | INSTRUMENT: NUMBER | INSTRUMENT: DATE | ENTERED | Signature of Registrar-General |
|---|---|---|---|---|
| This deed is presented to me [illegible] Now Certificate of Title [illegible] issued for lots in Deposited Plan No 21971 as follows: Lots 1 to 23 inclusive 9679 [illegible] Registrar-General | | | | |

The estate of proprietor created by Lot 123 on Dep 21971 by application 645901 Registered 31-5-92.

## SECOND SCHEDULE (continued)

| NATURE | NUMBER | DATE | PARTICULARS | ENTERED | Signature of Registrar-General | CANCELLATION |
|---|---|---|---|---|---|---|
| Easement to drain water created by Deposited Plan 21971 | Lot 123 on D.P. 21971 | Vested | The natural flow of surface water from the land shown on D.P. 21971 to the land shown on D.P. 21971. The Power to Grant Easements pursuant to Sec. 272 of the Conveyancing Act 1919 - Def 2 + 6 + 12 inclusive in D.P. 21971 may be exercised without the consent of the registered proprietor of Lot 123 on D.P. 21971 Registered 31-5-1992 | 23-5-1962 | [illegible] | |
| | | | | 23-5-1962 | [illegible] | |

[redacted]

NEW SOUTH WALES

# CERTIFICATE OF TITLE

PURSUANT TO [illegible] Act

CT09679-250

Crown Grant Vol. 6204 Fol. 178
Prior Title Vol. 9329 Fol. 212

Vol [illegible] Fol [illegible]

Last Edition Issued 20-4-1964.

I certify that the person described in the First Schedule is the registered proprietor of an estate in fee simple in the land within described subject however also to such reservations and conditions and interests as are notified by endorsement hereon.

Witness

Registrar General.

PLAN SHOWING LOCATION OF LAND

[redacted]

THE LAND WITHIN [redacted] IS SHOWN BOUNDED BLUE ON THE ABOVE DIAGRAM

(Page 1 of 2 Pages)

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE.

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 13 in Registered Plan 270711 at Carlingford in the Shire of Hornsby Parish of Cumberland and County of Stanley excepting thereout the minerals reserved by the Crown Grant.

FIRST SCHEDULE (Continued overleaf)

~~JOHN GEORGE MATTHEWS, of Carlingford Accountant~~ Owner.

Registrar General.

SECOND SCHEDULE (Continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant(s) above referred to.
2. Restrictions on Transfer - See Section 272 Crown Lands Consolidation Act 1913.

Registrar General.

[illegible] (13)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED.

FIRST SCHEDULE (continued)

| REGISTERED PROPRIETOR | INSTRUMENT: Nature | INSTRUMENT: No. | INSTRUMENT: Date | ENTERED | Signature of Registrar General |
|---|---|---|---|---|---|
| Ronald John Matthews of Coromandel Chainman Forestry Employee (Transfer 283422 16.5.1972) (Lease 283422 Registered 26-3-92) Ronald John Matthews as regards lot 11 in DP604260 and the Commissioner for Main Roads as regards the residue being lot 9 in DP255290 and lot 13 in DP604260 by Resumption WS108A Registered 19-7-1995 | Transfer | 283422 | 16.5.1972 | | |

SECOND SCHEDULE (continued)

| INSTRUMENT: Number | INSTRUMENT: Nature | INSTRUMENT: Date | PARTICULARS | ENTERED | Signature of Registrar General | CANCELLATION: | |
|---|---|---|---|---|---|---|---|
| Mortgage | 283422 | 16.5.1972 | to The Commercial Bank of Australia Limited Together with Caveat affecting part (being Lot 11 in DP 604260 Registered as 1182. | 1-7-1972 | | Discharged | |

12-2-1982

Mortgage Registered

This title is cancelled as to the land comprised in the within mortgage & lies

Transfer Registered 12-2-1982

of title is cancelled as to Lot 11 in the within mortgage & lies

Transfer for lot 13 DP 604260 Registered

Decommissioned plan.

The residue of land in this title is comprised in

New title(s) issued for Lot 13 in DP 604260 Volume 9 Folio 252

DP 255290 Volume 16A Folio 1402

FORM No. 02 NOTE: ENTRIES RULED THROUGH AND "AUTHENTICATED" BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

Vol. 16A Fol. 1402

Req:R243272 /Doc:DP 0604260 /Rev:01-Mar-2005 /Sts:SC OK /Prt:12-Apr-2019 10:12 /Pgs:2 of 2 /Ref:advantage /Src:P

New South Wales

CT10879-077

Vol 10879 Fol 77

Registered 19-9-1968

CANCELLED

Registrar General

# GRANT UPON PURCHASE OF UNNECESSARY ROAD

(Crown Lands Consolidation Act, 1913)

Whereas [illegible] of Carlingford Council Clerk Certificate-Clarence in Our State of New South Wales [illegible]

[illegible] GRANTEE [illegible] the sum of [illegible] Hundred Dollars [illegible] NOW THESE PRESENTS WITNESS that [illegible] GRANTEE [illegible] Lot 15 and Lot 21 both in registered Plan registered No. 219111 [illegible]

Parish of Field of Carlingford being the closed road lying between

DEPOSITED PLAN

[illegible] ROAD 66 WIDE [illegible] 66 WIDE [illegible] 66 [illegible] 12 13 [illegible]

SCALE

Area 2 roods 35 perches

[illegible] SUBJECT NEVERTHELESS AND WE DO HEREBY RESERVE AND EXCEPT unto Our Heirs and Successors all mines of gold silver coal and minerals whatsoever in or under the said land and also full power and authority for Us Our Heirs and Successors and such persons or person as shall from time to time be authorised by Us or Them in that behalf to enter upon the said land or any part thereof for the purpose of searching for working obtaining and carrying away the said gold silver coal and minerals or any of them AND ALSO all such parts and so much of the said land as may hereafter be required for the construction maintenance or repair of any road bridge or other work which may be necessary in connection therewith which shall be set out by Our Governor for the time being of Our said State or some person by Him authorised in that behalf and which may be entered through the same by Us Our Heirs and Successors and by Our Governor or aforesaid or such person or persons as aforesaid by Us Them or Him or in their respective behalf for the purpose aforesaid without payment of any compensation for the same and also subject to the right of Us Our Heirs and Successors and of Our Governor or aforesaid or such person or persons as aforesaid to enter upon the said land and to make and construct such roads ways and works thereon as may be necessary for the purpose of obtaining access to and from any mines of gold silver coal or minerals which may be discovered to exist in under or upon the said land or any part thereof AND SUBJECT NEVERTHELESS to the reservations exceptions conditions and powers contained in Section 136 of the Crown Lands Consolidation Act, 1913 as amended by subsequent Acts AND SUBJECT ALSO to the condition that the said land shall not be used for any purpose other than a road.

In Witness Our Governor of Our State of New South Wales and its Dependencies in the Commonwealth of Australia, at Sydney in Our said State, Our eighth day of September in the seventeenth year of Our Reign and in the year of Our Lord one Thousand nine hundred and sixty-eight.

Governor

By His Excellency's Command,

Minister for Lands

FOR ENDORSEMENTS SEE PAGE 2

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE

Vol. 10870 Fol. 177

## SCHEDULE OF REGISTERED PROPRIETORS

| REGISTERED PROPRIETOR | NATURE | INSTRUMENT NUMBER | INSTRUMENT DATE | ENTERED | Signature of Registrar General |
|---|---|---|---|---|---|
| Fencible Fishing Holdings of Cromarty - Clearance - Fencible Employees [redacted] Granted power of attorney as appears the whole of the right excepting part of [illegible] | Transfer so much the commencing | [illegible] | 25.3.1977 | 16.5.1977 | |

## SCHEDULE OF ENCUMBRANCES ETC.

| NATURE | REGISTERED NUMBER | DATE | PARTICULARS | ENTERED | Signature of Registrar General | CANCELLATION |
|---|---|---|---|---|---|---|
| Right(s) [illegible] Part [illegible] as indicated on the plan hereon being part of [illegible] Land Registry 94 [illegible] | | | [redacted] Registered 12.2.1976 This folio is cancelled as to [redacted] part upon creation of computer folios for lots 111/112 [illegible] aforementioned plan | | | |
| | | | [redacted] Registered [illegible] folio is cancelled as to [redacted] upon creation computer folios for lots [illegible] aforementioned plan. | The nature of land in this folio comprises [illegible] CALCULATED [illegible] | | PART LOT 19 |

[illegible] ARE ENTERED IN THE REGISTER BOOK AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL OF LAND CANCELLED

CT 96/2 [illegible]
DP 31-015

Ref. Address /Src: 2 of 2 /Req: 01-Mar-2016 12:05 /Doc: CT 10870/177 /Prn: 12-Apr-2016 12:05 /Seq: 2 of 2

# ICATE OF TITLE

[redacted] PROPERTY ACT [illegible]

Application No. 55572

Volume 14491 Folio 154

DATE OF ISSUE

5 3 1981

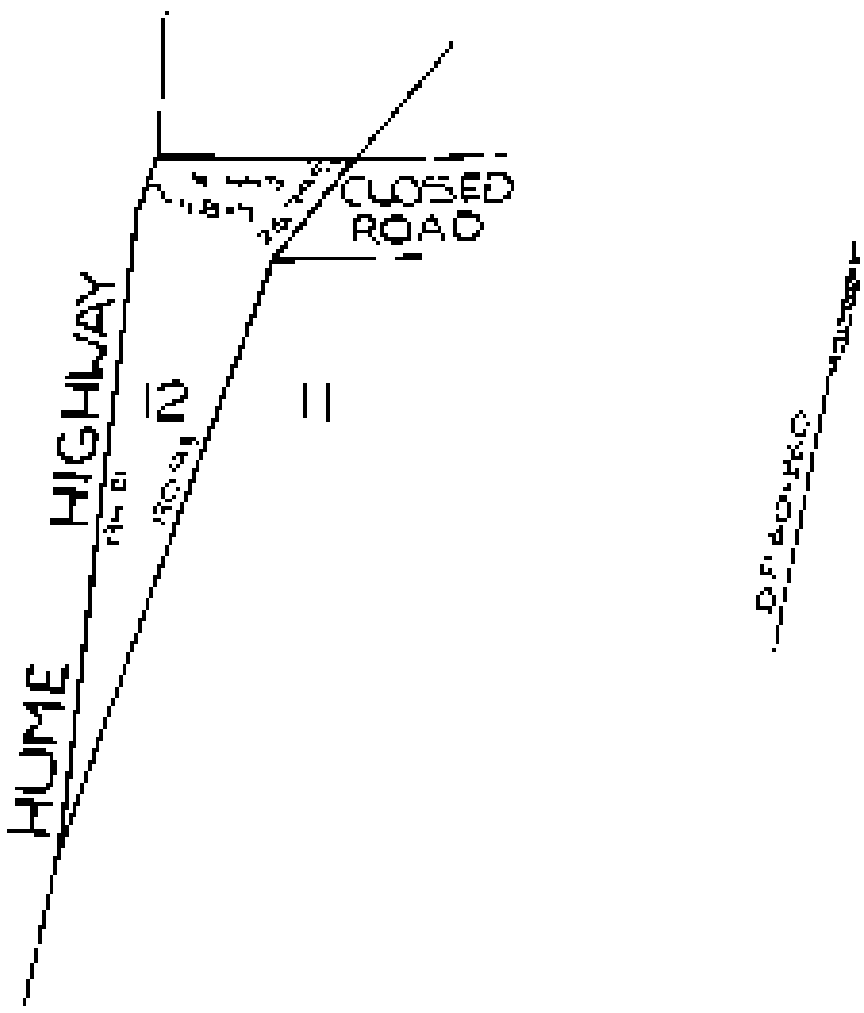
I certify that the person described as the First Schedule is the registered proprietor of an Estate in Fee Simple in the land described in the Second Schedule subject to such exceptions, encumbrances, interests and notations as are shown in the Second Schedule.

Registrar-General

PLAN SHOWING LOCATION OF LAND

[illegible]

CANCELLED




PARCEL 12

AREA 2989m²

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 12 on Deposited Plan 604760 at Coonil, in the Shire of Illabarra Parish of Carlingford County of Pitney being land for which no Crown grant has issued. EXCEPTING all minerals in regards the land shown as indicated in the plan hereon.

FIRST SCHEDULE

~~THE COMMISSIONER FOR MAIN ROADS.~~

SECOND SCHEDULE

NIL.

NOTE: ENTRIES RULED THROUGH AND INITIALLED BY THE REGISTRAR GENERAL ARE CANCELLED

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR

Arnold John Matthews by Transfer 5932857. Registered 2-3-1982.

SECOND SCHEDULE (continued)

PARTICULARS

5 5932338 Restriction as to use. Registered 2-3-1982.

12.2.1982

Typed

[illegible]

NOTATIONS AND UNREGISTERED DEALINGS

C.T. 1445 fo. 154 Cancelled

C.T. 1445 fo. 155 Created

TP 130304

PLAN FORM 2 — Plan Drawing only to appear in this space — *OFFICE USE ONLY

DP 730304

Registered: 25/6/1992
Office Use Only
Title System: TORRENS
Purpose: SUBDIVISION
Ref. Map: 9756-1-NE
Last Plan: DP 604260 (PT)

PLAN OF SUBDIVISION OF PART CLOSED ROAD (W168 IN W 177) AND LOTS 11 AND 12 DP 604260

Parish: ULMARRA
County: FITZROY
Locality: CORINDI
Town: CORINDI

Surveyor's Reference: 975

DIAGRAM NOT TO SCALE

ROAD 20.115 WIDE
ROAD 20 WIDE
ROAD 20.115 WIDE
ROAD 20 WIDE
ROAD 20 WIDE
ROAD 20 WIDE
PACIFIC HIGHWAY
WEDDING BELLS STATE FOREST No 150
PARISH OF PIPPAI
PARISH OF ULMARRA
PIPPAI
ULMARRA
(a) 4.92 ha
(b)
(c)
111
112
3.91 ha BY DECL & ADOT
2.61 ha
2.61 ha
1.93
1.93
41°
41°
(S) COMPASS (SURVEY)
(M) MERIDIAN AS TO BEARING

Council Clerk's Certificate
Council Clerk
28th November 1985

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this 25th February, 1993

Also all those pieces or parcels of land situate in the Shire of Coffs Harbour, Parish of Woolgoolga and County of Fitzroy, being lots 38, 39 and 40, Deposited Plan 259759 which is also numbered 0010.110.SS.1992 at the Department of Main Roads. The land is said to be in the possession of the Forestry Commission and the Crown.

Also all those pieces or parcels of land situate in the Shires of Ulmarra and Coffs Harbour, Parish of Woolgoolga and County of Fitzroy, being lots 20, 21, 22, 23 and 24, Deposited Plan 259760 which is also numbered 0010.110.SS.1991 at the Department of Main Roads. The land is said to be in the possession of the Forestry Commission and the Crown.

And also all those pieces or parcels of land situate in the Shires of Ulmarra and Coffs Harbour, Parishes of Corindi and Woolgoolga and County of Fitzroy, being lots 23 and 25, Deposited Plan 259761 which is also numbered 0010.110.SS. 1990 at the Department of Main Roads. The land is said to be in the possession of the Forestry Commission.

(D.M.R. Papers 10/110.1167) (6229)

## MAIN ROADS ACT, 1924.—PROCLAMATION

ACQUISITION OF LAND AT CORINDI IN THE SHIRE OF ULMARRA

(L.S.) A. R. CUTLER, *Governor.*

I, Sir ARTHUR RODEN CUTLER, Governor of the State of New South Wales and its Dependencies, with the advice of the Executive Council and on the application of The Commissioner for Main Roads, made by virtue of the powers conferred in him by the Transport (Division of Functions) Act, 1932, do, in pursuance of the provisions of the Main Roads Act, 1924, by this my Proclamation, declare that so much of the land hereunder described as is Crown land is hereby appropriated and so much thereof as is private property is hereby resumed under the provisions of the Public Works Act, 1912, for the purposes of the Main Roads Act, 1924, and that the land hereunder described is hereby vested in The Commissioner for Main Roads.

Signed and sealed at Sydney, this 3rd day of December, 1980.

By His Excellency's Command,

H. F. JENSEN, Minister for Roads.

GOD SAVE THE QUEEN!

DESCRIPTION OF THE LAND REFERRED TO

Schedule

All that piece or parcel of land situate in the Shire of Ulmarra, Parish of Corindi and County of Fitzroy, being lot 12, Deposited Plan 604260, which is also numbered 0010.450.SS.1978 at the Department of Main Roads. The land is said to be in the possession of the Council of the Shire of Ulmarra and the Crown.

(D.M.R. Papers 10/450.1110) (6191)

## MAIN ROADS ACT, 1924.—PROCLAMATION

ACQUISITION OF LAND AT FAIRY MEADOW IN THE CITY OF WOLLONGONG

(L.S.) A. R. CUTLER, *Governor.*

I, Sir ARTHUR RODEN CUTLER, Governor of the State of New South Wales and its Dependencies, with the advice of the Executive Council and on the application of The Commissioner for Main Roads, made by virtue of the powers conferred in him by the Transport (Division of Functions) Act, 1932, do, in pursuance of the provisions of the Main Roads Act, 1924, by this my Proclamation, declare that so much of the land hereunder described as is Crown land is hereby appropriated and so much thereof as is private property is hereby resumed under the provisions of the Public Works Act, 1912, for the purposes of the Main Roads Act, 1924, and that the land hereunder described is hereby vested in The Commissioner for Main Roads.

Signed and sealed at Sydney, this 3rd day of December, 1980.

By His Excellency's Command,

H. F. JENSEN, Minister for Roads.

GOD SAVE THE QUEEN!

DESCRIPTION OF THE LAND REFERRED TO

Schedule

All that piece or parcel of land situate in the City of Wollongong, Parish of Wonona and County of Camden, being lot 15, Deposited Plan 613212, which is also numbered 6008.497.SS.0011 at the Department of Main Roads. The land is in the possession of the Commissioner for Main Roads.

(D.M.R. Papers F8/497.1281) (6182)

## MAIN ROADS ACT, 1924.—PROCLAMATION

ACQUISITION OF LAND AT ARNCLIFFE IN THE MUNICIPALITY OF ROCKDALE

(L.S.) A. R. CUTLER, *Governor.*

I, Sir ARTHUR ROBEN CUTLER, Governor of the State of New South Wales and its Dependencies, with the advice of the Executive Council and on the application of The Commissioner for Main Roads, made by virtue of the powers conferred in him by the Transport (Division of Functions) Act, 1932, do, in pursuance of the provisions of the Main Roads Act, 1924, by this my Proclamation, declare that so much of the land hereunder described as is Crown land is hereby appropriated and so much thereof as is private property is hereby resumed under the provisions of the Public Works Act, 1912, for the purposes of the Main Roads Act, 1924, and that the land hereunder described is hereby vested in The Commissioner for Main Roads.

Signed and sealed at Sydney, this 3rd day of December, 1980.

By His Excellency's Command,

H. F. JENSEN, Minister for Roads.

GOD SAVE THE QUEEN!

DESCRIPTION OF THE LAND REFERRED TO

Schedule

All that piece or parcel of land situate in the Municipality of Rockdale, Parish of St George and County of Cumberland, being lot 11, Deposited Plan 260755, which is also numbered 0001.386.SS.1349 at the Department of Main Roads. The land is said to be in the possession of The Council of the Municipality of Rockdale.

(D.M.R. Papers 1/386.11002) (6189)

## MAIN ROADS ACT, 1924.—PROCLAMATION

ACQUISITION OF LAND AT BREDDO IN THE SHIRE OF MONARO

(L.S.) A. R. CUTLER, *Governor.*

I, Sir ARTHUR ROBEN CUTLER, Governor of the State of New South Wales and its Dependencies, with the advice of the Executive Council and on the application of The Commissioner for Main Roads, made by virtue of the powers conferred in him by the Transport (Division of Functions) Act, 1932, do, in pursuance of the provisions of the Main Roads Act, 1924, by this my Proclamation, declare that so much of the land hereunder described as is Crown land is hereby appropriated and so much thereof as is private property is hereby resumed under the provisions of the Public Works Act, 1912, for the purposes of the Main Roads Act, 1924, and that the land hereunder described is hereby vested in The Commissioner for Main Roads, and I hereby further declare the land hereunder described to be a public road and, in accordance with a recommendation of The Commissioner for Main Roads made as aforesaid, the said land is hereby placed under the control of the Council of the Shire of Monaro.

Signed and sealed at Sydney, this 3rd day of December, 1980.

By His Excellency's Command,

H. F. JENSEN, Minister for Roads.

GOD SAVE THE QUEEN!

DESCRIPTION OF THE LAND REFERRED TO

Schedule

All that piece or parcel of land situate in the Shire of Monaro, Parish of Billilingra and County of Beresford, being lot 11, Deposited Plan 253919, which is also numbered 0019. 290.SS.0205 at the Department of Main Roads. The land is said to be in the possession of Reid & Stevens Pty Limited.

(D.M.R. Papers 19/290.1304) (5895)

## MAIN ROADS ACT, 1924.—PROCLAMATION

ACQUISITION OF LAND AT TWELVE MILE CREEK IN THE SHIRE OF PORT STEPHENS

(L.S.) A. R. CUTLER, *Governor.*

I, Sir ARTHUR ROBEN CUTLER, Governor of the State of New South Wales and its Dependencies, with the advice of the Executive Council and on the application of The Commissioner for Main Roads, made by virtue of the powers conferred in him by the Transport (Division of Functions) Act, 1932, do, in pursuance of the provisions of the Main Roads Act, 1924, by this my Proclamation, declare that so much of the land hereunder described as is Crown land is hereby

[287] Department of Lands,
Sydney, 21st January, 1884.

## RESERVES FROM SALE FOR WATER SUPPLY AND OTHER PUBLIC PURPOSES.

HIS Excellency the Governor with the advice of the Executive Council, directs it to be notified that in pursuance of the provisions of the 6th section of the Crown Lands Alienation Act of 1861, the land specified in the Schedule appended hereto shall be reserved from sale for water supply and other public purposes.

JAMES S. FARNELL.

---

### Clarence District.

No. 661 extension. County of Fitzroy, parish of Corindi, area about 350 acres. The Crown Lands within the following boundaries: Commencing at the south-east corner of reserve No. 661, notified 6th September, 1880, on the sea coast; and bounded thence by the south boundary of that reserve west to the north-east corner of portion No. 41; thence by the east boundary of that portion south to its south-east corner; thence by a line east to the coast; and thence by the coast of the South Pacific Ocean northerly, to the point of commencement.
[Ms. 83-25,217]

No. 1,067. County of Fitzroy, parish of Duckan Duckan, area about 480 acres. The Crown Lands within the following boundaries: Commencing at the north-west corner of portion No. 31; and bounded thence by the west boundary of that portion and its continuation, being a line south to all 120 chains; thence by a line west 40 chains; thence by a line north 120 chains; and thence by a line east 40 chains, to the point of commencement.
[Ms. 83-25,217]

No. 1,068. Counties of Fitzroy and Gresham, parishes of Hayleford and Duckan Duckan, area about 480 acres. The Crown Lands within the following boundaries: Commencing at the south-west corner of portion No. 61, on Purgatory Creek; and bounded thence by the south boundary of that portion east to its south-east corner; thence by the continuation of that south boundary east 10 chains; thence by a line south 40 chains; thence by a line west 120 chains; thence by a line north 40 chains; and thence by a line east, to the point of commencement.
[Ms. 83-25,217]

No. 1,069. County of Fitzroy, parish of Turville, area about 200 acres. The Crown Lands within the following boundaries: Commencing at the north-east corner of portion No. 6, on Cattle Creek; and bounded thence by the east boundary of that portion and its prolongation, being in all a line south 50 chains; thence by a line east 40 chains; thence by a line north to Cattle Creek; and thence by that creek upwards, to the point of commencement.
[Ms. 83-25,217]

No. 1,070. County of Fitzroy, parish of Turville, area about 140 acres. The Crown Lands within the following boundaries: Commencing at the south-east corner of portion No. 72, on Mattler's Creek; and bounded thence by the east boundary of that portion and its continuation north to the west prolongation of the south boundary of reserve No. 510; thence by a line and part of that south boundary east to a point north from the north-west corner of portion No. 99; thence by a line and the west boundary of that portion south to Mattler's Creek aforesaid; and thence by that creek upwards, to the point of commencement.
[Ms. 83-25,217]

No. 1,071. County of Fitzroy, parish of Ermington, area about 260 acres. The Crown Lands within the following boundaries: Commencing at the south-west corner of portion No. 8, on OBX or Bloxom's Creek; and bounded thence by the south boundary of that portion east to its south-east corner; thence by a line south 40 chains; thence by a line west to the western side of Endless Creek; thence by that creek southerly to the north-east corner of portion No. 5; thence by that boundary west to OBX or Bloxom's Creek aforesaid; and thence by that creek downwards, to the point of commencement.
[Ms. 83-25,217]

No. 1,077. County of Buller, parish of Beaury, area about 640 acres. The Crown Lands within the following boundaries: Commencing on the right bank of Beaury Creek, at the north-east corner of portion No. 16, parish of Beaury; and bounded thence by the north boundary of that portion and its prolongation west, in all 120 chains; thence by a line north 40 chains; thence by a line east 2 miles; thence by a line south 40 chains; and thence by a line west 40 chains, to the point of commencement.
[Ms. 83-25,216]

No. 1,078. County of Buller, parish of Gore, area about 640 acres. The Crown Lands within the following boundaries: Commencing on the left bank of Woodenbong Creek, at the south-west corner of portion No. 2; and bounded thence by the south boundary of that portion bearing east to its south-east corner; thence by a line south 40 chains; thence by a line west 2 miles; thence by a line north 40 chains; and thence by a line east, to the point of commencement.
[Ms. 83-25,216]

No. 1,079. County of Buller, parish of Lindsay, area about 320 acres. The Crown Lands within the following boundaries: Commencing at the south-west corner of portion No. 17, on Toolloom Creek; and bounded thence by the south boundaries of portion Nos. 17 and 18 and the prolongation thereof east, in all 1 mile; thence by a line south 40 chains; thence by a line west to Toolloom Creek aforesaid; and thence by that creek northerly, to the point of commencement.
[Ms. 83-25,216]

No. 1,080. County of Buller, parish of Evans, area about 420 acres. The Crown Lands within the following boundaries: Commencing at the north-west corner of portion No. 30, on the Clarence River; and bounded thence by a line partly forming the north boundaries of portions Nos. 30 and 31, bearing east to Bottle Creek; thence by Bottle Creek upwards to a point due west of the north-west corner of portion No. 32; thence by a line and the north boundary of that portion bearing east to its north-east corner; thence by a line north 10 chains; thence by a line west to the Clarence River; and thence by that river downwards, to the point of commencement.
[Ms. 83-25-216]

### Monaro District.

No. 989. County of Auckland, parish of Tantawangalo, Kameruka Run, area 152 acres. The Crown Lands within the following boundaries: Commencing at the south-west corner of portion No. 6a of 172½ acres; and bounded thence on part of the west by a line bearing south 1 degree 5 minutes west 20 chains 22 links; thence on part of the south by a line bearing south 89 degrees 14 minutes east 19 chains 32 links to the south-west corner of portion No. 120; thence on part of the east by the west boundary of that portion bearing north 23 minutes east 4 chains 42½ links to the south boundary of portion No. 195; thence on part of the north by part of the south boundary of that portion bearing north 89 degrees 23 minutes west 1 chain 89 links to its south-west corner; again on the east by the west boundary of the same portion bearing north 58 minutes east 6 chains 1½ links to its north-west corner; again on the south by the north boundary of portion No. 195 bearing south 89 degrees 20 minutes east 10 chains 80 links to the left bank of Tantawangalo Creek; thence by that creek upwards to the south-east corner of portion No. 120 aforesaid; again on the south by a line crossing the aforementioned creek, bearing south 89 degrees 20 minutes east 10 chains 17 links to the south-west corner of portion No. 272; again on the east by its west boundary bearing north 54 minutes east 2 chains 17½ links to its north-west corner; again on the south by the north boundaries of the same portion and of portion No. 272 bearing south 89 degrees 11 minutes east 3 chains 16 links, and south 89 degrees 6 minutes east 1 chain 58 links to the north-east corner of the latter portion; thence on the remainder of the west by the east boundary of that portion bearing south 53 minutes west 3 chains 18 links to its south-east corner; on the remainder of the south by a line bearing south 88 degrees 41 minutes east 41 chains 33 links; on the remainder of the east by a line bearing north 57 minutes east 20 chains 22 links to the south-east corner of portion No. 6a aforesaid; and thence on the remainder of the north by the south boundary of that portion bearing north 88 degrees 54½ minutes west 80 chains 24 links, to the point of commencement.

Plan catalogued M. 126-1824a, in the Surveyor-General's Office.

This is in lieu of part of reserve No. 14, cancelled this day.

Withdrawn from lease as No. 99, notified this day.
[Ms. 83-25,541]

No. 990. County of Auckland, parish of Tantawangalo, Kameruka Run, area 129 acres 2 roods. The Crown Lands within the following boundaries: Commencing on the left bank of Tantawangalo Creek, at a south-east corner of portion No. 31; and bounded thence on the north by a south boundary of that portion bearing north 88 degrees 56½ minutes west 27 chains 70 links to its west extremity; thence on the west by a line bearing south 1 degree 25 minutes west 40 chains 52 links to the north-west corner of portion No. 6a; thence on the south by part of the north boundary of that portion bearing south 88 degrees 52 minutes east 40 chains 10½ links to the right bank of Tantawangalo Creek aforesaid; thence by that bank of that creek downwards to a point bearing south 42 degrees 35 minutes east from the point of commencement; and thence on the north-east by a line bearing north 42 degrees 35 minutes west to that point; but exclusive of portions Nos. 143, 144.

Plan catalogued M. 126-1,834a in the Surveyor-General's Office.

The above is in lieu of part of reserve No. 14, cancelled this day.

Withdrawn from lease as No. 100, notified this day.
[Ms. 83-25,541]

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
12/4/2019 9:44AM

FOLIO: 111/730304

First Title(s): OLD SYSTEM VOL 6104 FOL 176
VOL 10879 FOL 77
Prior Title(s): VOL 9679 FOL 250 VOL 10879 FOL 77
VOL 14491 FOL 154

| Recorded | Number | Type of Instrument | C.T. Issue |
|---|---|---|---|
| 17/2/1986 | DP730304 | DEPOSITED PLAN | FOLIO CREATED EDITION 1 |
| 16/5/1986 | W331720 | TRANSFER | |
| 16/5/1986 | W331721 | MORTGAGE | EDITION 2 |
| 14/6/1989 | DP642280 | DEPOSITED PLAN | |
| 17/5/1990 | Y739065 | LEASE | |
| 17/5/1990 | Y745768 | MORTGAGE OF LEASE | |
| 17/5/1990 | Y784924 | SUB-LEASE | EDITION 3 |
| 2/10/1990 | Z242668 | DEPARTMENTAL DEALING | |
| 10/10/1990 | Z235136 | RESUMPTION APPLICATION | |
| 24/1/1991 | Z456491 | TRANSFER OF LEASE | |
| 24/1/1991 | Z456492 | MORTGAGE OF LEASE | |
| 24/9/1992 | E783701 | DISCHARGE OF MORTGAGE | |
| 24/9/1992 | E783702 | DISCHARGE OF MORTGAGE | |
| 24/9/1992 | E783703 | MORTGAGE | EDITION 4 |
| 10/1/1994 | I934059 | DISCHARGE OF MORTGAGE | |
| 10/1/1994 | I934060 | TRANSFER OF LEASE | |
| 10/1/1994 | I934061 | MORTGAGE OF LEASE | EDITION 5 |
| 26/8/1994 | U566693 | DEPARTMENTAL DEALING | |
| 16/2/1995 | O22449 | DISCHARGE OF MORTGAGE | |
| 16/2/1995 | O22450 | TRANSFER OF LEASE | |
| 16/2/1995 | O22451 | MORTGAGE OF LEASE | |
| 1/10/1998 | 5304745 | DISCHARGE OF MORTGAGE | EDITION 6 |
| 6/9/1999 | 6166190 | DISCHARGE OF MORTGAGE | |
| 6/9/1999 | 6166191 | TRANSFER OF LEASE | EDITION 7 |

END OF PAGE 1 - CONTINUED OVER

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
12/4/2019 9:44AM

FOLIO: 111/730304 PAGE 2

| Recorded | Number | Type of Instrument | C.T. Issue |
|---|---|---|---|
| 14/8/2001 | 7851084 | DEPARTMENTAL DEALING | |
| 14/8/2001 | 7841116 | MORTGAGE | EDITION 8 |
| 18/3/2004 | AA503822 | DISCHARGE OF MORTGAGE | EDITION 9 |
| 1/9/2004 | AA891504 | DEPARTMENTAL DEALING | |
| 12/12/2007 | AD632145 | REQUEST | EDITION 10 |
| 20/4/2010 | AF441304 | MORTGAGE | EDITION 11 |
| 9/9/2018 | AN695392 | DEPARTMENTAL DEALING | EDITION 12<br>CORD ISSUED |

*** END OF SEARCH ***

advlegs PRINTED ON 12/4/2019

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 111/730304

| SEARCH DATE | TIME | EDITION NO | DATE |
|---|---|---|---|
| 12/4/2019 | 9:46 AM | 12 | 9/9/2018 |

NO CERTIFICATE OF TITLE HAS ISSUED FOR THE CURRENT EDITION OF THIS FOLIO.
CONTROL OF THE RIGHT TO DEAL IS HELD BY NATIONAL AUSTRALIA BANK LIMITED.

LAND

LOT 111 IN DEPOSITED PLAN 730304
AT CORINDI
LOCAL GOVERNMENT AREA COFFS HARBOUR
PARISH OF CORINDI COUNTY OF FITZROY
TITLE DIAGRAM DP730304

FIRST SCHEDULE

TALITA PTY. LIMITED (T W331720)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
2 S929113 COVENANT AFFECTING THE PART OF THE LAND ABOVE DESCRIBED SHOWN SO BURDENED IN THE TITLE DIAGRAM
3 S939332 RESTRICTION(S) ON THE USE OF LAND AFFECTING THE PART OF THE LAND ABOVE DESCRIBED SHOWN SO BURDENED IN THE TITLE DIAGRAM
4 Z235136 EASEMENT FOR PIPELINE AFFECTING THE PART OF THE LAND ABOVE DESCRIBED SHOWN AS PROPOSED EASEMENT VARIABLE WIDTH FOR PIPELINE IN DP642280
5 AF441304 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED

NOTATIONS

U566693 NOTE: EASEMENT CREATED BY Z235136 VESTED IN THE COUNCIL OF ULMARRA GAZETTE 17.6.1994 FOL 3014

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

advlegs PRINTED ON 12/4/2019

# Appendix B
## Planning Certificate

# COFFS HARBOUR CITY COUNCIL

## Planning Certificate under Section 10.7 Environmental Planning and Assessment Act 1979

**Certificate No:** 1071988/19

**Date of Issue:** 14/05/2019

**Property No:** 2215495

**Applicant:** WHITEHEAD & ASSOCIATES
2/13 INDUSTRIAL DRIVE
NORTH BOAMBEE VALLEY NSW 2450

**Your Reference:** Job 2358

**Owner's Name:** TALITA PTY LTD

**Address of Property:** 7 TASMAN STREET
CORINDI BEACH NSW 2456

**Legal Description:** Lot 111 DP 730304

***Please Note:***

*The zoning information in this certificate is based on the lot and plan number referred to in this Certificate. If the lot and plan number is not the current description of the land then this Certificate will be incorrect. Persons relying on this Certificate should satisfy themselves by reference to the Title Deed that the land to which this Certificate relates is identical to the land the subject of the enquiry.*

*A reference in this certificate to any instrument, including Coffs Harbour City Council Local Environmental Plan 2013, is a reference to that instrument, as amended.*

***Section 10.7 (2) Matters***

*In accordance with section 10.7(2) of the Environmental Planning and Assessment Act 1979, at the date of this certificate the following information is provided in respect of the prescribe matters to be included in a planning certificate.*

**CONTENTS**

## 1. Name of relevant Planning Instrument

Where a local environmental plan, a deemed environmental planning instrument, or a draft local environmental plan that has been placed on exhibition pursuant to section 66(1)(b) of the Act restricts, or purports to restrict, the purposes for which development may be carried out on the land, state:

(i) the name of the instrument;

***Coffs Harbour Local Environmental Plan 2013***

(ii) the purposes for which development may be carried out in accordance with that instrument without development consent and with development consent; and

(iii) the purposes for which the carrying out of development is prohibited under that instrument.

***See reply to 2.(ii) and (iii) below***

## 2. Zoning and Land Uses under relevant Local Environmental Plan

Where the land is identified as being within a zone (within the meaning of an instrument referred to in paragraph (i)), state:

(i) the name of the instrument and of the zone;

***Coffs Harbour Local Environmental Plan 2013***
***RU2 RU2 Rural Landscape zone***

(ii) the purposes for which development may be carried out within that zone without development consent and with development consent. Refer to the Coffs Harbour Local Environmental Plan 2013 Part 2 - Permitted or prohibited development (Land Use Table).

(iii) the purposes for which the carrying out of development is prohibited within that zone: Refer to the Coffs Harbour Local Environmental Plan 2013 Part 2 – Permitted or prohibited development (Land Use Table).

**ZONE RU2 RURAL LANDSCAPE**

**1 Objectives of zone**

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.
- To minimise the fragmentation and alienation of resource lands.

**2 Permitted without consent**

Building identification signs; Extensive agriculture; Home-based child care; Home occupations; Intensive plant agriculture; Roadside stalls

**3 Permitted with consent**

Agriculture; Airstrips; Animal boarding or training establishments; Bed and breakfast accommodation; Boat launching ramps; Boat sheds; Business identification signs; Camping grounds; Cellar door premises; Cemeteries; Child care centres; Community facilities; Crematoria; Depots; Dual occupancies (attached); Dwelling houses; Eco-tourist facilities; Environmental facilities; Environmental protection works; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Helipads; High technology industries; Home businesses; Home industries; Industrial training facilities; Information and education facilities; Jetties; Kiosks; Landscaping material supplies; Moorings; Neighbourhood shops; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (outdoor); Respite day care centres; Restaurants or cafes; Roads; Rural industries; Rural supplies; Turf farming; Water recreation structures; Water supply systems

**4 Prohibited**

Any development not specified in item 2 or 3

(*Note:* The following clauses may also apply to the development of this land:
- Clause 5.9—Preservation of trees or vegetation
- Clause 7.1—Acid sulphate soils
- Clause 7.2—Earthworks
- Clause 7.7—Limited development on foreshore area)

## 3. Relevant State Environmental Planning Policies and Proposed State Environmental Planning Policies

Any matter relating to a State Environmental Planning Policy or a Regional Environmental Plan applying to the land or to a Draft State Environmental Policy or Draft Regional Environmental Plan applying to that land, which the Minister has, generally or in any particular case, notified the Council should be specified in the Certificate.

***See Schedule 1 attached***

## 4. Erection of Dwelling-House

Is the erection of a dwelling-house on the land subject to a development standard relating to the minimum area on which the dwelling-house may be erected?

***Yes – refer to Coffs Harbour Local Environmental Plan 2013 Lot Size Map***

***(a) For provisions relating to the erection of a dwelling house in Zone B5 refer to Clause 7.15 of the Coffs Harbour Local Environmental Plan 2013.***

***(b) For provisions relating to the erection of a dwelling house in Zone IN1 refer to Clause 7.16 of the Coffs Harbour Local Environmental Plan 2013.***

***Note:***

***(a) Compliance with the minimum area per allotment size does not guarantee that a Development Application for a dwelling, attached or detached dual occupancy or multi-unit housing will be approved. Council is required to assess the Development Application against applicable legislative requirements including, but not limited to the Coffs Harbour Local Environmental Plan 2013 and the Environmental Planning and Assessment Act 1979, as well as associated relevant Development Control Plans, Council policies and strategies. If unsure, Council recommends that you enquire with a relevant Planning professional about the relevant requirements for development proposals.***

***Where the area of the subject land is less than that shown on the Lot Size Map, to obtain information in relation to the permissibility of a dwelling it is recommended that a Permissibility of a dwelling enquiry, for which a fee is payable in accordance with Council's adopted Fees & Charges Schedule, be submitted to Council. Contact Council's Customer Services Section on (02) 6648 4000 for further information.***

## 5. Heritage Conservation Status

Is the property in a heritage conservation area or identified as a heritage property by Council or State Government? (and if so, what is the status, e.g. local environmental plan, Heritage Act etc)?

***No***

## 6. Demolition of Buildings

Does the demolition of any building on the land require development consent to be obtained?

***Yes, except under the circumstances outlined in Clause 2.7 of Coffs Harbour Local Environmental Plan 2013.***

## 7. Relevant Development Control Plans

Where a development control plan (DCP) that is expressed to apply to the land has been approved under clause 24(1), the name of the plan (whether or not the plan is in force).

***Coffs Harbour Development Control Plan 2015***

## 8. State Significant Development

Is the land subject to any application to carry out development, the subject of a notice by the Minister under section 76A(7)(b) of the Act declaring the development to be State Significant development?

***No***

***All applications for canal development or artificial waterways must be referred to the Minister for Planning for determination.***

***Note: For development or classes of development that are, in the opinion of the Minister, State Significant, also refer to State Environmental Planning Policy (State Significant Development) 2005.***

## 9. 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 land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.*

***Coffs Harbour City Council has no record of the subject land being subject to annual charges under Section 496B of the Local Government Act 1993***

## 10. Mine Subsidence

Has the land been proclaimed to be a Mine Subsidence District within the meaning of Section 15 of the Mine Subsidence Compensation Act 1961?

***No***

## 11. Road Widening and Road Realignment

Is the land affected by any road widening or road realignment under:

(i) Division 2 of Part 3 of the Roads Act 1993;

***No***

(ii) any environmental planning instrument; or

***No***

(iii) any resolution of the Council?

***No***

## 12. 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 landslip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

***There are no policies. However, refer to the information provided pursuant to section 10.7 subsection (5) Planning Certificate.***

## 12B. Contaminated Land

Matters arising under the Contaminated Land Management Act 1997:

(i) Is the land to which this certificate relates within land declared to be "significantly contaminated land" under Part 3 of Contaminated Land Management Act 1997 at the date this certificate is issued?

***No***

(ii) Is the land to which this certificate relates subject to a "management order" within the meaning of that Act at the date this certificate is issued?

***No***

(iii) Is the land to which this certificate relates the subject of an approved voluntary management proposal the subject of the Department of Environment and Conservation's agreement under section 17 of that Act and the proposal has not been fully carried out at the date this certificate is issued?

***No***

(iv) Is the land to which this certificate relates subject to an "ongoing maintenance order" within the meaning of the Act at the date this certificate is issued?

***No***

(v) Has a copy of a site audit statement, concerning the land to which this certificate relates, been provided to Council prior to the issuing of this certificate?

***No***

## 12C. Legal Public Access

Is the property affected by constraints to legal public access?

***No***

## 12D. Road Maintenance

Is this property's legal local access provided by a Crown Road or a Council Road that is not currently maintained by Council?

***No***

## 13. Critical Habitat

Has critical habitat been identified on the property?

***No***

## 14. Developer Contributions Plans

The following Developer Contributions Plans, in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, may apply:

***Coffs Harbour Open Space 2016***
***Coffs City Harbour Road Network 2016***
***Surf Rescue Facilities 2016***
***Coffs Harbour Administration Levy 2016***
***Hearnes Lake/Sandy Beach Release Area 2016***
***Korora Rural residential Release Area 2016***
***Moonee Release Area 2016***
***North Boambee Valley (East) Release Area 2016***
***North Bonville 2016***
***Park Beach Area 2016***
***South Coffs 2016***
***West Coffs Harbour 2016***
***West Woolgoolga 2016***
***Bonville large lot residential Release Area 2017***

## 15. Bush Fire Prone Land

Is the land to which this certificate relates, or any part of that land, bush fire prone land (as defined in the Environmental Planning and Assessment Act 1979), at the date this certificate is issued?

***Yes***

## 16. Subdivision Restriction

Has the Council by resolution adopted a policy to restrict development of the land for the purposes of subdivision?

***No***

## 17. Wildlife Refuges and Conservation Agreements

Has any part of the land:

- been proclaimed a Wildlife Refuge under s.68 of the National Parks and Wildlife Act 1974; or
- has a Conservation Agreement been registered under s.69B of the National Parks and Wildlife Act 1974?

***No***

**Note:** Further information on conservation options for landholders (including voluntary conservation agreements, wildlife refuges, Land for Wildlife and Conserve Wildlife) may be obtained from the Conservation Partnerships Unit, NSW Government Office of Environment and Heritage.

## 18. Koala Habitat

If the land contains koala habitat identified by Council's Koala Plan of Management 1999, state the classification of koala habitat (Primary, Secondary or Tertiary).

***Not Applicable***

## 19. Property Vegetation Plans

Has Council been notified by the relevant approval authority that the property is subject to a Property Vegetation Plan created under the Native Vegetation Act 2003?

***No***

## 20. Complying Development

The extent to which the land is land on which complying development may or may not 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*.

***Housing Code***

***No, complying development for the purposes of the Housing Code may not be carried out for the reason that the land is identified by one or more 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.***

***Note 1:***
***Council's records indicate that the land, the subject of this certificate, may have a 'land based exclusion' (constraint) that may affect all or part of the subject land. To ascertain the extent of the land based exclusion, on the subject land, refer to Council's website***

***www.coffsharbour.nsw.gov.au** and use the on-line mapping tools to identify the constraints on the subject land. Exempt and Complying development may still be able to be carried out on those parts of the subject land not impacted by the exclusion/constraint.*
***Note 2:***
***To be complying development specified for the Housing Code, the development must not be carried out on land within a heritage conservation area unless the development is a detached outbuilding, detached development (other than a detached studio) or swimming pool.***
***Note 3:***
***Where the land is affected by coastal processes, development on the lot will need to take into account the effects of coastal processes. Council requires residential development and commercial/tourism development to be free from the effects of coastal processes for the planning period.***

***Rural Housing Code***

***No, complying development for the purposes of the Rural Housing Code may not be carried out for the reason that the land is identified by one or more 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.***

***Note 1:***
***Council's records indicate that the land, the subject of this certificate, may have a 'land based exclusion' (constraint) that may affect all or part of the subject land. To ascertain the extent of the land based exclusion, on the subject land, refer to Council's website www.coffsharbour.nsw.gov.au and use the on-line mapping tools to identify the constraints on the subject land. Exempt and Complying development may still be able to be carried out on those parts of the subject land not impacted by the exclusion/constraint.***
***Note 2:***
***To be complying development specified for the Rural Housing Code, the development must not be carried out on land within a heritage conservation area unless the development is a detached outbuilding, detached development (other than a detached studio) or swimming pool.***
***Note 3:***
***Where the land is affected by coastal processes, development on the lot will need to take into account the effects of coastal processes. Council requires residential development and commercial/tourism development to be free from the effects of coastal processes for the planning period.***

***Housing Alterations Code and General Development Code***

***No, complying development for the purposes of the Housing Alterations Code and General Development Code may not be carried out for the reason that the land is identified by one or more 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.***

***Note 1:***
***Council's records indicate that the land, the subject of this certificate, may have a 'land based exclusion' (constraint) that may affect all or part of the subject land. To ascertain the extent of the land based exclusion, on the subject land, refer to Council's website www.coffsharbour.nsw.gov.au and use the on-line mapping tools to identify the constraints on the subject land. Exempt and Complying development may still be able to be carried out on those parts of the subject land not impacted by the exclusion/constraint.***

***Commercial and Industrial (New Buildings and Additions) Code***

***N/A, The Commercial and Industrial (New Buildings and Additions Code applies to development on land in Zones B1, B2, B3, B4, B5, B6, IN1, IN3, IN4, and SP3.***

## 21. Site Compatibility Certificates and Conditions for Affordable Housing

Is the land, to which this Certificate relates, subject to a site compatibility certificate and conditions for affordable rental housing?

***No***

***Coffs Harbour City Council has no record of a current site compatibility certificate (affordable rental housing) applying to the subject land.***

***For further information please contact the head office of the Department of Planning.***

## 22. Site Compatibility Certificates for Infrastructure

Is the land, to which this Certificate relates, subject to a site compatibility certificate and conditions for infrastructure?

***No***

***Coffs Harbour City Council has no record of a current site compatibility certificate (infrastructure) applying to the subject land.***

***For further information please contact the head office of the Department of Planning.***

## 23. Site Compatibility Certificates and Conditions for Seniors Housing

Is the land, to which this Certificate relates, subject to a site compatibility certificate and conditions for seniors housing?

***No***

***Coffs Harbour City Council has no record of a current site compatibility certificate (seniors housing) applying to the subject land.***

***For further information please contact the head office of the Department of Planning.***

## 24. Orders Under Trees (Disputes between Neighbours) Act 2006

Has Council been notified that the subject land is subject to an Order under the *Trees (Disputes between Neighbours) Act 2006*?

***No***

## 25. Flood Related Development Controls Information

(a) Is development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) subject to flood related development controls?

***Yes - Council considers the property to be affected by the Flood Planning Level (FPL). FPL means the level of a 1:100 ARI (average recurrence interval) flood event plus 0.5 metre freeboard.***

***Restrictions on development affected by the FPL are set out in Council's Development Control Plan that is available for inspection on Council's website.***

(b) Is development on the land or part of the land for any other purposes subject to flood related development controls?

***Yes - Council considers the property to be affected by the Flood Planning Level (FPL). FPL means the level of a 1:100 ARI (average recurrence interval) flood event plus 0.5 metre freeboard.***

***Restrictions on development affected by the FPL are set out in Council's Development Control Plan that is available for inspection on Council's website.***

## 26. Land Reserved for Acquisition

Does the prevailing environmental planning instrument or proposed environmental planning instrument (referred to in Clause 1 of this Certificate) make provision in relation to acquisition of the land by a public authority?

***No***

## 27. Directions under Part 3A

Is there a direction by the Minister in force under Section 75P(2)(c1) of the EPA Act, that a provision of an environmental planning instrument prohibits or restricts the carrying out of a project or a stage of a project on the land under Part 4 of the Act?

***No***

## SCHEDULE OF ADVICE

Council records indicate the property is served by an on-site sewage management facility.

A person who purchases (or otherwise acquires) land on which a sewage management facility is installed or constructed must obtain an approval to operate the facility within three months from the date on which the land is transferred or otherwise conveyed to the person.

It is recommended that intending purchasers make enquiries through Council in relation to the compliance and performance standards applicable under the Local Government Act and Regulations.

*Note: Sewage management facilities are regulated under Sections 68 and 68A of the Local Government Act and the Local Government (General) Regulation 2005.*

## SCHEDULE 1

This list is intended as a guide only. Please refer to http://www.legislation.nsw.gov.au or http://www.planning.nsw.gov.au for full details of each policy.

- State Environmental Planning Policy No. 21—Caravan Parks
- State Environmental Planning Policy No. 30—Intensive Agriculture
- State Environmental Planning Policy No. 33—Hazardous and Offensive Development
- State Environmental Planning Policy No. 36—Manufactured Home Estates
- State Environmental Planning Policy No. 44 – Koala Habitat Protection
- State Environmental Planning Policy No. 50—Canal Estate Development
- State Environmental Planning Policy No. 55—Remediation of Land
- State Environmental Planning Policy No. 62 - Sustainable Aquaculture
- State Environmental Planning Policy No. 64—Advertising and Signage
- State Environmental Planning Policy No. 65—Design Quality of Residential Apartment Development
- State Environmental Planning Policy (Affordable Rental Housing) 2009
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- State Environmental Planning Policy (Coastal Management) 2018
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
- State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
- State Environmental Planning Policy (Rural Lands) 2008
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

**North Coast Regional Plan 2036**

The primary purpose of the Regional Strategy is to ensure that adequate land is available and appropriately located to accommodate the projected housing and employment needs of the Region's population over the next 25 years. The Strategy sets the policy to govern where and how growth can occur. The Strategy represents an agreed NSW Government position on the future of the Mid North Coast. It is the pre-eminent planning document for the Mid North Coast and complements and informs other relevant State planning instruments. The Mid North Coast Regional Strategy applies to the period 2006-2031 and will be reviewed every five years.

The Environmental Planning and Assessment Amendment Act 1997 commenced operation on 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998.

The above information has been taken from the Council's records but Council cannot accept responsibility for any omission or inaccuracy.

For further information regarding this Certificate, please contact Council on 6648 4000.

Steve McGrath
General Manager

## ATTACHMENT 1

## Part 7 Additional local provisions

### 7.1 Acid sulphate soils

(1) The objective of this clause is to ensure that development does not disturb, expose or drain acid sulphate soils and cause environmental damage.

(2) Development consent is required for the carrying out of works described in the Table to this subclause on land shown on the Acid Sulphate Soils Map as being of the class specified for those works.

| Class of land | Works |
|---|---|
| 1 | Any works. |
| 2 | Works below the natural ground surface.<br>Works by which the watertable is likely to be lowered. |
| 3 | Works more than 1 metre below the natural ground surface.<br>Works by which the watertable is likely to be lowered more than 1 metre below the natural ground surface. |
| 4 | Works more than 2 metres below the natural ground surface.<br>Works by which the watertable is likely to be lowered more than 2 metres below the natural ground surface. |
| 5 | Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. |

(3) Development consent must not be granted under this clause for the carrying out of works unless an acid sulphate soils management plan has been prepared for the proposed works in accordance with the Acid Sulphate Soils Manual and has been provided to the consent authority.

(4) Despite subclause (2), development consent is not required under this clause for the carrying out of works if:

(a) a preliminary assessment of the proposed works prepared in accordance with the Acid Sulphate Soils Manual indicates that an acid sulphate soils management plan is not required for the works, and

(b) the preliminary assessment has been provided to the consent authority and the consent authority has confirmed the assessment by notice in writing to the person proposing to carry out the works.

(5) Despite subclause (2), development consent is not required under this clause for the carrying out of any of the following works by a public authority (including ancillary work such as excavation, construction of access ways or the supply of power):

(a) emergency work, being the repair or replacement of the works of the public authority, required to be carried out urgently because the works have been damaged, have ceased to function or pose a risk to the environment or to public health and safety,

(b) routine maintenance work, being the periodic inspection, cleaning, repair or replacement of the works of the public authority (other than work that involves the disturbance of more than 1 tonne of soil),

(c) minor work, being work that costs less than $20,000 (other than drainage work).

(6) Despite subclause (2), development consent is not required under this clause to carry out any works if:

(a) the works involve the disturbance of less than 1 tonne of soil, and

(b) the works are not likely to lower the watertable.

**7.3 Flood planning**

(1) The objectives of this clause are as follows:

(a) to minimise the flood risk to life and property associated with the use of land,

(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,

(c) to avoid significant adverse impacts on flood behaviour and the environment.

(2) This clause applies to land at or below the flood planning level.

(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:

(a) is compatible with the flood hazard of the land, and

(b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and

(c) incorporates appropriate measures to manage risk to life from flood, and

(d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and

(e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.

(4) A word or expression used in this clause has the same meaning as it has in the *Floodplain Development Manual* (ISBN 0 7347 5476 0), published in 2005 by the NSW Government, unless it is otherwise defined in this clause.

(5) In this clause:

***flood planning level*** means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.

**7.4 Terrestrial biodiversity**

(1) The objective of this clause is to maintain terrestrial biodiversity by:

(a) protecting native fauna and flora, and

(b) protecting the ecological processes necessary for their continued existence, and

(c) encouraging the conservation and recovery of native fauna and flora and their habitats.

(2) This clause applies to land identified as "Biodiversity" on the Terrestrial Biodiversity Map.

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:

(a) whether the development is likely to have:

(i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and

(ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and

(iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and

(iv) any adverse impact on the habitat elements providing connectivity on the land, and

(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:

(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or

(b) if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or

(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

**7.5 Drinking water catchments**

(1) The objective of this clause is to protect drinking water catchments by minimising the adverse impacts of development on the quality and quantity of water entering drinking water storages.

(2) This clause applies to land identified as "Drinking water catchment" on the Drinking Water Catchment Map.

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following:

(a) whether or not the development is likely to have any adverse impact on the quality and quantity of water entering the drinking water storage, having regard to the following:

(i) the distance between the development and any waterway that feeds into the drinking water storage,

(ii) the on-site use, storage and disposal of any chemicals on the land,

(iii) the treatment, storage and disposal of waste water and solid waste generated or used by the development,

(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:

(a) the development is designed, sited and will be managed to avoid any significant adverse impact on water quality and flows, or

(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or

(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

**7.6 Riparian land and watercourses**

(1) The objective of this clause is to protect and maintain the following:

(a) water quality within watercourses,

(b) the stability of the bed and banks of watercourses,

(c) aquatic and riparian habitats,

(d) ecological processes within watercourses and riparian areas.

(2) This clause applies to all of the following:

(a) land identified as "Watercourse" on the Riparian Lands and Watercourses Map,

(b) all land that is within 40 metres of the top of the bank of each watercourse on land identified as "Watercourse" on that map.

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:

(a) whether or not the development is likely to have any adverse impact on the following:

(i) the water quality and flows within the watercourse,

(ii) aquatic and riparian species, habitats and ecosystems of the watercourse,

(iii) the stability of the bed and banks of the watercourse,

(iv) the free passage of fish and other aquatic organisms within or along the watercourse,

(v) any future rehabilitation of the watercourse and riparian areas, and

(a) whether or not the development is likely to increase water extraction from the watercourse, and

(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:

(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or

(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or

(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

# COFFS HARBOUR CITY COUNCIL

## Annexure Sub Section (5) to Planning Certificate under Section 10.7
## Environmental Planning and Assessment Act 1979

**Certificate No:** 1071988/19

**Date of Issue:** 14/05/2019

**Property No:** 2215495

**Applicant:** WHITEHEAD & ASSOCIATES
2/13 INDUSTRIAL DRIVE
NORTH BOAMBEE VALLEY NSW 2450

**Your Reference:** Job 2358

**Owner's Name:** TALITA PTY LTD

**Address of Property:** 7 TASMAN STREET
CORINDI BEACH NSW 2456

**Legal Description:** Lot 111 DP 730304

***Please Note:***

*The zoning information in this certificate is based on the lot and plan number referred to in this Certificate. If the lot and plan number is not the current description of the land then this Certificate will be incorrect. Persons relying on this Certificate should satisfy themselves by reference to the Title Deed that the land to which this Certificate relates is identical to the land the subject of the enquiry.*

*A reference in this certificate to any instrument, including Coffs Harbour City Council Local Environmental Plan 2013, is a reference to that instrument, as amended.*

## INFORMATION PROVIDED PURSUANT TO SECTION 10.7 SUBSECTION (5) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The following additional information is furnished in respect of the land pursuant to subsection (5) of the *Environmental Planning and Assessment Act 1979* and is subject to subsection (6).

### A Coastal Processes

(i) Is the land affected by a policy adopted by Council that restricts the development of the land because of the likelihood of coastal processes?

**The Coffs Harbour City Council Climate Change Policy (POL-040) articulates Council's position and response to Climate Change. This policy applies to land within the Coffs Harbour Local Government Area.**

### B Native Vegetation

(i) Is the land affected by the preservation of trees or vegetation pursuant to *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* and Coffs Harbour Development Control Plan 2015?

***No***

### C Flooding or Tidal Inundation

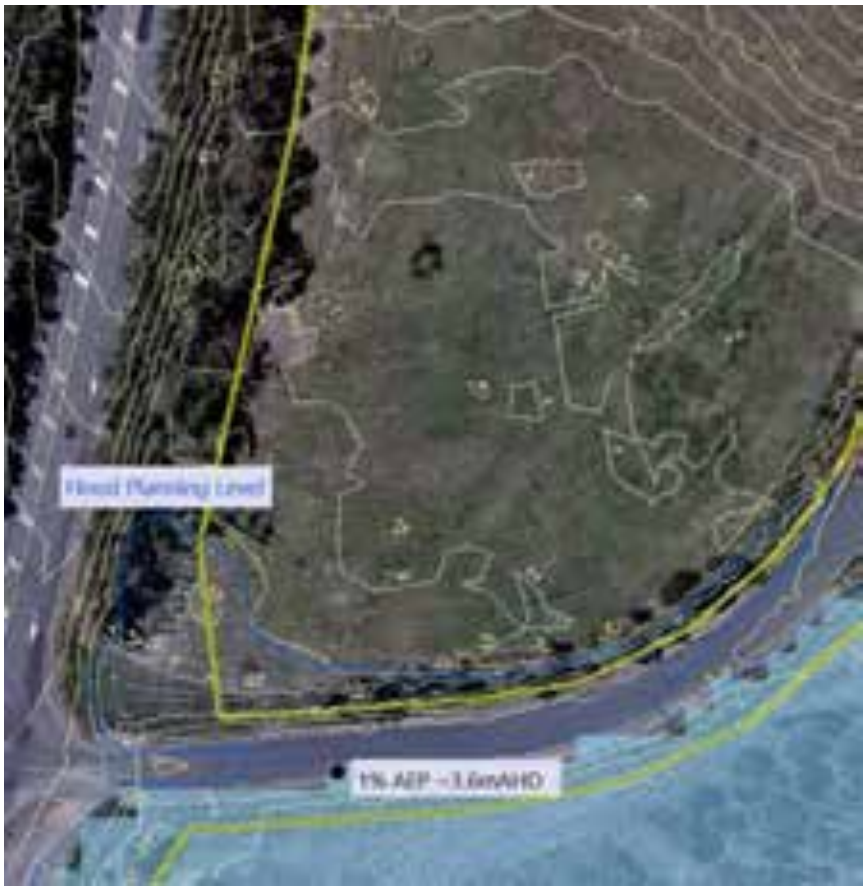
(i) Has the Council information that would indicate that the land is subject to the risk of flooding or tidal inundation?

***Yes, the land is affect by Council's Flood Policy.***

***Existing Level Contours shows that the property ranges from approximately 18mAHD at the location of Amble Inn, sloping downhill to the south of the property to a level of approximately 3-3.5mAHD***

***Existing flood modelling shows that the site located at the above address is not subjected to flooding up to 100 Year ARI extent. Therefore unable to give an appropriate flood level on this site.***

***However, the South-West corner (lowest point) of the property is subject to Flood Planning Controls where the ground elevation is less than 4.1mAHD. This is based on the 100 year ARI flood level of the adjoining land (across from Tasman Street) having a flood level of approximately 3.6mAHD. Below I have attached screenshots of the property to help clarify this.***


1% AEP +1.6mAHD

***The first picture has been taken from GeoCortex showing the 100 Year ARI Flood Extent + Flood Planning Level (Hatched blue); The second picture shows the South-Western corner of the property with existing level contours.***

## D Slip or Subsidence

(i) Has the Council information that would indicate that the land is subject to slip or subsidence?

***No***

## E Development Consents

(i) Has any development consent with respect to the land been granted within the previous two years?

***No***

## F Aircraft Noise

(i) Has the Council information which would indicate the land is, or likely to be, adversely impacted by noise from aircraft using Coffs Harbour Airport?

***No***

## G Raw Water

(i) Has the Council a Raw Water Policy that relates to the land?

***No***

## H Significant Trees

(i) Is the land affected by the Coffs Harbour City Council's Significant Tree Register provisions of Coffs Harbour Development Control Plan 2015 and the Significant Tree Policy?

***No***

## I Pacific Highway

(i) Is the land affected by the proposed Pacific Highway Upgrades?

***No***

## J General Matters

**There is nothing relevant in terms of the advices Council provides here.**

Note 1:

*Advice provided in in accordance with this Planning Certificate issued pursuant to Section 10.7 Subsection (5) is supplied in good faith. Council accepts no liability for the validity of the advice given (see Section 10.7 Subsection (6) of the Environmental Planning and Assessment Act 1979).*

Note 2:

*Further information in relation to Council's planning controls can be viewed on Council's Website: www.coffsharbour.nsw.gov.au*

The above information has been taken from the Council's records but Council cannot accept responsibility for any omission or inaccuracy.

For further information regarding this Certificate, please contact Council on 6648 4000.

Steve McGrath
General Manager

# Appendix C
Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

**Date: 11 Apr 2019 17:07:41**

**Reference: LS005750 EP**

**Address: 7 Tasman Street, Corindi Beach, NSW 2456**

# Table of Contents



# Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

| LC Code | Location Confidence |
|---|---|
| Premise match | Georeferenced to the site location / premise or part of site |
| General area or suburb match | Georeferenced with the confidence of the general/approximate area |
| Road match | Georeferenced to the road or rail |
| Road intersection | Georeferenced to the road intersection |
| Feature is a buffered point | Feature is a buffered point |
| Land adjacent to geocoded site | Land adjacent to Georeferenced Site |
| Network of features | Georeferenced to a network of features |

# Dataset Listing

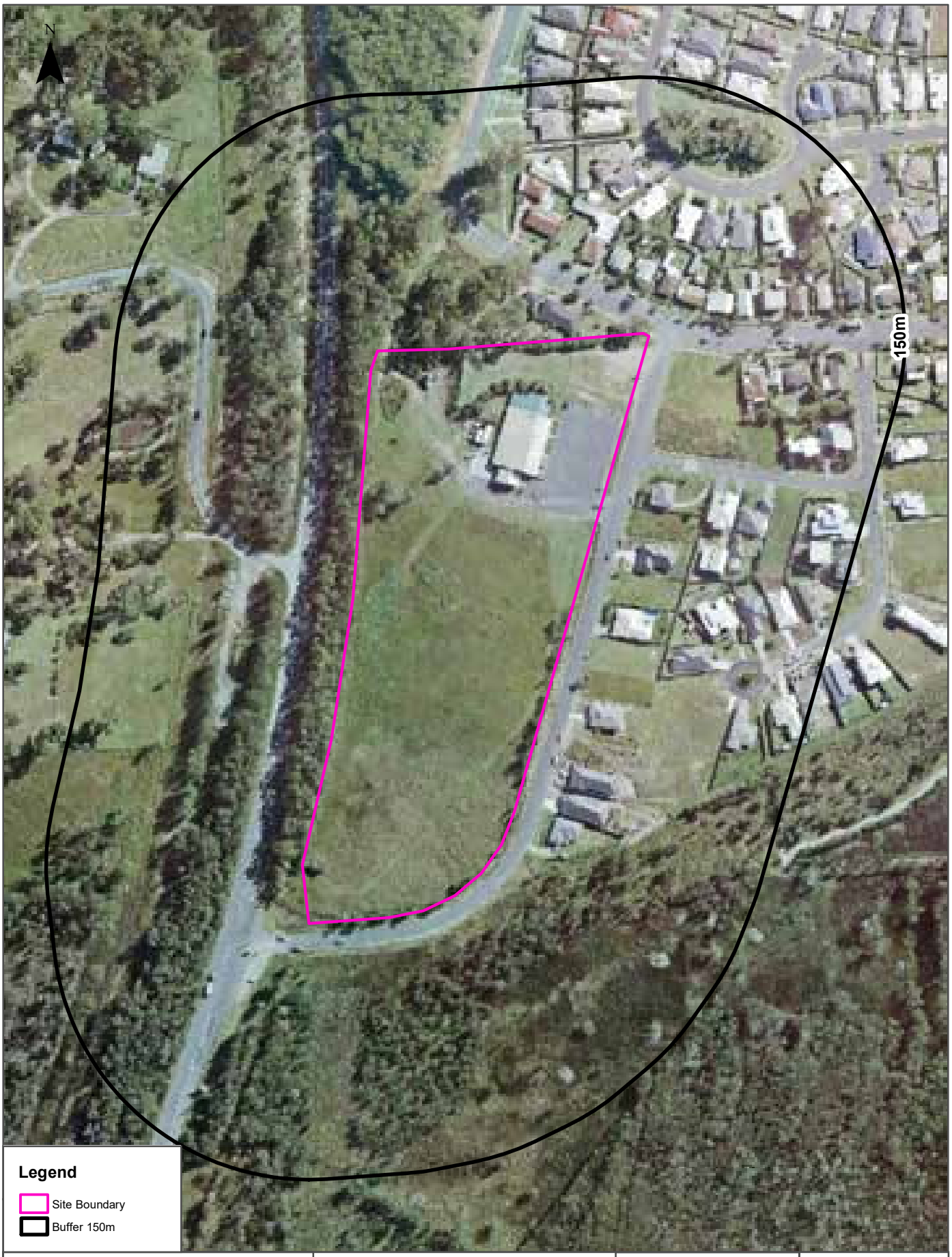
Datasets contained within this report, detailing their source and data currency:

| Dataset Name | Custodian | Supply Date | Currency Date | Update Frequency | Dataset Buffer (m) | No. Features Onsite | No. Features within 100m | No. Features within Buffer |
|---|---|---|---|---|---|---|---|---|
| Cadastre Boundaries | NSW Department of Finance, Services & Innovation | 11/04/2019 | 11/04/2019 | Daily | - | - | - | - |
| Topographic Data | NSW Department of Finance, Services & Innovation | 11/01/2019 | 11/01/2019 | As required | - | - | - | - |
| List of NSW contaminated sites notified to EPA | Environment Protection Authority | 10/04/2019 | 20/03/2019 | Monthly | 1000 | 0 | 0 | 0 |
| Contaminated Land Records of Notice | Environment Protection Authority | 10/04/2019 | 10/04/2019 | Monthly | 1000 | 0 | 0 | 0 |
| Former Gasworks | Environment Protection Authority | 03/04/2019 | 11/10/2017 | Monthly | 1000 | 0 | 0 | 0 |
| National Waste Management Facilities Database | Geoscience Australia | 05/02/2019 | 07/03/2017 | Quarterly | 1000 | 0 | 0 | 0 |
| EPA PFAS Investigation Program | Environment Protection Authority | 03/04/2019 | 03/04/2019 | Monthly | 2000 | 0 | 0 | 0 |
| Defence PFAS Investigation & Management Program | Department of Defence | 29/03/2019 | 29/03/2019 | Monthly | 2000 | 0 | 0 | 0 |
| Airservices Australia National PFAS Management Program | Airservices Australia | 29/03/2019 | 29/03/2019 | Monthly | 2000 | 0 | 0 | 0 |
| Defence 3 Year Regional Contamination Investigation Program | Department of Defence | 29/03/2019 | 29/03/2019 | Monthly | 2000 | 0 | 0 | 0 |
| EPA Other Sites with Contamination Issues | Environment Protection Authority | 13/12/2018 | 13/12/2018 | Annually | 1000 | 0 | 0 | 0 |
| Licensed Activities under the POEO Act 1997 | Environment Protection Authority | 26/03/2019 | 26/03/2019 | Monthly | 1000 | 0 | 2 | 2 |
| Delicensed POEO Activities still regulated by the EPA | Environment Protection Authority | 26/03/2019 | 26/03/2019 | Monthly | 1000 | 0 | 0 | 1 |
| Former POEO Licensed Activities now revoked or surrendered | Environment Protection Authority | 26/03/2019 | 26/03/2019 | Monthly | 1000 | 0 | 1 | 4 |
| UPSS Environmentally Sensitive Zones | Environment Protection Authority | 14/04/2015 | 12/01/2010 | As required | 1000 | 1 | 1 | 1 |
| UBD Business Directory 1982 (Premise & Intersection Matches) | Hardie Grant | | | Not required | 150 | 0 | 0 | 0 |
| UBD Business Directory 1982 (Road & Area Matches) | Hardie Grant | | | Not required | 150 | - | 1 | 1 |
| UBD Business Directory 1970 (Premise & Intersection Matches) | Hardie Grant | | | Not required | 150 | 0 | 0 | 0 |
| UBD Business Directory 1970 (Road & Area Matches) | Hardie Grant | | | Not required | 150 | - | 3 | 3 |
| UBD Business Directory 1961 (Premise & Intersection Matches) | Hardie Grant | | | Not required | 150 | 0 | 0 | 0 |
| UBD Business Directory 1961 (Road & Area Matches) | Hardie Grant | | | Not required | 150 | - | 0 | 0 |
| UBD Business Directory 1950 (Premise & Intersection Matches) | Hardie Grant | | | Not required | 150 | 0 | 0 | 0 |
| UBD Business Directory 1950 (Road & Area Matches) | Hardie Grant | | | Not required | 150 | - | 0 | 0 |
| UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches) | Hardie Grant | | | Not required | 500 | 0 | 0 | 0 |
| UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches) | Hardie Grant | | | Not required | 500 | - | 0 | 0 |
| Cattle dips of the Northern Rivers region | NSW Dept. of Primary Industries | 29/11/2018 | 29/11/2018 | Annually | 1000 | 0 | 0 | 0 |
| Points of Interest | NSW Department of Finance, Services & Innovation | 11/01/2019 | 11/01/2019 | Quarterly | 1000 | 0 | 1 | 15 |
| Tanks (Areas) | NSW Department of Finance, Services & Innovation | 11/01/2019 | 11/01/2019 | Quarterly | 1000 | 0 | 0 | 0 |
| Tanks (Points) | NSW Department of Finance, Services & Innovation | 11/01/2019 | 11/01/2019 | Quarterly | 1000 | 0 | 0 | 1 |

| Dataset Name | Custodian | Supply Date | Currency Date | Update Frequency | Dataset Buffer (m) | No. Features Onsite | No. Features within 100m | No. Features within Buffer |
|---|---|---|---|---|---|---|---|---|
| Major Easements | NSW Department of Finance, Services & Innovation | 11/01/2019 | 11/01/2019 | Quarterly | 1000 | 0 | 0 | 0 |
| State Forest | NSW Department of Finance, Services & Innovation | 18/01/2018 | 18/01/2018 | As required | 1000 | 0 | 0 | 2 |
| NSW National Parks and Wildlife Service Reserves | NSW Office of Environment & Heritage | 16/01/2019 | 14/11/2018 | Annually | 1000 | 0 | 0 | 1 |
| Hydrogeology Map of Australia | Commonwealth of Australia (Geoscience Australia) | 08/10/2014 | 17/03/2000 | As required | 1000 | 1 | 1 | 1 |
| Botany Groundwater Management Zones | NSW Department of Primary Industries | 15/03/2018 | 01/10/2005 | As required | 1000 | 0 | 0 | 0 |
| Groundwater Boreholes | NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology) | 24/07/2018 | 23/07/2018 | Annually | 2000 | 0 | 1 | 17 |
| Geological Units 1:250,000 | NSW Dept. of Industry, Resources & Energy | 20/08/2014 | | None planned | 1000 | 1 | - | 2 |
| Geological Structures 1:250,000 | NSW Dept. of Industry, Resources & Energy | 20/08/2014 | | None planned | 1000 | 0 | - | 0 |
| Naturally Occurring Asbestos Potential | NSW Dept. of Industry, Resources & Energy | 04/12/2015 | 24/09/2015 | Unknown | 1000 | 0 | 0 | 0 |
| Soil Landscapes | NSW Office of Environment & Heritage | 12/08/2014 | | None planned | 1000 | 3 | - | 7 |
| Atlas of Australian Soils | CSIRO | 19/05/2017 | 17/02/2011 | As required | 1000 | 1 | 1 | 2 |
| Environmental Planning Instrument Acid Sulfate Soils | NSW Department of Planning and Environment | 09/04/2019 | 28/02/2019 | Weekly | 500 | 2 | - | - |
| Atlas of Australian Acid Sulfate Soils | CSIRO | 19/01/2017 | 21/02/2013 | As required | 1000 | 2 | 2 | 3 |
| Dryland Salinity - National Assessment | National Land and Water Resources Audit | 18/07/2014 | 12/05/2013 | None planned | 1000 | 0 | 0 | 0 |
| Dryland Salinity Potential of Western Sydney | NSW Office of Environment & Heritage | 12/05/2017 | 01/01/2002 | None planned | 1000 | - | - | - |
| Mining Subsidence Districts | NSW Department of Finance, Services & Innovation | 13/07/2017 | 01/07/2017 | As required | 1000 | 0 | 0 | 0 |
| SEPP State Significant Precincts | NSW Department of Planning and Environment | 09/04/2019 | 04/07/2104 | Weekly | 1000 | 0 | 0 | 0 |
| Environmental Planning Instrument Land Zoning | NSW Department of Planning and Environment | 09/04/2019 | 29/03/2019 | Weekly | 1000 | 1 | 9 | 41 |
| Commonwealth Heritage List | Australian Government Department of the Environment and Energy - Heritage Branch | 16/01/2019 | 31/07/2018 | Unknown | 1000 | 0 | 0 | 0 |
| National Heritage List | Australian Government Department of the Environment and Energy - Heritage Branch | 16/01/2019 | 28/09/2018 | Unknown | 1000 | 0 | 0 | 0 |
| State Heritage Register - Curtilages | NSW Office of Environment & Heritage | 16/01/2019 | 09/11/2018 | Quarterly | 1000 | 0 | 0 | 0 |
| Environmental Planning Instrument Heritage | NSW Department of Planning and Environment | 09/04/2019 | 08/03/2019 | Weekly | 1000 | 0 | 0 | 1 |
| Bush Fire Prone Land | NSW Rural Fire Service | 26/02/2019 | 01/11/2018 | Quarterly | 1000 | 3 | 3 | 3 |
| Vegetation of Coffs Harbour LGA | NSW Office of Environment & Heritage | 06/01/2016 | 31/12/2012 | None planned | 1000 | 2 | 5 | 17 |
| Ramsar Wetlands of Australia | Commonwealth of Australia Department of the Environment | 08/10/2014 | 24/06/2011 | As required | 1000 | 0 | 0 | 0 |
| Groundwater Dependent Ecosystems | Bureau of Meteorology | 14/08/2017 | 15/05/2017 | Unknown | 1000 | 2 | 3 | 5 |
| Inflow Dependent Ecosystems Likelihood | Bureau of Meteorology | 14/08/2017 | 15/05/2017 | Unknown | 1000 | 3 | 6 | 10 |
| NSW BioNet Species Sightings | NSW Office of Environment & Heritage | 11/04/2019 | 11/04/2019 | Weekly | 10000 | - | - | - |

# Aerial Imagery 2015

**7 Tasman Street, Corindi Beach, NSW 2456**




| | | | |
|---|---|---|---|
| Scale: 0 25 50 100 Metres | Data Sources: Aerial Imagery © Department Finance, Services & Innovation | Coordinate System: GDA 1994 MGA Zone 56 | Date: 11 April 2019 |

# Contaminated Land & Waste Management Facilities

**7 Tasman Street, Corindi Beach, NSW 2456**

## List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

| Map Id | Site | Address | Suburb | Activity | Management Class | Status | Location Confidence | Dist (m) | Direction |
|---|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | | |

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

| EPA site management class | Explanation |
|---|---|
| Contamination being managed via the planning process (EP&A Act) | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment. |
| Contamination currently regulated under CLM Act | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices. |
| Contamination currently regulated under POEO Act | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register. |
| Contamination formerly regulated under the CLM Act | The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act. |
| Contamination formerly regulated under the POEO Act | The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act). |
| Contamination was addressed via the planning process (EP&A Act) | The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act). |
| Ongoing maintenance required to manage residual contamination (CLM Act) | The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices. |
| Regulation being finalised | The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised. |
| Regulation under the CLM Act not required | The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required. |
| Under assessment | The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order. |

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

# Contaminated Land & Waste Management Facilities

**7 Tasman Street, Corindi Beach, NSW 2456**

## Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

| Map Id | Name | Address | Suburb | Notices | Area No | Location Confidence | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | |

Contaminated Land Records of Notice Data Source: Environment Protection Authority


## Former Gasworks

Former Gasworks within the dataset buffer:

| Map Id | Location | Council | Further Info | Location Confidence | Distance | Direction |
|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | |

Former Gasworks Data Source: Environment Protection Authority


## National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

| Site Id | Owner | Name | Address | Suburb | Class | Landfill | Reprocess | Transfer | Comments | Loc Conf | Dist (m) | Direction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | | | | | |

Waste Management Facilities Data Source: Geoscience Australia

# PFAS Investigation Sites

**7 Tasman Street, Corindi Beach, NSW 2456**

## EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

| Id | Site | Address | Loc Conf | Dist | Dir |
|---|---|---|---|---|---|
| N/A | No records in buffer | | | | |

EPA PFAS Investigation Program: Environment Protection Authority


## Defence PFAS Investigation & Management Program

Sites being investigated or managed by the Department of Defence for PFAS contamination within the dataset buffer:

| Property ID | Base Name | Address | Loc Conf | Dist | Dir |
|---|---|---|---|---|---|
| N/A | No records in buffer | | | | |

Defence PFAS Investigation & Management Program Data Custodian: Department of Defence, Australian Government

## Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

| Map ID | Site Name | Impacts | Loc Conf | Dist | Dir |
|---|---|---|---|---|---|
| N/A | No records in buffer | | | | |

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

# Defence Sites

**7 Tasman Street, Corindi Beach, NSW 2456**

## Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

| Property ID | Base Name | Address | Known Contamination | Loc Conf | Dist | Dir |
|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | |

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

# EPA Other Sites with Contamination Issues

**7 Tasman Street, Corindi Beach, NSW 2456**

## EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

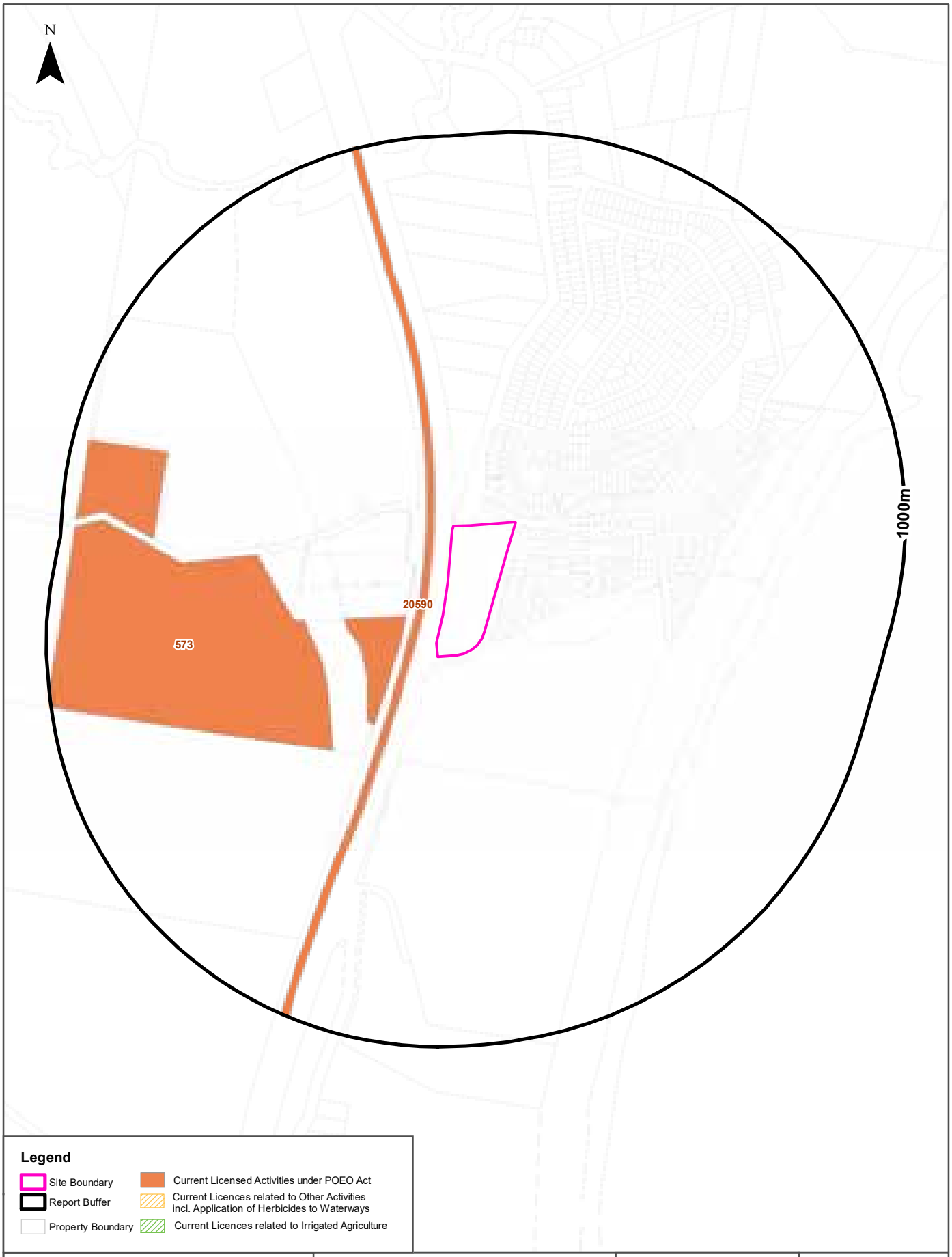
- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

Sites within the dataset buffer:

| Site Id | Site Name | Site Address | Dataset | Comments | Location Confidence | Distance | Direction |
|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | |

# Current EPA Licensed Activities

**7 Tasman Street, Corindi Beach, NSW 2456**



# EPA Activities

**7 Tasman Street, Corindi Beach, NSW 2456**

## Licensed Activities under the POEO Act 1997

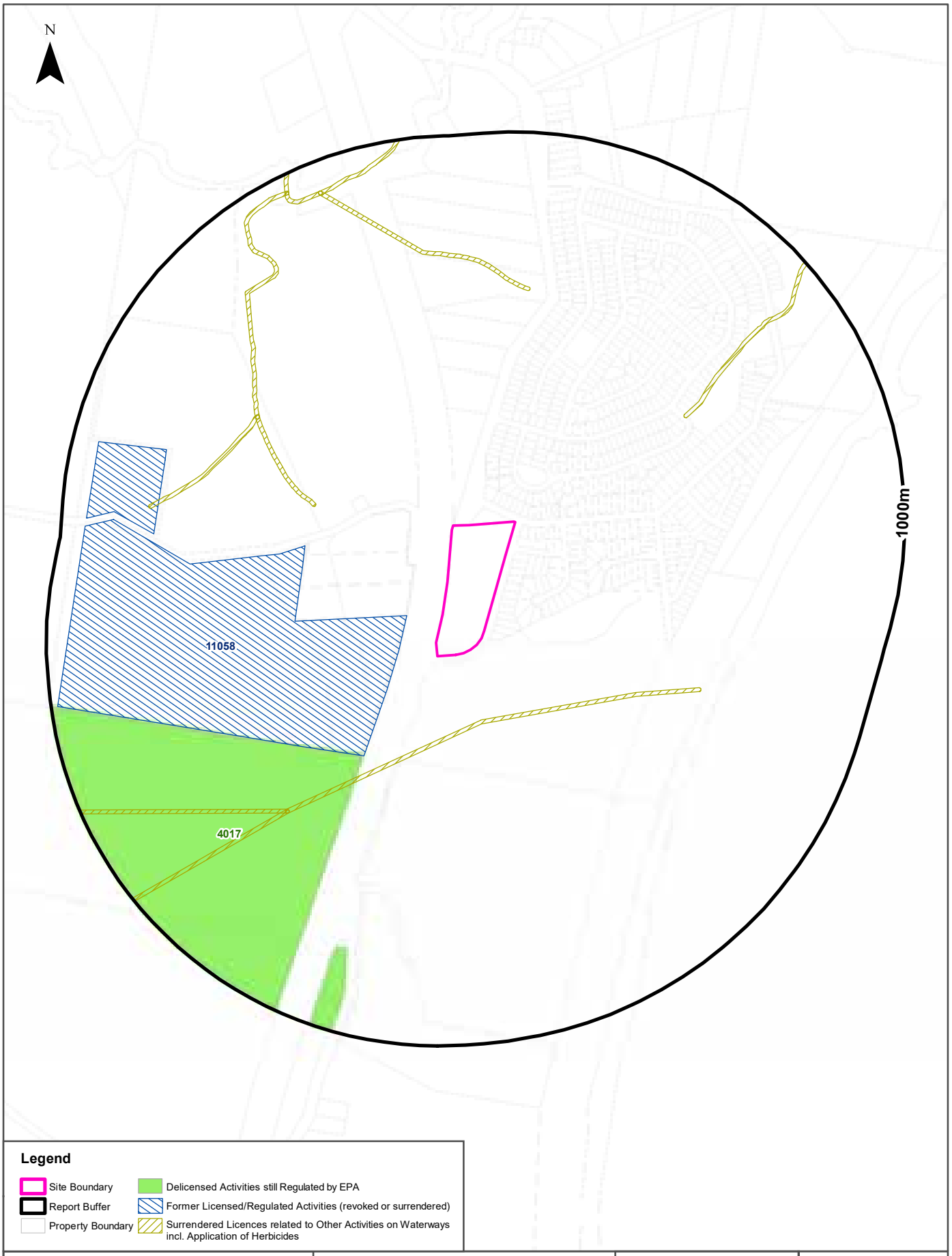
Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

| EPL | Organisation | Name | Address | Suburb | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 20590 | OHL CONSTRUCTION PACIFIC PTY LTD | | Pacific Highway, WOOLGOOLGA, NSW 2456 | | Crushing, grinding or separating, Land-based extractive activity, Road construction | Road Match | 46m | West |
| 573 | COFFS HARBOUR CITY COUNCIL | including Corindi Sewage Treatment Plant | CHRISTMAS BELLS ROAD, COFFS HARBOUR, NSW 2450 | CORINDI BEACH | Sewage treatment processing by small plants | Premise Match | 91m | West |

POEO Licence Data Source: Environment Protection Authority

# Delicensed & Former Licensed EPA Activities

**7 Tasman Street, Corindi Beach, NSW 2456**



# EPA Activities

**7 Tasman Street, Corindi Beach, NSW 2456**

## Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

| Licence No | Organisation | Name | Address | Suburb | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 4017 | FORESTRY CORPORATION OF NEW SOUTH WALES | | ITHIN THE U.N.E.R. SHOWN ON MAP 1 TO THE NSW U.N.E.R. FOREST AGREEMENT GRANTED ON THE 5 MARCH 1999., COFFS HARBOUR, NSW 2450 | | Logging operations | Network of Features | 318m | South West |

Delicensed Activities Data Source: Environment Protection Authority


## Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

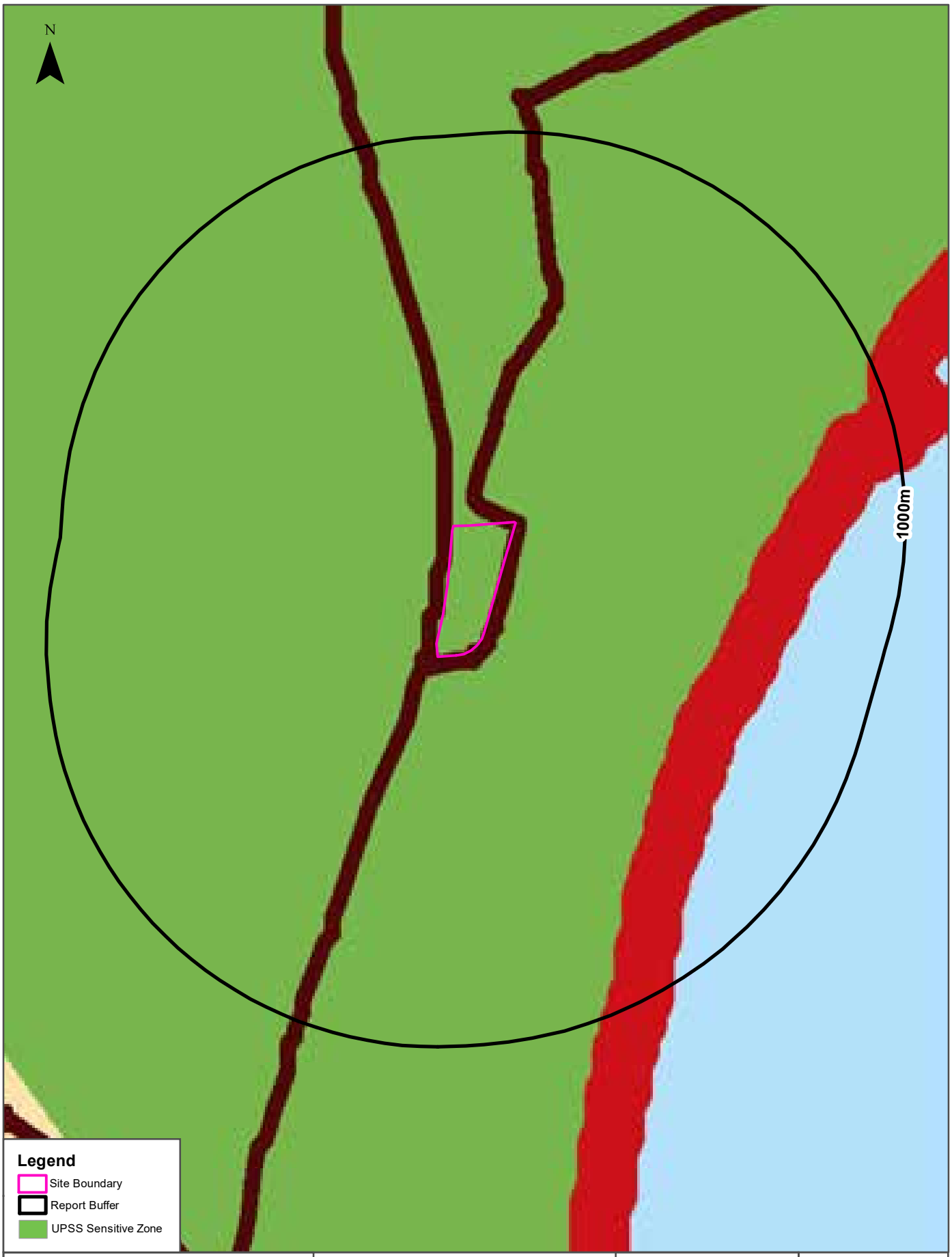
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

| Licence No | Organisation | Location | Status | Issued Date | Activity | Loc Conf | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| 11058 | COFFS HARBOUR CITY COUNCIL | KANGAROO TRAIL ROAD, CORINDI BEACH, NSW 2456 | Surrendered | 12/10/2000 | Sewage treatment processing by small plants | Premise Match | 89m | West |
| 4653 | LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD | WATERWAYS THROUGHOUT NSW | Surrendered | | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 177m | - |
| 4838 | Robert Orchard | Various Waterways throughout New South Wales - SYDNEY NSW 2000 | Surrendered | | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 177m | - |
| 6630 | SYDNEY WEED & PEST MANAGEMENT PTY LTD | WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148 | Surrendered | | Other Activities / Non Scheduled Activity - Application of Herbicides | Network of Features | 177m | - |

Former Licensed Activities Data Source: Environment Protection Authority

# UPSS Sensitive Zones

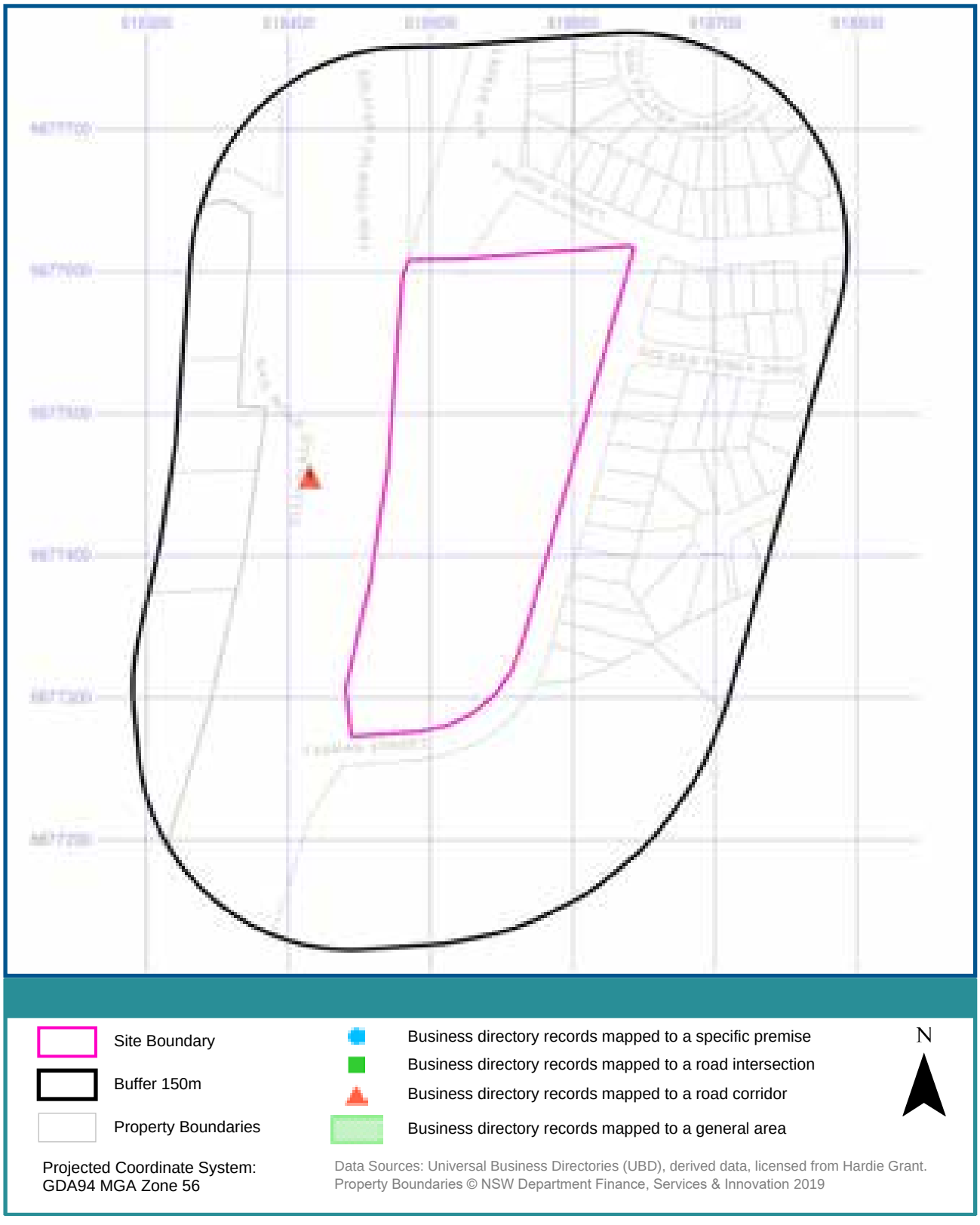
**7 Tasman Street, Corindi Beach, NSW 2456**



# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1982 Business Directory Records



# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1982 Business Directory Records
## Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## 1982 Business Directory Records
## Road or Area Matches

Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

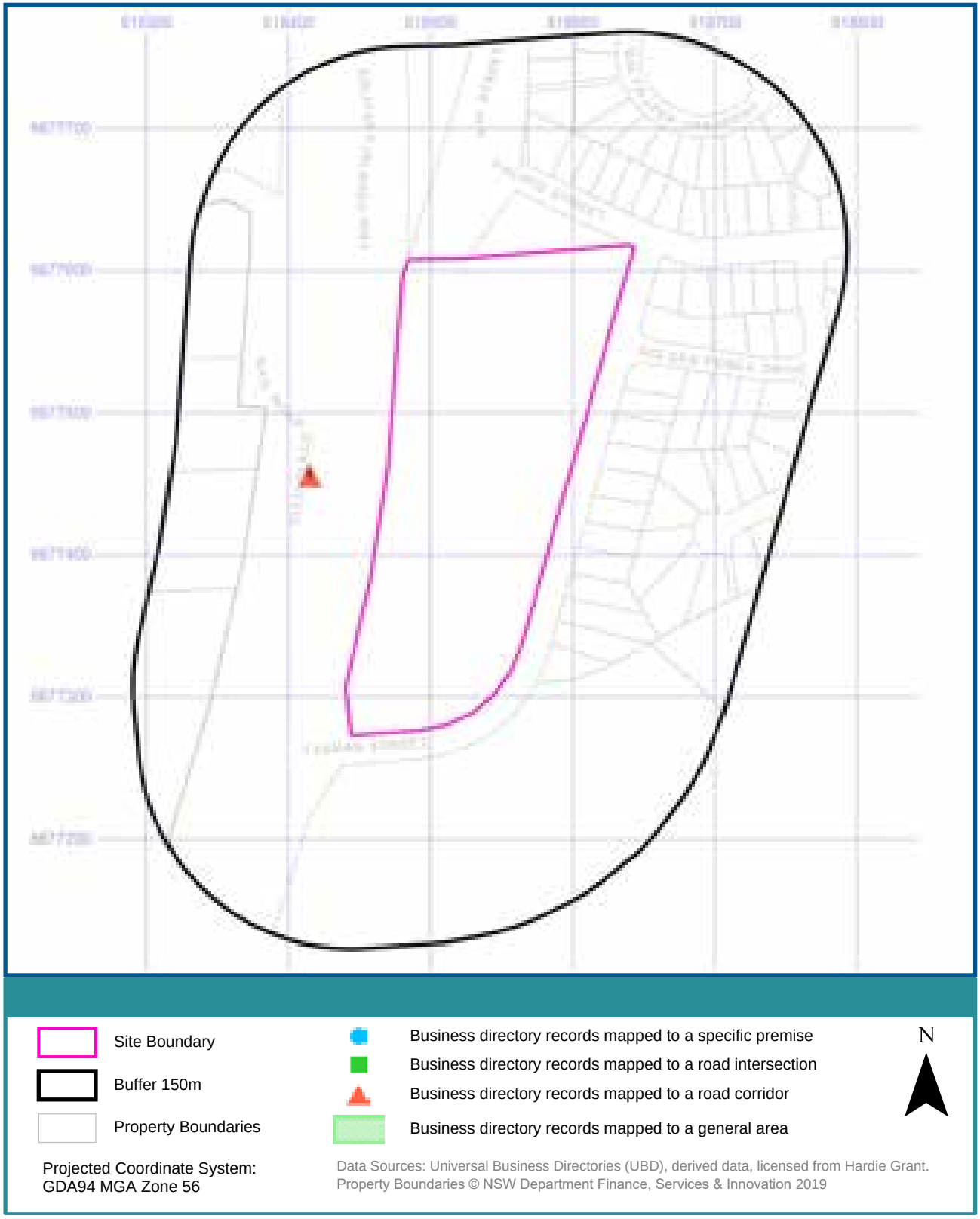
| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|
| 1 | Not Listed | Arrawarra Caravan Park, Pacific Highway, Arrawarra. 248., Woolgoolga | 98396 | Road Match | 0m |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1970 Business Directory Records



# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1970 Business Directory Records
## Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## 1970 Business Directory Records
## Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|
| 1 | HOLIDAY ACCOMMODATION | "Arrawarra" Caravan Park, Pacific Hghwy, Arrawarra, Woolgoolga | 616412 | Road Match | 0m |
| | CAMPING GROUNDS & CARAVAN PARKS | "Arrawarra" Caravan Park, Pacific Hghwy., Arrawarra, Woolgoolga | 616365 | Road Match | 0m |
| | MIXED BUSINESSES | "Arrawarra" Caravan Park, Pacific Hghwy., Arrawarra, Woolgoolga | 616443 | Road Match | 0m |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1961 Business Directory Records
## Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## 1961 Business Directory Records
## Road or Area Matches

Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|
| | No records in buffer | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## 1950 Business Directory Records
## Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## 1950 Business Directory Records
## Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

| Map Id | Business Activity | Premise | Ref No. | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|
| | No records in buffer | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# Historical Business Directories

**7 Tasman Street, Corindi Beach, NSW 2456**

## Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Property Boundary or Road Intersection | Direction |
|---|---|---|---|---|---|---|---|
| | No records in buffer | | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

## Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

| Map Id | Business Activity | Premise | Ref No. | Year | Location Confidence | Distance to Road Corridor or Area |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

# Cattle Dips

**7 Tasman Street, Corindi Beach, NSW 2456**

## Cattle Dips of the Northern Rivers Region

Cattle dip sites within the dataset buffer:

| Dip Name | Road | Town | Dip Status | Licence / Lease Status | Licence / Lease Expiry Date | Distance (m) | Direction |
|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | |

Cattle dip site data provided by the NSW Department of Primary Industries.

# Aerial Imagery 2011

**7 Tasman Street, Corindi Beach, NSW 2456**


| Scale: | Data Source Aerial Imagery: © 2019 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc. | Coordinate System: GDA 1994 MGA Zone 56 | Date: 12 April 2019 |
|---|---|---|---|

0 25 50 100
Meters

# Aerial Imagery 2002

**7 Tasman Street, Corindi Beach, NSW 2456**

# Aerial Imagery 1994

**7 Tasman Street, Corindi Beach, NSW 2456**

# Aerial Imagery 1984

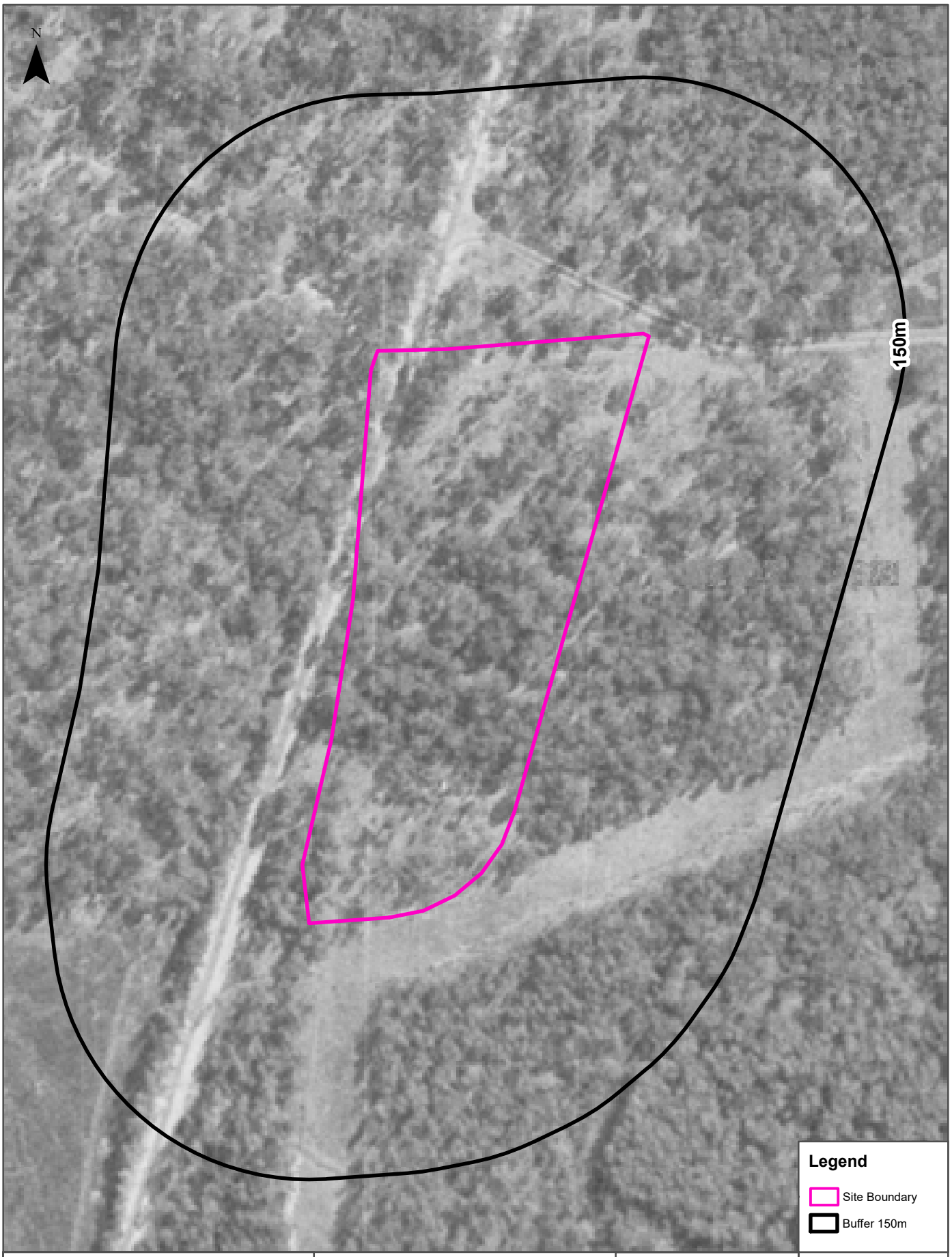
**7 Tasman Street, Corindi Beach, NSW 2456**

# Aerial Imagery 1974

**7 Tasman Street, Corindi Beach, NSW 2456**

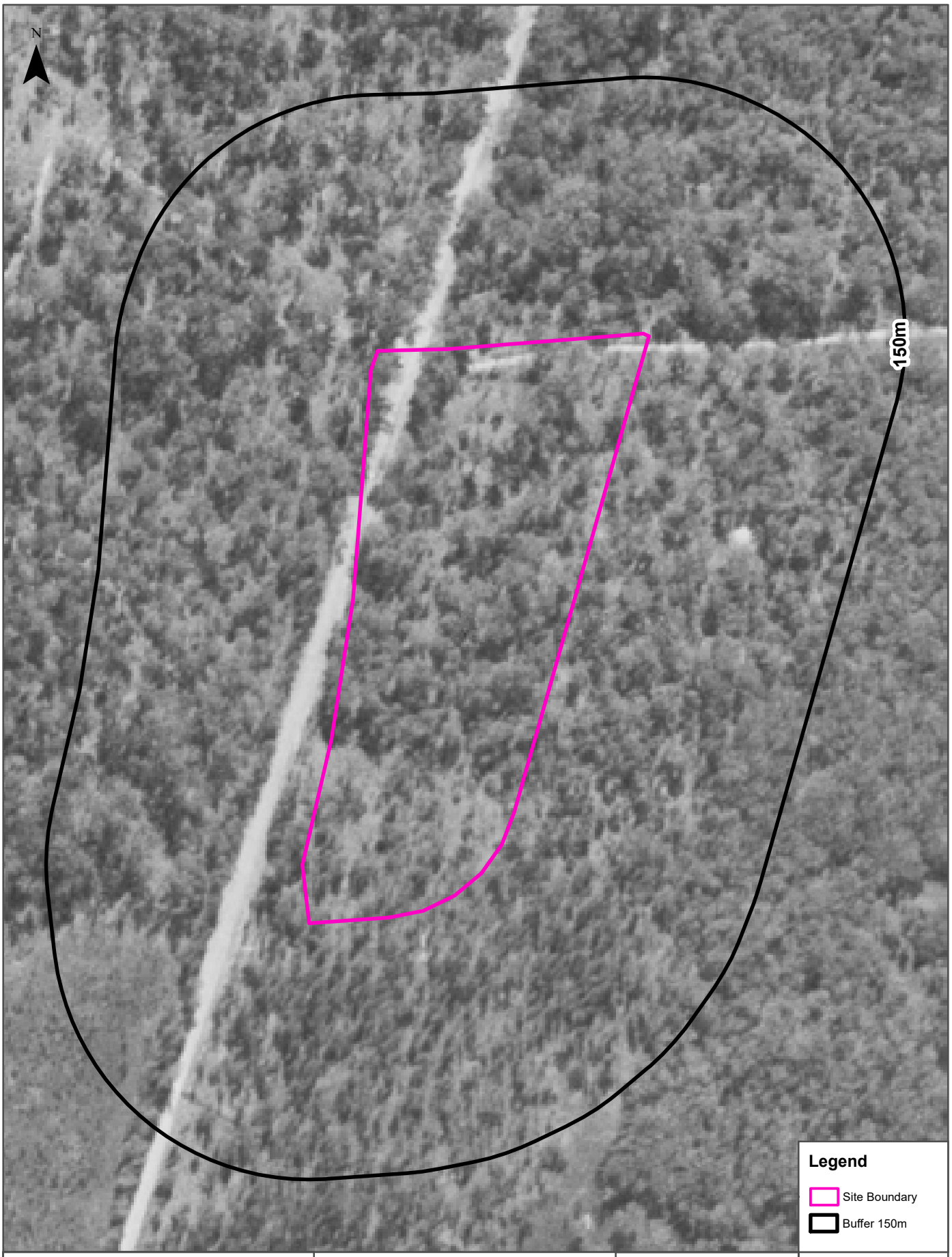
# Aerial Imagery 1964

**7 Tasman Street, Corindi Beach, NSW 2456**



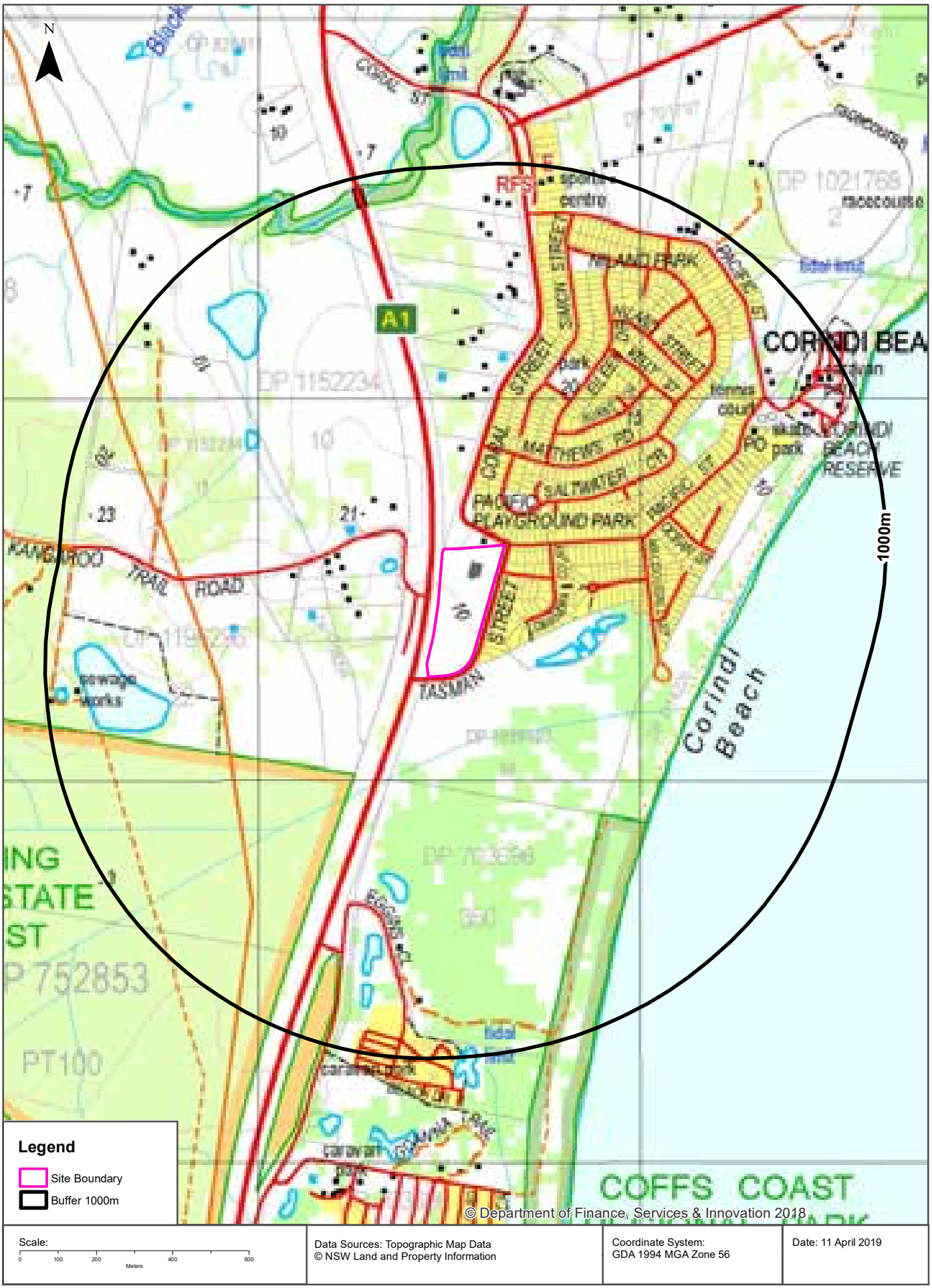
# Aerial Imagery 1956

**7 Tasman Street, Corindi Beach, NSW 2456**



# Topographic Map 2015

**7 Tasman Street, Corindi Beach, NSW 2456**





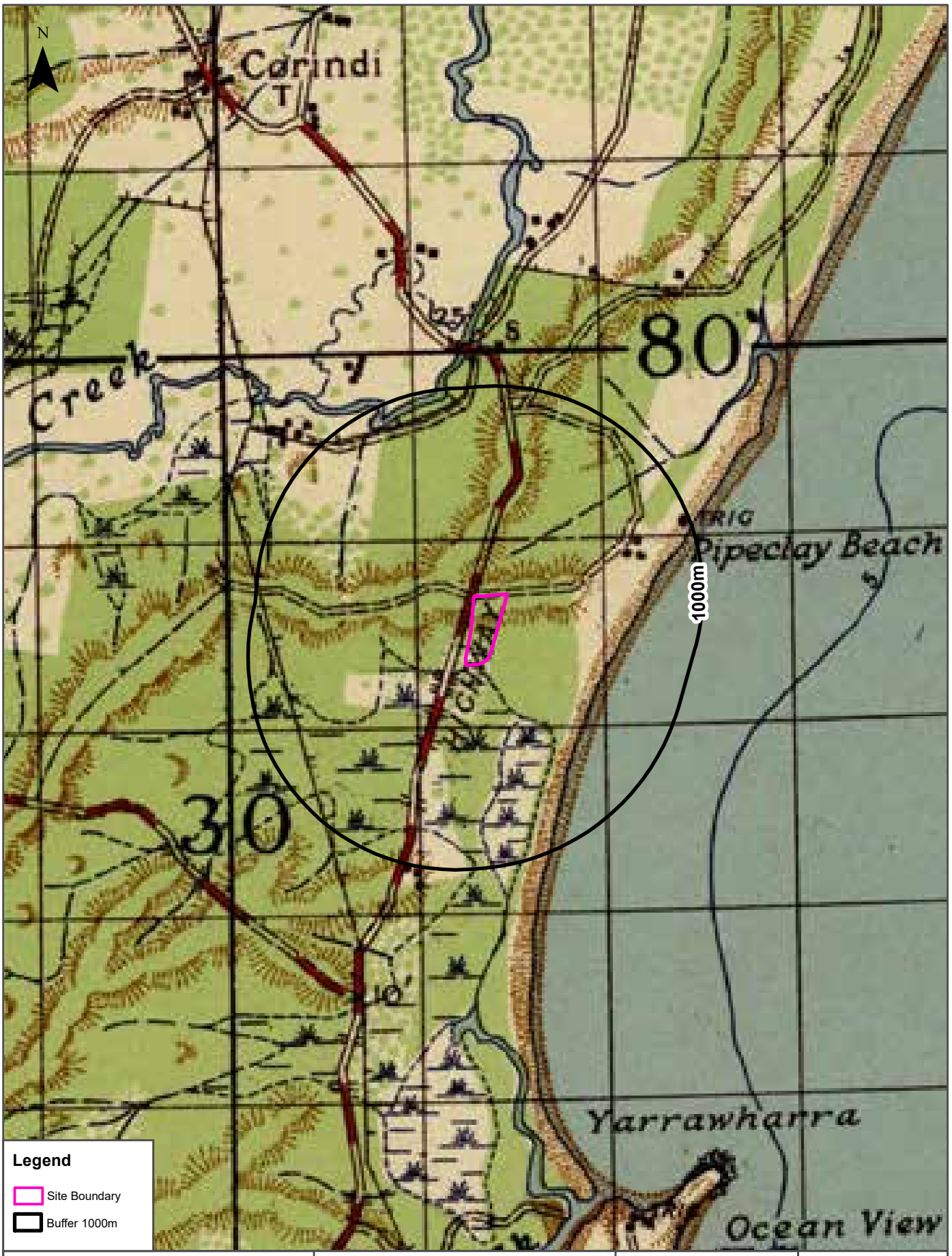

| Scale: 0 100 200 400 600 Meters | Data Sources: Topographic Map Data<br>© NSW Land and Property Information | Coordinate System:<br>GDA 1994 MGA Zone 56 | Date: 11 April 2019 |
|---|---|---|---|

# Historical Map 1974

**7 Tasman Street, Corindi Beach, NSW 2456**

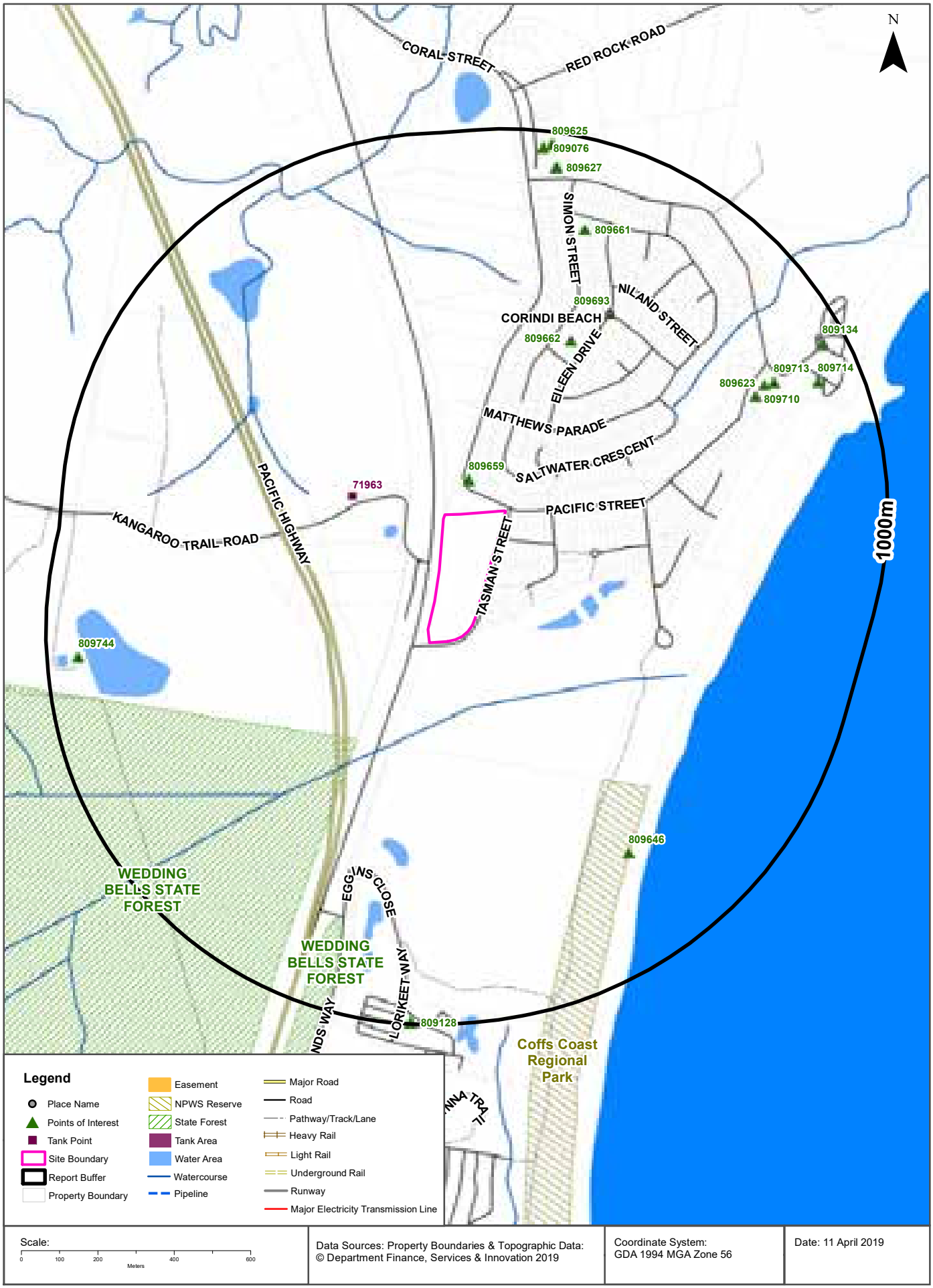
# Historical Map c.1942

**7 Tasman Street, Corindi Beach, NSW 2456**



# Topographic Features

**7 Tasman Street, Corindi Beach, NSW 2456**



# Topographic Features

**7 Tasman Street, Corindi Beach, NSW 2456**

## Points of Interest

What Points of Interest exist within the dataset buffer?

| Map Id | Feature Type | Label | Distance | Direction |
|---|---|---|---|---|
| 809659 | Park | PACIFIC PLAYGROUND PARK | 87m | North |
| 809662 | Park | Park | 478m | North East |
| 809693 | Town | CORINDI BEACH | 583m | North East |
| 809646 | Beach | CORINDI BEACH | 715m | South East |
| 809623 | Post Office | CORINDI BEACH POST OFFICE | 719m | North East |
| 809710 | Sports Court | TENNIS COURT | 753m | North East |
| 809661 | Park | NILAND PARK | 765m | North |
| 809713 | Sports Court | SKATE PARK | 778m | North East |
| 809714 | Park | CORINDI BEACH RESERVE | 885m | North East |
| 809627 | Sports Centre | Sports Centre | 910m | North |
| 809744 | Sewage Works | Sewage Works | 917m | West |
| 809134 | Tourist Park / Home Village | CORINDI BEACH HOLIDAY PARK | 938m | North East |
| 809076 | Firestation - Bush | CORINDI-RED ROCK RFB | 956m | North |
| 809625 | SES Facility | CORINDI SES | 967m | North |
| 809128 | Tourist Park / Home Village | THE LORIKEET TOURIST PARK AND HOME VILLAGE | 996m | South |

# Topographic Features

**7 Tasman Street, Corindi Beach, NSW 2456**

## Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

| Map Id | Tank Type | Status | Name | Feature Currency | Distance | Direction |
|---|---|---|---|---|---|---|
| | No records in buffer | | | | | |

## Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

| Map Id | Tank Type | Status | Name | Feature Currency | Distance | Direction |
|---|---|---|---|---|---|---|
| 71963 | Water | Operational | | 01/04/2002 | 244m | North West |



## Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

| Map Id | Easement Class | Easement Type | Easement Width | Distance | Direction |
|---|---|---|---|---|---|
| N/A | No records in buffer | | | | |

# Topographic Features

**7 Tasman Street, Corindi Beach, NSW 2456**

## State Forest

What State Forest exist within the dataset buffer?

| State Forest Number | State Forest Name | Distance | Direction |
|---|---|---|---|
| 360 | WEDDING BELLS | 318m | South West |
| 360 | WEDDING BELLS | 765m | South |



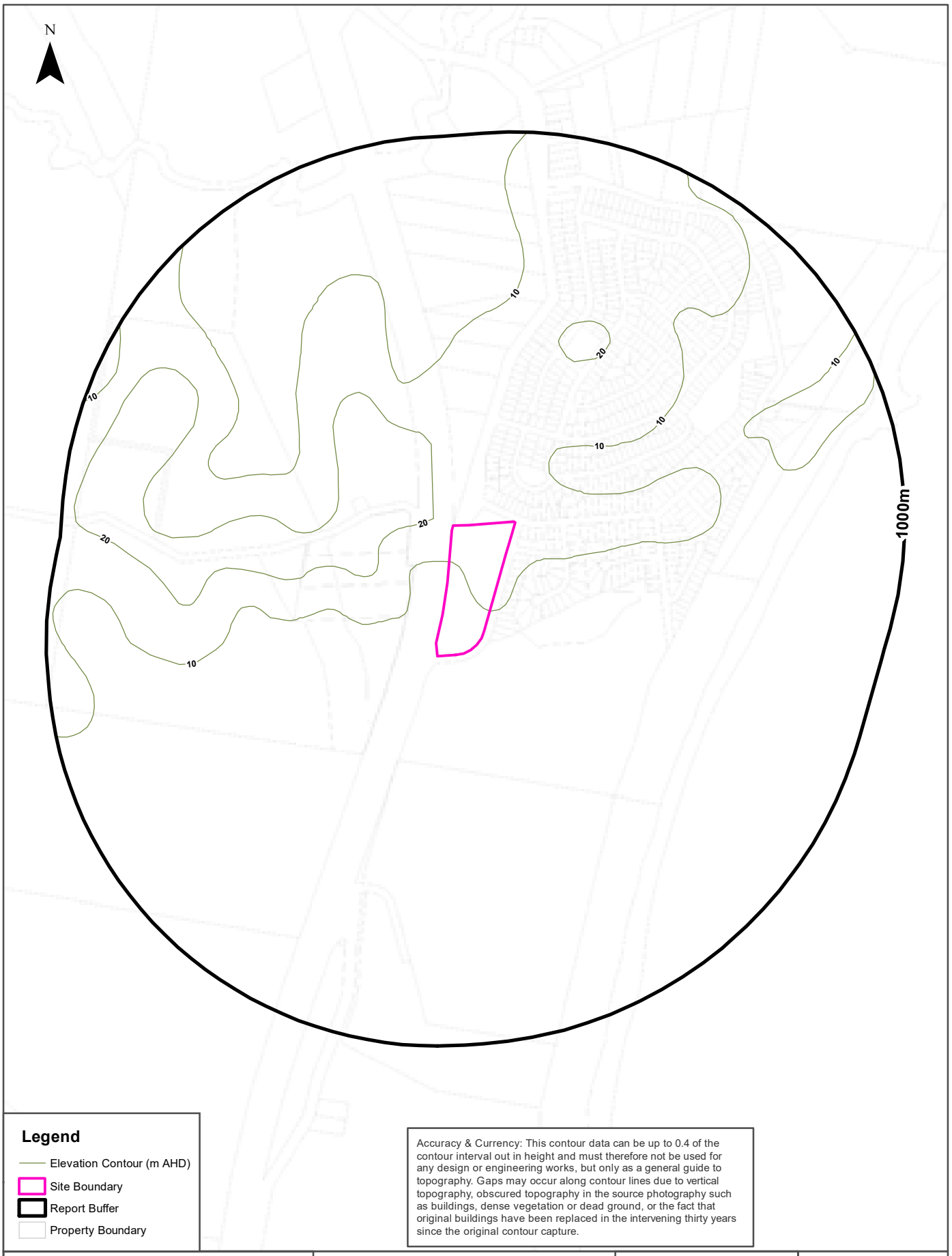
## National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

| Reserve Number | Reserve Type | Reserve Name | Gazetted Date | Distance | Direction |
|---|---|---|---|---|---|
| N1002 | REGIONAL PARK | Coffs Coast Regional Park | 03/10/2003 | 525m | South |

# Elevation Contours (m AHD)

**7 Tasman Street, Corindi Beach, NSW 2456**



# Hydrogeology & Groundwater

**7 Tasman Street, Corindi Beach, NSW 2456**

## Hydrogeology

Description of aquifers on-site:

| Description |
|---|
| Porous, extensive highly productive aquifers |

Description of aquifers within the dataset buffer:

| Description |
|---|
| Porous, extensive highly productive aquifers |

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)


## Botany Groundwater Management Zones

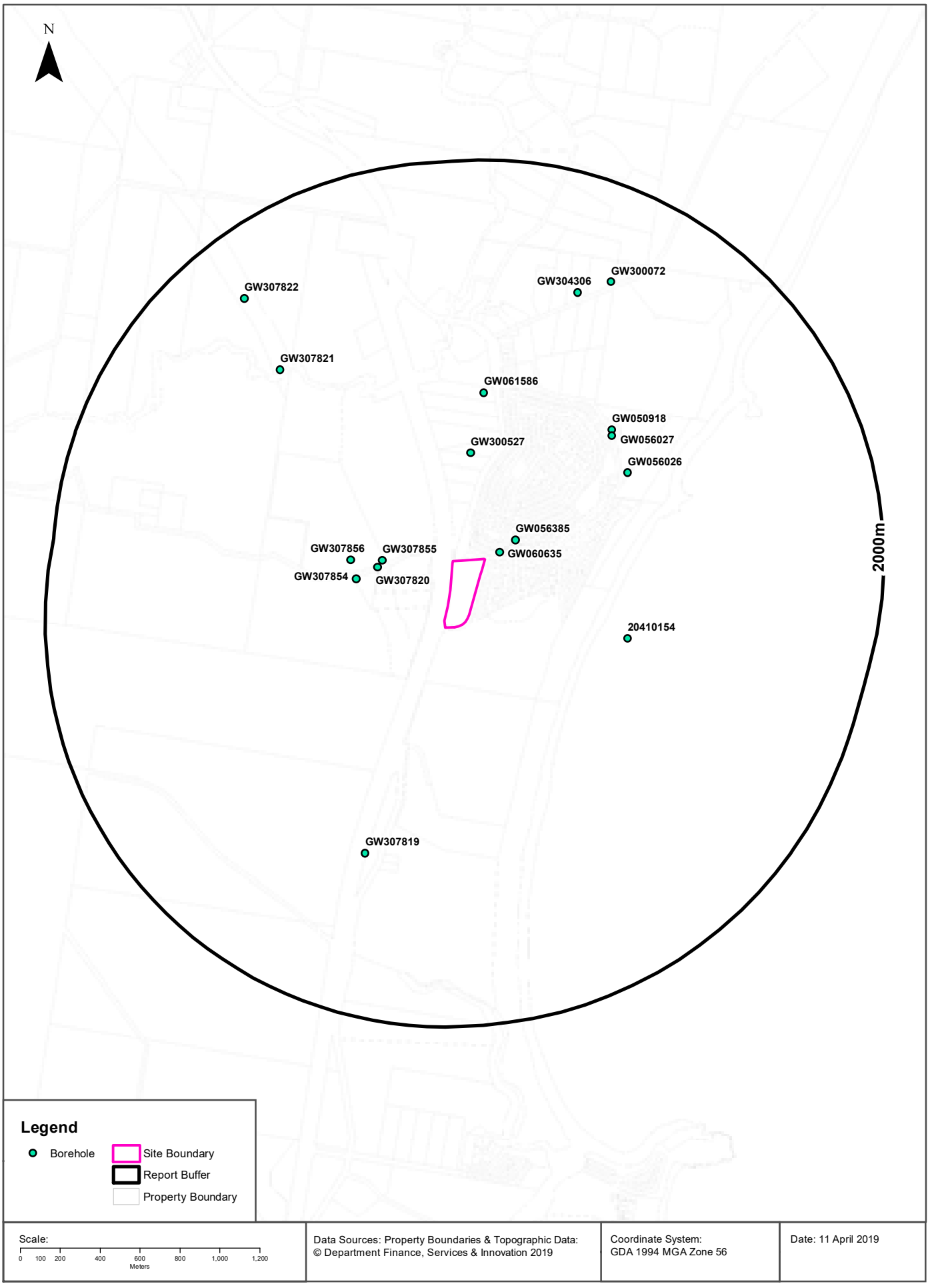
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

| Management Zone No. | Restriction | Distance | Direction |
|---|---|---|---|
| N/A | No records in buffer | | |

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

# Groundwater Boreholes

**7 Tasman Street, Corindi Beach, NSW 2456**



# Hydrogeology & Groundwater

**7 Tasman Street, Corindi Beach, NSW 2456**

## Groundwater Boreholes

Boreholes within the dataset buffer:

| GW No. | Licence No | Work Type | Owner Type | Authorised Purpose | Intended Purpose | Name | Complete Date | Final Depth (m) | Drilled Depth (m) | Salinity (mg/L) | SWL (m) | Yield (L/s) | Elev (AHD) | Dist | Dir |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GW060635 | 30BL131949 | Bore | Private | Domestic | Domestic | | 01/01/1985 | 28.70 | 28.70 | | | | | 82m | North East |
| GW056385 | 30BL122125 | Bore | Private | Domestic | General Use | | 01/12/1981 | 17.00 | 17.00 | | | | | 182m | North East |
| GW307855 | 30BL207023 | | | Monitoring Bore | Monitoring Bore | | 04/02/2013 | 14.00 | 14.00 | | | | | 349m | West |
| GW307820 | 30BL185947 | | | Monitoring Bore | Monitoring Bore | | 17/07/2012 | 17.00 | 17.00 | | | | | 371m | West |
| GW307854 | 30BL207023 | | | Monitoring Bore | Monitoring Bore | | 02/02/2013 | 17.00 | 17.00 | | | | | 474m | West |
| GW307856 | 30BL207023 | | | Monitoring Bore | Monitoring Bore | | 30/01/2013 | 17.05 | 17.05 | | | | | 508m | West |
| GW300527 | 30BL177122 | Bore | | Domestic | Domestic | | 22/11/1996 | 32.00 | 32.00 | Good | 9.00 | 1.000 | | 535m | North |
| 20410154 | | | | | UNK | | | | | | | | 0.00 | 798m | East |
| GW061586 | 30BL131621 | Bore | Private | Domestic | Domestic | | 01/09/1984 | 14.30 | 14.30 | Sweet | | | | 833m | North |
| GW056026 | 30BL121848 | Bore | Private | Domestic | General Use | | 01/11/1981 | 15.00 | 15.00 | | | | | 839m | North East |
| GW056027 | 30BL121693 | Bore | Private | Domestic | General Use | | 01/11/1981 | 16.00 | 16.00 | | | | | 888m | North East |
| GW050918 | 30BL115354 | Bore open thru rock | Private | Domestic | Domestic | | 01/03/1980 | 15.00 | 15.00 | Good | | | | 910m | North East |
| GW307819 | 30BL185947 | | | Monitoring Bore | Monitoring Bore | | 20/07/2012 | 14.10 | 14.10 | | | | | 1199m | South |
| GW307821 | 30BL185947 | | | Monitoring Bore | Monitoring Bore | | 02/11/2012 | 20.65 | 20.65 | | | | | 1291m | North West |
| GW304306 | 30BL181243 | Bore | Private | Domestic | Domestic | | 26/08/2003 | 30.00 | 30.00 | 2500 | | 0.400 | | 1415m | North |
| GW300072 | 30BL176824 | Bore | | Irrigation | Domestic | | 06/06/1995 | 38.10 | 38.10 | Good | 15.00 | 1.000 | | 1527m | North East |
| GW307822 | 30BL185947 | | | Monitoring Bore | Monitoring Bore | | 05/07/2012 | 35.40 | 35.40 | | | | | 1680m | North West |

# Hydrogeology & Groundwater

**7 Tasman Street, Corindi Beach, NSW 2456**

## Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

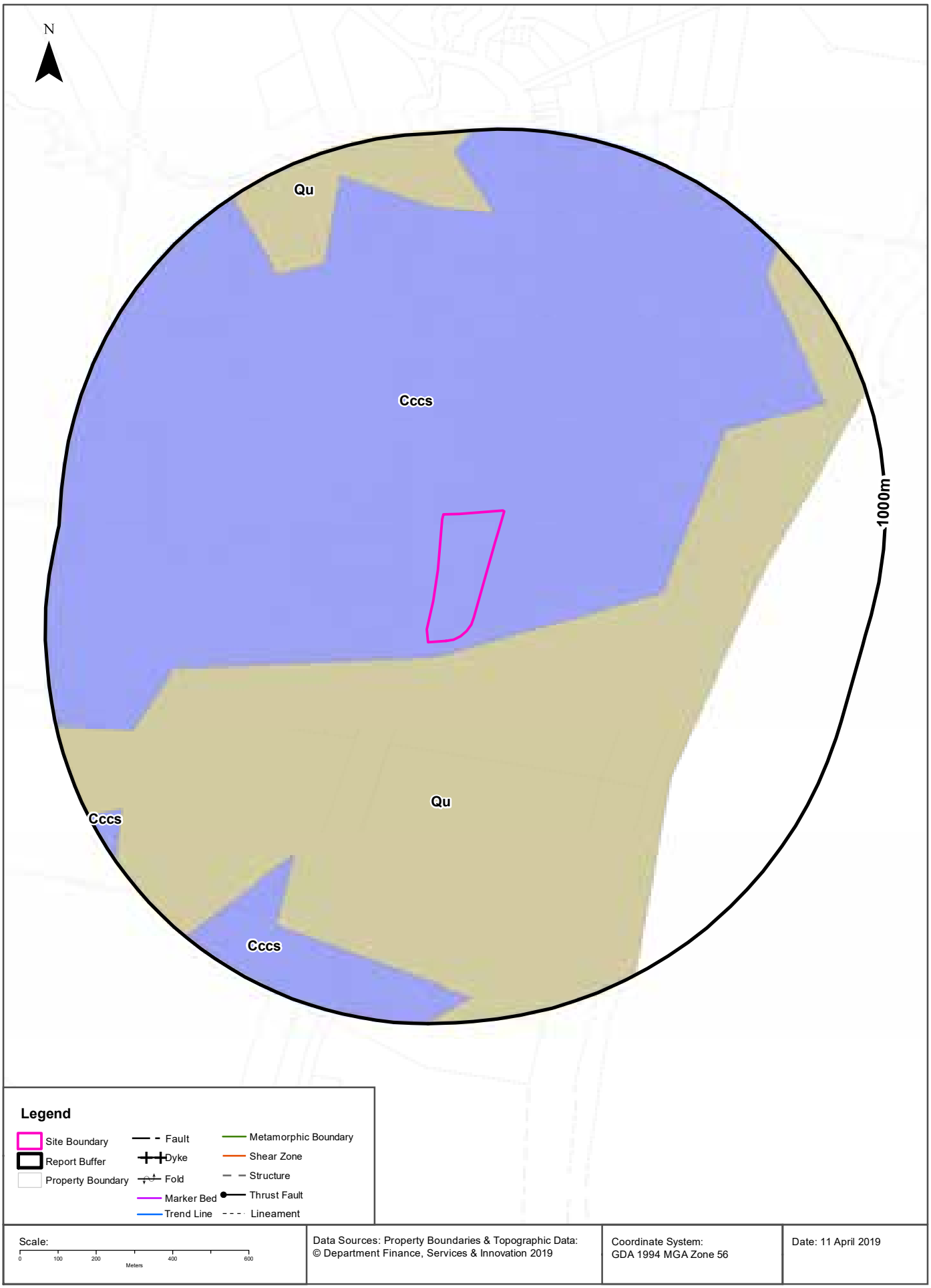
| Groundwater No | Drillers Log | Distance | Direction |
|---|---|---|---|
| GW060635 | 0.00m-0.61m Soil<br>0.61m-9.45m Clay Grey Red<br>9.45m-10.97m Shale Soft<br>10.97m-28.65m Shale Medium Water Supply | 82m | North East |
| GW056385 | 0.00m-4.00m Clay<br>4.00m-17.00m Shale Water Supply | 182m | North East |
| GW307855 | 0.00m-0.10m Topsoil, Silt; low plasticity, dark grey<br>0.10m-1.40m Clay; medium-high plasticity, red-brown-orange-grey mottled, moist, stiff<br>1.40m-1.90m Clay; low-medium plasticity, grey, trace of orange, moist, very stiff<br>1.90m-3.30m Siltstone, meta; grey-red, iron oxide staining, occasional presence of clay seams, dry-moist<br>3.30m-5.60m (Unknown); core loss<br>5.60m-6.20m Siltstone, meta; pale grey, with some orange iron oxide staining, well developed decomposed clayey zones, highly-extreme<br>6.20m-8.00m (Unknown); core loss, wash return comprised meta siltstone rock fragments, gravel sized highly weathered, iron stained<br>8.00m-8.20m Siltstone, meta; as above, highly weathered<br>8.20m-9.20m (Unknown); core loss<br>9.20m-9.40m Siltstone, meta; grey-brown, decomposed clayey zone, extremely weathered<br>9.40m-9.65m Siltstone, meta; pale grey, highly fractured, moderately weathered<br>9.65m-11.85m (Unknown); core loss, wash return meta siltstone, fine-medium grained rock fragments, with iron oxide staining, highly-m<br>11.85m-12.20m Siltstone, meta; pale grey, with orange-brown staining, highly-moderately weathered<br>12.20m-12.85m (Unknown); core loss<br>12.85m-14.10m Siltstone, meta; grey, with orange iron oxide staining, estimated extremely low to very low strength, extremely-highly w | 349m | West |
| GW307820 | 0.00m-0.10m Fill, Silty Clay; low plasticity, brown, with fine subangular gravel, dry-moist<br>0.10m-0.15m Topsoil, Silty Clay; medium plasticity, dark brown, trace of fine subangular gravel, moist<br>0.15m-1.70m Clay, Silty; high plasticity, mosit, becoming brown mottled pale brown @ 0.6m & 0.9m<br>1.70m-2.50m Siltstone, meta; pale grey with occasional orange stining, dry-moist<br>2.50m-5.00m (Unknown); missing page<br>5.00m-6.55m Siltstone, meta; pale grey with orange iron staining, zones of medium strength rock (orange-brown), highly-extremely wea<br>6.55m-6.85m (Unknown); core loss<br>6.85m-8.00m Siltstone, meta; as above, extremely-highly weathered<br>8.00m-9.00m Siltstone, meta; as above, becoming mottled blue-grey & orange @ 8m, highly weathered<br>9.00m-10.00m Siltstone, meta; as above, becoming with orange clay veins & pockets at 9.5m, moderately weathered<br>10.00m-17.00m Sandstone, meta; fine grained, blue-grey with orange iron staining, slightly weathered | 371m | West |
| GW307854 | 0.00m-0.10m Topsoil, clayey Silt; low plasticity, dark grey to grey<br>0.10m-0.85m Clay, medium plasticity, grey-yellow, trace of medium-coarse sand, moist, very stiff<br>0.85m-1.75m Siltstone, meta; grey, iron oxide staining, trace fine-medium sand, some clay seams/decomposed zones, dry-moist<br>1.75m-6.25m Siltstone, meta; pale grey & pale orange-brown, well developed closely spaced tight iron oxide annealed fractures, moder<br>6.25m-6.60m (Unknown); core loss<br>6.60m-10.85m Siltstone, meta; blue-grey, with orange iron oxide staining, occasional veneers, slightly to moderately weathered<br>10.85m-11.00m (Unknown); core loss<br>11.00m-11.35m Siltstone, meta; as previous, moderately weathered<br>11.35m-11.40m (Unknown); core loss<br>11.40m-12.55m Siltstone, meta; as previous, moderately-slightly weathered<br>12.55m-12.90m (Unknown); core loss<br>12.90m-17.00m Siltstone, meta; as previous, calcite veins, 1-2mm thick from 15.8-16m, slightly weathered | 474m | West |

| Groundwater No | Drillers Log | Distance | Direction |
|---|---|---|---|
| GW307856 | 0.00m-0.10m Topsoil, silty Clay; medium plasticity, dark grey, moist<br>0.10m-1.30m Clay; medium-high plasticity, red-grey, mosit, stiff<br>1.30m-4.65m Clay, Silty; low-medium plasticity, grey, low plasticity site, with fine sand, dry-moist, heavy<br>4.65m-4.80m Siltstone, meta; grey, orange iron oxide staining, dry-moist<br>4.80m-6.30m Siltstone, meta; pale grey, with orange-brown staining, well developed deomposed/clayey zones, extremely-highly weathere<br>6.30m-7.55m (Unknown); core loss<br>7.55m-9.90m Siltstone, meta; as previous, extremely weathered<br>9.90m-10.50m (Unknown); core loss<br>10.50m-11.10m Siltstone, meta; grey, with minor orange iron oxide staining, moderately weathered<br>11.10m-11.85m (Unknown); core loss<br>11.85m-12.30m Siltstone, meta; as previous, moderately weathered<br>12.30m-12.75m (Unknown); core loss<br>12.75m-13.00m Siltstone, meta; as previous, highly weathered<br>13.00m-13.10m (Unknown); core loss<br>13.10m-13.80m Siltstone, meta; blue grey, with extrensive orange-brown iron oxide staining, well developed fractures/shear zones, mod-<br>13.80m-14.15m (Unknown); core loss<br>14.15m-14.75m Siltstone, meta; as previous, moderately-highly weathered<br>14.75m-14.95m (Unknown); core loss<br>14.95m-15.45m Siltstone, meta; as previous, moderately weathered, becoming calcite staining along defects @ 15.3m<br>15.45m-16.10m (Unknown); core loss<br>16.10m-16.40m Siltstone, meta; as previous, moderately weathered<br>16.40m-16.65m (Unknown); core loss<br>16.65m-17.05m Siltstone, meta; as previous, moderately weathered | 508m | West |
| GW300527 | 0.00m-1.00m Top soil<br>1.00m-6.00m Clay<br>6.00m-15.00m Sandstone<br>15.00m-32.00m Fractured shale | 535m | North |
| GW061586 | 0.00m-0.91m Soil<br>0.91m-5.48m Clay Grey Pink<br>5.48m-7.92m Clay Grey Dry Chalky<br>7.92m-12.50m Sand Light Brown Indurated Water Supply<br>12.50m-12.80m Shale Hard<br>12.80m-14.02m Sand Light Brown Indurated Water Supply<br>14.02m-14.33m Basalt Light Orange Water Supply | 833m | North |
| GW056026 | 0.00m-4.00m Clay<br>4.00m-15.00m Shale Water Supply | 839m | North East |
| GW056027 | 0.00m-1.00m Soil<br>1.00m-6.00m Clay<br>6.00m-9.00m Shale Water Supply<br>9.00m-16.00m Shale Broken | 888m | North East |
| GW050918 | 0.00m-9.00m Clay<br>9.00m-12.00m Shale Water Supply<br>12.00m-13.00m Shale<br>13.00m-15.00m Shale Hard | 910m | North East |
| GW307819 | 0.00m-0.20m Topsoil; Silty Clay, medium plasticity, brown-grey, trace of fine subangular gravel, dry-moist<br>0.20m-6.70m Siltstone, meta; pale grey with orange staining, dry-moist<br>6.70m-8.75m Siltstone, meta; grey-brown, with orange stained fractures, mod-highly weathered<br>8.75m-10.00m Siltstone, meta; blue-grey & brown, as above, mod-slightly weathered<br>10.00m-14.10m (Unknown); missing page | 1199m | South |
| GW307821 | 0.00m-0.20m Topsoil; Silty Clay, low to medium plasticity, brown-dark brown, trace of fine grained sand, with organic matter thought<br>0.20m-1.40m Silt, Sandy; low plasticity, brown, fine to medium grained, with clay, trace of organic & carbonaceous matter, dry<br>1.40m-1.70m Sand, Silty; fine grained, brown-pale brown, trace of tree roots, dry-moist<br>1.70m-3.30m Sand; fine grained, brown-pale brown, with silt, dry-moist, loose to medium dense<br>3.30m-4.00m Sand; fine grained, pale grey, trace of silt, moist-wet, loose<br>4.00m-5.00m Sand; medium to coarse grained, pale grey, medium subangular gravel (quartz), moist-wet, loose<br>5.00m-10.00m (Unknown); page missing<br>10.00m-10.90m Clay, Silty; low to medium plasticity, dark brown, moist-wet, firm<br>10.90m-12.50m Siltstone, meta; blue-green chlorite staining & orange iron oxide staining throughout, moist<br>12.50m-15.30m (Unknown); page missing<br>15.30m-20.00m Siltstone, meta; blue-dark grey, indistinct bedding, occasional white calcite annealed fractures, slightly weathered<br>20.00m-20.65m (Unknown); page missing | 1291m | North West |
| GW304306 | 0.00m-0.60m SANDY SOIL<br>0.60m-1.80m CLAY<br>1.80m-12.80m DEC SHALE<br>12.80m-30.00m GREY SHALE | 1415m | North |
| GW300072 | 0.00m-0.60m TOPSOIL<br>0.60m-2.40m CLAY<br>2.40m-12.00m SANDSTONE<br>12.00m-26.00m SHALE<br>26.00m-38.10m SHALE & QUARTZ | 1527m | North East |

| Groundwater No | Drillers Log | Distance | Direction |
|---|---|---|---|
| GW307822 | 0.00m-0.20m Topsoil; Silty Clay, medium plasticity, grey-brown, moist-wet<br>0.20m-1.10m Clay, Silty; medium to high plasticity, brown-grey, trace of plant & tree roots, trace of ironstone gravel, moist-wet, f<br>1.10m-3.00m Clay; medium to high plasticity, brown-grey-red, moist, stiff-very stiff<br>3.00m-4.50m Clay; medium plasticity, grey trace of red brown, moist, very stiff<br>4.50m-10.00m (Unknown); page missing<br>10.00m-11.20m Sand, gravelly clayey; medium to coarse grained, brown-grey, fine to medium brown-yellow subrounded-subangular gravel up<br>11.20m-13.00m Sand, Gravelly Clayey; medium to coarse grained, fine-medium brown-grey gravel upto 20mm, trace of yellow subrounded-sub<br>13.00m-14.20m Sand, Clayey Gravelly; medium to coarse grained, fine-medium brown-grey gravel upto 20mm<br>14.20m-15.00m Gravel, Sandy; fine-medium, upto 20mm, grey traces of brown, subrounded-subangular, medium-coarse grained sand, some wit<br>15.00m-20.00m (Unknown); page missing<br>20.00m-23.50m Sand, Gravelly; medium to coarse grained, grey, fine gravel, with some clay & silt fines, wet, dense<br>23.50m-25.00m Sand, Gravelly, Clayey; medium-coarse grained, grey-pale green, subrounded-subangular gravel upto 10mm, pale green silts<br>25.00m-27.26m (Unknown); page missing<br>27.26m-29.57m Siltstone, meta; green-grey, extensive chlorite alternation, very closely spaged fractures, highly-mod weathered<br>29.57m-35.40m Siltstone, meta; gree-grey, extensive chlorite alteration, very closely spaced fractures, hiighly-mod-slightly weathered | 1680m | North West |

# Geology 1:250,000

**7 Tasman Street, Corindi Beach, NSW 2456**



# Geology

**7 Tasman Street, Corindi Beach, NSW 2456**

## Geological Units

What are the Geological Units onsite?

| Symbol | Description | Unit Name | Group | Sub Group | Age | Dom Lith | Map Sheet | Dataset |
|---|---|---|---|---|---|---|---|---|
| Cccs | Lithofeldspathic wacke, minor siltstone, siliceous siltstone, mudstone, metabasalt, chert & jasper, rare calcareous siltstone & felsic volcanics 'Coffs Harbour Association' (Cc) | Coramba beds | | | Palaeozoic | | | 1:250,000 |

What are the Geological Units within the dataset buffer?

| Symbol | Description | Unit Name | Group | Sub Group | Age | Dom Lith | Map Sheet | Dataset |
|---|---|---|---|---|---|---|---|---|
| Cccs | Lithofeldspathic wacke, minor siltstone, siliceous siltstone, mudstone, metabasalt, chert & jasper, rare calcareous siltstone & felsic volcanics 'Coffs Harbour Association' (Cc) | Coramba beds | | | Palaeozoic | | | 1:250,000 |
| Qu | Undifferentiated Quaternary sediments including: alluvial mud, silt, sand, gravel deposits, & swamp deposits; coastal sand beaches & dunes; estuarine deposits | | | | Cainozoic | | | 1:250,000 |

## Geological Structures

What are the Geological Structures onsite?

| Feature | Name | Description | Map Sheet | Dataset |
|---|---|---|---|---|
| No features | | | | 1:250,000 |

What are the Geological Structures within the dataset buffer?

| Feature | Name | Description | Map Sheet | Dataset |
|---|---|---|---|---|
| No features | | | | 1:250,000 |

Geological Data Source : NSW Department of Industry, Resources & Energy

# Naturally Occurring Asbestos Potential

**7 Tasman Street, Corindi Beach, NSW 2456**

## Naturally Occurring Asbestos Potential

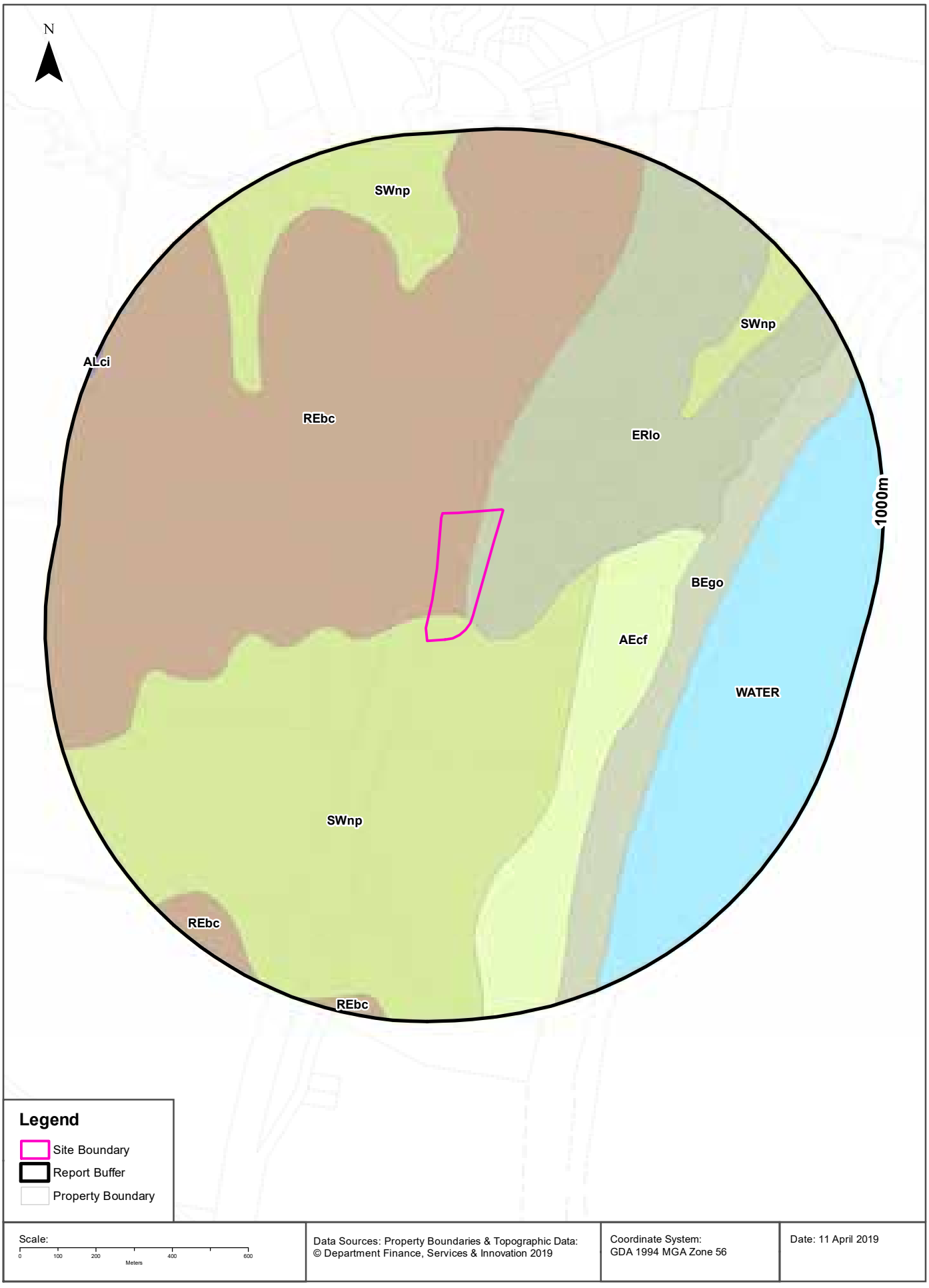
Naturally Occurring Asbestos Potential within the dataset buffer:

| Potential | Sym | Strat Name | Group | Formation | Scale | Min Age | Max Age | Rock Type | Dom Lith | Description | Dist | Dir |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No records in buffer | | | | | | | | | | | | |

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

# Soil Landscapes

**7 Tasman Street, Corindi Beach, NSW 2456**



# Soils

**7 Tasman Street, Corindi Beach, NSW 2456**

## Soil Landscapes

What are the onsite Soil Landscapes?

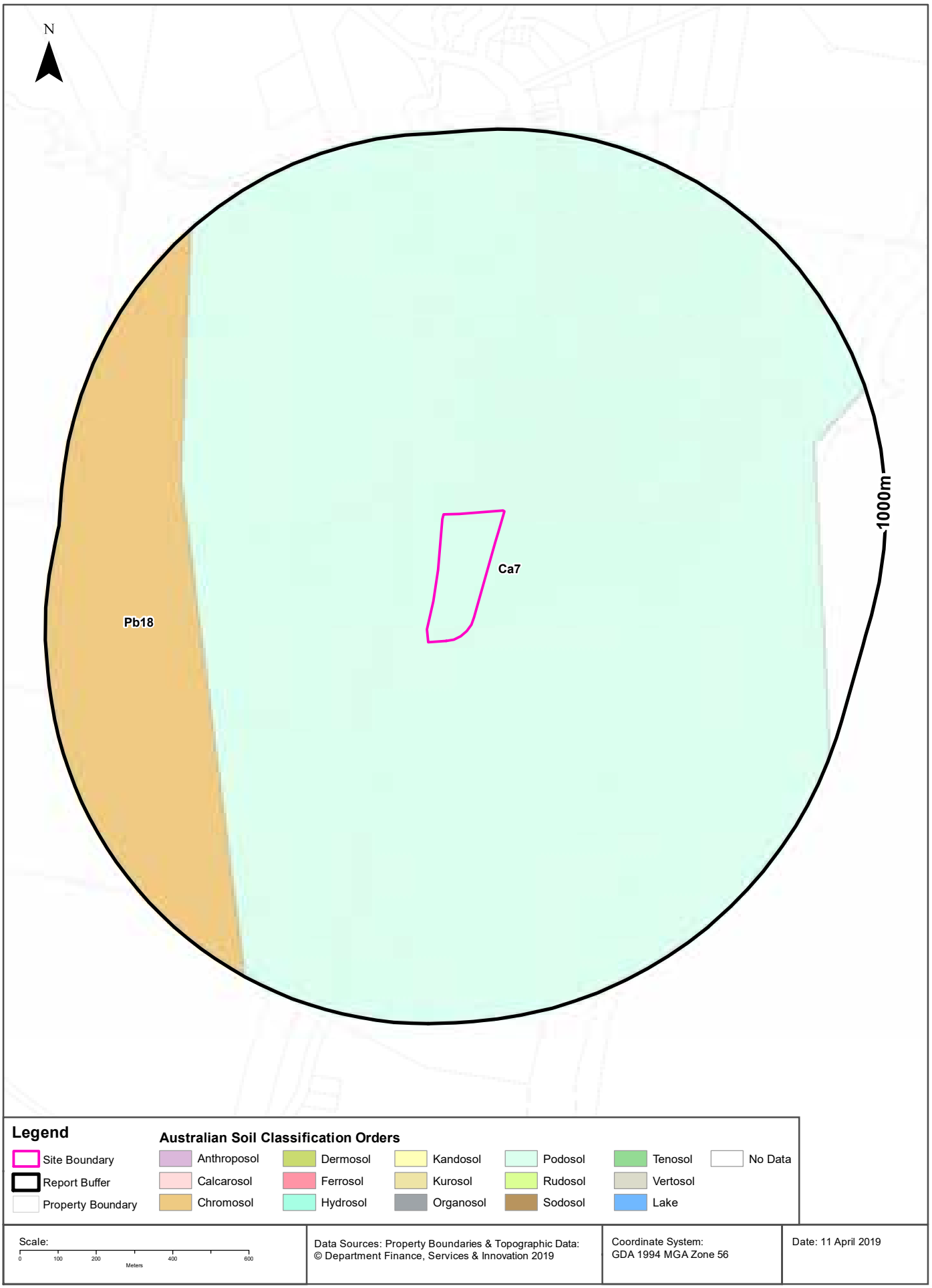
| Soil Code | Name | Group | Process | Map Sheet | Scale |
|---|---|---|---|---|---|
| ERlo | LOOK-AT-ME-NOW | | EROSIONAL | Coffs Harbour | 1:100,000 |
| REbc | BARCOONGERE | | RESIDUAL | Coffs Harbour | 1:100,000 |
| SWnp | NEWPORTS CREEK | | SWAMP | Coffs Harbour | 1:100,000 |

What are the Soil Landscapes within the dataset buffer?

| Soil Code | Name | Group | Process | Map Sheet | Scale |
|---|---|---|---|---|---|
| AEcf | COFFS HARBOUR | | AEOLIAN | Coffs Harbour | 1:100,000 |
| ALci | CORINDI | | ALLUVIAL | Coffs Harbour | 1:100,000 |
| BEgo | GOOLAWAH | | BEACH | Coffs Harbour | 1:100,000 |
| ERlo | LOOK-AT-ME-NOW | | EROSIONAL | Coffs Harbour | 1:100,000 |
| REbc | BARCOONGERE | | RESIDUAL | Coffs Harbour | 1:100,000 |
| SWnp | NEWPORTS CREEK | | SWAMP | Coffs Harbour | 1:100,000 |
| WATER | WATER | | WATER | Coffs Harbour | 1:100,000 |

# Atlas of Australian Soils

7 Tasman Street, Corindi Beach, NSW 2456



# Soils

**7 Tasman Street, Corindi Beach, NSW 2456**

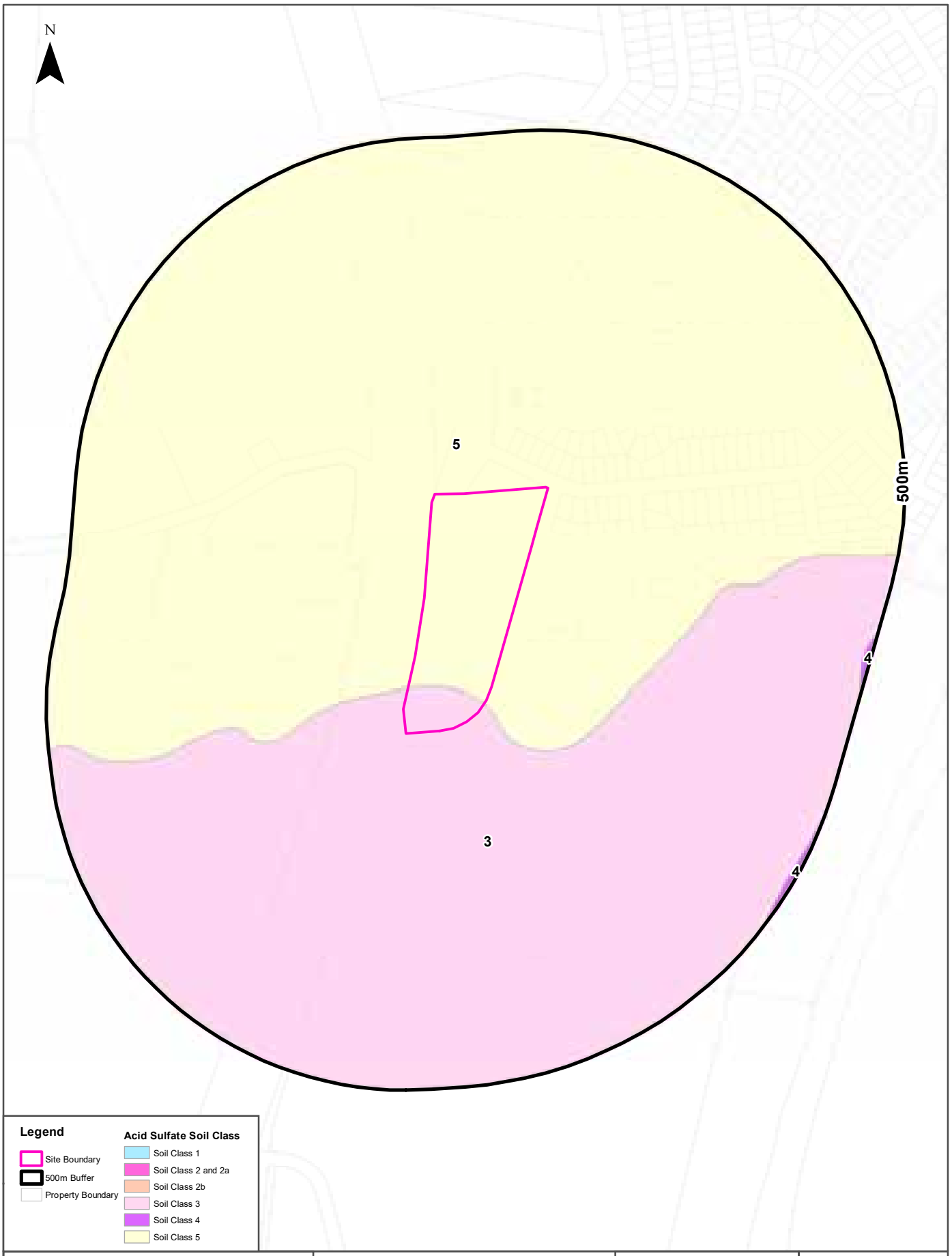
## Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

| Map Unit Code | Soil Order | Map Unit Description | Distance |
|---|---|---|---|
| Ca7 | Podosol | Old sand dune and swamp system of gently undulating dune-swale succession: dunes of leached sands (Uc2.21 and Uc2.22) with extensive undulating areas of leached sands, such as (Uc2.2), (Uc3.2), and (Uc2.3). Associated are swamplands of (Uc2.2) sands with variable peaty and/or clayey layers on the surface, some acid peats (O) and plastic clays (Uf6.61) also with variable peaty surfaces in the lower-lying portions. As mapped, small areas of neighbouring units are included. Often this unit is separated from unit A9 by an elongate swamp. | 0m |
| Pb18 | Chromosol | Undulating to low hilly: ridges and low hills of hard acidic red and red mottled soils (Dr2.21) and (Dr3.21) and hard acidic yellow mottled soils (Dy3.41) with intervening low-lying areas of sandy acidic yellow mottled soils (Dy5.81). Some river terraces of (DrS.21) and (Um6.11) soils (similar to unit Mj2) occur along the streams. | 589m |

# Acid Sulfate Soils

**7 Tasman Street, Corindi Beach, NSW 2456**




| Scale: | Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2019 | Coordinate System: GDA 1994 MGA Zone 56 | Date: 11 April 2019 |
|---|---|---|---|

# Acid Sulfate Soils

**7 Tasman Street, Corindi Beach, NSW 2456**

## Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

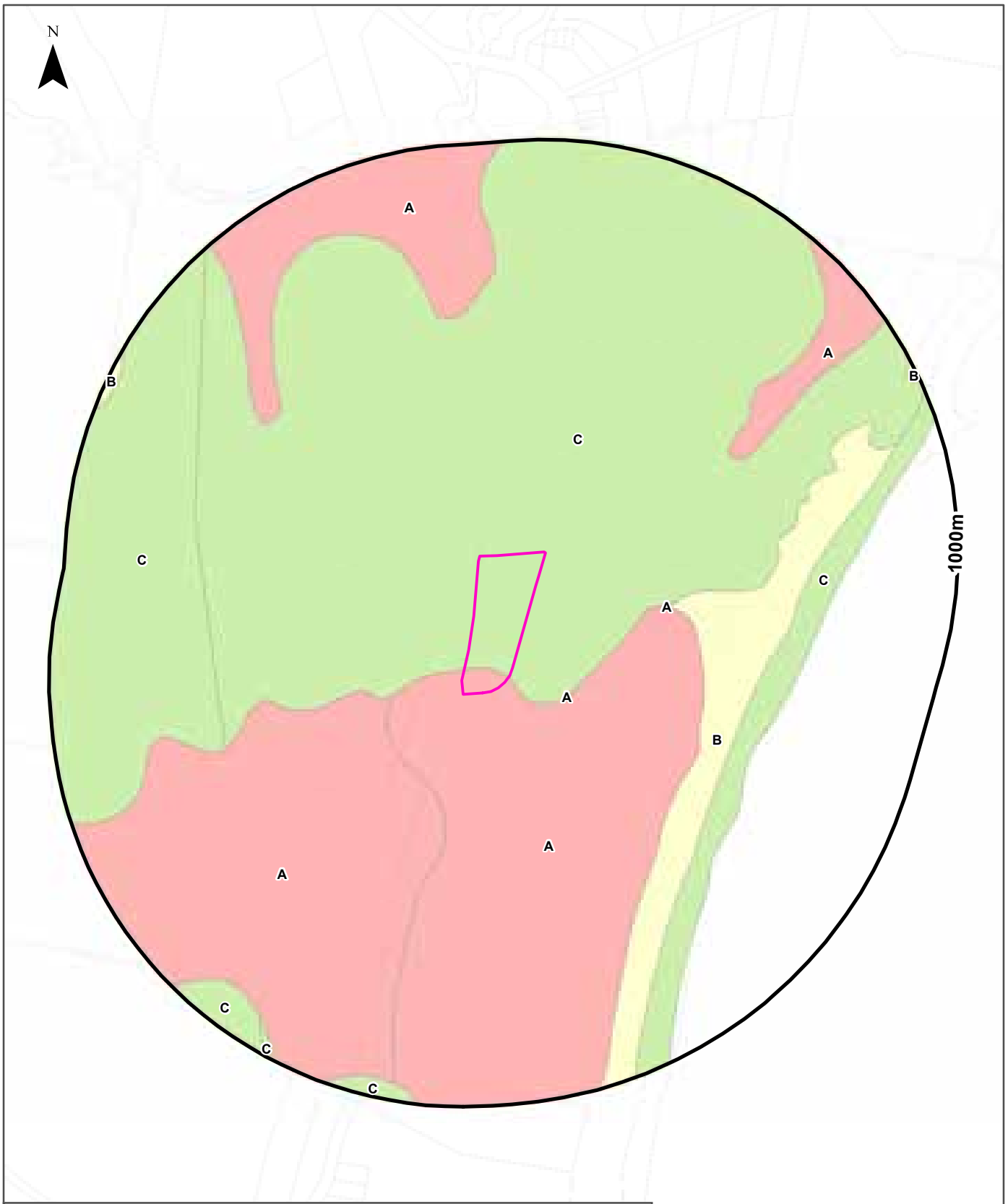
| Soil Class | Description | EPI Name |
|---|---|---|
| 3 | Works more than 1 metre below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered more than 1 metre below natural ground surface, present an environmental risk | Coffs Harbour Local Environmental Plan 2013 |

If the on-site Soil Class is 5, what other soil classes exist within 500m?

| Soil Class | Description | EPI Name | Distance | Direction |
|---|---|---|---|---|
| N/A | | | | |

# Atlas of Australian Acid Sulfate Soils

7 Tasman Street, Corindi Beach, NSW 2456




**Legend**

- Site Boundary
- Report Buffer
- Property Boundary

**Probability of occurrence of Acid Sulfate Soils**

- A. High (>70%)
- B. Low (6-70%)
- C. Extremely Low (1-5%)
- D. No Chance (0%)
- No Data

Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2019

Coordinate System: GDA 1994 MGA Zone 56

Date: 11April 2019

# Acid Sulfate Soils

**7 Tasman Street, Corindi Beach, NSW 2456**

## Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

| Class | Description | Distance |
|---|---|---|
| A | High Probability of occurrence. >70% chance of occurrence. | 0m |
| C | Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas. | 0m |
| B | Low Probability of occurrence. 6-70% chance of occurrence. | 313m |

# Dryland Salinity

**7 Tasman Street, Corindi Beach, NSW 2456**

## Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

**No**

Is there Dryland Salinity - National Assessment data within the dataset buffer?

**No**

What Dryland Salinity assessments are given?

| Assessment 2000 | Assessment 2020 | Assessment 2050 | Distance | Direction |
|---|---|---|---|---|
| N/A | N/A | N/A | N/A | N/A |

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

## Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

| Feature Id | Classification | Description | Distance | Direction |
|---|---|---|---|---|
| N/A | Outside Data Coverage | | | |

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage

# Mining Subsidence Districts

**7 Tasman Street, Corindi Beach, NSW 2456**

## Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

| District | Distance | Direction |
|---|---|---|
| There are no Mining Subsidence Districts within the report buffer | | |

# State Environmental Planning Policy

**7 Tasman Street, Corindi Beach, NSW 2456**

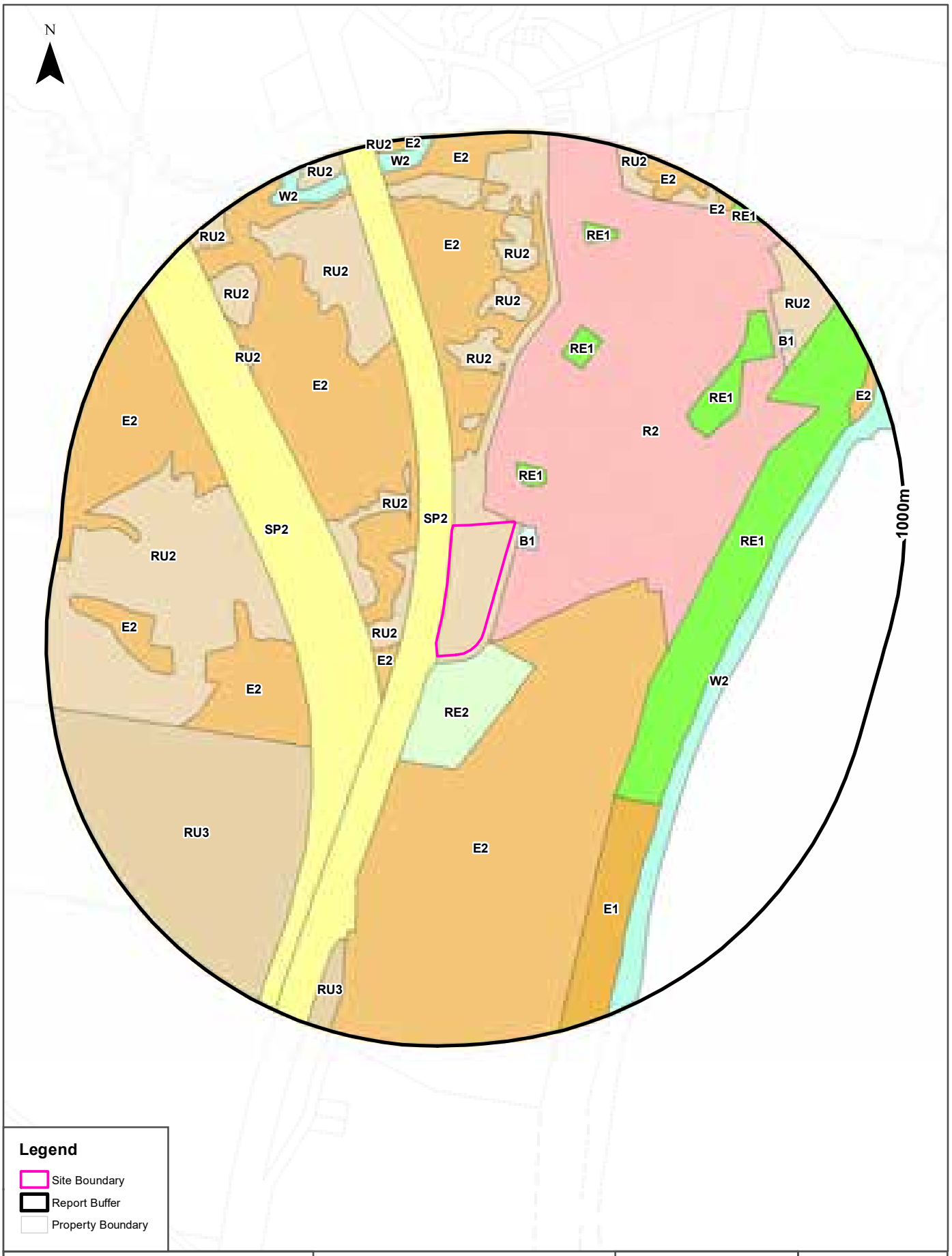
## State Significant Precincts

What SEPP State Significant Precincts exist within the dataset buffer?

| Map Id | Precinct | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| N/A | No Records in Buffer | | | | | | | |

# EPI Planning Zones

**7 Tasman Street, Corindi Beach, NSW 2456**




Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2019
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 11 April 2019

# Environmental Planning Instrument

**7 Tasman Street, Corindi Beach, NSW 2456**

## Land Zoning

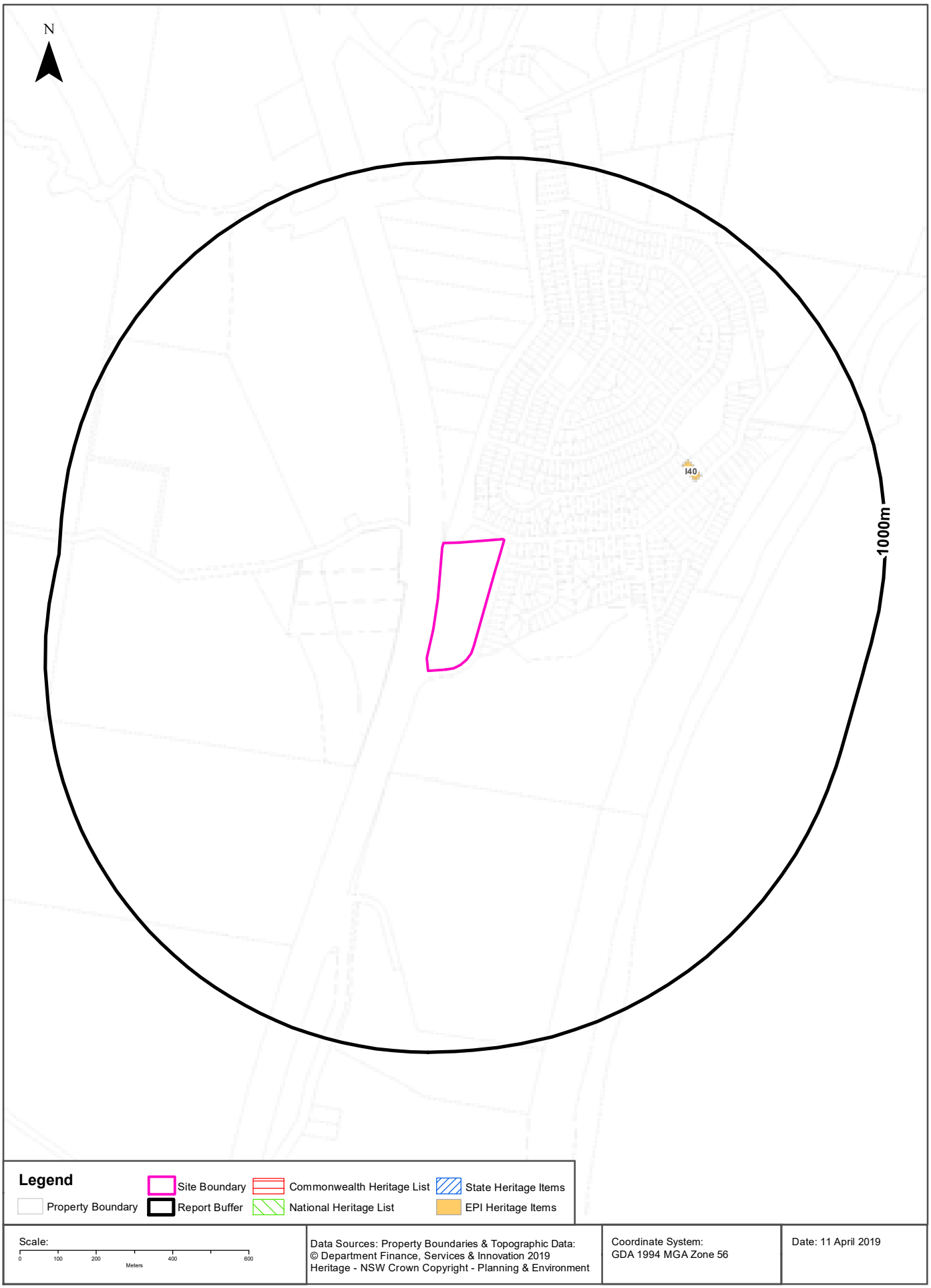
What EPI Land Zones exist within the dataset buffer?

| Zone | Description | Purpose | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 0m | Onsite |
| R2 | Low Density Residential | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 0m | North East |
| SP2 | Infrastructure | Classified Road | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 0m | North West |
| B1 | Neighbourhood Centre | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 20m | North East |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 20m | South |
| RE2 | Private Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 20m | South |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 87m | North West |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 87m | West |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 93m | South West |
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 101m | North East |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 109m | West |
| SP2 | Infrastructure | Classified Road | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 162m | North West |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 166m | North |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 352m | South West |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 364m | West |
| RU3 | Forestry | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 400m | South West |
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 427m | North East |
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 445m | East |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 466m | North West |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 513m | North |
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 515m | North East |
| E1 | National Parks and Nature Reserves | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 525m | South |
| W2 | Recreational Waterways | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 580m | North East |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 581m | West |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 641m | North |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 653m | North West |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 675m | West |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 733m | North West |

| Zone | Description | Purpose | EPI Name | Published Date | Commenced Date | Currency Date | Amendment | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 736m | North |
| RU3 | Forestry | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 765m | South |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 794m | North East |
| B1 | Neighbourhood Centre | | Coffs Harbour Local Environmental Plan 2013 | 08/01/2016 | 08/01/2016 | 09/11/2018 | Amendment No 5 | 814m | North East |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 878m | North |
| W2 | Recreational Waterways | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 895m | North West |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 898m | North East |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 919m | North West |
| W2 | Recreational Waterways | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 923m | North |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 941m | North West |
| RE1 | Public Recreation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 954m | North East |
| E2 | Environmental Conservation | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 966m | North |
| RU2 | Rural Landscape | | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 09/11/2018 | | 972m | North |

# Heritage Items

**7 Tasman Street, Corindi Beach, NSW 2456**



# Heritage

**7 Tasman Street, Corindi Beach, NSW 2456**

## Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

| Place Id | Name | Address | Place File No | Class | Status | Register Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | |

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch


## National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

| Place Id | Name | Address | Place File No | Class | Status | Register Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | |

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch


## State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

| Map Id | Name | Address | LGA | Listing Date | Listing No | Plan No | Distance | Direction |
|---|---|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | | | |

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage


## Environmental Planning Instrument - Heritage

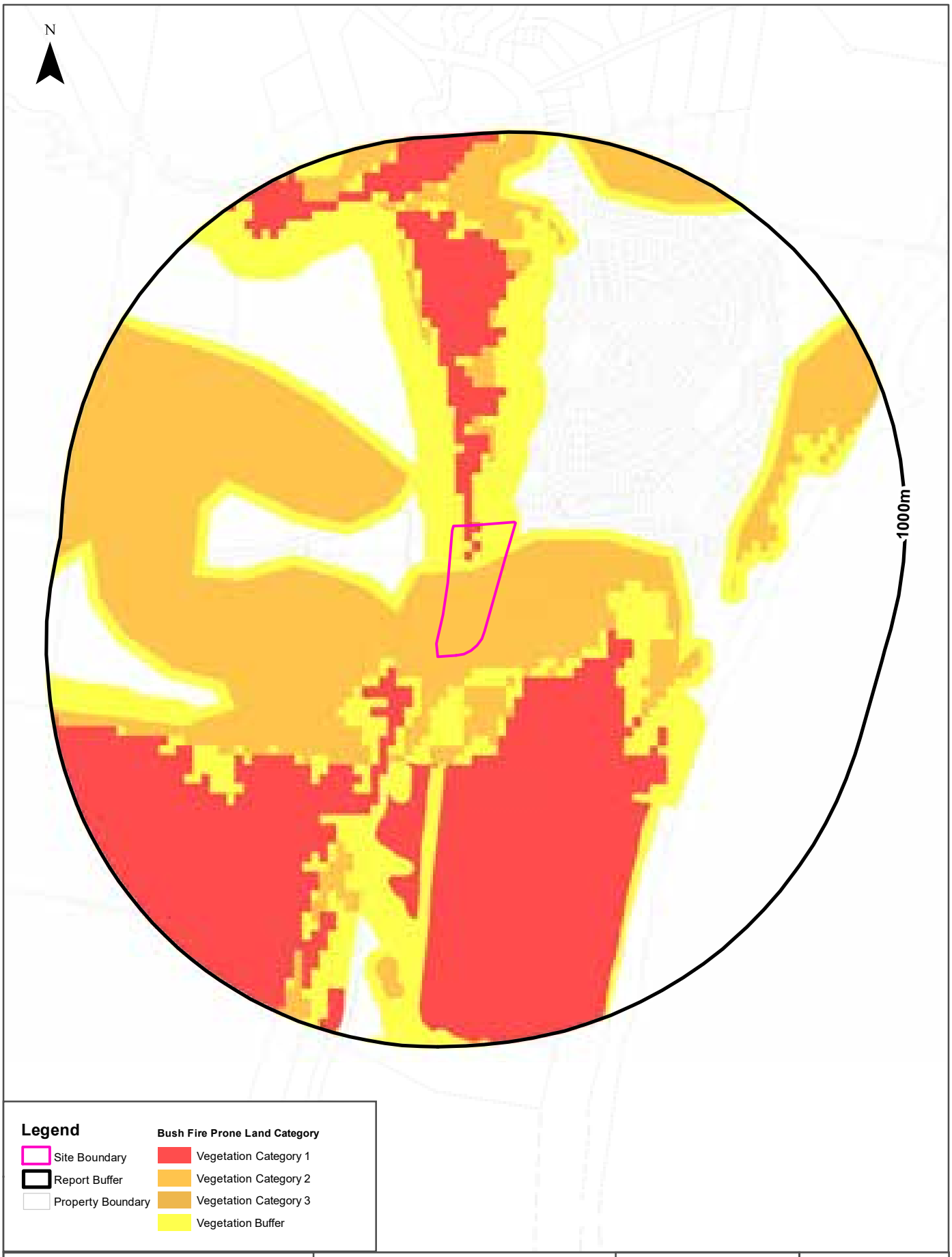
What are the EPI Heritage Items located within the dataset buffer?

| Map Id | Name | Classification | Significance | EPI Name | Published Date | Commenced Date | Currency Date | Distance | Direction |
|---|---|---|---|---|---|---|---|---|---|
| I40 | Residence | Item - General | Local | Coffs Harbour Local Environmental Plan 2013 | 27/09/2013 | 27/09/2013 | 30/11/2018 | 505m | North East |

Heritage Data Source: NSW Crown Copyright - Planning & Environment

# Natural Hazards - Bush Fire Prone Land

**7 Tasman Street, Corindi Beach, NSW 2456**




Data Sources: Bush Fire Prone Land: © NSW Rural Fire Service 2019. Property Boundaries: © Department Finance, Services & Innovation 2019

Coordinate System: GDA 1994 MGA Zone 56

Date: 11 April 2019

# Natural Hazards

**7 Tasman Street, Corindi Beach, NSW 2456**

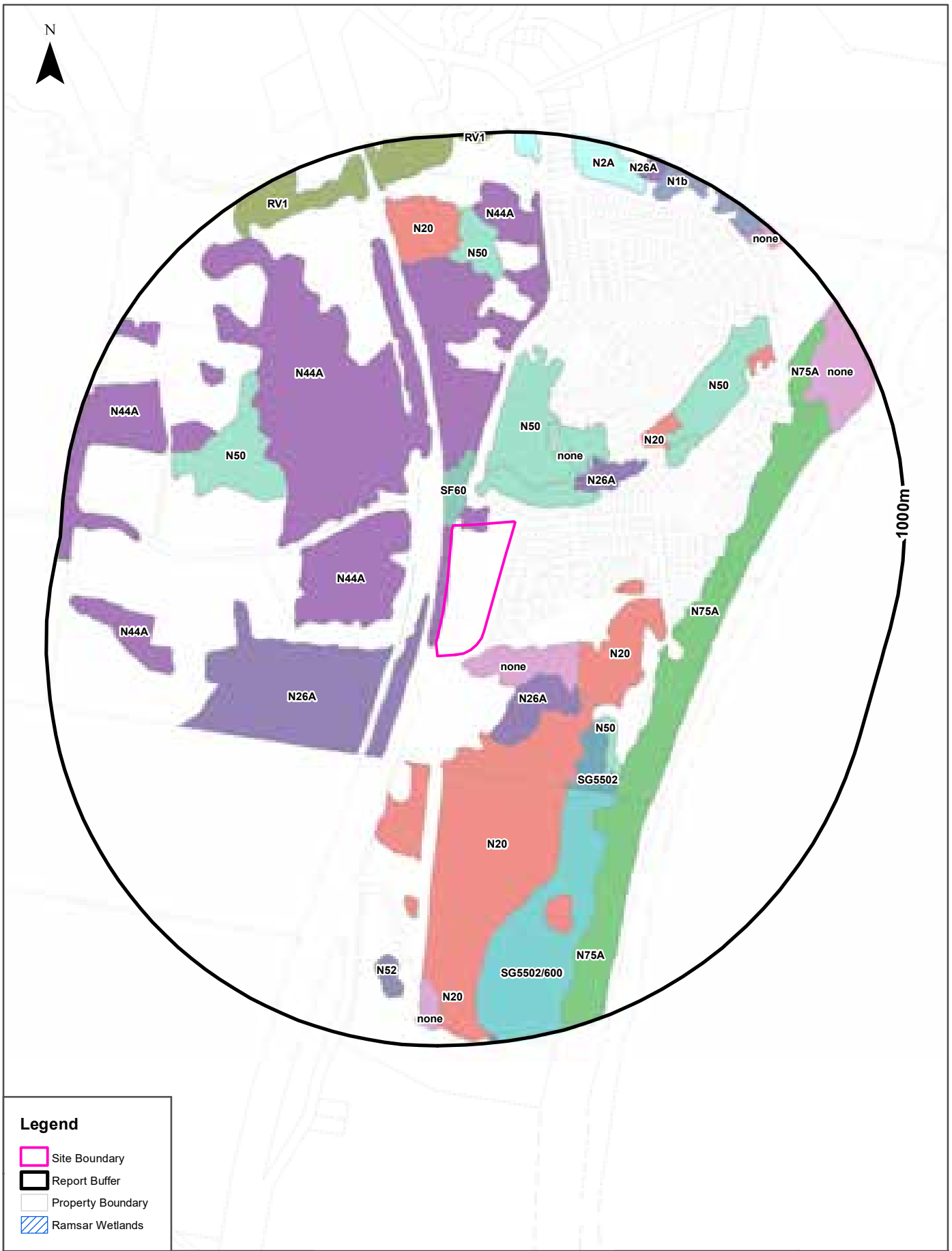
## Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

| Bush Fire Prone Land Category | Distance | Direction |
|---|---|---|
| Vegetation Buffer | 0m | Onsite |
| Vegetation Category 1 | 0m | Onsite |
| Vegetation Category 2 | 0m | Onsite |

# Ecological Constraints - Vegetation & Ramsar Wetlands

**7 Tasman Street, Corindi Beach, NSW 2456**



# Ecological Constraints

**7 Tasman Street, Corindi Beach, NSW 2456**

## Vegetation of Coffs Harbour LGA

What Vegetation of Coffs Harbour LGA exists within the dataset buffer?

| Vegetation Code | Vegetation Category | Species | Source | Distance | Direction |
|---|---|---|---|---|---|
| N44A | Open Forest | Eucalyptus pilularis, E. resinifera, Corymbia intermedia | Veg Mapping Addition. Kendall and Knock 2005 | 0m | Onsite |
| SF60 | Tall Open Forest | Eucalyptus siderophloia, E. propinqua, E. microcorys, E. acmenoides. | Veg Mapping Addition. Kendall and Knock 2005 | 0m | Onsite |
| none | Sedgeland/ Rushland Complex | | Veg Mapping Addition. Kendall and Knock 2005 | 20m | South East |
| N26A | Swamp forest | Casuarina glauca. | Veg Mapping Addition. Kendall and Knock 2005 | 39m | South West |
| N50 | Swamp forest | Melaleuca sp., Casuarina glauca, Eucalyptus robusta | Veg Mapping Addition. Kendall and Knock 2005 | 55m | North East |
| none | | | Veg Mapping Addition. Kendall and Knock 2005 | 205m | North East |
| N20 | Swamp Forest | Melaleuca quinquenervia | Veg Mapping Addition. Kendall and Knock 2005 | 209m | South |
| N20 | Swamp Forest | Melaleuca quinquenervia | Veg Mapping. Fisher 1996 | 282m | South |
| SG5502 | Wet Heath | Melaleuca sieberi, M. nodosa, Allocasuarina littoralis | Veg Mapping Addition. Kendall and Knock 2005 | 349m | South East |
| SG5502/600 | Wet Heath/Shrubland | Melaleuca sieberi, M. nodosa, Allocasuarina littoralis, Hakea sp. A, Callistemon pachyphyllus / Xanthorrhoea fulva | Veg Mapping. Fisher 1996 | 438m | South |
| N75A | Foredune Complex | Banksia integrifolia, Acacia sophorae,*Chrysanthemoides monfiifera*. | Veg Mapping Addition. Kendall and Knock 2005 | 445m | East |
| N75A | Foredune Complex | Banksia integrifolia, Acacia sophorae,*Chrysanthemoides monfiifera*. | Veg Mapping. Fisher 1996 | 520m | South |
| N52 | Swamp Forest | Eucalyptus robusta. | Veg Mapping. Fisher 1996 | 777m | South |
| none | | | Veg Mapping. Fisher 1996 | 823m | South |
| RV1 | Riparian Vegetation | Eucalyptus grandis, Lophostemon confertus, Cinnamomum camphora*. | Veg Mapping Addition. Kendall and Knock 2005 | 863m | North West |
| N2A | Open Forest | Eucalptus pilularis | Veg Mapping Addition. Kendall and Knock 2005 | 900m | North |
| N1b | Open Forest | Eucalyptus tereticonis, Angophora subvelutina, E robusta, Lophostemon suaveolens | Veg Mapping Addition. Kendall and Knock 2005 | 903m | North East |

## Ramsar Wetlands

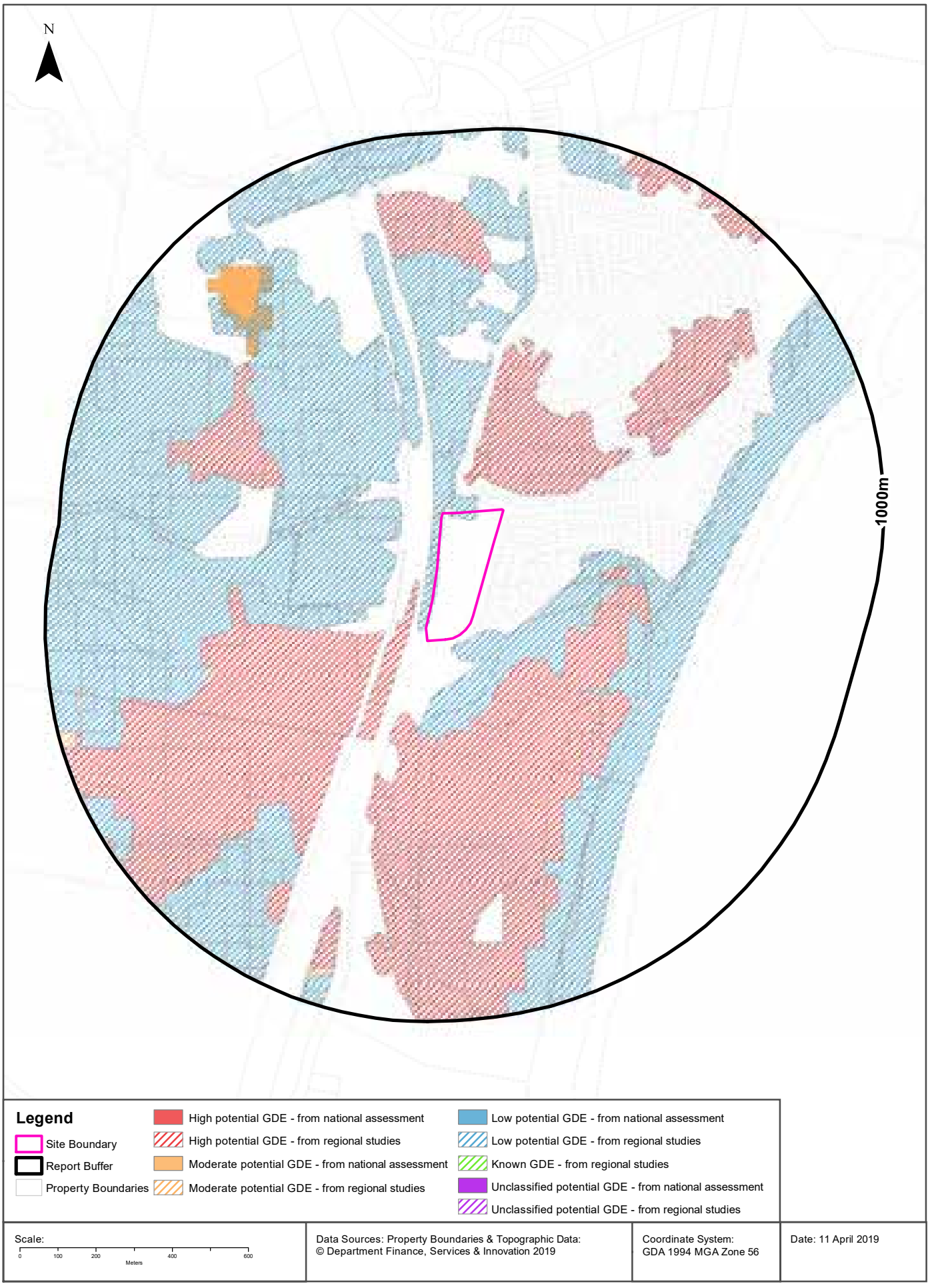
What Ramsar Wetland areas exist within the dataset buffer?

| Map Id | Ramsar Name | Wetland Name | Designation Date | Source | Distance | Direction |
|---|---|---|---|---|---|---|
| N/A | No records in buffer | | | | | |

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Environment

# Ecological Constraints - Groundwater Dependent Ecosystems Atlas

**7 Tasman Street, Corindi Beach, NSW 2456**



# Ecological Constraints

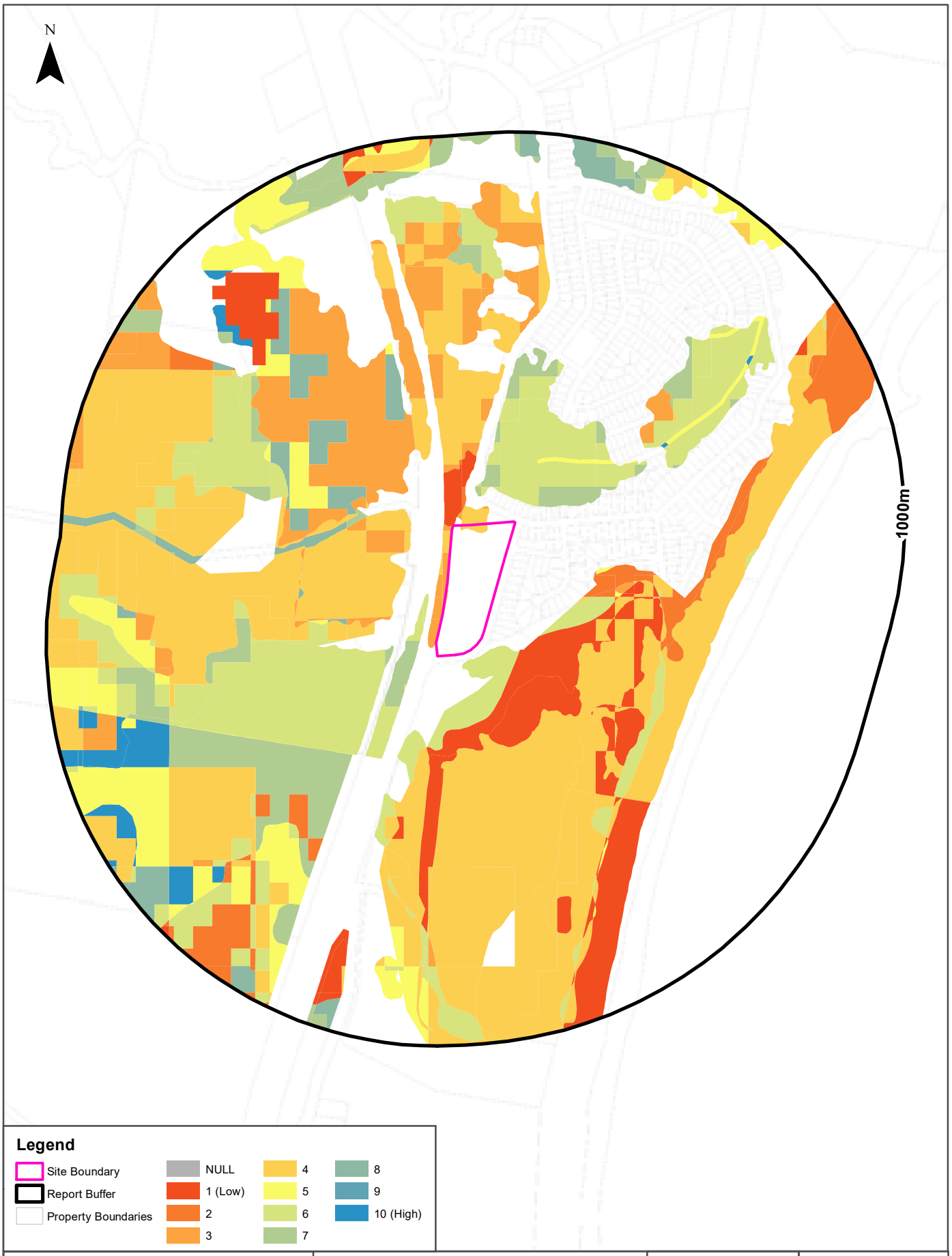
**7 Tasman Street, Corindi Beach, NSW 2456**

## Groundwater Dependent Ecosystems Atlas

| Type | GDE Potential | Geomorphology | Ecosystem Type | Aquifer Geology | Distance |
|---|---|---|---|---|---|
| Terrestrial | Low potential GDE - from regional studies | Coastal lowlands on weak sedimentary rocks, with littoral and alluvial plains. | Vegetation | | 0m |
| Terrestrial | Low potential GDE - from regional studies | Dissected plateau margin on granite and metamorphic rocks. | Vegetation | | 0m |
| Terrestrial | High potential GDE - from regional studies | Coastal lowlands on weak sedimentary rocks, with littoral and alluvial plains. | Vegetation | | 39m |
| Aquatic | Moderate potential GDE - from national assessment | Dissected plateau margin on granite and metamorphic rocks. | Wetland | | 632m |
| Terrestrial | Moderate potential GDE - from regional studies | Plateau flank dissected into narrow strike ridges and valleys. | Vegetation | | 828m |

# Ecological Constraints - Inflow Dependent Ecosystems Likelihood

**7 Tasman Street, Corindi Beach, NSW 2456**



# Ecological Constraints

**7 Tasman Street, Corindi Beach, NSW 2456**

## Inflow Dependent Ecosystems Likelihood

| Type | IDE Likelihood | Geomorphology | Ecosystem Type | Aquifer Geology | Distance |
|---|---|---|---|---|---|
| Terrestrial | 1 | Dissected plateau margin on granite and metamorphic rocks. | Vegetation | | 0m |
| Terrestrial | 3 | Coastal lowlands on weak sedimentary rocks, with littoral and alluvial plains. | Vegetation | | 0m |
| Terrestrial | 4 | Dissected plateau margin on granite and metamorphic rocks. | Vegetation | | 0m |
| Terrestrial | 6 | Plateau flank dissected into narrow strike ridges and valleys. | Vegetation | | 21m |
| Terrestrial | 2 | Dissected plateau margin on granite and metamorphic rocks. | Vegetation | | 36m |
| Terrestrial | 7 | Coastal lowlands on weak sedimentary rocks, with littoral and alluvial plains. | Vegetation | | 40m |
| Terrestrial | 5 | Coastal lowlands on weak sedimentary rocks, with littoral and alluvial plains. | Vegetation | | 162m |
| Terrestrial | 8 | Plateau flank dissected into narrow strike ridges and valleys. | Vegetation | | 217m |
| Terrestrial | 10 | Dissected plateau margin on granite and metamorphic rocks. | Vegetation | | 419m |
| Aquatic | 1 | Dissected plateau margin on granite and metamorphic rocks. | Wetland | | 632m |

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

# Ecological Constraints

**7 Tasman Street, Corindi Beach, NSW 2456**

## NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Amphibia | Crinia tinnula | Wallum Froglet | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Amphibia | Litoria aurea | Green and Golden Bell Frog | Endangered | Not Sensitive | Vulnerable | |
| Animalia | Amphibia | Mixophyes iteratus | Giant Barred Frog | Endangered | Category 2 | Endangered | |
| Animalia | Aves | Actitis hypoleucos | Common Sandpiper | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Anous stolidus | Common Noddy | Not Listed | Not Sensitive | Not Listed | CAMBA;JAMBA |
| Animalia | Aves | Anthochaera phrygia | Regent Honeyeater | Critically Endangered | Not Sensitive | Critically Endangered | |
| Animalia | Aves | Apus pacificus | Fork-tailed Swift | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Ardea ibis | Cattle Egret | Not Listed | Not Sensitive | Not Listed | CAMBA;JAMBA |
| Animalia | Aves | Ardenna carneipes | Flesh-footed Shearwater | Vulnerable | Not Sensitive | Not Listed | ROKAMBA;JAMBA |
| Animalia | Aves | Ardenna pacificus | Wedge-tailed Shearwater | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Ardenna tenuirostris | Short-tailed Shearwater | Not Listed | Not Sensitive | Not Listed | ROKAMBA;JAMBA |
| Animalia | Aves | Arenaria interpres | Ruddy Turnstone | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Artamus cyanopterus cyanopterus | Dusky Woodswallow | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Calidris alba | Sanderling | Vulnerable | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Calidris canutus | Red Knot | Not Listed | Not Sensitive | Endangered | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Calidris ruficollis | Red-necked Stint | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Calidris tenuirostris | Great Knot | Vulnerable | Not Sensitive | Critically Endangered | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Calyptorhynchus lathami | Glossy Black-Cockatoo | Vulnerable | Category 2 | Not Listed | |
| Animalia | Aves | Charadrius leschenaultii | Greater Sand-plover | Vulnerable | Not Sensitive | Vulnerable | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Charadrius mongolus | Lesser Sand-plover | Vulnerable | Not Sensitive | Endangered | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Charadrius veredus | Oriental Plover | Not Listed | Not Sensitive | Not Listed | ROKAMBA;JAMBA |
| Animalia | Aves | Chlidonias leucopterus | White-winged Black Tern | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Coracina lineata | Barred Cuckoo-shrike | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Daphoenositta chrysoptera | Varied Sittella | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Dromaius novaehollandiae | Emu | Endangered Population | Not Sensitive | Not Listed | |
| Animalia | Aves | Egretta sacra | Eastern Reef Egret | Not Listed | Not Sensitive | Not Listed | CAMBA |
| Animalia | Aves | Ephippiorhynchus asiaticus | Black-necked Stork | Endangered | Not Sensitive | Not Listed | |

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Aves | Esacus magnirostris | Beach Stone-curlew | Critically Endangered | Not Sensitive | Not Listed | |
| Animalia | Aves | Gallinago hardwickii | Latham's Snipe | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Gelochelidon nilotica | Gull-billed Tern | Not Listed | Not Sensitive | Not Listed | CAMBA |
| Animalia | Aves | Glossopsitta pusilla | Little Lorikeet | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Grantiella picta | Painted Honeyeater | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Aves | Grus rubicunda | Brolga | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Haematopus fuliginosus | Sooty Oystercatcher | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Haematopus longirostris | Pied Oystercatcher | Endangered | Not Sensitive | Not Listed | |
| Animalia | Aves | Haliaeetus leucogaster | White-bellied Sea-Eagle | Vulnerable | Not Sensitive | Not Listed | CAMBA |
| Animalia | Aves | Hieraaetus morphnoides | Little Eagle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Hirundapus caudacutus | White-throated Needletail | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Hydroprogne caspia | Caspian Tern | Not Listed | Not Sensitive | Not Listed | CAMBA;JAMBA |
| Animalia | Aves | Irediparra gallinacea | Comb-crested Jacana | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Ixobrychus flavicollis | Black Bittern | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Lathamus discolor | Swift Parrot | Endangered | Category 3 | Critically Endangered | |
| Animalia | Aves | Limosa lapponica | Bar-tailed Godwit | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Limosa limosa | Black-tailed Godwit | Vulnerable | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Lophoictinia isura | Square-tailed Kite | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Melithreptus gularis gularis | Black-chinned Honeyeater (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Merops ornatus | Rainbow Bee-eater | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Neophema pulchella | Turquoise Parrot | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Ninox strenua | Powerful Owl | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Numenius madagascariensis | Eastern Curlew | Not Listed | Not Sensitive | Critically Endangered | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Numenius phaeopus | Whimbrel | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Oceanites oceanicus | Wilson's Storm-Petrel | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Onychoprion fuscata | Sooty Tern | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Pandion cristatus | Eastern Osprey | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Pezoporus wallicus wallicus | Eastern Ground Parrot | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Pluvialis fulva | Pacific Golden Plover | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Pluvialis squatarola | Grey Plover | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Pomatostomus temporalis temporalis | Grey-crowned Babbler (eastern subspecies) | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Ptilinopus magnificus | Wompoo Fruit-Dove | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Ptilinopus regina | Rose-crowned Fruit-Dove | Vulnerable | Not Sensitive | Not Listed | |

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Aves | Ptilinopus superbus | Superb Fruit-Dove | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Stercorarius longicaudus | Long-tailed Jaeger | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Sterna hirundo | Common Tern | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Sternula albifrons | Little Tern | Endangered | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Stictonetta naevosa | Freckled Duck | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Todiramphus chloris | Collared Kingfisher | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Tringa brevipes | Grey-tailed Tattler | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Tringa incana | Wandering Tattler | Not Listed | Not Sensitive | Not Listed | JAMBA |
| Animalia | Aves | Tringa nebularia | Common Greenshank | Not Listed | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Aves | Turnix maculosus | Red-backed Button-quail | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Aves | Tyto novaehollandiae | Masked Owl | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Tyto tenebricosa | Sooty Owl | Vulnerable | Category 3 | Not Listed | |
| Animalia | Aves | Xenus cinereus | Terek Sandpiper | Vulnerable | Not Sensitive | Not Listed | ROKAMBA;CAMBA; JAMBA |
| Animalia | Insecta | Petalura litorea | Coastal Petaltail | Endangered | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Aepyprymnus rufescens | Rufous Bettong | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Arctocephalus pusillus doriferus | Australian Fur-seal | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Cercartetus nanus | Eastern Pygmy-possum | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Chalinolobus nigrogriseus | Hoary Wattled Bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Dasyurus maculatus | Spotted-tailed Quoll | Vulnerable | Not Sensitive | Endangered | |
| Animalia | Mammalia | Dugong dugon | Dugong | Endangered | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Eubalaena australis | Southern Right Whale | Endangered | Not Sensitive | Endangered | |
| Animalia | Mammalia | Falsistrellus tasmaniensis | Eastern False Pipistrelle | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Kerivoula papuensis | Golden-tipped Bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Megaptera novaeangliae | Humpback Whale | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Miniopterus australis | Little Bentwing-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Miniopterus schreibersii oceanensis | Eastern Bentwing-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Mormopterus norfolkensis | Eastern Freetail-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Myotis macropus | Southern Myotis | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Nyctophilus bifax | Eastern Long-eared Bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Petauroides volans | Greater Glider | Not Listed | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Petaurus australis | Yellow-bellied Glider | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Petaurus norfolcensis | Squirrel Glider | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Phascogale tapoatafa | Brush-tailed Phascogale | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Phascolarctos cinereus | Koala | Vulnerable | Not Sensitive | Vulnerable | |

| Kingdom | Class | Scientific | Common | NSW Conservation Status | NSW Sensitivity Class | Federal Conservation Status | Migratory Species Agreements |
|---|---|---|---|---|---|---|---|
| Animalia | Mammalia | Potorous tridactylus | Long-nosed Potoroo | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Pseudomys gracilicaudatus | Eastern Chestnut Mouse | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Pteropus poliocephalus | Grey-headed Flying-fox | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Mammalia | Saccolaimus flaviventris | Yellow-bellied Sheathtail-bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Scoteanax rueppellii | Greater Broad-nosed Bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Mammalia | Vespadelus troughtoni | Eastern Cave Bat | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Reptilia | Cacophis harriettae | White-crowned Snake | Vulnerable | Not Sensitive | Not Listed | |
| Animalia | Reptilia | Caretta caretta | Loggerhead Turtle | Endangered | Not Sensitive | Endangered | |
| Animalia | Reptilia | Chelonia mydas | Green Turtle | Vulnerable | Not Sensitive | Vulnerable | |
| Animalia | Reptilia | Eretmochelys imbricata | Hawksbill Turtle | Not Listed | Not Sensitive | Vulnerable | |
| Animalia | Reptilia | Hoplocephalus stephensii | Stephens' Banded Snake | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Acronychia littoralis | Scented Acronychia | Endangered | Not Sensitive | Endangered | |
| Plantae | Flora | Angophora robur | Sandstone Rough-barked Apple | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Arthraxon hispidus | Hairy Jointgrass | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Boronia umbellata | Orara Boronia | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Cyperus aquatilis | Water Nutgrass | Endangered | Not Sensitive | Not Listed | |
| Plantae | Flora | Eleocharis tetraquetra | Square-stemmed Spike-rush | Endangered | Not Sensitive | Not Listed | |
| Plantae | Flora | Eucalyptus tetrapleura | Square-fruited Ironbark | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Geodorum densiflorum | Pink Nodding Orchid | Endangered | Category 2 | Not Listed | |
| Plantae | Flora | Hicksbeachia pinnatifolia | Red Boppel Nut | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Lindernia alsinoides | Noah's False Chickweed | Endangered | Not Sensitive | Not Listed | |
| Plantae | Flora | Lindsaea incisa | Slender Screw Fern | Endangered | Category 3 | Not Listed | |
| Plantae | Flora | Macadamia tetraphylla | Rough-shelled Bush Nut | Vulnerable | Not Sensitive | Vulnerable | |
| Plantae | Flora | Marsdenia longiloba | Slender Marsdenia | Endangered | Not Sensitive | Vulnerable | |
| Plantae | Flora | Maundia triglochinoides | | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Melichrus hirsutus | Hairy Melichrus | Endangered | Not Sensitive | Endangered | |
| Plantae | Flora | Niemeyera whitei | Rusty Plum, Plum Boxwood | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Parsonsia dorrigoensis | Milky Silkpod | Vulnerable | Not Sensitive | Endangered | |
| Plantae | Flora | Phaius australis | Southern Swamp Orchid | Endangered | Category 2 | Endangered | |
| Plantae | Flora | Pultenaea maritima | Coast Headland Pea | Vulnerable | Not Sensitive | Not Listed | |
| Plantae | Flora | Quassia sp. Moonee Creek | Moonee Quassia | Endangered | Not Sensitive | Endangered | |
| Plantae | Flora | Rhodomyrtus psidioides | Native Guava | Critically Endangered | Not Sensitive | Not Listed | |
| Plantae | Flora | Sophora tomentosa | Silverbush | Endangered | Not Sensitive | Not Listed | |
| Plantae | Flora | Typhonium sp. aff. brownii | Stinky Lily | Endangered | Category 3 | Not Listed | |

Data does not include NSW category 1 sensitive species.



Data obtained 11/04/2019

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# Appendix D
Laboratory Report

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web : www.eurofins.com.au

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NATA # 1261
Site # 1254 & 14271

**Sydney**
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

**Brisbane**
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

**Perth**
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

**Company Name:** Whitehead & Associates
**Address:** Unit 2 / 13 Industrial Drive
North Boambee Valley
NSW 2450

**Project Name:** 7 TASMN ST CORINDI
**Project ID:** 2358

**Order No.:** 2358
**Report #:** 652265
**Phone:** 02 6651 1512
**Fax:**

**Received:** Apr 24, 2019 9:00 AM
**Due:** May 2, 2019
**Priority:** 5 Day
**Contact Name:** Strider Duerinckx

**Eurofins | mgt Analytical Services Manager : Andrew Black**

| Sample Detail | | | | | | Metals M8 | Eurofins \| mgt Suite B14 | Moisture Set |
|---|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA Site # 1254 & 14271** | | | | | | | | |
| **Sydney Laboratory - NATA Site # 18217** | | | | | | X | X | X |
| **Brisbane Laboratory - NATA Site # 20794** | | | | | | | | |
| **Perth Laboratory - NATA Site # 23736** | | | | | | | | |
| **External Laboratory** | | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | | |
| 1 | S-1 | Apr 18, 2019 | | Soil | S19-Ap34609 | X | X | X |
| 2 | S-2 | Apr 18, 2019 | | Soil | S19-Ap34610 | X | X | X |
| **Test Counts** | | | | | | 2 | 2 | 2 |

**Whitehead & Associates**
**Unit 2 / 13 Industrial Drive**
**North Boambee Valley**
**NSW 2450**



**Attention:** **Strider Duerinckx**

**Report** **652265-S**
Project name 7 TASMN ST CORINDI
Project ID 2358
Received Date Apr 24, 2019

| **Client Sample ID** | | | **S-1** | **S-2** |
|---|---|---|---|---|
| **Sample Matrix** | | | **Soil** | **Soil** |
| **Eurofins \| mgt Sample No.** | | | **S19-Ap34609** | **S19-Ap34610** |
| **Date Sampled** | | | **Apr 18, 2019** | **Apr 18, 2019** |
| Test/Reference | LOR | Unit | | |
| **Organochlorine Pesticides** | | | | |
| Chlordanes - Total | 0.1 | mg/kg | < 0.1 | < 0.1 |
| 4.4'-DDD | 0.05 | mg/kg | < 0.05 | < 0.05 |
| 4.4'-DDE | 0.05 | mg/kg | < 0.05 | < 0.05 |
| 4.4'-DDT | 0.05 | mg/kg | < 0.05 | < 0.05 |
| a-BHC | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Aldrin | 0.05 | mg/kg | < 0.05 | < 0.05 |
| b-BHC | 0.05 | mg/kg | < 0.05 | < 0.05 |
| d-BHC | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Dieldrin | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endosulfan I | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endosulfan II | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endosulfan sulphate | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endrin | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endrin aldehyde | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Endrin ketone | 0.05 | mg/kg | < 0.05 | < 0.05 |
| g-BHC (Lindane) | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Heptachlor | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Heptachlor epoxide | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Hexachlorobenzene | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Methoxychlor | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Toxaphene | 1 | mg/kg | < 1 | < 1 |
| Aldrin and Dieldrin (Total)* | 0.05 | mg/kg | < 0.05 | < 0.05 |
| DDT + DDE + DDD (Total)* | 0.05 | mg/kg | < 0.05 | < 0.05 |
| Vic EPA IWRG 621 OCP (Total)* | 0.1 | mg/kg | < 0.2 | < 0.2 |
| Vic EPA IWRG 621 Other OCP (Total)* | 0.1 | mg/kg | < 0.2 | < 0.2 |
| Dibutylchlorendate (surr.) | 1 | % | 94 | 128 |
| Tetrachloro-m-xylene (surr.) | 1 | % | 84 | 115 |
| **Organophosphorus Pesticides** | | | | |
| Azinphos-methyl | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Bolstar | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Chlorfenvinphos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Chlorpyrifos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Chlorpyrifos-methyl | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Coumaphos | 2 | mg/kg | < 2 | < 2 |
| Demeton-S | 0.2 | mg/kg | < 0.2 | < 0.2 |

| Client Sample ID | | | S-1 | S-2 |
|---|---|---|---|---|
| Sample Matrix | | | Soil | Soil |
| Eurofins \| mgt Sample No. | | | S19-Ap34609 | S19-Ap34610 |
| Date Sampled | | | Apr 18, 2019 | Apr 18, 2019 |
| Test/Reference | LOR | Unit | | |
| **Organophosphorus Pesticides** | | | | |
| Demeton-O | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Diazinon | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Dichlorvos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Dimethoate | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Disulfoton | 0.2 | mg/kg | < 0.2 | < 0.2 |
| EPN | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Ethion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Ethoprop | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Ethyl parathion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Fenitrothion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Fensulfothion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Fenthion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Malathion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Merphos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Methyl parathion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Mevinphos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Monocrotophos | 2 | mg/kg | < 2 | < 2 |
| Naled | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Omethoate | 2 | mg/kg | < 2 | < 2 |
| Phorate | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Pirimiphos-methyl | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Pyrazophos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Ronnel | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Terbufos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Tetrachlorvinphos | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Tokuthion | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Trichloronate | 0.2 | mg/kg | < 0.2 | < 0.2 |
| Triphenylphosphate (surr.) | 1 | % | 99 | 109 |
| **Heavy Metals** | | | | |
| Arsenic | 2 | mg/kg | 5.2 | 6.6 |
| Cadmium | 0.4 | mg/kg | < 0.4 | < 0.4 |
| Chromium | 5 | mg/kg | 11 | 23 |
| Copper | 5 | mg/kg | < 5 | < 5 |
| Lead | 5 | mg/kg | 15 | 21 |
| Mercury | 0.1 | mg/kg | < 0.1 | < 0.1 |
| Nickel | 5 | mg/kg | < 5 | < 5 |
| Zinc | 5 | mg/kg | 23 | 22 |
| | | | | |
| % Moisture | 1 | % | 19 | 26 |

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

| Description | Testing Site | Extracted | Holding Time |
|---|---|---|---|
| Organochlorine Pesticides | Sydney | Apr 29, 2019 | 14 Day |
| - Method: LTM-ORG-2220 OCP & PCB in Soil and Water | | | |
| Organophosphorus Pesticides | Sydney | Apr 29, 2019 | 14 Day |
| - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS | | | |
| Metals M8 | Sydney | Apr 29, 2019 | 28 Day |
| - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS | | | |
| % Moisture | Sydney | Apr 24, 2019 | 14 Day |
| - Method: LTM-GEN-7080 Moisture | | | |

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

**Brisbane**
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

**Perth**
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

| | | | | | |
|---|---|---|---|---|---|
| **Company Name:** | Whitehead & Associates | **Order No.:** | 2358 | **Received:** | Apr 24, 2019 9:00 AM |
| **Address:** | Unit 2 / 13 Industrial Drive<br>North Boambee Valley<br>NSW 2450 | **Report #:** | 652265 | **Due:** | May 2, 2019 |
| | | **Phone:** | 02 6651 1512 | **Priority:** | 5 Day |
| | | **Fax:** | | **Contact Name:** | Strider Duerinckx |
| **Project Name:** | 7 TASMN ST CORINDI | | | | |
| **Project ID:** | 2358 | | | | |

**Eurofins | mgt Analytical Services Manager : Andrew Black**

| Sample Detail | | | | | | Metals M8 | Eurofins \| mgt Suite B14 | Moisture Set |
|---|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA Site # 1254 & 14271** | | | | | | | | |
| **Sydney Laboratory - NATA Site # 18217** | | | | | | X | X | X |
| **Brisbane Laboratory - NATA Site # 20794** | | | | | | | | |
| **Perth Laboratory - NATA Site # 23736** | | | | | | | | |
| **External Laboratory** | | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | | |
| 1 | S-1 | Apr 18, 2019 | | Soil | S19-Ap34609 | X | X | X |
| 2 | S-2 | Apr 18, 2019 | | Soil | S19-Ap34610 | X | X | X |
| **Test Counts** | | | | | | 2 | 2 | 2 |

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

| | |
|---|---|
| **Dry** | Where a moisture has been determined on a solid sample the result is expressed on a dry basis. |
| **LOR** | Limit of Reporting. |
| **SPIKE** | Addition of the analyte to the sample and reported as percentage recovery. |
| **RPD** | Relative Percent Difference between two Duplicate pieces of analysis. |
| **LCS** | Laboratory Control Sample - reported as percent recovery. |
| **CRM** | Certified Reference Material - reported as percent recovery. |
| **Method Blank** | In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water. |
| **Surr - Surrogate** | The addition of a like compound to the analyte target and reported as percentage recovery. |
| **Duplicate** | A second piece of analysis from the same sample and reported in the same units as the result to show comparison. |
| **USEPA** | United States Environmental Protection Agency |
| **APHA** | American Public Health Association |
| **TCLP** | Toxicity Characteristic Leaching Procedure |
| **COC** | Chain of Custody |
| **SRA** | Sample Receipt Advice |
| **QSM** | US Department of Defense Quality Systems Manual Version 5.2 2018 |
| **CP** | Client Parent - QC was performed on samples pertaining to this report |
| **NCP** | Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within. |
| **TEQ** | Toxic Equivalency Quotient |

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

**Quality Control Results**

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| **Method Blank** | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | |
| Chlordanes - Total | mg/kg | < 0.1 | | | 0.1 | Pass | |
| 4.4'-DDD | mg/kg | < 0.05 | | | 0.05 | Pass | |
| 4.4'-DDE | mg/kg | < 0.05 | | | 0.05 | Pass | |
| 4.4'-DDT | mg/kg | < 0.05 | | | 0.05 | Pass | |
| a-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Aldrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| b-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| d-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Dieldrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endosulfan I | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endosulfan II | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endosulfan sulphate | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin aldehyde | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin ketone | mg/kg | < 0.05 | | | 0.05 | Pass | |
| g-BHC (Lindane) | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Heptachlor | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Heptachlor epoxide | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Hexachlorobenzene | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Methoxychlor | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Toxaphene | mg/kg | < 1 | | | 1 | Pass | |
| **Method Blank** | | | | | | | |
| **Organophosphorus Pesticides** | | | | | | | |
| Azinphos-methyl | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Bolstar | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Chlorfenvinphos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Chlorpyrifos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Chlorpyrifos-methyl | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Coumaphos | mg/kg | < 2 | | | 2 | Pass | |
| Demeton-S | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Demeton-O | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Diazinon | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Dichlorvos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Dimethoate | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Disulfoton | mg/kg | < 0.2 | | | 0.2 | Pass | |
| EPN | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Ethion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Ethoprop | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Ethyl parathion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Fenitrothion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Fensulfothion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Fenthion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Malathion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Merphos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Methyl parathion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Mevinphos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Monocrotophos | mg/kg | < 2 | | | 2 | Pass | |
| Naled | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Omethoate | mg/kg | < 2 | | | 2 | Pass | |
| Phorate | mg/kg | < 0.2 | | | 0.2 | Pass | |

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| Pirimiphos-methyl | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Pyrazophos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Ronnel | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Terbufos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Tetrachlorvinphos | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Tokuthion | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Trichloronate | mg/kg | < 0.2 | | | 0.2 | Pass | |
| **Method Blank** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | mg/kg | < 2 | | | 2 | Pass | |
| Cadmium | mg/kg | < 0.4 | | | 0.4 | Pass | |
| Chromium | mg/kg | < 5 | | | 5 | Pass | |
| Copper | mg/kg | < 5 | | | 5 | Pass | |
| Lead | mg/kg | < 5 | | | 5 | Pass | |
| Mercury | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Nickel | mg/kg | < 5 | | | 5 | Pass | |
| Zinc | mg/kg | < 5 | | | 5 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | |
| Chlordanes - Total | % | 100 | | | 70-130 | Pass | |
| 4.4'-DDD | % | 108 | | | 70-130 | Pass | |
| 4.4'-DDE | % | 98 | | | 70-130 | Pass | |
| 4.4'-DDT | % | 102 | | | 70-130 | Pass | |
| a-BHC | % | 93 | | | 70-130 | Pass | |
| Aldrin | % | 92 | | | 70-130 | Pass | |
| b-BHC | % | 93 | | | 70-130 | Pass | |
| d-BHC | % | 98 | | | 70-130 | Pass | |
| Dieldrin | % | 99 | | | 70-130 | Pass | |
| Endosulfan I | % | 99 | | | 70-130 | Pass | |
| Endosulfan II | % | 101 | | | 70-130 | Pass | |
| Endosulfan sulphate | % | 105 | | | 70-130 | Pass | |
| Endrin | % | 107 | | | 70-130 | Pass | |
| Endrin aldehyde | % | 90 | | | 70-130 | Pass | |
| Endrin ketone | % | 99 | | | 70-130 | Pass | |
| g-BHC (Lindane) | % | 95 | | | 70-130 | Pass | |
| Heptachlor | % | 104 | | | 70-130 | Pass | |
| Heptachlor epoxide | % | 102 | | | 70-130 | Pass | |
| Hexachlorobenzene | % | 93 | | | 70-130 | Pass | |
| Methoxychlor | % | 113 | | | 70-130 | Pass | |
| Toxaphene | % | 101 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Organophosphorus Pesticides** | | | | | | | |
| Dimethoate | % | 89 | | | 70-130 | Pass | |
| Ethion | % | 114 | | | 70-130 | Pass | |
| Fenitrothion | % | 108 | | | 70-130 | Pass | |
| Methyl parathion | % | 89 | | | 70-130 | Pass | |
| Mevinphos | % | 124 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | % | 117 | | | 70-130 | Pass | |
| Cadmium | % | 119 | | | 70-130 | Pass | |
| Chromium | % | 120 | | | 70-130 | Pass | |
| Copper | % | 121 | | | 70-130 | Pass | |
| Lead | % | 122 | | | 70-130 | Pass | |

| Test | | | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | % | 115 | | | 70-130 | Pass | |
| Nickel | | | % | 123 | | | 70-130 | Pass | |
| Zinc | | | % | 125 | | | 70-130 | Pass | |
| **Test** | **Lab Sample ID** | **QA Source** | **Units** | **Result 1** | | | **Acceptance Limits** | **Pass Limits** | **Qualifying Code** |
| **Spike - % Recovery** | | | | | | | | | |
| **Organochlorine Pesticides** | | | | Result 1 | | | | | |
| Chlordanes - Total | S19-Ap31275 | NCP | % | 111 | | | 70-130 | Pass | |
| 4.4'-DDE | S19-Ap31275 | NCP | % | 119 | | | 70-130 | Pass | |
| 4.4'-DDT | S19-Ap31912 | NCP | % | 114 | | | 70-130 | Pass | |
| a-BHC | S19-Ap31275 | NCP | % | 110 | | | 70-130 | Pass | |
| Aldrin | S19-Ap31275 | NCP | % | 116 | | | 70-130 | Pass | |
| b-BHC | S19-Ap31275 | NCP | % | 112 | | | 70-130 | Pass | |
| d-BHC | S19-Ap31275 | NCP | % | 111 | | | 70-130 | Pass | |
| Dieldrin | S19-Ap31275 | NCP | % | 117 | | | 70-130 | Pass | |
| Endosulfan I | S19-Ap31275 | NCP | % | 117 | | | 70-130 | Pass | |
| Endosulfan sulphate | S19-Ap31275 | NCP | % | 119 | | | 70-130 | Pass | |
| Endrin | S19-Ap31275 | NCP | % | 103 | | | 70-130 | Pass | |
| Endrin aldehyde | S19-Ap31275 | NCP | % | 116 | | | 70-130 | Pass | |
| Endrin ketone | S19-Ap31275 | NCP | % | 88 | | | 70-130 | Pass | |
| g-BHC (Lindane) | S19-Ap31275 | NCP | % | 104 | | | 70-130 | Pass | |
| Heptachlor | S19-Ap31275 | NCP | % | 77 | | | 70-130 | Pass | |
| Heptachlor epoxide | S19-Ap31912 | NCP | % | 128 | | | 70-130 | Pass | |
| Hexachlorobenzene | S19-Ap31275 | NCP | % | 109 | | | 70-130 | Pass | |
| Methoxychlor | S19-Ap31912 | NCP | % | 128 | | | 70-130 | Pass | |
| Toxaphene | S19-Ap31275 | NCP | % | 116 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | | | | | |
| Arsenic | S19-Ap37280 | NCP | % | 84 | | | 70-130 | Pass | |
| Cadmium | S19-Ap37280 | NCP | % | 89 | | | 70-130 | Pass | |
| Chromium | S19-Ap37280 | NCP | % | 82 | | | 70-130 | Pass | |
| Copper | S19-Ap37280 | NCP | % | 77 | | | 70-130 | Pass | |
| Lead | S19-Ap37280 | NCP | % | 87 | | | 70-130 | Pass | |
| Mercury | S19-Ap37280 | NCP | % | 93 | | | 70-130 | Pass | |
| Nickel | S19-Ap37280 | NCP | % | 85 | | | 70-130 | Pass | |
| Zinc | S19-Ap37280 | NCP | % | 77 | | | 70-130 | Pass | |
| **Test** | **Lab Sample ID** | **QA Source** | **Units** | **Result 1** | | | **Acceptance Limits** | **Pass Limits** | **Qualifying Code** |
| **Duplicate** | | | | | | | | | |
| **Organochlorine Pesticides** | | | | Result 1 | Result 2 | RPD | | | |
| Chlordanes - Total | N19-Ap35182 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| 4.4'-DDD | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| 4.4'-DDE | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| 4.4'-DDT | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| a-BHC | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Aldrin | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| b-BHC | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| d-BHC | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Dieldrin | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan I | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan II | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan sulphate | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin aldehyde | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin ketone | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Duplicate** | | | | | | | | | |
| **Organochlorine Pesticides** | | | | Result 1 | Result 2 | RPD | | | |
| g-BHC (Lindane) | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Heptachlor | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Heptachlor epoxide | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Hexachlorobenzene | N19-Ap35182 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Methoxychlor | N19-Ap35182 | NCP | mg/kg | < 0.2 | < 0.2 | <1 | 30% | Pass | |
| Toxaphene | N19-Ap35182 | NCP | mg/kg | < 1 | < 1 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | Result 2 | RPD | | | |
| Arsenic | S19-Ap34711 | NCP | mg/kg | 8.1 | 6.7 | 19 | 30% | Pass | |
| Cadmium | S19-Ap34711 | NCP | mg/kg | 0.5 | 0.5 | 2.0 | 30% | Pass | |
| Chromium | S19-Ap34711 | NCP | mg/kg | 14 | 14 | 1.0 | 30% | Pass | |
| Copper | S19-Ap34711 | NCP | mg/kg | 220 | 220 | 4.0 | 30% | Pass | |
| Lead | S19-Ap34711 | NCP | mg/kg | 620 | 730 | 15 | 30% | Pass | |
| Mercury | S19-Ap34711 | NCP | mg/kg | 0.3 | 0.3 | 9.0 | 30% | Pass | |
| Nickel | S19-Ap34711 | NCP | mg/kg | 8.0 | 7.3 | 8.0 | 30% | Pass | |
| Zinc | S19-Ap34711 | NCP | mg/kg | 250 | 300 | 18 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| | | | | Result 1 | Result 2 | RPD | | | |
| % Moisture | N19-Ap19857 | NCP | % | 4.3 | 4.1 | 4.0 | 30% | Pass | |

## Comments

## Sample Integrity

| | |
|---|---|
| Custody Seals Intact (if used) | N/A |
| Attempt to Chill was evident | Yes |
| Sample correctly preserved | Yes |
| Appropriate sample containers have been used | Yes |
| Sample containers for volatile analysis received with minimal headspace | N/A |
| Samples received within HoldingTime | Yes |
| Some samples have been subcontracted | No |

## Authorised By

| | |
|---|---|
| Andrew Black | Analytical Services Manager |
| Andrew Sullivan | Senior Analyst-Organic (NSW) |
| Gabriele Cordero | Senior Analyst-Metal (NSW) |

**Glenn Jackson**
**General Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

# CHAIN OF CUSTODY RECORD

☑ Sydney Laboratory
☐ Brisbane Laboratory
☐ Perth Laboratory
☐ Melbourne Laboratory

| | | | | | |
|---|---|---|---|---|---|
| Company | Whitehead & Associates | Project No | 2208 | Sampler | Mei Wang |
| Address | Unit 2 / 12 Industrial Drive, North Boambee Valley NSW 2450 | Project Name | 7 Tween St, Detroit | Attention | Brider Duerincks |
| Contact Name | Brider Duerincks | Project Manager | EDD Format | Email to Client | Brider.D@whiteheadenvironmental.com.au |
| Phone No | 02-66311512 | | | Email to Results | " |
| Special Questions | | | | | |
| Purchase Order | 2208 | | | | |
| Quote ID No | | | | | |

Containers

Required Turnaround Time (Standard 5 Business Days)

- ☐ Overnight (reporting by 9am)
- ☐ Same day ☐ 1 day
- ☐ 2 days ☐ 3 days
- ☒ 5 days (Standard)
- ☐ Other

| No | Client Sample ID | Sampled Date/Time | Matrix | MB | BH | | | | | | | | | | | | | | Sample Comments / Dangerous Goods Hazard Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S-1 | 18/4/19 | S | ✓ | ✓ | | | | | | | | | | | | | ✓ | |
| 2 | S-2 | 18/4/19 | S | ✓ | ✓ | | | | | | | | | | | | | ✓ | |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| | | Total Counts | | 2 | 2 | | | | | | | | | | | | | 2 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Method of Shipment | ☐ Courier (# | | ☐ Hand Delivered | ☐ Postal | Name | Mei Wang | Signature | | Date | | Date | 23/4/19 | Time | | |
| Sydney / Perth Laboratory Use Only | Received By | | VOC / SVOC / MBC / TRH / BTEX / PAH / Other | | Signature | Rickyards | Date | 23/4/19 | Time | 9:20 | Temperature | 16.9C | | | |
| | Received By | | VOC / SVOC / MBC / TRH / BTEX / PAH / Other | | Signature | | Date | | Time | | Report No | | | | |

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

**Brisbane**
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

**Perth**
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

**Company Name:** Whitehead & Associates
**Address:** Unit 2 / 13 Industrial Drive
North Boambee Valley
NSW 2450

**Project Name:** CORINIDI
**Project ID:** 2358

**Order No.:**
**Report #:** 659793
**Phone:** 02 6651 1512
**Fax:**

**Received:** Jun 7, 2019 11:27 AM
**Due:** Jun 19, 2019
**Priority:** 7 Day
**Contact Name:** Strider Duerinckx

**Eurofins | mgt Analytical Services Manager : Andrew Black**

| Sample Detail | | | | | | Asbestos - AS4964 | Moisture Set | Eurofins \| mgt Suite B7 | Eurofins \| mgt Suite B9 |
|---|---|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA Site # 1254 & 14271** | | | | | | | | | |
| **Sydney Laboratory - NATA Site # 18217** | | | | | | X | X | X | X |
| **Brisbane Laboratory - NATA Site # 20794** | | | | | | | | | |
| **Perth Laboratory - NATA Site # 23736** | | | | | | | | | |
| **External Laboratory** | | | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | | | |
| 1 | S-3 | Jun 05, 2019 | | Soil | S19-Jn07772 | | X | X | |
| 2 | S-4 | Jun 05, 2019 | | Soil | S19-Jn07773 | | X | | X |
| 3 | S-5 | Jun 05, 2019 | | Soil | S19-Jn07774 | X | X | X | |
| 4 | S-6 | Jun 05, 2019 | | Soil | S19-Jn07775 | X | X | X | |
| **Test Counts** | | | | | | 2 | 4 | 3 | 1 |

**Whitehead & Associates**
**Unit 2 / 13 Industrial Drive**
**North Boambee Valley**
**NSW 2450**

**NATA Accredited**
**Accreditation Number 1261**
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

**Attention:** **Strider Duerinckx**

**Report** **659793-S**
Project name CORINIDI
Project ID 2358
Received Date Jun 07, 2019

| **Client Sample ID** | | | **S-3** | **S-4** | **S-5** | **S-6** |
|---|---|---|---|---|---|---|
| **Sample Matrix** | | | **Soil** | **Soil** | **Soil** | **Soil** |
| **Eurofins \| mgt Sample No.** | | | **S19-Jn07772** | **S19-Jn07773** | **S19-Jn07774** | **S19-Jn07775** |
| **Date Sampled** | | | **Jun 05, 2019** | **Jun 05, 2019** | **Jun 05, 2019** | **Jun 05, 2019** |
| Test/Reference | LOR | Unit | | | | |
| **Total Recoverable Hydrocarbons - 1999 NEPM Fractions** | | | | | | |
| TRH C6-C9 | 20 | mg/kg | < 20 | < 20 | < 20 | < 20 |
| TRH C10-C14 | 20 | mg/kg | 41 | < 20 | 50 | < 20 |
| TRH C15-C28 | 50 | mg/kg | 150 | < 50 | 2400 | < 50 |
| TRH C29-C36 | 50 | mg/kg | 170 | < 50 | 2500 | < 50 |
| TRH C10-36 (Total) | 50 | mg/kg | 361 | < 50 | 4950 | < 50 |
| **BTEX** | | | | | | |
| Benzene | 0.1 | mg/kg | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Toluene | 0.1 | mg/kg | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Ethylbenzene | 0.1 | mg/kg | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| m&p-Xylenes | 0.2 | mg/kg | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| o-Xylene | 0.1 | mg/kg | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Xylenes - Total | 0.3 | mg/kg | < 0.3 | < 0.3 | < 0.3 | < 0.3 |
| 4-Bromofluorobenzene (surr.) | 1 | % | 97 | 90 | 90 | 87 |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | | | |
| Naphthalene[N02] | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| TRH C6-C10 | 20 | mg/kg | < 20 | < 20 | < 20 | < 20 |
| TRH C6-C10 less BTEX (F1)[N04] | 20 | mg/kg | < 20 | < 20 | < 20 | < 20 |
| TRH >C10-C16 | 50 | mg/kg | < 50 | < 50 | 66 | < 50 |
| TRH >C10-C16 less Naphthalene (F2)[N01] | 50 | mg/kg | < 50 | < 50 | 66 | < 50 |
| TRH >C16-C34 | 100 | mg/kg | 280 | < 100 | 4800 | < 100 |
| TRH >C34-C40 | 100 | mg/kg | 110 | < 100 | 660 | < 100 |
| TRH >C10-C40 (total)* | 100 | mg/kg | 390 | < 100 | 5526 | < 100 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | |
| Benzo(a)pyrene TEQ (lower bound) * | 0.5 | mg/kg | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| Benzo(a)pyrene TEQ (medium bound) * | 0.5 | mg/kg | 0.6 | 0.6 | 1.0 | 0.6 |
| Benzo(a)pyrene TEQ (upper bound) * | 0.5 | mg/kg | 1.2 | 1.2 | 1.3 | 1.2 |
| Acenaphthene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Acenaphthylene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Anthracene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benz(a)anthracene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(a)pyrene | 0.5 | mg/kg | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| Benzo(b&j)fluoranthene[N07] | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(g.h.i)perylene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Benzo(k)fluoranthene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Chrysene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |

| Client Sample ID | | | S-3 | S-4 | S-5 | S-6 |
|---|---|---|---|---|---|---|
| Sample Matrix | | | Soil | Soil | Soil | Soil |
| Eurofins \| mgt Sample No. | | | S19-Jn07772 | S19-Jn07773 | S19-Jn07774 | S19-Jn07775 |
| Date Sampled | | | Jun 05, 2019 | Jun 05, 2019 | Jun 05, 2019 | Jun 05, 2019 |
| Test/Reference | LOR | Unit | | | | |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | |
| Dibenz(a.h)anthracene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Fluoranthene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Fluorene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Indeno(1.2.3-cd)pyrene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Naphthalene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Phenanthrene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Pyrene | 0.5 | mg/kg | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Total PAH* | 0.5 | mg/kg | < 0.5 | < 0.5 | 0.6 | < 0.5 |
| 2-Fluorobiphenyl (surr.) | 1 | % | 129 | 136 | 111 | 121 |
| p-Terphenyl-d14 (surr.) | 1 | % | 87 | 95 | 73 | 82 |
| **Organochlorine Pesticides** | | | | | | |
| Chlordanes - Total | 0.1 | mg/kg | - | < 0.1 | - | - |
| 4.4'-DDD | 0.05 | mg/kg | - | < 0.05 | - | - |
| 4.4'-DDE | 0.05 | mg/kg | - | < 0.05 | - | - |
| 4.4'-DDT | 0.05 | mg/kg | - | < 0.05 | - | - |
| a-BHC | 0.05 | mg/kg | - | < 0.05 | - | - |
| Aldrin | 0.05 | mg/kg | - | < 0.05 | - | - |
| b-BHC | 0.05 | mg/kg | - | < 0.05 | - | - |
| d-BHC | 0.05 | mg/kg | - | < 0.05 | - | - |
| Dieldrin | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endosulfan I | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endosulfan II | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endosulfan sulphate | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endrin | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endrin aldehyde | 0.05 | mg/kg | - | < 0.05 | - | - |
| Endrin ketone | 0.05 | mg/kg | - | < 0.05 | - | - |
| g-BHC (Lindane) | 0.05 | mg/kg | - | < 0.05 | - | - |
| Heptachlor | 0.05 | mg/kg | - | < 0.05 | - | - |
| Heptachlor epoxide | 0.05 | mg/kg | - | < 0.05 | - | - |
| Hexachlorobenzene | 0.05 | mg/kg | - | < 0.05 | - | - |
| Methoxychlor | 0.2 | mg/kg | - | < 0.2 | - | - |
| Toxaphene | 1 | mg/kg | - | < 1 | - | - |
| Aldrin and Dieldrin (Total)* | 0.05 | mg/kg | - | < 0.05 | - | - |
| DDT + DDE + DDD (Total)* | 0.05 | mg/kg | - | < 0.05 | - | - |
| Vic EPA IWRG 621 OCP (Total)* | 0.1 | mg/kg | - | < 0.2 | - | - |
| Vic EPA IWRG 621 Other OCP (Total)* | 0.1 | mg/kg | - | < 0.2 | - | - |
| Dibutylchlorendate (surr.) | 1 | % | - | 132 | - | - |
| Tetrachloro-m-xylene (surr.) | 1 | % | - | 126 | - | - |
| **Heavy Metals** | | | | | | |
| Arsenic | 2 | mg/kg | 6.7 | 9.6 | 4.3 | 7.0 |
| Cadmium | 0.4 | mg/kg | < 0.4 | < 0.4 | < 0.4 | < 0.4 |
| Chromium | 5 | mg/kg | 5.4 | 8.2 | 16 | 15 |
| Copper | 5 | mg/kg | 13 | 40 | < 5 | < 5 |
| Lead | 5 | mg/kg | 24 | 6.8 | 15 | 13 |
| Mercury | 0.1 | mg/kg | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Nickel | 5 | mg/kg | 5.2 | < 5 | < 5 | < 5 |
| Zinc | 5 | mg/kg | 67 | 73 | 42 | 69 |
| | | | | | | |
| % Moisture | 1 | % | 6.4 | 12 | 16 | 15 |

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

| Description | Testing Site | Extracted | Holding Time |
|---|---|---|---|
| Eurofins \| mgt Suite B9 | | | |
| Total Recoverable Hydrocarbons - 1999 NEPM Fractions | Sydney | Jun 14, 2019 | 14 Day |
| - Method: LTM-ORG-2010 TRH C6-C40 | | | |
| BTEX | Sydney | Jun 14, 2019 | 14 Day |
| - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices | | | |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions | Sydney | Jun 14, 2019 | 14 Day |
| - Method: LTM-ORG-2010 TRH C6-C40 | | | |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions | Sydney | Jun 14, 2019 | |
| - Method: LTM-ORG-2010 TRH C6-C40 | | | |
| Polycyclic Aromatic Hydrocarbons | Sydney | Jun 14, 2019 | 14 Days |
| - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water | | | |
| Organochlorine Pesticides | Sydney | Jun 14, 2019 | 14 Day |
| - Method: LTM-ORG-2220 OCP & PCB in Soil and Water | | | |
| Metals M8 | Sydney | Jun 14, 2019 | 180 Days |
| - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS | | | |
| % Moisture | Sydney | Jun 07, 2019 | 14 Day |
| - Method: LTM-GEN-7080 Moisture | | | |

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NATA # 1261 Site # 20794

**Perth**
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

**Company Name:** Whitehead & Associates
**Address:** Unit 2 / 13 Industrial Drive
North Boambee Valley
NSW 2450

**Project Name:** CORINIDI
**Project ID:** 2358

**Order No.:**
**Report #:** 659793
**Phone:** 02 6651 1512
**Fax:**

**Received:** Jun 7, 2019 11:27 AM
**Due:** Jun 19, 2019
**Priority:** 7 Day
**Contact Name:** Strider Duerinckx

**Eurofins | mgt Analytical Services Manager : Andrew Black**

| Sample Detail | | | | | | Asbestos - AS4964 | Moisture Set | Eurofins \| mgt Suite B7 | Eurofins \| mgt Suite B9 |
|---|---|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA Site # 1254 & 14271** | | | | | | | | | |
| **Sydney Laboratory - NATA Site # 18217** | | | | | | X | X | X | X |
| **Brisbane Laboratory - NATA Site # 20794** | | | | | | | | | |
| **Perth Laboratory - NATA Site # 23736** | | | | | | | | | |
| **External Laboratory** | | | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | | | |
| 1 | S-3 | Jun 05, 2019 | | Soil | S19-Jn07772 | | X | X | |
| 2 | S-4 | Jun 05, 2019 | | Soil | S19-Jn07773 | | X | | X |
| 3 | S-5 | Jun 05, 2019 | | Soil | S19-Jn07774 | X | X | X | |
| 4 | S-6 | Jun 05, 2019 | | Soil | S19-Jn07775 | X | X | X | |
| **Test Counts** | | | | | | 2 | 4 | 3 | 1 |

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

| | |
|---|---|
| **Dry** | Where a moisture has been determined on a solid sample the result is expressed on a dry basis. |
| **LOR** | Limit of Reporting. |
| **SPIKE** | Addition of the analyte to the sample and reported as percentage recovery. |
| **RPD** | Relative Percent Difference between two Duplicate pieces of analysis. |
| **LCS** | Laboratory Control Sample - reported as percent recovery. |
| **CRM** | Certified Reference Material - reported as percent recovery. |
| **Method Blank** | In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water. |
| **Surr - Surrogate** | The addition of a like compound to the analyte target and reported as percentage recovery. |
| **Duplicate** | A second piece of analysis from the same sample and reported in the same units as the result to show comparison. |
| **USEPA** | United States Environmental Protection Agency |
| **APHA** | American Public Health Association |
| **TCLP** | Toxicity Characteristic Leaching Procedure |
| **COC** | Chain of Custody |
| **SRA** | Sample Receipt Advice |
| **QSM** | US Department of Defense Quality Systems Manual Version 5.2 2018 |
| **CP** | Client Parent - QC was performed on samples pertaining to this report |
| **NCP** | Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within. |
| **TEQ** | Toxic Equivalency Quotient |

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

**Quality Control Results**

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| **Method Blank** | | | | | | | |
| **Total Recoverable Hydrocarbons - 1999 NEPM Fractions** | | | | | | | |
| TRH C6-C9 | mg/kg | < 20 | | | 20 | Pass | |
| TRH C10-C14 | mg/kg | < 20 | | | 20 | Pass | |
| TRH C15-C28 | mg/kg | < 50 | | | 50 | Pass | |
| TRH C29-C36 | mg/kg | < 50 | | | 50 | Pass | |
| **Method Blank** | | | | | | | |
| **BTEX** | | | | | | | |
| Benzene | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Toluene | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Ethylbenzene | mg/kg | < 0.1 | | | 0.1 | Pass | |
| m&p-Xylenes | mg/kg | < 0.2 | | | 0.2 | Pass | |
| o-Xylene | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Xylenes - Total | mg/kg | < 0.3 | | | 0.3 | Pass | |
| **Method Blank** | | | | | | | |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | | | | |
| Naphthalene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| TRH C6-C10 | mg/kg | < 20 | | | 20 | Pass | |
| TRH >C10-C16 | mg/kg | < 50 | | | 50 | Pass | |
| TRH >C16-C34 | mg/kg | < 100 | | | 100 | Pass | |
| TRH >C34-C40 | mg/kg | < 100 | | | 100 | Pass | |
| **Method Blank** | | | | | | | |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | |
| Acenaphthene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Acenaphthylene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Anthracene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Benz(a)anthracene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Benzo(a)pyrene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Benzo(b&j)fluoranthene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Benzo(g.h.i)perylene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Benzo(k)fluoranthene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Chrysene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Dibenz(a.h)anthracene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Fluoranthene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Fluorene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Indeno(1.2.3-cd)pyrene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Naphthalene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Phenanthrene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| Pyrene | mg/kg | < 0.5 | | | 0.5 | Pass | |
| **Method Blank** | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | |
| Chlordanes - Total | mg/kg | < 0.1 | | | 0.1 | Pass | |
| 4.4'-DDD | mg/kg | < 0.05 | | | 0.05 | Pass | |
| 4.4'-DDE | mg/kg | < 0.05 | | | 0.05 | Pass | |
| 4.4'-DDT | mg/kg | < 0.05 | | | 0.05 | Pass | |
| a-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Aldrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| b-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| d-BHC | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Dieldrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endosulfan I | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endosulfan II | mg/kg | < 0.05 | | | 0.05 | Pass | |

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| Endosulfan sulphate | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin aldehyde | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Endrin ketone | mg/kg | < 0.05 | | | 0.05 | Pass | |
| g-BHC (Lindane) | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Heptachlor | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Heptachlor epoxide | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Hexachlorobenzene | mg/kg | < 0.05 | | | 0.05 | Pass | |
| Methoxychlor | mg/kg | < 0.2 | | | 0.2 | Pass | |
| Toxaphene | mg/kg | < 1 | | | 1 | Pass | |
| **Method Blank** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | mg/kg | < 2 | | | 2 | Pass | |
| Cadmium | mg/kg | < 0.4 | | | 0.4 | Pass | |
| Chromium | mg/kg | < 5 | | | 5 | Pass | |
| Copper | mg/kg | < 5 | | | 5 | Pass | |
| Lead | mg/kg | < 5 | | | 5 | Pass | |
| Mercury | mg/kg | < 0.1 | | | 0.1 | Pass | |
| Nickel | mg/kg | < 5 | | | 5 | Pass | |
| Zinc | mg/kg | < 5 | | | 5 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Total Recoverable Hydrocarbons - 1999 NEPM Fractions** | | | | | | | |
| TRH C6-C9 | % | 87 | | | 70-130 | Pass | |
| TRH C10-C14 | % | 74 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **BTEX** | | | | | | | |
| Benzene | % | 93 | | | 70-130 | Pass | |
| Toluene | % | 93 | | | 70-130 | Pass | |
| Ethylbenzene | % | 94 | | | 70-130 | Pass | |
| m&p-Xylenes | % | 92 | | | 70-130 | Pass | |
| o-Xylene | % | 94 | | | 70-130 | Pass | |
| Xylenes - Total | % | 93 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | | | | |
| Naphthalene | % | 84 | | | 70-130 | Pass | |
| TRH C6-C10 | % | 82 | | | 70-130 | Pass | |
| TRH >C10-C16 | % | 76 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | |
| Acenaphthene | % | 101 | | | 70-130 | Pass | |
| Acenaphthylene | % | 107 | | | 70-130 | Pass | |
| Anthracene | % | 106 | | | 70-130 | Pass | |
| Benz(a)anthracene | % | 105 | | | 70-130 | Pass | |
| Benzo(a)pyrene | % | 103 | | | 70-130 | Pass | |
| Benzo(b&j)fluoranthene | % | 107 | | | 70-130 | Pass | |
| Benzo(g.h.i)perylene | % | 109 | | | 70-130 | Pass | |
| Benzo(k)fluoranthene | % | 100 | | | 70-130 | Pass | |
| Chrysene | % | 101 | | | 70-130 | Pass | |
| Dibenz(a.h)anthracene | % | 106 | | | 70-130 | Pass | |
| Fluoranthene | % | 102 | | | 70-130 | Pass | |
| Fluorene | % | 106 | | | 70-130 | Pass | |
| Indeno(1.2.3-cd)pyrene | % | 105 | | | 70-130 | Pass | |
| Naphthalene | % | 102 | | | 70-130 | Pass | |
| Phenanthrene | % | 106 | | | 70-130 | Pass | |

| Test | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|
| Pyrene | % | 101 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Organochlorine Pesticides** | | | | | | | |
| Chlordanes - Total | % | 107 | | | 70-130 | Pass | |
| 4.4'-DDD | % | 122 | | | 70-130 | Pass | |
| 4.4'-DDE | % | 112 | | | 70-130 | Pass | |
| 4.4'-DDT | % | 110 | | | 70-130 | Pass | |
| a-BHC | % | 113 | | | 70-130 | Pass | |
| Aldrin | % | 109 | | | 70-130 | Pass | |
| b-BHC | % | 104 | | | 70-130 | Pass | |
| d-BHC | % | 118 | | | 70-130 | Pass | |
| Dieldrin | % | 109 | | | 70-130 | Pass | |
| Endosulfan I | % | 107 | | | 70-130 | Pass | |
| Endosulfan II | % | 112 | | | 70-130 | Pass | |
| Endosulfan sulphate | % | 114 | | | 70-130 | Pass | |
| Endrin | % | 102 | | | 70-130 | Pass | |
| Endrin aldehyde | % | 104 | | | 70-130 | Pass | |
| Endrin ketone | % | 109 | | | 70-130 | Pass | |
| g-BHC (Lindane) | % | 112 | | | 70-130 | Pass | |
| Heptachlor | % | 110 | | | 70-130 | Pass | |
| Heptachlor epoxide | % | 110 | | | 70-130 | Pass | |
| Hexachlorobenzene | % | 104 | | | 70-130 | Pass | |
| Methoxychlor | % | 102 | | | 70-130 | Pass | |
| Toxaphene | % | 90 | | | 70-130 | Pass | |
| **LCS - % Recovery** | | | | | | | |
| **Heavy Metals** | | | | | | | |
| Arsenic | % | 96 | | | 70-130 | Pass | |
| Cadmium | % | 94 | | | 70-130 | Pass | |
| Chromium | % | 94 | | | 70-130 | Pass | |
| Copper | % | 93 | | | 70-130 | Pass | |
| Lead | % | 96 | | | 70-130 | Pass | |
| Mercury | % | 100 | | | 70-130 | Pass | |
| Nickel | % | 93 | | | 70-130 | Pass | |
| Zinc | % | 93 | | | 70-130 | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Spike - % Recovery** | | | | | | | | | |
| **Total Recoverable Hydrocarbons - 1999 NEPM Fractions** | | | | Result 1 | | | | | |
| TRH C6-C9 | S19-Jn08429 | NCP | % | 82 | | | 70-130 | Pass | |
| TRH C10-C14 | S19-Jn12819 | NCP | % | 74 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **BTEX** | | | | Result 1 | | | | | |
| Benzene | S19-Jn08429 | NCP | % | 88 | | | 70-130 | Pass | |
| Toluene | S19-Jn08429 | NCP | % | 88 | | | 70-130 | Pass | |
| Ethylbenzene | S19-Jn08429 | NCP | % | 88 | | | 70-130 | Pass | |
| m&p-Xylenes | S19-Jn08429 | NCP | % | 87 | | | 70-130 | Pass | |
| o-Xylene | S19-Jn08429 | NCP | % | 87 | | | 70-130 | Pass | |
| Xylenes - Total | S19-Jn08429 | NCP | % | 87 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | Result 1 | | | | | |
| Naphthalene | S19-Jn08429 | NCP | % | 85 | | | 70-130 | Pass | |
| TRH C6-C10 | S19-Jn08429 | NCP | % | 80 | | | 70-130 | Pass | |
| TRH >C10-C16 | S19-Jn12819 | NCP | % | 77 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **Polycyclic Aromatic Hydrocarbons** | | | | Result 1 | | | | | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | S19-Jn15951 | NCP | % | 93 | | | 70-130 | Pass | |
| Acenaphthylene | S19-Jn15951 | NCP | % | 98 | | | 70-130 | Pass | |
| Anthracene | S19-Jn15951 | NCP | % | 100 | | | 70-130 | Pass | |
| Benz(a)anthracene | S19-Jn15951 | NCP | % | 99 | | | 70-130 | Pass | |
| Benzo(a)pyrene | S19-Jn15951 | NCP | % | 89 | | | 70-130 | Pass | |
| Benzo(b&j)fluoranthene | S19-Jn15951 | NCP | % | 84 | | | 70-130 | Pass | |
| Benzo(g.h.i)perylene | S19-Jn15951 | NCP | % | 106 | | | 70-130 | Pass | |
| Benzo(k)fluoranthene | S19-Jn15951 | NCP | % | 95 | | | 70-130 | Pass | |
| Chrysene | S19-Jn15951 | NCP | % | 92 | | | 70-130 | Pass | |
| Dibenz(a.h)anthracene | S19-Jn15951 | NCP | % | 102 | | | 70-130 | Pass | |
| Fluoranthene | S19-Jn15951 | NCP | % | 96 | | | 70-130 | Pass | |
| Fluorene | S19-Jn15951 | NCP | % | 99 | | | 70-130 | Pass | |
| Indeno(1.2.3-cd)pyrene | S19-Jn15951 | NCP | % | 101 | | | 70-130 | Pass | |
| Naphthalene | S19-Jn15951 | NCP | % | 96 | | | 70-130 | Pass | |
| Phenanthrene | S19-Jn15951 | NCP | % | 101 | | | 70-130 | Pass | |
| Pyrene | S19-Jn15951 | NCP | % | 92 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | | | | | |
| Arsenic | S19-Jn10991 | NCP | % | 110 | | | 70-130 | Pass | |
| Cadmium | S19-Jn10991 | NCP | % | 108 | | | 70-130 | Pass | |
| Chromium | S19-Jn10991 | NCP | % | 83 | | | 70-130 | Pass | |
| Copper | S19-Jn10991 | NCP | % | 106 | | | 70-130 | Pass | |
| Lead | S19-Jn10991 | NCP | % | 108 | | | 70-130 | Pass | |
| Mercury | S19-Jn10991 | NCP | % | 112 | | | 70-130 | Pass | |
| Nickel | S19-Jn10991 | NCP | % | 101 | | | 70-130 | Pass | |
| Zinc | S19-Jn10991 | NCP | % | 106 | | | 70-130 | Pass | |
| **Spike - % Recovery** | | | | | | | | | |
| **Organochlorine Pesticides** | | | | Result 1 | | | | | |
| Chlordanes - Total | S19-Jn14263 | NCP | % | 127 | | | 70-130 | Pass | |
| 4.4'-DDD | S19-Jn15950 | NCP | % | 117 | | | 70-130 | Pass | |
| 4.4'-DDE | S19-Jn15950 | NCP | % | 99 | | | 70-130 | Pass | |
| 4.4'-DDT | S19-Jn14263 | NCP | % | 91 | | | 70-130 | Pass | |
| a-BHC | S19-Jn15950 | NCP | % | 106 | | | 70-130 | Pass | |
| Aldrin | S19-Jn14263 | NCP | % | 130 | | | 70-130 | Pass | |
| b-BHC | S19-Jn14263 | NCP | % | 117 | | | 70-130 | Pass | |
| d-BHC | S19-Jn15950 | NCP | % | 107 | | | 70-130 | Pass | |
| Dieldrin | S19-Jn15950 | NCP | % | 113 | | | 70-130 | Pass | |
| Endosulfan I | S19-Jn14263 | NCP | % | 124 | | | 70-130 | Pass | |
| Endosulfan II | S19-Jn15950 | NCP | % | 112 | | | 70-130 | Pass | |
| Endosulfan sulphate | S19-Jn15950 | NCP | % | 109 | | | 70-130 | Pass | |
| Endrin | S19-Jn14263 | NCP | % | 117 | | | 70-130 | Pass | |
| Endrin aldehyde | S19-Jn14263 | NCP | % | 124 | | | 70-130 | Pass | |
| Endrin ketone | S19-Jn14263 | NCP | % | 126 | | | 70-130 | Pass | |
| g-BHC (Lindane) | S19-Jn14263 | NCP | % | 124 | | | 70-130 | Pass | |
| Heptachlor | S19-Jn14263 | NCP | % | 125 | | | 70-130 | Pass | |
| Heptachlor epoxide | S19-Jn14263 | NCP | % | 128 | | | 70-130 | Pass | |
| Hexachlorobenzene | S19-Jn14263 | NCP | % | 124 | | | 70-130 | Pass | |
| Methoxychlor | S19-Jn14263 | NCP | % | 96 | | | 70-130 | Pass | |
| Toxaphene | S19-Jn14263 | NCP | % | 104 | | | 70-130 | Pass | |

| Test | Lab Sample ID | QA Source | Units | Result 1 | | | Acceptance Limits | Pass Limits | Qualifying Code |
|---|---|---|---|---|---|---|---|---|---|
| **Duplicate** | | | | | | | | | |
| **Total Recoverable Hydrocarbons - 1999 NEPM Fractions** | | | | Result 1 | Result 2 | RPD | | | |
| TRH C6-C9 | S19-Jn08489 | NCP | mg/kg | < 20 | < 20 | <1 | 30% | Pass | |
| TRH C10-C14 | S19-Jn08489 | NCP | mg/kg | < 20 | < 20 | <1 | 30% | Pass | |
| TRH C15-C28 | S19-Jn08489 | NCP | mg/kg | < 50 | < 50 | <1 | 30% | Pass | |
| TRH C29-C36 | S19-Jn08489 | NCP | mg/kg | < 50 | < 50 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **BTEX** | | | | Result 1 | Result 2 | RPD | | | |
| Benzene | S19-Jn08489 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| Toluene | S19-Jn08489 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| Ethylbenzene | S19-Jn08489 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| m&p-Xylenes | S19-Jn08489 | NCP | mg/kg | < 0.2 | < 0.2 | <1 | 30% | Pass | |
| o-Xylene | S19-Jn08489 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| Xylenes - Total | S19-Jn08489 | NCP | mg/kg | < 0.3 | < 0.3 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **Total Recoverable Hydrocarbons - 2013 NEPM Fractions** | | | | Result 1 | Result 2 | RPD | | | |
| Naphthalene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| TRH C6-C10 | S19-Jn08489 | NCP | mg/kg | < 20 | < 20 | <1 | 30% | Pass | |
| TRH >C10-C16 | S19-Jn08489 | NCP | mg/kg | < 50 | < 50 | <1 | 30% | Pass | |
| TRH >C16-C34 | S19-Jn08489 | NCP | mg/kg | < 100 | < 100 | <1 | 30% | Pass | |
| TRH >C34-C40 | S19-Jn08489 | NCP | mg/kg | < 100 | < 100 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **Polycyclic Aromatic Hydrocarbons** | | | | Result 1 | Result 2 | RPD | | | |
| Acenaphthene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Acenaphthylene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Anthracene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Benz(a)anthracene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Benzo(a)pyrene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Benzo(b&j)fluoranthene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Benzo(g.h.i)perylene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Benzo(k)fluoranthene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Chrysene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Dibenz(a.h)anthracene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Fluoranthene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Fluorene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Indeno(1.2.3-cd)pyrene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Naphthalene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Phenanthrene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| Pyrene | S19-Jn08489 | NCP | mg/kg | < 0.5 | < 0.5 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| **Heavy Metals** | | | | Result 1 | Result 2 | RPD | | | |
| Arsenic | S19-Jn15949 | NCP | mg/kg | 4.3 | 4.0 | 7.0 | 30% | Pass | |
| Cadmium | S19-Jn15949 | NCP | mg/kg | < 0.4 | < 0.4 | <1 | 30% | Pass | |
| Chromium | S19-Jn15949 | NCP | mg/kg | 8.5 | 7.9 | 7.0 | 30% | Pass | |
| Copper | S19-Jn15949 | NCP | mg/kg | 51 | 47 | 9.0 | 30% | Pass | |
| Lead | S19-Jn15949 | NCP | mg/kg | 87 | 82 | 7.0 | 30% | Pass | |
| Mercury | S19-Jn15949 | NCP | mg/kg | 0.3 | 0.3 | 4.0 | 30% | Pass | |
| Nickel | S19-Jn15949 | NCP | mg/kg | 7.9 | 7.7 | 1.0 | 30% | Pass | |
| Zinc | S19-Jn15949 | NCP | mg/kg | 69 | 68 | 2.0 | 30% | Pass | |

| Duplicate | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides** | | | | Result 1 | Result 2 | RPD | | | |
| Chlordanes - Total | S19-Jn14259 | NCP | mg/kg | < 0.1 | < 0.1 | <1 | 30% | Pass | |
| 4.4'-DDD | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| 4.4'-DDE | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| 4.4'-DDT | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| a-BHC | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Aldrin | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| b-BHC | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| d-BHC | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Dieldrin | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan I | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan II | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endosulfan sulphate | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin aldehyde | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Endrin ketone | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| g-BHC (Lindane) | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Heptachlor | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Heptachlor epoxide | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Hexachlorobenzene | S19-Jn14259 | NCP | mg/kg | < 0.05 | < 0.05 | <1 | 30% | Pass | |
| Methoxychlor | S19-Jn14259 | NCP | mg/kg | < 0.2 | < 0.2 | <1 | 30% | Pass | |
| Toxaphene | S19-Jn14259 | NCP | mg/kg | < 1 | < 1 | <1 | 30% | Pass | |
| **Duplicate** | | | | | | | | | |
| | | | | Result 1 | Result 2 | RPD | | | |
| % Moisture | S19-Jn07774 | CP | % | 16 | 18 | 10 | 30% | Pass | |

## Comments

## Sample Integrity

| | |
|---|---|
| Custody Seals Intact (if used) | N/A |
| Attempt to Chill was evident | Yes |
| Sample correctly preserved | Yes |
| Appropriate sample containers have been used | Yes |
| Sample containers for volatile analysis received with minimal headspace | Yes |
| Samples received within HoldingTime | Yes |
| Some samples have been subcontracted | No |

## Qualifier Codes/Comments

| Code | Description |
|---|---|
| N01 | F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis). |
| N02 | Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid. |
| N04 | F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes. |
| N07 | Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs |

## Authorised By

| | |
|---|---|
| Andrew Black | Analytical Services Manager |
| Andrew Sullivan | Senior Analyst-Organic (NSW) |
| Gabriele Cordero | Senior Analyst-Metal (NSW) |
| Nibha Vaidya | Senior Analyst-Asbestos (NSW) |

**Glenn Jackson**

**General Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

# Certificate of Analysis

**NATA Accredited**
**Accreditation Number 1261**
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

**Whitehead & Associates**
**Unit 2 / 13 Industrial Drive**
**North Boambee Valley**
**NSW 2450**

| | |
|---|---|
| **Attention:** | Strider Duerinckx |
| **Report** | 659793-AID |
| **Project Name** | CORINIDI |
| **Project ID** | 2358 |
| **Received Date** | Jun 07, 2019 |
| **Date Reported** | Jun 19, 2019 |

## Methodology:

| | |
|---|---|
| Asbestos Fibre Identification | Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.<br>*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.* |
| Unknown Mineral Fibres | Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.<br>*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.* |
| Subsampling Soil Samples | The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.<br>*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.* |
| Bonded asbestos-containing material (ACM) | The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004.<br>*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.* |
| Limit of Reporting | The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).<br>The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).<br>*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.* |

**Project Name** CORINIDI
**Project ID** 2358
**Date Sampled** Jun 05, 2019
**Report** 659793-AID

| Client Sample ID | Eurofins \| mgt Sample No. | Date Sampled | Sample Description | Result |
|---|---|---|---|---|
| S-5 | 19-Jn07774 | Jun 05, 2019 | Approximate Sample 122g<br>Sample consisted of: Brown coarse-grained soil and rocks | No asbestos detected at the reporting limit of 0.01% w/w.<br>Organic fibre detected.<br>No respirable fibres detected. |
| S-6 | 19-Jn07775 | Jun 05, 2019 | Approximate Sample 131g<br>Sample consisted of: Brown coarse-grained soil and rocks | No asbestos detected at the reporting limit of 0.01% w/w.<br>Organic fibre detected.<br>No respirable fibres detected. |

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

| Description | Testing Site | Extracted | Holding Time |
|---|---|---|---|
| Asbestos - LTM-ASB-8020 | Sydney | Jun 07, 2019 | Indefinite |

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NATA # 1261
Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

**Brisbane**
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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

**Perth**
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

**Company Name:** Whitehead & Associates
**Address:** Unit 2 / 13 Industrial Drive
North Boambee Valley
NSW 2450

**Project Name:** CORINIDI
**Project ID:** 2358

**Order No.:**
**Report #:** 659793
**Phone:** 02 6651 1512
**Fax:**

**Received:** Jun 7, 2019 11:27 AM
**Due:** Jun 19, 2019
**Priority:** 7 Day
**Contact Name:** Strider Duerinckx

**Eurofins | mgt Analytical Services Manager : Andrew Black**

| Sample Detail | | | | | | Asbestos - AS4964 | Moisture Set | Eurofins \| mgt Suite B7 | Eurofins \| mgt Suite B9 |
|---|---|---|---|---|---|---|---|---|---|
| **Melbourne Laboratory - NATA Site # 1254 & 14271** | | | | | | | | | |
| **Sydney Laboratory - NATA Site # 18217** | | | | | | X | X | X | X |
| **Brisbane Laboratory - NATA Site # 20794** | | | | | | | | | |
| **Perth Laboratory - NATA Site # 23736** | | | | | | | | | |
| **External Laboratory** | | | | | | | | | |
| **No** | **Sample ID** | **Sample Date** | **Sampling Time** | **Matrix** | **LAB ID** | | | | |
| 1 | S-3 | Jun 05, 2019 | | Soil | S19-Jn07772 | | X | X | |
| 2 | S-4 | Jun 05, 2019 | | Soil | S19-Jn07773 | | X | | X |
| 3 | S-5 | Jun 05, 2019 | | Soil | S19-Jn07774 | X | X | X | |
| 4 | S-6 | Jun 05, 2019 | | Soil | S19-Jn07775 | X | X | X | |
| **Test Counts** | | | | | | 2 | 4 | 3 | 1 |

## Internal Quality Control Review and Glossary

### General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

### Units

| | |
|---|---|
| **% w/w:** weight for weight basis | grams per kilogram |
| Filter loading: | fibres/100 graticule areas |
| Reported Concentration: | fibres/mL |
| Flowrate: | L/min |

### Terms

| | |
|---|---|
| **Dry** | Sample is dried by heating prior to analysis |
| **LOR** | Limit of Reporting |
| **COC** | Chain of Custody |
| **SRA** | Sample Receipt Advice |
| **ISO** | International Standards Organisation |
| **AS** | Australian Standards |
| **WA DOH** | Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011) |
| **NEPM** | National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended) |
| **ACM** | Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve. |
| **AF** | Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”. |
| **FA** | Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve. |
| **Friable** | Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability. |
| **Trace Analysis** | Analytical procedure used to detect the presence of respirable fibres in the matrix. |

## Comments

### Sample Integrity

| | |
|---|---|
| Custody Seals Intact (if used) | N/A |
| Attempt to Chill was evident | Yes |
| Sample correctly preserved | Yes |
| Appropriate sample containers have been used | Yes |
| Sample containers for volatile analysis received with minimal headspace | Yes |
| Samples received within HoldingTime | Yes |
| Some samples have been subcontracted | No |

### Qualifier Codes/Comments

| Code | Description |
|---|---|
| N/A | Not applicable |

### Asbestos Counter/Identifier:

| | |
|---|---|
| Karthik Surisetty | Senior Analyst-Asbestos (NSW) |

### Authorised by:

| | |
|---|---|
| Sayeed Abu | Senior Analyst-Asbestos (NSW) |

**Glenn Jackson**
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

# Of Custody (COC)

Company: Whitehead & Associates
Address: PO Box 23, Bellingen, NSW, 2454
2/13 Industrial Drive, North Boambee Valley, Coffs Harbour NSW 2450
Contact:
Telephone: 02 6651 1512 Fax: 02 6651 1512
Email: mnc@whiteheadenvironmental.com.au

Project Name: 2358, Coramba
Project Number:
Quote Reference: Whitehead 8/5/19
Send Results to: Strider Duncan (email)
Results Required by*: 24 hrs ☐ 48 hrs ☐ 5 Day ☒ Other ☐

COC Number*:
*The COC number will act as a purchase order number if not supplied
Purchase Order No:

**SAMPLE DESCRIPTION**

| Lab ID | Sample ID | Date & Time Sampled | Soil / Water Other | Comments* | B7 | B9 | As bag 6g | P/A |
|---|---|---|---|---|---|---|---|---|
| | S-3 | 5/6/19 | S | 1x Jar | ✓ | | | |
| | S-4 | | | 1x Jar | ● | ✓ | | |
| | S-5 | | | 1x Jar 1x bag | ✓ | ✓ | ✓ | |
| | S-6 | ↓ | ↓ | " " | ✓ | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**ANALYSIS REQUIRED**

* Please Provide Field PID Readings where possible

Totals: 3 1 1

**Chain of Custody**

Relinquished by: [signature] Date/Time: 6/6/19
Received by: ANASTASIA Date/Time: 7/6/19
Relinquished by: Date/Time:
Received by: Date/Time:
Relinquished by: Date/Time:
Received by: Date/Time:

**Special Requirements** (eg. OHS issues etc.)

*Sample Receipt Advice (Lab Use Only)*

All Samples Received in Good Condition ✓
All Documentation in Proper Order ✓
Samples Received with an Attempt to Chill ✓
Samples Received Within Holding Times ✓
Average sample temp on receipt (°C): 8/3°C
For enquires please quote Ref. No. 659.793