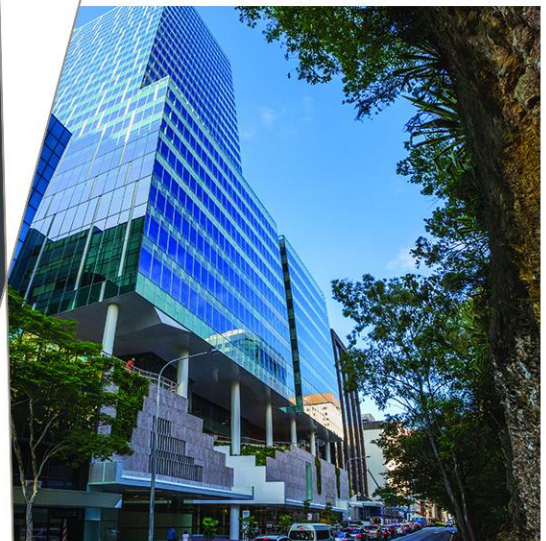


# Preliminary Site Investigation

512 Raymond Terrace Road,  
Thornton

304100802 - 002



Prepared for  
Sue and Terry Bunt

14 November 2022



now



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# 1 Introduction

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## 1.1 Background

Stantec was commissioned by Sue and Terry Bunt (current Site owners) of 512 Raymond Terrace Road, Thornton, NSW, to prepare a Preliminary Site Investigation (PSI) report for the proposed residential subdivision, located at 512 Raymond Terrace Road, Thornton, NSW. The is identified as Lot 101 DP 1279275 (formally known as Lot 191, DP 827070)

Stantec were provided with a layout plan of the proposed subdivision prepared by Delf Lascelles Consulting Surveyors Pty Ltd (Drawing No. 21664, Rev B, Dated 11.08.22). Based on the review of the plan and discussions with the client, it is understood that the proposed development will comprise the construction of a residential subdivision, comprising twenty-five (25) lots and one (1) internal road.

Stantec were provided with a Preliminary Contamination & Urban Capability Assessment Report completed by Douglas Partners (DP) in June 2004. The report titled 'Lot 1, DP 851737 & Lot 191, DP 827070 Raymond Terrace Road, Thornton [1] was used to assist in the creation of this report.

The PSI included a review of the previous DP Report [1], a desktop study of available historical data including a review of a MCC planning certificate, historical aerial photographs, previous investigations, the NSW EPA database for the proposed development area, and the Site inspection with the current owner.

The assessment was undertaken with reference to NSW EPA "Consultants reporting on contaminated land Contaminated land guidelines" [2]and *National Environment Protection Measure (NEPM) for the Assessment of Site Contamination, 1999.* [3].

## 1.2 Purpose & Objectives

The purpose of this PSI is to provide the client with preliminary advice on the contamination status of the Site and subsequent implications for the intended use. The PSI reviews current and historical activities undertaken at the Site and provides a preliminary environmental assessment of the potential for soil and /or groundwater contamination to be present on the Site.

The objectives of the PSI are to:

- > To the extent practicable, identify the potential for past or present activities on; and surrounding the Site, to have impacted soil or groundwater at the Site.
- > Identify potential areas and contaminants of concern at the Site.
- > Identify potential receptors of concern and assess the potential for the protected beneficial uses of the land to be impacted due to contamination.
- > To make a preliminary assessment of whether contamination is likely to affect the future use or development of the Site.
- > Assess the requirement, if any, for further environmental investigation to assess or make the Site suitable for the proposed use.

## 1.3 Scope

Stantec carried out the following tasks in order to satisfy the purpose and objectives of the PSI assessment.

### Defined the Site, Features & Surrounds:

- > Obtained the property title description from a Land-data Property Report.
- > Defined the Site boundaries based on title information, available data and established a Site base plan.
- > Identified the Site features.
- > Defined the topography, surface water drainage of the Site and its proximity to the nearest surface water body.
- > Identified the location of nearby sensitive environments and receptors such as residential, child-care and primary schools, wetlands, streams or rivers.
- > Identified the zoning of the site under the local Planning Scheme.

## **Hydrogeology & Groundwater Resource Use**

- > Ascertained the potential utilisation of groundwater at and near the Site through a search of the NSW Groundwater Database at NSW Office of Water website.

## **Review of Public Records on Site History**

Review publicly available documents relevant to the site including:

- > The historical chain of land titles.
- > Historical and current maps of the area.
- > Selected historical aerial photos available from the Department of Lands.
- > Undertake review of the NSW EPA Contaminated Lands Register to identify nearby contaminated sites reported to the NSW EPA under section 60 of the CLM (1997).

## **Site Inspection & Surrounds**

- > Confirmed the site features and identified any visible evidence of fuel storage tanks (above or below ground) and other infrastructure with potential to act as a source of soil and/or groundwater.
- > Confirmed the soil type and looked for evidence of site cutting and filling.
- > Assessed the surrounding area (to a radius of approximately 500m) for potential sources of contamination of soil or groundwater at the site.
- > Discussion regarding historical Site activity, with current Site owner, Terry Bunt.

## **Reporting**

- > Preparation of this Preliminary Site Investigation (PSI) report to document the assessment activities and results to including findings and recommendations relevant to the objectives of the assessment.
- > Developed a Conceptual Site Model (CSM) for the site, identifying complete and potential pathways between known and potential sources and receptors. This CSM is incorporated in this investigation report.

## 2 Previous Investigations

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Stantec were provided with a Preliminary Contamination & Urban Capability Assessment Report completed by Douglas Partners in June 2004. The report titled 'Lot 1, DP 851737 & Lot 191, DP 827070 Raymond Terrace Road, Thornton [1]' was used to assist in the creation of this report.

The report outlines the Site history of both aforementioned lots, and any potential contaminants that may be present on Site. The scope of work involved a desktop study, Site walkover and limited surface water sampling. At the time of the investigation, Access to Lot 191 DP 827070 (Current Site assessment) was not permitted, as such, observations were undertaken at the Site boundary.

Discussions with the owner of Lot 1 DP 851737 at the time (Ms Margaret Agland) outlined the key events, and when they occurred on Lot 191. Such as the subdivision of Lot 191 from Lot 1 (1992), the construction of the metal Clad Shed (2000) and brick house (2002), and that the Site is not connected to potable water or to a sewer reticulation system.

No intrusive sampling was undertaken, however previous investigations described the conditions as generally comprising topsoil materials underlain by clays, silty clays, and gravelly clays, up to depths of 0.5m and 4.0m followed by siltstone and sandstone bedrock. Acidic and low salinity topsoils have been identified within Thornton through limited laboratory testing.

The findings of the report concluded that there was no observed evidence of gross contamination on Lot 191 (the Site), and that the Site is considered suitable for future development.

### 3 Site Inspection & Surrounding Environment

#### 3.1 Site Identification

The subject Site details are presented in Table 3-1 below. For Site location, refer to drawing 1 in Appendix A.

Table 3-1 Site Details

Site Address	512 Raymond Terrace Road, Thornton, NSW.
Lot Number and Deposited Plan	101/DP1279275 (formerly known as 191/DP827070)
Site Area	2 Ha
Local Government Area	Maitland LGA
Relative Zoning	R1 General Residential

#### 3.2 Site Use & Infrastructure

A Site inspection was undertaken by Stantec on 7 October 2022 in order to identify and map salient features of the Site and the surrounding area. Site features and observations are detailed in Table 3-2 below with Site photographs attached in Appendix B.

Table 3-2 Site features and observations

Item	Observations
Site use	<ul style="list-style-type: none"> <li>Rural/residential</li> </ul>
Weather condition	<ul style="list-style-type: none"> <li>Sunny</li> </ul>
Site slope and drainage features	<ul style="list-style-type: none"> <li>The Site is relatively flat, with a gentle north facing slope in the northern portion of the Site.</li> </ul>
Nearby water bodies	<ul style="list-style-type: none"> <li>Water quality basin adjacent to the northern portion of the Site.</li> <li>Stormwater catchment immediately to the south just beyond Hillgate Drive.</li> <li>Recently constructed water quality basin to the east.</li> <li>Several dams located to the west and north.</li> </ul>
Site surface coverings	<ul style="list-style-type: none"> <li>Site surface is predominately open pastures with stands of mature tree</li> <li>Driveway traversing the western boundary of the Site, connecting the residence and Raymond Terrace Road.</li> </ul>
Surface soils	<ul style="list-style-type: none"> <li>No intrusive investigation was undertaken; however, the Site surface soils generally appeared to be natural, with the exception of minor filling under the building pads and adjacent to the storm water tanks.</li> </ul>
Site cut and fill	<ul style="list-style-type: none"> <li>There is a vegetated stockpile adjacent to the two storm water tanks on Site. Based on discussion with the owner, it is understood to comprise the material excavated to allow installation of the eastern water tank.</li> <li>Cut and fill associated with the building pads under the existing house and large shed.</li> </ul>
Buildings	<ul style="list-style-type: none"> <li>Site buildings include a large brick residence, a large metal clad shed, small wooden cubby house, old chicken shed all located within the central portion of the Site.</li> </ul>



Item	Observations
Potential asbestos in building materials	<ul style="list-style-type: none"> <li>Fibrous sheeting noted to the eaves of the residence, however due to construction occurring in 2002, the fibrous sheeting is unlikely to contain asbestos.</li> </ul>
Manufacturing, industrial or chemical processes and infrastructure	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Fuel storage tanks (USTs/ASTs)	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Dangerous goods	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Presence of stockpiles, fly tipping or anthropogenic materials	<ul style="list-style-type: none"> <li>Vegetated, soil stockpile adjacent to water tanks.</li> <li>Stockpile located on the eastern boundary comprising anthropogenic material generated from construction of the residence (as advised by Site owner).</li> </ul>
Liquid waste disposal features	<ul style="list-style-type: none"> <li>There is a Biocycle effluent system to the northeast of the residence.</li> </ul>
Evidence of previous site contamination investigations	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Evidence of land contamination (staining or odours)	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Evidence of groundwater contamination	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Groundwater use	<ul style="list-style-type: none"> <li>Not observed.</li> </ul>
Vegetation	<ul style="list-style-type: none"> <li>Vegetation primarily comprised of open pasture. There are isolated stands of mature trees surrounding the residence and the southern portion of the Site.</li> </ul>
Site fencing	<ul style="list-style-type: none"> <li>The majority of fencing on Site comprises fence and wire.</li> </ul>
Additional Notes and Observations	

### 3.3 Surrounding Environment & Land Uses

The Site is located within a large, developing residential subdivision with land uses around the Site detailed in Table 3-3 below.

Table 3-3 Surrounding Land Use

Direction	Land Use or Activity with a 500m buffer
North	<ul style="list-style-type: none"> <li>Site is immediately bound by a recently constructed water quality basin, and Raymond Terrace Road. There are various rural residential properties further north.</li> </ul>
East	<ul style="list-style-type: none"> <li>Recent subdivisional work, with residential dwellings under construction.</li> </ul>
South	<ul style="list-style-type: none"> <li>Recent subdivisional work, with residential dwellings under construction.</li> </ul>
West	<ul style="list-style-type: none"> <li>Recent subdivisional work, with residential dwellings under construction.</li> </ul>

The area is serviced by public roads and access to the Site is via Raymond Terrace Road

## 4 Published Data

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### 4.1 Regional Geology

With reference to the online mapping tool 'Minview' [4], the Site is underlain by Mulbring Siltstone (Pmtm) described as 'medium to dark-grey siltstone, minor claystone, sporadic thin cherty beds (resistant), rare thin sandstone and limestone beds, sporadic marine fossils.

### 4.2 Hydrogeology

A search of the NSW Groundwater Database from Department of Primary Industries – Office of Water NSW indicated no groundwater bores within a 500 m radius of the Site.

### 4.3 Acid Sulfate Soils

A review of the Maitland Local Environmental Plan (LEP) 2011 Acid Sulfate Soils Risk Map [5] indicates that the Site is situated within Class 5 Acid Sulfate Soils. Class 5 indicates that '*Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1,2,3 or 4 land. Works 2 in a class 5 area that are likely to lower the water table below 1 metre AHD 1 on adjacent class 1, 2, 3 or 4 land will trigger the requirement for assessment and may require management*'.

### 4.4 EPA Records Search

#### 4.4.1 Contaminated Land Record of Notice

The contaminated Land Record of Notice is maintained by the Office of Environment and Heritage (OEH) in accordance with Part 5 of the Contaminated Land Management (CLM) Act 1997 and contains regulatory notices issued by the Environment Protection Authority (EPA) in relation to contaminated sites.

A search of the NSW EPA record of Notices revealed no notices listed within 1km of the Site.

#### 4.4.2 PoEO Public Register

The PoEO Public Register under Section 308 of the Protection of the Environment Operations (PoEO) Act 1997 contains Environment Protection Licences (EPLs), applications and notices issued by the EPA.

The search revealed no licensed activities within a 500 m radius of the Site.

#### 4.4.3 List of NSW Contaminated Sites Notified to the EPA

A search of the NSW EPA list of notified sites [6] revealed no notices within 500m of the Site.

## 5 Site History

### 5.1 General

The Site history comprised review of the DP report [1], available published data, Section 10.7 Planning Certificates, and aerial photography review, all attached in Appendix C. The Site history review is detailed herein.

#### 5.1.1 Maitland City Council (MCC) Planning Information

A Section 10.7 Planning Certificate, dated July 2021, was provided by the owner for 101/DP1279275 (formerly identified as 191/DP827070). It is understood that the Planning Certificate predates the recent subdivision of 191/DP827070 to allow creation of the water quality basin. The Certificate has been summarised in Table 5-1 below.

Table 5-1 Section 10.7 Planning Certificate.

Matters Pursuant to Section 10.7(2)	191/DP827070
Zoning & Land Use	R1 General Residential
Development Control Plan (DCP)	Maitland DCP 2011
Critical Habitat	Land is NOT identified as a critical habitat
Conservation Area & Environmental Heritage	Land is NOT identified as being a Conservation area or having an item of Environmental Heritage.
Coal Mine Subsidence Act 2017	Land is NOT within a proclaimed Mine Subsidence District
Road Widening & Realignment	Land is NOT affected by road realignment or road widening
Flood Related Development Controls	Development on this land is Not subject to flood related development controls
Land Reserved for Acquisition	Land is NOT subjected to Land Reserved for Acquisition.
Biodiversity Certified Land	Land is NOT biodiversity certified land.
Bushfire Prone Land	Land IS identified as being bushfire prone land
Property Vegetation Plans	Land is NOT subject to a property vegetation plan under the Native Vegetation Act 2003
Loose-fill asbestos information	There are no premises on the subject land listed to contain or have contained loose-fill asbestos insulation.
Contaminated Land	<ul style="list-style-type: none"> <li>i) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.</li> <li>ii) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.</li> <li>iii) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.</li> <li>iv) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.</li> <li>v) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.</li> </ul>

### 5.1.2 Review of the Historical Aerial Photos

Stantec has conducted a review of historical aerial photographs or available aerial imagery, current Site inspection, previous investigations, and knowledge of the area, with the key observation outlined in Table 5-2 below.

Table 5-2 Aerial Imagery Review

Date	Reference	Observations
1954	Black and White Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>Site appears to be undeveloped, with scattered tree cover.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Raymond Terrace Road trends northeast just north of the Site, and Government Road traverses north to the east of the Site.</li> <li>Mainly undeveloped bushland surrounds the Site, with a cleared area within the bushland.</li> <li>To the southeast there is an area of cleared land, with several structures and connecting roads.</li> <li>Several dams to the east/southeast.</li> </ul>
1966	Black and White Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>Generally consistent with the 1954 photograph.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Generally consistent with the 1954 photograph, with the exception of a small structure being constructed to the northeast and another to the east.</li> </ul>
1975	Black and White Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>General consistent with the 1966 photograph, with the exception of increased mature tree growth.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Cleared area within the bushland to the east has had earthworks occur.</li> <li>Area to the east has been cleared of majority of mature tree cover, with an east trending access track appearing to have been constructed.</li> <li>Construction of a structure and several access tracks is evident to the north of the Site, beyond Raymond Terrace Road.</li> </ul>
1984	Black and White Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>The Site has been cleared of majority of tree cover.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Access track and a structure has been constructed to the southwest of the Site</li> <li>Cleared area to the east has had further earthworks occur.</li> <li>Further development to the structures to the north of the Site, with more being built further north.</li> <li>Earthworks apparent to the east of Government Road.</li> </ul>
1993	Colour Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>A dam has been constructed in the northern portion of the Site.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Further development to the structures to the southwest of the Site.</li> <li>Access track connecting Raymond Terrace Road to the cleared area within the bushland is evident.</li> </ul>

Date	Reference	Observations
		<ul style="list-style-type: none"> <li>Several dams have been constructed to the south and southeast of the Site.</li> <li>Area to the northeast of the Site has been cleared, with structures and associated access tracks formed.</li> </ul>
1998	Colour Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>Shed has been constructed in the middle portion of the Site, with a rainwater tank placed opposite it.</li> <li>Driveway connecting the shed to Raymond Terrace Road has been constructed.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>A structure and driveway have been constructed to the east.</li> </ul>
2007	Colour Metromap Imagery Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>Residence has been constructed on Site, with a fenced area has been placed around the shed and house.</li> <li>Small shed has been placed just east of the existing shed on Site, as well as a second water tank.</li> <li>Vegetated stockpile just east of water tanks.</li> <li>Appears to be several areas of isolated disturbance in the central portion of the Site.</li> <li>Several examples of household items being stored around the Site.</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Disturbed area to the east of the Site appears to have access tracks throughout it.</li> </ul>
2022	Colour Nearmap imagery Scale: N/A	<p><b>Onsite:</b></p> <ul style="list-style-type: none"> <li>Solar panels have been added to the shed on Site.</li> <li>Appears to be stored items around the sheds, (sheeted metal)</li> </ul> <p><b>Offsite:</b></p> <ul style="list-style-type: none"> <li>Major developments to a residential subdivision surrounding the majority of the Site.</li> <li>Water quality basin system has been constructed to the north of the residence.</li> </ul>

## 5.2 Discussions with Site owner

Discussions with the owner indicated the following information regarding the Site:

- > The residence was constructed in 2002, with construction being undertaken by the owner.
- > The residence is not serviced by potable water supply, nor does it have a reticulated sewer system.
- > An onsite effluent treatment system is in use, and discharges directly northeast of the residence.
- > The rubble stockpile identified in the DP report on the eastern boundary, was generated from the new construction of the existing residence.

## 5.3 Summary of Site History

Based on the available historical data, Stantec Site inspection, public searches, and liaison with the current owner of the land, the Site has been predominately used for rural residential land use. The Site was predominately in a natural condition until 1984 when increased clearing was noted. Development of the Site comprising the construction of a dam, the metal shed, and existing residence was noted from 1998 to 2002. The above timeline of development is consistent with commentary from the current Site owner.

At the time of the earliest aerial imagery (1954), the surrounding areas generally appeared to comprise rural acreage. Observations of the aerial imagery up until 2022 comprised:

- > Major clearing of the land and subsequent subdivision placed around the east of the Site.
- > Clearing of the land and construction of large residential properties to the north.

- > Land clearing to the west, and construction of rural residential properties.

## 6 Areas & Contaminants of Potential Concern

The assessment has identified several potential sources of contamination (and related Contaminants of Potential Concern – COPC), which are summarised in the Table 6-1 below. The Site plan attached in Appendix A outlines the areas of Environmental Concern below.

Table 6-1 Site Activities and Potential Contaminants of Concern

Area of Environmental Concern (AEC)	Site Activity / Potential Source	Contaminants of Potential Concern (CoPC)	Comments
<i>Onsite Sources</i>			
Area 1	Machinery Use	<ul style="list-style-type: none"> <li>▪ Agricultural Use</li> <li>▪ Installation of service utility</li> </ul>	<ul style="list-style-type: none"> <li>▪ 8 Heavy Metals</li> <li>▪ PAH, TRH BTEXN</li> </ul> <ul style="list-style-type: none"> <li>▪ Potential machinery uses on Site.</li> </ul>
Area 2	Buildings / Sheds	<ul style="list-style-type: none"> <li>▪ Degradation of galvanized cladding</li> <li>▪ Cut and fill</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential storage of pesticides, chemicals &amp; fuels.</li> <li>▪ metals</li> </ul> <ul style="list-style-type: none"> <li>▪ Age of the structures indicate for weathering of metal cladding.</li> <li>▪ Potential for uncontrolled fill associated with building pads for the structures on site</li> </ul>
Area 3	Grass Pasture	<ul style="list-style-type: none"> <li>▪ Cattle grazing</li> <li>▪ Agricultural activities</li> </ul>	<ul style="list-style-type: none"> <li>▪ OCP/OPP and metals</li> </ul> <ul style="list-style-type: none"> <li>▪ Potential use of pesticides.</li> </ul>
Area 4	Transpiration Bed	<ul style="list-style-type: none"> <li>▪ Human waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pathogens</li> <li>▪ Nutrients</li> <li>▪ Thermotolerant coliforms</li> </ul> <ul style="list-style-type: none"> <li>▪ Potential for leakage into surrounding ecosystems.</li> </ul>
Area 5	Generation of stockpile	<ul style="list-style-type: none"> <li>▪ Surplus materials</li> </ul>	<ul style="list-style-type: none"> <li>▪ 8 Heavy Metals</li> <li>▪ PAH, TRH BTEXN</li> <li>▪ Foreign materials</li> <li>▪ Potential asbestos containing materials</li> </ul> <ul style="list-style-type: none"> <li>▪ Discussions with client indicated that the stockpile was generated from dwelling construction.</li> </ul>
Area 6	Overall Site	<ul style="list-style-type: none"> <li>▪ Uncontrolled fill</li> </ul>	<ul style="list-style-type: none"> <li>▪ TRH, PAH, BTEXN, 8 metals</li> </ul> <ul style="list-style-type: none"> <li>▪ Potential cut and fill operations</li> </ul>
<i>Offsite Sources</i>			
Offsite	Raymond Terrace Road	<ul style="list-style-type: none"> <li>▪ Motor Vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Metals, TRH, PAH, BTEXN,</li> </ul> <ul style="list-style-type: none"> <li>▪ Public use of the road</li> </ul>

## 7 Conceptual Site Model

### 7.1 Preliminary Conceptual Site Model

Generally, a conceptual site model (CSM) provides an assessment of the fate and transport of COPCs relative to site-specific subsurface conditions with regard to their potential risk to human health and the environment. The CSM considers site-specific factors including:

- > Source(s) of contamination,
- > Identification of contaminants of potential concern (COPCs) associated with past (and present) source(s),
- > Vertical, lateral and temporal distribution of COPCs,
- > Site specific lithological information including soil type(s), depth to groundwater, effective porosity, and groundwater flow velocity,
- > Actual or potential receptors considering both current and future land use for both the Site and adjacent properties, and any sensitive ecological receptors.

Based on the information sourced in this report, a preliminary CSM has been developed and is outlined in Table 7-1 below. Additional details are included in the sections that follow as necessary.

Table 7-1 Preliminary Conceptual Site Model

Conceptual Site Model Element	Description
Site History	<ul style="list-style-type: none"> <li>▪ Rural residential development with potential agricultural activities – grazing.</li> </ul>
Site Current and Future Use	<ul style="list-style-type: none"> <li>▪ Existing rural residential development</li> <li>▪ Proposed to be developed into a residential subdivision</li> </ul>
Site Geology	<ul style="list-style-type: none"> <li>▪ No intrusive investigation was undertaken. Based on Site conditions and published data, the subsurface conditions can be generally summarised clays, silty clays and gravelly clays, with some isolated filling associated with water tank cavity and building pads.</li> </ul>
Site Hydrogeology	<ul style="list-style-type: none"> <li>▪ Groundwater assessment was not undertaken as part of the scope.</li> </ul>
Area of Environmental Concern (AoEC)	<ul style="list-style-type: none"> <li>▪ Onsite: Potential contamination associated with minor areas of filling and surficial disturbance including fill pads for structures and access tracks.</li> <li>▪ Onsite: Potential hydrocarbon contamination associated with machinery use.</li> <li>▪ Onsite: Potential pesticide and herbicide use.</li> <li>▪ Onsite: Potential hazardous materials associated with existing and former structures.</li> <li>▪ Onsite: Potential nutrient, thermotolerant coliforms and metals associated with transpiration beds.</li> <li>▪ Onsite: Potential contamination of stockpiles onsite.</li> <li>▪ Offsite: Potential contamination associated with motor vehicles on Raymond Terrace Road, immediately north.</li> </ul>
Media Potentially Impacted	<ul style="list-style-type: none"> <li>▪ Potentially contaminated surficial soils onsite.</li> <li>▪ Potentially contaminated underlying soils onsite.</li> <li>▪ Potentially contaminated fill soils onsite.</li> <li>▪ Potentially contaminated groundwater under the Site.</li> </ul>
Potential Human Receptors	<ul style="list-style-type: none"> <li>▪ Site users / workers / employees (onsite).</li> <li>▪ Site Construction workers (onsite).</li> <li>▪ Current and future residents (onsite).</li> <li>▪ Local rural residents and surrounding properties (offsite).</li> </ul>
Potential Environmental Receptors	<ul style="list-style-type: none"> <li>▪ Flora and fauna.</li> <li>▪ On-site and surrounding soils.</li> </ul>



	<ul style="list-style-type: none"> <li>▪ Nearby waterbodies – i.e. water quality basins adjacent to northern portion of the Site.</li> </ul>
<p>Potential Exposure Pathways</p>	<ul style="list-style-type: none"> <li>▪ Air – inhalation of dusts.</li> <li>▪ Soil – dermal / direct contact.</li> <li>▪ Lateral migration via surficial runoff.</li> </ul>

## 7.2 Data Gaps

Based on the inspection, the potential for contamination at this Site is not considered to present a significant constraint on the proposed redevelopment of subject Site. However, it must be appreciated that assessment was limited to review of historical data and observations within the subject Site, with no intrusive sampling undertaken.

The following data gaps and uncertainties regarding the assessment are detailed below:

- > No intrusive subsurface investigation or sampling spatially and vertically.
- > No soil or groundwater laboratory analysis.
- > No groundwater samples collected; however, groundwater contamination is considered unlikely.
- > No dangerous goods search was undertaken for the Site, however given the locality and current site use, it is unlikely dangerous goods have been stored at the Site.
- > No title deed searches were undertaken as part of the assessment.
- > No soils beneath existing structures were assessed.
- > No intrusive assessment of existing stockpiles.

## 8 Discussions and Conclusions

---

Stantec has completed a Preliminary Site Investigation (PSI) of Lot 101 DP1279275, located at 512 Raymond Terrace Road, Thornton, NSW. The objectives of the investigation were to assess:

- > The potential for past and present activities undertaken on and adjacent to the Site to have affected soil and groundwater at the Site.
- > The need for any further assessment or remedial works before definitive conclusions could be made on the suitability of the Site for use.

The DP report [1] indicated concern with the presence of a rubble stockpile onsite. It was understood that the stockpile was generated from the surplus material during the construction of the existing dwelling and inspection of the stockpile revealed no potential asbestos containing materials. The stockpile can be dealt during the construction phase and will require assessment for offsite disposal to a licenced waste facility.

It was noted that a rural dam was present along the northern boundary of the Site. The rural dam was redeveloped into a water quality basin and subdivided into a separate parcel of land outside the assessment area and was excluded.

Findings of the PSI indicated that the Site was predominately undeveloped rural land, up until the year 1998, where it was utilised for rural residential land use. The recent site inspection, as well review of the previous investigations indicated that there was no evidence of gross contamination on Site.

### 8.1.1 Summary of Contamination Potential

Based on the review of the Site history and Site inspection, Stantec identified the following potential sources of contamination at or adjacent to the Site:

- > Potential contamination associated with areas of filling (stockpiles) and surficial disturbance on Site – onsite.
- > Potential hydrocarbon contamination with machinery use – onsite.
- > Potential pesticide and herbicide use – onsite.
- > Potential contamination associated with septic / effluent disposal system – onsite.
- > Potential hazardous materials associated with existing and former structures – onsite.

### 8.1.2 Potential Acid Sulfate Soils

A review of the Maitland Local Environmental Plan (LEP) 2011 Acid Sulfate Soils Risk Map [5] indicates that the Site is situated within Class 5 Acid Sulfate Soils. Class 5 indicates that *'Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1,2,3 or 4 land. Works 2 in a class 5 area that are likely to lower the water table below 1 metre AHD 1 on adjacent class 1, 2, 3 or 4 land will trigger the requirement for assessment and may require management'*.

## 8.2 Conclusions

Based on review of previous investigations, together with the recent site inspection, no indication of gross contamination has been identified on the Site. The Site is considered to be low risk of potential contamination based on investigation findings and the identified data gaps. The Site is considered suitable for the proposed development subjected to the recommendations below. As there is a low risk for contamination an unexpected finds protocol has been developed, and is attached in Appendix D.

## 9 Recommendations

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Based on review of previous investigations, together with the recent site inspection, Stantec identified no past or current potentially gross contaminating activities having been undertaken on Site.

Given the results of this assessment, Stantec recommends the following which can be undertaken during the construction of phase of the development:

- > The implementation of an unexpected finds protocol to address any potential issues that may be uncovered during the course of the development. An unexpected finds protocol has been developed and attached as Appendix D
- > If potential contamination is encountered, Site works will be ceased, and suitable environmental consultant will be engaged for assessment as per the unexpected finds protocol.
- > Any soil to be excavated and transported off Site for disposal require classification in accordance with the NSW EPA Waste Classification Guidelines.
- > Presence of any existing stockpiles or sundry items to be assessed for offsite disposal or reuse. This can be undertaken during the construction phase.
- > Decommissioning of existing effluent systems.

## 10 References

---

- [1] Partners, Douglas, "Report on Preliminary Contamination & Urban Capability Assessment," 2004.
- [2] NSW EPA, Consultants reporting on contaminated land guidelines, NSW Environmental Protection Authority, 2020.
- [3] National Environment Protection (Assessment of Site Contamination) Measure 1999, Schedule B1 Guidelines on Investigation Levels for Soil and Groundwater, National Environment Protection Council (NEPC), 16 May 2013.
- [4] NSW Government, "Minview," 2022. [Online]. Available: <https://minview.geoscience.nsw.gov.au/#/?lon=151.6434&lat=-32.76599&z=17&bm=bm1&l=ge611:n:100,ge610:n:100,ge69:n:100,ge68:n:100,ge67:n:100,ge66:n:100,ge65:n:100,ge64:n:100,ge63:n:100,ge62:n:100,ge61:n:100,ge612:y:100,hi1:n:25,wa1:y:100,ut1:y:50,ad0:y:100>.
- [5] Maitland City Council, "Maitland Local Environmental Plan 2011," in *Acid Sulfate Soils Map - Sheet ASS\_006A - Map ID 5050\_COM\_ASS\_006A\_020\_20110401*, Maitland City Council, 1/4/2011.
- [6] "Contaminated Land - NSW EPA," [Online]. Available: <https://www.epa.nsw.gov.au/your-environment/contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites>. [Accessed 02 11 2022].
- [7] NSW Government, Stage of Environmental Planning Policy No 55 - Remediation of Land (SEPP 55), 1998.
- [8] NSW Government, "ePlanning Spatial Viewer," 2020. [Online]. Available: <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>. [Accessed 2021 July 9].
- [9] NSW DEC, Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd Edition), Department of Environment and Conservation NSW, 2017.
- [10] Standards Australia, Australian Standard - Guide to the investigation and sampling of sites with potentially contaminated soils - part one: non-volatile and semi-volatile compounds, 2005.

APPENDIX

A

FIGURES

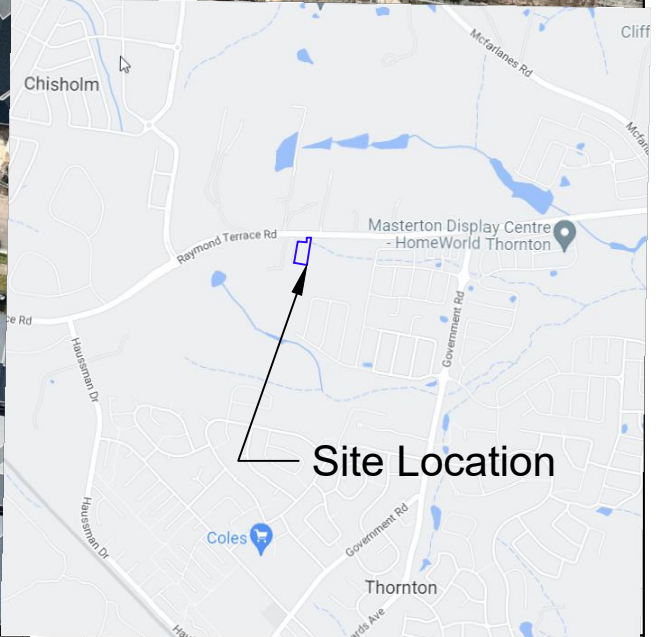
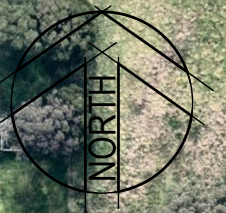


now



DATE PLOTTED: 11 November 2022 4:12 PM BY: BROCK COLLINSON

NOTES:  
Image underlay adapted from nearmaps aerial imagery.



Not to Scale

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Web: www.stantec.com

Drawn	BC	Date	11/11/2022
Checked		Date	
Designed		Date	
Verified		Date	
Approved		Date	

Client	Sue and Terry Bunt
Project	512 Raymond Terrace Road Thornton
Title	Areas of Potential Concern

Status	<b>PRELIMINARY</b> NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Project Number	304100802-002	Scale	Not to Scale
Figure Number	Site Plan Figure 2		Size A3
			Revision

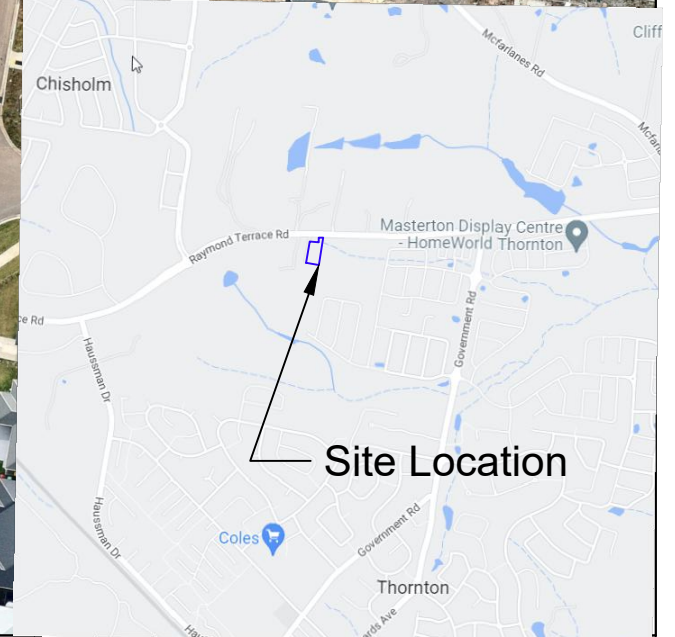
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DATE PLOTTED: 11 November 2022 4:00 PM BY: BROCK COLLINSON

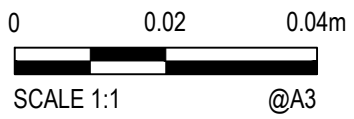
**NOTES:**  
Image underlay adapted from nearmaps aerial imagery.



Site Boundary



Site Location



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Drawn	BC	Date	11/11/2022
Checked		Date	
Designed		Date	
Verified		Date	
Approved			

Client	Sue and Terry Bunt
Project	512 Raymond Terrace Road Thornton
Title	Site plan

Status	<b>PRELIMINARY</b>		
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Project Number	Scale	Size	
	####	A3	
Figure Number	Site Plan Figure 1		Revision

XREFS: CAD File: C:\Users\brock.collinson\OneDrive - Cardno\Desktop\Geo Site plan.dwg

APPENDIX

# B

SITE PHOTOGRAPHS



now







Photo 1: View of the rubble stockpile on the eastern border of the Site. Taken on 7/10/2022.



Photo 2: View of the southern portion of the Site. Taken on 7/10/2022.

Client		Sue and Terry Bunt	
Project		512 Raymond Terrace Road Thornton	
Title		Cardno Reference	Size A4
Photo Plate			



Photo 3: View of the shed and water tanks looking north. Taken on 7/10/2022



Photo 4: View of the vegetated stockpile in the centre of the Site. Taken on 7/10/2022.

Client		Sue and Terry Bunt	
Project		512 Raymond Terrace Road Thornton	
Title		Cardno Reference	Size
Photo Plate			A4



Photo 5: View of the water tanks in the centre of the Site. Taken on 7/10/2020.



Photo 6: View of of the shed in the centre of the Site. Taken on 7/10/2022

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Client	Sue and Terry Bunt	
Project	512 Raymond Terrace Road Thornton	
Title	Cardno Reference	Size
		A4
Photo Plate		



Photo 7: View of the old chicken shed in the centre of the Site. Taken on 7/10/2022.



Photo 8: View of the residence looking south. Taken on 7/10/2022.

Client		Sue and Terry Bunt	
Project		512 Raymond Terrace Road Thornton	
Title		Cardno Reference	Size
Photo Plate			A4

APPENDIX

C

PLANNING CERTIFICATE, AERIALS



now





# HUNTER WATER CORPORATION

A.B.N. 46 228 513 446

## SERVICE LOCATION PLAN - NOT LIABLE

Enquiries: 1300 657 657

### APPLICANT'S DETAILS

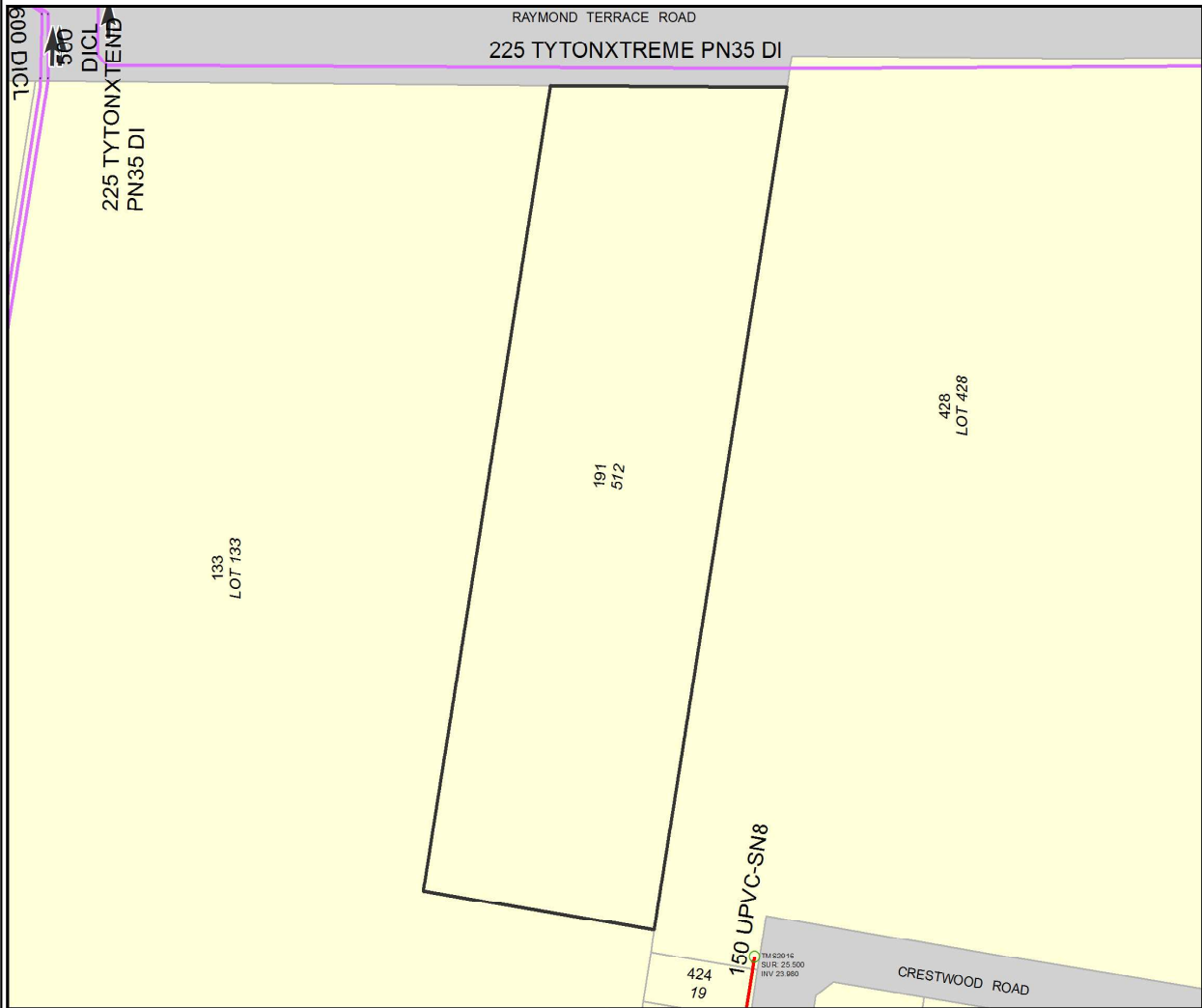


InfoTrack  
512 RAYMOND TERRACE  
THORNTON NSW

APPLICATION NO.: 1454122  
APPLICANT REF: M 11931:MC  
RATEABLE PREMISE NO.: 9999912228

PROPERTY ADDRESS: 512 RAYMOND TERRACE RD THORNTON 2322

LOT/SECTION/DP:SP: 191//DP 827070



SEWER POSITION APPROXIMATE ONLY.  
SUBJECT PROPERTY BOLDED.  
ALL MEASUREMENTS ARE METRIC.

**A SEWERMAIN AND WATERMAIN IS NOT AVAILABLE  
TO WHICH THE PROPERTY CAN BE CONNECTED.**

IF A SEWERMAIN IS LAID WITHIN THE BOUNDARIES OF THE LOT, SPECIAL REQUIREMENTS FOR THE PROTECTION OF THE SEWERMAIN APPLY IF DEVELOPMENT IS UNDERTAKEN. IN THESE CASES, IT IS RECOMMENDED THAT YOU SEEK ADVICE ON THE SPECIAL REQUIREMENTS PRIOR TO PURCHASE. PHONE 1300 657 657, FOR MORE INFORMATION.

#### IMPORTANT:

IF THIS PLAN INDICATES A SEWER CONNECTION IS AVAILABLE OR PROPOSED FOR THE SUBJECT PROPERTY, IT IS THE INTENDING OWNERS RESPONSIBILITY TO DETERMINE WHETHER IT IS PRACTICABLE TO DISCHARGE WASTEWATER FROM ALL PARTS OF THE PROPERTY TO THAT CONNECTION.

ANY INFORMATION ON THIS PLAN MAY NOT BE UP TO DATE AND THE CORPORATION ACCEPTS NO RESPONSIBILITY FOR ITS ACCURACY.

Date: 19/07/2021

Scale: at A4 1:2,000

CADASTRAL DATA © LPI OF NSW  
CONTOUR DATA © AAMHatch  
© Department of Planning

SEWER/WATER/RECYCLED WATER  
UTILITY DATA  
© HUNTER WATER CORPORATION

**Certificate No.:** PC/2021/2312

**Certificate Date:** 20/07/2021

**Fee Paid:** \$53.00

**Receipt No.:** 1048132

**Your Reference:** 11931:MC

**SECTION 10.7 PLANNING CERTIFICATE**  
**Environmental Planning and Assessment Act, 1979 as amended**

---

<b>APPLICANT:</b>	Infotrack  ecertificates@infotrack.com.au
<b>PROPERTY DESCRIPTION:</b>	512 Raymond Terrace Road THORNTON NSW 2322
<b>PARCEL NUMBER:</b>	29686
<b>LEGAL DESCRIPTION:</b>	Lot 191 DP 827070

---

**IMPORTANT: Please read this Certificate carefully.**

This Certificate contains important information about the land described above.

Please check for any item, which could be inconsistent with the proposed use or development of the land. If there is anything you do not understand, please contact Council by phoning (02) 4934 9700, or personally at Council's Administration Building at 285-287 High Street, Maitland.

The information provided in this Certificate relates only to the land described above. If you require information about adjoining or nearby land, or about the Council's development policies or codes for the general area, contact Council's Planning & Environment Department.

All information provided is correct as at the date of issue of this Certificate, however it is possible for changes to occur at any time after the issue of this Certificate. We recommend that you only rely upon a very recent Certificate.

The following responses are based on the Council's records and/or information from sources outside the Council. The responses are provided with all due care and in good faith, however the Council cannot accept responsibility for any omission or inaccuracy arising from information outside the control of the Council.

Furthermore, while this Certificate indicates the general effect of the zoning of the abovementioned land, it is suggested that the applicable planning instruments be further investigated to determine any additional requirements.

**Copies of Maitland City Council's Local Environmental Planning Instrument, Development Control Plans and Policies are available from Council's [website](#).**

## **PART 1: MATTERS PROVIDED PURSUANT TO SECTION 10.7 (2)**

### **1. Local Environmental Plan (LEP)**

Maitland LEP 2011, published 16 December 2011, applies to the land.

#### **Exhibited draft Local Environmental Plans**

No draft local Environmental Plans that have been on public exhibition under the Act are applicable to the land.

#### **Development Control Plan prepared by Council**

Maitland Development Control Plan 2011 applies to the land.

#### **Development Control Plan prepared by the Director General**

The Council has not been notified of any Development Control Plan applying to the land that has been prepared by the Director-General under section 51A of the Act.

#### **State Environmental Planning Policies**

The Minister for Planning has notified that the following State Environmental Planning Policies (SEPPs) shall be specified on Certificates under Section 10.7 of the Environmental Planning and Assessment Act, 1979.

The land is affected by the following State Environmental Planning Policies:

- SEPP21 Caravan Parks
- SEPP (Mining, Petroleum Production and Extractive Industries) 2007
- SEPP (State and Regional Development) 2011
- SEPP33 Hazardous and Offensive Development
- SEPP36 Manufactured Home Estates
- SEPP (Koala Habitat Protection) 2019
- SEPP50 Canal Estate Development
- SEPP (Housing for Seniors or People with a Disability) 2004
- SEPP55 Remediation of Land
- SEPP Affordable Rental Housing 2009
- SEPP Building Sustainability Index: BASIX 2004
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Infrastructure) 2007
- SEPP64 Advertising and Signage
- SEPP Primary Production and Rural Development 2019
- SEPP65 Design Quality of Residential Apartment Development
- SEPP70 Affordable Housing (Revised Schemes)
- SEPP (Concurrences and Consents) 2018
- SEPP Vegetation in Non Rural Areas 2017
- SEPP (Educational Establishments and Child Care Facilities) 2017



- 

### **Draft State Environmental Planning Policies**

The following draft State Environmental Planning Policy(s) applying to the land is, or has been, the subject of community consultation or on public exhibition under the Act:

#### ***Housekeeping Amendment to the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008***

The proposed amendments to this SEPP are housekeeping amendment to the Codes SEPP to simplify and improve the policy, clarify definitions and standards, and address other minor technical matters raised. The proposed housekeeping amendment to the Codes SEPP will simplify and improve the policy, clarify definitions and standards, and address other minor technical matters.

## **2. Zoning and land use under relevant LEPs**

Maitland LEP 2011, published 16 December 2011, identifies the zone applying to the land as:

### **R1 General Residential**

The following development information gives the objectives of the zone, the description of the zone and identifies development allowed or prohibited in each zone. Development consent where required, must be obtained from the Council.

#### **R1 General Residential**

##### **a) Purpose/Objective**

- To provide for the housing needs of the community
- To provide for a variety of housing types and densities
- To enable other land uses that provide facilities or services to meet the day to day needs of residents

##### **b) Permitted with Consent**

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Dwelling houses; Group homes; Home-based child care; Home industries; Hostels; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Tank-based aquaculture; Any other development not specified in item 2 or 4

##### **c) Permitted without Consent**

Home occupations

##### **d) Prohibited**

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks;

Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies.

**e) Land dimensions to permit the erection of a dwelling house on the land**

For the land zoned R1 General Residential the Maitland LEP 2011 does not contain a development standard specifying the land dimensions required to permit the erection of a dwelling house on the land.

**f) Critical Habitat**

No Local Environmental Plan or draft Local Environmental Plan identifies the land as including or comprising critical habitat.

**g) Conservation Area**

The land IS NOT in a Heritage Conservation Area.

**h) Item of Environmental Heritage**

The land does NOT contain an item of Environmental Heritage.

**3. Complying Development**

Complying development under the **Housing Code** may be carried out on the land.

Complying development under the **Low Rise Medium Density Housing Code** may be carried out on the land. Complying development under the **Greenfield Housing Code** may be carried out on the land, but only if the land is identified on the *Greenfield Housing Code Area Map* issued by the NSW Department of Planning and Environment.

Complying development under the **Rural Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Housing Alterations Code** may be carried out on the land.

Complying development under the **General Development Code** may be carried out on the land.

Complying development under the **Commercial and Industrial Alterations Code** may be carried out on the land.

Complying development under the **Commercial and Industrial (New Buildings**

**and Additions) Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Subdivisions Code** may be carried out on the land.

Complying development under the **Demolition Code** may be carried out on the land.

Complying development under the **Fire Safety Code** may be carried out on the land.

Complying development under the **Container Recycling Facilities Code** may not be carried out on the land.

**Note: Despite the above provisions, if only part of a lot is subject to an exclusion or exemption under Clause 1.17A or Clause 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial Development and Other Matters) 2013, complying development may be carried out on that part of the lot that is not affected by the exclusion or exemption.**

#### **4B. Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works**

The owner (or any previous owner) of the land has NOT 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).

#### **5. Coal Mine Subsidence Compensation Act 2017**

The land has NOT been proclaimed to be within a Mine Subsidence District under the meaning of section 20 of the Coal Mine Subsidence Compensation Act 2017.

#### **6. Road widening and road realignment**

- a) The land is NOT affected by road widening under Division 2 of Part 3 of the Roads Act 1993.
- b) The land is NOT affected by any environmental planning instrument
- c) The land is NOT affected by any road-widening or realignment under any resolution of the Council

The information above relates to Council's road proposals only. Other authorities, including Roads and Maritime Services, may have proposals, which have not been set out.

#### **7. Council and other public authority policies on hazard risk restrictions**

All land within the Maitland Local Government Area has the potential to contain acid sulfate soils. Clause 7.1 of the Maitland Local Environmental Plan 2011 generally applies. Development consent is required where works described in the Table to this clause are proposed on land shown on the Maitland LEP 2011 Acid Sulfate Soils Map as being of the class specified for those works.

The Council has adopted a Contaminated Lands Policy to provide a framework to appropriately manage land contamination risk through the land use planning process. This Policy seeks to ensure that changes in land use will not increase the risk to human health or the environment. The Policy applies to all land in the

Maitland Local Government Area.

## **7A. Flood Related Development Controls**

The land or part of the land IS NOT within the flood planning area and subject to flood related development controls.

The land or part of the land IS NOT between the flood planning area and the probable maximum flood and subject to flood related development controls.

The Maitland LEP 2011 identifies the flood planning level (FPL) as the level of a 1:100 ARI flood event plus 0.5m freeboard. The probable maximum flood has the same meaning as the Floodplain Development Manual.

## **8. Land Reserved for Acquisition**

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

## **9. Contribution Plans**

The following contribution plan(s) apply to the land:

- Maitland S94A Levy Contributions Plan 2006
- Thornton North S94 Contribution Plan 2008
- Maitland City Wide Section 94 Contributions Plan 2016
- Maitland S94 Contributions Plan (City Wide) 2006

Contributions Plans may be viewed on Council's website or inspected and purchased at Council's Customer Service Centre.

## **9A. Biodiversity Certified Land**

The land is not biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016.

## **10. Biodiversity Stewardship Sites**

The Council is not aware if the land is a biodiversity stewardship site under a biodiversity stewardship agreement under part 5 of the *Biodiversity Conservation Act 2016*.

## **10A. Native Vegetation clearing set asides**

The Council is not aware if the land contains a set aside area under 60ZC of the *Local Land Services Act 2013*.

## **11. Bushfire Prone Land**

The land is mapped as bushfire prone land and as such restrictions may apply to new development on this land.

## **12. Property vegetation plans**

The Council has not received any notification from Hunter Local Land Services that this land is affected by a property vegetation plan under Part 4 of the Native

Vegetation Act 2003 (and that continues in force).

**13. Order under Trees (Disputes between Neighbours) Act 2006**

Council has NOT received notification from the Land and Environment Court of NSW that the land is affected by an Order under Trees – (Disputes Between Neighbours) Act 2006.

**14. Directions under Part 3A**

There is NO direction by the Minister under Section 75P(2)(c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 (other than a project of a class prescribed by the regulations) of the Act does not have effect.

**15. Site Compatibility Certificate and Conditions for Seniors Housing**

**a) Site Compatibility Certificate**

Council is unaware of whether a current Site Compatibility Certificate issued under Clause 25 of the State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004 has been issued for the land.

**b) Conditions of Development Consent since 11 October 2007**

No development consent has been granted for the development permitted under State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004 after 11 October 2007.

**16. Site compatibility certificates for infrastructure, schools or TAFE establishments**

Council is unaware of whether a valid Site Compatibility Certificate has been issued under clause 19 of State Environmental Planning Policy (Infrastructure) 2007 for the land.

**17. Site compatibility certificates and conditions for affordable rental housing**

Council is unaware if a Site Compatibility Certificate (Affordable Rental Housing) has been issued in accordance with State Environmental Planning Policy (Affordable Rental Housing) 2009.

**18. Paper subdivision information**

There is no development plan that applies to the:

- 1) Land or that is proposed to be subject to a consent ballot
- 2) There is no subdivision order that applies to the land.

**19. Site verification certificates**

Council is not aware of any current site verification certificate in respect of the land.

**20. Loose-fill asbestos insulation**

There are no premises on the subject land listed on the register.

**21. Affected building notices and building product rectification orders**

The Council is NOT aware of any affected building notice which is in force in respect of the land.

The Council is NOT aware of any building product rectification order which is in

force in respect of the land and that has not been fully complied with.

The Council is NOT aware of any notice of intention to make a building product rectification order being given in respect of the land and that is outstanding.

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

**Contaminated Land**

- a) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.
  - b) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.
  - c) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.
  - d) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.
  - e) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.
- 

**David Evans**  
**General Manager**

**Certificate No.:** PC/2021/2312

**Certificate Date:** 20/07/2021

**Fee Paid:** \$53.00

**Receipt No.:** 1048132

**Your Reference:** 11931:MC

**SECTION 10.7 PLANNING CERTIFICATE**  
**Environmental Planning and Assessment Act, 1979 as amended**

---

<b>APPLICANT:</b>	Infotrack  ecertificates@infotrack.com.au
<b>PROPERTY DESCRIPTION:</b>	512 Raymond Terrace Road THORNTON NSW 2322
<b>PARCEL NUMBER:</b>	29686
<b>LEGAL DESCRIPTION:</b>	Lot 191 DP 827070

---

**IMPORTANT: Please read this Certificate carefully.**

This Certificate contains important information about the land described above.

Please check for any item, which could be inconsistent with the proposed use or development of the land. If there is anything you do not understand, please contact Council by phoning (02) 4934 9700, or personally at Council's Administration Building at 285-287 High Street, Maitland.

The information provided in this Certificate relates only to the land described above. If you require information about adjoining or nearby land, or about the Council's development policies or codes for the general area, contact Council's Planning & Environment Department.

All information provided is correct as at the date of issue of this Certificate, however it is possible for changes to occur at any time after the issue of this Certificate. We recommend that you only rely upon a very recent Certificate.

The following responses are based on the Council's records and/or information from sources outside the Council. The responses are provided with all due care and in good faith, however the Council cannot accept responsibility for any omission or inaccuracy arising from information outside the control of the Council.

Furthermore, while this Certificate indicates the general effect of the zoning of the abovementioned land, it is suggested that the applicable planning instruments be further investigated to determine any additional requirements.

**Copies of Maitland City Council's Local Environmental Planning Instrument, Development Control Plans and Policies are available from Council's [website](#).**

## **PART 1: MATTERS PROVIDED PURSUANT TO SECTION 10.7 (2)**

### **1. Local Environmental Plan (LEP)**

Maitland LEP 2011, published 16 December 2011, applies to the land.

#### **Exhibited draft Local Environmental Plans**

No draft local Environmental Plans that have been on public exhibition under the Act are applicable to the land.

#### **Development Control Plan prepared by Council**

Maitland Development Control Plan 2011 applies to the land.

#### **Development Control Plan prepared by the Director General**

The Council has not been notified of any Development Control Plan applying to the land that has been prepared by the Director-General under section 51A of the Act.

#### **State Environmental Planning Policies**

The Minister for Planning has notified that the following State Environmental Planning Policies (SEPPs) shall be specified on Certificates under Section 10.7 of the Environmental Planning and Assessment Act, 1979.

The land is affected by the following State Environmental Planning Policies:

- SEPP21 Caravan Parks
- SEPP (Mining, Petroleum Production and Extractive Industries) 2007
- SEPP (State and Regional Development) 2011
- SEPP33 Hazardous and Offensive Development
- SEPP36 Manufactured Home Estates
- SEPP (Koala Habitat Protection) 2019
- SEPP50 Canal Estate Development
- SEPP (Housing for Seniors or People with a Disability) 2004
- SEPP55 Remediation of Land
- SEPP Affordable Rental Housing 2009
- SEPP Building Sustainability Index: BASIX 2004
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Infrastructure) 2007
- SEPP64 Advertising and Signage
- SEPP Primary Production and Rural Development 2019
- SEPP65 Design Quality of Residential Apartment Development
- SEPP70 Affordable Housing (Revised Schemes)
- SEPP (Concurrences and Consents) 2018
- SEPP Vegetation in Non Rural Areas 2017
- SEPP (Educational Establishments and Child Care Facilities) 2017



- 

### **Draft State Environmental Planning Policies**

The following draft State Environmental Planning Policy(s) applying to the land is, or has been, the subject of community consultation or on public exhibition under the Act:

#### ***Housekeeping Amendment to the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008***

The proposed amendments to this SEPP are housekeeping amendment to the Codes SEPP to simplify and improve the policy, clarify definitions and standards, and address other minor technical matters raised. The proposed housekeeping amendment to the Codes SEPP will simplify and improve the policy, clarify definitions and standards, and address other minor technical matters.

## **2. Zoning and land use under relevant LEPs**

Maitland LEP 2011, published 16 December 2011, identifies the zone applying to the land as:

### **R1 General Residential**

The following development information gives the objectives of the zone, the description of the zone and identifies development allowed or prohibited in each zone. Development consent where required, must be obtained from the Council.

#### **R1 General Residential**

##### **a) Purpose/Objective**

- To provide for the housing needs of the community
- To provide for a variety of housing types and densities
- To enable other land uses that provide facilities or services to meet the day to day needs of residents

##### **b) Permitted with Consent**

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Dwelling houses; Group homes; Home-based child care; Home industries; Hostels; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Tank-based aquaculture; Any other development not specified in item 2 or 4

##### **c) Permitted without Consent**

Home occupations

##### **d) Prohibited**

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks;

Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies.

**e) Land dimensions to permit the erection of a dwelling house on the land**

For the land zoned R1 General Residential the Maitland LEP 2011 does not contain a development standard specifying the land dimensions required to permit the erection of a dwelling house on the land.

**f) Critical Habitat**

No Local Environmental Plan or draft Local Environmental Plan identifies the land as including or comprising critical habitat.

**g) Conservation Area**

The land IS NOT in a Heritage Conservation Area.

**h) Item of Environmental Heritage**

The land does NOT contain an item of Environmental Heritage.

**3. Complying Development**

Complying development under the **Housing Code** may be carried out on the land.

Complying development under the **Low Rise Medium Density Housing Code** may be carried out on the land. Complying development under the **Greenfield Housing Code** may be carried out on the land, but only if the land is identified on the *Greenfield Housing Code Area Map* issued by the NSW Department of Planning and Environment.

Complying development under the **Rural Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Housing Alterations Code** may be carried out on the land.

Complying development under the **General Development Code** may be carried out on the land.

Complying development under the **Commercial and Industrial Alterations Code** may be carried out on the land.

Complying development under the **Commercial and Industrial (New Buildings**

**and Additions) Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Subdivisions Code** may be carried out on the land.

Complying development under the **Demolition Code** may be carried out on the land.

Complying development under the **Fire Safety Code** may be carried out on the land.

Complying development under the **Container Recycling Facilities Code** may not be carried out on the land.

**Note: Despite the above provisions, if only part of a lot is subject to an exclusion or exemption under Clause 1.17A or Clause 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial Development and Other Matters) 2013*, complying development may be carried out on that part of the lot that is not affected by the exclusion or exemption.**

#### **4B. Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works**

The owner (or any previous owner) of the land has NOT 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).

#### **5. Coal Mine Subsidence Compensation Act 2017**

The land has NOT been proclaimed to be within a Mine Subsidence District under the meaning of section 20 of the Coal Mine Subsidence Compensation Act 2017.

#### **6. Road widening and road realignment**

- a) The land is NOT affected by road widening under Division 2 of Part 3 of the Roads Act 1993.
- b) The land is NOT affected by any environmental planning instrument
- c) The land is NOT affected by any road-widening or realignment under any resolution of the Council

The information above relates to Council's road proposals only. Other authorities, including Roads and Maritime Services, may have proposals, which have not been set out.

#### **7. Council and other public authority policies on hazard risk restrictions**

All land within the Maitland Local Government Area has the potential to contain acid sulfate soils. Clause 7.1 of the Maitland Local Environmental Plan 2011 generally applies. Development consent is required where works described in the Table to this clause are proposed on land shown on the Maitland LEP 2011 Acid Sulfate Soils Map as being of the class specified for those works.

The Council has adopted a Contaminated Lands Policy to provide a framework to appropriately manage land contamination risk through the land use planning process. This Policy seeks to ensure that changes in land use will not increase the risk to human health or the environment. The Policy applies to all land in the

Maitland Local Government Area.

## **7A. Flood Related Development Controls**

The land or part of the land IS NOT within the flood planning area and subject to flood related development controls.

The land or part of the land IS NOT between the flood planning area and the probable maximum flood and subject to flood related development controls.

The Maitland LEP 2011 identifies the flood planning level (FPL) as the level of a 1:100 ARI flood event plus 0.5m freeboard. The probable maximum flood has the same meaning as the Floodplain Development Manual.

## **8. Land Reserved for Acquisition**

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

## **9. Contribution Plans**

The following contribution plan(s) apply to the land:

- Maitland S94A Levy Contributions Plan 2006
- Thornton North S94 Contribution Plan 2008
- Maitland City Wide Section 94 Contributions Plan 2016
- Maitland S94 Contributions Plan (City Wide) 2006

Contributions Plans may be viewed on Council's website or inspected and purchased at Council's Customer Service Centre.

## **9A. Biodiversity Certified Land**

The land is not biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016.

## **10. Biodiversity Stewardship Sites**

The Council is not aware if the land is a biodiversity stewardship site under a biodiversity stewardship agreement under part 5 of the *Biodiversity Conservation Act 2016*.

## **10A. Native Vegetation clearing set asides**

The Council is not aware if the land contains a set aside area under 60ZC of the *Local Land Services Act 2013*.

## **11. Bushfire Prone Land**

The land is mapped as bushfire prone land and as such restrictions may apply to new development on this land.

## **12. Property vegetation plans**

The Council has not received any notification from Hunter Local Land Services that this land is affected by a property vegetation plan under Part 4 of the Native

Vegetation Act 2003 (and that continues in force).

**13. Order under Trees (Disputes between Neighbours) Act 2006**

Council has NOT received notification from the Land and Environment Court of NSW that the land is affected by an Order under Trees – (Disputes Between Neighbours) Act 2006.

**14. Directions under Part 3A**

There is NO direction by the Minister under Section 75P(2)(c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 (other than a project of a class prescribed by the regulations) of the Act does not have effect.

**15. Site Compatibility Certificate and Conditions for Seniors Housing**

**a) Site Compatibility Certificate**

Council is unaware of whether a current Site Compatibility Certificate issued under Clause 25 of the State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004 has been issued for the land.

**b) Conditions of Development Consent since 11 October 2007**

No development consent has been granted for the development permitted under State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004 after 11 October 2007.

**16. Site compatibility certificates for infrastructure, schools or TAFE establishments**

Council is unaware of whether a valid Site Compatibility Certificate has been issued under clause 19 of State Environmental Planning Policy (Infrastructure) 2007 for the land.

**17. Site compatibility certificates and conditions for affordable rental housing**

Council is unaware if a Site Compatibility Certificate (Affordable Rental Housing) has been issued in accordance with State Environmental Planning Policy (Affordable Rental Housing) 2009.

**18. Paper subdivision information**

There is no development plan that applies to the:

- 1) Land or that is proposed to be subject to a consent ballot
- 2) There is no subdivision order that applies to the land.

**19. Site verification certificates**

Council is not aware of any current site verification certificate in respect of the land.

**20. Loose-fill asbestos insulation**

There are no premises on the subject land listed on the register.

**21. Affected building notices and building product rectification orders**

The Council is NOT aware of any affected building notice which is in force in respect of the land.

The Council is NOT aware of any building product rectification order which is in

force in respect of the land and that has not been fully complied with.

The Council is NOT aware of any notice of intention to make a building product rectification order being given in respect of the land and that is outstanding.

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

**Contaminated Land**

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  - b) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.
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  - d) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.
  - e) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.
- 

**David Evans**  
**General Manager**

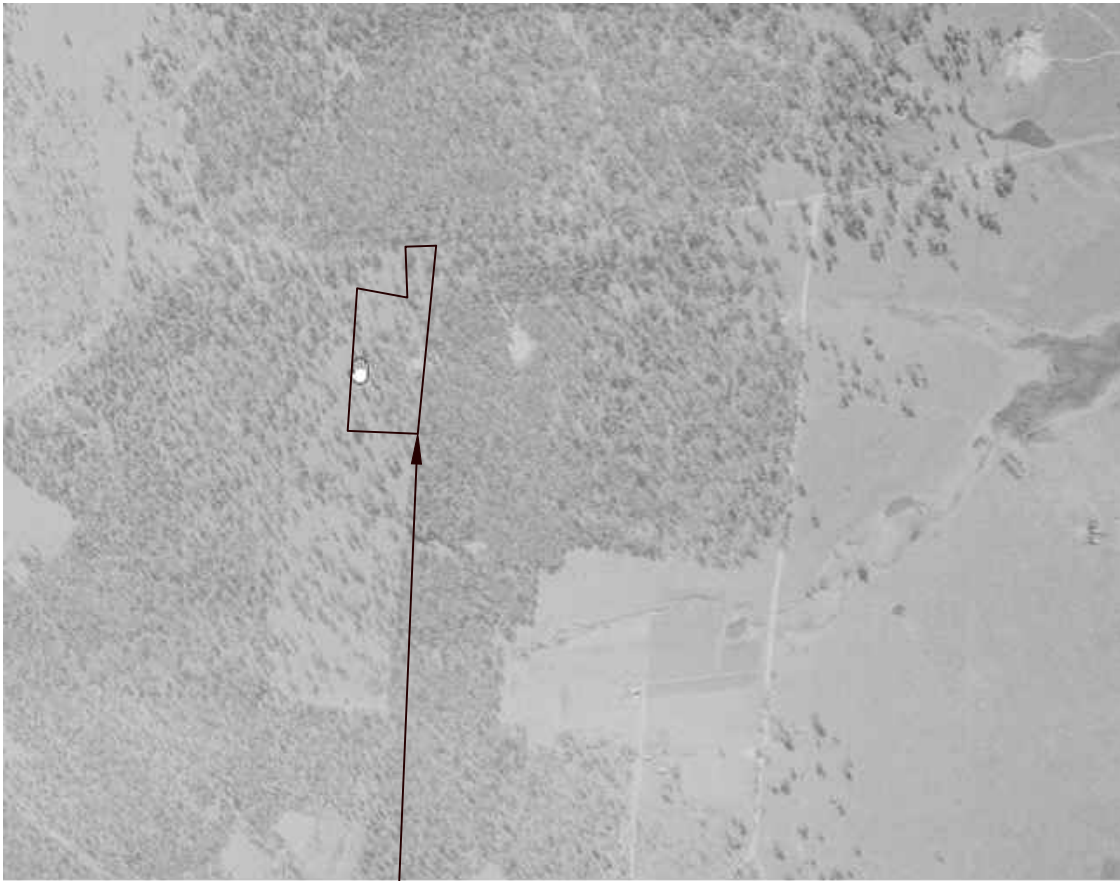


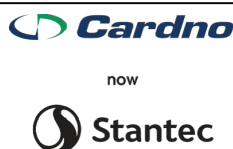
Photo 1: Aerial photograph - 1954.

Approximate site boundary



Photo 2: Aerial photograph - 1966.

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Client	Sue and Terry Bunt		
Project	512 Raymond Terrace Road, Thornton		
Title	Cardno Reference	304100802 - 002	Size
			A4
	Aerial Imagery		



Photo 3: Aerial photograph - 1975

Approximate site boundary



Photo 4: Aerial photograph - 1984

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Client	Sue and Terry Bunt		
Project	512 Raymond Terrace Road, Thornton		
Title	Cardno Reference	304100802 - 002	Size
			A4
	Aerial Imagery		





Photo 5: Aerial photograph - 1993

Approximate site boundary



Photo 6: Aerial photograph - 1998

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Client	Sue and Terry Bunt		
Project	512 Raymond Terrace Road, Thornton		
Title	Cardno Reference	304100802 - 002	Size
			A4
	Aerial Imagery		

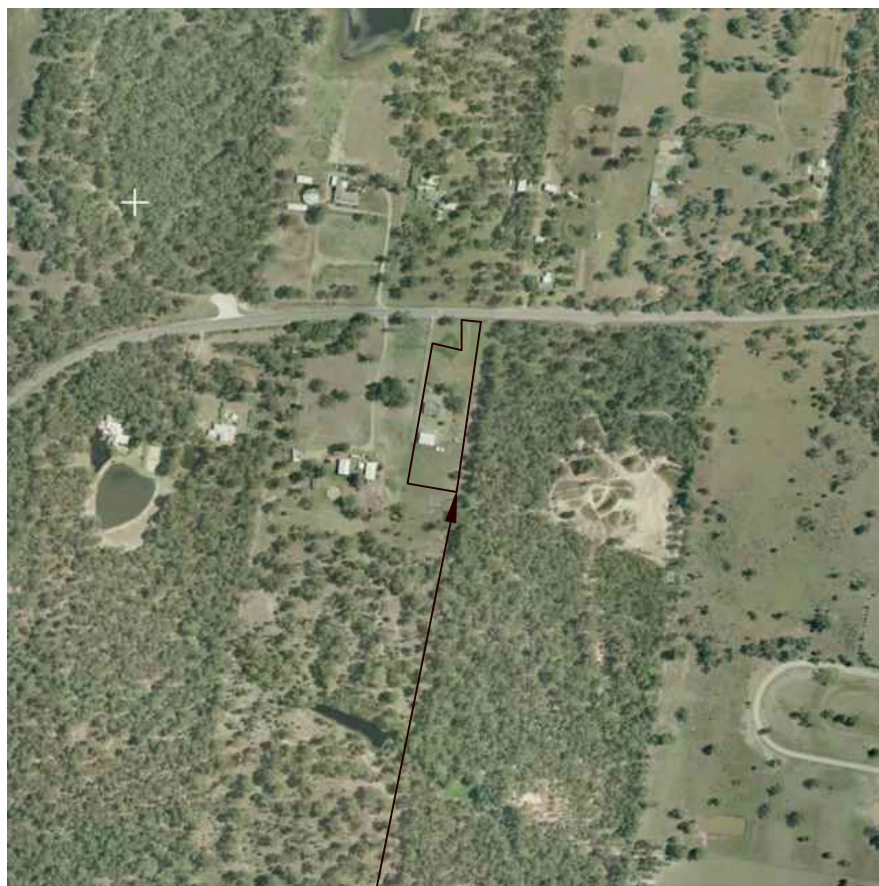


Photo 7: Aerial photograph - 2007

Approximate site boundary



Photo 8: Aerial photograph - 2022

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Client	Sue and Terry Bunt	
Project	512 Raymond Terrace Road, Thornton	
Title	Cardno Reference	304100802 - 002
	Size	A4
Aerial Imagery		

APPENDIX

# D

UNEXPECTED FINDS PROTOCOL



now



# Unexpected Finds Protocol (UFP)

512 Raymond Terrace Road,  
Thornton

304100802 - 002



Prepared for  
Sue and Terry Bunt

11 November 2022



now



### Contact Information

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### Document Information

Prepared for Sue and Terry Bunt  
Project Name 512 Raymond Terrace Road,  
Thornton.  
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Job Reference 304100802 - 002  
Date 14 November 2022  
Version Number 0

Author(s):



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Graduate Environmental Scientist

Effective Date 1/11/2022

Approved By:



Dimce Stojanovski  
Geotechnical Engineer

Date Approved 1/11/2022

### Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
0	14/11/2022	First Issue to Client	BC	DS

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# 1 Introduction

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This Unexpected Finds Protocol (UFP) has been developed for the proposed residential subdivision located 512 Raymond Terrace Road, Thornton (the 'Site'). Stantec were provided with a layout plan of the proposed subdivision prepared by Delf Lascelles Consulting Surveyors Pty Ltd (Drawing No. 21664, Rev B, Dated 11.08.22).

Based on the review of the plan and discussions with the client, it is understood that the proposed residential development will comprise:

- > Twenty-five (25) lots, and
- > One (1) internal road.

The purpose of the Unexpected Finds Protocol is to document the process for evaluating any unexpected environmental finds during the project, and to specify safety measures to be implemented to manage such circumstances and prevent any adverse environmental and human health impacts.

## 1.1 Scope

This Unexpected Finds Protocol (UFP) is specific to the proposed residential subdivision located at 512 Raymond Terrace Road, Thornton, NSW (the 'Site'). It provides guidance and procedures for dealing with any unexpected finds that may be encountered during the disturbance works carried out on Site.

## 1.2 References

The following documents have been reviewed in preparation of this Unexpected Finds Protocol:

- > National Parks and Wildlife Act 1974 (NSW)
- > Coroners Act 2009 (NSW)
- > Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)
- > Heritage Act 1977 (NSW)
- > National Environmental Protection Measure (1999)

## 2 Procedure

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### 2.1 General

The following procedure should be used to assess any unexpected finds that are encountered throughout the duration of the project. Unexpected finds may include but are not limited to heritage items, unidentified filling, odorous or stained soils, and suspected asbestos materials. All Site personnel are required to report any unexpected finds to the site manager, if observed during the course of their works.

### 2.2 Training and Induction of Personnel

Personnel involved in the project on Site are to be inducted to the unexpected finds protocol.

Site inductions would include making workers and site personnel aware of the possibility of unexpected finds. Inductions will also include the immediate course of actions to be taken by workers if they were to find anything, including stopping work, notifying their supervisor immediately and completing the Incident Report forms. The induction should be reinforced at daily toolbox meetings.

### 2.3 Initial Response

If any unexpected/unidentified material is uncovered during disturbance works, the following procedure should be followed;

- > Cease all works in the immediate area.
- > Identify the category of the find (Contaminated Soils, Heritage, uncovering of Asbestos Materials etc).
- > Delineate and restrict access to the area using fencing and /or appropriate barriers and signage.
- > Ensure appropriate training and PPE is available for any persons required to enter the area.
- > Document the nature of the find.
- > Engage a suitably qualified consultant to assess the unexpected find.
- > The consultant will assess the unexpected find and provide advice regarding the preliminary assessment with reference to Sections 2.4 – 2.8 below, which will include the following:
  - The need for further immediate management controls if required;
  - Further assessment and / or remediation works required in accordance with relevant guidelines;
  - Preparation of Remediation Action Plan (RAP) if required or provide clean up advice;
  - If required, clean up strategies of the affected area will be implemented.
  - If appointed, correspondence with a Site Auditor shall be undertaken.

Works within the affected area are not to recommence until it is deemed safe and suitable for works to continue. Written confirmation shall be undertaken by the appropriate consultant following appropriate advice and clean up procedures.

### 2.4 Skeletal Remains

In the event that skeletal remains are uncovered and the remains are not immediately identifiable as non-human remains, a qualified archaeologist should be engaged to determine their origin. If the skeletal remains are identifiable as human remains, the Local Police should be contacted to assess the discovery. Under no circumstances should the skeletal remains be disturbed without prior consultation with the relevant authorities which may include the coroner, police, Office of Environment & Heritage, aboriginal groups or a qualified anthropologist.



## 2.5 Aboriginal Heritage

In the event that any relic, artefact or material that is suspected of being Aboriginal Heritage is uncovered, works must cease immediately in the area. The Office of Environment and Heritage (OEH) should be notified, as well as the National Parks and Wildlife Service, NSW Police and local Aboriginal Stakeholders.

The Office of Environment and Heritage requires notification and an AHIP permit is required prior to the removal of any Aboriginal artefacts. An AHIP permit is issued under the National Parks and Wildlife Act and applications can be made directly to the OEH.

## 2.6 Archaeological Heritage

Items of archaeological heritage may be uncovered during disturbance works. Items of archaeological heritage may include Aboriginal artefacts or remains, European artefacts following settlement. European heritage may include items such as roadways (telford & corduroy timber road bases etc), kerbing, culverts, building foundations and tools. A suitably qualified archaeologist should be engaged to assess the find.

## 2.7 Potentially Contaminated Soils

In the event that any odorous, stained or unidentified soils are uncovered during the site works, a suitable qualified environmental consultant should be engaged to assess the material and the following procedures should apply:

- > Excavation works at that part of the Site where suspect soil material was encountered should cease until an inspection by an environmental consultant is carried out;
- > Based on a visual inspection, the consultant will provide guidance on health and safety of remedial works, soil storage and soil disposal to allow construction works to proceed if possible;

Based on sampling and analysis the consultant will provide advice as to any additional requirements (i.e. managed on Site or any offsite disposal requirements).

## 2.8 Asbestos Containing Materials

Contingency measures must be developed to evaluate any unexpected finds of suspected asbestos containing materials. These are to specify safety measures that can be implemented to manage and prevent any adverse environmental and human health impacts. Appropriate contingency measures in relation to asbestos impacted soils and suspected asbestos containing materials (ACM) include:

- > Where suspected ACM is encountered excavation works must cease until an inspection by an environmental consultant is carried out;
- > Any illegal dumping containing suspected asbestos bearing material or synthetic mineral fibres should be inspected by an environmental consultant.

Following a visual inspection; and sampling if necessary, the consultant will provide interim advice on health and safety requirements to allow construction works to proceed if possible;

Based on sampling and analysis the consultant will provide advice as to any additional requirements (i.e. management or disposal requirements).

Following an inspection and sampling for laboratory testing (where required), works can continue following the consultants written advice.

## 2.9 Summary

Where an area is identified as containing an isolated find, works must cease, and an inspection and sampling (where required) shall be undertaken by a suitable qualified consultant in accordance with Sections 2.4 to 2.8.

Works within the area shall only recommence following the advice of the suitable qualified personal.

An Unexpected Finds Protocol procedure form is available attached to this UFP document.



**UNEXPECTED FINDS PROTOCOL**  
**INCIDENT REPORT FORM**

Location of discovery (photographs, location map etc):

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Nature of find (contaminated soils, heritage, asbestos etc.):

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Action Taken:

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Date:

Recorded By: