Mace Australia Pty Ltd

Stage 1 Site Contamination Assessment

Manning Base Hospital – Demolition of Building 9

York Street, Taree

Report No. RGS02920.1-AC

11 January 2023

REGIONAL GEOTECHNICAL SOLUTIONS

REGIONAL GEOTECHNICAL SOLUTIONS

Manning-Great Lakes
Port Macquarie
Coffs Harbour

RGS02920.1-AC

11 January 2023

Mace Australia Pty Ltd
68 Pitt St
SYDNEY NSW 2000

Attention: Gordon Barlow

Dear Gordon

RE: Manning Base Hospital – Demolition of Building 9 – York Street, Taree
Stage 1 Site Contamination Assessment

As requested, Regional Geotechnical Solutions Pty Ltd (RGS) has undertaken a Stage 1 site contamination assessment for the proposed demolition of Building 9 (Administration) including the removal of footings, at Manning Base Hospital, York Street, Taree, NSW.

The assessment found that further detailed investigations should be undertaken following the completion of demolition works to delineate the nature and extent of contamination at the site.

The work presented herein was reviewed by Dr David Tully CEnvP SC. A copy of Dr Tully's letter pertaining to the review is appended to the report.

If you have any questions regarding this project, or require any additional consultations, please contact the undersigned.

For and on behalf of

Regional Geotechnical Solutions Pty Ltd

Prepared by

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1 INTRODUCTION

1.1 Background

Regional Geotechnical Solutions Pty Ltd (RGS) has undertaken a Stage 1 site contamination assessment for the proposed demolition of Building 9 (Administration) including the removal of footings, at Manning Base Hospital. The site is located on York Street, Taree, NSW and is shown on Figure 1.

The hospital site is identified as Lot 1 DP 1011890 and occupies approximately 2.5 hectares. The subject portion of the site which is to be redeveloped is located at the western end of the facility and occupies approximately 6,700m^2. The layout of the subject portion of the site is shown on Figure 2.

From information provided, it is understood that the existing Administration building (Building 9) will be demolished in accordance with the Demolition Site Plan (Ref:BVN-AR-01-10A-XX-15).

A Stage 1 Site Contamination Assessment is required to evaluate past and present potentially contaminating activities and contamination types and to assess the site's suitability for ongoing use as a health facility from a contamination perspective.

1.2 Objectives

The objectives of the Stage 1 site contamination assessment were to provide a preliminary assessment of the potential for soil contamination to be present on the site.

1.3 Scope of Works

In accordance with the relevant sections of the *National Environmental Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013*), the assessment involved the following process:

- A brief study of site history, with the aim of identifying past activities on or near the site that might have the potential to cause contamination;
- Review of available recent and historical aerial photography for the last 50 years;
- A search of NSW EPA records, or contaminated land notifications on the site;
- Government records of groundwater bores in the area;
- Site walkover to assess visible surface conditions and identify any evidence of contamination, or past activities that may cause contamination;
- Using the above information, characterise the site into Areas of Environmental Concern, in which the potential for contamination has been identified, and nominate Chemicals of Concern that might be associated with those activities;
- Undertake targeted sampling and analysis at the selected Areas of Concern to allow some preliminary analysis of the presence of contamination;
- Analyse samples for a suite of potential contaminants associated with the past activities; and

- Evaluate the results against industry accepted criteria for residential land use with minimal opportunities for soil access (Residential B land use guideline criteria have been adopted for this assessment as a conservative measure).

1.1 Site Identification

General site information is provided below in Table 1. The site location is shown in Figure 1.

Table 1: Summary of Site Details

Site location:	York Street, Taree
Approximate site area:	2.5 Hectares (total site) 6,700m^2 (proposed redevelopment portion)
Title Identification Details:	Lot 1 DP 1011890
Current Ownership:	Health Administration Corporation
Current Landuse:	Healthcare facility (hospital)
Proposed Landuse:	Ongoing healthcare facility
Adjoining Site Uses:	• York Street, allied health and residential properties to the north • Existing hospital buildings and facilities to the east; • High Street, allied health and commercial properties to the south; and • Commerce Street, commercial and residential properties to the west.
Government Area:	Midcoast Council

2 SITE DESCRIPTION

2.1 Topography and Drainage

The site is located within Manning Base Hospital, off Commerce Street and York Street, Taree.

The site is bound by York Street to the north west, Commerce Street to the south west, existing IPU Building and High Street to the south east and the Maintenance and Pathology Building to the north east. Entry to the above buildings is from York Street. A concrete driveway, car parking spaces, loading and unloading areas were observed between the buildings in the north east corner of the site. A grassed open area was observed in the central area between the buildings.

Garden beds with small shrubs were observed near the north west boundary and near the outside walls of existing buildings.

2.2 Geology

Reference to the Minview website indicates that the subject site is underlain by Hastings Block Pappinbarra Formation comprising sandstone and interbedded siltstone with minor conglomerate, tuff, calcareous sandstone, crinoidal sandstone and limestone.

2.3 Hydrogeology

A groundwater bore search on the NSW Water Information website, http://waterinfo.nsw.gov.au/gw/ indicates that there are no licenced groundwater bores located within 500m of the site.

Based on RGS' experience in the region, regional groundwater depth in this area is typically about 10m below ground surface.

2.4 Site History

2.4.1 Historical Aerial Photography

Available aerial photographs of the site were reviewed to assist in identifying past land uses that may contribute to site contamination. The results of the review are summarised in Table 2.

Table 2 - Aerial Photograph Summary

Year	Site	Surrounding Land
1969	The hospital site has been developed with the layout and presence of buildings on the subject portion of the facility appearing to be as it is in its current state with the exception of the swimming pool present between the administration and fever ward buildings.	The remaining part of the hospital site is occupied by small buildings. Land surrounding the hospital is occupied by residential and commercial properties in each direction.
1981	No visible changes from the previous photograph.	The area to the east of the subject part of the hospital site appears to be under redevelopment with some of the former buildings no longer present, areas of disturbed ground and at least one building which not previously present. No other visible changes from the previous photograph.
1997	No visible changes from the previous photograph.	No visible changes from the previous photograph.

Year	Site	Surrounding Land
2005 (Google Earth)	No visible changes from the previous photograph.	The eastern part of the hospital site has been redeveloped with several large multi-storey buildings and car parking areas present.
2013 (Google Earth)	The swimming pool which was present between the administration and fever ward buildings is no longer visible and the ground surface in this location appears to be disturbed. The southern part of the administration building appears to have undergone some renovation and possibly extension works.	There has been some redevelopment of commercial properties on land to the south of the site.
2021 (Google Earth)	The location of the former swimming pool and disturbed ground between the administration and fever ward buildings is covered by grass. The northern part of the administration building appears to have been re-roofed.	Further redevelopment on the eastern part of the hospital site including a multi-storey car park and additional structure located along the southern property boundary.

2.4.2 Site Observations

Fieldwork was undertaken on 15 February 2022. Observations from a contamination perspective made during the site visit are summarised below:

- The subject portion of the site is mainly covered by existing buildings and associated driveways and car parking areas, footpaths, a courtyard, and grassy areas and gardens around the perimeters of buildings;
- Most of the buildings were multi-storey and of brick construction with the exception of the fever ward building which was of fibro weatherboard construction;
- A gas storage area was present just inside the entrance to this part of the site near York Street;
- The courtyard between the administration and fever ward building where the former swimming pool was located was occupied by an open grassy area;
- An asbestos warning sign was present on the outside of the fever ward building (Building 8);
- Fragments fibro-cement suspected as being asbestos containing material (ACM) were buried at shallow depth at the SS2 sampling location outside the administration building's northern face (see Figure 3); and
- No other visual or olfactory evidence of contamination was observed.

A selection of images of the site is presented below.

 *Looking east along the outside of the administration building fronting York Street.*	 *Looking west across the courtyard between the fever ward and administration buildings. The former inground concrete swimming pool was located where the grass is now present.*
 *Fragments of fibro-cement suspected as being ACM buried at shallow depth at the SS2 sampling location outside the administration building's northern face.*	 *Fill with foreign materials including bricks and concrete fragments at the SS4 sampling location.*

	
Sign on the outside of the fever ward building indicating the presence of asbestos building materials.	*Gas storage area located inside the York Street entrance to the subject portion of the site.*

2.4.3 NSW EPA Records

A check with the NSW Office of Environment and Heritage website (www.environment.nsw.gov.au) revealed that no notices have been issued on the site under the Contaminated Land Management Act (1997).

2.4.4 Anecdotal Information

Mr Greg Miller from the hospital facilities maintenance department has over 30 years of site experience and provided the following information:

- The existing administration building previously had friable asbestos lagging on pipes below and in the ceilings of the building;
- Some remediation of the asbestos lagging was undertaken with impacted soil being capped with concrete beneath the buildings which are to be removed as part of the redevelopment;
- There is no concrete capping beneath the southern part of the administration building;
- A former inground concrete swimming pool was located in the courtyard between the administration and fever ward building;
- The swimming pool structural material was crushed and placed into the pool void which was also backfilled with imported sand and coffee rock (indurated sand); and
- Mr Miller was not aware of any other areas of contamination that may be present such as oil sumps or buried medical waste.

2.4.5 Land Title Search

A list of past registered proprietors and lessors of the site was obtained from the Land Titles Office. A summary of the title details is included in Appendix A.

The title history search revealed the following:

April 1893 – December 1936	Charles Boyce, auctioneer Thomas West Dugdale, storekeeper William Armstrong, saddler Henry Wynter Flett, auctioneer Richard Churchill, public school teacher
December 1936 – January 1937	Henry Wynter Flett, grazier
January 1937 – September 1991	The Manning River District Hospital
September 1991 – August 2000	The Manning Great Lakes Area Health Services Manning River District Hospital
August 2000 – October 2009	Mid North Coast Area Health Services
October 2009 – to date	Health Administration Corporation

2.4.6 Site History Summary

Based on available data the chronological development of the site is summarised below:

- The layout of the subject portion of the site appears to have been developed prior to 1969 and remained largely unchanged with the exception of works described below;
- Some remediation of asbestos lagging present on pipes and ceilings in the administration building was undertaken with impacted soil being capped with concrete beneath the building (with the exception of the southern part of the administration building);
- A swimming pool which was located between the administration and fever ward buildings appears to have been removed between 2013 and 2021. Anecdotal information provided indicates that the swimming pool structural material was crushed and placed into the pool void and also backfilled with imported sand and coffee rock (indurated sand);
- Disturbed ground surface in the courtyard in the same area described above, appears to have been covered by grass between the same period (2013 and 2021); and

- The southern part of the administration building appears to have underdone renovation (re-roofing) and extension works between 2013 and 2021.

3 FIELD AND LABORATORY INVESTIGATIONS

3.1 Sampling Plan

The NSW EPA (1995) Sampling Design Guidelines recommend a minimum of 17 sampling locations to characterise a site of this size (6,700m^2). Due to the preliminary nature of the assessment and limited access with existing structures and pavement, at this stage five sampling locations were selected using a judgemental approach based on the identification of accessible Areas of Environmental Concern.

Five surface soil samples (SS1 to SS5) and one ACM sample (AS1) were collected from targeted locations across the site.

3.2 Field Work

Field work for the assessment was undertaken on 15 February 2022 and included:

- Site walkover to assess visible surface conditions and identify evidence of contamination, or past activities that may cause contamination (if any);
- Collection of five soil samples and one ACM sample by an Environmental Engineer.

The locations of the sampling points are shown on Figure 3. They were obtained on site and located by measurement relative to existing site features.

Soil samples were taken from fill using disposable gloves and hand tools which were decontaminated between sampling points using Decon90 detergent and deionised water. The samples were collected in acid-rinsed 250mL glass jars and placed in an ice-chilled cooler box.

3.2.1 Laboratory Analysis

Samples were transported under chain-of-custody conditions to ALS Laboratory Group, a NATA accredited specialist chemical testing laboratory, to be analysed for the following suite of contaminants;

- Polycyclic Aromatic Hydrocarbons (PAH);
- Total Recoverable Hydrocarbons (TRH);
- Benzene, Toluene, Ethyl-benzene, Xylenes (BTEX);
- Organochlorine and Organophosphorus Pesticides (OC/OPs);
- Heavy metals (arsenic, cadmium, chromium, cobalt, copper, lead, mercury, and zinc);
- Polychlorinated Biphenyls (PCB); and
- Presence and quantification of asbestos.

The results are presented in Appendix B.

3.3 Data Quality Objectives

The Data Quality Objectives (DQOs) are presented in Table 3.

Table 3 – Data Quality Objectives

DQO	Details of Process
State the Problem	A Stage 1 (Preliminary) SCA is required to assess the suitability of the site for ongoing hospital land use from a contamination perspective.
Identify the Decision	The principal study questions that are: • What is the nature and extent of soil contamination on the subject land (if any)?; and • Is the land suitable for the proposed hospital redevelopment from a contamination viewpoint?
Identify Inputs to the Decision	The primary inputs are: • Site history study; • Site walkover assessment; • Chemical analysis of selected soil samples; and • Results summary.
Define the Boundary of the Assessment	• The spatial boundaries are limited to the property boundaries of the subject site as shown on Figure 2; • The investigation and screening levels for a Residential B land use scenario (limited access to soil) as a conservative measure.
Develop a Decision Rule	The decision rules for the investigation are: • If concentrations of contaminants in soil exceed the adopted investigation and screening levels for a Residential B land use scenario (as a conservative measure), then further assessment may be required; Decision criteria for QA/QC measures are defined in Section 4.1. A decision on the acceptance of analytical data will be made on the basis of the data quality indicators (DQIs) in the context of precision, accuracy, representativeness, completeness and comparability (PARCC) parameters as follows: • **Precision:** NATA registered laboratories were used following NATA endorsed methods. An appropriate number of intra-laboratory samples were collected and analysed (following ASC

DQO	Details of Process
	NEPM guidance), the results of which are considered to be satisfactory; • **Accuracy:** The laboratory limit or reporting (LOR) was appropriate for the screening criteria utilised. NATA registered laboratories were used following NATA endorsed methods including appropriate method blanks, laboratory control samples, laboratory spikes and duplicates the results of which are considered to be satisfactory. • **Representativeness –** The samples were received by the laboratories in good condition. The data obtained is considered to be representative of the soils present on site; • **Completeness –** Experienced field staff were utilised to undertake the sampling and keep appropriate documentation. Samples were in proper custody between the field and reaching the laboratory. The laboratories performed the tests requested. The data obtained from the field investigations is considered to be relevant and usable; and • **Comparability –** Sample holding times were met and samples were properly and adequately preserved. Field sampling and handling procedures were followed. The data collected is considered to be comparable.
Specify Acceptable Limits on Decision Errors	• Acceptable limits for QA/QC measures are defined in Section 4.1; • Acceptable investigation and screening levels are those for a Residential B land use scenario; and • Specific limits are in accordance with the appropriate NSW EPA guidelines including indicators of data quality and standard procedures for field sampling and handling.
Optimise the Design for Obtaining Data	Based on the above steps of the DQO process. The design for obtaining the required data (i.e proposed field and laboratory investigations) is presented in Section 3.1.

4 GUIDELINES AND ASSESSMENT CRITERIA

Assessment as outlined in NSW EPA *Guidelines for Consultants Reporting on Contaminated Land (2020)*.

To evaluate results, and for guidance on assessment requirements, the assessment adopted the guidelines provided in the *National Environment Protection (Assessment of Site Contamination) Measure as amended in 2013 (NEPM 2013)*. The NEPM document provides a range of guidelines for assessment of contaminants for various land use scenarios.

The proposed future land use ongoing healthcare facilities. As such, comparison with the NEPM guideline Health Investigation and Screening Levels for Residential B (high rise buildings and

apartments with limited access to soil) land use is considered appropriate for this site as a conservative measure during this preliminary investigation. In accordance with the NEPM guideline the following criteria were adopted for this assessment:

- Health Investigation Levels (HILs) for Residential 'B' land use (HIL-B) were used to assess the potential human health impact of heavy metals and polycyclic aromatic hydrocarbons (PAHs);
- Health Screening Levels (HSLs) for coarse textured (sand) or fine textured (silt and clay) soils on a Residential B site were adopted as appropriate for the soils encountered to assess the potential human health impact of petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylene (BTEX) compounds;
- Ecological Investigation Levels (EILs) for residential land use were used for evaluation of the potential ecological / environmental impact of heavy metals and PAHs;
- Ecological Screening Levels (ESLs) for coarse textured (sand) soils or fine textured (silt and clay) soils on a Residential B land use site were adopted as appropriate for the soils encountered, to assess the potential ecological / environmental impact of petroleum hydrocarbons and BTEX compounds.

In accordance with NEPM 2013, exceedance of the respective criteria does not necessarily deem that remediation or clean-up is required but is a trigger for further assessment of the extent of contamination and associated risks. The adopted criteria are presented in the results summary table in Appendix B.

5 QUALITY ASSURANCE / QUALITY CONTROL

Samples were obtained using industry accepted protocols for sample treatment, preservation, and equipment decontamination. Sampling equipment was decontaminated between sample locations and a clean pair of nitrile gloves used for the collection of each sample into laboratory supplied glass sampling jars.

Samples were placed on ice on-site and maintained on ice during transport to the testing laboratories. One duplicate soil sample identified as D1 (duplicate of primary sample SS1) was submitted to the laboratory for analysis for quality control purposes. Comparison between the primary and duplicate samples are presented in the results summary table in Appendix B.

The Relative Percent Differences (RPDs) were calculated for the duplicate sample and presented in the results summary table in Appendix B. The RPDs were within the control limit of 40% and indicated good correlation between the primary and duplicate samples.

One rinsate sample (RINSATE1) was collected from the hand tools to assess the efficacy of the decontamination techniques. Analysis of the rinsate sample indicated that it was free of contaminants.

In addition to the field quality control procedures, the laboratory conducted internal quality control testing including surrogates, blanks, and laboratory duplicate samples. The results are presented with the laboratory test results in Appendix B.

All laboratory quality control data is within acceptable limits for the tests carried out. Therefore, on the basis of the results of the field and laboratory quality control procedures and testing, the data is

considered to reasonably represent the concentrations of contaminants in the soils at the sample locations at the time of sampling and the results can be adopted for this assessment.

6 RESULTS

6.1.1 Subsurface Conditions

The soil types recorded in surface samples are summarised below in Table 4.

Table 4: Summary of Subsurface Conditions (Surface Samples)

Sample ID	Description
SS1 – SS5	Fill/Topsoil - Clayey SILT, low plasticity, dark brown, clay of medium plasticity.

6.1.2 Laboratory Results

An appraisal of the laboratory test results presented in Appendix B is provided below with reference to the adopted soil investigation and screening levels discussed in Section 4.

- Concentrations of heavy metals were either below the laboratory limit of reporting or below the adopted health investigation criteria for a Residential B site in each of the samples analysed;
- Concentrations of TRH, PAH, BTEX and OP pesticides were below the laboratory limit of reporting in each of the samples analysed;
- Concentrations of PCB and OC pesticides were either below the laboratory limit of reporting or below the adopted health investigation criteria for a Residential B site in each of the samples analysed;
- Asbestos was detected in one of the soil samples analysed (SS1) collected from outside the northern side of the administration building. The concentrations of fibrous asbestos and fines (FA + AF) in SS1 exceeded the adopted health investigation criteria;
- A fragment of fibro-cement (AS1) collected from the outside the administration building in the north west of the site contained asbestos; and
- Asbestos was not detected in the remaining soil samples.

6.2 Conceptual Site Model

Based on the site observations and knowledge obtained about site activities as outlined above, a conceptual site model (CSM) has been developed.

6.2.1 Potential Sources of Contamination

Potential Areas of Environmental Concern (AECs) and Chemicals of Concern (COCs) identified for the assessment are outlined in Table 5.

Table 5: Potential AECs and COCs

AEC	Mode of Potential Contamination	Potential COCs	Likelihood of Contamination
AEC1: Soils in the vicinity of structures to be demolished	Potentially hazardous building materials	Lead and asbestos	High
AEC2: Fill placed in the former swimming pool footprint	Importation of potentially contaminated fill	Heavy Metals, TPH, BTEX, PAH, PCB, OC/OPP and asbestos	Low to moderate
AEC3: Gas storage area	Potential for impacted soil to be present associated with the long-term storage of gases	Heavy Metals, TPH, BTEX, PAH, PCB	Low to moderate
AEC4: Areas of fill of unknown origin	Importation of potentially contaminated fill	Heavy Metals, TPH, BTEX, PAH, PCB, OC/OPP and asbestos	Low to moderate
AEC5: Unidentified buried waste	Potential for buried waste material including contaminated fill and medical waste	Heavy Metals, TPH, BTEX, PAH, PCB, OC/OPP, asbestos, and pathogens	Low
Heavy Metals - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc *BTEX - Benzene, Toluene, Ethylbenzene and Xylene* *TPH - Total Petroleum Hydrocarbons* *PAH – Polycyclic Aromatic Hydrocarbons* *PCB – Polychlorinated Biphenyls* *OC/OPP – Organochlorine and Organophophorus Pesticides*			

The approximate locations of the AEC's are shown on Figure 3.

6.2.2 Potential Exposure Pathways and Receptors

Based on the site observations and knowledge obtained about site activities as outlined above, potential exposure pathways and receptors identified for the assessment are summarised in Table 6.

Table 6: Potential Exposure Pathways and Receptors

Chemicals of Concern	Key Pathways	Key Receptors
Asbestos, heavy metals	Generation of dust during earthworks which is inhaled	Onsite - Construction and site workers Offsite - Adjacent sites
Asbestos, heavy metals, TPH, BTEX, PAH, PCB, OC/OPP	Skin contact / ingestion, plant uptake	Onsite - Construction and site workers, future site users, vegetation in landscaped areas
Heavy Metals, TPH, BTEX, PAH, PCB, OC/OPP	Surface runoff and leaching of soils	Offsite - Surface water ecosystems and users

Heavy Metals - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc
BTEX - Benzene, Toluene, Ethylbenzene and Xylene
TPH - Total Petroleum Hydrocarbons
PAH – Polycyclic Aromatic Hydrocarbons
PCB – Polychlorinated Biphenyls
OC/OPP – Organochlorine and Organophophorus Pesticides

6.3 Discussion

A Stage 1 (preliminary) site contamination Assessment was required to evaluate past and present potentially contaminating activities and contamination types and to assess the site's suitability for ongoing use as a health facility from a contamination perspective.

The site history study indicates that the layout of the subject portion of the site has remained largely unchanged since at least 1969. Some remediation of asbestos lagging on pipes and in ceilings of the administration building has been undertaken with asbestos impacted soil buried beneath the building under a concrete capping layer. It is noted that there is no capping layer under the southern part of the administration building. A swimming pool was previously located in the courtyard between the administration and fever ward buildings which is understood to have been of concrete construction. The pool was crushed and placed into the void between 2013 and 2021 which was backfilled with imported sand and indurated sand.

Identified AEC's included soils in the vicinity of the existing structures to be demolished, fill placed into the former swimming pool footprint, gas storage area near the Yorke Street entrance, unidentified areas of fill and potentially buried waste (medical and otherwise).

Fragments of ACM in the form of fibro-cement sheeting fragments were identified at shallow depth below the ground surface on the outside of the northern face of the administration building.

Apart from the ACM described above, no other visual or olfactory evidence of contamination (such as oil staining or hydrocarbon odours) were observed. Anecdotal evidence from maintenance staff indicated that there is no buried medical waste present within footprint of the proposed development area.

The results of laboratory analysis of surface soil samples collected from five targeted locations (AEC's outlined above), revealed concentrations of the chemicals of concern were either below the laboratory detection limit, or below the adopted health investigation criteria for a Residential B site.

Total PCBs were reported at a concentration of 0.6mg/kg in sample SS1 from the northern part of the site. Although this concentration is lower than the ASC NEPM screening criteria for residential and commercial land uses, it may be indicative of higher concentrations present in fill material at the site or a historic source of PCBs in the vicinity such as an electrical transformer.

Organochlorine pesticides in the form of dieldrin and dichlorodiphenyldichloroethylene (DDE)(a isomer (breakdown product) of dichlorodiphenyltrichloroethane (DDT))were detected in sample SS3 from the southern part of the site. Although this concentration is lower than the ASC NEPM screening criteria for residential and commercial land uses, it may be indicative of higher concentrations present in fill material at the site or the historic use of pesticides in the vicinity.

Asbestos was detected in one of the soil samples (SS1) submitted for analysis which was obtained from outside the northern face of the administration building. Friable asbestos fibres which exceeded the adopted health investigation criteria were also detected in this sample. Asbestos was not detected in the remaining soil samples.

A sample of suspected ACM (AS1) (fragments of fibro-cement sheeting) was also obtained from the SS1 sample location and submitted to the laboratory for analysis. The AS1 sample contained asbestos.

6.4 Conclusions and Recommendations

In addition to the asbestos contamination encountered, given the elevated concentrations of PCBs and OC pesticides detected in two soil samples and the limited and preliminary nature of this investigation, there is potential for other unidentified areas of contamination to be present such as soils around the gas storage area, uncontrolled fill, buried waste below pavement and footpaths etc.

It is recommended that further detailed soil sampling and analysis be undertaken following the demolition of Building 9 to evaluate the nature and extent of contamination (particularly asbestos, PCB and OC pesticide impacts) across the proposed development area. The detailed assessment would then facilitate the development of a Remedial Action Plan (RAP) and/or waste classification in order to render the site suitable for the proposed development from a contamination perspective.

In the interim, it is recommended that a licenced asbestos assessor be engaged to undertake a Hazardous Materials Survey (HMS) of the buildings which are to be demolished, and an Asbestos Management Plan (AMP) be prepared in order to safely undertake the demolition works. Given the presence of friable asbestos, it is likely that air monitoring will be required during the demolition works.

Based on the results obtained in this investigation, is considered that the site can be made suitable for the proposed development with regard to the presence of soil contamination, provided the recommendations and advice of this report are adopted, and site preparation works are conducted in accordance with appropriate site management protocols and legislative requirements.

7 LIMITATIONS

This report comprises the results of an investigation carried out for a specific purpose and client as defined in the document. The report should not be used by other parties or for purposes or projects other than those assumed and stated within the report, as it may not contain adequate or appropriate information for applications other than those assumed or advised at the time of its preparation. The contents of the report are for the sole use of the client and no responsibility or liability will be accepted to any third party. The report should not be reproduced either in part or in full, without the express permission of Regional Geotechnical Solutions Pty Ltd.

Contaminated site investigations are based on data collection, judgment, experience, and opinion. By nature, these investigations are less exact than other engineering disciplines. The findings presented in this report and used as the basis for the recommendations presented herein were obtained using normal, industry accepted practises and standards. To our knowledge, they represent a reasonable interpretation of the general condition of the site. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points.

Recommendations regarding ground conditions referred to in this report are estimates based on the information available at the time of its writing. Estimates are influenced and limited by the fieldwork method and testing carried out in the site investigation, and other relevant information as has been made available. In cases where information has been provided to Regional Geotechnical Solutions for the purposes of preparing this report it has been assumed that the information is accurate and appropriate for such use. No responsibility is accepted by Regional Geotechnical Solutions for inaccuracies within any data supplied by others.

If site conditions encountered during construction vary significantly from those discussed in this report, Regional Geotechnical Solutions Pty Ltd should be contacted for further advice.

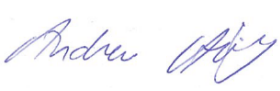
This report alone should not be used by contractors as the basis for preparation of tender documents or project estimates. Contractors using this report as a basis for preparation of tender documents should avail themselves of all relevant background information regarding the site before deciding on selection of construction materials and equipment.

If you have any questions regarding this project, or require any additional consultations, please contact the undersigned.

For and on behalf of

Regional Geotechnical Solutions Pty Ltd

Prepared by



Andrew Hills

Senior Environmental Engineer

Reviewed by

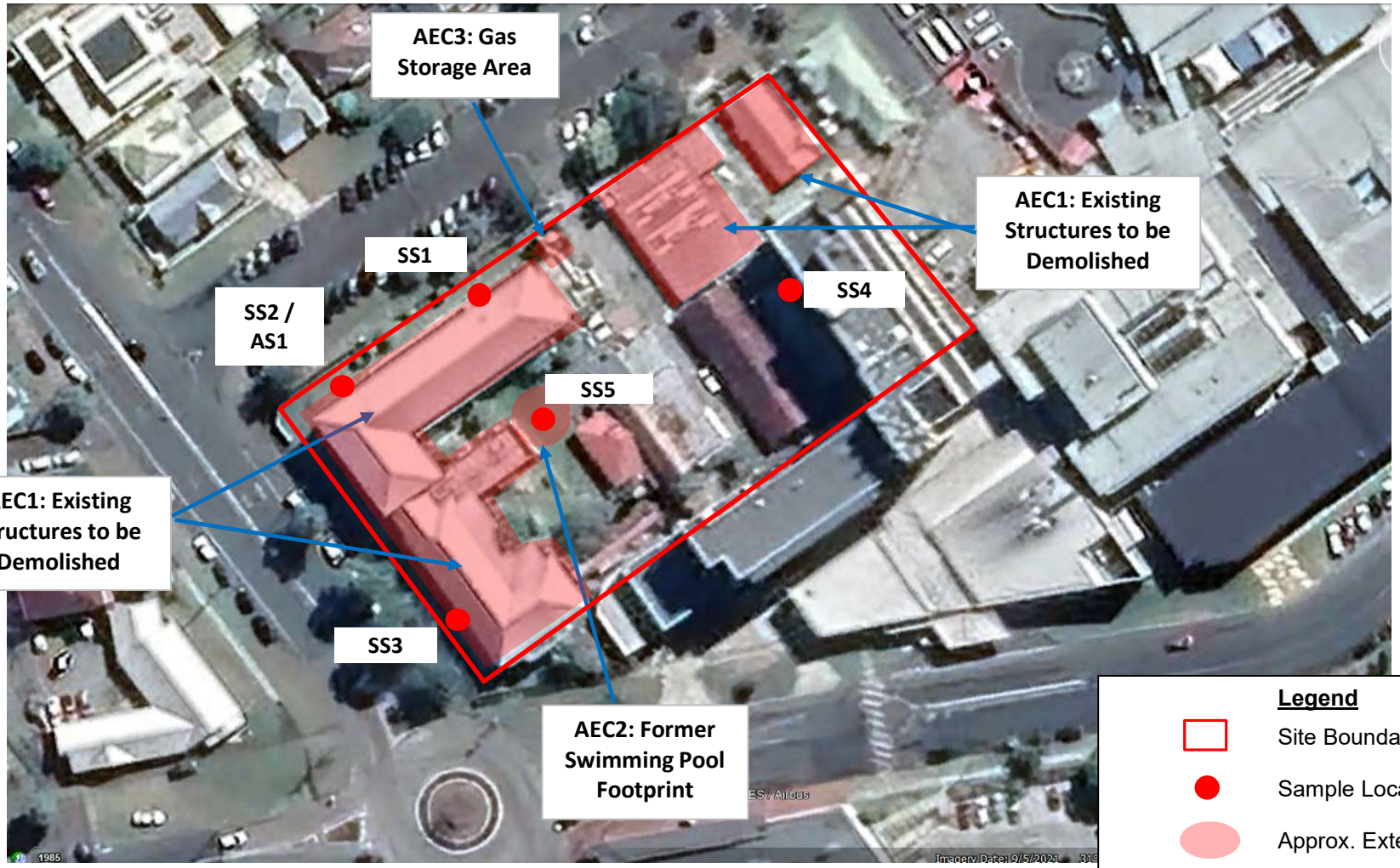
Steven Morton

Principal Geotechnical Engineer

Figures

REGIONAL GEOTECHNICAL SOLUTIONS	**Client:**	Mace Australia Pty Ltd	Job No.	RGS02920.1
	Project:	Manning Base Hospital - Demolition of Building 9 York Street, Taree	Drawn By:	APH
			Scale:	As Shown
			Date:	18-Mar-22
	Title:	Site Location Plan	Drawing No.	**Figure 1**

REGIONAL GEOTECHNICAL SOLUTIONS	**Client:**	Mace Australia Pty Ltd	Job No.	RGS02920.1
	Project:	Manning Base Hospital - Demolition of Building 9 York Street, Taree	Drawn By:	APH
			Scale:	As Shown
			Date:	18-Mar-22
	Title:	Site Layout Plan	Drawing No.	**Figure 2**



Note: AEC's 4 & 5 covers all of the subject part of the site.

*As per satellite image from " Google Maps"

REGIONAL GEOTECHNICAL SOLUTIONS

Client:	Mace Australia Pty Ltd	Job No.	RGS02920.1
Project:	Manning Base Hospital - Demolition of Building 9 York Street, Taree	Drawn By:	APH
		Scale:	As Shown
		Date:	18-Mar-22
Title:	Sample Location Plan	Drawing No.	**Figure 3**

Appendix A

Site History Documentation

ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)
ABN 82 147 943 842

18/36 Osborne Road,
Manly NSW 2095

Mobile: 0412 169 809
Email: search@alsearchers.com.au

31st January, 2022

REGIONAL GEOTECHNICAL SOLUTIONS PTY LTD
44 Bent Street,
WINGHAM, NSW, 2429

Attention: Andrew Hills,

RE: **Manning Base Hospital,**
York Street,
Taree
RGS02920.1

Note: Search is of part Lot 1 DP 1011890 as shown on diagram provided.

Current Search

Folio Identifier 1/1011890 (title attached)
DP 1011890 (plan attached)
Dated 27th January, 2022
Registered Proprietor:
HEALTH ADMINISTRATION CORPORATION

Title Tree
Lot 1 DP 1011890

Folio Identifier 1/1011890

(a)	(b)	(c)
Folio Identifier 11/22/3933	Folio Identifier 21/2564	Government Gazette 06 February 1998
CTVol 1478 Folio 200	CTVol 1090 Folio 17	Folio 591
****	****	Road
		****

Index

T – Transfer
L - Lease
App – Application
ND – Notice of Death

****

Summary of proprietor(s)
Lot 1 DP 1011890

Year	Proprietor(s)	
	(Lot 1 DP 1011890)	
26 Oct 2009 – todate	Health Administration Corporation	T
(06 Nov 2009 – todate)	*(current lease to Healthcare Imaging Services Pty Limited, of Suite 1, Manning Base Hopital, Taree)*	*(L)*
24 Oct 2001	Mid North Coast Area Health Services	
24 Oct 2001 – todate)	*(various leases shown on Historical Folio 1/1011890)*	*(L)*

See Notes (a), (b) & (c)

Note (a)

	(Lot 11 Section 22 DP 3933)	
03 Aug 2000	Mid North Coast Area Health Services	App
18 Sep 1991	The Manning Great Lakes Area Health Services Manning River District Hospital	App
14 Aug 1990	The Manning River District Hospital	
(14 Aug 1990 – 24 Oct 2001)	*(various leases shown on Historical Folio 11/22/3933)*	*(L)*
	(Lot 11 Section 22 DP 3933 – Area 2 Roods 36 ½ Perches – CTVol 1478 Fol 200)	
18 Jan 1937	The Manning River District Hospital	T
31 Dec 1936	Henry Wynter Flett, grazier	ND
15 Jul 1903	Charles Boyce, auctioneer William Armstrong, saddler Henry Wynter Flett, grazier Richard Churchill, gentleman	T

****

Note (b)

	(Lot 21 DP 2564)	
03 Aug 2000	Mid North Coast Area Health Services	App
18 Sep 1991	The Manning Great Lakes Area Health Services Manning River District Hospital	App
08 Oct 1990	The Manning River District Hospital	
(08 Oct 1990 – 24 Oct 2001)	*(various leases shown on Historical Folio 21/2564)*	*(L)*
	(Lot 21 DP 2564 – Area 2 Acres – CTVol 1090 Fol 17)	
18 Jan 1937	The Manning River District Hospital	T
31 Dec 1936	Henry Wynter Flett, grazier	ND
15 Apr 1893	Charles Boyce, auctioneer Thomas West Dugdale, storekeeper William Armstrong, saddler Henry Wynter Flett, auctioneer Richard Churchill, public school teacher	T

****

Note (c)

	(Closed Road, Town Taree – Govt Gaz 06 Feb 1998 Fol 591))	
06 Feb 1998	Mid North Coast Area Health Services	
	(Road – Town Taree)	
Prior – 06 Feb 1998	Crown Road	

****

Cadastral Records Enquiry Report : Lot 1 DP 1011890

Ref : NOUSER

Locality : TAREE **Parish :** TAREE

LGA : MID-COAST **County :** MACQUARIE

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
DP372613			
Lot(s): 18A			
DP1279162	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP581400			
Lot(s): 1			
DP268044	REGISTERED	COMPILATION	EASEMENT
DP860251			
Lot(s): 1			
DP267082	REGISTERED	SURVEY	EASEMENT
DP267641	REGISTERED	SURVEY	EASEMENT
DP1001611			
Lot(s): 81, 82			
DP3933	HISTORICAL	COMPILATION	UNRESEARCHED
DP1011890			
Lot(s): 1			
DP2564	HISTORICAL	COMPILATION	UNRESEARCHED
DP3933	HISTORICAL	COMPILATION	UNRESEARCHED
DP311453	HISTORICAL	COMPILATION	UNRESEARCHED
DP366504	HISTORICAL	SURVEY	UNRESEARCHED
DP368047	HISTORICAL	SURVEY	UNRESEARCHED
DP386039	HISTORICAL	COMPILATION	UNRESEARCHED
DP412644	HISTORICAL	SURVEY	UNRESEARCHED
DP509189	HISTORICAL	SURVEY	SUBDIVISION
DP517361	HISTORICAL	SURVEY	SUBDIVISION
DP652546	HISTORICAL	COMPILATION	DEPARTMENTAL
DP662914	HISTORICAL	COMPILATION	DEPARTMENTAL
DP1031727			
Lot(s): 1, 2			
DP315874	HISTORICAL	COMPILATION	UNRESEARCHED
DP1033218			
Lot(s): 1			
DP3933	HISTORICAL	COMPILATION	UNRESEARCHED
DP1079521			
Lot(s): 6			
DP343430	HISTORICAL	SURVEY	UNRESEARCHED
SP74531	REGISTERED	COMPILATION	STRATA PLAN
SP74531	TERMINATED	COMPILATION	STRATA PLAN
DP1102765			
Lot(s): 1			
DP2564	HISTORICAL	COMPILATION	UNRESEARCHED
DP711499	HISTORICAL	SURVEY	SUBDIVISION
DP1117939			
Lot(s): 2			
DP951522	HISTORICAL	SURVEY	UNRESEARCHED
DP1121012			
Lot(s): 1			
DP10880	HISTORICAL	SURVEY	UNRESEARCHED
DP1143112			
Lot(s): 1			
DP106701	HISTORICAL	SURVEY	UNRESEARCHED
DP1170565			
Lot(s): 1, 2			
DP2564	HISTORICAL	COMPILATION	UNRESEARCHED
DP1208510			
Lot(s): 21			
DP322794	HISTORICAL	SURVEY	UNRESEARCHED
DP337805	HISTORICAL	SURVEY	UNRESEARCHED
DP1149709	HISTORICAL	SURVEY	SUBDIVISION
DP1244876	WITHDRAWN	SURVEY	SUBDIVISION

	Status	Surv/Comp	Purpose
DP1219010			
Lot(s): 617			
DP2564	HISTORICAL	COMPILATION	UNRESEARCHED
DP1236263			
Lot(s): 1			
DP2564	HISTORICAL	COMPILATION	UNRESEARCHED
DP344293	HISTORICAL	COMPILATION	UNRESEARCHED
DP359310	HISTORICAL	SURVEY	UNRESEARCHED
DP529938	HISTORICAL	SURVEY	SUBDIVISION
DP865234	HISTORICAL	SURVEY	SUBDIVISION
DP1105301	HISTORICAL	COMPILATION	DEPARTMENTAL
DP1158338	HISTORICAL	SURVEY	SUBDIVISION
DP1244372			
Lot(s): 101			
DP510895	HISTORICAL	SURVEY	SUBDIVISION
DP1261259	REGISTERED	COMPILATION	EASEMENT
DP1252408			
Lot(s): 1			
DP393236	HISTORICAL	SURVEY	UNRESEARCHED
DP1260657			
Lot(s): 91			
DP3933	HISTORICAL	COMPILATION	UNRESEARCHED
SP60790			
DP3933	HISTORICAL	COMPILATION	UNRESEARCHED
DP1004412	HISTORICAL	SURVEY	REDEFINITION
SP70633			
DP622734	HISTORICAL	SURVEY	SUBDIVISION
DP1054978	HISTORICAL	SURVEY	REDEFINITION
SP71125			
DP622930	HISTORICAL	SURVEY	SUBDIVISION
DP1058413	HISTORICAL	SURVEY	REDEFINITION
SP74531			
DP1079521	HISTORICAL	SURVEY	REDEFINITION
SP80224			
DP10880	HISTORICAL	SURVEY	UNRESEARCHED
DP1121012	HISTORICAL	SURVEY	SUBDIVISION
Road			
Polygon Id(s): 105081816, 105200022, 105622463			
EX-SUR 48/02 DP983024			
DP1244206	REGISTERED	SURVEY	SURVEY INFORMATION ONLY

Plan	Surv/Comp	Purpose
DP2564	COMPILATION	UNRESEARCHED
DP3933	COMPILATION	UNRESEARCHED
DP10363	SURVEY	UNRESEARCHED
DP10880	SURVEY	UNRESEARCHED
DP20699	SURVEY	UNRESEARCHED
DP35311	SURVEY	SUBDIVISION
DP50231	COMPILATION	UNRESEARCHED
DP103073	SURVEY	UNRESEARCHED
DP106701	SURVEY	UNRESEARCHED
DP120372	COMPILATION	DEPARTMENTAL
DP169351	COMPILATION	UNRESEARCHED
DP204316	SURVEY	SUBDIVISION
DP206066	SURVEY	SUBDIVISION
DP213748	SURVEY	SUBDIVISION
DP301622	COMPILATION	UNRESEARCHED
DP302998	COMPILATION	UNRESEARCHED
DP315874	COMPILATION	UNRESEARCHED
DP317452	SURVEY	UNRESEARCHED
DP320414	SURVEY	UNRESEARCHED
DP328841	SURVEY	UNRESEARCHED
DP333149	SURVEY	UNRESEARCHED
DP337365	SURVEY	UNRESEARCHED
DP344286	SURVEY	UNRESEARCHED
DP350942	COMPILATION	UNRESEARCHED
DP354242	COMPILATION	UNRESEARCHED
DP354980	SURVEY	UNRESEARCHED
DP355242	SURVEY	UNRESEARCHED
DP358884	SURVEY	UNRESEARCHED
DP359065	SURVEY	UNRESEARCHED
DP359278	SURVEY	UNRESEARCHED
DP362217	SURVEY	UNRESEARCHED
DP368188	SURVEY	UNRESEARCHED
DP370760	SURVEY	UNRESEARCHED
DP372613	SURVEY	UNRESEARCHED
DP374461	COMPILATION	UNRESEARCHED
DP384467	SURVEY	UNRESEARCHED
DP386653	SURVEY	UNRESEARCHED
DP388229	SURVEY	UNRESEARCHED
DP388254	SURVEY	UNRESEARCHED
DP388309	SURVEY	UNRESEARCHED
DP388815	SURVEY	UNRESEARCHED
DP389646	SURVEY	UNRESEARCHED
DP392624	SURVEY	UNRESEARCHED
DP392774	SURVEY	UNRESEARCHED
DP393236	SURVEY	UNRESEARCHED
DP394205	SURVEY	UNRESEARCHED
DP398200	SURVEY	UNRESEARCHED
DP401215	SURVEY	UNRESEARCHED
DP403583	SURVEY	UNRESEARCHED
DP406135	SURVEY	UNRESEARCHED
DP409198	SURVEY	UNRESEARCHED
DP409286	SURVEY	UNRESEARCHED
DP413265	SURVEY	UNRESEARCHED
DP419308	COMPILATION	UNRESEARCHED
DP420666	COMPILATION	UNRESEARCHED
DP500808	SURVEY	SUBDIVISION
DP501718	SURVEY	SUBDIVISION
DP503287	SURVEY	SUBDIVISION
DP519320	SURVEY	SUBDIVISION
DP522671	SURVEY	SUBDIVISION
DP522895	SURVEY	SUBDIVISION
DP528620	SURVEY	SUBDIVISION
DP532904	SURVEY	ROAD OR MOTORWAY
DP533482	SURVEY	SUBDIVISION
DP536943	SURVEY	SUBDIVISION

Plan	Surv/Comp	Purpose
DP538041	SURVEY	SUBDIVISION
DP539574	SURVEY	SUBDIVISION
DP542044	SURVEY	SUBDIVISION
DP554752	SURVEY	SUBDIVISION
DP559261	SURVEY	SUBDIVISION
DP566319	SURVEY	SUBDIVISION
DP566547	COMPILATION	SUBDIVISION
DP567345	COMPILATION	SUBDIVISION
DP578481	SURVEY	SUBDIVISION
DP581400	COMPILATION	CONSOLIDATION
DP581564	COMPILATION	SUBDIVISION
DP608120	COMPILATION	SUBDIVISION
DP614367	SURVEY	SUBDIVISION
DP622741	SURVEY	SUBDIVISION
DP623039	SURVEY	SUBDIVISION
DP625500	SURVEY	SUBDIVISION
DP627280	SURVEY	SUBDIVISION
DP664704	COMPILATION	DEPARTMENTAL
DP666986	COMPILATION	DEPARTMENTAL
DP711499	SURVEY	SUBDIVISION
DP789946	COMPILATION	CONSOLIDATION
DP790941	SURVEY	SUBDIVISION
DP830214	SURVEY	SUBDIVISION
DP830450	SURVEY	SUBDIVISION
DP833076	SURVEY	SUBDIVISION
DP860251	SURVEY	CONSOLIDATION
DP937783	SURVEY	UNRESEARCHED
DP961774	SURVEY	UNRESEARCHED
DP984898	COMPILATION	UNRESEARCHED
DP1001611	SURVEY	SUBDIVISION
DP1006466	COMPILATION	DEPARTMENTAL
DP1011890	SURVEY	CONSOLIDATION
DP1031727	SURVEY	SUBDIVISION
DP1033218	COMPILATION	CONSOLIDATION
DP1079521	SURVEY	REDEFINITION
DP1102765	SURVEY	SUBDIVISION
DP1106114	COMPILATION	DEPARTMENTAL
DP1117939	SURVEY	SUBDIVISION
DP1121012	SURVEY	SUBDIVISION
DP1143112	SURVEY	CONSOLIDATION
DP1170565	SURVEY	SUBDIVISION
DP1208510	SURVEY	SUBDIVISION
DP1219010	COMPILATION	CONSOLIDATION
DP1236263	SURVEY	CONSOLIDATION
DP1244372	COMPILATION	CONSOLIDATION
DP1252408	SURVEY	SUBDIVISION
DP1260657	SURVEY	SUBDIVISION
SP32355	COMPILATION	STRATA PLAN
SP39884	COMPILATION	STRATA PLAN
SP41632	COMPILATION	STRATA PLAN
SP42150	COMPILATION	STRATA PLAN
SP42835	COMPILATION	STRATA PLAN
SP48001	COMPILATION	STRATA PLAN
SP60790	COMPILATION	STRATA PLAN
SP70633	COMPILATION	STRATA PLAN
SP71125	COMPILATION	STRATA PLAN
SP80224	COMPILATION	STRATA PLAN

Form: 97-12PV
Licence: 10V/0600/96
Edition: 981130

APPLICATION FOR NEW CERTIFICATE OF TI

New South Wales
ss38(2) & 111 Real Property Act

6640902J

(A) **TORRENS TITLE**

Number of the certificate of title mislaid, destroyed, stolen, damaged or partly destroyed
See Schedule Attached

(B) **LODGED BY**

LTO Box	Name, Address or DX and Telephone	CODES
354L	State Search PO Box A909 Sydney South 2000 Ph. 94562207 Reference (optional): Taree	PV R

(C) **REGISTERED PROPRIETOR**

Insert the names of all the registered proprietors
THE MANNING-GREAT LAKES ~~H.S.~~ HEALTH SERVICE., MANNING RIVER DISTRICT HOSPITAL

(D) **APPLICANT**

MID NORTH COAST AREA HEALTH SERVICE

WARNING! SEVERE PENALTIES MAY BE IMPOSED FOR LODGING A FALSE APPLICATION

The certificate of title referred to above has been—

(E) i. mislaid
ii. ~~destroyed~~
iii. ~~stolen~~
iv. ~~damaged or partly destroyed~~ (see "*Note*" in Instructions for Completion).

In consequence I apply for issue of a replacement, and certify this application correct for the purposes of the Real Property Act 1900.

(F) Signed in my presence by the applicant who is personally known to me. **DATE:** 10 - 3 - 00

Signature of witness: R Hill

Name of witness: Ronald John Hill

Address of witness: 1A Excelsior Rd. Mount Colah

Daytime telephone number of witness: Ph 0411 620 648
The witness may be contacted by the Land Titles Office to verify the signing.

Signature of applicant: R Smith

Ronald Bruce Smith
Authorised Agent
Mid North Coast A.H.S.

For directions on completing and lodging this application and details of the evidence which must accompany the application, see the accompanying Instructions for Completion (97-12PV-2)

PLEASE NOTE

1. **This application will not be accepted through the post. It must be lodged personally at the Land Titles Office.**
2. **A replacement certificate of title will not be issued until the Land Titles Office completes its investigation.**
3. **If the evidence furnished at lodgment (see No. 6 in Instructions for Completion) is insufficient for the Land Titles Office to fully investigate the application, further evidence will be required.**

In the case of an application lodged by a private person in regard to a certificate of title mislaid, destroyed or stolen:

4. **The replacement certificate of title will be posted by registered mail to the address shown on the rate notice (see No. 6 in Instructions for Completion); if the address for service of notice has changed, evidence from the local council is required. The person accepting it will be required by Australia Post to sign a receipt.**
5. **The cost of posting by registered mail will be charged in addition to the lodgment fee.**

All handwriting must be in block capitals.
A set of notes on this form (97-12PV-2) is available from the Land Titles Office.

Checked by (LTO use):

FILM

STATUTORY DECLARATION

OATHS ACT, 1900 NINTH SCHEDULE

I, the undersigned, **TIM MOONEY, MID NORTH COAST AREA HEALTH SERVICE,** in the State of New South Wales, do hereby solemnly and sincerely declare and affirm that:-

1. Certificates of Title on the attached Schedule 'A' are held in safe keeping by me. A thorough search by me has failed to locate these Certificates of Title.

2. There are no records as to the movement of the lost documents so it is not apparent whether the Certificates of Title were lost from within this office or elsewhere, nor is there any apparent explanation for the loss.

3. The lost documents have not been lodged with any person or entity as security or for any other purpose whatsoever.

4. In relation to the particulars of easements and encumbrances affecting the land in the Certificate I state that same is "Nil".

5. The properties are not tenanted.

6. The registered proprietor has never been bankrupt or insolvent and has not assigned its estate for the benefit of creditors.

7. Certificates of Title relate to the following:-

LAND DESCRIPTION: (SEE ATTACHED SCHEDULE 'A')
LOCAL GOVERNMENT AREA OF GREATER TAREE
PARISH OF TAREE
COUNTY OF MACQUARIE

And I make this solemn declaration, as to the matter aforesaid, according to the law made in this behalf, and subject to the punishment imposed by law for any wilfully false statement in such declaration.

Signed .....

TAKEN and declared at **TAREE** in the State of New South Wales on this

13TH DAY OF MAY 1999

BEFORE ME

Carol A Carrie JP.
Justice of the Peace/Solicitor

MANNING BASE HOSPITAL
CONSOLIDATION OF SITE

SCHEDULE 'A'

Lot 11 ~~and 22~~	DP 3933
Lot 7	DP 652546
Lot10A	DP 386039
Lot A	DP 368047
Lot B	DP 368047
Lot 2	DP 517361
Lot A	DP 366504
Lot B	DP 366504
Lot 15	DP 412644
Lot 16	DP 412644
Lot 4	DP 412644
~~Lot 1~~	~~DP 509189~~
~~Lot 7~~	~~DP 662914~~
Lot 21	DP 2564

97-10CN LTO Licence Number 10V/0167/95

Application to Record

CHANGE OF NAME

Land Titles Office use only

EVIDENCE

Real Property Act 1900
Crown Lands Consolidation Act 1900
Western Lands Act 1901

(A) **LAND**
Show no more than 20 References to Title.

See Schedule Attached

(B) **REGISTERED DEALING**
If applicable.

(C) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
354L	STATE SEARCH Box A302 Sydney South 1235 REFERENCE (max 15 characters): Taree

(D) **REGISTERED PROPRIETOR**
whose name is to be changed.

The Manning - Great Lakes Health Service and Manning River District Hospital

(E) **NEW NAME**
In full.

CN Mid North Coast Area Health Service

(F) I, the Registered Proprietor, apply to have my New Name recorded in the Register in respect of the above **Land/~~Registered Dealing~~.**

(G) **STATUTORY DECLARATION BY THE APPLICANT**

I, *[New Name]* RONALD BRUCE SMITH, DRAFTSMAN, solemnly and sincerely declare that

1. I am identical with the Registered Proprietor referred to above;
2. On ..... 19 ..... at .....
   in the State of ..... I married .....;
3. the above was changed by the operation of the Health Services Act, 1997.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths Act 1900, and I certify this application correct for the purposes of the Real Property Act 1900.

Made and subscribed at Sydney in the State of New South Wales
on 21st August ~~19~~ 2000 in the presence of

..... J.P. 7200270
Signature of Witness

DAVID RUDOV
Name of Witness (BLOCK LETTERS)

102/9-15 BISHOPS AVE RANDWICK
Address and Qualification of Witness

JUSTICE OF THE PEACE

..... RB Smith
Signature of Applicant

Authorised Agent
Health Administration Corporation

CHECKED BY (office use only)

0895LTO

Licence: 10V/0096/95
Printed: 0297LTO

(1)

New South Wales
Real Property Act 1900

8062528D

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

Office of State Revenue use only

NEW SOUTH WALES DUTY
26-10-2001 0000787305-001
SECTION OTHR LEGN-ORIGINAL
NO DUTY PAYABLE

(A) **LAND TRANSFERRED**
If appropriate, specify the share or part transferred.

FI 1/1011850 Part being
SEE ATTACHED SCHEDULE

(B) **LODGED BY**

LTO Box	Name, Address or DX and Telephone
354L	STATE SEARCH. Reference (15 character maximum): GL.

(C) **TRANSFEROR** MID NORTH COAST AREA HEALTH SERVICE

(D) acknowledges receipt of the consideration of Nil
and as regards the land specified above transfers to the transferee an estate in fee simple.

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

(F) **TRANSFEREE**

T TS (s713 LGA) TW (Sheriff)	HEALTH ADMINISTRATION CORPORATION

(G) **TENANCY:**

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

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

V Johnstone
Signature of Witness

VALERIE JOHNSTONE
Name of Witness (BLOCK LETTERS)

233 KINGS CREEK ROAD, WAUCHOPE 2446
Address of Witness

Common Seal MID NORTH COAST AREA HEALTH SERVICE

T. CLOUT CEO
E. HALL - CHAIR

Signature of Transferor

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

Signature of Witness

GRANT LAVENDER
Name of Witness (BLOCK LETTERS)

73 MILLER ST North Sydney.
Address of Witness

Signed by me Stuart Gordon BALL **as delegate of the HEALTH ADMINISTRATION CORPORATION, pursuant to section 21 (1) Health Administration Act, 1982 and I hereby certify that I have no notice of the revocation of such delegation.**

Signature of Transferee

If signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name in block letters.

Checked by (LTO use) ....

~~OFF L Z604585~~

SCHEDULE OF LANDS

LOT 11/zz/DP 3933
LOT 21 DP 2564
LOT 7 DP 652546
LOT B DP 366504
LOT 10A DP 368039
LOT B DP 368047
LOT 2 DP 517361
~~LOT A DP 366504~~
LOT A DP 368047
LOT 15 DP 412644
LOT 4 DP 412644
LOT 16 DP 412644

PLAN FORM 2 — Plan Drawing only to appear in this space

DP1011890

Registered: 24·10·2001

C.A:

Title System: TORRENS & OLD SYSTEM

Purpose: CONSOLIDATION

Ref. Map: Z4662-144

Last Plan: SEE BELOW

PLAN OF CONSOLIDATION OF
LOTS 1, 6, 11 & 21
OF SEC 22 IN DP3933,
1 & 2, DP311453
A & B, DP366504

HEADING CONTINUED BELOW

Lengths are in metres. Reduction Ratio 1:1000

L.G.A.: GREATER TAREE

~~Suburb~~/Locality: TAREE

Parish: TAREE

County: MACQUARIE

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

I, GRAEME SPARKES-CARROLL

of 11 MAIDEN AVENUE, TAREE NSW.

a surveyor registered under the Surveyors Act 1929, hereby certify that the survey represented in this plan is accurate and has been made in accordance with the Surveyors (Practice) Regulation 1996 and was completed on * 6/11/1997

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

Datum Line: 'X'-'Y' Zone: URBAN

*Insert date of survey

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

DP3933	DP503287	DP622741
DP368047	DP509189	DP623039
DP384467	DP517361	DP833076
DP409198	DP529938	DP865234
DP412644	DP542044	DP871344

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

HEADING OF PLAN CONT FROM ABOVE

A & B, DP368047
10A & 10B, DP386039
3, 4, 15 & 16, DP412644
1,2,3 DP509189
1 & 2, DP517361
7, DP652546 21, DP2564
7, DP662914
AND CLOSED ROADS BEING
LOTS 1&2 DP874017

PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919
IT IS INTENDED TO RELEASE
EASEMENT FOR SEWERAGE (D117116)

PLAN AMENDED IN LPI AT SURVEYORS REQUEST 20.3.2000

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

Signed by me DOUGLAS JENNER
as delegate of the HEALTH ADMINISTRATION CORPORATION, pursuant to section 21 (1) Health Administration Act, 1982 and I hereby certify that I have no notice of the revocation of such delegation.

Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

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

Council's Certificate

I hereby certify that -

(a) the requirements of the Local Government Act, 1993 (other than the requirements for the registration of plans), and

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

have been complied with by the applicant in relation to the proposed

..... (insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No .....

Date .....

(Signature) ..... General Manager/Authorised person

Council File No. .....

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

†Delete if inapplicable

GRID NORTH

PULTENEY STREET

COMMERCE STREET

YORK STREET

HIGH STREET

WYNTER STREET

COMMERCE LANE DP503287

YORK LANE DP833076

DP409198

PM13762 FD

RMGIPFD (DP409286) 323°36'-0.455

RMDH&W 264°45' 2.365

RMDH&W 192°25-2.58

RMGIPFD (DP509189) 217°-0.38 BY ME

RMDH&WFD (DP833076) 22°32'-6.945

R/S NAIL&W IN BK RMGIPFD (DP509189) 225°-0.44 BY ME

RMGIPFD (DP412644) 53°35'30-53.57 BY ME

DH FD ON BK (DP566319)

RMDH&W FD (?) 343°33'-2.855 BY ME

PM13755 FD 340°38'-2.857 (BY DP623039)

PM13763 FD 309°32-8.657

RMDH&W FD (DP517361) 320°23'-0.455

PEG & RMGIP FD (DP503287) 179°56'-0.535

PM61488 FD (NOT EST) 57°09'-2.88

RM NOT FD

SPIKE IN BITUMEN

DH&W TOP DWF WALL RMDH&W 79°10-1.6

PM13764 FD 'Y'

DH FD (?) DP529938 289°11'-0.18 TO COR BY ME

PEG FD

BK (DP409198)

MKS GONE

CONC BASE

NO OCC

2·518 ha

(A) LAND EXCLUDES MINERALS - T447400

(B) RESERVATIONS & CONDITIONS - SEE CROWN GRANT

(C) COVENANT - H805602

PM13763 - PM13764 231°38'56" 166·218 BY ME
PM13763 - PM13762 333°53'20" 152·515 BY ME

SURVEYORS (PRACTICE) REGULATION 1996: CLAUSE 32(2)

MARK	ISG COORDINATES EASTING	ISG COORDINATES NORTHING	ZONE	HORIZ ACC'Y
PM13755	248 194·926	1 467 978·077	562	2
PM13762	248 413·614	1 468 137·151	"	"
PM13763	248 480·733	1 468 000·211	"	"
PM13764	248 350·382	1 467 897·077	"	"

COMBINED SEA LEVEL AND SCALE FACTOR: 0·99997

SOURCE: ISG COORDINATES ADOPTED FROM LIC ON 26 NOV 1997

SURVEYOR'S REFERENCE: 149X634 TEL/FAX (02) 6552 3194

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
27/1/2022 1:31PM

FOLIO: 1/1011890

First Title(s): OLD SYSTEM
Prior Title(s): 21/2564 1/22/3933
6/22/3933 11/22/3933
1-2/311453 A-B/366504
A-B/368047 10A/386039
10B/386039 3-4/412644
15-16/412644 1-3/509189
1-2/517361 7/652546
7/662914 VOL 1516 FOL 218
VOL 3672 FOL 158 VOL 6414 FOL 21
GZ 06021998 FOL 591

Recorded	Number	Type of Instrument	C.T. Issue
24/10/2001	DP1011890	DEPOSITED PLAN	FOLIO CREATED EDITION 1
24/10/2001	PA80298	PRIMARY APPLICATION	
26/10/2001	8062528	TRANSFER	EDITION 2
19/7/2004	AA810613	LEASE	EDITION 3
6/11/2009	AF97455	LEASE	EDITION 4
10/4/2014	AI500716	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

advlegs PRINTED ON 27/1/2022

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
27/1/2022 1:32PM

FOLIO: 11/22/3933

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 1478 FOL 200

Recorded	Number	Type of Instrument	C.T. Issue
16/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
14/11/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
18/9/1991	Z797282	APPLICATION	
18/9/1991	Z604585	LEASE	EDITION 1
3/8/2000	6640902	APPLICATION	
24/10/2001	DP1011890	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

advlegs PRINTED ON 27/1/2022

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
27/1/2022 1:31PM

FOLIO: 21/2564

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 1090 FOL 17

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
8/10/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
18/9/1991	Z797282	APPLICATION	
18/9/1991	Z604585	LEASE	EDITION 1
3/8/2000	6640902	APPLICATION	
24/10/2001	DP1011890	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

advlegs PRINTED ON 27/1/2022

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 1/1011890

SEARCH DATE	TIME	EDITION NO	DATE
27/1/2022	1:31 PM	4	6/11/2009

LAND

LOT 1 IN DEPOSITED PLAN 1011890
AT TAREE
LOCAL GOVERNMENT AREA MID-COAST
PARISH OF TAREE COUNTY OF MACQUARIE
TITLE DIAGRAM DP1011890

FIRST SCHEDULE

HEALTH ADMINISTRATION CORPORATION (T 8062528)

SECOND SCHEDULE (4 NOTIFICATIONS)

* 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM
2 LAND EXCLUDES MINERALS WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM - SEE MEMORANDUM T447400
3 H805602 COVENANT AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM.
4 AF97455 LEASE TO HEALTHCARE IMAGING SERVICES PTY LIMITED OF SUITE 1, MANNING BASE HOSPITAL, TAREE. EXPIRES: 31/5/2014.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

advlegs PRINTED ON 27/1/2022

Appendix B

Laboratory Test Result Sheets

REGIONAL GEOTECHNICAL SOLUTIONS

Client: Mace Australia Pty Ltd
Job No. RGS02920.1
Project: Manning Base Hospital - Demolition of Building 9
Location: York Street, Taree

Location	DEPTH (m)	MATERIAL	ASBESTOS		TOTAL RECOVERABLE HYDROCARBONS					PAH		BTEX	PCB	Pesticides		HEAVY METALS					
			Present	FA + AF	C6-C10	C10-C16	C16-C34	C34-C40	TOTAL 10-40	Total	b-a-p			OC	OP	As	Cd	Cr#	Cu	Pb	Ni	Zn	Hg
SS1	0.0 - 0.2	Fill/Topsoil	Yes	0.009	<10	<10	<50	<100	<50	<0.5	<0.5	<0.2	0.6	<0.2	<0.2	14	<1	14	26	147	6	169	0.2
SS2	0.0 - 0.2	Fill/Topsoil	No	<0.001	<10	<10	<50	<100	<50	<0.5	<0.5	<0.2	<0.1	<0.2	<0.2	9	<1	12	41	399	6	489	0.1
SS3	0.0 - 0.2	Fill/Topsoil	No	<0.001	<10	<10	<50	<100	<50	<0.5	<0.5	<0.2	<0.1	2.09	<0.2	<5	<1	14	35	710	5	504	0.5
SS4	0.0 - 0.2	Fill/Topsoil	No	<0.001	<10	<10	<50	<100	<50	<0.5	<0.5	<0.2	<0.1	<0.2	<0.2	<5	<1	9	23	97	8	282	0.2
SS5	0.0 - 0.2	Fill/Topsoil	No	<0.001	<10	<10	<50	<100	<50	<0.5	<0.5	<0.2	<0.1	<0.2	<0.2	<5	<1	6	29	9	5	63	<0.1
AS1		Fibro-cement	Yes	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
D1 (duplicate of SS11	0.0 - 0.2	Fill/Topsoil	--	--	<10	<50	<100	<100	<50	<0.5	<0.5	<0.2	0.4	<0.2	<0.2	13	<1	13	23	132	5	173	0.2
RINSATE1 (µg/L)		Water			<20	--	--	--	--	--	--	<1	--			--	--	--	--	--	--	--	--
RPD (%)					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	7.4	0.0	7.4	15.4	10.8	18.2	2.3	0.0
Health Based Soil investigation Level (HIL)*:				0.001% (w/w)						400	4	NL	1	10	10	500	150	500#	30000	1200	1200	60000	120
Health Screening Level (HSL)**:					F1=45(0-<1m) F1=70 (1-<2m) F1=110 (2-<4m)	F2=110 (0-<1m) F2=240 (1-<2m) F2=440 (2-<4m)																	
Ecological Investigation Level (EIL)***:					800	1000	3500	10000								100		190	190	1100	170	400	
Ecological Screening Level (ESL)****:					215	170	1700	3300				50				Coarse grained soil in mg/kg							
					215	170	2500	6600				65				Fine grained soil in mg/kg							
Management Limits					700	1000	2500	10000								Coarse grained soil in mg/kg							
					800	1000	3500	10000								Fine grained soil in mg/kg							

NOTES:

Denotes concentration exceeds health based guideline for Residential B land use

Denotes concentration exceeds ecological guideline for Residential B land use

Denotes concentration exceeds management Limits for Residential or Recreational land use

Denotes concentration exceeds health and ecological based guideline for Residential B land use

NL No Limit available

LOR Limit of Reporting

* Health Based Investigation Levels for Reseidential B (NEPM 2013)
**Health Screening Level (F1 & F2) for Residential B land use and coarse grained soil (sand) (NEPM 2013)
** Ecological Investigation Level - for Residential B land use
*** Ecological Screening Level for Residential B land use and fine grained soil
#Chromium VI
Speciation testing confirmed only Chromium III present

REGIONAL GEOTECHNICAL SOLUTIONS

Summary Table - Comparison of Contamination Analysis Results With Waste Classification Threshold Limits (Results in mg/kg)

Client: Mace Australia Pty Ltd
Job No. RGS02920.1
Project: Manning Base Hospital - Demolition of Building 9
Location: York Street, Taree

SAMPLE	MATERIAL	DEPTH (m)	TOTAL PETROLEUM HYDROCARBONS					PAH	PCBs (Total)	OC/OP Pesticides	HEAVY METALS									
			C6-C9	C10-C14	C15-C28	C29-C36	TOTAL				Arsenic	TCLP	Cadmium	TCLP	Nickel	TCLP	Lead	TCLP	Mercury	TCLP
SS1	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	0.07	<5		1		<2		132		0.1	
SS2	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		45		<0.1	
SS3	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		**566**		0.4	
SS4	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		6		<0.1	
SS5	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		96		<0.1	
SS6	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		37		<0.1	
SS7	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		56		<0.1	
SS8	Topsoil / Fill / Aeolian	0.0 - 0.2	<10	<50	<100	<100	<50	<0.5	<0.1	<0.05	<5		<1		<2		53		<0.1	
THRESHOLD LIMITS																				
GENERAL SOLID WASTE		*CT1*									*100*		*20*		*40*		*100*		*4*	
		SCC1	*650*				*10000*	*200*	*<50*	*250*	*500*		*100*		*1050*		*1500*		*50*	
		TCLP1									*5*		*1*		*2*		*5*		*0.2*	
RESTRICTED SOLID WASTE		*CT2*									*400*		*80*		*160*		*400*		*16*	
		SCC2	*2600*				*40000*	*800*	*<50*	*1000*	*2000*		*400*		*4200*		*6000*		*200*	
		TCLP2									*20*		*4*		*8*		*20*		*0.8*	

NOTES

CT	Contaminant Threshold (without TCLP)
SCC	Specific Contaminant Concentrations (used with TCLP)
TCLP	Toxicity Characteristics Leaching Procedure (used with SCC)
Shaded	Exceeds General Solid Waste Threshold = Restricted Solid Waste
BOLD and Shaded	Exceeds Restricted Solid Waste Threshold = Hazardous Waste

CRITERIA:

Waste Classification - Classifying Waste, Part 1 (*NSW EPA 2014*)

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2205646**	Page	: 1 of 15
Amendment	: **1**		
Client	: **REGIONAL GEOTECHNICAL SOLUTION**	Laboratory	: Environmental Division Sydney
Contact	: Andrew Hills	Contact	: Customer Services ES
Address	: 44 BENT STREET WINGHAM NSW, AUSTRALIA 2429	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 6553 5641	Telephone	: +61-2-8784 8555
Project	: RGS02920.1 Manning Base Hospital Redevlopment Stage 2	Date Samples Received	: 18-Feb-2022 10:38
Order number	: ----	Date Analysis Commenced	: 21-Feb-2022
C-O-C number	: ----	Issue Date	: 21-Mar-2022 15:37
Sampler	: ----		
Site	: York Street, Taree		
Quote number	: EN/222		
No. of samples received	: 9		
No. of samples analysed	: 8		

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

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

This Certificate of Analysis contains the following information:

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

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

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

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

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

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

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

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

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP068: Positive results have been confirmed by re-extraction and re-analysis.
- EP066 : Positive PCB result is confirmed by re-extraction and re-analysis.
- EG035: Positive Mercury result ES2205646 #3 has been confirmed by reanalysis.
- **EA200 Legend**
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: Analysis of asbestos from swabs and tapes is not covered under the current scope of NATA accreditation.
- Amendment (18/03/2022): This report has been amended and re-released to allow the reporting of S-16 to sample S1. All analysis results are as per the previous report.
- EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Asbestos (Fines and Fibrous) weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination

- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- EA200: N/A - Not Applicable

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS1	SS2	SS3	SS4	SS5
			Sampling date / time	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205646-001	ES2205646-002	ES2205646-003	ES2205646-004	ES2205646-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.6	16.8	14.0	10.3	8.8
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	Yes	No	No	No	No
Asbestos Type	1332-21-4	-	--	Ch + Am	-	-	-	-
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	No
Sample weight (dry)	----	0.01	g	288	338	338	378	394
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	No
Organic Fibre	----	0.1	g/kg	No	No	No	No	No
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE
EA200N: Asbestos Quantification (non-NATA)								
ø Asbestos (Fines and Fibrous <7mm)	1332-21-4	0.0004	g	0.0249	<0.0004	<0.0004	<0.0004	<0.0004
ø Asbestos (Fines and Fibrous FA+AF)	----	0.001	% (w/w)	0.009	<0.001	<0.001	<0.001	<0.001
ø Asbestos Containing Material	1332-21-4	0.1	g	1.6	<0.1	<0.1	<0.1	<0.1
ø Asbestos Containing Material (as 15% Asbestos in ACM >7mm)	1332-21-4	0.01	% (w/w)	0.08	<0.01	<0.01	<0.01	<0.01
ø Weight Used for % Calculation	----	0.0001	kg	0.288	0.338	0.338	0.378	0.394
ø Fibrous Asbestos >7mm	----	0.0004	g	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	14	9	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	14	12	14	9	6
Copper	7440-50-8	5	mg/kg	26	41	35	23	29
Lead	7439-92-1	5	mg/kg	147	399	710	97	9
Nickel	7440-02-0	2	mg/kg	6	6	5	8	5
Zinc	7440-66-6	5	mg/kg	169	489	504	282	63
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	0.1	0.5	0.2	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	0.6	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS1	SS2	SS3	SS4	SS5
			Sampling date / time	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205646-001	ES2205646-002	ES2205646-003	ES2205646-004	ES2205646-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**1.47**	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	**0.62**	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	**1.47**	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	**0.62**	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS1	SS2	SS3	SS4	SS5
				Sampling date / time	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2205646-001	ES2205646-002	ES2205646-003	ES2205646-004	ES2205646-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS1	SS2	SS3	SS4	SS5
			Sampling date / time	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205646-001	ES2205646-002	ES2205646-003	ES2205646-004	ES2205646-005
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**99.2**	**99.4**	**114**	**95.9**	**118**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**95.1**	**93.4**	**130**	**86.9**	**107**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**80.5**	**99.9**	**83.4**	**83.2**	**101**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**83.9**	**83.7**	**86.4**	**87.3**	**86.0**
2-Chlorophenol-D4	93951-73-6	0.5	%	**87.7**	**86.3**	**88.8**	**89.3**	**89.1**
2.4.6-Tribromophenol	118-79-6	0.5	%	**77.6**	**75.9**	**78.4**	**80.9**	**78.8**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**102**	**100**	**104**	**104**	**103**
Anthracene-d10	1719-06-8	0.5	%	**102**	**101**	**105**	**105**	**104**
4-Terphenyl-d14	1718-51-0	0.5	%	**95.9**	**93.6**	**96.7**	**97.0**	**96.1**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS1	SS2	SS3	SS4	SS5
				Sampling date / time	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00	15-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2205646-001	ES2205646-002	ES2205646-003	ES2205646-004	ES2205646-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**79.5**	**95.6**	**84.5**	**111**	**93.9**
Toluene-D8	2037-26-5	0.2	%		**81.2**	**100**	**86.7**	**115**	**98.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**96.8**	**104**	**88.6**	**117**	**101**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	D1	----	----	----	----
			Sampling date / time	15-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-007	--------	--------	--------	--------
				Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**17.6**	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**13**	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	**13**	----	----	----	----
Copper	7440-50-8	5	mg/kg	**23**	----	----	----	----
Lead	7439-92-1	5	mg/kg	**132**	----	----	----	----
Nickel	7440-02-0	2	mg/kg	**5**	----	----	----	----
Zinc	7440-66-6	5	mg/kg	**173**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	**0.2**	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	**0.4**	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	D1	----	----	----	----
			Sampling date / time	15-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-007	--------	--------	--------	--------
				Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	D1	----	----	----	----
			Sampling date / time	15-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-007	--------	--------	--------	--------
				Result	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	D1	----	----	----	----
			Sampling date / time	15-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-007	--------	--------	--------	--------
				Result	----	----	----	----
EP080: BTEXN - Continued								
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**112**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**90.1**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**96.4**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**83.1**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**83.9**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**72.6**	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**95.2**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**97.4**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**91.2**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**100**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	**86.2**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**85.2**	----	----	----	----

Analytical Results

Sub-Matrix: SOLID (Matrix: SOLID)			Sample ID	AS1	----	----	----	----
			Sampling date / time	15-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-009	--------	--------	--------	--------
				Result	----	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	**Yes**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**Ch + Cr**	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	**N/A**	----	----	----	----
Sample weight (dry)	----	0.01	g	**76.5**	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	**No**	----	----	----	----
Organic Fibre	----	0.1	g/kg	**No**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RINSATE	----	----	----	----
			Sampling date / time	16-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2205646-008	--------	--------	--------	--------
				Result	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L	<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**114**	----	----	----	----
Toluene-D8	2037-26-5	2	%	**105**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	**105**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	SS1 - 15-Feb-2022 00:00	Soil sample containing several pieces of asbestos cement sheeting.
EA200: Description	SS2 - 15-Feb-2022 00:00	Soil sample.
EA200: Description	SS3 - 15-Feb-2022 00:00	Soil sample.
EA200: Description	SS4 - 15-Feb-2022 00:00	Soil sample.
EA200: Description	SS5 - 15-Feb-2022 00:00	Soil sample.

Sub-Matrix: **SOLID**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	AS1 - 15-Feb-2022 00:00	Several pieces of asbestos cement sheeting.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

Inter-Laboratory Testing

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

(SOIL) EA200N: Asbestos Quantification (non-NATA)

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

(SOLID) EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples

Appendix C

Letter from Dr David Tully CEnvP SC

Contaminated Land Solutions

11 January 2023

Ref: CLS0191.L03

Regional Geotechnical Solutions Pty Ltd
44 Brent Street
Wingham
NSW 2429

For the attention of Andrew Hills

Dear Andrew,

RE: Report Review: Stage 1 Site Contamination Assessment – Manning Hospital – Demolition of Building 9, York Street, Taree

I, Dr David Tully of Contaminated Land Solutions Pty Ltd, am a Certified Environmental Practitioner Site Contamination Specialist (General Certified Environmental Practitioner certification no. 1138 and Site Contamination Specialist certification no. SC40084).

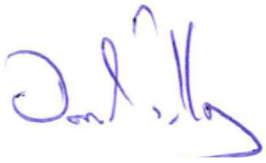
I confirm I have reviewed the Regional Geotechnical Solutions report entitled "*Stage 1 Site Contamination Assessment – Manning Hospital - Demolition of Building 9, York Street, Taree*" (Ref: RGS02920.1-AF), dated 11 January 2023 and a copy of which I have retained.

I can confirm that on the basis of the information contained within the report, I support the conclusions and recommendations provided therein.

Should the client, regulator or local authority have any queries regarding the report review, I can be contacted by e-mail via david.tully@contaminatedlandsolutions.com.au. Specific queries regarding the content of the report should be addressed to Andrew Hills at Regional Geotechnical Solutions.

For and on behalf of

Contaminated Land Solutions Pty Ltd



Dr David Tully CEnvP SC
Director
Contaminated Land Solutions Pty Ltd

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