

Wollongong Local Planning Panel Assessment Report | 23 February 2023

WLPP No.	Item No. 1
DA No.	DA-2022/1093
Proposal	Demolition Works - decommissioned Bulli Hospital
Property	27-29 Hospital Road BULLI NSW 2516
Applicant	Landcom
Responsible Team	Development Assessment and Certification - City Wide Team (SG)
Lodgement date	11/10/2022

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Wollongong Local Planning Panel (WLPP)

The proposal has been referred to the WLPP for **determination** pursuant to part 3 of Schedule 2 of the Local Planning Panels Direction, as the Development is deemed to be of significant community interest by written submissions having been received from thirteen (13) objectors.

Proposal

The proposal seeks consent for the following:

- Demolition works.

Permissibility

The site is zoned R2 Low Density Residential zone.

The proposed development is permissible on land to which the Wollongong Local Environmental Plan 2009 (WLEP 2009) applies pursuant to Clause 2.7 of WLEP 2009.

Consultation

Details of the proposal were publicly exhibited in accordance with Council's adopted Community Participation Plan 2019. Thirteen (13) submissions were received. The issues identified are discussed at section 1.5 of this report.

Internal

Details of the proposal were referred to Council's Development Engineering, Environment, Landscaping and Heritage Officers for assessment. Satisfactory referral advice, comments and/or recommended conditions were provided in each instance. Assessment considerations of internal groups as relates to relevant Chapters of the WDCP 2009 are presented at section 2.3.1 of this report.

Main Issues

The main issues resulting from the assessment process are:

- Potential heritage impact and management of demolition activities

RECOMMENDATION

DA-2022/1093 be approved subject to the conditions provided in **Attachment 6**.

Application Overview

1.0 PLANNING CONTROLS

The following planning controls apply to the proposal:

The proposal is considered Crown Development.

State Environmental Planning Policies:

- SEPP (Resilience and Hazards) 2021
- SEPP (Building Sustainability Index: BASIX) 2004

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan (WDCP) 2009

Other policies

- Wollongong City Wide Development Contributions Plan 2021
- Wollongong Community Participation Plan 2019

1.2 DETAILED DESCRIPTION OF PROPOSAL

The application proposes the following:

- Demolition of the decommissioned Bulli Hospital buildings being Stage 1 of the redevelopment of the site. Note - A Stage 2 development application DA- is currently under assessment for site remediation works and tree removals.

1.3 BACKGROUND

There is no previous recent development history on the site which has operated (until recently) as a hospital

Customer service actions:

There are no outstanding customer service requests of relevance to the properties.

1.4 SITE DESCRIPTION

The site is located at 27-29 Hospital Road, Bulli, and the title reference is Lot 1 DP 326181, Lot 1 DP 83742, Lot 1 DP 595930, Lot 20-22 DP 6793, and Lot 1-8 DP 7677.

The approximate area of the subject site is 2.75 ha, comprised of land parcels identified in Figure 1 and 2.

The subject site contains a total of 15 structures, ranging from one to two storeys, comprising a main building, an electrical substation, storage and change rooms, two maintenance workshops, carpark and various weatherboard structures and sheds.

The vegetation on the subject site is predominantly cleared of vegetation with clusters of established trees along the boundaries of the site, specifically along the western, north-eastern, and south-eastern boundaries.

The street scene in the immediate vicinity is characterised predominately by low density residential dwellings of single and double storey construction. Adjacent to the subject site on Hospital Road, is a

newly constructed aged care facility. The street scene on the Western side of the subject site is zoned C4, environmental living and consists of low-density residential dwellings of single and double storey. The street scene to the Southern boundary of the subject is zoned as RE1, Public Recreation, and consists of a childcare centre and a sports field.

Access to the subject site is established via Hospital Road and Dumbrell Road, Bulli. Access for demolition works will be confined to the Hospital Road entry only.

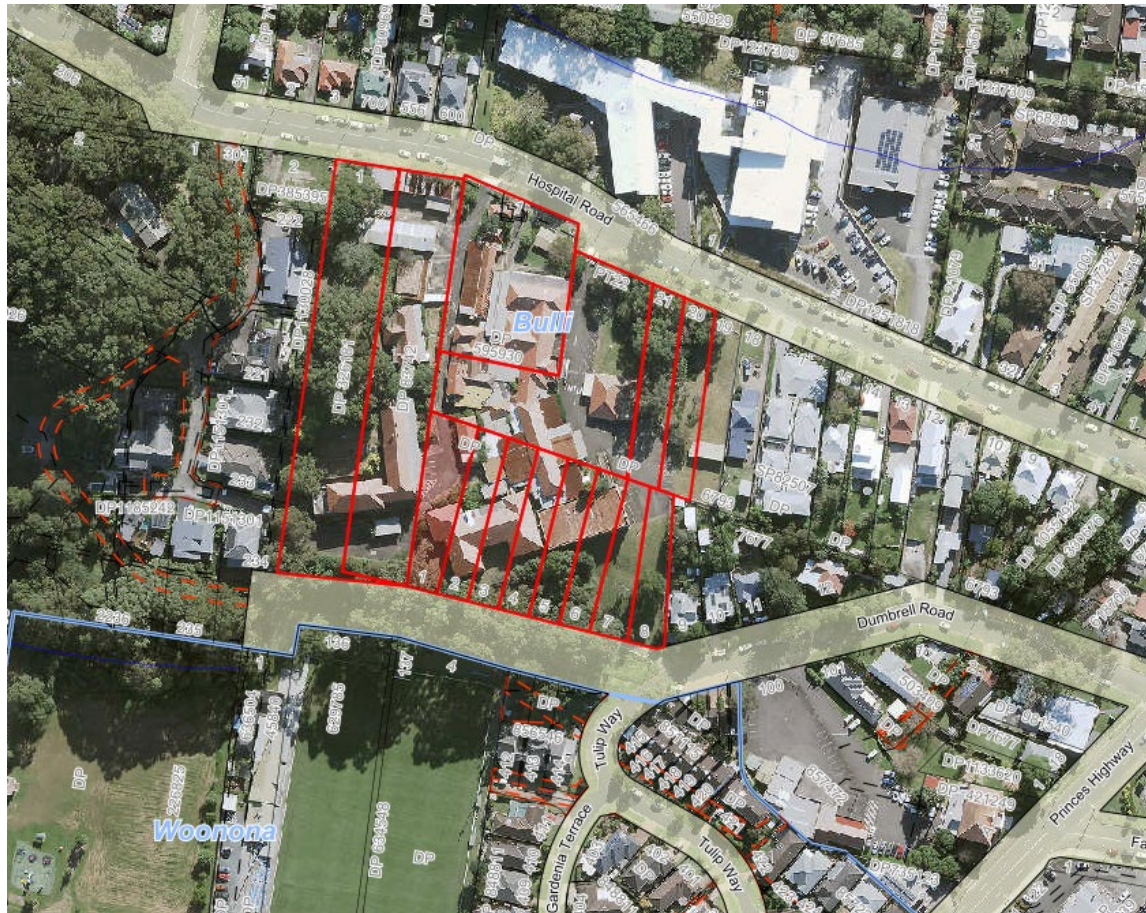


Figure 1: Aerial photograph (2022)

Property constraints

- Complying Part – ESL – Natural Resources
- Unstable land – Affected
- Bushfire Prone – Affected
- Ecological Sensitive Land – NR Biodiversity

There are not restrictions on the Title.

1.5 SUBMISSIONS

Details of the proposal were publicly exhibited in accordance with Council’s adopted Community Participation Plan 2019. Thirteen (13) submissions were received. The main issues identified within the submissions are discussed below.

Table 1: Submissions

Concern	Comment
1. Traffic Management	<p>Details of the application including the Construction Traffic Management Plan were referred to Council's Development Engineering Officer for assessment.</p> <p>The Construction Traffic Management Plan has been assessed against the requirements of Chapter E3 of Wollongong DCP 2009 Section 6.2. It is considered that the matters discussed in the report are reasonable.</p> <p>It is considered that the traffic generated by the proposal will not be unreasonable in this circumstance and is within the capacity of the local road network.</p> <p>A Final Construction Traffic Management Plan is required by condition to be presented to Council's Development Engineering Manager, prior to the commencement of works.</p>
2. Geotechnical Issues	<p>The proposal involves demolition works only, therefore geotechnical constraints of the site are considered to be of limited relevance.</p>
3. Historical Significance	<p>Details of the application including a Heritage Impact Statement/Archaeological Survey Report were referred to Council's Heritage Officer for assessment.</p> <p>It is acknowledged the site has local community heritage values, relating to the built form and social and historic significance. These values will be required by conditions to be interpreted on the site through design of the concept DA, interpretation elements and consultation with the local community. An initial Strategy is conditioned for as part of Stage 1, with further requirements envisaged for future DA's to further develop this outcome.</p> <p>Separately the proponent has acknowledged that impacts from the proposed demolition works could be adverse to any relics on site and has accepted a condition limiting demolition works to ground level only. Any concrete slabs on site are to remain insitu.</p>
4. Future use of the Site	<p>Concerns regarding the future use of the site were raised in the assessment of the proposed development.</p> <p>The development proposal is for demolition only, with the final form of future development unknown at this point though it is understood that Landcom have conducted local community engagement information sessions relating to residential development</p>
5. Tree Protection	<p>No significant tree removal is identified in the current proposal.</p>

Concern	Comment
	Council's Landscape officer has reviewed the application submission and provided for conditions relating to tree protection measures during demolition works with Arboricultural supervision.
6. Community use, access and engagement	<p>The former Bulli Hospital has been decommissioned By NSW Health and is no longer operational. The buildings on site are considered dilapidated and unsafe. They contain hazardous materials and have been damaged by recent weather events.</p> <p>It is understood that Landcom have conducted local community engagement information sessions relating to residential development.</p>
7. Hazardous materials and onsite management	<p>Details of the application including a Hazardous Materials Survey and Demolition Statement were assessed by Council's Environment Officer.</p> <p>Conditions are proposed for the removal and handling of such materials in accordance with all relevant regulations, codes of practice, and Australian standards as detailed in the Hazardous Materials Survey report.</p>
8. Environmental Impacts	Conditions are proposed to mitigate adverse environmental impact by way of site management as relates to tree protection, demolition work methods, waste inventory for disposal including asbestos management, noise, traffic and soil and erosion control measures.
9. Vehicle Parking	<p>The submitted Construction Traffic Management Plan has been assessed against the requirements of Chapter E3 of Wollongong DCP 2009 Section 6.2. It is considered that the matters discussed in the report are reasonable.</p> <p>Concerns were also raised for the future use of the site and the suitability of potential parking were raised in the submissions.</p> <p>The proposed development is for demolition only, with the final form of future development unknown at this point though it is understood that Landcom have conducted local community engagement information sessions relating to residential development.</p>

Table 1: Number of concerns raised in submissions

Concern	1	2	3	4	5	6	7	8	9
Frequency	10	1	8	12	6	10	4	4	6

1.6 CONSULTATION

1.6.1 INTERNAL CONSULTATION

Development Engineering Officer

Council's Development Engineering Officer has assessed the application submission in regard to traffic matters and provided conditionally satisfactory advice.

Landscape Officer

Council's Landscape Officer has assessed the application submission in relation to vegetation impacts and provided conditionally satisfactory advice.

Environment Officer

Council's Environment Officer has assessed the application submission in relation to vegetation, site management and hazardous materials impacts and provided conditionally satisfactory advice.

Heritage Officer

Council's Heritage Officer has assessed the application submission and provided conditionally satisfactory advice.

Particular consideration was given to potential heritage impacts, and submissions have raised local community heritage values, relating to the built form and social and historic significance.

Whilst the subject site is not a locally listed heritage item within WLEP2009, it is noted that a previous 'cottage hospital' was located on the site that has since been demolished.

The applicant has prepared a Heritage Impact Statement/Archaeological Survey report (Australia Archaeology, dated December 2023).

An Aboriginal Due Diligence Assessment has also been prepared by Austral Archaeology, which assesses the site as being of low potential for relics and recommends a condition for an unexpected finds protocol which has been imposed.

The site has local community heritage values, relating to the built form and social and historic significance. These values will be required to be interpreted on the site through design of the concept DA, interpretation elements and consultation with the local community. An initial Strategy is conditioned as part of Stage 1, with further requirements envisaged for future DA's to further develop this outcome.

1.6.2 EXTERNAL CONSULTATION

There was no external consultation required for the proposal.

2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

2.1 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

2.1.1 STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT 2011 SCHEDULE 7 CLAUSE 4)

Clause 4.33 of the EP&A Act 1979 specifies that Council may not refuse consent or impose a condition of consent on a Crown Development Application without first obtaining written approval from the Minister. Additionally, clause 95 of the EP&A Regulations sets the prescribed period for which a Crown Development is to be determined. If the consent authority fails to determine the Crown Development Application within the prescribed period, the applicant or consent authority may refer this application to the applicable Sydney District or Regional Planning Panel.

Draft conditions of consent were forwarded to Landcom for comment. Email communication received on 13/02/2023 Identified that the draft conditions as presented at Attachment 6 are accepted.

2.1.2 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

4.6 Contamination and remediation to be considered in determining development application

- (1) *A consent authority must not consent to the carrying out of any development on land unless:*
- (a) it has considered whether the land is contaminated, and*
 - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
 - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

A desktop audit of previous land uses does not indicate any historic use that would contribute to the contamination of the site beyond that of a use as a hospital. It should be noted that Council currently has DA-2022/1364 under assessment for proposed remediation works as Stage 2 of the redevelopment of the site. Council's Environmental Officer has reviewed the history of the site in conjunction with details of the application submission which included both a demolition statement and hazardous materials survey. To mitigate any conflict between the remediation action plan (Stage 2 DA submission) and the proposed demolition works a condition is proposed (and accepted by the applicant) to limit demolition works to ground top of footings/ slab level only which are to remain insitu.

The Stage 1 siteworks for demolition works only are therefore considered satisfactory and consistent with the assessment considerations of SEPP (Resilience and Hazards) 2021 to the extent that the determining authority can be satisfied as required by clause 4.6. as relates to the intended use of the land for residential purposes and land contamination matters.

Specific conditions are also proposed for hazardous materials handling and disposal including asbestos management.

2.1.3 State Environmental Planning Policy (coastal management) 2018

There is no Coastal Zone Management Plan currently applicable to the land.

2.1.4 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Part 1 Preliminary

Clause 1.4 Definitions

Demolish: in relation to a heritage item or an Aboriginal object, or a building, work, relic or tree within a heritage conservation area, means wholly or partly destroy, dismantle or deface the heritage item, Aboriginal object or building, work, relic or tree.

Part 2 Permitted or prohibited development

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned **R2 Low Density Residential**.

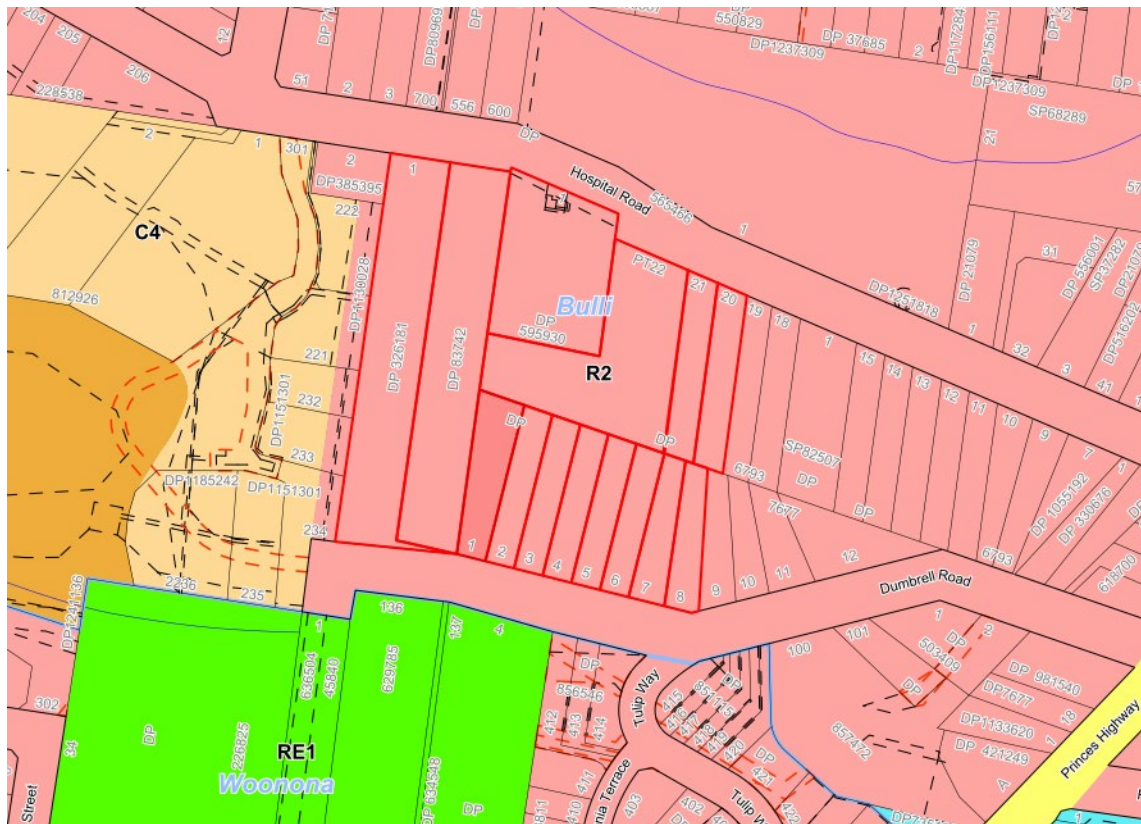


Figure 2: Land zoning map (2022).

Clause 2.3 – Zone objectives and land use table

The objectives of the zone R2 Low Density Residential are as follows:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

It is considered that the proposed demolition works are generally satisfactory with regard to the above objectives for Zone R2 Low Density Residential as it is understood that Landcom have conducted local community engagement information sessions relating to residential development

The proposal is permissible in the R2 Low Density Residential zone with development consent.

Clause 2.7 Demolition requires development consent

Demolition of a building may be carried out only with development consent.

Part 4 Principal development standards

Clause 4.3 Height of buildings

N/A the proposal is for demolition works only. Clause 4.3 Height of Buildings and

Clause 4.4 Floor Space Ratio

N/A the proposal is for demolition works only.

Part 5 Miscellaneous provisions

Clause 5.10 Heritage conservation

Details of the application were referred to Council's Heritage Officer for comment. Advice received is that the proposed development is considered conditionally satisfactory. Please refer to Heritage comments section 1.6.1

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

The subject site is already serviced by public utilities

2.2 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT

None applicable to the site or proposed development.

2.3 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN

2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The development has been assessed against the relevant chapters of WDCP 2009. Compliance tables are presented at **Attachment 4**.

2.3.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN 2020

The estimated cost of works is \$4,950,000.00 and a levy of 1% is applicable under this plan as the threshold value is \$100,000.

2.4 SECTION 4.15(1)(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development

2.5 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

Proposed conditions at **Attachment 6** require compliance with AS 2601 for demolition works.

2.6 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

Context and Setting:

The proposal has been assessed with regard to mitigating both environmental and amenity impacts and is considered to be compatible with the local area.

Access, Transport and Traffic:

Access to the site for all works will be limited to Hospital Road. The development is considered not to result in an adverse impact on the traffic movement and access to the site. Council's Development Engineering Officer has no objections to the proposed access arrangements subject to conditions included at Attachment 6.

Public Domain: The development is not considered to result in significant impact on the public domain.

Utilities:

The proposal is not envisaged to place an unreasonable demand on utilities supply. Existing utilities service the site .

Heritage:

Details of the application were referred to Council's Heritage Officer for comment. Advice received is that the proposed development is considered conditionally satisfactory.

Other land resources:

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon valuable land resources.

Water:

The site is presently serviced by Sydney Water, and the proposal is not envisaged to have unreasonable water consumption.

Soils:

It is expected that, with the use of appropriate erosion and sedimentation controls during construction, soil impacts will not be unreasonably adverse. A specific condition is proposed (and accepted by the applicant) to limit demolition works to ground top of footings/ slab level only which are to remain insitu.

Air and Microclimate:

The proposal is not expected to have a negative impact on air or microclimate. Dust suppression measures are conditioned for.

Flora and Fauna: Tree removal is not identified as being part of the proposal. The proposal is not expected to adversely impact fauna.

Waste:

Waste management during works can be managed through proper arrangements. A condition is proposed requiring the use of an appropriate receptacle for any waste generated during the construction and compliance with the Site Waste Management and Minimisation Plan provided with the DA as well as documentation via an inventory of hazardous material handling and disposal

Energy:

The proposal is not envisaged to have unreasonable energy consumption.

Noise and vibration:

Noise and vibration impacts during demolition, excavation and construction are unavoidable. Conditions are recommended to mitigate noise nuisance during demolition.

Natural hazards:

There are no natural hazards affecting the site that would prevent the proposal.

Technological hazards:

There are no technological hazards affecting the site that would prevent the proposal.

The proposal is identified as being affected by class 5 acid sulphate soils. However as there are no earthworks proposed it is considered that there is minimal impact. As such no special conditions are required in relation to Acid Sulphate Soils.

Safety, Security and Crime Prevention:

This application does not result in greater opportunities for criminal or antisocial behaviour.

Social Impact:

The proposal is not expected to create negative social impacts.

Economic Impact:

The proposal is not expected to create negative economic impacts.

Construction:

Conditions of consent are recommended in relation to demolition impacts such as hours of work, erosion and sedimentation controls, works in the road reserve, and the use of any crane, hoist, plant or scaffolding.

A condition will be attached to any consent granted that all works are to be in compliance with the Building Code of Australia.

Cumulative Impacts:

The development is considered consistent with the amenity of the neighbourhood and to be consistent with the surrounding development.

2.8 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR DEVELOPMENT

Does the proposal fit in the locality?

The proposal is considered appropriate with regard to the zoning of the site and is not expected to result in negative impacts on the amenity of the locality or adjoining developments.

Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

2.9 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS

Please see section 1.5 of this report.

2.10 SECTION 4.15(1)(E) THE PUBLIC INTEREST

The proposal is not expected to result in unreasonable impacts on the environment or the amenity of the locality. It is considered appropriate with consideration to the zoning and the character of the area and is therefore considered to be in the public interest.

2.11 SECTION 4.33 1(B) DETERMINATION OF CROWN APPLICATIONS

As Crown development is proposed the draft conditions at Attachment 6 were forwarded to Landcom as the applicant for agreement.

Agreement was provided by way of email confirmation dated 13/02/2023

3 CONCLUSION

The proposal has been assessed with regard to the relevant prescribed matters for consideration outlined in Section 4.15 of the Environmental Planning & Assessment Act 1979, the provisions of Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

Demolition with consent is permitted in the R2 land use zone pursuant to Clause 2.7 of the WLEP 2009.

All internal referrals are conditionally satisfactory and there are no outstanding issues.

The main issues arising from the assessment relate to heritage and environmental matters which are considered capable of being effectively managed by way of conditions of consent as proposed, which have been accepted by Landcom – a Crown Authority.

It is considered that the proposed development is unlikely to result in adverse impacts on the character or amenity of the surrounding area, environment, and adjoining development.

4 RECOMMENDATION

DA-2022/1093 be approved pursuant to Section 4.16(1) of the Environmental Planning & Assessment Act 1979 subject to the conditions provided at **Attachment 6**.

5 ATTACHMENTS

- 1 Plans and Documents
- 2 Plans and Documents Continued
- 3 Site Inspection Photos
- 4 Compliance table for Wollongong Development Control Plan 2009
- 5 Landcom agreement on conditions by way of email
- 6 Conditions



SUBJECT TITLE NOTATIONS
1/326181 (LOT 1 DP 326181) - LAND EXCLUDES MINERALS VIDE C668833
1/83742 (LOT 1 DP 83742) - LAND EXCLUDES MINERALS
AUTO CONSOL 3447-86 (LOTS 3-4 IN DP 7677) - LAND EXCLUDES MINERALS VIDE A735081
AUTO CONSOL 3142-227 (LOT 2 IN DP 7677, LOTS 5-8 DP 7677) - LAND EXCLUDES MINERALS VIDE C668833
1/7677 (LOT 1 DP 7677) - LAND EXCLUDES MINERALS VIDE C668833
AUTO CONSOL 2385-147 (LOTS 20-22 IN DP 6793) - LAND EXCLUDES ROADS WITHIN LOT 2
19/6793 (LOT 19 DP 6793) - NIL
1/595930 (LOT 1 DP 595930) - (A) - EASEMENT FOR ELECTRICITY PURPOSES
1 WIDE AND VARIABLE VIDE AG545362
(B) - EASEMENT FOR SUBSTATION PREMISES 42159
VARIABLE WIDTH VIDE AG545362
(C) - RIGHT OF WAY VARIABLE WIDTH VIDE AG54362

(A) - EASEMENT FOR ELECTRICITY PURPOSES
1 WIDE AND VARIABLE VIDE AG545362
(B) - EASEMENT FOR SUBSTATION PREMISES 42159
VARIABLE WIDTH VIDE AG545362
(C) - RIGHT OF WAY VARIABLE WIDTH VIDE AG54362

UTILITY ASSETS LEGEND	
ELECTRICITY	
COMMS TELEPHONE LINE	—T—T—
COMMS OPTICAL FIBRE	—OU—OU—
COMMS HOUSE CONNECTION	—TH—TH—
WATER MAIN	
WATER HOUSE CONNECTION	
LOW PRESSURE GAS	
GAS HOUSE CONNECTION	—GH—GH—
SEWER MAIN	
STORMWATER PIPE	
OVERHEAD ELECTRICITY	

UTILITY MAPPING NOTES:
1. Subsurface utility investigation was undertaken by Astrea Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.
2. Positions are based on Astrea Class A & B point surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may still exist.
3. This plan shows a representation of the dwg model, this model should be viewed in a cadd environment to interpret this information.
4. This utility plan is valid for 28 days starting from the date of the issue, as underground utility works are often updated.
5. Electricity cables are not necessarily enclosed in conduits and are not necessarily covered with markers, tape or other indicators of their presence.
6. All services have been electronically traced in the field and are shown here for diagrammatic purposes only. Depths shown are approximate only and should be verified prior to works.
7. This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.
SUBSURFACE UTILITY INFORMATION (SUI) ASS488 LOCATION CLASS
Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be managed

GENERAL SURVEY LEGEND:
BB - R.L POTHOLE INVERT
DP - DRAINAGE PIT
DX - CHAMBER
EJ - EDGE OF FORMATION
EP - EDGE OF PAVEMENT
FI - GUTTER FLOW INLET
PI - PIPE INVERT
RC - ROAD CROWN
PWHY - HYDRANT
PWSV - STOP VALVE
PSHT - SPOT HEIGHT
PGPM - GAS MARKER
PGTP - GAS TEST POINT
PSIN - SIGN POST
PPPL - POWER POLE
PTSP - TELSTRA PIT
PSMH - SEWER MANHOLE
CLASS A: Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a on-destructive excavation (pot holing) technique. The vertical information for this locating method is to the top or shallowest part of the located service. The 3D location is recorded by survey as an X, Y, Z coordinate.
CLASS B: Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sondes or flexi-trace, ground penetrating radar and acoustic pulse equipment. This is the most common form of utility locating and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, soil conditions and multiple banks of cables affecting the locating signal.
CLASS C: Information is collected by correlating the survey of visible utility surface features such as marker plates or water hydrants and acquired Dial-Before-You-Dig plans to "draw" a string which shows the approximate position of services. This method does not usually show multiple banks of cables and does not always show three dimensional information. Electronically traced locate marks with poor scratchy signals are represented as OL-C.
CLASS D: Information is the most basic level of utility locations using only information based on existing Dial-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should always be treated as an indication of the presence of a service only and should not be used for design. GPR scans are also represented as OL-D as the GPR image cannot be confirmed to its origin point. Depths on GPR scan must be treated as indicative only.

DIAL BEFORE YOU DIG
www.1100.com.au

GENERAL SURVEY NOTES:
• THIS TITLEBLOCK IS AN INTEGRAL PART OF THIS DWG AND SHOULD NOT BE REMOVED
• BOUNDARIES HAVE BEEN DEFINED BY SURVEY
• CONTOURS ARE INDICATIVE OF LAND FORM. SPOT LEVELS TAKE PRECEDENCE.
• LEVEL DATUM IS AHD * COORDINATE SYSTEM MGA 2020
• IT IS THE RESPONSIBILITY OF ANY USER OF THIS DATA TO ENSURE ANY OTHER DATA BEING INTEGRATED IS ON THE SAME COORDINATE SYSTEM
• REFER TO THE FACE OF THE PLAN FOR TITLE NOTATIONS

SCALE 1:200

ORIGIN	PM 17166 E 307479.099 N 6 1986320440
ORIENTATION	PM17166 TO SSM13131
AHD ORIGIN	SSM 17166 RL 40.646 CLASS LB

CLIENT : LANDCOM
PLAN IN RELATION TO : BULLI HOSPITAL, BULLI
SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING TO QUALITY LEVEL B
PURPOSE: ENGINEERING DESIGN
SHEET 2 OF 6

DIGITAL SURVEY SOLUTIONS
UTILITY MAPPING
SUITE 5.04, 32 DELHI ROAD
MACQUARIE PARK NSW 2113
SCOTT DEVERIDGE 0425 285 270
www.astrea.com.au

JOB REFERENCE : A2384	I/D 7453
DWG No. A2384-DETAIL	
SURVEYOR: EK, BD, JD	SCOTT DEVERIDGE
DATE OF SURVEY: FEB. 2022	REGISTERED LAND SURVEYOR UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002
UTILITY LOCATOR: B.C.	
© ASTREA 2021 - UNAUTHORISED USE IS PROHIBITED	
REV	AMENDMENTS
	DATE



UTILITY ASSETS LEGEND	
ELECTRICITY	
COMMS TELEPHONE LINE	—T—T—
COMMS OPTICAL FIBRE	—OU—OU—
COMMS HOUSE CONNECTION	—TH—TH—
WATER MAIN	
WATER HOUSE CONNECTION	—W—W—
LOW PRESSURE GAS	
GAS HOUSE CONNECTION	—GH—GH—
SEWER MAIN	
STORMWATER PIPE	—SW—SW—SW—
OVERHEAD ELECTRICITY	—OP—OP—OP—

UTILITY MAPPING NOTES:

1. Subsurface utility investigation was undertaken by Atria Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.
2. Positions are based on Atria Class A & B point surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may still exist.
3. This plan shows a representation of the dwg model, this model should be viewed in a cadd environment to interpret this information.
4. This utility plan is valid for 28 days starting from the date of the issue, as underground utility works are often updated.
5. Electricity cables are not necessarily enclosed in conduits and are not necessarily covered with markers, tape or other indicators of their presence.
6. All services have been electronically traced in the field and are shown here for diagrammatic purposes only. Depths shown are approximate only and should be verified prior to works.
7. This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.

SUBSURFACE UTILITY INFORMATION (SUI) ASS488 LOCATION CLASS

Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be managed.

CLASS A: Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a on-destructive excavation (pot holing) technique. The vertical information for this locating method is to the top or shallowest part of the located service. The 3D location is recorded by survey as an X, Y, Z coordinate.

CLASS B: Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sondes or flexi-trace, ground penetrating radar and acoustic pulse equipment. This is the most common form of utility locating and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, soil conditions and multiple banks of cables affecting the locating signal.

CLASS C: Information is collected by correlating the survey of visible utility surface features such as marker plates or water hydrants and acquired Dial-Before-You-Dig plans to "draw" a string which shows the approximate position of services. This method does not usually show multiple banks of cables and does not always show three dimensional information. Electronically traced locate marks with poor scratchy signals are represented as CL-C.

CLASS D: Information is the most basic level of utility locations using only information based on existing Dial-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should always be treated as an indication of the presence of a service only and should not be used for design. GPR scans are also represented as CL-D as the GPR image cannot be confirmed to its origin point. Depths on GPR scan must be treated as indicative only.

GENERAL SURVEY LEGEND:

BB - R/L POT HOLE INVERT	PWHY - HYDRANT
DP - DRAINAGE PIT	PWSV - STOP VALVE
DX - CHAMBER	PSHT - SPOT HEIGHT
EJ - EDGE OF FORMATION	PGPM - GAS MARKER
EP - EDGE OF PAVEMENT	PGTP - GAS TEST POINT
FI - GUTTER FLOW INLET	PSIN - SIGN POST
PI - PIPE INVERT	PPPL - POWER POLE
RC - ROAD CROWN	PTSP - TELSTRA PIT
	PSMH - SEWER MANHOLE

DIAL BEFORE YOU DIG
www.1100.com.au

GENERAL SURVEY NOTES:

- THIS TITLEBLOCK IS AN INTEGRAL PART OF THIS DWG AND SHOULD NOT BE REMOVED
- BOUNDARIES HAVE BEEN DEFINED BY SURVEY
- CONTOURS ARE INDICATIVE OF LAND FORM. SPOT LEVELS TAKE PRECEDENCE.
- LEVEL DATUM IS AHD. * COORDINATE SYSTEM MGA 2020
- IT IS THE RESPONSIBILITY OF ANY USER OF THIS DATA TO ENSURE ANY OTHER DATA BEING INTEGRATED IS ON THE SAME COORDINATE SYSTEM
- REFER TO THE FACE OF THE PLAN FOR TITLE NOTATIONS

SCALE 1:200

GDA 2020

ORIGIN	PM 17166 E 307479.099 N 6 1986320440
ORIENTATION	PM17166 TO SSM13131
AHD ORIGIN	SSM 17166 RL 40.646 CLASS LB

CLIENT : LANDCOM

**PLAN IN RELATION TO :
BULLI HOSPITAL, BULLI**

**SHOWING : TOPOGRAPHICAL SURVEY AND
UTILITY MAPPING TO QUALITY LEVEL B**

PURPOSE: ENGINEERING DESIGN

SHEET 3 OF 6

DIGITAL SURVEY SOLUTIONS
UTILITY MAPPING
SUITE 5.04, 32 DELHI ROAD
MACQUARIE PARK NSW 2113
SCOTT DEVERIDGE 0425 285 270
www.astrea.com.au

JOB REFERENCE : A2384
DWG No. A2384-DETAIL
SURVEYOR: EK, BD, JD
DATE OF SURVEY: FEB. 2022
UTILITY LOCATOR: B.C.

I/D 7453
SCOTT DEVERIDGE
REGISTERED LAND SURVEYOR
UNDER THE SURVEYING AND
SPATIAL INFORMATION ACT, 2002

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REV	AMENDMENTS	DATE



UTILITY ASSETS LEGEND

ELECTRICITY

COMMS TELEPHONE LINE

COMMS OPTICAL FIBRE

COMMS HOUSE CONNECTION

WATER MAIN

WATER HOUSE CONNECTION

LOW PRESSURE GAS

GAS HOUSE CONNECTION

SEWER MAIN

STORMWATER PIPE

OVERHEAD ELECTRICITY

UTILITY MAPPING NOTES:

1. Subsurface utility investigation was undertaken by Atria Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.

2. Positions are based on Astrea Class A & B point surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may still exist.

3. This plan shows a representation of the dwg model, this model should be viewed in a cadd environment to interpret this information.

4. This utility plan is valid for 28 days starting from the date of the issue, as underground utility works are often updated.

5. Electricity cables are not necessarily enclosed in conduits and are not necessarily covered with markers, tape or other indicators of their presence. All services have been electronically traced in the field and are shown here for diagrammatic purposes only. Depths shown are approximate only and should be verified prior to works.

6. This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.

7. This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.

SUBSURFACE UTILITY INFORMATION (SU), ASS488 LOCATION CLASS

Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be managed

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BULLI HOSPITAL, BULLI

SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING TO QUALITY LEVEL B

DIGITAL SURVEY SOLUTIONS

UTILITY MAPPING

SUITE 5.04, 32 DELHI ROAD

MACQUARIE PARK NSW 2113

SCOTT DEVERIDGE 0425 285 270

www.astrea.com.au

JOB REFERENCE : A2384

DWG No. A2384-DETAIL

SURVEYOR: EK, BD, JD

DATE OF SURVEY: FEB. 2022

UTILITY LOCATOR: B.C.

REGISTERED LAND SURVEYOR UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002

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SCALE 1:200

ORIGIN

ORIENTATION

AHD ORIGIN

PM 17166

E 307479.099 N 6 1986320440

PM17166 TO SSM13131

SSM 17166

RL 40.646 CLASS LB

PURPOSE: ENGINEERING DESIGN

SHEET 4 OF 6

ASTREA



SUBJECT TITLE NOTATIONS
1/326181 (LOT 1 DP 326181) - LAND EXCLUDES MINERALS VIDE C668833
EASEMENT FOR WATER SUPPLY VIDE P959978
1/83742 (LOT 1 DP 83742) - LAND EXCLUDES MINERALS
AUTO CONSOL 3447-86 (LOTS 3-4 IN DP 7677) - LAND EXCLUDES MINERALS VIDE A735081
AUTO CONSOL 3142-227 (LOT 2 IN DP 7677, LOTS 5-6 DP 7677) - LAND EXCLUDES MINERALS VIDE C668833
1/7677 (LOT 1 DP 7677) - LAND EXCLUDES MINERALS VIDE C668833
AUTO CONSOL 2385-147 (LOTS 20-22 IN DP 6793) - LAND EXCLUDES ROADS WITHIN LOT 2
19/6793 (LOT 19 DP 6793) - NIL
1/595930 (LOT 1 DP 595930) - (A) - EASEMENT FOR ELECTRICITY PURPOSES
1 WIDE AND VARIABLE VIDE AG545362
(B) - EASEMENT FOR SUBSTATION PREMISES 42159
VARIABLE WIDTH VIDE AG545362
(C) - RIGHT OF WAY VARIABLE WIDTH VIDE AG54362

UTILITY ASSETS LEGEND
ELECTRICITY
COMMS TELEPHONE LINE
COMMS OPTICAL FIBRE
COMMS HOUSE CONNECTION
WATER MAIN
WATER HOUSE CONNECTION
LOW PRESSURE GAS
GAS HOUSE CONNECTION
SEWER MAIN
STORMWATER PIPE
OVERHEAD ELECTRICITY

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SCALE 1:200
0 5 10 15 20

ORIGIN	PM 17166 E 307479.099 N 6 1986320440
ORIENTATION	PM17166 TO SSM13131
AHD ORIGIN	SSM 17166 RL 40.646 CLASS LB

PURPOSE:	ENGINEERING DESIGN
SHEET 5 OF 6	

NOTES

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL REQUIREMENTS AND / OR AS DIRECTED BY THEIR REPRESENTATIVE;
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT COUNCIL SPECIFICATIONS AND OTHER CONSULTANT DRAWINGS. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK;
- THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJOINING PROPERTIES WITHOUT THE WRITTEN PERMISSION OF THE OWNERS OR THE RELEVANT AUTHORITY;
- NO TREES ARE TO BE REMOVED OTHER THAN THOSE NOTED ON PLAN WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM COUNCIL;
- TREES TO BE RETAINED ON SITE SHALL BE PROTECTED BY SUITABLE BARRIER FENCING OR APPROVED EQUIVALENT PRIOR TO THE COMMENCEMENT OF WORKS;
- INFRASTRUCTURE & DEVELOPMENT CONSULTING ACCEPTS NO RESPONSIBILITY FOR ANY SURVEY INFORMATION PROVIDED. ALL SURVEY INFORMATION SHOULD BE CONFIRMED BY A REGISTERED SURVEYOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES, OMISSIONS OR ERRORS SHALL BE REPORTED TO THE SUPERINTENDENT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK;
- SURVEY MARKS SHALL BE RETAINED AT ALL TIMES WHERE POSSIBLE. IF A SURVEY MARK IS TO BE REMOVED THE SUPERINTENDENT IS TO BE NOTIFIED AND THE CONTRACTOR IS TO FIRST OBTAIN CONSENT FROM THE DEPARTMENT OF LAND AND PROPERTY INFORMATION NSW PRIOR TO REMOVAL;
- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE THE LINE AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS AND MAKE ARRANGEMENTS TO RELOCATE OR ADJUST IF NECESSARY. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CONTRACTOR TO ENSURE ADEQUATE PROTECTION OF EXISTING SERVICES TO BE RETAINED THROUGHOUT DURATION OF DEMOLITION WORKS;
- THE CONTRACTOR SHALL OBTAIN ALL REGULATORY AUTHORITY APPROVALS AT THEIR OWN EXPENSE;
- THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS TO ADJOINING PROPERTIES AT ALL TIMES. IF REQUIRED THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES TO MAINTAIN SUPPLY TO EXISTING BUILDINGS REMAINING IN OPERATION DURING THE WORKS. ONCE DIVERSION IS COMPLETE THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD. ALL WORKS TO BE TO THE SATISFACTION OF THE SUPERINTENDENT AND THE RELEVANT SERVICE AUTHORITY;
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES;
- THE CONTRACTOR SHALL UNDERTAKE ANY TEMPORARY TRAFFIC CONTROL MEASURES AS REQUIRED BY COUNCIL. ALL WORKS TO BE IN ACCORDANCE WITH COUNCIL'S TRAFFIC MANAGEMENT POLICY. ALL APPROPRIATE WARNING SIGNAGE TO BE DISPLAYED FOR THE DURATION OF THE WORKS;
- ALL WORKMANSHIP AND MATERIALS TO COMPLY WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS AND LOCAL STATUTORY AUTHORITY CODES;



LEGEND

- TEMPORARY SEDIMENT FENCE. REFER TO DRAWING C101 FOR DETAILS
- EXISTING FENCE TO BE DEMOLISHED AND REMOVED
- STABILISED CONSTRUCTION ENTRANCE. REFER TO DRAWING C101 FOR DETAILS
- SANDBAG SEDIMENT TRAP. REFER TO DRAWING C101 FOR DETAILS
- EXISTING BUILDINGS AND ASSOCIATED STRUCTURES TO BE DEMOLISHED AND REMOVED
- PROPOSED SITE COMPOUND / SKIP BIN LOCATION
- PROPOSED VEHICLE WASH BAY
- PROPOSED SITE VEHICLE TRAVEL ROUTE

Rev	Date	Description	Drawn	Appr
B	23.09.22	ISSUED FOR DA	JG	DR
A	20.09.22	ISSUED FOR DA	MRN	DR

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PROJECT
**LANDCOM
BULLI HOSPITAL
BULLI**

DRAWING TITLE
DEMOLITION PLAN

SCALE 1:400 STATUS DA

DRAWING NO. 22-526-SK-C100 REV B

Technical Advisory Note

Quality Information			
Project:	Old Bulli Hospital TMP		
Project Number:	SCT_00363		
Document Name:	Construction Traffic Management Plan for Demolition Works		
Version:	2.0	Date:	21 September 2022
Author:	Shawn Cen	Principal Consultant	<i>Shawn Cen</i>
Reviewer:	Jonathan Busch	Associate Director	<i>JDB</i>
Authoriser:	Jonathan Busch	Associate Director	<i>JDB</i>

1.0 Introduction

1.1 Project background

SCT Consulting was engaged by Landcom to prepare a Construction Traffic Management Plan (CTMP) for the Demolition Works for Old Bulli Hospital TMP. The development application currently is seeking the demolition of the Old Bulli Hospital.

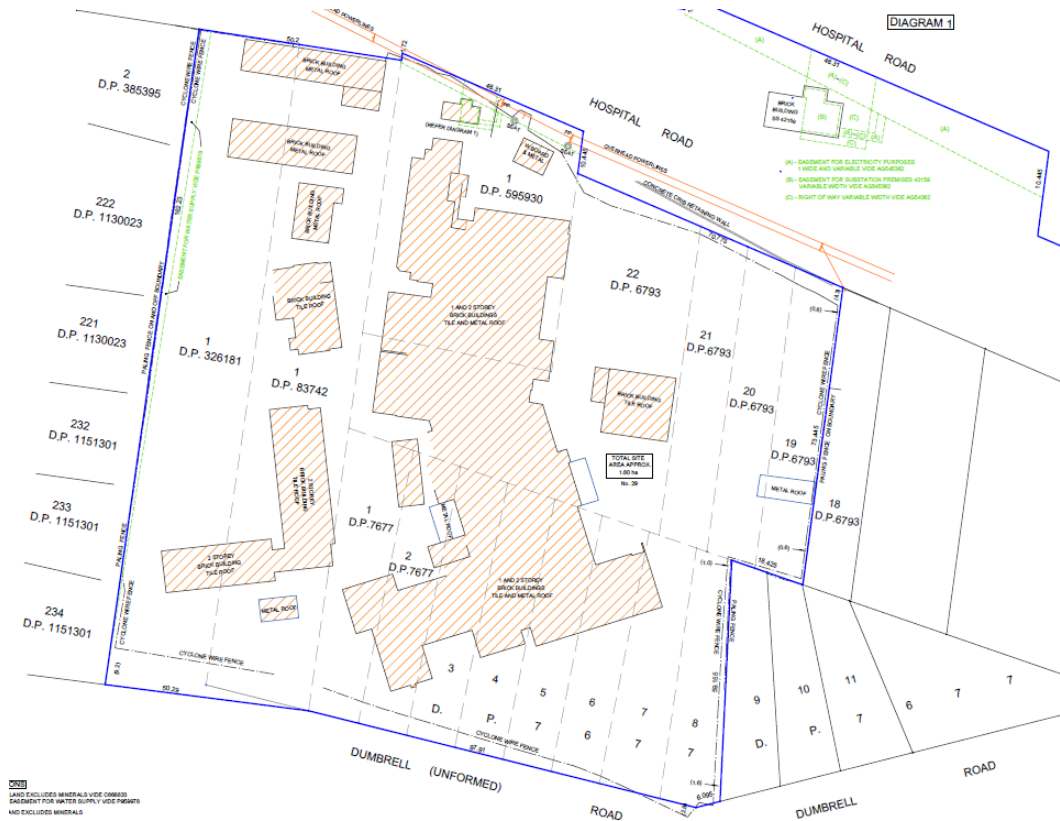
The CTMP for the demolition of the project will cover the below key aspects:

- Review of relevant background documentation for the site including Wollongong Council (LEP and DCP), Transport for NSW's (TfNSW's) Traffic Control at Work Sites Technical Manual, Australian Standards and TfNSW Guidelines where relevant.
- Desktop review of existing site conditions relevant to the heavy vehicle movements and safety of access for the site.
- Identify the location, if any, of works zones and loading zones required for the construction activity.
- Document assumptions regarding traffic movements, parking, delivery requirements and heavy vehicle routes.
- Conduct swept path assessments of key vehicles accessing and egressing the site.

1.2 Site context

The site has street frontage on Hospital Road, which is a local road. There are three access points for the current site which are all located on Hospital Road. Access to Hospital Road is provided by a signalised intersection with the state road network – Memorial Drive. The intersection is located at the northern extent of Memorial Drive, where it transitions from a divided carriageway in a motorway environment to an undivided arterial road cross-section. A site plan is shown in **Figure 1–1**.

Figure 1–1 Site plan



Source: Astrea, 2022

1.3 TfNSW's Traffic control at work sites Technical Manual

The *Traffic control at work sites technical manual* outlines TfNSW's expectations for how Traffic Management Plan (TMP's) and Traffic Guidance Schemes (TGS's) are prepared. As a construction activity that interfaces and uses the state road network, this document applies to the preparation of this CTMP.

The key objective for a TMP that works are arranged such that:

- Road workers can work safely
- Road users can travel around, past or through the work site safely
- Road workers and road users are separated wherever possible
- The activity does not impact or cause delay to road users or, if not reasonably practicable, it is minimised.

1.3.1 Personnel must be appropriately qualified

As of 1 July 2020, traffic control training in NSW is prescribed under the WHS Regulation 2017 and is managed by SafeWork NSW. As a requirement of the WHS Regulation 2017, a person undertaking traffic control work must hold the relevant qualification for the work they are performing. The three qualifications outlined in the WHS Regulation 2017 are as follows:

- Traffic Control (TC)
- Implement Traffic Control Plans (ITCP)
- Prepare Work Zone Traffic Management Plans (PWZTMP).

Implication for this project: Any Traffic Guidance Schemes must be pre-prepared by an individual who is qualified to prepare a Work Zone Traffic Management Plan (PWZTMP) and Traffic Control must only be conducted by appropriately qualified individuals.

1.3.2 Hierarchy of controls

TfNSW identifies a hierarchy of controls (**Table 1-1**) that should inform the way that interventions are developed.

Table 1-1 Hierarchy of traffic controls

Traffic management method	Description	Examples
Around (elimination)	<p>An around method is where traffic is completely separated from the work area. An around method is the preferred TTM method where achievable, as a majority of risks associated with TTM are eliminated and it generally provides the lowest overall net risk option.</p> <p>This method must be considered as the first option, however, if it cannot be achieved, justification must be provided in the TMP.</p>	<p>Examples of around methods include:</p> <ul style="list-style-type: none"> – A road closure requiring a detour of all traffic. – Construction of a sidetrack. – Contraflow of traffic via a separated median.
Past (isolation or engineering)	<p>A past method is where substitution, isolation and engineering controls are used to guide traffic along an adjacent path to the work area. A past method includes the use of a barrier or shifting of traffic to provide complete separation of workers and traffic.</p>	<p>Examples of past methods include:</p> <ul style="list-style-type: none"> – Contraflow without a separated median. – A lateral shift taper. – Use of an accepted temporary barrier system.
Through (administration and PPE)	<p>A through method relies on administrative, training and PPE controls only. A through method does not provide separation of traffic to the work area and requires the passage of traffic through the work area.</p> <p>A through method must only be considered when around and past strategies are not achievable or the risk generated by installing those options outweighs the safety benefit.</p>	<p>Examples of through method include:</p> <ul style="list-style-type: none"> – Directing road users immediately over the work area. – Separation is only achieved by the use of cones or bollards. – Pilot vehicle used to platoon road users.

Source: Transport for NSW, 2022

For the proposed construction activity, traffic from the site can't be eliminated, isolated or engineered away. Waste materials need to be transported from site and the only access points are the public road network.

1.3.3 Risk evaluation

TfNSW prescribes a risk management approach to identify and control hazards for traffic management. The list of hazards is identified in **Table 1-2**.

Table 1-2 Traffic management hazards and risks

Hazards and risks	
Moving traffic	Traffic generating special events
Queued traffic	Non-compliance with temporary speed limits
High volume traffic	Reduced lane and shoulder widths
High vulnerable road user activity	Compromised access points
Other construction activity or roadworks in close proximity to proposed work site	Emergency vehicle access
Rising and setting of the sun	Overhead power lines or other utilities
Traffic speed and compliance behaviour	Horizontal (curves) and vertical (crests/sags) alignment
Traffic composition	Crash history
Number and location of traffic control points	Site vehicle access and egress points
Exposure and proximity of workers to live traffic	Topographical constraints
Length of delays for road users	

Source: Transport for NSW, 2022

The risk matrix which is used to evaluate the need for intervention is provided in **Figure 1–2**.

Figure 1–2 Risk matrix

Risk evaluation matrix								
Risk ratings: Very high VH High H Medium M Low L			Consequence					
			Insignificant	Minor	Moderate	Major	Severe	Catastrophic
			C6	C5	C4	C3	C2	C1
Likelihood	Almost certain	L1	M	H	H	VH	VH	VH
	Very likely	L2	M	M	H	H	VH	VH
	Likely	L3	L	M	M	H	H	VH
	Unlikely	L4	L	L	M	M	H	H
	Very unlikely	L5	L	L	L	M	M	H
	Almost unprecedented	L6	L	L	L	L	M	M

Source: Transport for NSW, 2022

The key risks for the site are associated with truck collisions, particularly with vulnerable user groups. Controls are required to manage the potential conflicts caused by trucks, which are outlined in this plan.

2.0 Construction activities

2.1 Works

The works contain the demolition of Old Bulli Hospital which currently has two carports and 15 buildings including a Main Building, an electrical station, storage and change rooms, two maintenance workshops etc.

2.2 Work hours

In accordance with the *Draft Construction Noise Guideline* (EP&A) recommended standard hours for construction work, construction activities are proposed to occur between the hours of 7.00 am to 6.00 pm on weekdays, with no work on Saturdays, Sundays or Public Holidays. The work does not involve blasting.

The demolition work is expected to last up to eight weeks.

2.3 Construction worker parking

There will be on average 10 – 20 workers during the demolition works. On-street parking on Hospital Road between the eastern and western accesses is restricted.

There is sufficient on-site parking area to satisfy the worker's parking demand. Workers will not use on-street parking.

It is therefore expected that there will be minimal traffic generated by workers arriving at the site and that most traffic will be outside of typical commuter peak periods. Workers will be travelling in the counter-flow direction to the normal commuters in the morning and afternoon, which further reduces the impact on the surrounding network.

During site induction, workers should be advised of this information.

2.4 Construction vehicles

There will be a range of vehicles on site including from 15 to 60 tons. The largest vehicle accessing site would be a 19m long truck & dog vehicle during the demolition stage. The arrival and delivery of one oversize load (excavator) may be required.

If oversize vehicles are required, this will be confirmed post-approval. Any relevant traffic control to support the arrival of these vehicles will be confirmed.

According to the *Old Bulli Hospital, Decommission and Demolition Works Cost Estimate Report* (AltusExpertService, 2021), the total area of the building/structure of the site is 10,015 m². This has been estimated to be approximately 12,719 m³ or 16,395 tons of waste generated during the demolition stage¹. Assuming a demolition work program of 12 weeks (five days per week), the estimated truck movements would be nine movements per day². This results in 18 one-way trips during the day (one movement represents one inbound and one outbound trip).

Due to the loading efficiency and variation of the trucks, the exact number of trips would vary in operation. The truck demand would be spread out across the day. Given the relatively small number of vehicles generated by the site, the road network is expected to be able to manage the temporary increase in traffic with limited impacts on other road users.

2.5 Construction site access and routes

Access to the site is provided on Hospital Road. It connects to Princess Highway and Memorial Drive to the east, which are both classified as 19m B-double routes about 350m to the east (**Figure 2-1**).

Memorial Drive extends further to North Wollongong to the south where it connects with Princes Motorway. Hence, it is expected that most of the construction vehicles would access to/from the south:

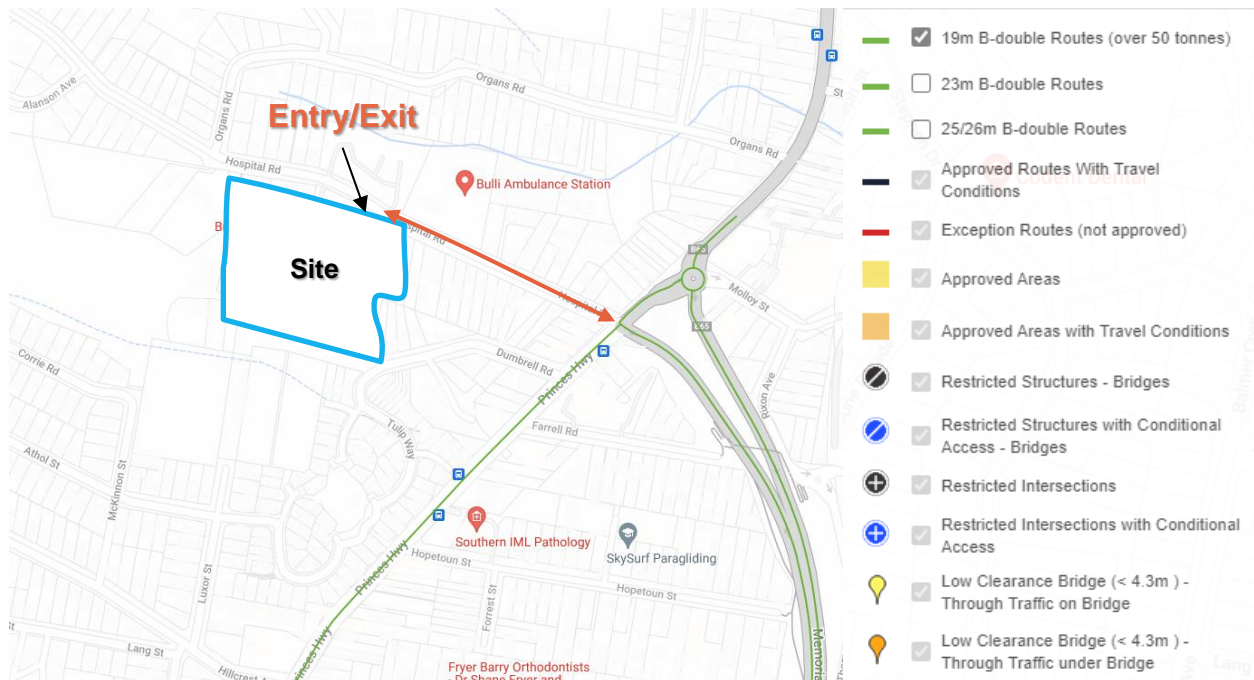
- **Outbound:** Hospital Road → Princes Highway → Memorial Drive
- **Inbound:** Memorial Drive → Hospital Road.

¹ [Demolition Waste - an overview | ScienceDirect Topics](#) suggests about a rate about 1.27m³/m² or 1.64 ton/m² for demolition waste.

² The capacity of a typical truck and dog is 25 m³ and 32 tons according to [Truck and Dog – Richmond Sand Gravel and Landscaping](#).

Although Organs Road also connects back to Princes Highway, it is not expected to be able to accommodate heavy vehicles since Princes Highway is not a 19m B-double route when approaching Organs Road and the shortest haulage route should be adopted between the site and any state road. Drivers should prioritise use of Hospital Road to limit impacts on residents.

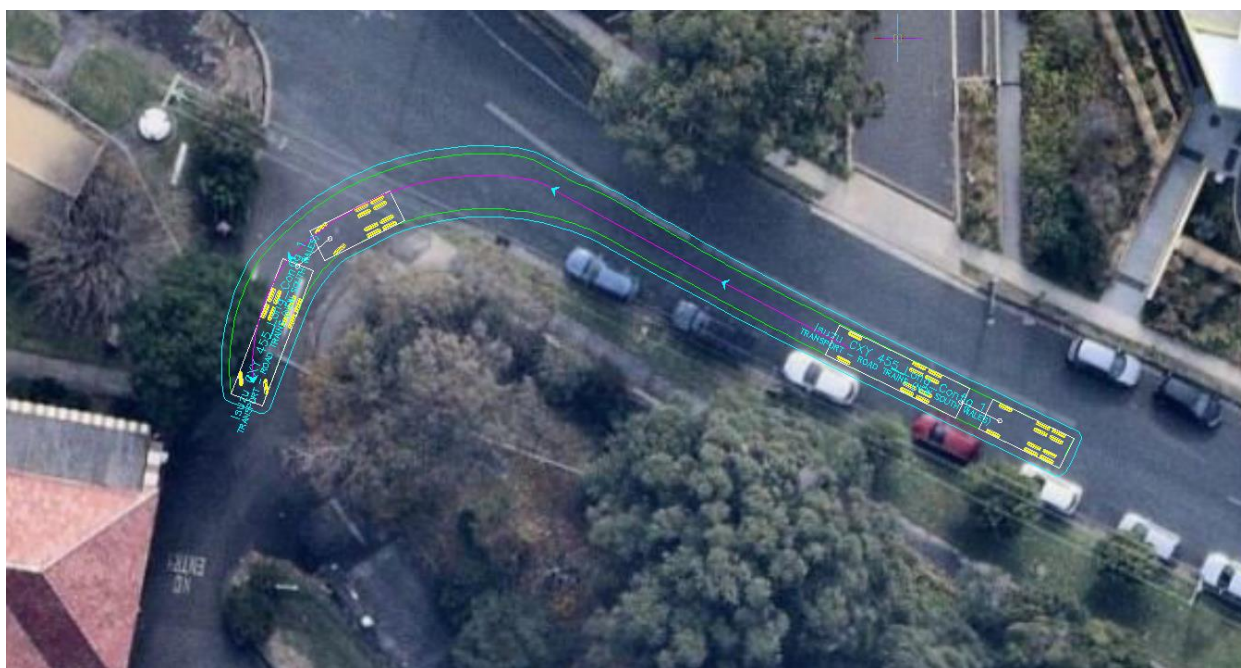
Figure 2-1 Higher Mass Limits Network for 19m B-Double Routes

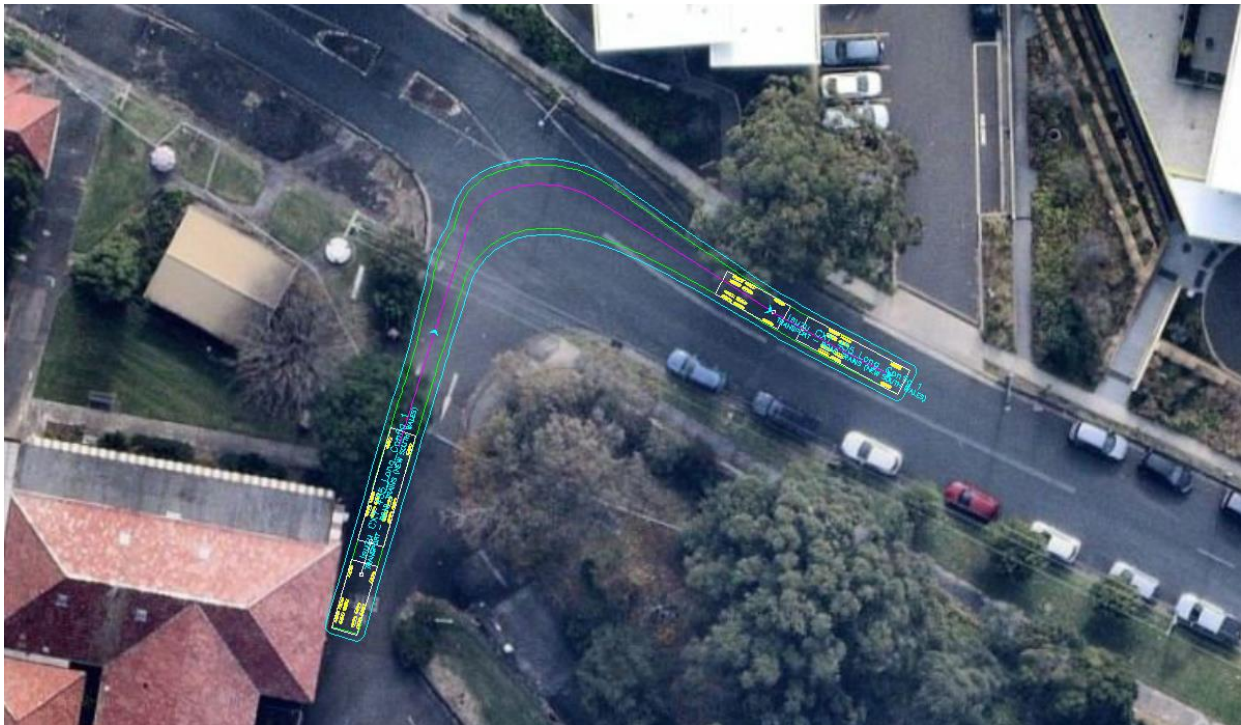


Source: Transport for NSW [NSW Combined Higher Mass Limits \(HML\) and Restricted Access Vehicle \(RAV\) Map < Heavy vehicles > Transport for NSW](#) with SCT Consulting annotations, 2022

Vehicles will enter and leave the site in a forward direction. This is shown in the swept paths in **Appendix A**. An excerpt is shown in **Figure 2-2**, which shows a vehicle entering and exiting the site in a forward direction with no impact on the parallel parking on Hospital Road.

Figure 2-2 Swept path for the access





Source: Nearmap, SCT Consulting, 2022

An accredited traffic controller will manage the site entry to minimise the risk of incidents between pedestrians and vehicles. The traffic controller will not stop traffic on Hospital Road. The main benefit of a traffic controller at the site entrance will be to hold back trucks from entering the driveway if the truck can't complete the movement safely (e.g. due to conflicts with pedestrians or cyclists).

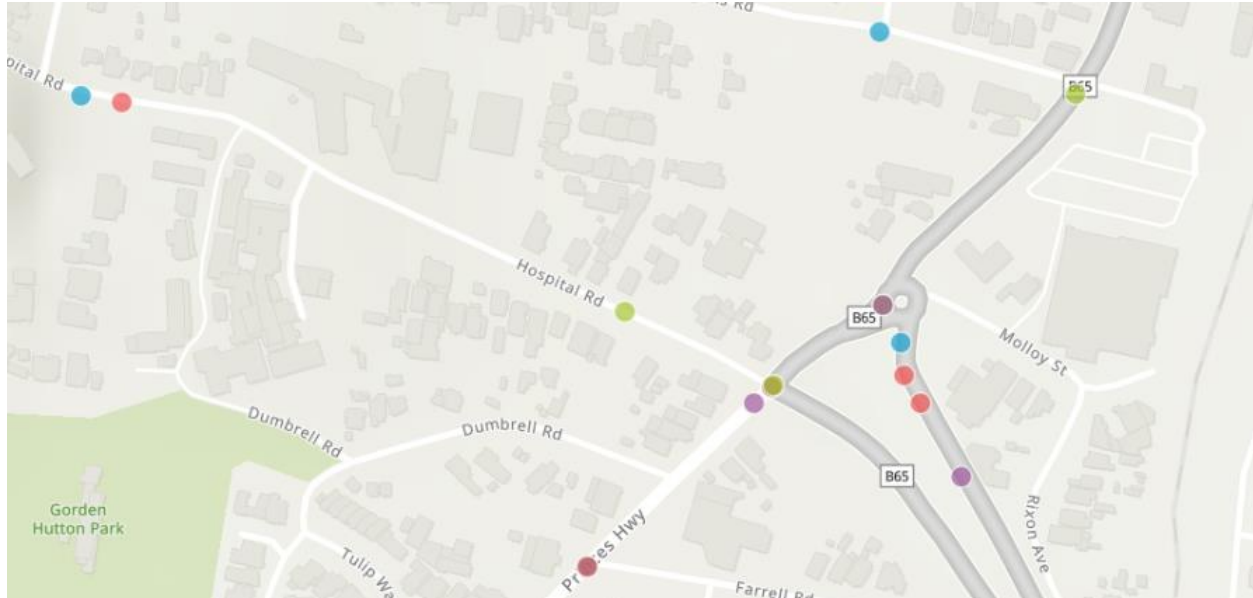
Queuing or marshalling of construction vehicles will not be permitted on the road network, with call-up procedures to be put in place to manage arrivals.

3.0 Construction traffic management

3.1 Crash history

Crash data is shown in **Figure 3–1** for the area.

Figure 3–1 Crash history on Hospital Road



Source: Transport for NSW, 2022

The data shows that Hospital road has relatively few crashes, however, the intersection of Hospital Road / Princes Highway has had four crashes since 2016. These crashes are mostly rear-end crashes, likely relating to drivers paying insufficient attention around the intersection.

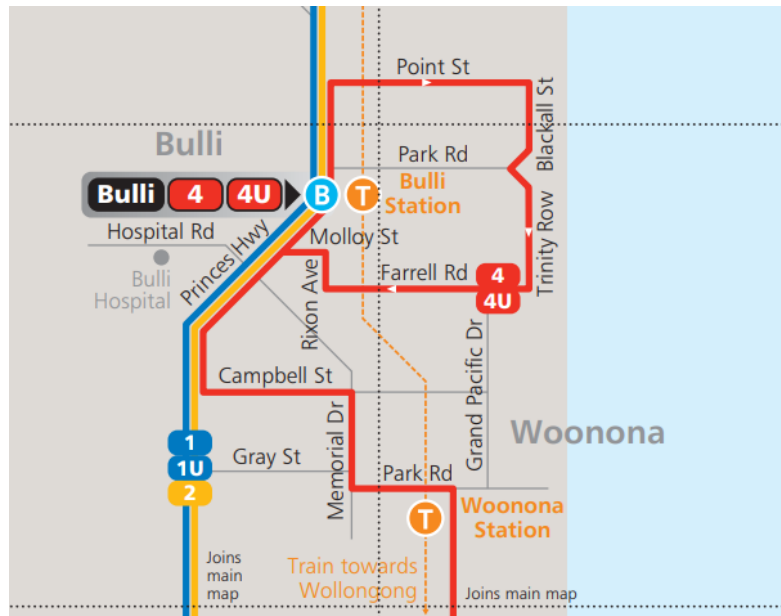
3.2 Pedestrian management

Pedestrian connectivity along Hospital Road and the pedestrian refuge outside the existing access will be maintained throughout construction. Appropriate fencing/hoarding will be provided to ensure pedestrians are appropriately separated from construction activities.

3.3 Public transport

There are no expected impacts on public transport. As shown in **Figure 3–2**, there are no bus routes that use Hospital Road.

Figure 3–2 Bus network map extract for Bulli



Source: Transport for NSW, 2022

3.4 Emergency vehicle access

Access to the site for emergency vehicles would be maintained at all times. The provision of a traffic controller at the entry and exit gate will assist with emergency services accessing the site should this be required.

3.5 Existing and future developments

There are no other known developments proposed near the site that could be adversely impacted by the construction works. There are no concurrent expected construction activities in the vicinity.

3.6 Traffic movements in adjoining council areas

No adverse impacts are expected from the movement of heavy vehicles through adjacent council areas.

3.7 Truck management

Road network impacts by worker traffic to the site will be mitigated by the construction workers generally starting earlier and finishing earlier than the commuter peak periods and would likely not coincide with the school or road network peak periods. Construction workers will be encouraged to carpool, further reducing the impact on the road network and local parking demands.

So as not to adversely impact the traffic system during the construction period, the construction traffic is expected to be managed as follows:

- Truckloads would be covered during transportation off-site
- All activities are not to impede traffic flow along local roads
- Truck arrivals and departures, and spoil removed during standard construction hours
- Avoidance of idling trucks alongside sensitive receivers
- Truck arrivals would be planned to ensure a consistent and minimal number of trucks arriving at the site at any one time.

To manage driver's conduct the following measures are to be implemented:

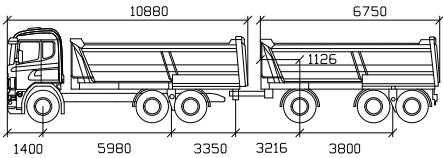
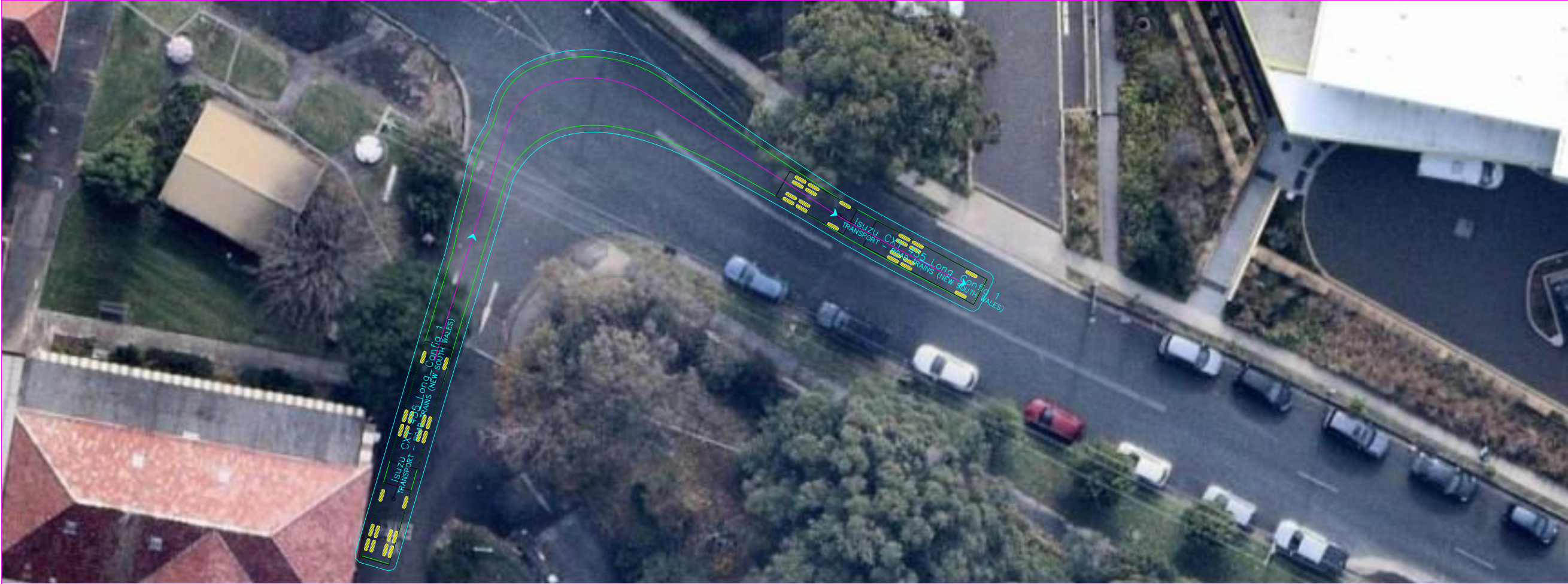
- All truck movements will be scheduled.
- Vehicles are to enter and exit the site in a forward direction along the travel path shown on delivery maps.

- Drivers are to always give way to pedestrians and cyclists.

Vehicles must enter and exit the site in a forward direction. They must wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site, the vehicles already on the road have the right-of-way. Vehicles entering, exiting, and driving around the site will be required to always give way to pedestrians.

Appendix A

Swept path assessment



Isuzu CXY 455 Long_Config 1

mm	
First Unit Width	4490
Trailer Width	2490
First Unit Track	2440
Trailer Track	2440
Lock to Lock Time	5.0
Steering Angle	35.7
Articulating Angle	70.0

infrastructure & development consulting

Bulli Hospital, 27-29 Hospital Road

Bulli, NSW 2516

Demolition Statement

September 2022

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Project Number	22-526	Date	30 September 2022
Project Name	Bulli Hospital	Status	DA
Client	Landcom	Revision	C
Author	Jissa George	Checked	Chris Avis

1 Executive Summary

This Demolition Plan and Statement has been compiled to instruct Wollongong Council on the procedure to remove existing assets from the Bulli Hospital site at 27-29 Hospital Road, Bulli. This document will specify the operation and approach to demolition works.

This Demolition Plan and Statement will form the basis and provide a framework for ensuring that the demolition activities do not adversely affect the health, safety, traffic conditions or environmental conditions for both the public and any neighbouring properties.

An initial investigation of the structures on site along with an analysis of the site itself shall be carried out before any stripping or demolition work is to commence. This investigation must be in accordance with any statutory obligations or regulatory provisions. From this investigation, a site works plan is to be prepared and documented. The plan itself must be submitted to the relevant regulatory authority for approval.

Prior to an approval of the site works plan from the regulatory authority, no stripping or demolition activity shall commence within the site boundaries or otherwise on the site. Where latent conditions or other conditions are discovered during the execution of works that requires a regulatory authority to be notified and approve proposed changes before they are put in effect, the regulatory authority is to be notified of the changes within 24 hours of discovery.

An investigation of structures is to be carried out with any results of the investigation recorded. Copies of these recordings must be made available for inspection by the regulatory authority. These records shall accompany the site works plan in order to validate the choice of safety procedures, particular sequence, method or process of demolition.

2 Site Description & Proposed Works

The Bulli Hospital site includes Lot 1 DP 326181, Lot 1 DP 83742, Lot 1 DP 595930, Lot 1 to 8 DP 7677 and Lot 19 to 22 DP 6793 and covers an area of approximately 2.76Ha.

Figure 1 - Existing Site



2.1 Scope of Demolition Works

There are numerous structures which will need to be demolished prior to commencement of construction activities for the site redevelopment. These are generally summarised below (note all existing services are to be disconnected prior to demolition works):

- The existing hospital buildings and associated structures. We note that demolition and removal of the existing on-ground pavements and associated vehicle access areas is not proposed as part of this proposal.

3 Demolition Planning

The demolition works are to be carried out by a qualified contractor for the safety of all operational works. Prior to the commencement of any works on the land, a detailed demolition work plan should be designed in accordance with the following regulations:

- Work Health & Safety Act 2011;
- Work Health & Safety Regulation 2011;
- Protection of the Environment Operation Act 1997;
- Protection of the Environment Operation Regulations (various);
- Demolition Work Code of Practice;
- AS2601:2001 – Demolition of Structures;
- AS1885:1990 – Workplace Injury and Disease Recording Standard;
- AS/NZS4804:2001 – Occupational Health and Safety Management Systems – General Guidelines on Principles, Systems and Supporting Techniques;
- National Code of Practice for Excavation Work;
- Asbestos Blueprint for NSW;
- Local Government Act 1993;
- Safe Work Australia (2011) – How to Safely Remove Asbestos;
- Safe Work Australia (2011) – How to Manage and Control Asbestos in the Workplace;
- NOHSC Code of Practice for the Safe Removal of Asbestos (2005);
- All relevant DEC, EPA, and Work Cover NSW Guidelines;
- Wollongong Council's DCP and Asbestos Policy; and
- Wollongong Council's Engineering Construction Specifications.

The appointed demolition Contractor should prepare the detailed plan to include the identification of any hazardous materials, methods of demolition, precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.

3.1 Timeframe

It is anticipated that the demolition works will commence shortly after approval has been received from Wollongong City Council. All demolition works are estimated to take 12 weeks as outlined in the CTMP prepared by SCT Consulting.

3.2 Site Notice Board

The works area is to be barricaded and signposted to define the area. The sign must be erected in a prominent position on the premises on which work is to be carried out. The sign is to be maintained during work and removed at the completion of the works.

3.3 Site Preparation

3.3.1.1 Site Access

Access to the demolition area is to be via the existing rural residential driveways. Throughout the demolition stage, the site is to be secured via perimeter fencing against entry by unauthorised personnel or vehicles. The fencing will be signposted with “Demolition Work in Progress” when applicable.

In the event of a fire, accident, or other event requiring emergency services to access the site, provision must be made for ready access at any time.

3.3.1.2 Access within the Structure

At least one access and egress route connecting all un-demolished areas to the nearest street must be provided for. It must be clearly marked to the satisfaction of any regulatory authority – this route is to be provided as an emergency exit in the event of fire or accident.

The proposed route is to be kept clear of any materials that could impede egress at all times – including accumulated demolition materials.

3.3.1.3 Demolition Exclusion Zone

An exclusion zone is to be clearly marked and signposted in accordance with the regulations specified above. This is the case even though demolition debris is to be retained within the site boundary.

If an unacceptable risk arises requiring additional measures, a detailed Job Safety Analysis and Safe Work Method Statement is to be prepared by the Contractor.

3.3.1.4 First Aid

A certified First Aid worker(s) shall be onsite full time during the works to administer First Aid in the event of an incident and to participate in any emergency evacuation drill.

3.3.1.5 Site Amenities

Appropriate amenities for site personnel are to be provided in accordance with any statutory requirements. Adequate refuse disposal methods and workers storage facilities shall be installed on site.

The site amenities will be powered by a local electrical source. The amenities will be maintained in a clean and hygienic manner during the course of the project.

4 Demolition Methodology

Initially, hand demolition will commence, with the structures initially stripped and tested for asbestos. Any recyclable materials will be identified and disposed of accordingly at this stage.

All septic systems will be disconnected by a qualified and appropriately accredited plumber. The tank will then be pumped and cleaned. The concrete tank will be excavated from the ground and removed off site.

4.1 Demolition Sequencing

The general staging and sequencing of the demolition works should include the following stages:

- Preliminary service searches are to be conducted prior to entering the site, a dial before you dig is to be carried out to identify any services that may exist;
- Site establishment including work zone setup, plant mobilisation, amenities establishment etc;
- Clearance certification;
- Install tree protection zone fencing around all trees within the site boundary;
- Preparation of site for asbestos removal works where appropriate;
- Once asbestos removal works are cleared demolition works will commence;
- Prepare buildings and small structures for induced collapses to minimise impacts to the surrounding environment;
- Stabilise structure where necessary by employing temporary bracing or other stabilisation measures;
- Disconnect all services before removing from site, meters to be returned to authorities;
- Demolition area remediation, tidy the site;
- Demobilise plant and equipment; and
- Site handover.

4.2 Permit Requirements

Any permit requirements such as the following are to be applied for prior to the commencement of works:

- Pump concrete from a public reserve or laneway;
- Stand a mobile crane within a public road reserve or laneway;
- Use part of Council's road or footpath area;
- Pump stormwater from site to Council's stormwater drains;
- Store waste and recycling containers, skip bins and / or building materials on part of Council's land;
- Application for approval to install / construct / alter an on-site grey water management system / on-site sewage management with Wollongong Council; and
- All other permits necessary to undertake the works.

4.3 Proposed Machinery

The proposed demolition works including removal of material may include the use of truck & dog vehicles and excavators. Refer section 2.4 *Construction Vehicles* of the CTMP prepared by SCT Consulting for more detailed information.

4.4 Personnel Protective Equipment During Demolition Works

Every site worker and visitor shall comply with relevant safety procedures on site. These include wearing a safety helmet complying with AS1801, and where appropriate, the following equipment:

- Eye protection complying with AS1336 and AS1337;
- Respirators complying with AS1715 and AS1716;
- Hearing protection complying with AS1270;
- Industrial safety gloves or mittens complying with AS2161;
- Safety footwear complying with AS2210;
- Industrial safety belts or harness complying with AS1891; and
- Disposable coveralls or overalls.

4.5 Protection of Public Roads

Precautions shall be taken in accordance with the requirements of the regulatory authority to minimise the spreading of mud and debris by vehicles leaving the site. All boundary roads (including Hospital Road and Dumbrell Road) are to be kept clear throughout the demolition phase of any trucks and other vehicles. Trucks and other large vehicles will leave the site accordingly and under the instruction of traffic management if required. Any damages to the road are to be repaired by the demolition Contractor, at their own expense.

4.6 Demolition Procedures

4.6.1.1 Locate any Existing Services and Utilities

Contractor to carry out a dial before you dig service investigation for the extent of the site works. Any potential services that may provide a hazard are to be located on site prior to commencement of any works. Services are either to be demolished and removed in accordance with service providers standards and requirements or a safe working zone is to be maintained by providing a restricted working zone around the service.

4.6.1.2 Disconnection of Existing Services

Existing utilities to be disconnected in accordance with service providers requirements. Any meters to be returned to relevant Authorities.

4.6.1.3 Cutting or Lowering of Large Members

Large members may be cut into smaller sized portions prior to lowering if necessary for equipment capacities. Whole or large portions of members shall be lowered in a controlled manner such that the likelihood of them falling freely is minimised. Wherever possible, a crane or similar lifting device shall be used to support beams or columns as they are being separated from the remainder of the structure.

4.6.1.4 Manual Demolition

Personnel shall be permitted to work from safe and serviceable work platforms only. They shall not be permitted to work from the top of a wall or partition being demolished unless it is attached to an approved fall arrest system. Where concrete members are being manually demolished, reinforcement shall not be cut while the concrete is being broken out.

4.6.1.5 Electrical Safety

Temporary electrical installations which supply electricity to appliances and equipment used for the demolition works are to comply with AS3012, and any other relevant regulations or requirements of the electrical supply authority. All electrical tools onsite are to be tagged appropriately.

4.7 Safety and Environmental Risk Control

Project risks should be assessed prior to work commencing to identify the high-level safety and environmental risks that are likely to be encountered during demolition works. A competent and qualified professional is to supervise demolition works at all times.

Where a risk assessment identifies ongoing demolition works may impact on adjoining properties, specific control measures will be designed with engineering review and undertaken to protect the adjacent sites. The structural integrity of adjoining or neighbouring buildings should not be affected through any demolition activities.

4.7.1.1 Weather

Daily monitoring of the weather will be undertaken by accessing the online weather bureau website. Precautions will be taken to ensure that the stability of the structure and safety of the workers on site will be maintained in the event of a sudden and severe change in weather.

In the event the wind reaches levels where the work is deemed to be unsafe for asbestos removal works (if required), or when debris cannot be effectively contained or captured, all works should stop and the work area made safe until conditions abate.

4.7.1.2 Dust Control

All procedures used in the demolition works shall be such as to minimise the release of dust into the atmosphere. Before commencement of stripping in an area of a structure, any existing accumulation of dust in that area should be collected, placed into suitable containers, and removed.

Selection of an appropriate collection technique, such as vacuuming or hosing down shall consider the nature of dust and the type of hazard it presents. Dust generated during stripping or during breaking of building fabric is to be removed from the site or otherwise contained. The use of excess water for this purpose shall be avoided.

4.7.1.3 Noise Control

Noise pollution shall be managed and minimised as far as predictable, with the selection of appropriate methods / equipment or the use of silencing devices where applicable. Noise is to be kept at no more than 5dBA above the ambient background noise present on site.

5 Waste Management Plan

In accordance with the waste minimisation and management guidelines provided in Wollongong City Council's DCP, a Waste Management Plan has been prepared to ensure the following objectives are to be achieved:

- Minimise waste generation and disposal to landfill;
- Maximise re-use and recycling at demolition stage;
- Footpaths, public reserves, street gutters are not to be used as places to store demolition / construction waste or materials of any kind without Council's approval;
- Any material moved offsite is to be tracked and transported in accordance with any relevant legislation;
- Waste is only transported to a place that can lawfully be used as a waste disposal facility; and
- Generation, storage, treatment and disposal of hazardous waste and any special waste (such as asbestos) is conducted in accordance with any relevant legislation.

Phase One – Demolition Stage:

Principal Off-Site Recycler / Landfill Site:

Whytes Gully Waste and Resource Recovery Centre
LOT 502 Reddalls Road, Kembla Grange New South Wales 2526

Demolition waste will be loaded directly onto trucks or waste bins for transportation to the above-mentioned licensed disposal facilities.

Materials	Estimated Volume (m ³)	On-Site Reuse	Off-Site Recycling / Disposal	
			Site	Location
Bricks	>500m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Concrete	>500m ³	Excess material to be used as granular fill, levelling materials and road base	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Timber (structural timber, fencing etc)	<200m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Plasterboard	<200m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Metal (window frames, pipework etc)	<250m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Roof Tiles	<300m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Floor Coverings (Carpet, Tiles etc)	<500m ³	-	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526
Road Material	<10m ³	Milled on site for use as road base and structural fill	Whytes Gully Waste and Resource Recovery Centre	LOT 502 Reddalls Road, Kembla Grange New South Wales 2526

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AUSTRAL
ARCHAEOLOGY

OLD BULLI HOSPITAL BULLI NEW SOUTH WALES

HISTORICAL HERITAGE ASSESSMENT

FINAL REPORT

LANDCOM

20 January 2023



DOCUMENT INFORMATION

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EXECUTIVE SUMMARY

Austral Archaeology Pty Ltd (Austral) has been commissioned by LANDCOM (the proponent) to undertake a Historical Heritage Assessment (HHA) for the proposed development at 27-29 Hospital Road, Bulli, New South Wales (NSW). The proposed development consists of the redevelopment of the Old Bulli Hospital, with the focus of this report a subdivision. This report will form part of the first Development Application [DA] being made to Wollongong Name under Part 4 of the *Environmental Planning and Assessment Act 1979* (EPA Act). The proposed works within the study area will have subsequent DA submissions, however, this will focus on the Stage 1 and Stage 2 components identified in Table 1.

Table 1 Development Application Stages

Stage	Proposed Works	Dates
1	Hazardous Material and Demolition of Structures to Ground Floor	Lodged 7 October 2022
2	Ground Remediation including Demolition of Slab, Retailing walls, foundations, driveways, paths and vehicle access/parking	Lodged 19 December 2022
3	Subdivision	Planned May 2023

The study area consists of Lots 19, 20, 21 and 22 DP6793, Lot 1 DP595930, Lot 1, DP83742, Lot 1 DP326181 and Lots 1, 2, 3, 4, 5, 6, 7, 8 DP7677 which comprise the entirety of the study area. The study area is located within Bulli Central Business District (CBD) and is within the Wollongong Local Government Area (LGA). The study area is not listed under any statutory Acts or Local Planning Instruments.

The purpose of this historical archaeological assessment is to assess the potential impact from the development on the significance of any built, landscape or archaeological values that may be present within or in the vicinity of the study area. The report will provide suitable management recommendations should impacts to archaeological values be anticipated.

IDENTIFIED HERITAGE VALUES

The study area does not appear on any identified heritage register at either the national or state level. This includes the State Heritage Inventory, the *Wollongong Local Environmental Plan 2009* or any Section 170 Heritage Registers.

It is concluded that there are varying degrees of historical heritage values and archaeological potential and sensitivity within the study area owing to the presence of the cottage hospital until 1945. It is concluded that the only known value related to one phase of use:

- Phase 1: The Bulli Cottage Hospital (1892-1945)

These remains are likely to be associated with the original development of the Bulli Hospital Cottage, which was erected in the 1890s and demolished in 1945. The location of the Cottage Hospital has not been able to be determined due to a lack of historical documentation of the site. This has resulted in the study area being deemed as having low archaeological potential as there is no focal point within the study area to target in terms of archaeological sensitivity. Furthermore, subsequent construction activities on the site may have impacted on whatever archaeological remains are present. However, as the proposed development consists of a range of activities that may therefore impact on unknown archaeological remains within the study area, a program of archaeological monitoring is recommended to identify any unexpected archaeological remains uncovered during the demolition and remediation process, and to sufficiently record, and manage any impacts to the archaeological resource as part of the proposed development.

RECOMMENDATIONS

On the basis of the findings of this report, it is recommended that:

- 1) An archival recording of the study area must be undertaken in accordance with Heritage NSW guidelines. The Archival Recording Report must be completed prior to the completion of demolition and be submitted to the Wollongong City Council Local Studies collection in digital and hard-copy formats.
- 2) During Demolition an Unexpected Finds Policy is to be implemented; specifically, there is the potential for time capsules and other information to be uncovered prior to any groundworks. These items are likely to be of interest to the local community and it is recommended that their location be documented. In terms of future management, preference should be given to retention onsite for future interpretation. If this is not feasible, donation to a relevant local heritage society or museum may be feasible. Where items such as this are found during the demolition works, all works in the immediate vicinity are to cease immediately and a qualified archaeologist is to be contacted to assess the situation and, if necessary, consult with Heritage NSW and Wollongong City Council regarding the most appropriate course of action.
- 3) Due to the long history of the hospital use and the potential for unanticipated archaeological deposits such as rubbish dumps or remains relating to the original cottage such as the time capsule be present, an archaeological research design (ARD) must be developed to support an application under Section 140 of the *NSW Heritage Act 1977*. The ARD will detail a program of archaeological investigations that will be undertaken during demolition and early earthworks. It is advised that the ARD and Section 140 permit approval be obtained and conditioned as part of the conditions of consent associated with the remediation DA.
- 4) It is advised that a Heritage Interpretation Plan (HIP) should be developed. The HIP will include details from the Archival Recording Report and archaeological program and identify opportunities to communicate the key heritage themes associated with the item. This will include places within the study area that are open to the public as where the former use of the item can be remembered. It is recommended that these spaces include information on the Bulli Cottage Hospital, 20th century hospital and individual such as Sid Warne, Syd Atkins and Charlie Stanbridge. It is preferential that, if identified, the memorial plaque and information on the time capsules which could be located on the site be included in public spaces along with any artefacts and physical fabric which could be salvaged from the site.
- 5) The highly significant trees identified within the arboricultural reports on the western side of the study area are recommended to be retained as part of remediation works and the demolition. The trees are present in earlier aerials and contribute to the amenity of the item and surrounding landscape. This may be re-evaluated following the production of the arborist and ecology reports.
- 6) A copy of this assessment is recommended to be lodged by the proponent in the local history section of the local library, and in the library maintained by Heritage NSW.

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1. INTRODUCTION

Austral Archaeology Pty Ltd (Austral) has been commissioned by LANDCOM (the proponent) to undertake a Historical Assessment (HHA) for the proposed development at 27-29 Hospital Road, Bulli, New South Wales (NSW). This report will form part of the first Development Application (DA) being made to Wollongong City Council under Part 4 of the *Environmental Planning and Assessment Act 1979* (EPA Act). The proposed works within the study area will have subsequent DA submissions, however, this will focus on the remediation and demolition components.

Table 1.1 DA Stages

Stage	Proposed Works	Dates
1	Hazardous Material and Demolition of Structures to Ground Floor	Lodged 7 October 2022
2	Ground Remediation including Demolition of Slab, Retaining walls, foundations, driveways, paths and vehicle access/ parking	Lodged 19 December 2022
3	Subdivision	Planned May 2023

The study area consists of lots 19, 20, 21 and 22, DP6793, Lot 1, DP595930, Lot 1, DP83742, Lot 1, DP326181 and lots 1, 2, 3, 4, 5, 6, 7, 8, DP7677 which comprise the entirety of the study area. The study area is located within Bulli Central Business District (CBD) and is within the Wollongong City Council Local Government Area (LGA).

The location of the study area is shown in Figure 1.1, Figure 1.2 and Figure 1.3.

1.1 METHODOLOGY

The methodology supporting this report involved a period of research to locate additional background material and to prepare a synthesis of the historical research to reflect better and understand the historical context of the study area.

The report is underpinned by the philosophy of the International Council on Monuments and Sites (ICOMOS) and the *Burra Charter: Australia ICOMOS Charter for Places of Cultural Significance, 2013* (Burra Charter), the practices and guidelines of Heritage NSW and the requirements of the *Wollongong Local Environmental Plan 2009* (Wollongong LEP) and *Wollongong Development Control Plan 2009* (Wollongong DCP).

1.2 ASSESSMENT OBJECTIVES

The purpose of this HHA is to assess the potential impact from the development on the significance of any heritage values that may be present within or in the vicinity of the study area. The report will provide suitable management recommendations should impacts to heritage values be anticipated.

The objectives of this report are to:

- Identify any potential historical heritage values within or in the vicinity of the study area;
- Produce an archaeological predictive model and sensitivity map to guide any management decisions regarding the study area;
- Make a statement of significance regarding any historical heritage values that may be impacted by the proposed development;
- Assess the impact of the proposed works on any identified historical heritage values; and
- Make appropriate management and mitigation recommendations.

1.3 PROJECT TEAM AND ACKNOWLEDGEMENTS

The project team has been led by Alexander Beben (Director, Austral) who has managed the project and provided input into the assessment approach and management recommendations. The assessment was authored by Nicole Monk (Archaeologist, Austral). David Marcus (Director, Austral) reviewed the draft report for quality assurance and technical adequacy.

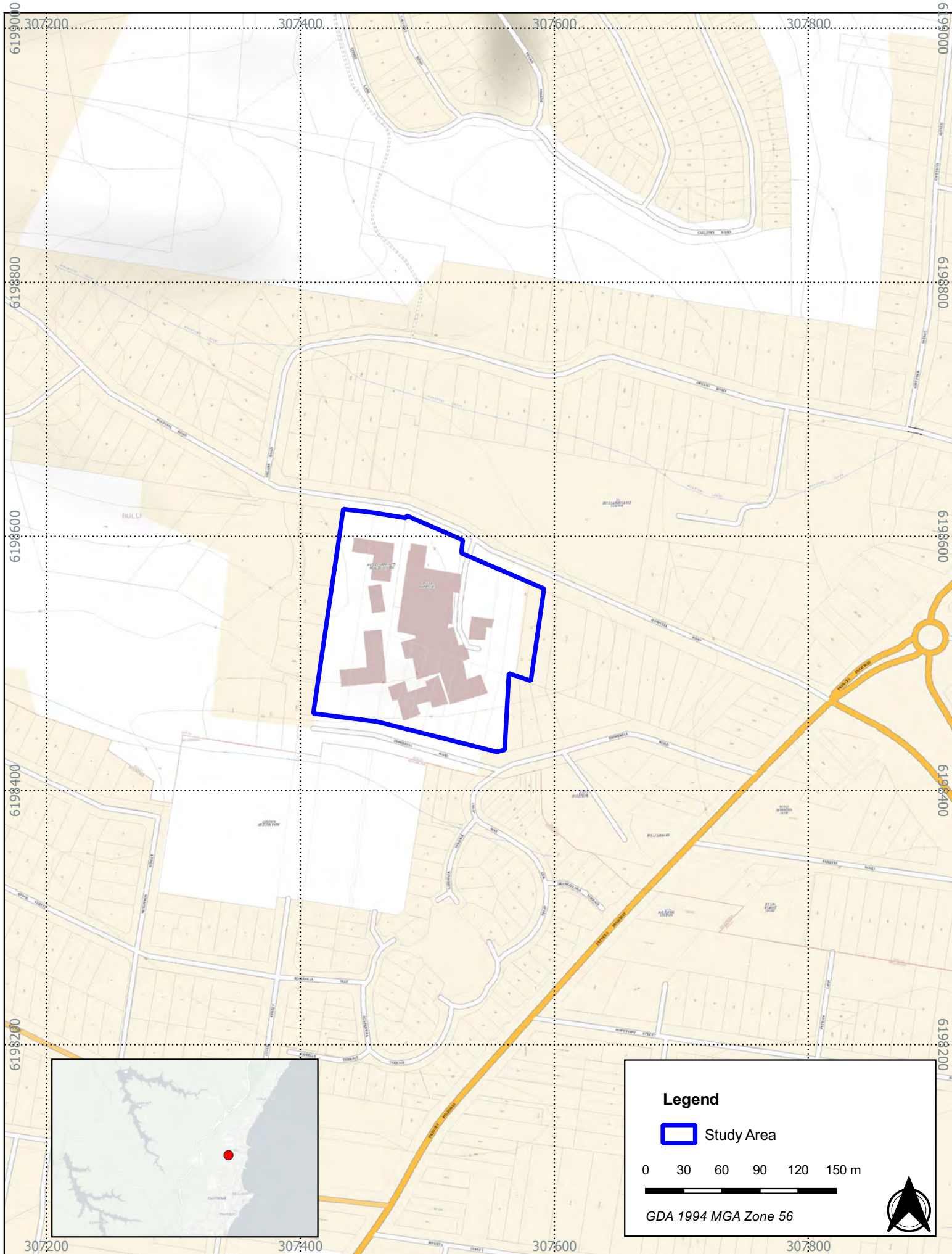


Figure 1.1 - Location of the study area

22127 - 27 Hospital Road, Bulli - HHA



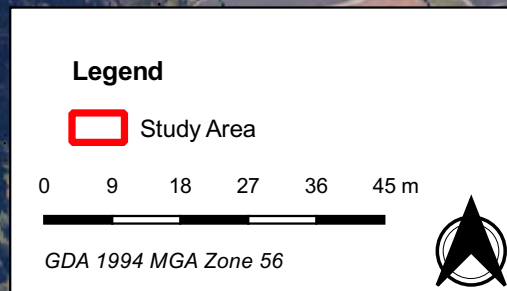
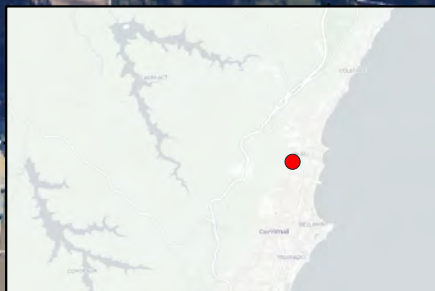


Figure 1.2 - Detailed aerial of the study area

22127 - 27 Hospital Road, Bulli - HHA



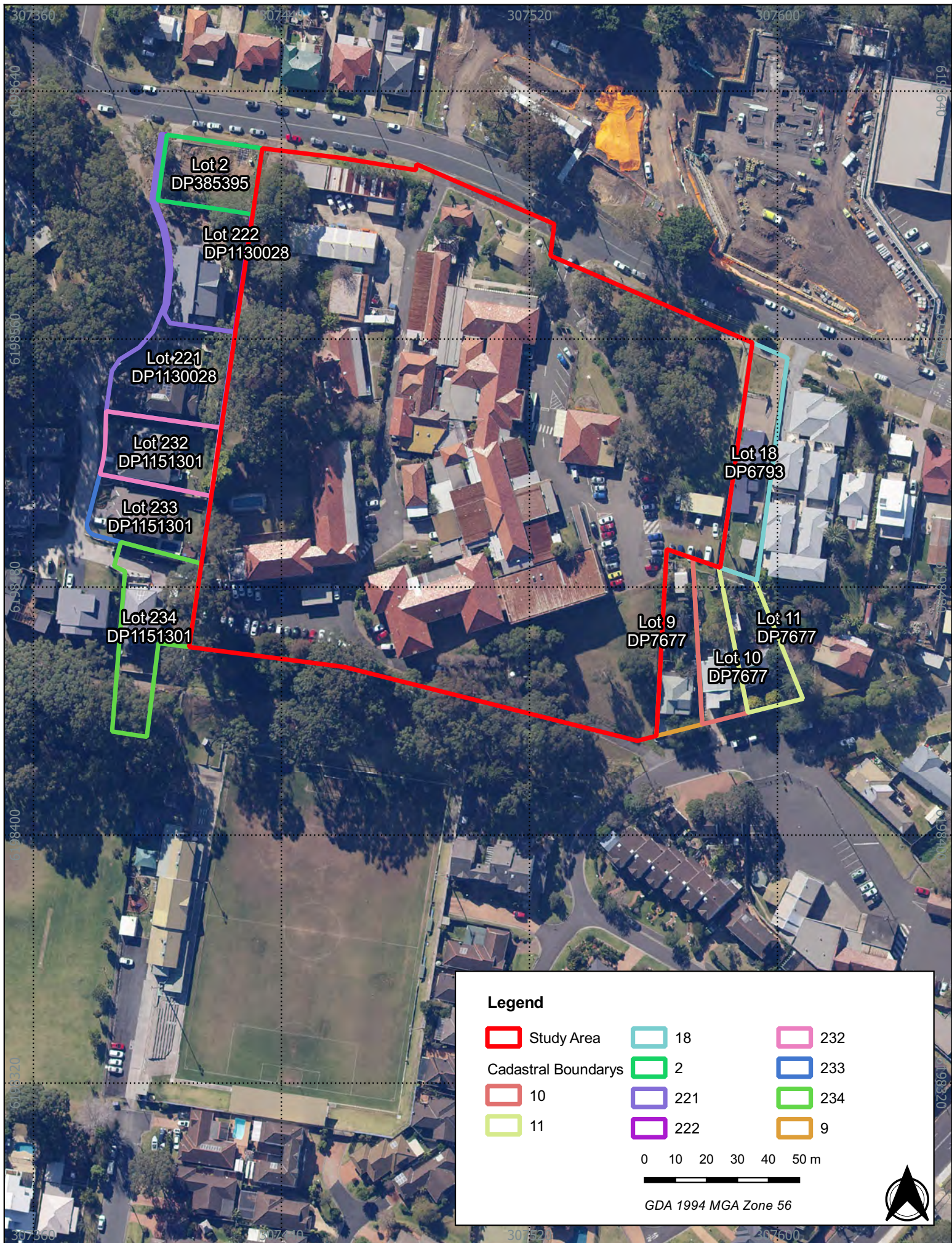


Figure 1.3 - Study area and neighbouring properties

22127 - 27 Hospital Road, Bulli - HHA



1.4 LIMITATIONS OF THE REPORT

This assessment includes an assessment of archaeological values to support the DA being made by the proponent. The report must be read in conjunction with the DA and additional reports, such as the arborist report, as they refer to supporting documentation not included within this report. It does not include an assessment of Aboriginal cultural heritage that may be present within the study area. An Aboriginal Cultural Heritage Due Diligence Assessment (ACHDDA) has been authored by Austral (2022) and includes information regarding the Aboriginal cultural heritage associated with the study area. The ACHDDA concluded that no Aboriginal cultural heritage was identified within the study area.

The results, assessments and judgements contained in this report are constrained by the standard limitations of historical research and by the unpredictability inherent in archaeological zoning from the desktop. Whilst every effort has been made to gain insight to the historical values of the study area, Austral cannot be held accountable for errors or omissions arising from such constraining factors.

1.5 ABBREVIATIONS

The following are common abbreviations that are used within this report:

Austral	Austral Archaeology Pty Ltd
Burra Charter	<i>Burra Charter: Australia ICOMOS Charter for Places of Cultural Significance 2013</i>
CBD	Central Business District
CHL	Commonwealth Heritage List
DA	Development Application
DCP	Development Control Plan
DoMar	Department of Mines and Resources
EPA Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environmental Protection and Biodiversity Act 1999</i>
EPI	Environmental Planning Instrument
GG	NSW Government Gazette
Heritage Act	<i>NSW Heritage Act 1977</i>
HHA	Historical Heritage Assessment
ICOMOS	International Council on Monuments and Sites
IHO	Interim Heritage Order
IM	<i>Illawarra Mercury</i>
LEP	Local Environmental Plan
LGA	Local Government Area
NHL	National Heritage List
NPW Act	<i>National Parks and Wildlife Act 1974</i>
The Proponent	LANDCOM
RNE	Register of the National Estate
SHI	State Heritage Inventory
SHR	State Heritage Register
SMH	Sydney Morning Herald
Study Area	27-29 Hospital Road, Bulli (lots 19, 20, 21 and 22, DP6793, Lot 1, DP595930, Lot 1, DP83742, Lot 1, DP326181 and lots 1, 2, 3, 4, 5, 6, 7 and 8, DP7677)
Wollongong DCP	<i>Wollongong Development Control Plan 2009</i>

Wollongong LEP

Wollongong Local Environmental Plan 2009

2. STATUTORY CONTEXT

The following section summarises the relevant statutory context, including heritage listings, acts, and environmental planning instruments which are relevant to the study area and its cultural heritage.

2.1 ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) established the Australian Heritage Council (formerly the Australian Heritage Commission) and provides for the protection of cultural heritage at a national level and items owned or managed by the Commonwealth. The EPBC Act has established two heritage registers:

- Commonwealth Heritage List (CHL): for significant items owned or managed by Commonwealth Government agencies;
- National Heritage List (NHL): for items assessed as being of national cultural significance.

A referral under the EPBC Act that is approved by the Australian Heritage Council is required for works to an item registered on either of these lists to ensure that the item's significance is not impacted upon.

No part of the study area appears on either the CHL or the NHL.

The Australian Heritage Council is also responsible for keeping the Register of the National Estate (RNE). In 2007 the RNE was frozen and no further sites were added to it. For Commonwealth properties, the RNE was superseded by the CHL and NHL lists. The RNE is now retained as an archive of information about more than 13,000 places throughout Australia.

No part of the study area appears on the RNE.

2.2 NSW HERITAGE ACT 1977

The Heritage Council is the approval authority under the *NSW Heritage Act 1977* (Heritage Act) for works to an item on the State Heritage Register (SHR). Section 57(1) of the Heritage Act identifies the need for Heritage Council approval if the work involves the following tasks:

- Demolishing the building or work;
- Damaging or despoiling the place, precinct or land, or any part of the place, precinct or land;
- Moving, damaging or destroying the relic or moveable object;
- Excavating any land for the purpose of exposing or moving the relic;
- Carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct;
- Altering the building, work, relic or moveable object;
- Displaying any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct; and
- Damaging or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land.

Demolition of an SHR item (in whole) is prohibited under the Heritage Act, unless the item constitutes a danger to its occupants or the public. A component of an SHR item may only be demolished if it does not contribute to the significance of the item.

Section 57(1) of the Heritage Act also applies to archaeological remains (such as relics) within an SHR site, and excavation can only proceed subject to approval of a Section 60 application by Heritage NSW.

Heritage NSW has issued a set of Standard Exemptions to subsection 57(1) of the Heritage Act that allow for certain activities and works to occur to SHR items without the need for an approval under Section 60. General Condition 6 of these exemptions does not permit the removal of relics (*NSW Government Gazette [GG]*, No. 318, 13 November 2020). Therefore, any work or activity that may result in the removal of relics from an SHR site would need to proceed with an approval under Section 60 of the Heritage Act.

No part of the study area appears on the SHR.

EXCAVATION PERMITS

Archaeological remains on sites not listed on the SHR are addressed under Section 139 of the Heritage Act, which states that:

a person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

Relics are defined by the Heritage Act to be:

...any deposit, artefact, object or material evidence that:

- a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and*
- b) is of State or local heritage significance.*

An excavation permit is also required if a relic has been discovered in the course of excavation without a permit (Section 139(2) of the Heritage Act). Section 139 of the Heritage Act applies to all relics which are not listed on the SHR or protected by an Interim Heritage Order (IHO). Relics protected by an SHR listing or an IHO are subject to approval required by Section 57(1) of the Heritage Act and require a Section 60 Application.

If an excavation permit is required by Section 139 of the Heritage Act, an application is made under Section 140 of the Heritage Act. To obtain an excavation permit, the Section 140 application must include an archaeological assessment, SoHI and research design. The archaeological assessment establishes the archaeological sensitivity of the site and its significance, while the SoHI documents the likely impact of the proposed development. The research design outlines the method proposed to mitigate the impact of the development (such as monitoring, test excavation, sampling, or open area excavation). The research design also provides research questions that the archaeological resource has the potential to answer. An archaeological assessment, SoHI and research design need to be prepared under the Heritage Council's relevant guidelines, including *Historical Archaeological Sites* and the *Historical Archaeology Code of Practice* (Heritage Council of New South Wales 2009, NSW Department of Planning, Heritage Council of NSW 2006).

The Heritage Act also contains provisions for the unintentional disturbance of archaeological relics. Under Section 146 of the Heritage Act, the Heritage Council must be immediately notified in the event of relics being unintentionally located or disturbed. Works may be required to cease, pending consultation and further research.

ARCHAEOLOGICAL EXCEPTIONS

A schedule of exceptions pursuant to subsection 139(4) of the Heritage Act were introduced on 1 March 2022. These exceptions allow for the disturbance or excavation of land without an excavation permit under subsections 139(1) or 139(2) of the Heritage Act (NSW GG, No. 59, 18 February 2022) provided that the works fall under one or more of the exceptions described in Clause 2 and which are summarised below in Table 2.1.

Table 2.1 Summary of archaeological exceptions under Section 139(4) of the Heritage Act.

Exception	Requirement
A	Any disturbance or excavation of land that has limited archaeological research potential, as demonstrated by a heritage management document, such as an Archaeological Assessment, completed within the last five years.
B	Any disturbance or excavation of land that constitutes minor works involving limited impact to relics of local heritage significance, in accordance with ' <i>Relics of local heritage significance: a guide for minor works with limited impact</i> ' (Heritage NSW 2022a).
C	Any disturbance or excavation of land that constitutes minor works involving limited impact to relics of local heritage significance, in accordance with ' <i>Relics of local heritage significance: a guide for minor works with limited impact</i> ' (Heritage NSW 2022a).
D	Any disturbance or excavation of land for archaeological test excavation of relics of local heritage significance completed in accordance with the guideline ' <i>Relics of local heritage significance: a guide for archaeological test excavation</i> ' (Heritage NSW 2022b).
E	Any disturbance or excavation of land for archaeological monitoring of relics of local heritage significance completed in accordance with the guideline ' <i>Relics of local heritage significance: a guide for archaeological monitoring</i> ' (Heritage NSW 2022c).
F	Any disturbance or excavation of land: <ul style="list-style-type: none"> i. for the purpose of exposing underground utility services infrastructure which occurs within an existing service trench and will not affect any other relics. ii. to carry out inspections or emergency maintenance or repair on underground utility services with due care taken to avoid effects on any other relics. iii. to maintain, repair, or replace underground utility services to buildings which will not affect any other relics. iv. to maintain or repair the foundations of an existing building which will not affect any associated relics. v. to expose survey marks for use in conducting a land survey.

In addition to the exceptions listed in clauses 2(a) to 2(f), the works must also be undertaken in compliance with the General Conditions proscribed under clause 3. The General Conditions state that the exceptions detailed above do not apply to Aboriginal objects that are protected under the *National Parks and Wildlife Act 1974*, relics of State heritage significance or that are subject to an IHO. The General Conditions also state that the exceptions are self-assessed and therefore it is the responsibility of the proponent to ensure that the proposed activities and works fall under the proscribed activities. Adequate records of activities must be kept for auditing purposes and the activities that are completed must be undertaken by people with knowledge, skills and experience appropriate to the work, certain activities such as archaeological testing and monitoring are subject to certain levels of proscribed experience as set out in the guidelines (Heritage NSW 2022b, 2022c).

Any activities or works that do not fit strictly within the exceptions outlined in the schedule of exemptions will need to be completed in accordance with an approval under Section 140 of the Heritage Act.

HERITAGE AND CONSERVATION REGISTER (SECTION 170 REGISTER)

Under Section 170 of the Heritage Act, government instrumentalities must keep a Heritage and Conservation Register (a Section 170 Register) which contains items under the control or ownership of the agency, and which are, or could, be listed as heritage items (of State or local significance). Road reserves within the study area are owned by the Department of Roads and Maritime Services.

No part of the study area appears on any Section 170 Heritage and Conservation registers.

2.3 ENVIRONMENTAL PLANNING INSTRUMENTS

An Environmental Planning Instrument (EPI) is made under the EPA Act. An EPI can be a Development Control Plan (DCP), Local Environmental Plan (LEP) or a State Environmental Planning Policy.

WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

The current LEP for the study area is the Wollongong LEP. Part 5.10 of the Wollongong LEP deals with heritage conservation, and subsections (2) and (3) determine whether development consent needs to be granted by Wollongong Council before any activities occur which may impact cultural heritage. Heritage items are listed under Schedule 5, Part 1 of the Wollongong LEP.

No part of the study area is listed on Schedule 5 of the Wollongong LEP.

WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The applicable DCP for the study area is the Wollongong DCP. Part E11 of the Wollongong DCP outlines design controls to be implemented when dealing with heritage items in general. It is noted that the site is not heritage listed and is not a known archaeological site. If the site is found to be an archaeological site, Section 19.2 details requirements for the managing post-European archaeological sites.

This HHA serves to meet Condition 1, in that it includes an assessment of archaeological potential in order to determine whether the study area is known or likely to contain an archaeological site, and by association, ensures compliance with the remaining requirements of the DCP should any archaeological items be found.

2.4 SUMMARY OF HERITAGE LISTINGS

Table 2.2 lists the relevant statutory and non-statutory registers, listings and orders, and identifies those in which any part of the site is listed. The location of heritage items in relation to the study area are outlined in Figure 2.1 and Figure 2.2.

Table 2.2 Summary of heritage register listings for the subject study area

Register/Listing	Inclusion	Statutory implications
NHL	No	No
CHL	No	No
RNE	No	No
SHR	No	No
Wollongong LEP	No	No
Wollongong DCP	No	No



Figure 2.1 - NSW LEP Heritage listing surrounding the study area

22127 - 27 Hospital Road, Bulli - HHA





Figure 2.2 - NSW State Heritage listing surrounding the study area

22127 - 27 Hospital Road, Bulli - HHA

3. HISTORICAL CONTEXT

The following historical background is designed to contextualise a site-specific history which will aid in the understanding of the historical heritage values of the study area. This work will provide a useful and concise summary of the history of the study area.

3.1 HISTORY OF THE BULLI AREA

3.1.1 EARLY DEVELOPMENT – 1815 TO 1869

The charting and exploration of the Illawarra by Europeans began in 1770 when Lieutenant James Cook sailed the Endeavour along the coast. The land from Port Kembla to Corrimal was drawn by the ship's artist Sidney Parkinson and landmarks named included the Port Kembla headland ('Red Point') and Mount Kembla ('Hat Hill'). In 1796, George Bass and Matthew Flinders landed near Tom Thumb Lagoon, named after their small boat, and explored Lake Illawarra and areas to the west, documenting the first recorded contact with Aboriginal people in Illawarra (Jervis 1942, p.244). Flinders' journal refers to whites living with Aboriginal people encountered there and it has been suggested these were escaped convicts (McDonald 1979, Organ 1990).

In 1797, the ship 'Sydney Cove' was wrecked in the Bass Strait and survivors made their way along the coast, largely on foot, passing through the Illawarra and making camp at Coalcliff where a coal seam was discovered and utilised for a campfire. Upon reaching Sydney the survivors reported the discovery as well as a supposed attack by 'savage natives' near Red Point (McDonald 1979). The discovery of coal led to its investigation by George Bass on a further expedition along the coast in a whaleboat. Bass landed at Kiama and also explored the Shoalhaven River area, making observations on the richness of the land (Osbourne 2000, p.20).

As European settlement extended further from the colony, explorers attempted to identify new fruitful pastures and beneficial resources in other areas. One of these explorers was Joe Wild, an employee of Dr Charles Throsby, who not only identified good pastures but also a way to travel from Bong Bong Road through to the Illawarra (Lindsay 1994, p.14). Prior to this, the only way that stock had been able to access this area was by boat, which had begun in 1803. Following Joe Wild's report, the opportunity to farm the Illawarra area became popular and many individuals requested farming permits from Governor King (Lindsay 1994, p.14).

In 1810, authorities under Governor Macquarie decided to extend the boundaries of the Colony, with the Illawarra providing opportunities to farmers and cedar getters (Organ & Speechley 1997, p.10). Five years later, Throsby established the first settlement in the Illawarra and with the assistance of Joe Wild and local Aboriginal guides, cut a cattle track from Appin via Bulli. Within the same year, the first known reference to Bulli was recorded in the *Sydney Gazette and New South Wales Advertiser*, spelled as 'Bolye' and referenced as being 35 miles south of Port Jackson (22 April 1815, pg 1).

In 1821, the first land grants were allocated in the Bulli region, with land allocated to Cornelius O'Brien, R. Lillis, P. Lillis, Thomas Trotter, T. Brophy and D. Guiney (Bayley 2002, p.3). Of the allocated land grants, O'Brien was the first settler in the area, constructing a house that remained the only one present until 1825 (Bayley 2002, p.3). Part of O'Brien's 300 acre (121 hectare) land, along with that of his neighbours, William Bowman and George Tate, would form part of the present 'Township of Bulli' (Jervis 1942, p.93).

Other cattlemen soon followed, eventually founding cedarwood and agricultural industries within the wider area with industry specific enterprises (Mould & Cairns 2004, p.1). A sawmill was opened in July of 1858 by Robert Sommerville (Lindsay, Organ, & Doyle, 1994). By the 1840s, however, the supply of cedar was dwindling as much had been cleared. There was an inherent need for new industry to support development in the area.

Although coal was first discovered in the Illawarra in 1797, difficult access to the Illawarra and the Australian Agricultural Company's monopoly on coal industries delayed the development of coal along the south coast until 1849 (Dingsdag 1993, p.18). In 1847, the Australian Agricultural Company relinquished claim on coal operations in the Illawarra, and mines were subsequently opened in Mt. Keira, Woonona, Russel Vale, and Mount Pleasant (Mould & Cairns, 2004).

A company known as the Bellambi and Bulli Coal Company was formed in 1859, and officially opened a mine on the mountainside west of Bulli Point in 1863 (Mould & Cairns, 2004). Records do not indicate a clear change in ownership, however, when operations were commenced, the company in charge was the 'Bulli Coal Mining Company', rather than the Bellambi and Bulli Coal Company. The first mine was later known as the 'A' pit. In August 1878, a 'B' pit was established to the north of the initial mine but was closed 7 years after opening due to issues including volcanic activity. The 'A' pit had 3 main tunnels, while the 'B' pit had 2 main tunnels. Another small mine was opened to the south of the 'B' pit and known as the 'Corn Beef' mine, in operation from 1878 to 1908, and which is known now as Bulli No. 3 (Department of Mines and Resources DoMAR 1878). In 1879, a new tunnel was built (Shaft No. 2; old tunnel is Shaft No 1.), and in 1880, 170 men were recorded working in the old tunnel, and 25 in the new tunnel (DoMAR 1880). A new furnace shaft was erected in 1885, due to poor air quality.

Access to the south coast via road was difficult due to steep elevation changes. Bulli Pass was constructed in 1867, and was much safer than the old road, simplifying access to Bulli (Lindsay, Organ, & Doyle, 1994). Freight from the coal mines was still handled by sea, and coal companies throughout the Illawarra constructed several rail lines which ran from mines to local jetties. A jetty was constructed at Sandon Point for the Bulli Colliery around 1863, and the Bulli Coal Company constructed a tramway of standard gauge between Bulli Colliery and Sandon Point Jetty (also referred to as Bulli Jetty) in 1861. Horse-pulled carts were used to transport the coal from the mine to the jetty until 1967, when they were replaced by a steam loco (Eardley 1919). The rail line was in use from 1867 until the 1940s (Singleton, 1984). It was the first rail line to carry a steam engine in the Illawarra and is highly valued as a heritage item.

Between 1861 and 1864, Taylor and Walker operated a horse tramway from their South Bulli mine to a second jetty at Bellambi Point, crossing Hale's line nearby. In 1887 it was revived as a steam railway from the foot of the South Bulli Colliery incline to a fourth jetty at Bellambi Point (Singleton, 1984).

The Bulli Post Office was opened in 1869 serving a population of less than 100 but by 1879, there were 5 stores present in the township and a population of 1,187 people (GML Heritage 2014, p.12).

Local unions were established for miners starting in 1880 and created a major issue for the mining company. A 6-month strike took place in 1886, which forced the colliery owners to employ non-union labour to work the mine. The miners returned to work in January of 1887 after negotiating conditions of employment and pay raises. In 1887 a methane gas explosion at the mine killed 81 men and boys (GML Heritage 2014, p.12, Kass 2010, p.32).

Following the explosion of the mine, the community banded together in support of a hospital for the Bulli area as doctors would often have to travel from Wollongong. (Bayley 2002, pp.36, 58). Land donated by locals for a hospital and road sped up the process and in 1892 the Bulli Cottage Hospital was erected (Bayley 2002, p.58).

Around the same time that the hospital was constructed, the opening of the Illawarra railway was also occurring, linking the coastal villages and townships and increasing the ability to transport goods in and out of the area (Bayley 2002, p.49).

From 1911, community services such as police stations and courthouses were built and although the focus remained heavily on the mining industry and the miners the summer months also saw tourism increase, providing additional incomes for the locals (Bayley 2002, p.70).

From the early 20th century, Bulli continued to grow as a small community with tragedies along the way, including another mine disaster in 1965, which killed 4. Bulli's agricultural beginnings have since disappeared from the area and been replaced by suburban developments (Bayley 2002, p.88)

3.2 HISTORICAL SKETCH OF THE STUDY AREA

The following section seeks to document the known development history of the site.

3.2.1 PHASE 0 – PRE-1892

The study area originally formed part of Henry Jefferson Bate's 52-acre (21 hectare) grant and William Bowman's 300 acre (121 hectares) grant (Vol. 13677 Fol. 73; Serial 56 Pg No. 130; PA26003, PA16323). Bate purchased his grant, Portion 79 (Lot 7) in an auction in 1840 and Bowman received Portion 16 in 1841 (Bk 6 No.333).

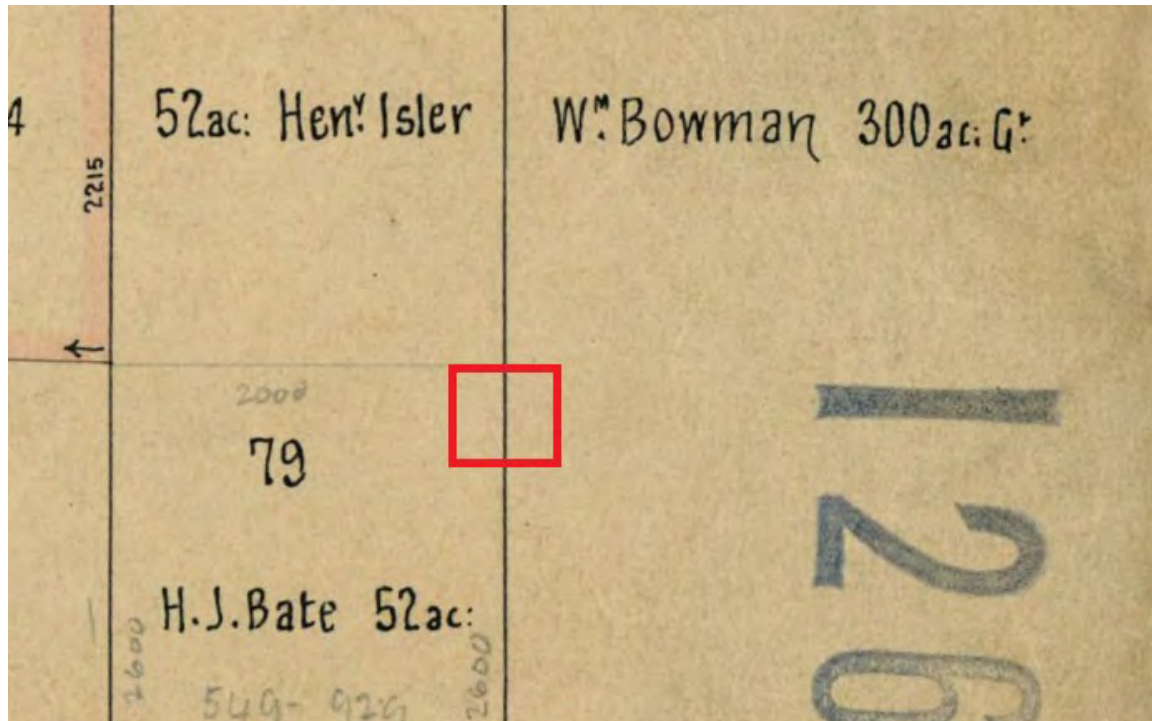


Figure 3.1 Approximate location of the study area (PA12683)

Both grants remained in the Bate and Bowman family for less than 10 years, with Bate selling the land in 1848 and Bowman's widow selling Portion 16 following Bowman's death in 1848 (GG, 6 September 1844, pg 1108; Bk 16 No 379). Bate sold Portion 79 to Lachlan McKinnon in 1848 and Bowman's wife sold Portion 16 to George Organ (Bk 14 No.983; Bk 16 No 379).

Paying a deposit of £42, Organ, a local farmer who owned multiple farms in the area, officially took ownership of the property in 1850 and he likely used it for farming before subdividing the 300 acres and selling 28 acres (11.3 hectares) to Thomas, his brother (Organ & Hardy 1984, p.67). It is unknown what the study area was used for at the time, but both McKinnon and Organ were farmers, and the surrounding activities suggest that it may have continued to have been utilised for agricultural purposes.

3.2.2 PHASE 1 – 1892-1945

Following the explosion at the Bulli Colliery in March 1887, a local paper, the *Bulli Times*, suggested that a local hospital be established in the Bulli area (Bayley 2002, p.58; Atkins 1992, p.2). As a result of this article, Bulli locals took up the call and wrote to other papers describing how '*the need for a hospital in Northern Illawarra ... is every day becoming -more and more obvious*' (*Illawarra Mercury* [IM], 21 June 1892, pg 2). To help organise the hospital, a committee was formed. Unfortunately, the committee was only active for 2 to 3 meetings before it collapsed (Atkins 1992, p.2).

In 1890, with the increase in population at Bulli the necessity for a hospital was again popularised and within the year a committee was once again formed, consisting of half colliery workers and half the general public (Atkins 1992, p.2). In their first meeting in 1890, the issue of land was alleviated by the donation of land by Mrs Maria Organ, the widow of George who had died in 1889, which included part of the current study area [Lot 1 DP 595930] (*IM*, 14 June 1892, pg 2; Atkins 1992, p.2, Organ & Hardy 1984, p.56). Although half an acre (0.2 hectares) was originally donated, it was increased to $\frac{3}{4}$ of an acre (0.3 hectares) prior to the construction of a hospital [*IM*, 14 June 1892, pg 2]. (Figure 3.2).

It was not until 1892 that part of the study area was officially donated, possibly due to waiting for tenders to be submitted for the designs of the hospital (Atkins 1992, p.3). As a result of the large costs received from tenderers, ranging from £700 to £1,900, the architectural firm Messrs. Kenwood and Kerla suggested alterations to the design and the decision was made for the lowest tender to be accepted, with a local builder, Mr J Myles, chosen (*IM*, 19 March 1892, pg 1; Atkins 1992, p.3).

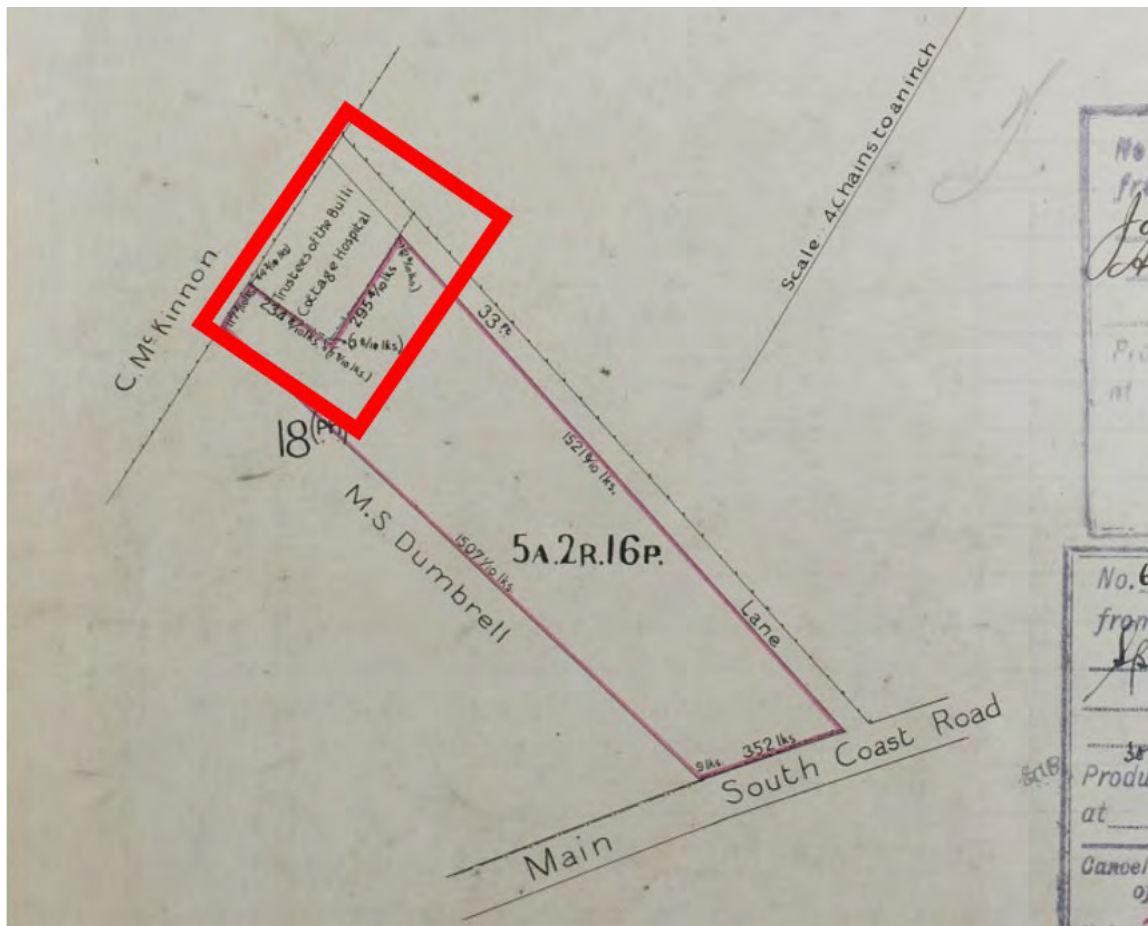


Figure 3.2 Approximate location of the study area (Vol. 2091 Fol. 101).

Funding for the construction of the hospital was often by donation; the architect William Kenwood worked at no cost, the State Government provided a grant, the Colliery proprietors contributed a large sum and their employees set up an ongoing payment to a fund for the construction and maintenance of the hospital (Atkins 1992, pp.2–3).

In 1892, the foundation stone was laid by Mr Woodward, who had helped 'obtain a grant of £500 from Government towards the Hospital funds' and by December 1892, the building was completed for £740 (JM, 14 January 1893, pg 3; Bayley 2002, p.58). The opening ceremony praised the opening of the Bulli Cottage Hospital:

Speaking at the ceremony of laying the foundation stone of the Bulli Cottage Hospital, Mr. G. Henderson, miners' general secretary, said that within the last two years there had been (says the Illawarra Mercury) no less than 200 accidents in the Illawarra coal mines. Some, of course, had been slight, whilst others had been of a serious nature, and two had been fatal. He was pleased to learn that the coal-owners of the district had co-operated with the miners and general community in helping on the hospital movement, and it was gratifying to him to know that there was at least one institution that the colliery proprietors had seen fit to support in some measure. The miners had established an accident and relief fund, and during the past two years they had paid away over £1338 towards the relief of persons injured. For this fund and its laudable work, they had solicited the support from the coal owners, who took away the wealth of the district, but with one exception had failed to draw any assistance from them. The one exception was the Helensburgh Company, which contributed £20 annually (Newcastle Morning Herald and Miners' Advocate, 20 June 1892, pg 4)

Upon the opening of the hospital, it catered to 5 in the male ward and 2 in the female ward, with a sketch showing the outside of the building (Figure 3.3) [*The Sydney Morning Herald* (SMH), 22 May 1893, pg 6]. Lieutenant-Governor Sir Frederick Darley and Lady Darley attended the opening, with Lady Darling officially opening the hospital (SMH, 22 May 1893, pg 6). The Hospital at the time of opening was described as

The building is of a modified gothic type and is of red brick, built on a concrete foundation. It has a verandah 7ft wide on three sides. The building is of Oregon pine with oak shingles. The corridor is large and suitable for persons who have to wait on any occasion and is fitted with a seat. The male ward, 24ft. 6in. x 12 ft. 6 in. is to the right of the corridor, and is made to accommodate five beds. To the left is the female ward – 14ft. 9in x 10ft. 6in. for two beds. At the front and left of the corridor is the doctor's room, 12ft 9 in x 10ft. 6 in. Facing the corridor, with windows overlooking either ward, is the matron's room, 12 ft. 6in. x 11ft. 6 in. the building also contains a bathroom, 8ft. 6 in. x 7ft. 9in with a porcelain enameled cast-iron hospital bath, fitted upon wheels. There are also two lavatories, besides several small recesses. The ceiling throughout the main building is executed in fine corrugated galvanised iron. The building is well-ventilated with fanlights and patent ventilators and can be regulated at will to suit the temperature. At the rear of the main building, and connected by a covered way is the kitchen, having pantry, cupboards, linen closets, with washhouse &c., attached. There is a large underground tank beside several receiving tanks. (SMH, 22 May 1893, pg 6).



Figure 3.3 1893 sketch of Bulli Hospital (Wollongong City Library P06/P06210)

Although the building was newly completed, there were almost immediate plans to extend the building with a kitchen and outhouses, with tenders advertised in February 1893 for small administrative buildings (*The Sydney Mail and New South Wales Advertiser*, 3 December 1892, pg. 1283; SMH, 1 February 1893, pg 1). This extension required additional funds and in early 1893 a gala was organised with proceeds raised to go to the Bulli Cottage Hospital (*IM*, 14 January 1893, pg 3).

In 1896, a road was to be constructed, with a contract to form the road and metal it from the present gate of the existing road to the hospital gate (Atkins 1992, p.6). Within the same year, the hospital purchased a clothing wrangle and mangle, as well as 2, 600 gallon tanks, which were tendered to be placed on a hardwood frame with brick piers, guttering and down pipes for the bathroom (Atkins 1992, p.7).

The first 11 years of the 20th century saw numerous changes within the hospital portion of the study area (Lot 1 DP595930). The public hospital continued to be subsidised by the colliery employees, who donated 1d a week, and then also by railway employees from 1923, with a combined donation of 4d a week (Bayley 2002, p.76). It is currently unknown where this structure was located, within this allotment. In 1902 a telephone was introduced and a kerosine lamp was installed on the front gate of the hospital, although this did not last long as 3 years later, in 1905, acetylene gas lighting was introduced to replace kerosene lights (Atkins 1992, p.10). The following year, 1906, plans for the construction of a new male ward and theatre were drawn up and in 1908 nursing accommodation was erected and included a 2 room cottage and a verandah (Atkins 1992, p.10) [Figure 3.4 and Figure 3.5]. In 1911, water mains were installed in the northern portion of the study area (Atkins 1992, p.10).



Figure 3.4 1910 Bulli Hospital (Wollongong City Library P06/P06273).



Figure 3.5 1910 Bulli Hospital (Wollongong City Library P05/P05545).

From 1915, significant changes began to occur in the study area, with the hospital accumulating the surrounding farmland as part of the *Public Works Act 1912* and the *Public Hospitals Act 1929*. In 1910, Martha Susannah Dumbrell, wife of Henry Dumbrell, who was a tramway official, took possession of the western allotment (Lot 1 DP83742) but in 1921 she transferred the land to the Bulli Hospital.

Two years later, in 1913, the land that would later become the eastern blocks were purchased by Alan Black, boot merchant, Jacob Glass, storekeeper, and John Muir, miner, who became joint tenants after purchasing lots 20, 21 and 22 from George Organ (Vol. 2385, Fol. 147). This same year, town water was connected to the hospital and in 1914, electricity was connected (Atkins 1992, p.10). In 1914 Christopher Troman purchased lots 5 and 6, and by 1918 George Henry Wood purchased the property, although by 1920 the Minister of Works had resumed the allotment (Vol. 2536, Fol. 48).

In 1916, the first ambulance was purchased by the hospital and described as a 'horse drawn carriage' (Atkins 1992, p.10). Later, the Bulli hospital was one of the few to introduce a motor ambulance and led the State the introduction of a weekly contribution scheme for its upkeep which was eventually adopted throughout the country (Bayley 2002, p.76).

The following year, 1917, a new roof was added to the hospital (*South Coast Times and Wollongong Argus*, 12 October 1917, pg 14).

In 1918 George Henry Wood, a builder, purchased lots 2 and 7 to 11 (DP7677) on the southern side of the hospital, although by 1920 this land had been resumed by the Minister of Works (Vol. 2883, Fol. 178). Around the same time, in 1919, WJ (Billy) Williams was given the contract to build a timber nurses' home, which was occupied in February of the same year, (Atkins 1992, p.10). The pneumonic influenza, also known as the Spanish flu, epidemic also began in 1919, and this restricted the number and types of patients within the hospital, allowing only epidemic patients (Atkins 1992, p.10).

The 1920s saw the hospital sewerage system installed but also the further accumulation of the surrounding land (GG, 16 January 1920, pg 292). In 1920 the Minister of Works resumed the land from George Henry Wood including lot 2 and lots 5 to 8 of DP7677 (Vol. 3142, Fol. 227), from Christopher Troman, who relocated to the area and from Martha Susannah Dumbrell (lots 5 and 6, DP7677).

Plans to demolish some of the buildings began in 1919 (*Australian Town and Country Journal*, 30 April 1919, pg 4). The first major change occurred in 1922 when the nurses' cottage at Bulli Hospital was moved to a new site, although it is unknown whether the new site was within the study area or a new location entirely (IM, 1 September, pg 2). The same year also saw the name of the hospital change from Bulli Cottage Hospital to Bulli District Hospital, although the name had been in use since 1920 (Atkins 1992, p.10).

In 1925, an additional structure/ward was erected at the southern side of the former building increasing the accommodation numbers from 11 to 24 beds, and in 1929 an x-ray room was built and dedicated to the Bellambi Coal Co (Bayley 2002, p.76).

In 1930, Neil McKinnon's land (Lot 1, DP326181) was resumed as part of a larger resumption of lands, and in 1935, the hospital became the proprietor of Lot 20 (Vol. 2385, Fol. 147). Around the same time, the road was also widened by land transferred to Council. In 1934, Pendlebury & Illawarra Bricks donated the bricks for the retaining wall of the new isolation ward, which increased the accommodation to 39 patients, and 6 years later, x-ray plants were installed with further donations from the Bellambi Coal Company (Bayley 2002, p.76).

In 1935, new nurses' quarters were opened (Bayley 2002, p.76). Three years later, in 1938, the Hospital accumulated additional land, one acre (0.4 hectares) west of the current allotment (Vol.4421, Fol.14). This land had remained in the McKinnon family from the 1840s and prior to the resumption by the Government it was owned by Neil James McKinnon (Vol 3778 Fol. 219).

In 1939, the hospital became proprietor of Lot 1 (Vol. 5044, Fol. 96); this land had been resumed under the *Public Works Act 1912* And the *Public Hospitals Act 1929* (Vol. 5044, Fol. 98). George Organ, tramway official, owned this allotment before selling it to John Australia Mayo in 1912, when it then passed to Francis Murphy and to Hector Henry Earnest McKay, Bootmaker (Vol. 2394, Fol. 66). In 1961, the hospital purchased additional land on the eastern side of the study area which included Lot 19 (Vol. 2394, Fol. 66).

In 1942, there are records that war volunteers dug air raid shelters in the hospital grounds, although it is unknown where this was located and may have been demolished during other works (Atkins 1992, p.10).

In 1945, the original Bulli cottage hospital building was demolished, and at the time it was noted that a bottle originally placed in the foundation stone was identified with a paper containing the inscription: *'This, the foundation stone of the Bulli Cottage Hospital, was laid by Francis Woodward, Esq., of Wollongong on Saturday, June 11, 1892, A.D. in the presence of the Great Architect of the Universe and the assembled public of Bulli and district'* (Bayley 2002, p.82; IM, 7 Dec 1945, pg 1).



Figure 3.6 - 1948 Aerial of the study area

22127 - 27 Hospital Road, Bulli - HHA



3.2.3 PHASE 2 – 1946 TO PRESENT

In 1946, 3 months following the demolition of the Bulli cottage hospital building, the foundation stone was laid for a new children's ward and nurses' quarters. The bottle that was found in the demolition process was laid in the new foundation stone (Atkins 1992, p.10).

The second half of the 20th century saw changes to the study area starting in 1949 with the extension of an 18 bedrooms annex and recreation room to nurses' home (Atkins 1992, p.10). In 1951, the 2-storyed brick nurses' home at the south end of the former home was constructed for £24,000, in 1953 volunteers built a parking area, in 1954 the amenities block was constructed and in 1957 the administrative block was built (Bayley 2002, p.82). Ten years later, in 1964, the No 2 theatre was constructed and the outpatients department was constructed (Atkins 1992, p.10) [Figure 3.7].

Major works occurred between 1975 and 1977, with the outpatient waiting room, E.C.G room, ambulance port and nurses swimming pool constructed, the opening of the Syd Atkins ward, excavation of new connections for sewerage to the hospital, expansions to the office block, kiosk, engineers office, a third x-ray room commissioned and the sealing of bitumen on all internal roads (Atkins 1992, p.10) [Figure 3.8].

In 1981, an easement was leased for the transmission of electricity over the land, which expired in 2010 (Vol. 13677 Fol. 73). In the same year, the last major development occurred with the extension of the kitchen. Although there were additional attempts to update the hospital these did not occur and a new, purpose built hospital facility was constructed on the northern side of Hospital Road. The buildings within the study area were formally decommissioned in 2020 when the hospital formally moved to the new location (Atkins 1992, p.10).

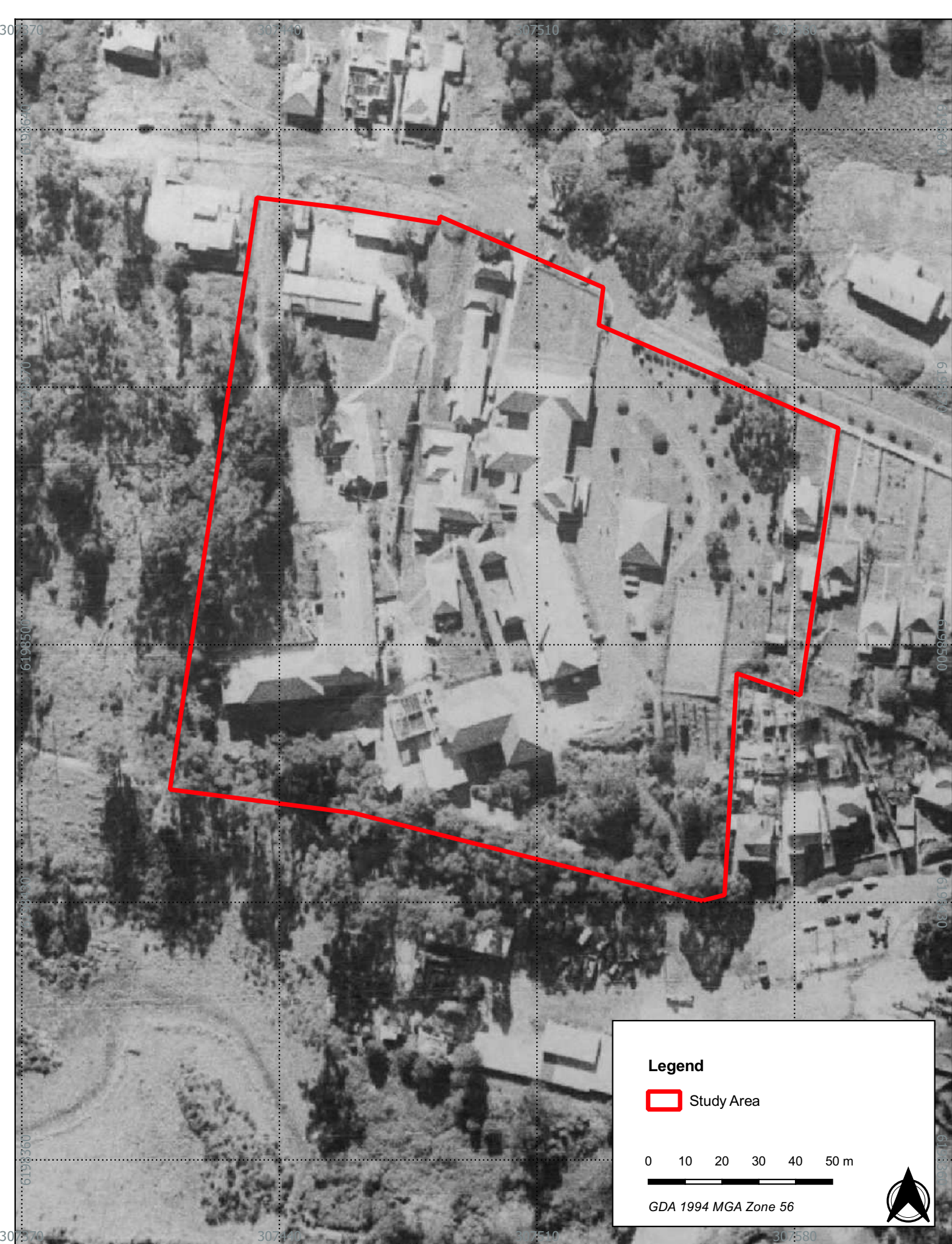


Figure 3.7 - 1961 Aerial of the study area

22127 - 27 Hospital Road, Bulli - HHA



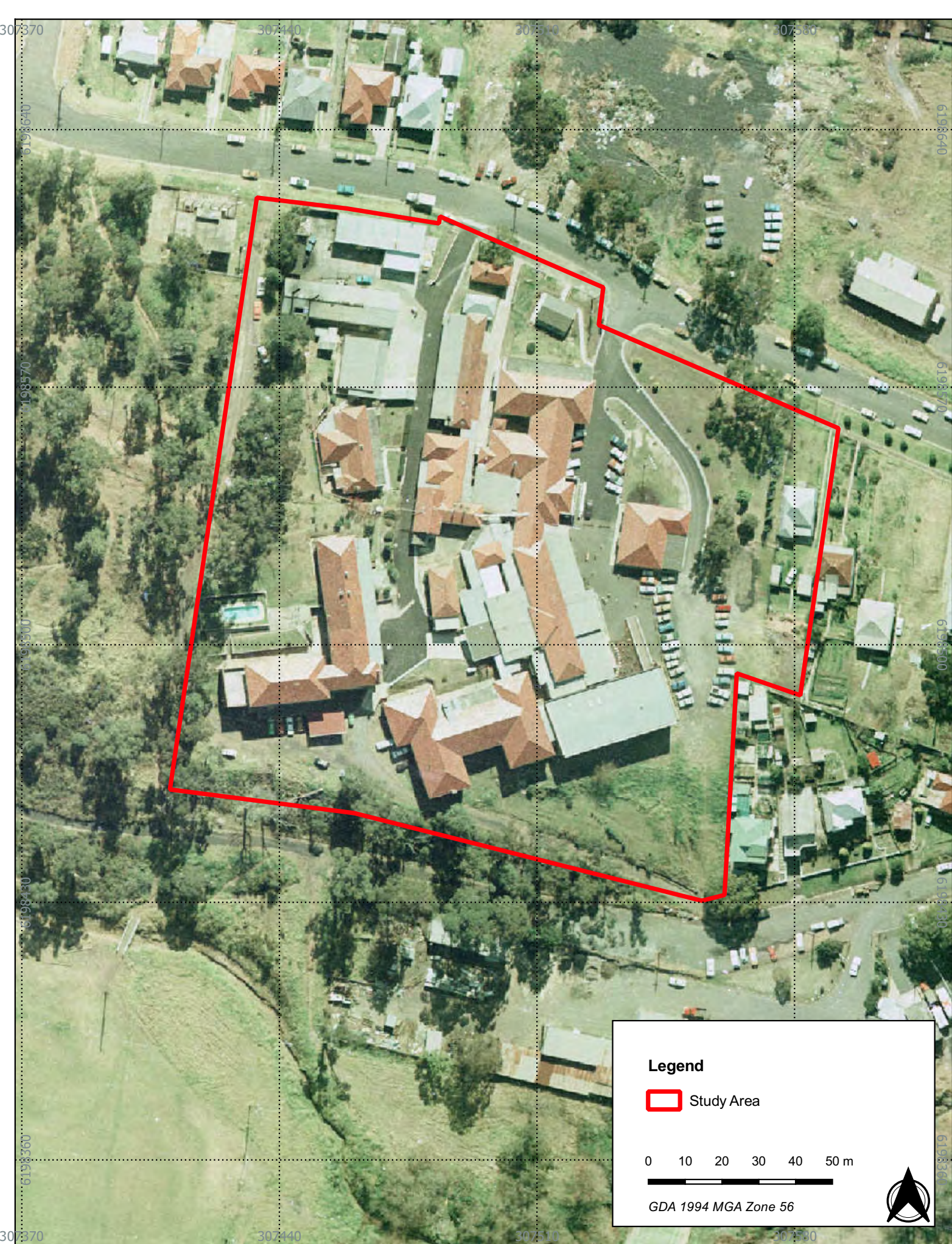


Figure 3.8 - 1977 Aerial of the study area

22127 - 27 Hospital Road, Bulli - HHA



3.3 CHRONOLOGY OF THE STUDY AREA

Based on the historical background presented, it is possible to summarise the chronology of the study area. This is presented in Table 3.1.

Table 3.1 Summary of chronological events relating to the study area

Phase	Summary	Date range
0	The study area was originally part of William Bowman's 300 acre grant, allocated to him in 1841, and Henry Jefferson Bate's 59 acre, allocated to him in 1840.	Pre-1892
1	Phase 1 consisted of the construction of the Bulli Cottage Hospital, the accumulation of surrounding farmland and construction of additional nurses' quarters etc, and ends with the demolition of Old Cottage Hospital in 1945.	1892-1945
2	Following the demolition of the original Bulli cottage hospital building, the structures within the study area continued to be modified and constructed until the turn of the century, when the upkeep of the hospital was reduced, and up to the closure of the hospital in 2020.	1946-present

An additional table has been provided, for the simplified transfer of land (Table 3.2)

Table 3.2 Land ownership

Current Lot DP	Land Acquisition	Previous Title Vol-Fol	Previous Title Vol-Fol	Previous Title Vol Fol	Previous Title Vol. Fol	Background
Lot 1 DP 326181	Resumed	4421-14 <ul style="list-style-type: none"> 1938, Formed part of an acquisition of land/resumption by the Minister for Public Works (ES Spooner) for the Bulli Hospital. 	3778-219 <ul style="list-style-type: none"> 1925 Neil James McKinnon 1930 Neil James McKinnon transferred the land to the Minister for Public Works as constructing authority 	3725-215 <ul style="list-style-type: none"> 1925 Neil James McKinnon was the applicant for the Primary Application 26003 	PA26003	Originally part of Henry Jefferson Bate's Portion 79
Lot 1 DP 83742	Primary Application	5044-96 <ul style="list-style-type: none"> The Bulli Hospital was the applicant for the primary application (PA33742). 			All land resumed within 100 feet of High Water Mark. on the sea coast and on every creek, harbour and inlet. Public Works Act 1929	Originally part of Henry Jefferson Bates's Portion 79
Lot 1 DP 7677	Resumed	2883-173 <ul style="list-style-type: none"> In 1921 Martha Sussanah Dumbrell (nee Organ) sister of George Organ transferred to the Minister for Public Works as constructing authority for the purposes of the 'Public 		2101-96 <ul style="list-style-type: none"> In 1910 Martha Sussanah Dumbrell became the proprietor after Maria Organ left the land to her in 1898 as part of her and George Organ's will. 	PA16323 <ul style="list-style-type: none"> in the will of Maria Organ, granted 1898 	Part of William Bowman's Portion 18

Current Lot DP	Land Acquisition	Previous Title Vol-Fol	Previous Title Vol-Fol	Previous Title Vol Fol	Previous Title Vol. Fol	Background
		Works Act 1912'. <ul style="list-style-type: none"> In 1938 a notice of resumption was made for the Bulli Hospital. 				
Lot 2 DP 7677	Resumed	3142-227 <ul style="list-style-type: none"> In 1920 George Henry Wood transferred to the Minister of Public Works as constructing authority In 1938 this lot and lots 5, 6, 7 8 DP7677 were resumed for the Bulli Hospital. 	2883-178 <ul style="list-style-type: none"> In 1918 George Henry Wood purchased the property from Martha Sussanah Dumbress 			
Lot 3 DP 7677	Resumed	3447-86 <ul style="list-style-type: none"> The minister for Public works 1912 under Section 14 1836 	2782-113 <ul style="list-style-type: none"> Robert Richardson in 1917. Notice of resumption in 1921 			
Lot 4 DP 7677						
Lot 5 DP 7677	Resumed	3142-227 <ul style="list-style-type: none"> The Minister from George Henry Wood, 	2536-48 <ul style="list-style-type: none"> 1918 Christopher Troman to 			
Lot 6 DP 7677						
Lot 7 DP 7677						

CurrentLot DP	Land Acquisition	Previous Title Vol-Fol	Previous Title Vol-Fol	Previous Title Vol Fol	Previous Title Vol. Fol	Background
Lot 8 DP 7677	Resumed	Lot 2 and Lots 5 to 8	George Henry Wood <ul style="list-style-type: none">1914 Christopher Troman from Martha Susannah Dumbrell Lots 5 and 6			
Lot 20 DP 6793	Resumed	2385-147 <ul style="list-style-type: none">In 1935 an application under Section 14 of the Real Property (Amendment) Act 1921 Bulli Hospital in 1935.In 1913 Alan Black with Jacob Glass and John Muir purchased the lots from John Australia Mayo	2091-101 <ul style="list-style-type: none">In 1910 George Edward Organ (nephew?) became the proprietorIn 1912 George Edward Organ to John Australia Mayo (auctioneer)In 1913 John Australia Mayo to Alan Black, Jacob Glass and John Muir in 1913		PA16328 <ul style="list-style-type: none">in the will of Maria Organ, granted 1898	
Lot 21 DP 6793						
Lot 22 DP 6793						
Lot 1 DP 595930	Donated	13677-73	PA 53550 <ul style="list-style-type: none">Donated by Maria Organ (nee Morgan)			

4. PREDICTIVE STATEMENTS

An assessment of archaeological potential usually considers the historic sequence of occupation in comparison to the structures that are currently extant, as well as the impact that the more recent constructions and works would have had on the earlier occupation phases and, as such, the likely intactness of the archaeological resource. This, in turn, is tied in with the extent to which a site may contribute knowledge not available from other sources to current themes in historical archaeology and related disciplines.

Regarding the assessment of the study area, the archaeological potential depends upon the anticipated likelihood for the survival of buried structural fabric and cultural deposits as well as an estimation of archaeological integrity. Structural fabric refers to what is generally regarded as building or civil engineering remnants. Cultural deposits refer to archaeological deposits, i.e. deposited sediments containing artefacts *et cetera*.

Having analysed the historical evidence in the previous chapters, the following section presents a summary of the potential for a physical archaeological resource to be present in the study area, that is, its archaeological sensitivity/potential.

The following predictive model draws on the areas of known archaeological sensitivity. As a general rule of archaeology, sites first redeveloped in either the 19th or early 20th century can also retain evidence of occupation from previous periods. It is also widespread that such evidence can be recovered even when sites have been redeveloped or disturbed by modern construction activity.

Based on the detailed background history, the following general predictive statements can be made:

- There is low potential for archaeological material to be present relating to the use of the study area in Phase 1. This is due to the construction of the hospital and associated infrastructure.
- There is low potential for the remains of the original Bulli cottage hospital to be present in the study area. Documentary sources are unclear on the precise location of the original cottage, however, it was demolished in 1946 and much of the site has been subject to significant levels of subsequent disturbance. As such, it is likely that only limited archaeological remains are present within the study area associated with this phase of occupation.
- There is an unknown potential for the air raid shelters to be identified. Documentary sources are unclear on the potential location of the air raid shelters in relation to contemporary buildings. It is possible that the shelters were destroyed during the post-war phase of development relating to the demolition of the original cottage as well as subsequent construction within the site has removed all evidence of these features.

5. SITE INSPECTION

The site inspection was conducted by Alexander Beben (Director, Austral) and Nicole Monk (Archaeologist, Austral) on 18 November 2022. The inspection consisted of a pedestrian survey of the entirety of the study area, with a focus on the existing structures and any surface deposits that may indicate the presence of archaeological material.

The site inspection commenced at the entrance to the Old Bulli Hospital, south of Hospital Road, and continued in a south-easterly direction beginning in the garden on the eastern perimeter (Figure 5.1).

During the survey, it was noted that there were multiple structures visible that were also present in 1948, these include the brick structure in Figure 5.12



Figure 5.1 North-east facing photograph of the garden within the study area.



Figure 5.2 South-west facing photograph of the Syd Atkins Ward.



Figure 5.3 North-west facing photograph of the Sid Wearne Block.



Figure 5.4 East facing photograph of the building constructed after 1961.



Figure 5.5 North-west photograph of building present in 1961.



Figure 5.6 South facing photograph of the x-ray department.

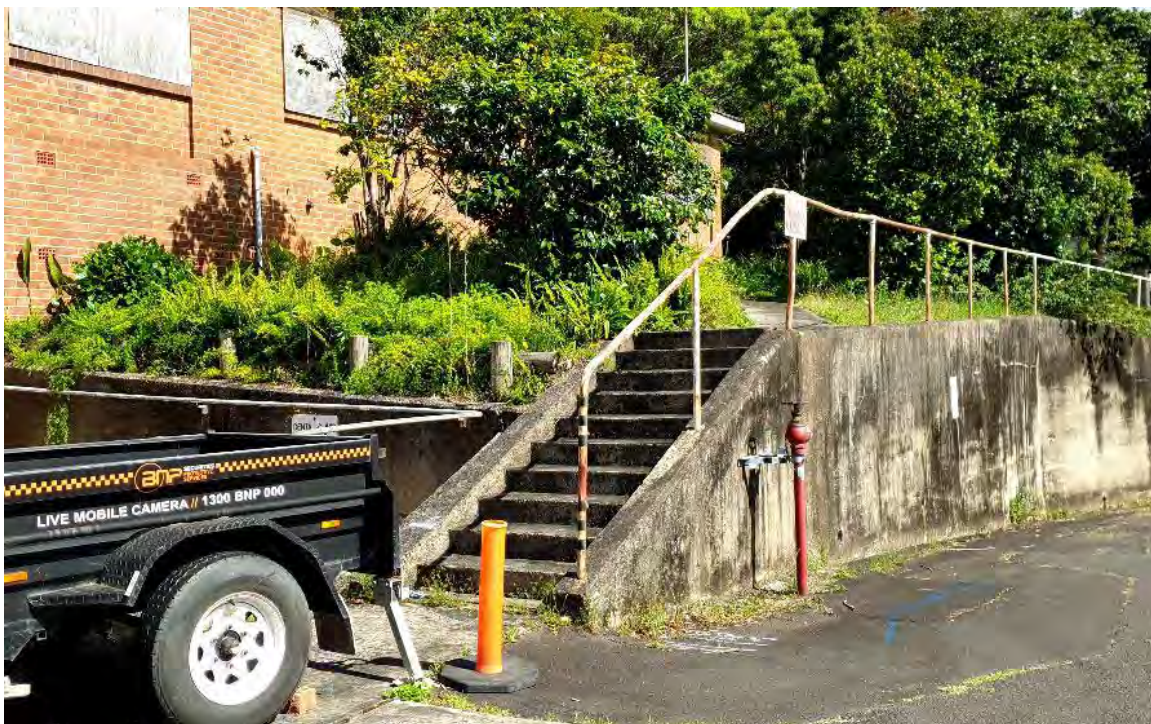


Figure 5.7 West facing photograph of the cement stairs.



Figure 5.8 Photograph of the Chullora Pottery vents.



Figure 5.9 Memorial to Charles Stanbridge.



Figure 5.10 East facing photograph of the different roof styles.



Figure 5.11 South facing photograph of building with awnings present in 1948.



Figure 5.12 East facing photograph showing the fabric in the existing structures.



Figure 5.13 East facing photograph showing weatherboard structures.



Figure 5.14 South-west facing photograph showing weatherboard structures.



Figure 5.15 West facing photograph of the entrance gates to old Bulli Hospital.

6. HISTORICAL LAND USE MAPPING

6.1 HISTORICAL LAND USE

The study area was originally part of the grants allocated to William Bowman and Henry Jefferson Bates and was likely used for agricultural purposes.

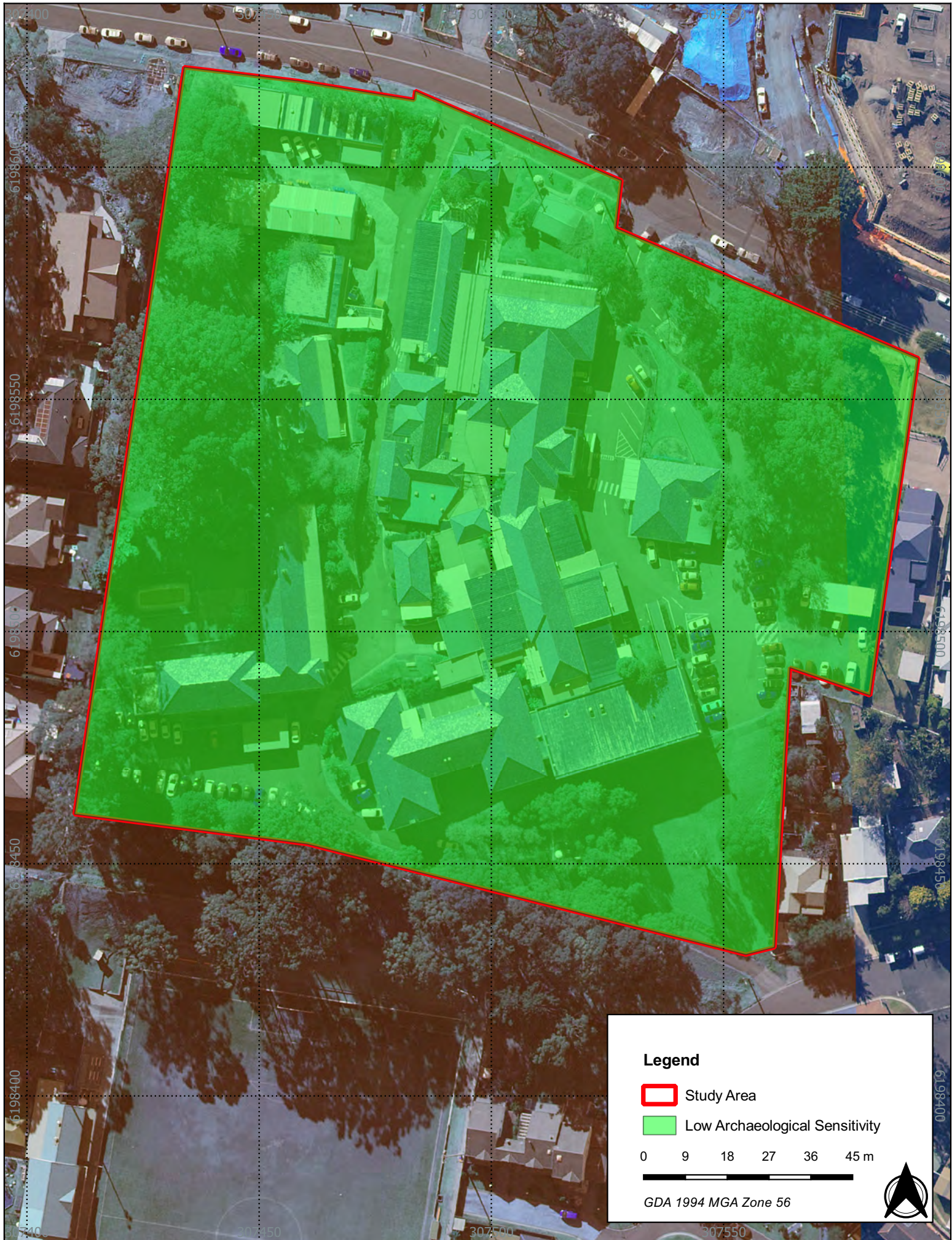
Year	Details
1892	Part of the study area was officially donated for use as a hospital and the first foundation stone was laid in the northern portion of the study area (Atkins 1992, p.3).
1906	Plans for the construction of a new male ward and theatre were drawn up (Atkins 1992, p.10).
1908	Nursing accommodation was erected and included a 2 room cottage and a verandah (Atkins 1992, p.10).
1911	Water mains were installed in the northern portion of the study area (Atkins 1992, p.10).
1913	The town water was connected to the hospital (Atkins 1992, p.10).
1914	Electricity was connected to the hospital (Atkins 1992, p.10).
1915	The hospital accumulated the surrounding farmland as part of the <i>Public Works Act 1912</i>
1917	A new roof was added to the hospital (<i>South Coast Times and Wollongong Argus</i> , 12 October 1917, pg 14).
1918	George Henry Wood, a builder, purchased lots 2 and 7 to 11 (DP7677), on the southern side of the hospital.
1920	The land brought by George Henry Wood had been resumed by the Minister of Works (Vol. 2883, Fol. 178). Around the same time, WJ (Billy) Williams built a timber nurses' home (Atkins 1992, p.10).
1925	An additional structure/ward was erected at the southern end of the former building increasing the accommodation from 11 to 24 beds.
1929	An X-ray room was built dedicated to Bellambi Coal Co (Bayley 2002, p.76).
1930	The hospital road was widened from land transferred to Council
1934	Pendlebury & Illawarra Bricks donated the bricks for the retaining ward of the new isolation ward, which increased the accommodation to 39.
1935	New nurse's quarters were opened (Bayley 2002, p.76).
1938	Hospital accumulated additional land, one acre (.4 hectares) west of the current allotment (Vol.4421 Fol.14). This land had remained in the McKinnon family from the 1840s and prior to the resumption from the government it was owned by Neil James McKinnon (Vol 3778 Fol. 219).
1940	X-ray plants were installed with donations from the Bellambi Coal Company (Bayley 2002, p.76).
1942	there are records that war volunteers dug air raid shelters on the hospital grounds ((Atkins 1992, p.10). A possible location for this is in the 1948 aerial, where there is a

Year	Details
	large rectangular-shaped disturbance present, adjacent to the eastern perimeter, but this has now been upgraded to a car park (Figure 3.6).
1945	The original Bulli Cottage Hospital was demolished, and at the time it was noted that the bottle originally placed in the foundation stone was identified with a paper containing the inscription: <i>'This, the foundation stone of the Bulli Cottage Hospital, was laid by Francis Woodward, Esq., of Wollongong on Saturday, June 11, 1892, A.D. in the presence of the Great Architect of the Universe and the assembled public of Bulli and district'</i> (Bayley 2002, p.82; IM, 7 Dec 1945, pg 1).
1946	The foundation stone was laid for a children's ward and nurses' quarters. The bottle that was found in the demolition process was laid in the new foundation stone (Atkins 1992, p.10).
1949	Extension of 18 bedrooms annex and recreation room to nurses' home (Atkins 1992, p.10)
1951	The two-storeyed brick nurses' home at the south end of the former home was constructed (Bayley 2002, p.82).
1953	Volunteers built the parking area (Bayley 2002, p.82).
1954	An amenities block was constructed (Bayley 2002, p.82).
1957	An administrative block was built (Bayley 2002, p.82).
1964	No 2 theatre was constructed and the outpatient department was constructed (Atkins 1992, p.10).
1975-1977	Construction of outpatient waiting room, E.C.G room, ambulance port and nurses swimming pool constructed, the opening of the Syd Atkins ward, new connections for sewerage to the hospital, expansions to the office block, kiosk, engineers office, a third x-ray room commissioned and the sealing of bitumen on all internal roads (Atkins 1992, p.10).
1981	An electricity easement was leased over the land and the last major development began with a kitchen extension.

6.2 ARCHAEOLOGICAL SENSITIVITY MAPPING

The results of Section 4 are depicted in an archaeological sensitivity map below (Figure 6.1). The figure shows the degree of predicted archaeological potential within the study area following site development and forms the basis for the conclusions and management recommendations outlined in Section 9. However, one key point to note is that potential is not equal to significance, and areas of even moderate or high archaeological potential may not actually contain archaeological material which is considered significant (see Section 8).

It is noted that low archaeological sensitivity identified in Figure 6.1 represents the fact that the actual location of the original hospital cottage is unknown. As such, considering the scope of later construction across the site, earlier archaeological remains may only be fragmentary in nature. It is still possible that archaeological remains requiring further investigations may be present in areas zoned as low archaeological sensitivity.



7. ASSESSMENT OF SIGNIFICANCE

An assessment of cultural significance seeks to establish the importance that a place has to the community. The concept of cultural significance is intrinsically tied to the fabric of the place, its history, setting and its relationship to other items in its surrounds and the response it evokes from the community.

The assessment of cultural significance with respect to archaeological sites can present difficulties because the nature and extent of the "relics" are often indeterminate and value judgements therefore need to be made based on potential attributes. The element of judgement can be greatly reduced by historical or other research, as has been completed for the current study. Archaeological deposits and features provide important evidence of the history and settlement of New South Wales. These heritage items may include deposits containing material culture (artefacts) that can be analysed to yield information regarding early urban development that is unavailable from other sources. Archaeological investigations can reveal much about technology, industry, past economic and social conditions and people's lives.

Sites that contain these elements therefore have scientific value that may be of considerable significance when analysed in association with documentary evidence. It is through this potential to reveal information about the past use of a place that archaeological sites have heritage significance.

7.1 BASIS FOR ASSESSMENT

The Burra Charter of Australia ICOMOS was formulated in 1979 (revised 1999 and 2013) [Australia ICOMOS 2013], based largely on the Venice Charter (for International Heritage) of 1966. The Burra Charter is the standard adopted by most heritage practitioners in Australia. The Charter divides significance into four categories for the purpose of assessment. They are: Aesthetic, Historical, Scientific/Technical, and Social significance.

The Heritage Council of NSW has established a set of seven criteria to be used in assessing cultural heritage significance in NSW, and specific guidelines have been produced to assist archaeologists in assessing significance for subsurface deposits (Heritage Council of New South Wales 2009; NSW Heritage Office 2001). The Heritage Council's criteria incorporate those of the Burra Charter, but are expanded to include rarity, representative value, and associative value.

In order to determine the significance of a historical site, the Heritage Council have determined that the following seven criteria are to be considered (NSW Heritage Office 2001):

- **Criterion (a):** an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);
- **Criterion (b):** an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);
- **Criterion (c):** an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
- **Criterion (d):** an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);
- **Criterion (e):** an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);
- **Criterion (f):** an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and
- **Criterion (g):** an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).

These criteria were designed for use on known or built heritage items, where above ground heritage is both tangible and easily identified. Due to the nature of archaeology being that it is invisible until disturbed, the presence and attributes of archaeological material must be assumed based on the recorded levels of disturbance, known site history and the creation of predictive statements. Ultimately, the actual presence of archaeological material can only ever be framed in terms of the potential for it to be present. The following assessment therefore deals with the built and archaeological potential within the study area in a consolidated manner.

7.2 LEVELS OF SIGNIFICANCE

The Heritage Act allows for the protection of heritage items of State or local significance. The levels of significance can be defined as:

- Items of State significance are of special interest in a State context. They form an irreplaceable part of the environmental heritage of NSW and must have some connection of association to the State.
- Items of local significance are of special interest to the LGA. They important to the local community and often form an important part of the local identity. Collectively, such items reflect the cultural or natural history of the given area.

7.3 SIGNIFICANCE ASSESSMENT

The following section addresses the significance of the potential archaeological resource in accordance with the criteria adopted in the Heritage Council's significance guidelines for archaeological deposits (Heritage Council of New South Wales 2009, pp.11–13), using selected questions from the guidelines.

Table 7.1 Response to consideration against heritage criteria.

Criteria	Assessment
(a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);	<p>The development of the hospital is linked to the local community and in particular the Bulli mine. The 1887 mine disaster resulted in the planning and development of the Bulli Cottage Hospital. The Bulli community, miners and railway workers were closely associated with the development of the hospital, donating part of the land which forms part of the study area, and establishing a fund for the construction and ongoing maintenance of the hospital.</p> <p>Therefore, the study area meets the threshold for listing under this criteria at a local level.</p>
(b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);	<p>The Bulli District Hospital is strongly associated with the Bulli Mine disaster. Following the explosion, the community's involvement and donations led to the construction of the hospital. The local mining community also contributed ongoing payments to the maintenance of the study area.</p> <p>Therefore, the study area meets the threshold for this criterion at a local level.</p>
(c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);	<p>The hospital is constructed from brick and weatherboard fabrics which is consistent with the inter-war functionalist style it represents.</p> <p>As the buildings do not have uniformity and do not have a high degree of creative or technical achievement in NSW, the study area does not meet the threshold for this criteria.</p>

Criteria	Assessment
(d) an item has a strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);	<p>The Bulli District Hospital was a health provider for around 130 years from 1882 to 2020, and there are likely community members who have either utilised the service or know people that have used it. In addition, the hospital caters to life and death activities which are significant at a regional level as it was valued by the local and surrounding rural community. As such, the hospital is considered to have a special or strong association with the local community, as well as the mines sponsored the hospital and the miners who paid for its upkeep.</p> <p>Therefore, the study area <u>meets the threshold</u> for this criteria at a local level.</p>
(e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);	<p>There is limited evidence for the use of the study area prior to the late 1800s but the use of the study area for 130 years as a hospital and the ongoing changes and disturbances have impacted the study area's ability to yield information. As a result, the study area is not considered to have the potential to yield any information that will contribute to an understanding of Bulli's, the Illawarra's or NSW's cultural or natural history.</p> <p>Therefore, the study area <u>does not meet the threshold</u> for listing under this criterion.</p>
(f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and	<p>The buildings within the study area were constructed in the early to mid-20th century and are not considered to possess uncommon, rare or endangered aspects of NSW's or the Illawarra's cultural or natural history.</p> <p>Therefore, the study area <u>does not meet the threshold</u> for this criteria.</p>
(g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).	<p>The Bulli hospital was constructed as a result of community involvement and demonstrates the Bulli community's initiative to provide health care to local residents. The hospital provides a representative example of inter-war hospital design.</p> <p>Therefore, the study area does meet the threshold for this criteria.</p>

7.4 STATEMENT OF SIGNIFICANCE

Historical research has identified that the study area was originally granted to Henry Jefferson Bate in 1840 and William Bowman in 1841, whose grant forms a significant part of the current Bulli township. Following the release of the land grants and the subsequent ownership by Lachlan McKinnon and George and Maria Organ, the Bulli Cottage Hospital was constructed predominantly through public subscription following the Bulli Colliery Mine disaster and the community's initiative to establish a health base in the local area. The former hospital has high associative significance as community involvement and donations led to the construction of the hospital. The study area is significant as it shows how community involvement and donations contribute to the development of facilities. Bulli District Hospital is also significant to the local community as it demonstrates ongoing health care for the past 130 years, with the hospital remaining in use and transferring to a new purpose-built facility on the northern side of Hospital Road. Although the Bulli Cottage Hospital is no longer standing within the study area, the site has a high social value to the local community.

As such, the archaeological resource within the study area is considered to meet the Heritage Significance Criteria (a), (b), (d) and (g) at the local level.

8. STATEMENT OF HERITAGE IMPACT

The purpose of this section is to present a comprehensive assessment of the impacts to the identified archaeological values associated with the study area from the proposed works.

8.1 PROPOSED WORK

The proposed activity at this stage consists of the demolition of the existing structures and preparation for a residential subdivision. The works are anticipated to be undertaken in 2 stages:

- Stage 1: includes the removal of hazardous material and the demolition of structures to the ground floor level.
- Stage 2: ground remediation, including the demolition of remaining slabs, retaining walls, foundations, driveways, paths and vehicle access/parking.

8.2 ASSESSED IMPACTS

The proposed works would cause varying degrees of impact throughout the entirety of the study area. The most extensive impacts would occur to the existing structures, which includes the demolition of the buildings, ground clearing and levelling for the development of future structures, and the excavation involved in the implementation of amenities and structural footings. These works will result in the loss of heritage values, should they be present within the study area.

8.3 PREDICTED IMPACT ON THE POTENTIAL ARCHAEOLOGICAL RESOURCE

The following section provides an assessment of each element of the proposed works and whether the task has potential to impact on the identified archaeological resource.

PREDICTED IMPACTS WITH POTENTIAL TO HARM THE ARCHAEOLOGICAL RESOURCE

Bulk earthworks associated with the demolition and remediation of the existing structures and the excavation of levelling activities associated with the proposed subdivision will impact any archaeological material which may be present. However, there is a question of where any such deposits may be located. If any archaeological remains are identified during the investigation process, discussions will be held in regards to determining whether these remains can be protected or incorporated into the subsequent development in these areas.

PREDICTED IMPACTS WITH LIMITED EFFECT ON THE ARCHAEOLOGICAL RESOURCE

The bulk earthworks associated with the proposed development are likely to result in significant impacts on the archaeological resource that will need to be managed through a permit approval made under Section 140 of the Heritage Act.

8.4 CONSIDERATION OF HERITAGE VALUES IN THE DESIGN PROCESS

The following questions are taken from the Heritage Division's guidelines to preparing statements of heritage impact (Heritage Office and Department of Urban Affairs & Planning 1996).

WHAT ASPECTS OF THE PROPOSAL RESPECT OR ENHANCE THE HERITAGE SIGNIFICANCE OF THE STUDY AREA?

The historical research for this document has identified that there is a history of the hospital's development associated with the study area that has remained largely underappreciated in conventional historical accounts. The development will provide the opportunity to integrate interpretive displays into the new development.

HAVE MORE SYMPATHETIC OPTIONS BEEN CONSIDERED AND DISCOUNTED?

The development is being designed to respect the significance of the existing history of the study area. LANDCOM is in support of including historical representations within the study area, including interpretive signs.

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

Background and site investigations undertaken for this report demonstrate that various parts of the study area have been used for agricultural purposes since the 1840s, at the time of the first land grants to Bowman and Bate. Since the 1890s, the northern portion of the study area has been utilised as a hospital, before the surrounding allotments were purchased and the hospital was extended. There exists the potential for subsurface relics associated with the Bulli Cottage Hospital to be located in the northern allotment (Lot 1 DP595930), although it is currently unknown where the exact location of this hospital was. The subsequent history of the study area reflects the changes in ownership between local landholders, and as such there may also be evidence of both occupation and farming practices present, although this is unlikely due to the ensuing development of the Bulli Hospital and the land clearing that would have been undertaken. As such, much of the study area has been identified as having potential to contain archaeological material which is assessed as being of local significance.

IDENTIFIED HERITAGE VALUES

The study area does not appear on any identified heritage register at either the national or state level. This includes the State Heritage Inventory, the *Wollongong Local Environmental Plan 2009* or any Section 170 Heritage Registers.

It is concluded that there are varying degrees of historical heritage values and archaeological potential and sensitivity within the study area owing to the presence of the cottage hospital until 1945. It is concluded that the only known value related to one phase of use:

- Phase 1: The Bulli Cottage Hospital (1892-1945)

These remains are likely to be associated with the original development of the Bulli Hospital Cottage, which was erected in the 1890s and demolished in 1945. The location of the Cottage Hospital has not been able to be determined due to a lack of historical documentation of the site. This has resulted in the study area being deemed as having low archaeological potential as there is no focal point within the study area to target in terms of archaeological sensitivity. Furthermore, subsequent construction activities on the site may have impacted on whatever archaeological remains are present. However, as the proposed development consists of a range of activities that may therefore impact on unknown archaeological remains within the study area, a program of archaeological monitoring is recommended to identify any unexpected archaeological remains uncovered during the demolition and remediation process, and to sufficiently record, and manage any impacts to the archaeological resource as part of the proposed development.

9.2 RECOMMENDATIONS

On the basis of the findings of this report, it is recommended that:

- 1) An archival recording of the study area must be undertaken in accordance with Heritage NSW guidelines. The Archival Recording Report must be completed prior to the completion of demolition and be submitted to the Wollongong City Council Local Studies collection in digital and hard-copy formats.
- 2) During Demolition an Unexpected Finds Policy is to be implemented; specifically, there is the potential for time capsules and other information to be uncovered prior to any groundworks. These items are likely to be of interest to the local community and it is recommended that their location be documented. In terms of future management, preference should be given to retention onsite for future interpretation. If this is not feasible, donation to a relevant local heritage society or museum may be feasible. Where items such as this are found during the demolition works, all works in the immediate vicinity are to cease immediately and a qualified archaeologist is to be contacted to assess the situation and, if necessary, consult with Heritage NSW and Wollongong City Council regarding the most appropriate course of action.

- 3) Due to the long history of the hospital use and the potential for unanticipated archaeological deposits such as rubbish dumps or remains relating to the original cottage such as the time capsule be present, an archaeological research design (ARD) must be developed to support an application under Section 140 of the *NSW Heritage Act 1977*. The ARD will detail a program of archaeological investigations that will be undertaken during demolition and early earthworks. It is advised that the ARD and Section 140 permit approval be obtained and conditioned as part of the conditions of consent associated with the remediation DA.
- 4) It is advised that a Heritage Interpretation Plan (HIP) should be developed. The HIP will include details from the Archival Recording Report and archaeological program and identify opportunities to communicate the key heritage themes associated with the item. This will include places within the study area that are open to the public as where the former use of the item can be remembered. It is recommended that these spaces include information on the Bulli Cottage Hospital, 20th century hospital and individual such as Sid Warne, Syd Atkins and Charlie Stanbridge. It is preferential that, if identified, the memorial plaque and information on the time capsules which could be located on the site be included in public spaces along with any artefacts and physical fabric which could be salvaged from the site.
- 5) The highly significant trees identified within the arboricultural reports on the western side of the study area are recommended to be retained as part of remediation works and the demolition. The trees are present in earlier aerials and contribute to the amenity of the item and surrounding landscape. This may be re-evaluated following the production of the arborist and ecology reports.
- 6) A copy of this assessment is recommended to be lodged by the proponent in the local history section of the local library, and in the library maintained by Heritage NSW.

10. REFERENCES

- Atkins, S 1992, *Bulli District Hospital: The First Hundred Years*, Syd Atkins.
- Austral Archaeology Pty Ltd 2022, *Aboriginal Cultural Heritage Due Diligence Advice for 27 Hospital Road, Bulli*, Landcom, NSW.
- Australia ICOMOS 2013, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.
- Bayley, W 2002, *Black Diamonds: A History of the Bulli District, NSW*, Illawarra Historical Society, Wollongong.
- Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.
- Dingsdag, D 1993, *Bulli Mining Disaster 1887: Lessons from the past*, St Louis Press.
- Eardley, GH 1919, 'Down Illawarra train at Central, 1919'.
- GML Heritage 2014, *300 Princes Highway, Bulli NSW. Historical Archaeological Excavation: Interim Report. Unpublished consultancy report to Roads and Maritime Services*.
- Heritage Council of New South Wales 2009, *Assessing significances for historical archaeological sites and 'relics'*, Heritage Branch, NSW Dept. of Planning, Parramatta, N.S.W., viewed 30 January 2019, <http://www.heritage.nsw.gov.au/03_index.htm>.
- Heritage NSW 2022a, 'Relics of local heritage significance: a guide for minor works with limited impact. Heritage NSW Information Sheet 2022.1'.
- Heritage NSW 2022b, 'Relics of local heritage significance: a guide for archaeological test excavation. Heritage NSW Information Sheet 2022.2'.
- Heritage NSW 2022c, 'Relics of local heritage significance: a guide for archaeological monitoring. Heritage NSW Information Sheet 2022.3'.
- Heritage Office and Department of Urban Affairs & Planning 1996, 'Statements of Heritage Impact', <<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf>>.
- Jervis, J 1942, 'Illawarra: A Century of History', *Journal of the Royal Australian Historical Society*, vol. XXVIII, pp. 65–107; 129–56; 193–248; 273–302; 353–374.
- Kass, T 2010, *A Thematic History of the City of Wollongong*, Wollongong City Council, Wollongong.
- Lindsay, B 1994, *Early Land Settlement in Illawarra (1804-1861)*, M Organ & A Doyle (eds.), Illawarra Historical Publications.
- McDonald, WG 1979, *The Oldest Road*, Illawarra Historical Publications, Wollongong.
- Mould, G & Cairns, R 2004, 'Mining History of the Illawarra', in, Australian Institute of Mine Surveyors, Wollongong.
- Murray, T, M, A 2002, "Casselden Place Development: Archaeological Investigation Works Phases 1 and 2, Full Research Design", report for Godden Mackay Logan Pty Ltd in association with Archaeology Program La Trobe University and Austral Archaeology Pty Ltd.'

NSW Department of Planning, Heritage Council of NSW 2006, *Historical Archaeological Excavations: Code of Practice*, State of New South Wales, Sydney.

NSW Heritage Office 2001, 'Assessing heritage significance', viewed 1 May 2016, <<http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/listings/assessingheritagesignificance.pdf>>.

Organ, M 1990, *A Documentary History of the Illawarra and South Coast Aborigines 1770-1850*, Aboriginal Education Unit, Wollongong University, Wollongong.

Organ, M & Speechley, C 1997, *Illawarra Aborigines - An Introductory History*, University of Wollongong, Wollongong, NSW.

Organ, MK & Hardy, R 1984, 'Pioneers of the Illawarra - a history of the family of Elias Organ in Wollongong, 1839-1869'.

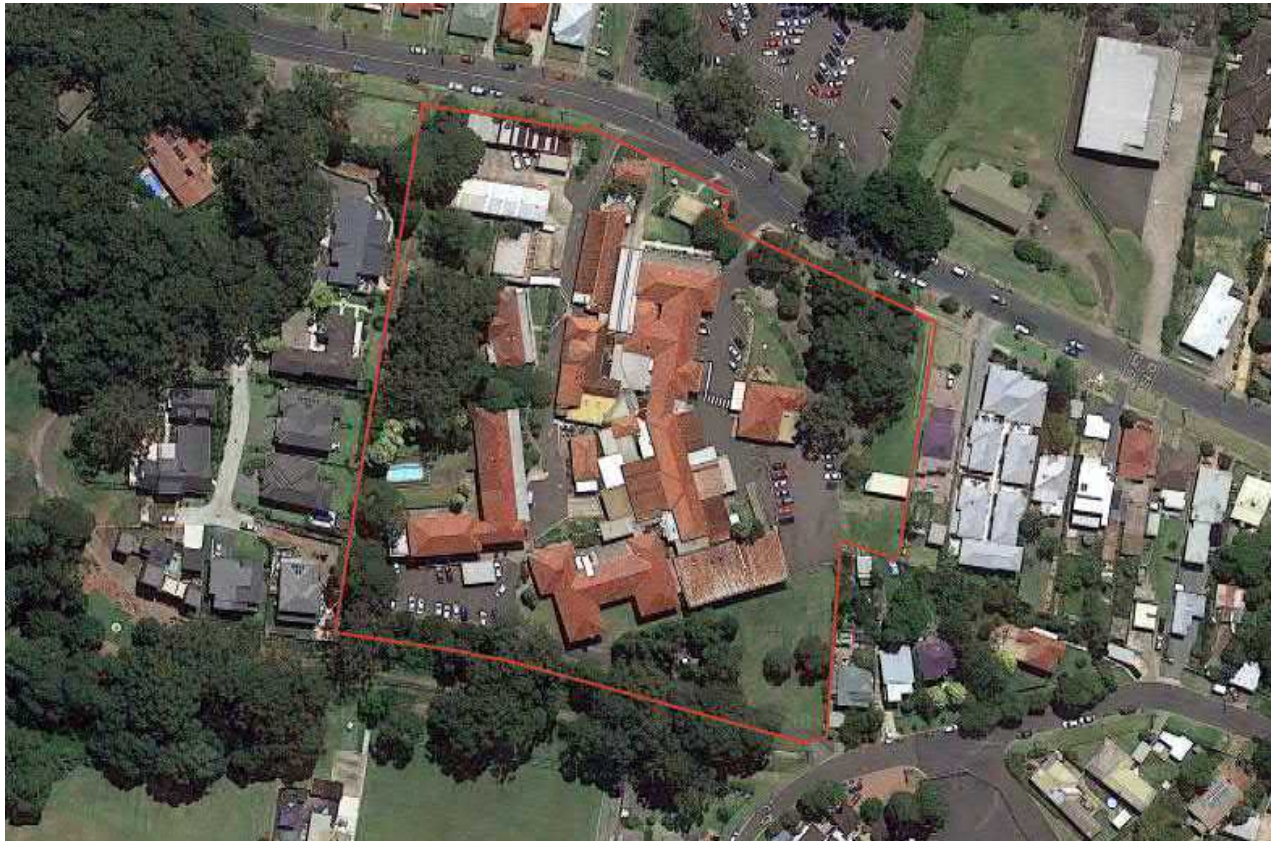
Osbourne, F 2000, 'The Parkinson Family', *Illawarra Historical Society Bulletin*, , no. March-April, pp. 5–10.

Schacht 2010, 'Towards a Thematic Research Framework in Australian Historical Archaeology', *Australasian Historical Archaeology*, , no. 28, pp. 61–76.



Hazardous Materials Survey

Old Bulli Hospital, Hospital Road, Bulli NSW 2516



Project Name:	HAZMAT Survey ref: J178406
Survey Location:	31 Hospital Road, Bulli NSW 2516
Survey Date:	September 2022
Surveyed By:	Cameron Hollands, Greencap

Executive summary

This report presents the findings of a hazardous materials survey conducted for Landcom at the site located at Old Bulli Hospital, Hospital Road, Bulli NSW 2516. The survey was performed by Cameron Hollands of Greencap in August 2022.

The purpose of the survey was to identify the location and extent of hazardous building materials for future demolition of the site.



Please note that Greencap had conducted a previous HazMat inspections and sampling regime for the site which may be cited herein. (Ref: C109541: J161155 Dated December 2019).

The scope of the hazardous materials survey included Asbestos, Lead Paint, lead in Accumulated Dust, Synthetic Mineral Fibre (SMF), Ozone Depleting Substances (ODS), Polychlorinated Biphenyls (PCBs), Biological and Radiation Hazards.

A summary of the survey findings is included in the following table:

Area	Asbestos		Hazardous Materials						
	Friable	Non-friable	SMF	PCBs	Lead Paint	Lead Dust	ODS	Biological	Radiation
Building A	✓	✓	✓	✓	✓	X	✓	✓	X
Building B	✓	✓	✓	✓	✓	X	X	✓	X
Building C	X	✓	✓	✓	✓	X	✓	✓	X
Building D	✓	✓	✓	✓	✓	✓	✓	✓	X
Building E	X	✓	X	✓	✓	✓	X	✓	X
Building F	X	✓	✓	✓	X	X	X	✓	X
Building G	✓	✓	✓	x	✓	X	✓	✓	X
Building I	✓	✓	✓	✓	✓	X	✓	✓	X
Building I (Garage)	✓	✓	X	X	X	X	X	✓	X
Building J	✓	✓	✓	✓	✓	✓	✓	✓	X
Building K	X	✓	✓	✓	✓	X	X	✓	X
Building L	X	✓	✓	✓	✓	✓	X	✓	X
Building M	X	X	✓	✓	X	X	X	✓	X
Building N	X	✓	✓	✓	✓	✓	X	✓	X

Document Control

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Client Name:	Landcom	
Client Number:	C123920	
Signatures:	Prepared By:  Cameron Hollands Principal Consultant NSW Licensed Asbestos Assessor LAA000107 EIANZ Certified Environmental Practitioner #1419	Reviewed By:  Leigh Rampley Principal Consultant – HazMat (NSW) Licence No. LAA001197
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Statement of limitations

All and any Services proposed by Greencap to the Client were subject to the Terms and Conditions listed on the Greencap website at: <https://www.greencap.com.au/terms-conditions> Unless otherwise expressly agreed to in writing and signed by Greencap, Greencap does not agree to any alternative terms or variation of these terms if subsequently proposed by the Client. The Services were carried out in accordance with the current and relevant industry standards of testing, interpretation and analysis. The Services were carried out in accordance with Commonwealth, State, Territory or Government legislation, regulations and/or guidelines. The Client was deemed to have accepted these Terms when the Client signed the Proposal (where indicated) or when the Company commenced the Services at the request (written or otherwise) of the Client.

The services were carried out for the Specific Purpose, outlined in the body of the Proposal. To the fullest extent permitted by law, Greencap, its related bodies corporate, its officers, consultants, employees and agents assume no liability, and will not be liable to any person, or in relation to, any losses, damages, costs or expenses, and whether arising in contract, tort including negligence, under statute, in equity or otherwise, arising out of, or in connection with, any matter outside the Specific Purpose.

The Client acknowledged and agreed that proposed investigations were to rely on information provided to Greencap by the Client or other third parties. Greencap made no representation or warranty regarding the completeness or accuracy of any descriptions or conclusions based on information supplied to it by the Client, its employees or other third parties during provision of the Services. Under no circumstances shall Greencap have any liability for, or in relation to, any work, reports, information, plans, designs, or specifications supplied or prepared by any third party, including any third party recommended by Greencap.

The Client releases and indemnifies Greencap from and against all Claims arising from errors, omissions or inaccuracies in documents or other information provided to Greencap by the Client, its employees or other third parties. The Client was to ensure that Greencap had access to all information, sites and buildings as required by or necessary for Greencap to undertake the Services. Notwithstanding any other provision in these Terms, Greencap will have no liability to the Client or any third party to the extent that the performance of the Services was not able to be undertaken (in whole or in part) due to access to any relevant sites or buildings being prevented or delayed due to the Client or their respective employees or contractors expressing safety or health concerns associated with such access.

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The Report is provided for the exclusive use of the Client and for this Project only, in accordance with the Scope and Specific Purpose as outlined in the Agreement, and only those third parties who have been authorized in writing by Greencap. It should not be used for other purposes, other projects or by a third party unless otherwise agreed and authorized in writing by Greencap. Any person relying upon this Report beyond its exclusive use and Specific Purpose, and without the express written consent of Greencap, does so entirely at their own risk and without recourse to Greencap for any loss, liability or damage. To the extent permitted by law, Greencap assumes no responsibility for any loss, liability, damage, costs or expenses arising from interpretations or conclusions made by others, or use of the Report by a third party. Except as specifically agreed by Greencap in writing, it does not authorize the use of this Report by any third party. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

The conclusions, or data referred to in this Report, should not be used as part of a specification for a project without review and written agreement by Greencap. This Report has been written as advice and opinion, rather than with the purpose of specifying instructions for design or redevelopment. Greencap does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in relation to the site it investigated.

This Report should be read in whole and should not be copied in part or altered. The Report as a whole set outs the findings of the investigations. No responsibility is accepted by Greencap for use of parts of the Report in the absence (or out of context) of the balance of the Report.

It should be noted that this asbestos survey report is not intended to be used as a Bill of Quantities for the removal of hazardous-containing materials and should be used as a reference document only when tendering.

1 INTRODUCTION

This report presents the findings of a hazardous materials survey conducted for Landcom at the site located at Old Bulli Hospital, Hospital Road, Bulli NSW 2516. The survey was performed by Cameron Hollands of Greencap between, excluding weekends, 26th July to 5th August 2022.

The purpose of the survey was to identify the location and extent of hazardous building materials for future demolition of the site.

Please note that Greencap had conducted previous HazMat inspections and sampling regime for the site which may be cited herein. (Ref: C109541 : J161155 Dated December 2019).

2 SCOPE OF WORK

The scope of works for this project was as follows:

- Desktop review of previous HAZMAT/Asbestos reports and the existing register for the site;
- Inspect representative and accessible areas of the site to identify hazardous materials, prior to demolition works, including Asbestos, Synthetic Mineral Fibre (SMF); Polychlorinated Biphenyls (PCBs), Ozone Depleting Substances (ODS) Lead Paint, Accumulated Lead in Dust, Biological and Radiation Hazards;
- Compile an up-to-date hazardous materials register for the site;
- Provide general recommendations for demolition (removal/remediation);
- Collect onsite samples of suspected asbestos/lead-containing, mould materials;
- Obtain representative photographs of hazardous materials.

This assessment was performed in accordance with:

- *Work Health and Safety Regulation 2017 (NSW)*;
- *Code of Practice How to Manage and Control Asbestos in the Workplace, SafeWork NSW, 2019*;

Refer to Methodology for full details.

3 SITE DESCRIPTION

The Old Bulli Hospital is located on the south side of Hospital Road on a moderate east facing slope. Residential properties directly abut the west and east site boundaries. The south boundary is a steeply sloped unoccupied area covered with dense vegetation. The north site of the site is bound by Hospital Road with the new Bulli Hospital site beyond. The Old Bulli Hospital site includes twelve buildings constructed between approximately 1940 to 1960 that are spread throughout the site with access roads and garden areas between. The main area of the site, Buildings A, B and D are semi-detached in the central section of the site. The older buildings are generally constructed with timber frame/flooring, brick walls, tile roof, masonry walls and fibrous plaster ceilings. The newer buildings have concrete slab floor and gyprock internal wall/ceiling linings. There are numerous additions, extensions and refurbished areas to the buildings which mix the construction material types. The buildings are all one or two levels and have been abandoned for approximately 2 years which has resulted in significant dilapidation in some areas.

Refer to **Appendix B Site Plans** for further details.

4 METHODOLOGY

4.1 Asbestos

This component of the assessment was carried out in accordance with the guidelines documented in the *Code of Practice How to Manage and Control Asbestos in the Workplace, SafeWork NSW, 2019*; and the NSW Work Health and Safety Regulation 2017. Representative samples of suspected asbestos-containing material were collected and placed in plastic bags with clip-lock seals. These samples were subsequently analysed in for the presence of asbestos in Greencap's NATA-accredited laboratory by Polarised Light Microscopy.

Inaccessible areas that are likely to contain asbestos have been assumed to contain asbestos until further inspection and analysis of samples has been undertaken by an approved analyst.

Limited destructive sampling techniques have been used to gain access into restricted areas for the purpose of determining the likelihood of asbestos materials in these areas. Due to the nature of the survey methodology, it is possible that not every area of the site have been accessed. Reference should be made to the 'Areas Not Accessible' section of this report for further details. Refer to **Appendix C Laboratory Analysis Reports** for further details.

4.2 Synthetic Mineral Fibres (SMF)

This component of the assessment was carried out in accordance with the guidelines documented in the Code of Practice for the Safe Use of Synthetic Mineral Fibres, NOHSC, 2006 (1990). Accessible areas where Synthetic Mineral Fibre (SMF) insulation was visually confirmed as being present were noted to give a general indication to the presence of materials throughout the building.

4.3 Polychlorinated Biphenyls (PCBs)

Representative light fittings containing capacitors were inspected where safely practicable and details noted for cross-referencing with the ANZECC Identification of PCB-Containing Capacitors - 1997. Where metal capacitors were not listed on the database, these capacitors are noted as suspected to contain polychlorinated biphenyls. Due to the inherent hazard in accessing electrical components, or other reasons such as height restrictions, immovable equipment and furniture, some light fittings may not be safely accessed. In these instances, comment is made on the likelihood of PCB containing materials based upon age and appearance.

4.4 Lead Paint

Suspect paint chip samples were collected and sent to an external NATA-accredited laboratory for analysis of lead content (lead content reported as a percentage weight by weight) by ICP-AES methods.

As per the Australian/New Zealand Standard (AS/NZS 4361.2:2017): Guide to hazardous paint management: Part 2: Lead paint in residential and commercial buildings: Section 1.4.16, Lead paint is defined as a paint film that contains greater than 0.1% lead by mass in the dry film. The presence of lead paint may be assumed based upon the age of the building, with 1997 indicated by the Standard as the date non-industrial paints were manufactured with less than or equal to **0.1% lead by mass**. As per AS/NZS 4361.2:2017 laboratory analysis is required to confirm the presence of lead and its concentration in an existing paint film. Refer to **Appendix C Laboratory Analysis Reports** for further details.

4.5 Accumulated Lead in Dust

Dust samples were collected during the inspection and sent to an external NATA-accredited laboratory for analysis of lead content (lead content reported as mg/kg) by ICP-AES methods.

No specific level or concentration (mg/kg or %) requirement relating to lead in dust in occupational environments has been specified or provided by Safe Work Australia or the various state-based WHS regulators. The main Australian screening criteria for lead in dust are found in the National Environment

Protection (Assessment of Site Contamination) Measure (the NEPM) Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater (2011). The NEPM provides Health-based Investigation Levels (HILs) for contaminants in soil for varying exposure scenarios, primarily based on public health. Greencap has adopted the most sensitive and protective Health Investigation Level (HIL) for lead in soil of **300 mg/kg** in soil as an initial guideline value for lead in dust. As dust is more likely to become airborne the lowest measure for lead in soil is used. Refer to **Appendix C Laboratory Analysis Reports** for further details.

4.6 Ozone Depleting Substances

Representative items of refrigerators, air conditioners, chiller units, other refrigerated equipment and any equipment labelled as containing ODSs or suspected of containing ozone-depleting substances (ODSs) were noted and cross referenced with known ozone-depleting gases published in Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives, United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (DTIE) OzoneAction Programme, 2001 Ozone Depleting Substances (ODSs) are those substances which deplete the earth's ozone layer and have been widely used in a range of commercial and industrial applications. All items listed in this report as containing ODS must be have their gases extracted by specialised contractors prior to destruction of the unit.

4.7 Biological Hazards

Biological hazards include pathogenic micro-organisms (viruses, bacteria, fungi), toxins and bio-active substances. Biological hazards can also be considered to include biological vectors or transmitters of disease. Biological hazards pose risks for workers including exposure to materials containing viral or bacterial diseases from contact with human bodily matter, such as blood, tissues, saliva, mucous, urine and faeces. Exposure to biological hazards can also occur when people are in contact with laboratory cell cultures, soil, clay and plant materials, organic dusts, food, and rubbish, wastewater and sewerage. Exposure to moulds and yeasts is common in some industrial processes, in workplaces with air conditioning systems and high humidity, and in the Construction industry.

Inspection for Biological Hazards: All accessible internal areas of the building were visually inspected for selected biological hazards such as the remnants of human bodily matter and laboratory cultures. The consultant systematically inspected all rooms, closets, cupboards, and storage areas for materials/substances which may have been discarded.

Mould Assessment: Internal building surfaces were visually inspected for growth and the proliferation of microorganisms. The consultant systematically inspected walls, ceiling and floor areas with rooms and outdoors. Representative areas of concern were selected for Non-Viable Surface Samples using Biotape samplers for laboratory analysis of total fungal Structures per square centimetre. There is no assessment criterion for demolition works, however, laboratory results exceeding **1,500 fungal/cm²** (structures per square centimetre) is considered an indication of contamination. Non-Viable microbial air sampling was undertaken using Air-O-Cell Cassette, which are inserted into Quick Take sampling pump, calibrated to draw air at 15L/min for 5 minutes, collecting a total of 75 L. There is no assessment criterion for demolition works, however, the American Industrial Hygienist Association's publication (AIHA, 2001), Synergist, recommends a limit of **2,500 spores/m³** for commercial buildings. Refer to **Appendix C Laboratory Analysis Reports** for further details.

4.8 Radiation Hazard Assessment

The site inspection included a systematic walk through of all accessible rooms and buildings to ascertain any evidence of the uses or radiation. During the walk through all accessible cupboards, lockers, drawers, shelves etc were inspected. The inspector used a Tracerco T406-1 radiation survey meter with audible alarm, (Serial No. 215079), throughout the site.

The assessment also included a historical review of NSW EPA and the Radiation Advisory Council (RAC) records.

5 LIMITED ACCESS AND INACCESSIBLE AREAS

It is noted that given the constraints of practicable access encountered during the survey, the following areas had limited access or were completely inaccessible:

- Wall/ceiling linings behind cool rooms/mortuary freezers
- West portion of Building A sub-floor (due to narrowing space associated with ground slope)
- North portion of Building I and Building B sub-floors (due to narrowing space associated with ground slope)
- Subfloor to Building K
- Limited access into all sub-floors and roof cavities
- Beneath concrete slab/asphalt flooring/paving
- Vaulted ceiling spaces without room for physical access
- Only selected partition walls were opened for inspection
- Only selected floor coverings were uncovered for inspection
- Only selected floor cuts were made for inspection of the sub-floor
- Inside double brick wall cavities – no physical access
- Inside vertical chimneys to Building I – no physical access
- Exterior, Level 01, west, roof top terrace (off Rooms 103 / 104)

Refer to **Appendix D Technical Limitations** for further details.

6 RECOMMENDATIONS

Greencap understands that demolition work is planned for the site. The following recommendations are provided:

- All hazardous materials identified at the site must be removed prior to demolition work, as far as practicable, in accordance with the requirements of AS 2601: 2001 The Demolition of Structures, Part 1.6.1 and *Demolition Work Code of Practice (SafeWork Australia, 2019)*, as indicated in the following sections, and in accordance with the Technical Specification document prepared by Greencap (pending). It is noted some hazardous materials will need to be removed in conjunction with controlled demolition.
- Caution should be taken when demolishing the above listed Limited Access and Inaccessible Areas and should be presumed to contain hazardous materials. Appropriate management, planning and safe working practices techniques such as controlled demolition should be implemented in these areas.
- **It is imperative that should any personnel come across any suspected asbestos or hazardous materials during the demolition, work should cease immediately in the affected areas**, the area isolated until further sampling and investigation is performed. Work can be continued in other areas of the site provided there is an effective isolation area/zone.

6.1 Asbestos

- Demolition of flooring over area of identified sub-floor contamination (or inaccessible areas) must be undertaken in a way to minimise disturbance of the subfloor and allow for sufficient removal of asbestos/impacted soil prior to excavation of footings.

- Engage a Class A licensed asbestos removal contractor to undertake removal works of all items under controlled conditions in accordance with NSW Regulations and the Safe Code of Practice How to Safely Remove Asbestos (SafeWork NSW, 2019), as well as the Technical Specification document prepared by Greencap (pending).
- Engage an independent asbestos hygienist (competent person/licensed asbestos assessor) to undertake asbestos fibre air monitoring during and after, where required, the remedial/removal works and a visual inspection at the completion of the removal works. Following the final clearance inspection, and clearance monitoring where required, a clearance certificate must be issued prior to reoccupation.
- All licensed asbestos removal work must be notified to the state regulator in writing at least five days before licensed asbestos removal work commences as stated in the relevant state WHS Regulations and the *Code of Practice How to safely remove asbestos* (SafeWork NSW, 2019).
- The Licensed Asbestos removalist must obtain the asbestos register of the workplace before commencing licensed asbestos removal work. The register must be reviewed and if necessary revised if asbestos removal work is being conducted to be sufficient for asbestos remediation/removal to be undertaken.
- All associated asbestos waste must be disposed of lawfully in accordance with the waste disposal procedures and personal decontamination must be carried out in accordance with relevant state WHS Regulations and the *Code of Practice How to safely remove asbestos*.

6.2 Synthetic Mineral Fibres (SMF)

Synthetic Mineral Fibre (SMF) materials should be removed under controlled conditions prior to demolition/refurbishment works, in accordance with the requirements of the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].

6.3 Polychlorinated Biphenyls (PCBs)

Prior to demolition, all equipment identified as containing Polychlorinated Biphenyls (PCBs) should de-energised by a licensed electrician, removed under controlled conditions and disposed of in accordance with The Australian and New Zealand Environment and Conservation Council (ANZECC) Polychlorinated Biphenyls Management Plan, Revised Edition 2003, and NSW EPA environmental protection guidelines.

6.4 Lead Paint

Prior to demolition all flaking/damaged paint surfaces should be removed under controlled conditions generally in accordance with AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings, Standards Australia/New Zealand, 2017.

6.5 Accumulated Lead Dust

- Prior to demolition, all dust, dirt and sediment material with lead levels above the adopted standard (i.e. above 300mg/kg) should be removed under controlled conditions prior to refurbishment or demolition in accordance with Australian Standard 'Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings' (AS 4361.2-1998.) prior to demolition works.
- Settled dust in all ceiling voids, cavities and risers etc, should be presumed to contain elevated levels of lead and removed in accordance with AS 4361.2-1998.

6.6 Ozone Depleting Substances

Prior to demolition all items identified as containing ODS must be extracted and correctly disposed by a qualified trade in accordance with Ozone Protection and Synthetic Greenhouse Gas Management Regulations, Australian Government, 1995.

6.7 Biological Hazards

All biological hazards must be removed under controlled conditions in conjunction with the demolition works. Clinical waste must be labelled, transported, and disposed of in accordance with the WHS Act/Regulation (2011/2017) and Protection of the Environment Operations Act/Waste Regulation (1997/2014).

6.8 Radiation Hazard Assessment

Based on the lack of any evidence of historical uses radioactive substances and/or materials of any type, the assessment indicated that there is unlikely any residual or legacy radioactive contamination present on the site. It is recommended that during the demolition of the site, risk assessments, and/or Safe Work Method Statement (SWMS) should include the potential for radiation hazard, to encourage contractors to be diligent during the demolition.







Hazardous Materials Survey







Old Bulli Hospital, Hospital Road, Bulli NSW 2516







Appendix A: Hazardous Materials Register







BUILDING A















Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Roof over Rooms 125 & 128	Corrugated fibre cement sheet	Asbestos	Friable surface	100m2	J149255-05-Block A-001	Positive	
Block A - Main Hospital Building	Roof over Room 3 Ambulance Bay	Corrugated fibre cement sheet	Asbestos	Friable surface	30m2	J178406-003	Positive	
Block A - Main Hospital Building	Roof over Rooms 61 & 64	Bituminous membrane	Asbestos	Non-friable	30m2	J149255-05-Block A-011	Positive	
Block A - Main Hospital Building	Exterior grounds, retaining wall along Hospital Road	Potential buried asbestos in soil	Asbestos	Unknown	100m2	-	Presumed Positive	
Block A - Main Hospital Building	Exterior eaves, note some some areas concealed by building extensions & awnings	Fibre cement sheet	Asbestos	Non-friable	500m2	J178406-002 & J149255-05 -Block A- 003	Positive	
Block A - Main Hospital Building	Room 103, walls to roof top air con. Plant	Fibre cement sheet	Asbestos	Non-friable	5m2	J178406-014	Positive	







Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Exterior Room 107, roof top to, metal cased pipe under eave lining	Pipe lagging	Asbestos	Friable	9 Lm	-	Presumed Positive	
Block A - Main Hospital Building	Exterior Room 20 / 21, awning soffit	Fibre cement sheet	Asbestos	Non-friable	50m2	J149255-05-BLOCK A-006	Positive	
Block A - Main Hospital Building	Exterior Room 106, south awning soffit	Fibre cement sheet	Asbestos	Non-friable	20m2	J149255-05-Block A-009	Positive	
Block A - Main Hospital Building	Exterior façade throughout, window infill panels	Fibre cement sheet	Asbestos	Non-friable	50m2	J149255-05-BLOCK A-010	Positive	
Block A - Main Hospital Building	Exterior, rooftop, Room 53, upper fibro wall infill panel	Fibre cement sheet	Asbestos	Non-friable	5m2	-	Presumed Positive	-
Block A - Main Hospital Building	Exterior, pavement near Room 74, Testra Pit	Moulded Fibre cement	Asbestos	Non-friable	5m2	-	Presumed Positive	
Block A - Main Hospital Building	Exterior, pavement near Room 74, Conduits in Telstra Pit	Fibre cement pipe	Asbestos	Non-friable	5m2	J149255-05 -Block A-007	Positive	



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Exterior south & sub-floor to Room 24, in-ground conduits x 3	Fibre cement pipe	Asbestos	Non-friable	9 Lm	J178406-009	Positive	
Block A - Main Hospital Building	Exterior walls to Rooms 5b, 23, 24	Fibre cement sheet	Asbestos	Non-friable	60m2	J178406-022	Positive	
Block A - Main Hospital Building	Exterior walls to Rooms 43, 53, 55	Fibre cement sheet	Asbestos	Non-friable	40m2	J178406-024 & J178406-025	Positive	
Block A - Main Hospital Building	Exterior walls and eaves to Room 9, 87, 88	Fibre cement sheet	Asbestos	Non-friable	40m2	J178406-030	Positive	
Block A - Main Hospital Building	Exterior walls and eaves to to Rooms 59, 60, 62, 63	Fibre cement sheet	Asbestos	Non-friable	40m2	-	Presumed Positive	
Block A - Main Hospital Building	Exterior north wall to Room 91	Fibre cement sheet	Asbestos	Non-friable	8m2	J149255-05-BLOCK A-002	Positive	






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Exteriro Room 3 (near Room 69), vertical metal cased pipe	Pipe lagging	Asbestos	Friable	4 Lm	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 116, ceiling	Fibre cement sheet	Asbestos	Non-friable	2m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 59 & 60, walls & ceilings	Fibre cement sheet	Asbestos	Non-friable	30m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 3 corridor, walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	400m2	J178406-017 & J149255-05-Block A-016	Positive	
Block A - Main Hospital Building	Interior, Rooms 76 / 77, ceiling to plant rooms	Fibre cement sheet	Asbestos	Non-friable	10m2	J178406-021	Positive	
Block A - Main Hospital Building	Interior, Room 111, -floor covering under linoleum	Vinyl tiles & adhesive	Asbestos	-	-	J149255-05-BLOCK A-014	Negative	
Block A - Main Hospital Building	Interior, Room 111, base layer floor underlay	Bituminous membrane	Asbestos	Friable	100m2	J149255-05-BLOCK A-014	Positive	




Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Interior, Rooms 110 / 111, walls, ceilings, awning soffit	Fibre cement sheet	Asbestos	Non-friable	160m2	J178406-005	Positive	
Block A - Main Hospital Building	Interior, Toilets Rooms 48 / 49, east walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	20m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Rooms 112 / 115, vaulted ceiling (115 inside roof void)	Fibre cement sheet	Asbestos	Non-friable	120m2	-	Presumed Positive	
Block A - Main Hospital Building	Roof void over Room 67 hot water tank and tray	Moulded Fibre cement	Asbestos	Non-friable	4m2	J178406-012	Positive	
Block A - Main Hospital Building	Interior, Room 68, ceiling	Fibre cement sheet	Asbestos	Non-friable	40m2	J178406-026	Positive	-
Block A - Main Hospital Building	Interior, Room 23, walls	Fibre cement sheet	Asbestos	Non-friable	20m2	J178406-015	Positive	
Block A - Main Hospital Building	Interior, Rooms 50, 56, 61, 64, 66, walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	300m2	J178406-028 & J178406-029	Positive	



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Interior, Room 8, base floor covering under grey linoleum	Vinyl tiles & adhesive	Asbestos	Non-friable	100m2	J178406-033	Positive (adhesive negative)	
Block A - Main Hospital Building	Interior, Room 8, 9, 88, walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	200m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 2, ceiling and floor debris	Fibre cement sheet	Asbestos	Non-friable	30m2	J178406-036	Positive	
Block A - Main Hospital Building	Interior, Room 125, west wall	Fibre cement sheet	Asbestos	Non-friable	20m2	J178406-037	Positive	
Block A - Main Hospital Building	Interior, Room 109, north-west wall	Fibre cement sheet	Asbestos	Non-friable	25m2	J178406-039	Positive	
Block A - Main Hospital Building	Interior, Cool Room 113, ceiling	Fibre cement sheet	Asbestos	Non-friable	10m2	J178406-040	Positive	
Block A - Main Hospital Building	Interior, Toilet Room 84, ceiling	Fibre cement sheet	Asbestos	Non-friable	4m2	-	Presumed Positive	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Interior, Room 128, ceiling	Fibre cement sheet	Asbestos	Non-friable	20m2	J155696-5-ISLHD-BDH-A-001	Positive	
Block A - Main Hospital Building	Interior, Room 108, wall infill panel	Fibre cement sheet	Asbestos	Non-friable	1m2	-	Presumed Positive	
Block A - Main Hospital Building	Exterior, cupboard wall linings near Rooms 107 & 112	Fibre cement sheet	Asbestos	Non-friable	10m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, various section of infill wall panels, Rooms 5a, 23, 28, 29, 35	Fibre cement sheet	Asbestos	Non-friable	100m2	-	Presumed Positive	-
Block A - Main Hospital Building	Sub-floor, Rooms 9 / 35/ 54 / 88, horizontal hot water pipes	Pipe lagging & debris	Asbestos	Friable	200 Lm	J178406-007 & J178406-23	Positive	
Block A - Main Hospital Building	Sub-floor, Rooms 20 / 23 / 125, debris	Fibre cement sheet debris	Asbestos	Potentially friable	400m2	J178406-006 / 010 / 011	Positive	
Block A - Main Hospital Building	Sub-floor, Room 23, pier packers	Fibre cement sheet	Asbestos	Non-friable	20m2	J178406-007	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Exterior, Room 3, west wall	Fibre cement sheet	Asbestos	-	-	J178406-004	Negative	-
Block A - Main Hospital Building	Sub-floor under Room 23, pipe wrap	Bituminous paper	Asbestos	-	-	J178406-008	Negative	-
Block A - Main Hospital Building	Interior, Room 77, vertical pipe insulation	Pipe insulation / plaster type material	Asbestos	-	-	J178406-013	Negative	-
Block A - Main Hospital Building	Interior, Room 68, wall	Fibre cement sheet	Asbestos	-	-	J178406-027	Negative	-
Block A - Main Hospital Building	Exterior, Room 87 window glazing	Putty	Asbestos	-	-	J178406-031	Negative	-
Block A - Main Hospital Building	Interior, Rooms 17 and 41, walls	Fibre cement sheet	Asbestos	-	-	J178406-016	Negative	-
Block A - Main Hospital Building	Interior, Room 91, upper north wall	Fibre cement sheet	Asbestos	-	-	J178406-032	Negative	-
Block A - Main Hospital Building	Interior, Room 8 (near room 92), floor covering	Cream linoleum & screed	Asbestos	-	-	J178406-034	Negative	-
Block A - Main Hospital Building	Interior, Room 130	Fire door core	Asbestos	-	-	J178406-035	Negative	-
Block A - Main Hospital Building	Interior, Room 108, floor covering	Orange vinyl tile	Asbestos	-	-	J149255-05-BLOCK A-013	Negative	-
Block A - Main Hospital Building	Interior, Room 100, floor covering	Orange linoleum	Asbestos	-	-	J178406-038	Negative	-
Block A - Main Hospital Building	Interior, Room 43, money safe	Shell/door Insulation	Asbestos	-	-	J178406-019	Negative	-
Block A - Main Hospital Building	Interior, Room 55, north wall infills	Fibre cement sheet	Asbestos	-	-	J178406-020	Negative	-
Block A - Main Hospital Building	Exterior, Room 128, weatherboards	Fibre cement sheet	Asbestos	-	-	J149255-05-BLOCK A-015	Negative	-
Block A - Main Hospital Building	Roof void throughout building	Accumulated dust	Lead	-	-	J178406-A-LD-01	Negative	-
Block A - Main Hospital Building	All exterior timber: doors, door frames, windows, window frames, barge/facia boards	Deteriorated white paint	Lead	-	160m2	J178406-A-LP-001	Positive	
Block A - Main Hospital Building	All Exterior timber windows/frames	Deteriorated light aqua paint	Lead	-	100m2	J178406-A-LP-003	Positive	







Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Exterior near Room 72, 73, 74, 68, masonry detail and metal railings	Deteriorated cream paint	Lead	-	40m2	J178406-A-LP-002	Positive	
Block A - Main Hospital Building	All interior timber: doors, door frames, windows, window frames, skirting boards	Layers of cream, white and pink paint	Lead	-	100m2	J178406-A-LP-006.	Positive	
Block A - Main Hospital Building	All interior walls	Deteriorated blue paint	Lead	-	3000m2	J178406-A-LP-005, J178406-A-LP-009, J178406-A-LP-010 & J178406-A-LP-011	Positive	
Block A - Main Hospital Building	All interior ceilings	Deteriorated white paint	Lead	-	2600m2	J178406-A-LP-04, J178406-A-LP-0007 & J178406-A-LP-012	Positive	
Block A - Main Hospital Building	Exterior, near Room 111, timber windows	Dark green paint	Lead	-	-	J161155-05-ISLHD-BDH-A-LP-001	Negative	
Block A - Main Hospital Building	Interior, west Corridor 3, walls	Cream paint	Lead	-	-	J178406-A-LP-08	Negative	-
Block A - Main Hospital Building	Interior, Rooms 46, 73 and 112	Hot water tanks	SMF	-	-	-	Presumed Positive	-
Block A - Main Hospital Building	Interior, air handing units	Ducting	SMF	-	-	-	Presumed Positive	-
Block A - Main Hospital Building	Ceiling insulation, Rooms 3, 15, 24, 46, 47, 53, 56, 64, 91, 92	Batts	SMF	-	-	-	Presumed Positive	-
Block A - Main Hospital Building	Interior, Room 77, single tube wall fluorescent light fitting	Plastic Plessey capacitor APF 250	PCB	-	2 units	-	Positive	-






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Interior, Room 109, three blade ceiling fans	Capacitors (no access)	PCB	-	2 units	-	Presumed Positive	-
Block A - Main Hospital Building	Interior, Room 112, double tube ceiling fluorescent	Capacitors (no access)	PCB	-	1 unit	-	Presumed Positive	-
Block A - Main Hospital Building	Interior Room 3, double tube ceiling fluorescent	Plastic ATCO capacitor	PCB	-	1 unit	-	Negative	-
Block A - Main Hospital Building	Exterior, Room 68	Westinghouse portable air-con unit	ODS	-	1 unit	-	Presumed Positive	-
Block A - Main Hospital Building	Exterior, Room 46	Fujitsu split air-con unit	ODS	-	1 unit	-	Presumed Positive	-
Block A - Main Hospital Building	Exterior roof top over Room 107	Accent split air-con unit	ODS	-	1 unit	-	Presumed Positive	
Block A - Main Hospital Building	Exterior, west wall Room 125	L'Unite Hermetique Compressors	ODS	-	2 units	-	Presumed Positive	
Block A - Main Hospital Building	Exterior, Room 53	Toshiba R410A split	ODS	-	1 unit	-	Negative	-
Block A - Main Hospital Building	Exterior, Rooms 12 & 18	Mitsubishi split	ODS	-	2 units	-	Negative	-
Block A - Main Hospital Building	Interior, Room 23	Blood culture specimen bottles	Biological	-	5 vials	-	Positive	
Block A - Main Hospital Building	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	-	Throughout Building	-	Not identified	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block A - Main Hospital Building	Interior, Room 64, throughout	Air	Airborne Mould	-	-	Interior Building A	Positive	-
Block A - Main Hospital Building	Interior, Room 64, throughout	Material	Surface Mould	-	100m2	A-M-001	Positive	-
Block A - Main Hospital Building	Interior, Rooms 2, 5b, 64 & 118	Moderate growth	Mould	-	200m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 3 adjacent to Room 9	Extensive growth	Mould	-	150m2	-	Presumed Positive	
Block A - Main Hospital Building	Interior, Room 64, refrigerator	Spoiled foods	Biological	-	2 kg	-	Presumed Positive	-
Block A - Main Hospital Building	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	400 Lm	-	Presumed Positive	-
Block A - Main Hospital Building	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	400 Lm	-	Presumed Positive	-






BUILDING B








Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Exterior, roof top plantroom walls, over Room 40	Fibre cement sheet	Asbestos	Non-friable	4m2	J149255-05-BLOCK B-004	Positive	
Block B - Palmer House and Syd Atkins Ward	Exterior, roof cladding over Rooms 40 & 55	Corrugated fibre cement sheet	Asbestos	Friable surface	60m2	J149255-05-BLOCK B-003	Positive	
Block B - Palmer House and Syd Atkins Ward	Exterior, eaves throughout	Fibre cement sheet	Asbestos	Non-friable	300m2	J149255-05-BLOCK B-001	Positive	
Block B - Palmer House and Syd Atkins Ward	Exterior, north west pavement, near Building I, Telstra Pit	Moulded fibre cement	Asbestos	Non-friable	1m2	-	Presumed positive	
Block B - Palmer House and Syd Atkins Ward	Exterior, Palmer House, window infill panels	Fibre cement sheet	Asbestos	Non-friable	10m2	-	Presumed positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 55, walls and ceiling. Note ceiling extends west to Rooms 40 & adjacent Corridor 1 concealed by gyprock ceiling.	Fibre cement sheet	Asbestos	Non-friable	140m2	J178406-52 & 53	Positive	



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Interior, Room 1 (near Room 40) debris	Fibre cement sheet	Asbestos	Non-friable	2m2	J178406-53	Positive	
Block B - Palmer House and Syd Atkins Ward	Roof void, Palmer house, toilet cistern	Moulded fibre cement	Asbestos	Non-friable	3m2	J149255-05-BLOCK B-011	Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 59, ceiling	Fibre cement sheet	Asbestos	Non-friable	12m2	J149255-05-BLOCK B-005	Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 66, ceiling	Fibre cement sheet	Asbestos	Non-friable	16m2	J149255-05-BLOCK B-007	Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 49, wall	Fibre cement sheet	Asbestos	Non-friable	16m2	-	Presumed positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 19, terrazzo floor	Expansion joint	Asbestos	-	-	J178406-041	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 20 floor covering	Grey linoleum & adhesive	Asbestos	-	-	J178406-042 & 43	Negative	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Interior, Room 23, floor covering	Cream-speckled linoleum & adhesive	Asbestos	-	-	J178406-044	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 18, floor covering	Green-speckled linoleum & adhesive	Asbestos	-	-	J178406-045	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 67, floor covering	Tan-speckled linoleum & adhesive	Asbestos	-	-	J178406-054	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 34, floor covering	Grey-speckled linoleum & adhesive	Asbestos	-	-	J178406-047	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 17, walls	Fibre cement sheet	Asbestos	-	-	J178406-046	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, firedoors to all areas	Fire door core	Asbestos	-	-	J178406-048 & 51	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Corridor 1, floor covering	Green linoleum sheet & adhesive (surface layer)	Asbestos	-	-	J178406-049	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Corridor 1, floor covering	Cream linoleum sheet (base layer)	Asbestos	-	-	J178406-050	Negative	-
Block B - Palmer House and Syd Atkins Ward	Exterior, windows	Glazing putty	Asbestos	-	-	J155696-05-ISLHD-BDH-B-001	Negative	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, throughout, expansion joint	Bituminous board	Asbestos	-	-	J178406-057	Negative	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, throughout, pipe wrap & waterproofing	Bituminous paper	Asbestos	-	-	J178406-058	Negative	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Sub-floor, throughout Palmer House (west portion of building), peir packers	Fibre cement sheet	Asbestos	-	20m2	J178406-055	Positive	
Block B - Palmer House and Syd Atkins Ward	Sub-floor, throughout Palmer House (west portion of building), debris	Fibre cement sheet	Asbestos	-	800m2	J178406-056	Positive	
Block B - Palmer House and Syd Atkins Ward	Sub-floor, Plantrooms beneath Rooms 23, 36, 31, 33, untagged fire doors	Fire door core	Asbestos	-	4 doors	J178406-059	Positive	
Block B - Palmer House and Syd Atkins Ward	Sub-floor, throughout Palmer House	Pipe insulation debris	SMF	-	500m2	-	Presumed positive	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, beneath Room 49, EDB	Bituminous electrical backing plate	Asbestos	Non-friable	1m2	J149255-05-BLOCK B-008	Positive	
Block B - Palmer House and Syd Atkins Ward	Sub-floor, Plant beneath Room 50, ceiling	Fibre cement sheet	Asbestos	Non-friable	30m2	J149255-05-BLOCK B-009	Positive	




Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Sub-floor, plant beneath Room 34	Battery bank	Acids	-	70 units	-	Presumed positive	
Block B - Palmer House and Syd Atkins Ward	Roof void	Accumulated dust	Lead	-	-	J178406-B-LD-01	Negative	-
Block B - Palmer House and Syd Atkins Ward	Exterior, timberwork throughout: doors, door frames, windows, window frames, barge/facia boards	Deteriorated white paint	Lead	-	100m2	J178406-B-LP-006	Positive	
Block B - Palmer House and Syd Atkins Ward	Exterior, Palmer house, eaves	Deteriorated white paint	Lead	-	100m2	Similar to J178406-B-LP-006	Presumed positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 45, throughout Palmer House	Light aqua wall paint	Lead	-	1000m2	J178406-B-LP-004	Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 1 and throughout Palmer House, timberwork: doors, frames, skirting boards	Pink paint	Lead	-	300m2	J178406-B-LP-005	Positive	

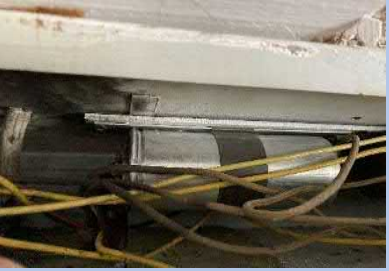

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Interior, Room 20, ceiling	White paint	Lead	-	-	J178406-A-LP-001	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 3, central corridor throughout, ceiling	White paint	Lead	-	-	J178406-A-LP-002	Negative	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 33, walls	Blue paint	Lead	-	-	J178406-A-LP-003	Negative	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, Plant beneath Rooms 31 & 50	Hot water tanks	SMF	-	2 units	-	Presumed positive	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, Entire building, pipework	Insulation	SMF	-	300 Lm	-	Presumed positive	-
Block B - Palmer House and Syd Atkins Ward	Sub-floor, Entire building, air handling units & duct	Insulation	SMF	-	100 m2	-	Presumed positive	-
Block B - Palmer House and Syd Atkins Ward	Interior, Room 1, double tube ceiling fluorescent	Metal Ducon capacitor APF 235 SCR	PCB	-	x 10	-	Presumed positive	-
Block B - Palmer House and Syd Atkins Ward	Interior, Rooms 9 and 10, double tube ceiling fluorescent	Metal Alpha MP capacitor 6.0 MFD.	PCB	-	-	-	Negative	-
Block B - Palmer House and Syd Atkins Ward	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	400 Lm	-	Presumed Positive	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block B - Palmer House and Syd Atkins Ward	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	400 Lm	-	Presumed Positive	-
Block B - Palmer House and Syd Atkins Ward	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified except previous evidence of X-ray machines	-
Block B - Palmer House and Syd Atkins Ward	Room 5, throughout	Air	Airborne Mould	-	200m3	Block B interior	Positive	-
Block B - Palmer House and Syd Atkins Ward	Room 8, throughout, carpet sample	Material	Surface Mould	-	50m2	B-M-001	Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 1 (near Room 40)	Extensive growth	Visible Mould	-	20m2	-	Presumed Positive	
Block B - Palmer House and Syd Atkins Ward	Interior, Room 40 and 55	Light to moderate growth	Visible Mould	-	20m2	-	Presumed Positive	-

BUILDING C














Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block C - Conference and Education Centre	Exterior, eaves	Fibre cement sheet	Asbestos	Non-friable	24m2	J149255-05-BLOCK C-001	Positive	
Block C - Conference and Education Centre	Exterior, windows	Glazing putty	Asbestos	-	-	J149255-05-BLOCK C-002	Negative	-
Block C - Conference and Education Centre	Interior, Room 1 floor covering	Grey linoleum sheet	Asbestos	-	-	J149255-05-BLOCK C-003	Negative	-
Block C - Conference and Education Centre	Roof void, throughout	Accumulated dust	Lead	-	-	J178406-B-LD-01	Negative	-
Block C - Conference and Education Centre	Exterior, weatherboard cladding walls	Deteriorated cream paint	Lead	-	150m2	J155696-05-ISLHD-BDH-C-LP-001	Positive	
Block C - Conference and Education Centre	Exterior, timber windows and frames, doors, door frames	Deteriorated dark green paint	Lead	-	150m2	J161155-05-ISLHD-BDH-C-LP-001	Positive	



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block C - Conference and Education Centre	Interior, ceiling throughout	Deteriorated white paint	Lead	-	-	J178406-C-LP-001	Negative	-
Block C - Conference and Education Centre	Sub-floor, throughout, hot watert pipework	Insulation	SMF	-	100 Lm	-	Presumed positive	-
Block C - Conference and Education Centre	Interior, Rooms 1, 2, 3, 4, double tube fluorescent lights	Metal capacitor	PCB	-	x 4	-	Presumed positive	
Block C - Conference and Education Centre	Exterior west wall	Wall mounted (window) air conditioning unit	ODS	-	x 1	-	Presumed positive	
Block C - Conference and Education Centre	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	100 Lm	-	Presumed Positive	-
Block C - Conference and Education Centre	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	100 Lm	-	Presumed Positive	-
Block C - Conference and Education Centre	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-




BUILDING D










Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Exterior, Rooms 7, 8, 9, walls	Fibre cement sheet	Asbestos	Non-friable	100m2	J178406-063	Positive	
Block D - CSSD	Exterior, Rooms 7, 8, 9, eaves	Fibre cement sheet	Asbestos	Non-friable	20m2	J178406-064	Positive	
Block D - CSSD	Exterior, Rooms 5 and 6, eaves and bulkhead near Plant	Fibre cement sheet	Asbestos	Non-friable	30m2	J149255-05-BLOCK D-006	Positive	
Block D - CSSD	Exterior, Room 6, north end upper infill panel	Fibre cement sheet	Asbestos	Non-friable	3m2	-	Presumed positive	
Block D - CSSD	Exterior, Room 12, north-east side, walls, eaves & barge board	Fibre cement sheet	Asbestos	Non-friable	30m2	J178406-065 / 66	Positive	
Block D - CSSD	Exterior, Room 12 (north-east end), verge lining	Fibre cement sheet	Asbestos	Non-friable	2m2	J149255-05-BLOCK D-002	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Sub-floor, Rooms 7, 8, 9, debris	Fibre cement sheet	Asbestos	Possibly friable	10m2	-	Presumed positive	-
Block D - CSSD	Interior, Room 3, EDB	Bituminous electrical backing plate	Asbestos	Non-friable	1m2	J178406-061	Positive	
Block D - CSSD	Interior, Room 15, small infill panel, ceiling and upper wall	Fibre cement sheet	Asbestos	Non-friable	10m2	J178406-072	Positive	
Block D - CSSD	Interior, Rooms 5, 6, 10, 12, various walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	200m2	J178406-062 / 74	Positive	
Block D - CSSD	Interior, Rooms 7, 8, 9, 10, lining beneath vinyl floor tiles	Bitumen paper	Asbestos	Friable	80m2	J178406-077	Positive	
Block D - CSSD	Interior, Rooms 7, 8, 9, various walls and ceilings	Fibre cement sheet	Asbestos	Non-friable	180m2	J178406-080 / 081	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Interior, Plant Room 11, ceiling	Fibre cement sheet	Asbestos	Non-friable	12m2	J178406-083	Positive	
Block D - CSSD	Interior / exterior, Room 12 entrance, upper wall awning infill panel	Fibre cement sheet	Asbestos	Non-friable	-	J178406-060	Negative	
Block D - CSSD	Interior, Room 3, walls	Fibre cement sheet	Asbestos	Non-friable	-	J149255-05-BLOCK D-003	Negative	-
Block D - CSSD	Interior, Room 5, south wall	Fibre cement sheet	Asbestos	Non-friable	-	J178406-069	Negative	-
Block D - CSSD	Interior, Room 5, floor covering	Olive linoleum sheet	Asbestos	Non-friable	-	J178406-073	Negative	-
Block D - CSSD	Interior, Room 12, floor covering	Blue linoleum sheet	Asbestos	Non-friable	-	J178406-075	Negative	-
Block D - CSSD	Interior, Room 10, floor covering	Brown vinyl tile	Asbestos	Non-friable	-	J178406-076	Negative	-
Block D - CSSD	Interior, Rooms 4, 5, 16, floor covering	Green linoleum floor covering & screed	Asbestos	Non-friable	-	J178406-070 & 071	Negative	-
Block D - CSSD	Interior, Room 7, floor covering	Blue vinyl tile	Asbestos	Non-friable	-	J178406-078	Negative	-
Block D - CSSD	Interior, Room 7, floor covering	Blue linoleum sheet	Asbestos	Non-friable	-	J178406-079	Negative	-






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Exterior, timber windows between Rooms 7 & 10	Glazing putty	Asbestos	Non-friable	-	J178406-082	Negative	-
Block D - CSSD	Exterior, pavement, expansion joint	Bituminous board	Asbestos	Non-friable	-	J178406-067	Negative	-
Block D - CSSD	Exterior, partion wall between south part of Building D and NW section of Building A	Fibre cement sheet	Asbestos	Non-friable	-	J178406-068	Negative	
Block D - CSSD	Exterior, partion wall between central part of Building D and NE section of Building A	Fibre cement sheet	Asbestos	Non-friable	-	J149255-05-BLOCK D-004	Negative	
Block D - CSSD	Exterior, east awning soffit	Fibre cement sheet	Asbestos	Non-friable	-	J149255-05-BLOCK D-001	Negative	
Block D - CSSD	Roof void throughout	Accumulated dust	Lead	-	400m2	J178406-D-LD-01	Positive	-
Block D - CSSD	Exterior, eaves (west side)	Deteriorated white paint	Lead	-	20m2	J178406-D-LP-002	Positive	-





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Interior, Room 7, walls	Deteriorated white paint	Lead	-	40m2	Similar to J178406-D-LP-002	Presumed positive	
Block D - CSSD	Interior, Rooms 4, 5, 16, walls	Light blue paint	Lead	-	200m2	J178406-D-LP-003	Positive	-
Block D - CSSD	Interior, Rooms 15 and 17, walls	Deteriorated tan paint	Lead	-	80m2	J178406-D-LP-004	Positive	
Block D - CSSD	Exterior, timberwork: doors, windows & framing	Green paint	Lead	-	-	J161155-05-ISLHD-BDH-D-LP-001	Negative	-
Block D - CSSD	Exterior, barge boards	Maroon paint	Lead	-	-	J178406-D-LP-001	Negative	-
Block D - CSSD	Roof void various areas, ceiling insulation	Batts	SMF	-	400m2	-	Presumed positive	-
Block D - CSSD	Roof void various areas, hot water pipe insulation	Pipe insulation	SMF	-	200 Lm	-	Presumed positive	-
Block D - CSSD	Exterior, east awning, single tube ceiling fluorescent lights	Metal AEE capacitor FW	PCB	-	x 2	-	Presumed positive	
Block D - CSSD	Interior, all rooms, older, metal trapezoid shaped double tube ceiling fluorescent lights	No access	PCB	-	x 20	-	Presumed positive	

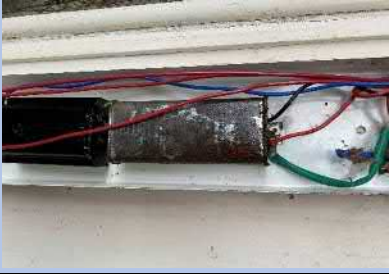

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block D - CSSD	Roof top, over Room 4, air conditioning unit	Refrigerant gas	ODS	-	x 1	-	Presumed positive	
Block D - CSSD	Interior, Rooms 6 & 7	Moderate visible mould growth	Mould	-	80m2	-	Presumed positive	
Block D - CSSD	Interior, Room 12 (former viewing room sectioned within Room 12)	Extensive visible mould growth	Mould	-	30m2	-	Presumed positive	-
Block D - CSSD	Interior, Room 5	Air	Airborne Mould	-	Throughout Building	Sample Building D Interior	Positive	-
Block D - CSSD	Interior, Room 7, wall	Surface Mould	Mould	-	80m2	D-M-001	Positive	
Block D - CSSD	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	100 Lm	-	Presumed Positive	-
Block D - CSSD	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	100 Lm	-	Presumed Positive	-
Block D - CSSD	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radioactive materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-

BUILDING E









Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block E - Substation (Old Mortuary)	Exterior, window / door infill panels. Also above entry vestibule doorway.	Fibre cement sheet	Asbestos	Non-friable	10m2	J178406-084	Positive	
Block E - Substation (Old Mortuary)	External, eaves	Fibre cement sheet	Asbestos	Non-friable	16m3	J149255-05-BLOCK E-001	Positive	
Block E - Substation (Old Mortuary)	External entry soffit	Fibre cement sheet	Asbestos	Non-friable	4m2	Similar to J178406-085	Presumed Positive	
Block E - Substation (Old Mortuary)	Internal ceiling	Fibre cement sheet	Asbestos	Non-friable	60m2	J178406-085	Positive	
Block E - Substation (Old Mortuary)	External, pavement/building expansion joint	Bituminous board	Asbestos	Non-friable	-	J178406-086	Negative	-
Block E - Substation (Old Mortuary)	Roof void	Accumulated dust	Lead	NA	60m2	J178406-E-LD-01	Positive	



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block E - Substation (Old Mortuary)	Interior floor and horizontal surfaces	Accumulated dust	Lead	NA	60m2	J178406-E-LD-02	Positive	-
Block E - Substation (Old Mortuary)	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-
Block E - Substation (Old Mortuary)	External timber trip / doors / windows	White paint	Lead	NA	50m2	NA	Positive	
Block E - Substation (Old Mortuary)	All internal walls	Deteriorated green paint	Lead	NA	120m2	J178406-E-LP-001	Positive	
Block E - Substation (Old Mortuary)	South interior, floor conduits	Fibre cement pipe	Asbestos	Non-friable	1 Lm (prsumed to continue underground)	NA	Presumed Positive	
Block E - Substation (Old Mortuary)	External entyrance area, former EDB	Fibre cement sheet	Asbestos	Non-friable	1m2	-	Presumed Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block E - Substation (Old Mortuary)	Interior flourescent light fittings	Metal capacitors (illegible)	PCB	NA	4 units	-	Presumed Positive	
Block E - Substation (Old Mortuary)	Interior	Transformers	PCB	NA	2 units	-	Presumed Positive	

BUILDING F









Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building F - Meals on Wheels	Interior, Toilet, under wall tiles	Waterproofing/adhesive	Asbestos	-	-	J149255-05-Block F-004	Negative	
Building F - Meals on Wheels	Exterior, wood trim to windows, doors & frames	Dark green paint	Lead	-	-	J149255-05-Block F-004	Negative	
Building F - Meals on Wheels	Exterior, eaves	Fibre cement sheet	Asbestos	Non-friable	15m2	J149255-05-BLOCK F-002	Positive	
Building F - Meals on Wheels	Exterior, weatherboard walls	Fibre cement sheet	Asbestos	Non-friable	120m2	J149255-05-BLOCK F-001	Positive	
Building F - Meals on Wheels	Exterior eaves, note some areas concealed by building extensions & awnings	Insulation batts	SMF	Bonded	60m2	-	Presumed positive	
Building F - Meals on Wheels	Interior, all walls	Fibre cement sheet	Asbestos	Non-friable	120m2	J149255-05-BLOCK F-003	Positive	







Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building F - Meals on Wheels	Interior, ceiling fluorescent light fittings	Plastic Plessey capacitor (not listed)	PCB	-	x 4	-	Presumed positive	
Building F - Meals on Wheels	Interior, kitchen cabinets	Fibre cement sheet	Asbestos	Non-friable	5m2	-	Presumed positive	
Building F - Meals on Wheels	Interior, kitchen, hot water tank	Insulation	SMF	Bonded	2m2	-	Presumed positive	-




BUILDING G






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building G - Rose Cottage	Interior, Room 15, Throughout, Floor	Adhesive to carpet	Asbestos	-	-	J178406-088	Negative	-
Building G - Rose Cottage	Interior, Room 6, Throughout, Floor Covering	Cream linoleum	Asbestos	-	-	J178406-089	Negative	-
Building G - Rose Cottage	Interior, Room 8, Throughout, Floor Covering	Blue speckled linoleum	Asbestos	-	-	J178406-090	Negative	-
Building G - Rose Cottage	Interior, Room 14, Throughout, Wall lining	Fibre cement sheeting	Asbestos	-	-	J178406-091	Negative	-
Building G - Rose Cottage	Interior, Room 6, walls	Fibre cement sheeting	Asbestos	-	-	J178406-092	Negative	-
Building G - Rose Cottage	Interior, Room 22, Throughout, Ceiling lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	J178406-093	Positive	-
Building G - Rose Cottage	Interior, Ceiling Space, Throughout, Loose insulation	Insulation material	Asbestos	-	-	J178406-094	Negative	-
Building G - Rose Cottage	Exterior, north, Expansion joint	Bituminous material	Asbestos	-	-	J178406-095	Negative	-
Building G - Rose Cottage	Exterior, north, Expansion joint	Fibre cement sheeting	Asbestos	-	-	J178406-096	Negative	-
Building G - Rose Cottage	Interior, Subfloor, throughout, Debris	Fibre cement sheeting	SMF	Bonded (SMF)	50m2	J178406-097	Positive	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building G - Rose Cottage	Interior, Subfloor, throughout, Debris	Fibre cement sheeting	Asbestos	Friable	300m2	J178406-098	Positive	
Building G - Rose Cottage	interior Subfloor, Central, Floor	Fibre cement sheeting	Asbestos	Non-Friable	5m2	-	Presumed Positive	
Building G - Rose Cottage	Interior, Subfloor, Throughout, Packers	Fibre cement sheeting	Asbestos	-	-	J178406-099	Negative	-
Building G - Rose Cottage	Exterior, Window glazing	Mastic	Asbestos	-	-	J149255-05-Block G-002	Negative	-
Building G - Rose Cottage	Exterior, South, Roof covering	Fibre cement sheeting	Asbestos	-	-	J149255-05-Block G-003	Negative	-
Building G - Rose Cottage	Exterior, Surrounding, Eaves & infill panels	Fibre cement sheeting	Asbestos	Non-Friable	43m2	J149255-05-Block G-004	Positive	
Building G - Rose Cottage	Interior, Room 11, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	25m2	J149255-05-Block G-005	Positive	
Building G - Rose Cottage	Interior, Cleaners Room, North and west, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	16m2	Similar to: J149255-05-Block G-005	Presumed Positive	
Building G - Rose Cottage	Interior, Room 1, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	25m2	Similar to: J149255-05-Block G-006	Presumed Positive	




Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building G - Rose Cottage	Interior, Room 19 & various Rooms, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	200m2	Similar to: J149255-05-Block G-007	Presumed Positive	
Building G - Rose Cottage	Interior, Room 15, South, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block G-008	Presumed Positive	
Building G - Rose Cottage	Interior, Room 10, South, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block G-009	Presumed Positive	
Building G - Rose Cottage	Interior, Room 12, South, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block G-010	Presumed Positive	
Building G - Rose Cottage	Interior, Room 13, East, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block G-011	Presumed Positive	
Building G - Rose Cottage	Interior, Room 10, Sink Pad	Bituminous Material	Asbestos	Non-Friable	05m2	J149255-05-Block G-006	Positive	
Building G - Rose Cottage	Interior, Ceiling Space, Accumulated roof void dust	Accumulated Dust	Lead Dust	-	-	J178406-G-LD-001	Negative	-
Building G - Rose Cottage	Interior, Room20, Walls	Cream paint	Lead Paint	-	-	J178406-G-LP-001	Negative	-
Building G - Rose Cottage	Interior, Room 15, Ceilings	White paint	Lead Paint	-	-	J178406-G-LP-002	Negative	-




Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building G - Rose Cottage	Interior, All Areas, Timberwork	Cream paint	Lead Paint	-	-	J178406-G-LP-003	Negative	-
Building G - Rose Cottage	Exterior, Surrounding, timberwork	White paint	Lead Paint	-	-	J178406-G-LP-004	Negative	-
Building G - Rose Cottage	Interior, Ceiling Space, Throughout, Insulation Batts	Insulation Material	SMF	Bonded (SMF)	100m2	-	Presumed Positive	
Building G - Rose Cottage	Interior, Ceiling Space, Throughout, Ductwork	Insulation Material	SMF	Bonded (SMF)	50m	-	Presumed Positive	as above
Building G - Rose Cottage	Interior, Subfloor, Northeast, Hot water heater	Insulation Material	SMF	Bonded (SMF)	1 Unit	-	Presumed Positive	
Building G - Rose Cottage	All areas, Various throughout, Fluorescent light fitting	ATCO Capacitor	PCB	-	-	-	Negative	-
Building G - Rose Cottage	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	100 Lm	-	Presumed Positive	-
Building G - Rose Cottage	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	100 Lm	-	Presumed Positive	-
Building G - Rose Cottage	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radioactive materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-
Building G - Rose Cottage	Interior, Room 1, Throughout	Air	Airborne Mould	-	-	Interior Building G	Positive	-
Building G - Rose Cottage	Interior, Room 1, Throughout	Surface Mould	Mould	-	100m2	G-M-001	Positive	





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building G - Rose Cottage	Interior, All Areas, Throughout	Moderate visible mould growth to surfaces	Mould	-	200m2	-	Presumed Positive	
Building G - Rose Cottage	Interior, Eastern Rooms, Throughout	Extensive visible mould growth to surfaces	Mould	-	150m2	-	Presumed Positive	
Building G - Rose Cottage	Exterior, north, Air conditioner	Refrigerant	ODS	-	2 units	-	Presumed Positive	






BUILDING I





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block I - Nurses Quarters	Exterior, Pool Area, filter pump, EDB	Bituminous electrical backing plate	Asbestos	Non-friable	1m2	-	Presumed Positive	
Block I - Nurses Quarters	Exterior, Level 01, west, roof top terrace (off Rooms 103 / 104)	Bituminous membrane	Asbestos	Non-friable	60m2	-	Presumed Positive	
Block I - Nurses Quarters	Interior, Level 01, Entry Room 133, floor covering	Cream linoleum sheet	Asbestos	-	-	J178406-102	Negative	-
Block I - Nurses Quarters	Interior, level 00, Room 7, floor covering	Tan linoleum sheet	Asbestos	-	-	J178406-103	Negative	-
Block I - Nurses Quarters	Exterior eaves, note some areas concealed by building extensions & awnings	Blue spotted linoleum sheet	Asbestos	-	-	J178406-115	Negative	-
Block I - Nurses Quarters	Interior, Level 00, Room 7, main corridor throughout Level 00, flooring underlay	Bitumen membrane	Asbestos	Friable	180m2	J178406-104	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block I - Nurses Quarters	Interior, level 00, Bath Rooms 36 & 37, ceiling	Fibre cement sheet	Asbestos	Non-friable	50m2	J178406-105	Positive	
Block I - Nurses Quarters	Interior, Level 00, , Room 38, floor covering	Blue & green vinyl tile	Asbestos	Non-friable	30m2	J149255-05-BLOCK I-003	Positive	
Block I - Nurses Quarters	Interior, Level 00, , Room 38, flooring adhesive	Bituminous adhesive	Asbestos	Friable	30m2	J178406-107	Positive	-
Block I - Nurses Quarters	Interior, Level 00, Room 24, floor covering	Cream linoleum sheet & adhesive	Asbestos	-	-	J178406-108 & 109	Negative	-
Block I - Nurses Quarters	Interior, Level 00, Room 24, floor covering	Cream linoleum sheet & adhesive	Asbestos	-	-	J178406-110	Negative	-
Block I - Nurses Quarters	Interior, Level 00, Room 24, floor underlay	Fibrous matting	Asbestos	-	-	J178406-111	Negative	-
Block I - Nurses Quarters	Interior, Level 00, exit area near Room 28, wall	Fibre cement sheet	Asbestos	Non-friable	10m2	J178406-112	Positive	-
Block I - Nurses Quarters	Exterior, South, Construction joint mastic under air con unit????	Fibre cement sheet	Asbestos	-	-	J178406-113	Negative	-
Block I - Nurses Quarters	Interior, all windows, Sash cord	Rope	Asbestos	-	-	J178406-114	Negative	-
Block I - Nurses Quarters	Interior, Level 00, Room 15, floor covering	Blue linoleum sheet	Asbestos	-	-	J178406-116	Negative	-
Block I - Nurses Quarters	Sub-floor, various throughout, redundant electrical cables	Woven cable sheath	Asbestos	-	-	J178406-117	Negative	-
Block I - Nurses Quarters	Sub-floor, beneath Room 149 Level 01, pipe insulation debris	Lagging debris	Asbestos	Friable	60m2	J178406-118	Positive	







Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block I - Nurses Quarters	Interior, Level 01, Room 148, floor covering	Cream vinyl tiles	Asbestos	-	-	J178406-119	Negative	-
Block I - Nurses Quarters	Interior, Level 01, Room 148, outer wall lower infill panel	Fibre cement sheet	Asbestos	-	8m2	-	Presumed Positive	
Block I - Nurses Quarters	Interior, Level 01, Room 138, fireplace	Mortar	Asbestos	-	-	J178406-120	Negative	-
Block I - Nurses Quarters	Interior, Level 01, Bathroom 108	Textured paint	Asbestos	-	-	J178406-121	Negative	-
Block I - Nurses Quarters	Interior, Level 01, Bathrooms 108 and 145, ceiling lining	Fibre cement sheet	Asbestos	Non-friable	70m2	-	Presumed Positive	
Block I - Nurses Quarters	Roof void, various throughout, redundant electrical cables	Woven cable sheath	Asbestos	-	-	J178406-122	Negative	-
Block I - Nurses Quarters	Exterior, partition wall between south part of Building D and NW section of Building A	Moulded fibre cement	Asbestos	Non-friable	8m2 (2 units)	J178406-123	Positive	
Block I - Nurses Quarters	Exterior, partition wall between central part of Building D and NE section of Building A	Accumulated dust	Asbestos Dust	-	-	J178406-124	Negative	-
Block I - Nurses Quarters	Roof void, above Room 149, round tank	Insulation	SMF	Bonded	6m2	J178406-125	Positive	




Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block I - Nurses Quarters	Exterior, wood trim throughout: eaves, windows, doors, window frames, door frames, barge boards	Deteriorated white paint	Lead Paint	-	200m2	J178406-I-LP-006	Positive	
Block I - Nurses Quarters	Interior, wood trim throughout: windows, doors, window frames, door frames, skirting boards	Cream paint	Lead Paint	-	200m2	J161155-05-ISLHD-BDH-I-LP-001, J178406-I-LP-003	Positive	
Block I - Nurses Quarters	Interior, Level 00, walls throughout	Cream paint	Lead Paint	-	1000m2	J161155-05-ISLHD-BDH-I-LP-002, J178406-I-LP-008, J178406-I-LP-009	Positive	
Block I - Nurses Quarters	Interior, Level 01, walls throughout	Cream paint	Lead Paint	-	1000m2	J178406-I-LP-001, J178406-I-LP-005	Positive	-
Block I - Nurses Quarters	Interior, all levels, ceilings	White paint	Lead Paint	-	-	J178406-I-LP-002, J178406-I-LP-004, J178406-I-LP-010	Negative	-
Block I - Nurses Quarters	Interior throughout, light fittings	Plessey, green APF plastic capacitator	PCB	-	x 40	-	Positive	
Block I - Nurses Quarters	Room 148, window mounted	Air conditioning unit	ODS	-	1 unit	-	Positive	
Block I - Nurses Quarters	Interior, Room 112	Extensive visible mould growth	Mould	-	80m2	-	Presumed positive	-
Block I - Nurses Quarters	Interior, Room 112	Air	Airborne Mould	-	Throughout Building	Building I Interior	Positive	-
Block I - Nurses Quarters	Interior, Room 112	Surface Mould	Mould	-	80m2	I-M-001	Positive	-





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Block I - Nurses Quarters	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	600 Lm	-	Presumed Positive	-
Block I - Nurses Quarters	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	600 Lm	-	Presumed Positive	-
Block I - Nurses Quarters	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radioactive materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-
I - Garage	Garage (separate building to north), roof cladding	Corrugated fibre cement sheet	Asbestos	Friable surface	50m2	J178406-100	Positive	
I -Garage	Garage (separate building to north), internal / external wall cladding & eaves	Fibre cement sheet	Asbestos	Non-friable	100m3	J178406-101	Positive	
I - Car Port	Car Port (south of Building I), metal framework	Deteriorated white paint	Lead Paint	-	-	J178406-I-Carport-LP-001	Negative	-





BUILDING J








Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Exterior, All areas, Surrounding, Eaves	Fibre cement sheeting	Asbestos	Non-Friable	60m2	J178406-132	Positive	
Building J - old Admin Building	Exterior, South and west, wall lining	Fibre cement sheeting	Asbestos	Non-Friable	14m2	J149255-05-Block J-001	Positive	
Building J - old Admin Building	Exterior, West, Infill panel	Fibre cement sheeting	Asbestos	Non-Friable	1m2	Similar to: J149255-05-Block J-001	Presumed Positive	
Building J - old Admin Building	Exterior, West and north, Wall lining	Fibre cement sheeting	Asbestos	Non-Friable	30m2	Similar to: J149255-05-Block J-001	Presumed Positive	
Building J - old Admin Building	Interior, Room 3, walls	Fibre cement sheeting	Asbestos	Non-Friable	20m2	J178406-133	Positive	
Building J - old Admin Building	Interior, Room 8, Throughout, Ceiling Lining	Fibre cement sheeting	Asbestos	Non-Friable	30m2	J178406-134	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Interior, Room 8, Throughout, Floor Covering	Linoleum	Asbestos	-	-	J178406-135	Negative	-
Building J - old Admin Building	Interior, Room 21, Throughout, Waterproofing and levelling compound	Bituminous material	Asbestos	-	-	J178406-136	Negative	-
Building J - old Admin Building	Interior, Room 14, Throughout, Ceiling Lining	Fibre cement sheeting	Asbestos	Non-Friable	80m2	J178406-137	Positive	
Building J - old Admin Building	Interior, Room 14, Throughout, Debris	Fibre cement sheeting	Asbestos	Friable	10m2	Similar to: J178406-137	Presumed Positive	
Building J - old Admin Building	Interior, Room 21, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block J-001	Presumed Positive	-
Building J - old Admin Building	Interior, Room 18, East, Infill panels	Fibre cement sheeting	Asbestos	Non-Friable	1m2	Similar to: J149255-05-Block J-001	Presumed Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Interior, Hallway adjacent Room 12, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	10m2	Similar to: J149255-05-Block J-001	Presumed Positive	
Building J - old Admin Building	Interior, Room 3, North and south, high level Infill panels	Fibre cement sheeting	Asbestos	Non-Friable	4m2	Similar to: J149255-05-Block J-001	Presumed Positive	-
Building J - old Admin Building	Interior, Room 14, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	-	-	J149255-05-Block J-002	Negative	-
Building J - old Admin Building	Interior, Room 9, North, high level Infill panels	Fibre cement sheeting	Asbestos	Non-Friable	2m2	Similar to: J149255-05-Block J-001	Presumed Positive	
Building J - old Admin Building	Interior, Room 9, Throughout, Ceiling Lining	Fibre cement sheeting	Asbestos	Non-Friable	2m2	Similar to: J149255-05-Block J-001	Presumed Positive	As above
Building J - old Admin Building	Interior, Room 20, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	36m2	Similar to: J149255-05-Block J-001	Presumed Positive	
Building J - old Admin Building	interior, Ceiling Space, accumulated dust	Accumulated Dust	Lead Dust	-	150m2	J178406-J-LD-001	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Exterior, All Areas, Various Surrounding	Deteriorated white paint to timberwork	Lead Paint	-	100m2	J178406-J-LP-001	Positive	
Building J - old Admin Building	Interior, All Areas, Various Throughout	Cream paint to timberwork	Lead Paint	-	100m2	J178406-J-LP-002	Positive	
Building J - old Admin Building	Interior, All Areas, Various Throughout	White paint to ceilings	Lead Paint	-	150m2	J178406-J-LP-003	Positive	
Building J - old Admin Building	Interior, All Areas, Throughout	Cream paint to walls	Lead Paint	-	500m2	J178406-J-LP-004	Positive	
Building J - old Admin Building	Exterior, partition wall between south part of Building D and NW section of Building A	Plastic capacitor	PCB	-	4 Units	-	Negative	-
Building J - old Admin Building	Exterior, partition wall between central part of Building D and NE section of Building A	Plastic capacitor	PCB	-	25 Units	-	Negative	-







Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Interior, Room 18, East, Hot Water Heater	Insulation Material	SMF	Bonded (SMF)	1 Unit	-	Presumed Positive	
Building J - old Admin Building	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radioactive materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-
Building J - old Admin Building	Interior, Room 1, Throughout	Air	Airborne Mould	-	-	Interior Building J	Positive	
Building J - old Admin Building	Interior, Room 1, Throughout	Surface Mould	Mould	-	100m2	J-M-001	Positive	
Building J - old Admin Building	Interior, Eastern Rooms, All Areas	Moderate visible mould growth to surfaces	Mould	-	200m2	-	Presumed Positive	
Building J - old Admin Building	Interior, Western Rooms, All Areas	Extensive visible mould growth to surfaces	Mould	-	150m2	-	Presumed Positive	






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building J - old Admin Building	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	150 Lm	-	Presumed Positive	-
Building J - old Admin Building	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	150 Lm	-	Presumed Positive	-

BUILDING K



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building K - Storage & Change Room	Interior and exterior, all areas, various throughout	Capacitor AEE FW 7uF Capacitance	PCB	-	15 Units	-	Positive	
Building K - Storage & Change Room	Interior, Room 1, Wet area, under tile floor	Waterporofing membrane & screed	Asbestos	Non-Friable	-	J178406-126	Negative	-
Building K - Storage & Change Room	Exterior, All Areas, Surrounding, Windows	Glazing putty	Asbestos	Non-Friable	-	J178406-127	Negative	-
Building K - Storage & Change Room	Exterior, East, Eaves	Fibre cement sheeting	Asbestos	Non-Friable	20m2	Similar to: J149255-05-Block K-006	Presumed Positive	
Building K - Storage & Change Room	Exterior, East and South, awning soffit Lining	Fibre cement sheeting	Asbestos	Non-Friable	50m2	Similar to: J149255-05-Block K-006	Presumed Positive	
Building K - Storage & Change Room	Exterior, North, Infill Panels high level	Fibre cement sheeting	Asbestos	Non-Friable	8m2	Similar to: J149255-05-Block K-006	Presumed Positive	
Building K - Storage & Change Room	Exterior, Northeast, Infill Panels low Level	Fibre cement sheeting	Asbestos	Non-Friable	35m2	Similar to: J149255-05-Block K-006	Presumed Positive	






Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building K - Storage & Change Room	Exterior, Driveway, north, Telecommunications pit	Moulded fibre cement	Asbestos	Non-Friable	1 Unit	J149255-05-Block K-007	Positive	
Building K - Storage & Change Room	Interior, Room 1, Throughout, Floor	Grey and red vinyl tiles	Asbestos	Non-Friable	40m2	J149255-05-Block K-004	Positive	
Building K - Storage & Change Room	Interior, Room 1, Throughout, Ceiling Lining	Fibre cement sheeting	Asbestos	Non-Friable	60m2	J149255-05-Block K-005	Positive	
Building K - Storage & Change Room	Interior, Room 2, Throughout, Floor	Green sheet vinyl	Asbestos	Non-Friable	60m2	J149255-05-Block K-001	Positive	
Building K - Storage & Change Room	Interior, Room 2, Throughout, Floor	Light grey vinyl tiles	Asbestos	Non-Friable	6m2	J149255-05-Block K-002	Positive	
Building K - Storage & Change Room	Interior, Room 2, Northeast, Hot water heater	Insulation Material	SMF	Bonded (SMF)	1 Unit	-	Presumed Positive	


Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building K - Storage & Change Room	Room 2, Throughout, Ceiling Lining	Fibre cement sheeting	Asbestos	Non-Friable	14m2	J149255-05-Block K-006	Positive	
Building K - Storage & Change Room	Room 2, Throughout, Wall Lining	Fibre cement sheeting	Asbestos	Non-Friable	20m2	J149255-05-Block K-003	Positive	
Building K - Storage & Change Room	Exterior, All Areas, Surrounding	Cream paint to masonry	Lead Paint	-		J178406-K-LP-002	Positive	
Building K - Storage & Change Room	Interior, Roof Void, Throughout	Dust	Lead Dust	-	120m2	J178406-K-LD-001	Negative	-
Building K - Storage & Change Room	Exterior, All Areas, Various Surrounding	White paint to timberwork	Lead Paint	-	50m2	J155696-05-ISLHD-BDH-K-LP-001	Positive	
Building K - Storage & Change Room	Room 2, Various throughout	Green paint to timberwork	Lead Paint	-	10m2	J161155-05-ISLHD-BDH-K-LP-001	Positive	
Building K - Storage & Change Room	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	100 Lm	-	Presumed Positive	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building K - Storage & Change Room	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	100 Lm	-	Presumed Positive	-
Building K - Storage & Change Room	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radioactive materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-

BUILDING L





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building L - Maintenance Workshop	Exterior, Dust collection unit, central	Insulation material	SMF	Bonded (SMF)	2 Units	-	Presumed Positive	-
Building L - Maintenance Workshop	Room 6, Southeast, Ductwork	Insulation material	SMF	Bonded (SMF)	2 Units	-	Presumed Positive	
Building L - Maintenance Workshop	Interior, All Areas, Various Throughout, Fluorescent light fitting	Capacitor	PCB	-	16 Units	Height Restricted	Presumed Positive	
Building L - Maintenance Workshop	All Areas - Various Throughout, Fibro Sheets	Fibre Cement Sheeting	Asbestos	Non-Friable	150m2	J149255-05-Block L-001	Positive	
Building L - Maintenance Workshop	Room 3, Ceiling, Throughout	Insulation Material	SMF	Bonded (SMF)	1 Unit	-	Presumed Positive	
Building L - Maintenance Workshop	Room 4, throughout, floor	Dust	Lead Dust	-	270m2	J178406-L-LD-001	Positive	-
Building L - Maintenance Workshop	Interior & Exterior, All Areas, Various walls Throughout	Cream paint to masonry	Lead Paint	-	300m2	J178406-L-LP-001	Positive	

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building L - Maintenance Workshop	Interior & Exterior, All Areas, Various Throughout	Yellow paint to metalwork	Lead Paint	-	100m2	J178406-L-LP-002	Negative	
Building L - Maintenance Workshop	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	200 Lm	-	Presumed Positive	-
Building L - Maintenance Workshop	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	200 Lm	-	Presumed Positive	-
Building L - Maintenance Workshop	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-

BUILDING M





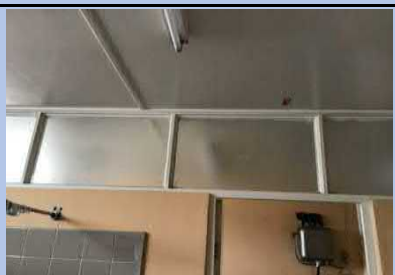





Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building M - Store	Room 1, Central, Fluorescent light fitting	Capacitor	PCB	-	1 Unit	-	Presumed Positive	
Building M - Store	Room 1, Central, Incinerator	Refractory Lining	Asbestos	Friable	30m2	J178406-128	Negative	-
Building M - Store	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	60 Lm	-	Presumed Positive	-
Building M - Store	Room 1, Central, Incinerator	Residual ash within incinerator and chimney	Biological	-	2m3	-	Presumed Positive	
Building M - Store	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-




BUILDING N



Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building N - Maintenance Workshop	Exterior, East and West, Outside Rooms a and 9, Expansion Joint	Bituminous Material	Asbestos	-	-	J149255-05-Block N-002	Negative	-
Building N - Maintenance Workshop	Exterior - North, Window Frames Window Beading	Putty	Asbestos	-	-	J149255-05-Block N-001	Negative	-
Building N - Maintenance Workshop	Exterior - Northwest Corner, Pipe	Moulded Fibre Cement Flue	Asbestos	Non-Friable	1 Unit	J149255-05-Block N-003	Positive	
Building N - Maintenance Workshop	Exterior - South (Outside Room 10) Infill Panels - High Level	Fibre Cement Sheeting	Asbestos	Non-Friable	-	J149255-05-Block N-005	Negative	-
Building N - Maintenance Workshop	Exterior - South (Outside Room 10) Infill Panels - Low Level	Fibre Cement Sheeting	Asbestos	Non-Friable	-	J149255-05-Block N-006	Negative	-
Building N - Maintenance Workshop	All Areas, Various Throughout Windows & Doors	Green Paint	Lead Paint	-	-	J155696-05-ISLHD- BDH-N-LP-001	Negative	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building N - Maintenance Workshop	Room 12, South, Wall	Fibre Cement Sheeting	Asbestos	Non-Friable	-	J178406-130	Negative	-
Building N - Maintenance Workshop	Driveway - Southeast Telecommunications Pit	Moulded Fibre Cement	Asbestos	Non-Friable	1 Unit	J149255-05-Block N-004	Positive	
Building N - Maintenance Workshop	All Areas, Various Throughout, Fluorescent Light Fitting	Metal Capacitor DUCON Capacitance 3.1 not listed	PCB	-	20 Units	-	Presumed Positive	
Building N - Maintenance Workshop	All Areas, Various Throughout, Fluorescent Light Fitting	Metal Capacitor AEE Capacitance 3.5uF	PCB	-	20 Units	-	Positive	
Building N - Maintenance Workshop	Rooms 13 and 8, Hot Water Heaters	Insulation Material	SMF	Bonded SMF	2 Units	-	Presumed Positive	
Building N - Maintenance Workshop	Room 6, 7, 8 and 9 Throughout, Ceiling Lining	Fibre Cement Sheeting	Asbestos	Non-Friable	100m2	NAA 97926-N-06	Positive	

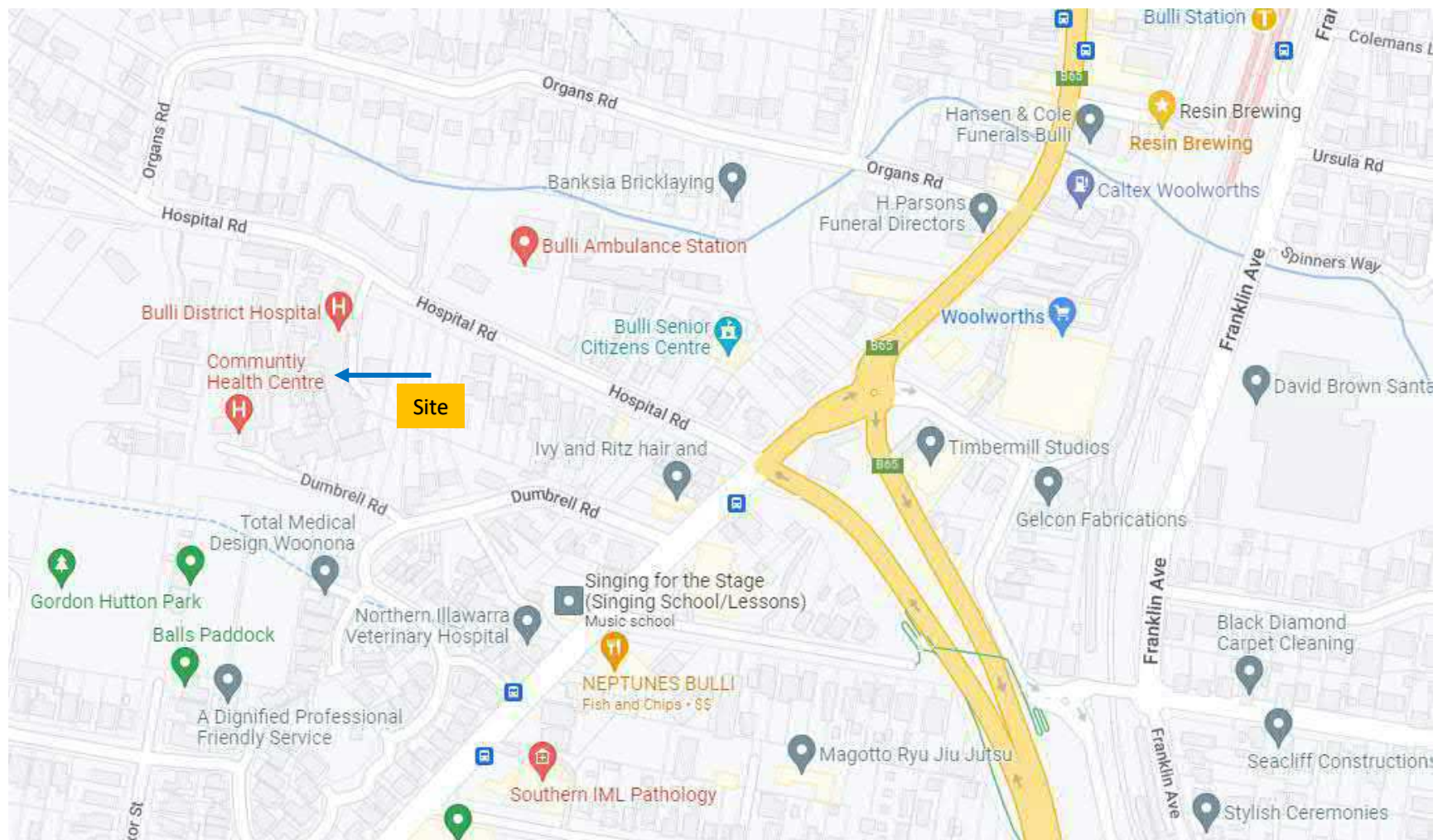
Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building N - Maintenance Workshop	Room 9, ceiling, throughout	Deteriorated white paint	Lead Paint	-	20m2	Similar to: J178406-N-LP-002	Presumed Positive	
Building N - Maintenance Workshop	All Areas, Various throughout, Metalwork	Cream Paint	Lead Paint	-	-	J178406-N-LP-001	Negative	-
Building N - Maintenance Workshop	Room 9, Throughout, Floor Covering	Vinyl tiles	Asbestos	Non-Friable	35m2	J149255-05-Block N-007	Positive	
Building N - Maintenance Workshop	Room 9, Throughout, Walls	Deteriorated orange paint	Lead Paint	-	50m2	J178406-N-LP-002	Positive	
Building N - Maintenance Workshop	Room 10, East, Wall	Fibre Cement Sheeting	Asbestos	-	-	J149255-05-Block N-008	Negative	-
Building N - Maintenance Workshop	Room 4, South, Wall	Fibre Cement Sheeting	Asbestos	-	-	Similar to: J149255-05-Block N-005	Presumed Negative	-
Building N - Maintenance Workshop	Room 2 and 3, Throughout, Wall	Fibre Cement Sheeting	Asbestos	-	-	Similar to: J149255-05-Block N-008	Presumed Negative	-
Building N - Maintenance Workshop	Room 8, Throughout, Wall	Fibre Cement Sheeting	Asbestos	-	-	J178406-131	Negative	-
Building N - Maintenance Workshop	Room 1, Throughout, Floor covering	Cream coloured linoleum	Asbestos	-	-	J178406-129	Negative	-
Building N - Maintenance Workshop	Roof void, throughout	accumulated dust	Lead Dust	-	150m2	J178406-N-LD-001	Positive	-
Building N - Maintenance Workshop	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-

Building	Location/Feature	Material	Hazard Type	Friability	Approx. Extent	Sample Id.	Result	Photo
Building N - Maintenance Workshop	Room 14, throughout	Mould	Airborne Mould	-	50m2	Building N Interior	Positive	
Building N - Maintenance Workshop	Room 9, throughout	Mould	Surface Mould	-	50m2	N-M-001	Positive	
Building N - Maintenance Workshop	Internal Areas	Mould	Visible Mould		—	-	Presumed Positive	
Building N - Maintenance Workshop	Interior, Room 9, refrigerator	Spoiled foods	Biological	-	2 kg	-	Presumed Positive	-
Building N - Maintenance Workshop	Throughout site	Redundant stormwater and wastewater pipes	Biological	-	200 Lm	-	Presumed Positive	-
Building N - Maintenance Workshop	Throughout site	Redundant sewage infrastructure including toilets, pipes and pits	Biological	-	200 Lm	-	Presumed Positive	-
Building N - Maintenance Workshop	Radioactive materials / substances, radiation meter readings, evidence of radionuclide signage / facilities	Radiocative materials / substances	Radiation	NA	Throughout Building	NA	Not identified	-

Hazardous Materials Survey

Old Bulli Hospital, Hospital Road, Bulli NSW 2516

Appendix B: Site Plans



Source: Google Maps

Figure 1 – Site Location Plan

Client: Landcom

Site: Old Bulli Hospital



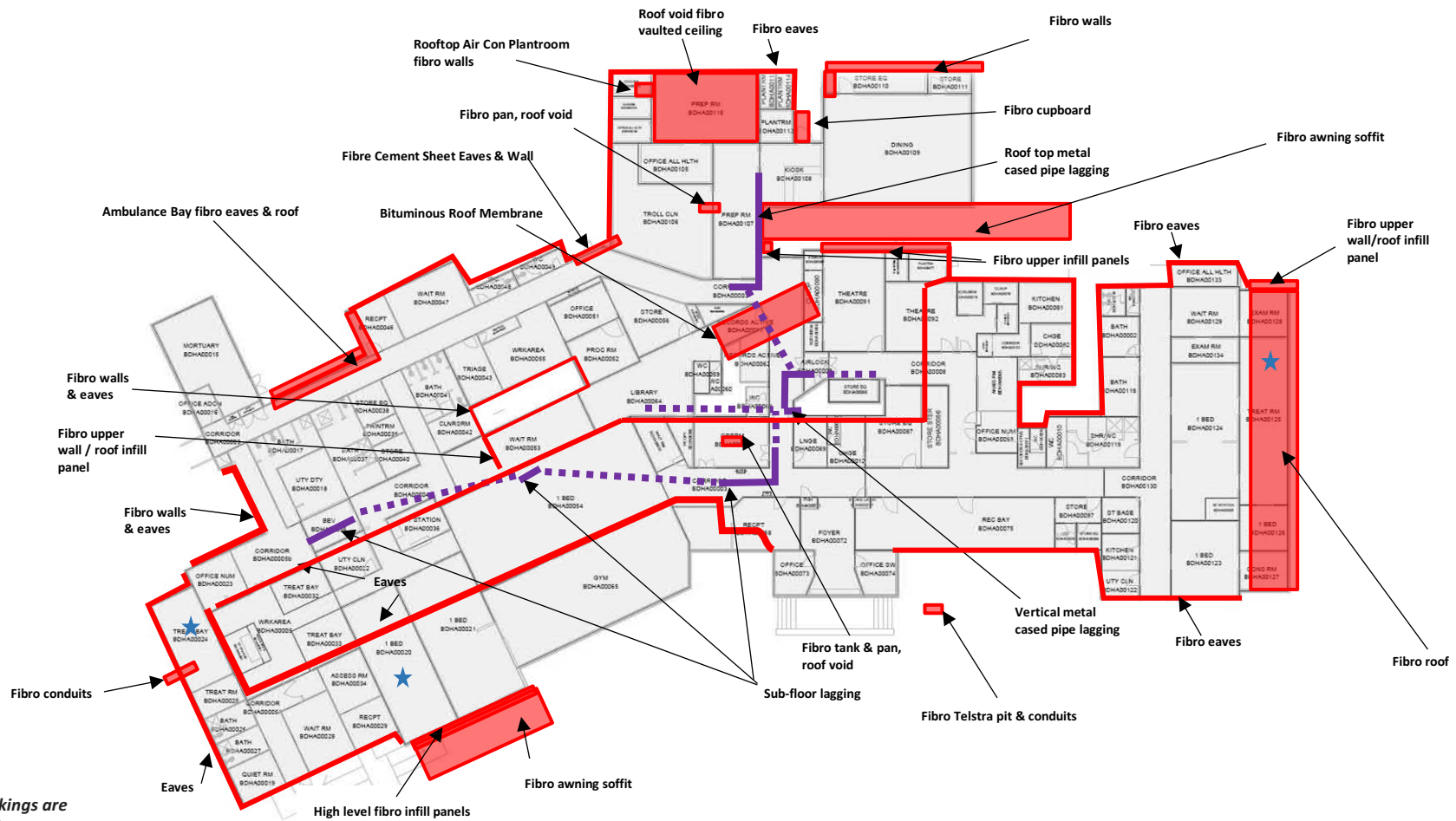
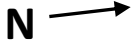
Figure 2 – Site Layout Plan

Client: Landcom

Site: Old Bulli Hospital



Source: SixMaps NSW



Not to scale - Markings are representative only

BUILDING A - EXTERIOR, ROOF TOP, ROOF VOID & SUBFLOOR Location of Asbestos Containing Materials

Legend



General locations of ACM



Pipe lagging



Sub-floor debris

Site Name

Old Bulli Hospital

Client Name

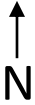
Landcom

Date

August 2022

Job Number

J178406



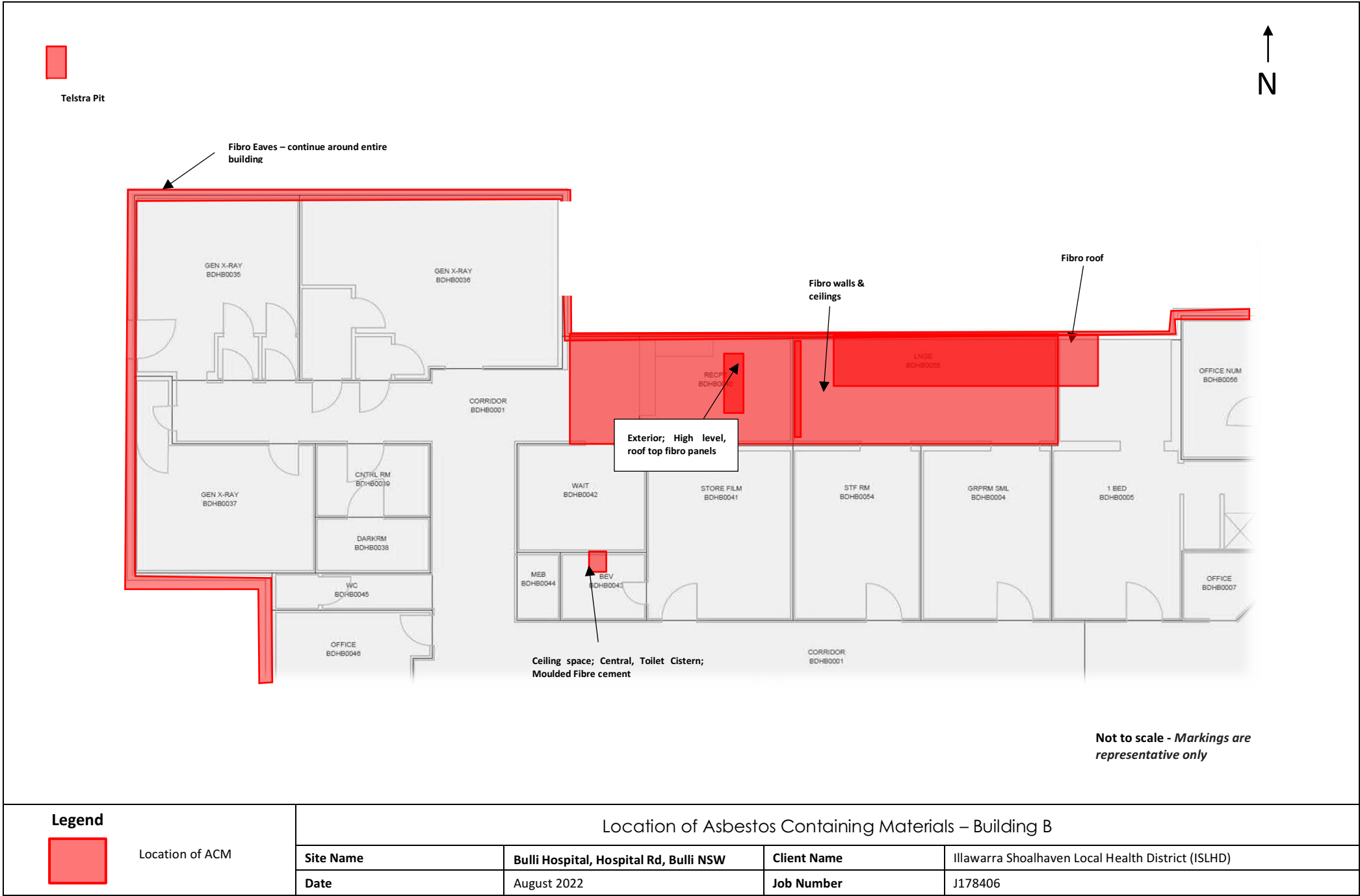
Legend



Location of ACM

Location of Asbestos Containing Materials – Building B

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406





Fibro eaves

Not to scale - Markings are
representative only

Legend

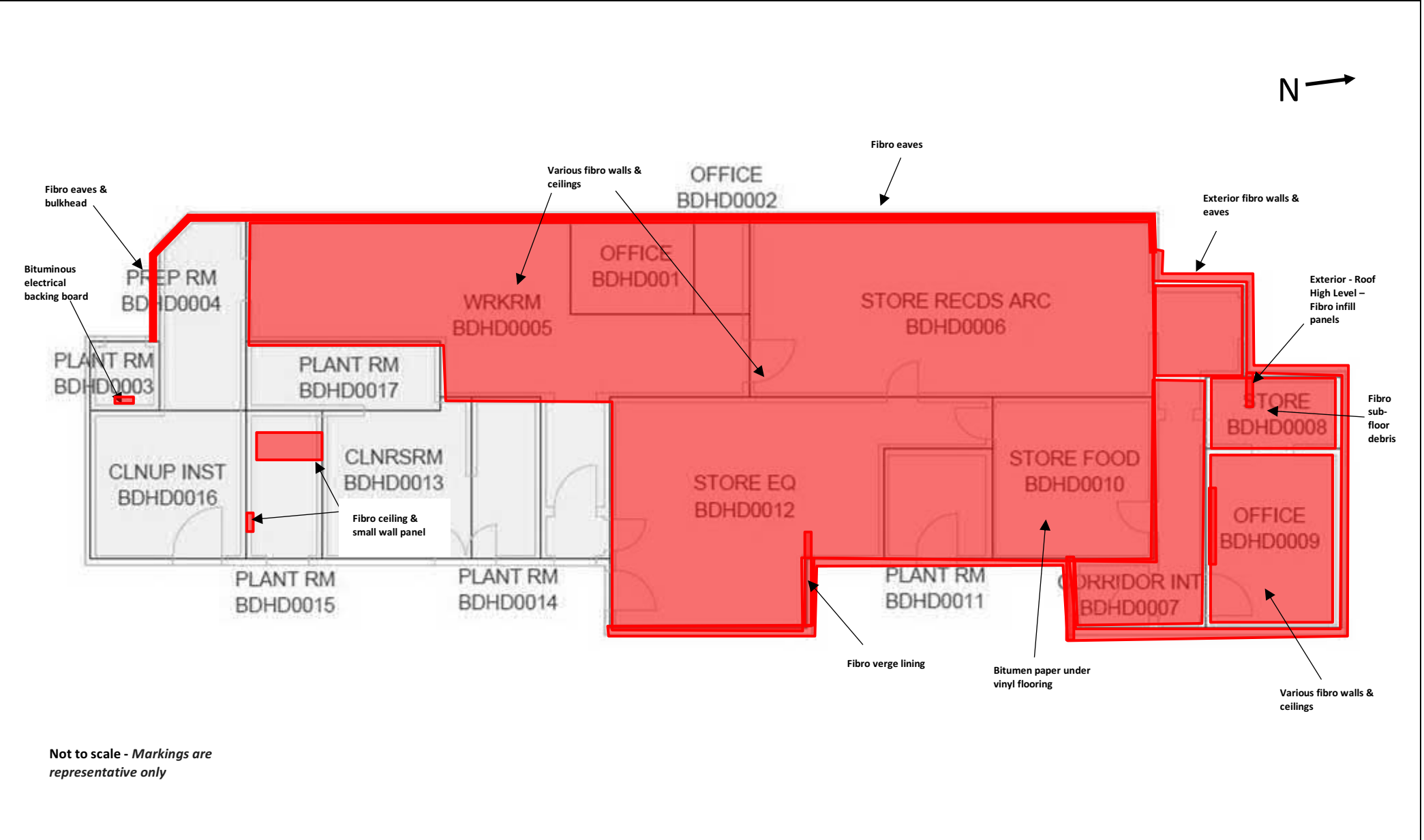


Location of ACM

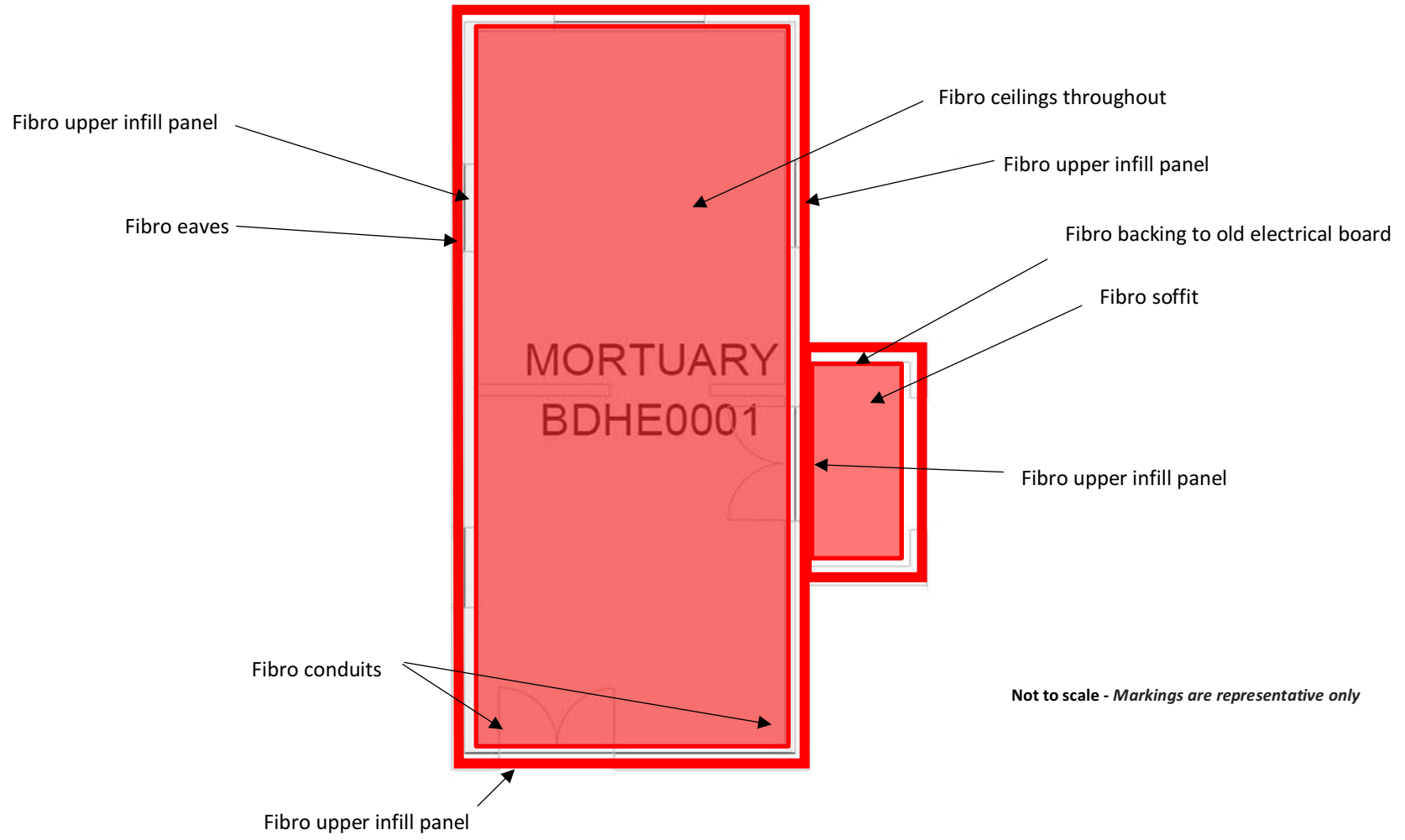
BUILDING C

Location of Asbestos Containing Materials

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



Legend		Location of Asbestos – Building D			
<div></div>	Location of ACM	Site Name	Old Bulli Hospital	Client Name	Landcom
		Date	August 2022	Job Number	J178406



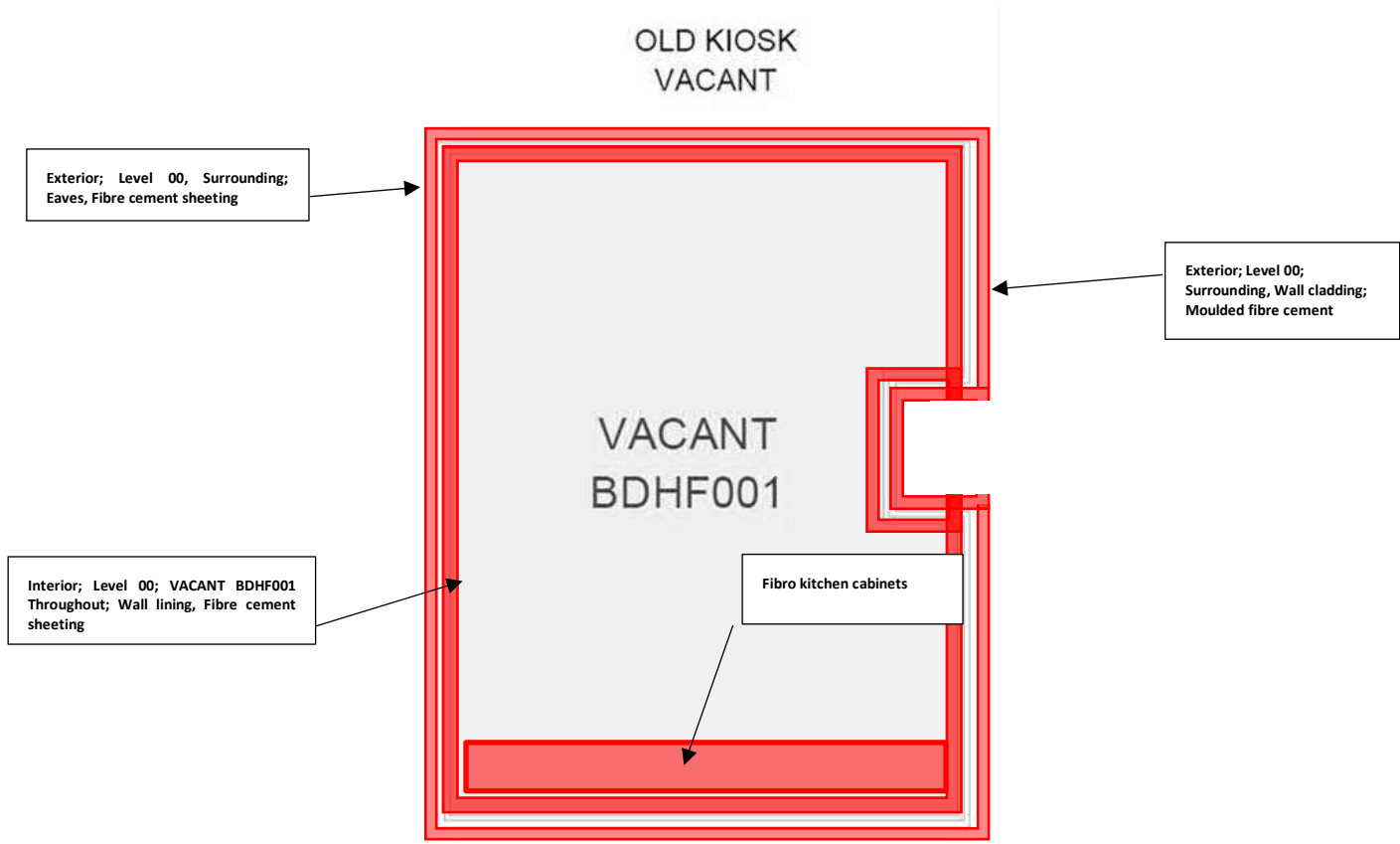
Legend




Location of ACM

Location of Asbestos Containing Materials – Building E

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



Not to scale - Markings are representative only

Legend		Location of Asbestos Containing Materials - Building F			
	Location of ACM	Site Name	Old Bulli Hospital	Client Name	Landcom
		Date	August 2022	Job Number	J178406



Interior; Level 00; Subfloor, Floor, Fibre cement sheeting

Interior; Level 00: Wall linings: Fibre cement sheeting – Various areas as follows:

- GYM BDHG0015 – South
- TREAT BAY BDHG0006 – North
- CORRIDOR BDHG0019 – South
- KITCHEN BDHG0010 – South
- STORE BDHG0011 – Surrounding
- OFFICE BDHG0012 – East and South
- OFFICE BDHG0013 – East
- WC BDHG0022 – East, West, and South
- CORRIDOR BDHG0001 – East, West, and South

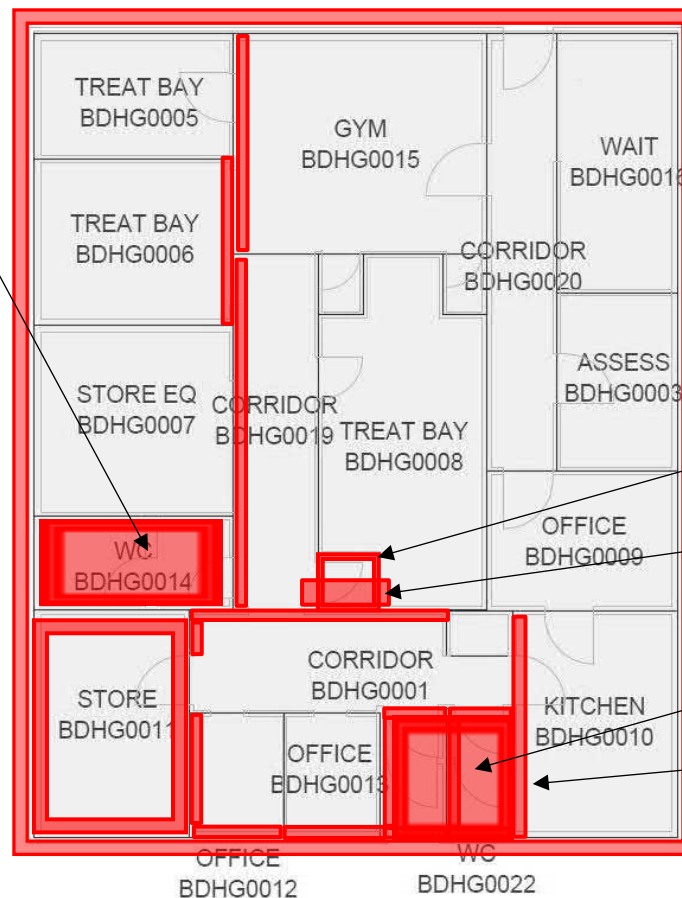
Exterior; Level 00; Surrounding, Eaves, Fibre cement sheeting

Interior; Level 00; Cleaner's Room – Surrounding; Wall Lining, Fibre Cement Sheetting

Subfloor: Central, Debris, Fibre cement sheeting (West of extension)

Interior; Level 00; Room 22 – Throughout; Ceiling Lining, Fibre Cement Sheetting

Interior; Level 00; KITCHEN BDHG0010 – South under sink, Heat Mat, Bituminous material



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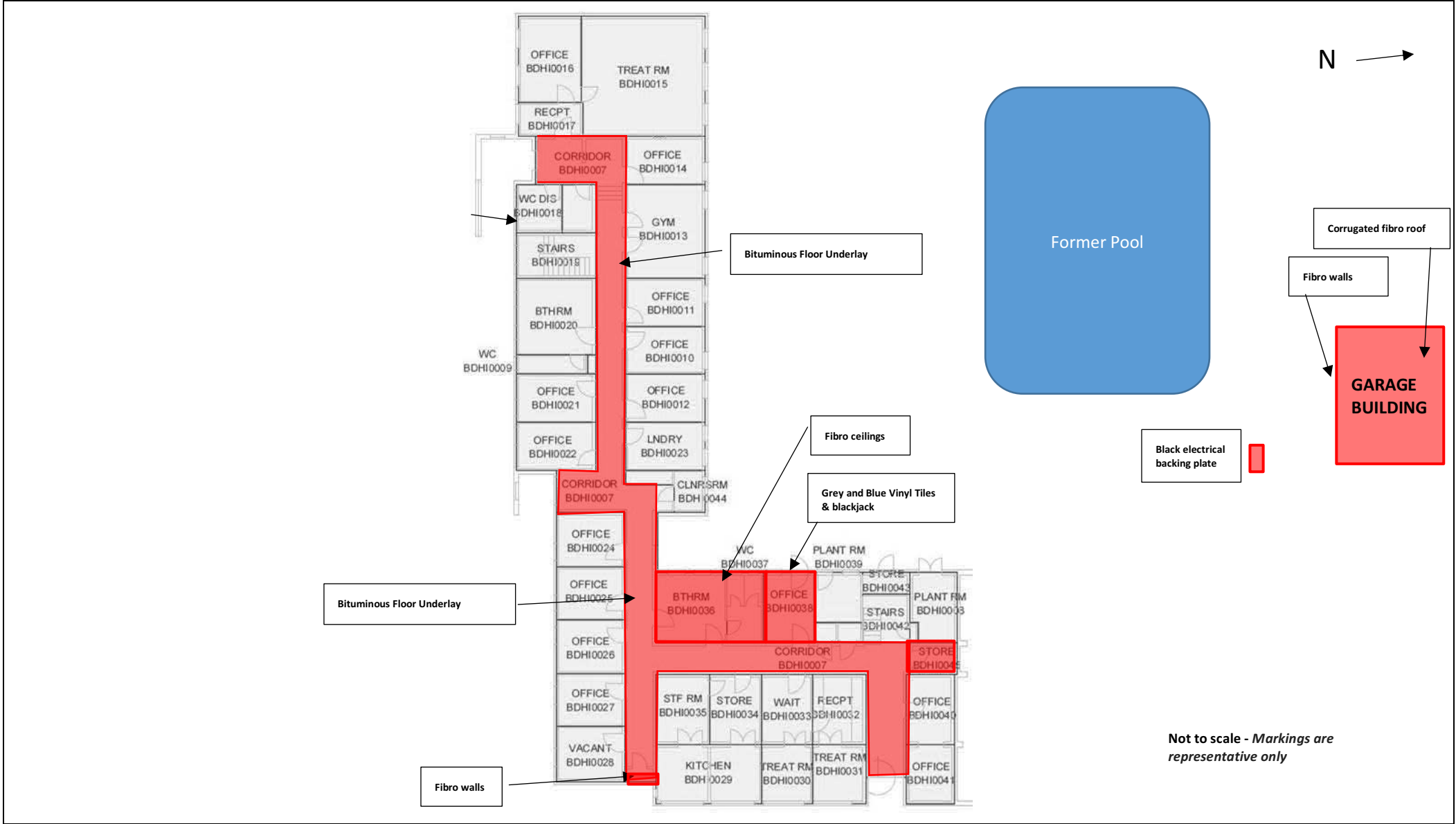
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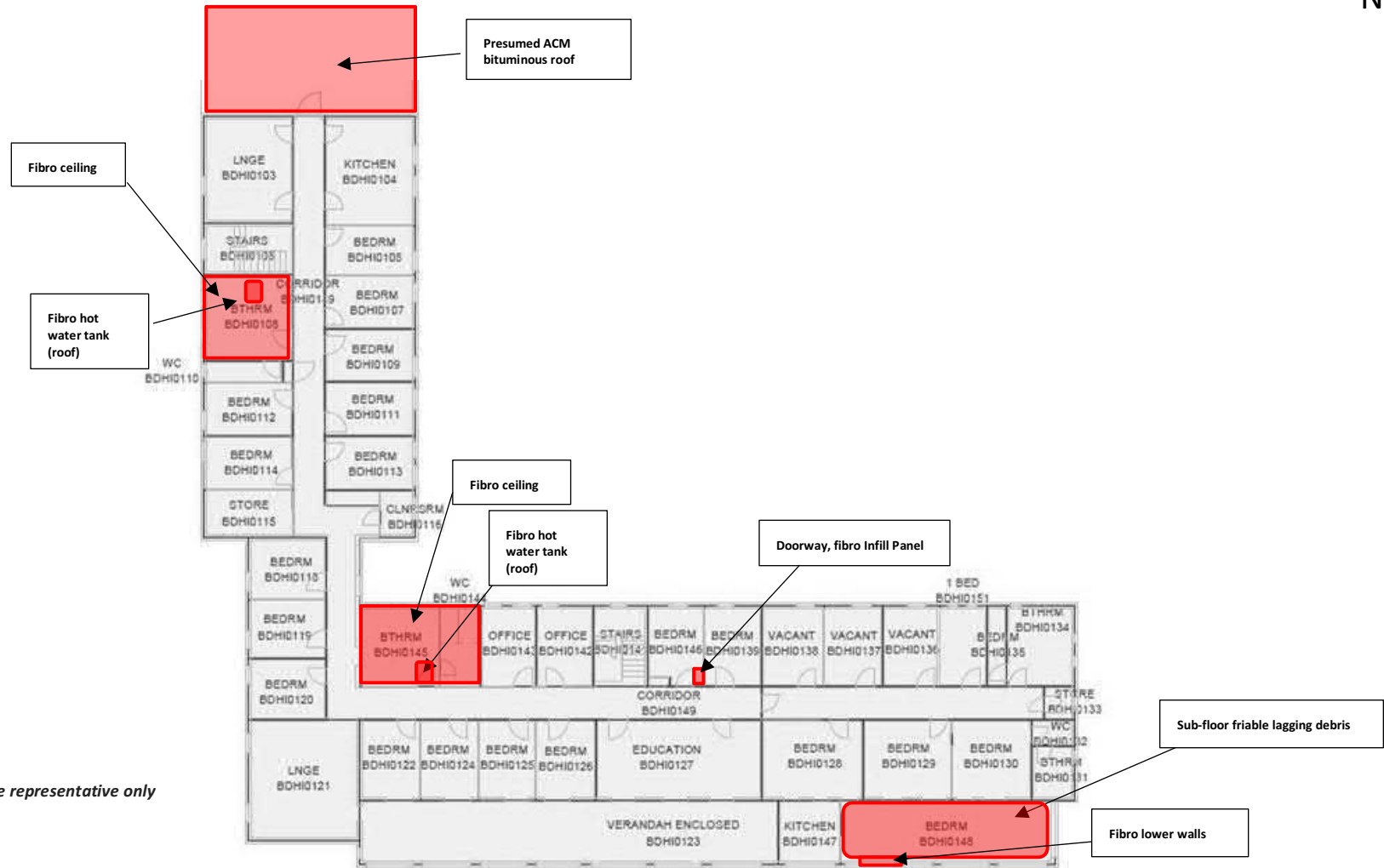
Location of ACM

Location of Asbestos Containing Materials – Building G

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



N →



Legend



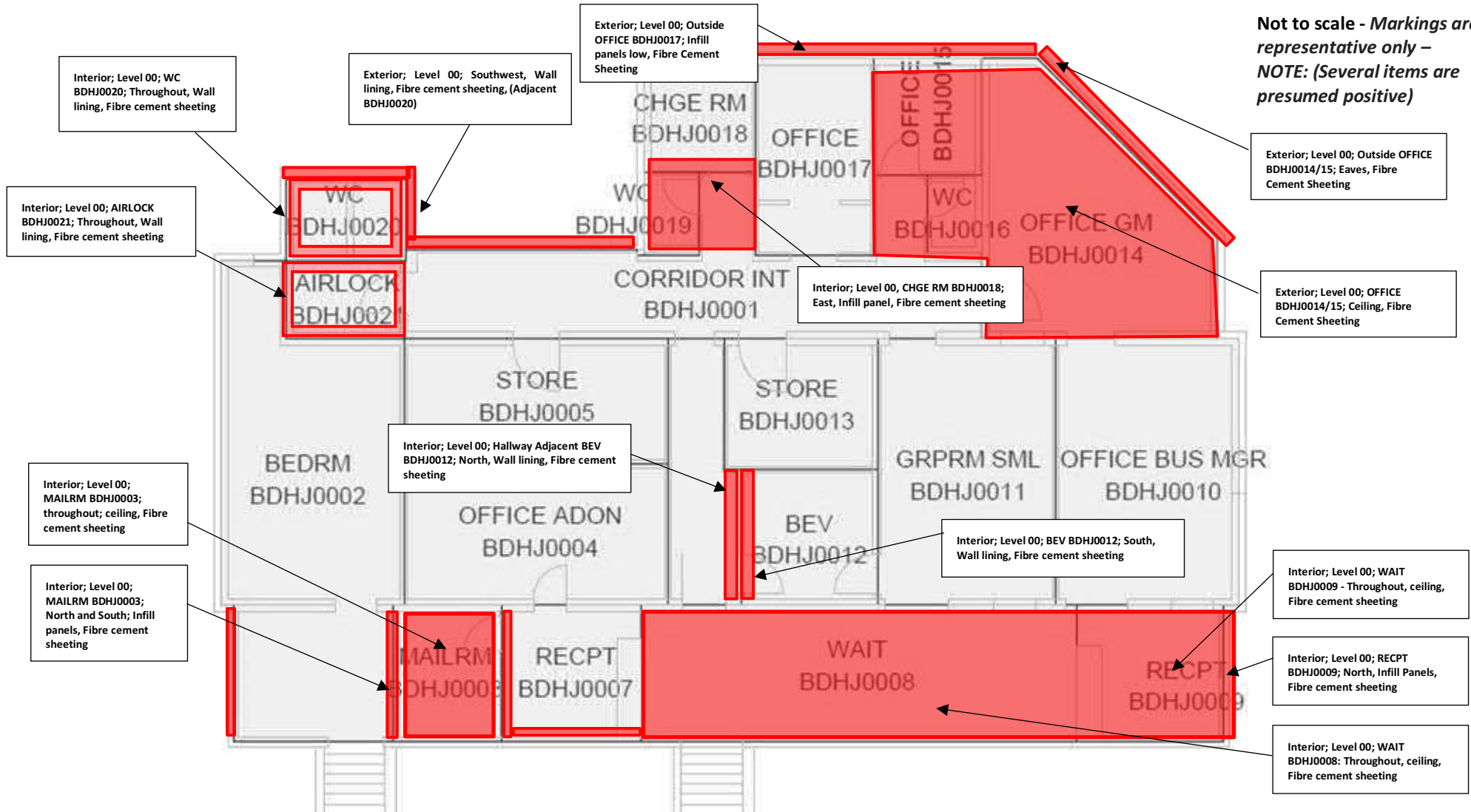
Location of ACM

Location of Asbestos Containing Materials – Building I (Level 01)

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



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NOTE: (Several items are presumed positive)



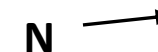
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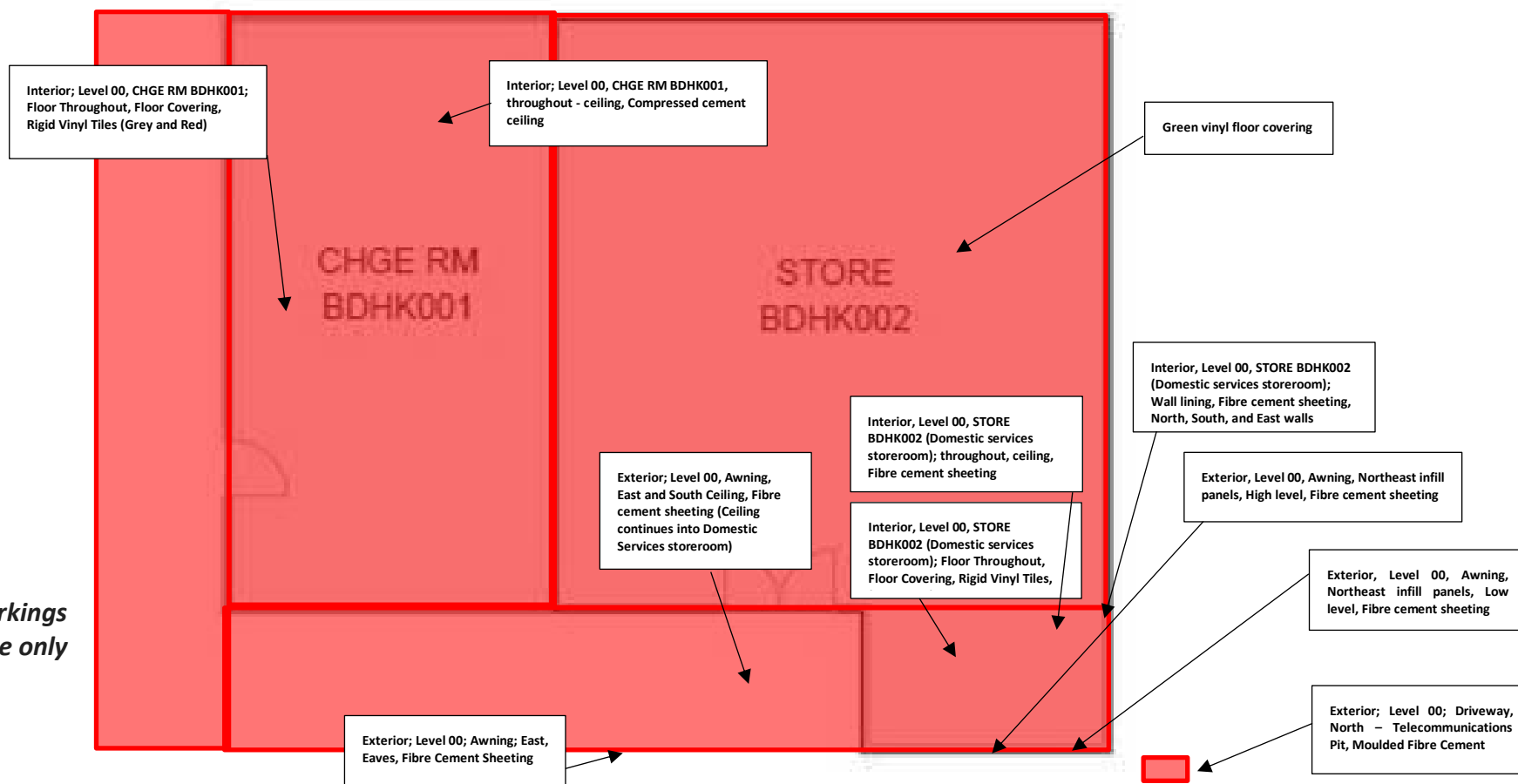
Location of Asbestos

Location of Asbestos Containing Materials – Building J

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



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are representative only



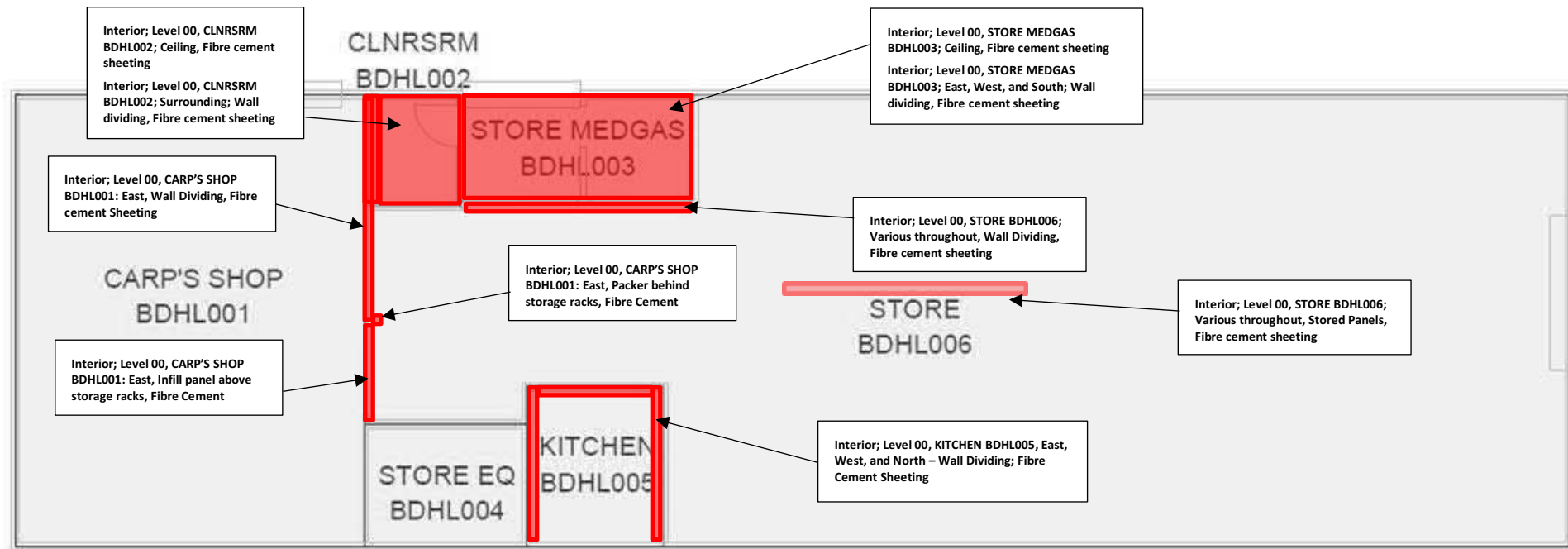
Legend



Location of ACM

Location of Asbestos Containing Materials – Building K

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



Note: All fibro panels stored throughout building are presumed to contain asbestos



Not to scale - Markings are representative only

Legend



Location of ACM

Location of Asbestos Containing Materials – Building L

Site Name	Old Bulli Hospital	Client Name	Landcom
Date	August 2022	Job Number	J178406



STORE
BDHM001

**Not to scale - Markings are
representative only**

Legend



Location of ACM

Location of Asbestos Containing Materials – Building M

Site Name

Old Bulli Hospital

Client Name

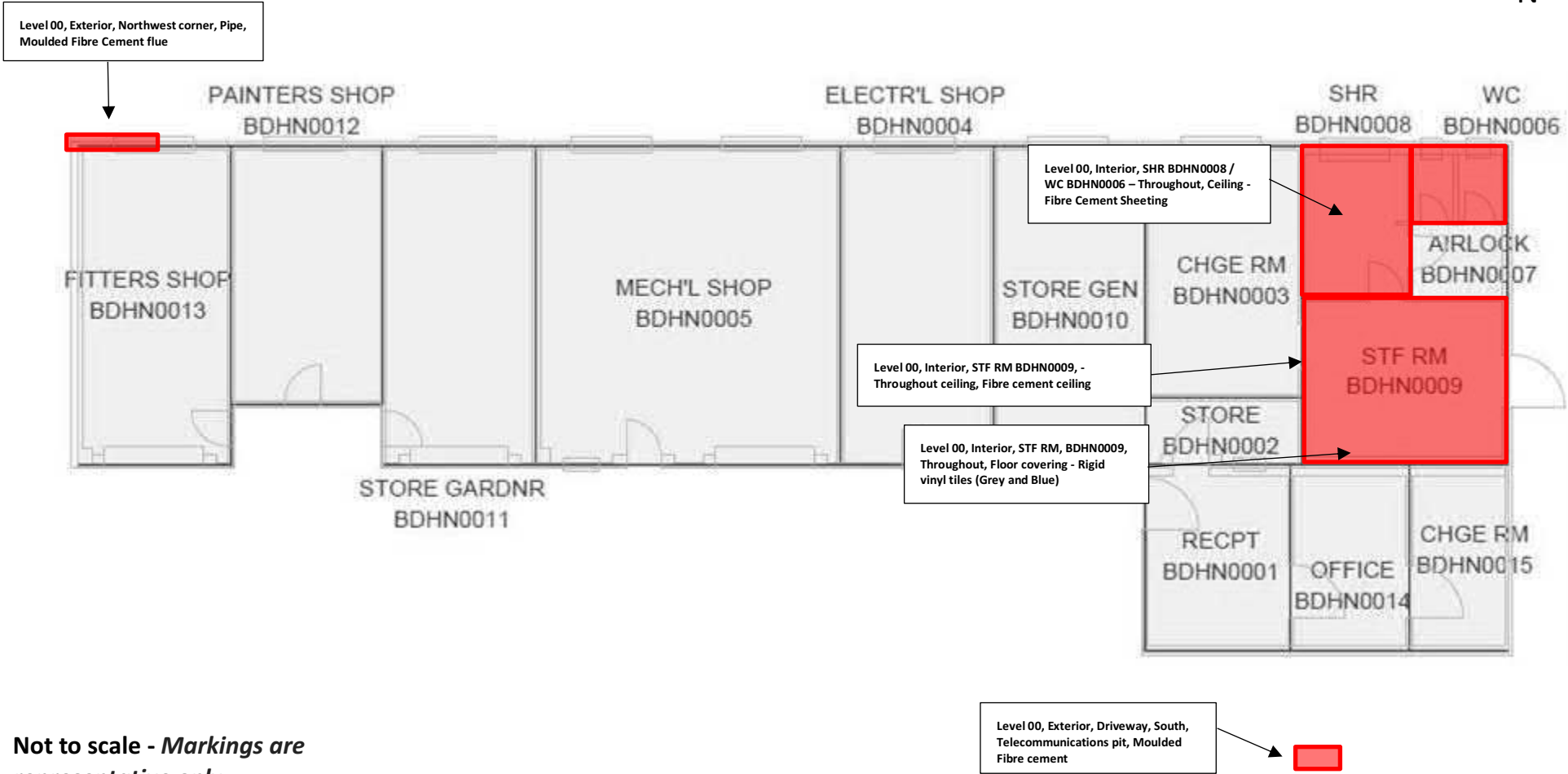
Landcom

Date

August 2022


Job Number

J178406



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Location of Asbestos Containing Materials – Building N

Legend  Location of ACM	Site Name			
	Old Bulli Hospital			
	Client Name			
Date		August 2022		Landcom
		Job Number		J178406

Hazardous Materials Survey

Old Bulli Hospital, Hospital Road, Bulli NSW 2516

Appendix C: Laboratory Analysis Reports

Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Michael Er
Landcom
PO Box 237
PARRAMATTA NSW 2124

Dear Michael,

Re: Asbestos Identification Analysis - Old Bulli Hospital, Hospital Road, Bulli NSW 2516

This letter presents the results of asbestos fibre identification analysis performed on 137 samples collected by Cameron Hollands of Greencap on from 29/01/2022 to 04/08/2022. The samples were collected from Old Bulli Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining and trace analysis in our Sydney Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at <https://www.greencap.com.au/terms-conditions> and are governed by our statements of limitation available at <https://www.greencap.com.au/statements-limitation>.

The analysis was completed on Tuesday, 16 August 2022.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact our project manager Ben Morgan.

Yours sincerely,
Greencap


Vince Nguyen : Approved Identifier


Vince Nguyen : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 3402 Sydney Laboratory.



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J178406 - 001	Building A - Exterior - Room 55 - East - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 15 x 10 x 5 mm	No Asbestos Detected Organic Fibres
2	J178406 - 002	Building A - Exterior - Near 65 - East - Eaves - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 20 x 15 x 5 mm	Chrysotile (white asbestos)
3	J178406 - 003	Building A - Exterior - Ambulance Bay - Roof - Corrugated Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 30 x 15 x 2 mm	Chrysotile (white asbestos)
4	J178406 - 004	Building A - Exterior - Ambulance Bay - West - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 40 x 20 x 5 mm	No Asbestos Detected Organic Fibres
5	J178406 - 005	Building A - Interior - Near 110 - West - Wall - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 80 x 45 x 5 mm	Chrysotile (white asbestos) Organic Fibres
6	J178406 - 006	Building A - Exterior - Room 23 - Subfloor - Debris - Fibre Cement Sheet Dirty unpainted grey compacted fibre-cement sheet material ~ 30 x 30 x 3 mm	Chrysotile (white asbestos)
7	J178406 - 007	Building A - Exterior - Room 23 - Subfloor - Pier Packers - Fibre Cement Sheet Dirty unpainted grey compacted fibre-cement sheet material ~ 50 x 50 x 4 mm	Chrysotile (white asbestos)
8	J178406 - 008	Building A - Exterior - Room 23 - Subfloor - Pipe Wrap - Bituminous Paper Black semi-flexible bituminous sheet material ~ 110 x 70 x 1 mm	No Asbestos Detected Organic Fibres
9	J178406 - 009	Building A - Exterior - Room 24 - Ground - Conduit - Fibre Cement Pipe Unpainted grey compacted fibre-cement sheet material ~ 42 x 30 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
10	J178406 - 010	Building A - Exterior - Room 20 - Subfloor - Debris - Fibre Cement Sheet Unpainted gold-grey compressed fibre-cement sheet material ~ 80 x 70 x 6 mm	Chrysotile (white asbestos) Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
11	J178406 - 011	Building A - Exterior - Room 125 - Subfloor - Debris - Fibre Cement Sheet Dirty unpainted grey compacted fibre-cement sheet material ~ 60 x 35 x 3 mm	Chrysotile (white asbestos) Crocidolite (blue asbestos)
12	J178406 - 012	Building A - Exterior - Room 67 - Roof Void - Hot Water Tank/Base - Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 35 x 20 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
13	J178406 - 013	Building A - Interior - Plant 77 - NE Corner - Vertical Pipe - Insulation White compressed powder, fibre plasterboard material ~ 35 x 20 x 5 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
14	J178406 - 014	Building A - Exterior - Rooftop Plant Over Room 103 - Throughout - Wall - Fibre Cement Sheet Dirty unpainted grey compacted fibre-cement sheet material ~ 65 x 60 x 5 mm	Chrysotile (white asbestos)
15	J178406 - 015	Building A - Interior - Room 23 - Throughout - Wall - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 35 x 20 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
16	J178406 - 016	Building A - Interior - Room 37 - Throughout - Wall - Fibre Cement Sheet Unpainted gold-grey compressed fibre-cement sheet material and associated white semi-flexible vinyl material, attached with amber adhesive material ~ 60 x 45 x 10 mm	No Asbestos Detected Organic Fibres
17	J178406 - 017	Building A - Interior - Room 3 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 70 x 65 x 5 mm	Chrysotile (white asbestos)
18	J178406 - 018	Building A - Interior - Room 3 - Throughout - Wall - Fibre Cement Sheet White-painted gold-pink compressed fibre-cement sheet material ~ 50 x 50 x 5 mm	No Asbestos Detected Organic Fibres
19	J178406 - 019	Building A - Interior - Room 43 - North Wall - Safe - Insulation White compressed powder, fibre plasterboard material ~ 10 x 7 x <1 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
20	J178406 - 020	Building A - Interior - Room 55 - Door Infills - Wall - Fibre Cement Sheet Cream-painted gold-pink compressed fibre-cement sheet material ~ 55 x 55 x 5 mm	No Asbestos Detected Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
21	J178406 - 021	Building A - Interior - Plant 76 - Throughout - Ceiling - Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 150 x 110 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
22	J178406 - 022	Building A - Exterior - Rooms 05B, 23, 24 - Throughout - Wall - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 47 x 30 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
23	J178406 - 023	Building A - Exterior - Room 35 - Throughout - Subfloor - Pipe Lagging White loosely-formed powder, fibre material ~ 50 x 40 x 3 mm	Amosite (brown asbestos)
24	J178406 - 024	Building A - Exterior - Rooms 43 & 55 - Throughout - Wall / Shadowline - Fibre Cement Sheet Dirty white-painted grey compacted fibre-cement sheet material ~ 56 x 35 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
25	J178406 - 025	Building A - Exterior - Room 53 - Throughout - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 50 x 30 x 3 mm	Chrysotile (white asbestos) Organic Fibres
26	J178406 - 026	Building A - Interior - Room 68 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 25 x 20 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
27	J178406 - 027	Building A - Interior - Room 68 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 50 x 25 x 5 mm	No Asbestos Detected Organic Fibres
28	J178406 - 028	Building A - Interior - Room 64 - Throughout - Wall - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 140 x 55 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
29	J178406 - 029	Building A - Interior - Room 64 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 40 x 23 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
30	J178406 - 030	Building A - Exterior - Room 88 - Throughout - Wall - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 40 x 30 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos)



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
31	J178406 - 031	Building A - Exterior - Room 87 - Throughout - Window - Glazing Putty Green-painted cream hardened mastic material ~ 85 x 7 x 7 mm	No Asbestos Detected
32	J178406 - 032	Building A - Interior - Room 91 - North - Upper Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 45 x 25 x 5 mm	No Asbestos Detected Organic Fibres
33	J178406 - 033	Building A - Interior - Corridor 8 Near Room 86 - Throughout - Flooring - Vinyl Tiles A: Grey brittle vinyl material B: Amber adhesive material, attached to underside of sample 033A A: ~ 170 x 160 x 3 mm B: ~ 170 x 160 x <1 mm	A: Chrysotile (white asbestos) B: No Asbestos Detected
34	J178406 - 034	Building A - Interior - Corridor 8 Near Room 92 - Throughout - Flooring - Linoleum Cream semi-flexible vinyl material and associated black-brown bituminous material, attached with grey concrete/screed material ~ 220 x 140 x 3 mm	No Asbestos Detected
35	J178406 - 035	Building A - Interior - Corridor 130 - Near Room 120 - Fire Door - Core Gold-grey compressed/formed powder, mica vermiculite-type material ~ 45 x 20 x 3 mm	No Asbestos Detected
36	J178406 - 036	Building A - Interior - Bath 02 - Throughout - Ceiling - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 50 x 40 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
37	J178406 - 037	Building A - Interior - Room 125 - West - Wall - Fibre Cement Sheet Blue-painted gold-grey compressed fibre-cement sheet material ~ 55 x 25 x 2 mm	Chrysotile (white asbestos) Organic Fibres
38	J178406 - 038	Building A - Interior - Dining 109 - Throughout - Flooring - Orange Linoleum Orange brittle vinyl material and associated amber adhesive material ~ 120 x 90 x 3 mm	No Asbestos Detected Organic Fibres
39	J178406 - 039	Building A - Interior - Dining 109 - NW Corner - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 35 x 20 x 4 mm	Chrysotile (white asbestos) Organic Fibres
40	J178406 - 040	Building A - Interior - Plant 113 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 90 x 80 x 5 mm	Chrysotile (white asbestos) Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
41	J178406 - 041	Building B - Interior - BDHB0019 - Terrazzo Floor Throughout - Floor Expansion Joint Board - Fibrous Board Brown rubbery mastic material ~ 30 x 10 x 3 mm	No Asbestos Detected
42	J178406 - 042	Building B - Interior - BDHB0020 - Throughout - Floor Covering - Grey Vinyl Sheet Grey brittle vinyl material and associated amber adhesive material ~ 75 x 70 x 2 mm	No Asbestos Detected
43	J178406 - 043	Building B - Interior - BDHB0020 - Throughout - Floor - Levelling Compound Grey compressed/formed cementitious screed material ~ 45 x 40 x 5 mm	No Asbestos Detected
44	J178406 - 044	Building B - Interior - BDHB0023 - Throughout - Floor Covering - Cream Speckled Vinyl Sheet Grey-speckled cream flexible vinyl material and associated amber adhesive material ~ 100 x 75 x 2 mm	No Asbestos Detected Organic Fibres
45	J178406 - 045	Building B - Interior - BDHB0018 - Throughout - Floor Covering - Green Speckled Vinyl Sheet Green flexible vinyl material and associated amber adhesive material ~ 110 x 100 x 2 mm	No Asbestos Detected
46	J178406 - 046	Building B - Interior - BDHB0017 - Throughout - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 55 x 30 x 10 mm	No Asbestos Detected Organic Fibres
47	J178406 - 047	Building B - Interior - BDHB0034 - Throughout - Floor Covering - Grey Speckled Vinyl Sheet Grey-speckled cream flexible vinyl material and associated amber adhesive material ~ 110 x 65 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres
48	J178406 - 048	Building B - Interior - Corridor Adjacent To BDHB0003 & BDHB0006 - Throughout - Double Fire Doors - Fire Door Core Gold-grey compressed/formed powder, mica vermiculite-type material ~ 55 x 25 x 2 mm	No Asbestos Detected
49	J178406 - 049	Building B - Interior - BDHB0001 - Throughout - Floor Covering (Surface Layer) - Dark Green Speckled Vinyl Sheet Green flexible vinyl material and associated amber adhesive material ~ 85 x 20 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres
50	J178406 - 050	Building B - Interior - BDHB0001 - Throughout - Floor Covering (Base Layer) - Cream Vinyl Sheet Cream semi-flexible vinyl material and associated amber adhesive material, attached with brown fibrous backing material ~ 65 x 50 x 2 mm	No Asbestos Detected Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
51	J178406 - 051	Building B - Interior - BDHB0001 - Throughout - Fire Door - Fire Door Core Gold-grey compressed/formed powder, mica vermiculite-type material ~ 105 x 15 x 2 mm	No Asbestos Detected
52	J178406 - 052	Building B - Interior - BDHB0055 - Throughout - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 20 x 15 x 3 mm	Chrysotile (white asbestos) Organic Fibres
53	J178406 - 053	Building B - Interior - BDHB0055 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 45 x 30 x 2 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
54	J178406 - 054	Building B - Interior - BDHB0067 - Throughout - Floor Covering - Tan Speckled Vinyl Sheet Cream semi-flexible vinyl material only (no distinct adhesive layer visible) ~ 55 x 45 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres
55	J178406 - 055	Building B - Interior - Subfloor - Throughout - Packers - Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 60 x 40 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
56	J178406 - 056	Building B - Interior - Subfloor - Throughout - Debris - Fibre Cement Sheet Dirty cream-painted grey compacted fibre-cement sheet material ~ 70 x 55 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
57	J178406 - 057	Building B - Interior - Subfloor - Throughout - Waterproofing Membrane to Brick Wall - Bituminous Board Black-brown compressed/formed resinous, fibrous, bituminous board material ~ 95 x 35 x 2 mm	No Asbestos Detected Organic Fibres
58	J178406 - 058	Building B - Interior - Subfloor - Throughout - Waterproofing Membrane to Brick Wall - Bituminous Paper Black semi-flexible bituminous sheet material ~ 135 x 10 x 1 mm	No Asbestos Detected Organic Fibres
59	J178406 - 059	Building B - Interior - Subfloor, Plantroom - Throughout - Fire Door - Fire Door Core White compressed/formed fibre, powder low density board material ~ 35 x 20 x 2 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
60	J178406 - 060	Building D - Interior - 12 (Small Corridor) - Throughout - Upper Infill Panel - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 20 x 15 x 5 mm	No Asbestos Detected Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
61	J178406 - 061	Building D - Interior - Plant 3 - East Wall - EDB - Bituminous Compressed Board Black-brown compressed/formed resinous, fibrous board material ~ 15 x 15 x 3 mm	Chrysotile (white asbestos)
62	J178406 - 062	Building D - Interior - Room 6 - North - Upper Infill Wall Panel - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 30 x 15 x 5 mm	Chrysotile (white asbestos) Organic Fibres
63	J178406 - 063	Building D - Exterior - Rooms 7, 8, 9 - Throughout - Wall - Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 15 x 10 x 3 mm	Chrysotile (white asbestos)
64	J178406 - 064	Building D - Exterior - Rooms 7, 8, 9 - Throughout - Eaves - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 15 x 10 x 3 mm	Chrysotile (white asbestos) Organic Fibres
65	J178406 - 065	Building D - Exterior - Room 12 - Throughout - Wall - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 20 x 15 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
66	J178406 - 066	Building D - Exterior - Room 12 - Throughout - Eaves & Barge Boards - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 30 x 25 x 5 mm	Chrysotile (white asbestos)
67	J178406 - 067	Building D - Exterior - Throughout - Concrete Slab Expansion Joint - Bituminous Board Black-brown compressed/formed resinous, fibrous board material ~ 40 x 15 x 5 mm	No Asbestos Detected Organic Fibres
68	J178406 - 068	Building D - Exterior - Between Bld A & Bld B - Partition - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 30 x 10 x 2 mm	No Asbestos Detected Organic Fibres
69	J178406 - 069	Building D - Interior - Room 5 - South - Wall - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 15 x 10 x 5 mm	No Asbestos Detected Organic Fibres
70	J178406 - 070	Building D - Interior - Rooms 4, 5, 16 - Throughout - Floor - Green Linoleum Green semi-flexible vinyl material and associated amber adhesive material ~ 170 x 70 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
71	J178406 - 071	Building D - Interior - Rooms 4, 5, 16 - Throughout - Floor - Screed Beneath Linoleum Grey compressed/formed cementitious screed material ~ 65 x 45 x 3 mm	No Asbestos Detected
72	J178406 - 072	Building D - Interior - Room 15 - Throughout - Upper Ceiling - Fibre Cement Sheet White-painted gold-pink compressed fibre-cement sheet material ~ 40 x 10 x 5 mm	Chrysotile (white asbestos) Organic Fibres
73	J178406 - 073	Building D - Interior - Room 5 - Throughout - Floor - Olive Linoleum Grey semi-flexible vinyl material and associated amber adhesive material, attached with grey concrete/screed material ~ 150 x 110 x 2 mm	No Asbestos Detected
74	J178406 - 074	Building D - Interior - Room 12 - Throughout - Ceiling - Fibre Cement Sheet White-painted gold-pink compressed fibre-cement sheet material ~ 25 x 15 x 2 mm	Chrysotile (white asbestos) Organic Fibres
75	J178406 - 075	Building D - Interior - Room 12 - Throughout - Floor - Blue Linoleum Blue flexible vinyl material and associated amber adhesive material ~ 120 x 85 x 2 mm	No Asbestos Detected
76	J178406 - 076	Building D - Interior - Room 10 - Throughout - Floor - Vinyl Tiles Brown brittle vinyl material and associated amber adhesive material ~ 180 x 75 x 3 mm	No Asbestos Detected Organic Fibres
77	J178406 - 077	Building D - Interior - Room 10 - Throughout - Floor - Bitumen Paper Under Vinyl Tiles Black-brown flexible resinous, fibrous sheet material ~ 110 x 60 x 2 mm	Chrysotile (white asbestos) Organic Fibres
78	J178406 - 078	Building D - Interior - Room 7 - Throughout - Floor - Blue Vinyl Floor Tiles Blue brittle vinyl material and associated amber adhesive material ~ 150 x 110 x 3 mm	No Asbestos Detected Organic Fibres
79	J178406 - 079	Building D - Interior - Room 7 - Throughout - Floor - Blue Linoleum Blue flexible vinyl material and associated amber adhesive material ~ 65 x 55 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres
80	J178406 - 080	Building D - Interior - Rooms 7, 8, 9 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 15 x 15 x 5 mm	Chrysotile (white asbestos) Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
81	J178406 - 081	Building D - Interior - Rooms 7, 8, 9 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 20 x 10 x 3 mm	Chrysotile (white asbestos) Organic Fibres
82	J178406 - 082	Building D - Interior - Between Room 7 & 10 - Throughout - Window - Glazing Putty Red/green-painted cream hardened mastic material ~ 70 x 15 x 15 mm	No Asbestos Detected
83	J178406 - 083	Building D - Interior - Room 11 - Throughout - Ceiling - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 10 x 10 x 2 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
84	J178406 - 084	Building E - Exterior & Interior - Entire Building - Walls - Upper Infill Panels - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 15 x 10 x 3 mm	Chrysotile (white asbestos) Organic Fibres
85	J178406 - 085	Building E - Interior - Entire Building - Throughout - Ceiling - Fibre Cement Sheet Cream-painted grey compacted fibre-cement sheet material ~ 15 x 10 x 5 mm	Chrysotile (white asbestos)
86	J178406 - 086	Building E - Exterior - Entire Building - Throughout - Expansion Joints - Bituminous Board Black-brown compressed/formed resinous, fibrous, bituminous board material ~ 80 x 40 x 10 mm	No Asbestos Detected Organic Fibres
87	J178406 - 087	Building F - Interior - Entry - Throughout - Floor - Grey Linoleum Grey/cream semi-flexible vinyl material and associated amber adhesive material ~ 230 x 55 x 2 mm	No Asbestos Detected
88	J178406 - 088	Building G - Interior - Room 15 - Throughout - Floor - Adhesive To Carpet Amber semi-flexible adhesive material ~ 65 x 40 x 2 mm	No Asbestos Detected Organic Fibres
89	J178406 - 089	Building G - Interior - Room 6 - Throughout - Floor - Cream Linoleum White flexible vinyl material and associated amber adhesive material ~ 60 x 50 x 2 mm	No Asbestos Detected Organic Fibres
90	J178406 - 090	Building G - Interior - Room 8 - Throughout - Floor - Blue Speckled Linoleum Blue flexible vinyl material and associated amber adhesive material, attached with brown fibrous backing material ~ 93 x 70 x 2 mm	No Asbestos Detected Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
91	J178406 - 091	Building G - Interior - Room 14 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 25 x 15 x 5 mm	No Asbestos Detected Organic Fibres
92	J178406 - 092	Building G - Interior - Room 6 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-pink compressed fibre-cement sheet material ~ 30 x 25 x 3 mm	No Asbestos Detected Organic Fibres
93	J178406 - 093	Building G - Interior - Room 22 - Throughout - Ceiling - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 10 x 5 x 2 mm	Chrysotile (white asbestos) Organic Fibres
94	J178406 - 094	Building G - Exterior - Roof Void - Throughout - Loose Insulation Yellow-grey loosely-formed vitreous fibre material ~ 80 x 80 x 3 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
95	J178406 - 095	Building G - Exterior - North Elevation - Building Extension - Expansion Joints - Bituminous Board Black-brown compressed/formed resinous, fibrous, bituminous board material ~ 65 x 20 x 10 mm	No Asbestos Detected Organic Fibres
96	J178406 - 096	Building G - Exterior - North Elevation - Building Extension - Expansion Joints - Fibre Cement Sheet Unpainted gold-grey compressed fibre-cement sheet material ~ 65 x 55 x 5 mm	No Asbestos Detected Organic Fibres
97	J178406 - 097	Building G - Subfloor - North Subfloor - Throughout - Debris - Loose Insulation Gold-grey compressed/formed fibre material ~ 65 x 40 x 20 mm	No Asbestos Detected Organic Fibres
98	J178406 - 098	Building G - Subfloor - All Areas - Throughout - Debris - Fibre Cement Sheet Unpainted grey compacted fibre-cement sheet material ~ 40 x 10 x 3 mm	Chrysotile (white asbestos)
99	J178406 - 099	Building G - Subfloor - All Areas - Throughout - Pier Packers - Fibre Cement Sheet Unpainted gold-grey compressed fibre-cement sheet material ~ 35 x 35 x 7 mm	No Asbestos Detected Organic Fibres



Report Date: Tuesday, 16/08/2022

Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
100	J178406 - 100	Building IA - Exterior - All areas - Throughout - Wall - Fibre Cement Sheet Dirty unpainted grey compacted fibre-cement sheet material ~ 40 x 35 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
101	J178406 - 101	Building IA - Exterior - All areas - Throughout - Roof - Corrugated Fibre Cement Sheet Cream-painted gold-grey compacted fibre-cement sheet material ~ 25 x 20 x 2 mm	Chrysotile (white asbestos) Organic Fibres
102	J178406 - 102	Building I - Interior, 01 - Entry Room 133 - Throughout - Floor - Cream Linoleum Cream semi-flexible vinyl material, associated amber adhesive material and attached brown fibrous matting material ~ 65 x 55 x 2 mm	No Asbestos Detected Organic Fibres
103	J178406 - 103	Building I - Interior, 00 - Room 7 - Throughout - Floor - Tan Linoleum Tan semi-flexible vinyl material and associated amber adhesive material ~ 140 x 55 x 2 mm	No Asbestos Detected Organic Fibres
104	J178406 - 104	Building I - Interior, 00 - Room 7 - Throughout - Floor - Bituminous Paper Under Linoleum Black-brown flexible resinous, fibrous sheet material ~ 50 x 35 x 1 mm	Chrysotile (white asbestos) Organic Fibres
105	J178406 - 105	Building I - Interior, 00 - Room 37 - Throughout - Ceiling - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 30 x 15 x 5 mm	Chrysotile (white asbestos)
106	J178406 - 106	Building I - Interior, 00 - Room 38 - Throughout - Floor - Blue/Green Vinyl Tile Green semi-flexible vinyl material ~ 170 x 100 x 2 mm	No Asbestos Detected
107	J178406 - 107	Building I - Interior, 00 - Room 38 - Throughout - Floor - Black Adhesive Black-brown flexible resinous, fibrous sheet material and associated amber adhesive material, attached to underside of sample 007 ~ 170 x 100 x 1 mm	Chrysotile (white asbestos) Organic Fibres
108	J178406 - 108	Building I - Interior, 00 - Room 24 - Throughout - Floor - Cream Linoleum Cream flexible vinyl material ~ 140 x 70 x 2 mm	No Asbestos Detected Synthetic Mineral Fibres
109	J178406 - 109	Building I - Interior, 00 - Room 24 - Throughout - Floor - Adhesive Under Lino Amber adhesive material, attached to underside of sample 009 ~ 140 x 70 x 1 mm	No Asbestos Detected



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Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
110	J178406 - 110	Building I - Interior, 00 - Room 7 - Throughout - Floor - Light Blue Linoleum Blue flexible vinyl material, associated amber adhesive material and attached brown fibrous matting material ~ 65 x 45 x 3 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
111	J178406 - 111	Building I - Interior, 00 - Room 7 - Throughout - Floor - Underlay Cream fibrous matting material ~ 85 x 40 x 1 mm	No Asbestos Detected Organic Fibres
112	J178406 - 112	Building I - Interior, 00 - Exit near Room 28 - Throughout - wall - Fibre Cement Sheet Pink-painted gold-grey compressed fibre-cement sheet material ~ 30 x 10 x 5 mm	Chrysotile (white asbestos) Organic Fibres
113	J178406 - 113	Building I - Interior, 00 - Room 15 - Throughout - wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 35 x 15 x 5 mm	No Asbestos Detected Organic Fibres
114	J178406 - 114	Building I - Interior - All areas - Throughout - Sash window - Woven Cord Gold-grey woven fibre material ~ 80 x 7 x 7 mm	No Asbestos Detected Organic Fibres
115	J178406 - 115	Building I - Interior, 00 - Room 7 - Throughout - Floor - Blue Spotted Linoleum Blue flexible vinyl material, associated amber adhesive material and attached brown fibrous material ~ 90 x 60 x 2 mm	No Asbestos Detected Organic Fibres
116	J178406 - 116	Building I - Interior, 00 - Room 15 - Throughout - Floor - Blue Linoleum Blue flexible vinyl material, associated amber adhesive material and attached brown fibrous timber material ~ 125 x 60 x 2 mm	No Asbestos Detected Organic Fibres
117	J178406 - 117	Building I - Subfloor - Under Stair Room - Throughout - Redundant electrical cable - Cable Sheath Gold-grey woven fibre material ~ 60 x 5 x 5 mm	No Asbestos Detected Organic Fibres
118	J178406 - 118	Building I - Subfloor - Under Level 01, Room 149 - Throughout - Debris - Lagging White compressed/formed fibre, powder low density board material ~ 80 x 30 x 15 mm	Amosite (brown asbestos)
119	J178406 - 119	Building I - Interior, 01 - Room 147 - Throughout - Floor - Cream Vinyl Tiles Cream semi-flexible vinyl material, associated amber adhesive material and attached brown fibrous matting material ~ 155 x 55 x 2 mm	No Asbestos Detected Organic Fibres



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Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
120	J178406 - 120	Building I - Interior, 01 - Room 138 - Fireplace - Floor - Mortar Grey compressed/formed cementitious material ~ 55 x 15 x 10 mm	No Asbestos Detected
121	J178406 - 121	Building I - Interior, 01 - Room 108 - Throughout - wall - Textured Paint White-painted cream fine quartz-like pebbled, hardened mastic material ~ 50 x 30 x 3 mm	No Asbestos Detected
122	J178406 - 122	Building I - Roof void - All areas - Throughout - Redundant electrical cable - Cable Sheath Gold-grey woven fibre material ~ 110 x 5 x 5 mm	No Asbestos Detected Organic Fibres
123	J178406 - 123	Building I - Roof void - Above Room 145 - Hot water tank - Vessel - Moulded Fibre Cement Unpainted grey compacted fibre-cement sheet material ~ 30 x 15 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
124	J178406 - 124	Building I - Roof void - All areas - Throughout - Dust Brown non-homogenous dust ~ 0.15 g	No Asbestos Detected At or Above Reporting Limit Organic Fibres NOTE 1
125	J178406 - 125	Building I - Roof void - Above Room 149 - Hot water tank - Insulation - Fibrous Material Yellow-grey loosely-formed vitreous fibre material ~ 35 x 15 x 1 mm	No Asbestos Detected Synthetic Mineral Fibres
126	J178406 - 126	Building K - Interior - Room 1 - Throughout - Floor - Waterproofing Membrane & Screed Grey compressed/formed fine quartz-like pebbled screed material ~ 30 x 15 x 3 mm	No Asbestos Detected
127	J178406 - 127	Building K - Exterior - Entire building - Throughout - Window - Glazing Putty Cream-painted cream hardened mastic material ~ 70 x 20 x 7 mm	No Asbestos Detected
128	J178406 - 128	Building M - Interior - Room 1 - Incinerator - Refractory lining - Ceramic Brown loosely/formed fine ceramic material ~ 65 x 20 x 10 mm	No Asbestos Detected
129	J178406 - 129	Building N - Interior - Room 1 - Throughout - Floor - Cream Linoleum Cream semi-flexible vinyl material and associated amber adhesive material ~ 140 x 105 x 2 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres



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Our ref: C123920:J178406

Site Location:		Old Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
130	J178406 - 130	Building N - Interior - Room 12 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 20 x 15 x 5 mm	No Asbestos Detected Organic Fibres
131	J178406 - 131	Building N - Interior - Room 8 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compressed fibre-cement sheet material ~ 45 x 25 x 5 mm	No Asbestos Detected Organic Fibres
132	J178406 - 132	Building J - Exterior - All areas - Throughout - Eaves - Fibre Cement Sheet White-painted gold-grey compressed fibre-cement sheet material ~ 40 x 20 x 5 mm	Chrysotile (white asbestos) Organic Fibres
133	J178406 - 133	Building J - Internal - Room 3 - Throughout - Wall - Fibre Cement Sheet Cream-painted gold-grey compacted fibre-cement sheet material ~ 28 x 20 x 5 mm	Chrysotile (white asbestos) Organic Fibres
134	J178406 - 134	Building J - Internal - Room 8 - Throughout - Ceiling - Fibre Cement Sheet White-painted grey compacted fibre-cement sheet material ~ 30 x 15 x 2 mm	Chrysotile (white asbestos)
135	J178406 - 135	Building J - Internal - Room 8 - Throughout - Floor - Linoleum Sheet Grey semi-flexible vinyl material and associated amber adhesive material ~ 70 x 20 x 2 mm	No Asbestos Detected Organic Fibres
136	J178406 - 136	Building J - Internal - Room 20 - Throughout - Floor - Waterproofing & Levelling Compound Grey compressed/formed cementitious material ~ 60 x 40 x 5 mm	No Asbestos Detected
137	J178406 - 137	Building J - Internal - Room 14 - Throughout - Ceiling - Fibre Cement Sheet Cream-painted gold-grey compacted fibre-cement sheet material ~ 37 x 30 x 5 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.

If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

NOTE 1 Due to the nature of the gel lift sample quantifying asbestos content using a reporting limit of 0.1g/kg (0.01%) is not possible.

CERTIFICATE OF ANALYSIS 302702

Client Details

Client	Greencap (Wollongong)
Attention	Cameron Hollands
Address	Office 2, 120 Smith St, Wollongong, NSW, 2500

Sample Details

Your Reference	<u>J178406-Bulli</u>
Number of Samples	12 Dust, 48 Paint, 1 Paint/Dust
Date samples received	10/08/2022
Date completed instructions received	10/08/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

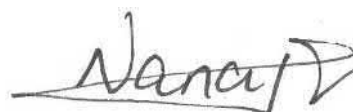
Report Details

Date results requested by	16/08/2022
Date of Issue	16/08/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Hannah Nguyen, Metals Supervisor
Loren Bardwell, Development Chemist

Authorised By



Nancy Zhang, Laboratory Manager

Lead (dust)						
Our Reference		302702-1	302702-14	302702-21	302702-23	302702-28
Your Reference	UNITS	J178406-A-LD-01	J178406-B-LD-001	J178406-C-LD-001	J178406-D-LD-001	J178406-E-LD-001
Date Sampled		28/07/2022	28/07/2022	1/08/2022	1/08/2022	25/07/2022
Type of sample		Dust	Dust	Dust	Dust	Dust
Date prepared	-	11/08/2022	11/08/2022	11/08/2022	11/08/2022	11/08/2022
Date analysed	-	15/08/2022	15/08/2022	15/08/2022	15/08/2022	15/08/2022
Lead	mg/kg	180	240	240	690	14,000

Lead (dust)						
Our Reference		302702-29	302702-31	302702-32	302702-48	302702-53
Your Reference	UNITS	J178406-E-LD-002	J178406-F-LD-001	J178406-G-LD-001	J178406-J-LD-001	J178406-K-LD-001
Date Sampled		25/07/2022	25/07/2022	25/07/2022	27/07/2022	27/07/2022
Type of sample		Dust	Dust	Dust	Dust	Dust
Date prepared	-	11/08/2022	11/08/2022	11/08/2022	11/08/2022	11/08/2022
Date analysed	-	15/08/2022	15/08/2022	15/08/2022	15/08/2022	15/08/2022
Lead	mg/kg	1,900	35	150	670	160

Lead (dust)			
Our Reference		302702-58	302702-59
Your Reference	UNITS	J178406-L-LD-001	J178406-N-LD-001
Date Sampled		26/07/2022	26/07/2022
Type of sample		Dust	Dust
Date prepared	-	11/08/2022	11/08/2022
Date analysed	-	15/08/2022	15/08/2022
Lead	mg/kg	300	1,000

Client Reference: J178406-Bulli

Lead in Paint						
Our Reference	UNITS	302702-2	302702-3	302702-4	302702-5	302702-6
Your Reference		J178406-A-LP-001	J178406-A-LP-002	J178406-A-LP-003	J178406-A-LP-004	J178406-A-LP-005
Date Sampled		28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.35	0.12	6.9	0.12	0.79

Lead in Paint						
Our Reference	UNITS	302702-7	302702-8	302702-9	302702-10	302702-11
Your Reference		J178406-A-LP-006	J178406-A-LP-007	J178406-A-LP-008	J178406-A-LP-009	J178406-A-LP-010
Date Sampled		28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	1.5	0.14	0.095	0.14	0.22

Lead in Paint						
Our Reference	UNITS	302702-12	302702-13	302702-15	302702-16	302702-17
Your Reference		J178406-A-LP-011	J178406-A-LP-012	J178406-B-LP-001	J178406-B-LP-002	J178406-B-LP-003
Date Sampled		28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Type of sample		Paint/Dust	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.75	0.11	0.084	<0.005	<0.005

Lead in Paint						
Our Reference	UNITS	302702-18	302702-19	302702-20	302702-22	302702-24
Your Reference		J178406-B-LP-004	J178406-B-LP-005	J178406-B-LP-006	J178406-C-LP-001	J178406-D-LP-001
Date Sampled		28/07/2022	28/07/2022	28/07/2022	1/08/2022	1/08/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	1.3	0.10	0.99	<0.005	0.04

Client Reference: J178406-Bulli

Lead in Paint						
Our Reference		302702-25	302702-26	302702-27	302702-30	302702-33
Your Reference	UNITS	J178406-D-LP-002	J178406-D-LP-003	J178406-D-LP-004	J178406-E-LP-001	J178406-G-LP-001
Date Sampled		1/08/2022	1/08/2022	1/08/2022	25/07/2022	25/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	3.2	0.86	0.16	2.6	0.073

Lead in Paint						
Our Reference		302702-34	302702-35	302702-36	302702-37	302702-38
Your Reference	UNITS	J178406-G-LP-002	J178406-G-LP-003	J178406-G-LP-004	J178406-I-Carport-LP-001	J178406-I-LP-001
Date Sampled		25/07/2022	25/07/2022	25/07/2022	29/07/2022	29/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	<0.005	0.04	0.03	0.073	1.7

Lead in Paint						
Our Reference		302702-39	302702-40	302702-41	302702-42	302702-43
Your Reference	UNITS	J178406-I-LP-002	J178406-I-LP-003	J178406-I-LP-004	J178406-I-LP-005	J178406-I-LP-006
Date Sampled		29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.062	2.4	0.03	1.7	6.9

Lead in Paint						
Our Reference		302702-44	302702-45	302702-46	302702-47	302702-49
Your Reference	UNITS	J178406-I-LP-007	J178406-I-LP-008	J178406-I-LP-009	J178406-I-LP-010	J178406-J-LP-001
Date Sampled		29/07/2022	25/07/2022	25/07/2022	25/07/2022	27/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.095	5.1	6.8	0.05	0.15

Lead in Paint						
Our Reference		302702-50	302702-51	302702-52	302702-54	302702-55
Your Reference	UNITS	J178406-J-LP-002	J178406-J-LP-003	J178406-J-LP-004	J178406-K-LP-001	J178406-K-LP-002
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.63	1.6	3.4	0.01	1.6

Lead in Paint						
Our Reference		302702-56	302702-57	302702-60	302702-61	302702-62
Your Reference	UNITS	J178406-L-LP-001	J178406-L-LP-002	J178406-N-LP-001	J178406-N-LP-002	J178406-A-LP-011 - [TRIPLICATE]
Date Sampled		26/07/2022	26/07/2022	26/07/2022	26/07/2022	28/07/2022
Type of sample		Paint	Paint	Paint	Paint	Paint/Dust
Date prepared	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Date analysed	-	16/08/2022	16/08/2022	16/08/2022	16/08/2022	16/08/2022
Lead in paint	%w/w	0.12	0.094	0.067	0.25	0.28

Lead in Paint		
Our Reference		302702-63
Your Reference	UNITS	J178406-D-LP-003 - [TRIPLICATE]
Date Sampled		1/08/2022
Type of sample		Paint
Date prepared	-	16/08/2022
Date analysed	-	16/08/2022
Lead in paint	%w/w	2.9

Method ID	Methodology Summary
Metals-020	Determination of various metals by ICP-AES.
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

QUALITY CONTROL: Lead (dust)					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			11/08/2022	1	11/08/2022	11/08/2022		11/08/2022	[NT]
Date analysed	-			15/08/2022	1	15/08/2022	15/08/2022		15/08/2022	[NT]
Lead	mg/kg	1	Metals-020	<1	1	180	130	32	108	[NT]

QUALITY CONTROL: Lead (dust)					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	58	11/08/2022	11/08/2022		[NT]	[NT]
Date analysed	-			[NT]	58	15/08/2022	15/08/2022		[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	58	300	280	7	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			16/08/2022	2	16/08/2022	16/08/2022		16/08/2022	[NT]
Date analysed	-			16/08/2022	2	16/08/2022	16/08/2022		16/08/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	2	0.35	0.36	3	93	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			[NT]	9	16/08/2022	16/08/2022		16/08/2022	[NT]
Date analysed	-			[NT]	9	16/08/2022	16/08/2022		16/08/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	9	0.095	0.084	12	96	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			[NT]	12	16/08/2022	16/08/2022		16/08/2022	[NT]
Date analysed	-			[NT]	12	16/08/2022	16/08/2022		16/08/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	12	0.75	0.38	65	97	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	26	16/08/2022	16/08/2022		[NT]	[NT]
Date analysed	-			[NT]	26	16/08/2022	16/08/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	26	0.86	2.2	88	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	39	16/08/2022	16/08/2022		[NT]	[NT]
Date analysed	-			[NT]	39	16/08/2022	16/08/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	39	0.062	0.071	14	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	42	16/08/2022	16/08/2022		[NT]	[NT]
Date analysed	-			[NT]	42	16/08/2022	16/08/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	42	1.7	1.5	12	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	54	16/08/2022	16/08/2022		[NT]	[NT]
Date analysed	-			[NT]	54	16/08/2022	16/08/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	54	0.01	<0.005	67	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	61	16/08/2022	16/08/2022		[NT]	[NT]
Date analysed	-			[NT]	61	16/08/2022	16/08/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	61	0.25	0.25	0	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Acid Extractable Metals in Paint:

- The laboratory RPD acceptance criteria has been exceeded for 302702-12. Therefore a triplicate result has been issued as laboratory sample number 302702-62.
- The laboratory RPD acceptance criteria has been exceeded for 302702-26. Therefore a triplicate result has been issued as laboratory sample number 302702-63.

Greencap NSW P/L
Ground Floor, North Building, 22 Giffnock Avenue
Macquarie Park
NSW 2113



NATA Accredited
Accreditation Number 1261
Site Number 25079

Accredited for compliance with ISO/IEC 17025 – Testing
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Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Cameron Hollands

Report 913045-ML
Project name BULLI HOSPITAL
Project ID J178406
Received Date Aug 10, 2022

Client Sample ID	A-M-001	B-M-001	D-M-001	I-M-001	J-M-001
Sample Matrix	Bio-Tape	Bio-Tape	Bio-Tape	Bio-Tape	Bio-Tape
Eurofins Sample No.	22-Au0021853	22-Au0021854	22-Au0021855	22-Au0021856	22-Au0021857
Date Sampled	Jul 28, 2022	Jul 28, 2022	Jul 28, 2022	Jul 28, 2022	Jul 28, 2022
Bio-Tape Mould Analysis					
% Analysed	5	5	5	5	5
LOR	6	6	6	6	6
Background Debris	3	3	4	4	3
	Raw Counts	Raw Counts	Raw Counts	Raw Counts	Raw Counts
Hyphal Structure	>100	>100	6	>100	>100
Un-ID					
Identification					
<i>Acremonium</i> -like				>2000	
<i>Alternaria</i>			3		
<i>Ascomycetes (NS)</i>			1		
<i>Asp/Pen</i> -like	>5000	>3000	56	>100	
<i>Basidiospores (NS)</i>			4	>2000	
<i>Bipolaris</i> -like					
<i>Cladosporium</i> -like	>2000	>1000	4	3	>5000
<i>Curvularia</i>					
<i>Epicoccum</i>					
<i>Nigrospora</i>					
<i>Pithomyces</i>					
<i>Trichoderma</i>					
<i>Paecilomyces</i>				>100	
<i>Trichothecium</i>				54	
Water Indicators					
<i>Aureobasidium</i> *					
<i>Chaetomium</i>			1		
<i>Fusarium</i>					
<i>Scopulariopsis</i>					
<i>Stachybotrys</i>					
<i>Ulocladium</i>					
Total (fs/cm ²)	>39000	>23000	420	>24000	>28000
Woodrot Basidiospore				Yes	
Active Fungal Hyphae	Yes	Yes		Yes	

Client Sample ID	G-M-001	N-M-001
Sample Matrix	Bio-Tape	Bio-Tape
Eurofins Sample No.	22-Au0021858	22-Au0021859
Date Sampled	Jul 28, 2022	Jul 28, 2022
Bio-Tape Mould Analysis		
% Analysed	5	5
LOR	6	6
Background Debris	4	3
	Raw Counts	Raw Counts
Hyphal Structure	>100	>100
Un-ID	>100	
Identification		
<i>Acremonium-like</i>		
<i>Alternaria</i>		
<i>Ascomycetes (NS)</i>		
<i>Asp/Pen-like</i>		>1000
<i>Basidiospores (NS)</i>		
<i>Bipolaris-like</i>		
<i>Cladosporium-like</i>		>2000
<i>Curvularia</i>		
<i>Epicoccum</i>		
<i>Nigrospora</i>		
<i>Pithomyces</i>		
<i>Scedosporium</i>	>3000	
<i>Trichoderma</i>		
<i>Paecilomyces</i>		>1000
Water Indicators		
<i>Aureobasidium*</i>		
<i>Chaetomium</i>		
<i>Fusarium</i>		
<i>Scopulariopsis</i>		
<i>Stachybotrys</i>		
<i>Ulocladium</i>		
Total (fs/cm²)	>18000	>23000
Woodrot Basidiospore		
Active Fungal Hyphae		

Client Sample ID	EXTERIOR (REFERENCE)	INTERIOR BUILDING A	BLOCK B INTERIOR	BUILDING D INTERIOR	BUILDING G INTERIOR
Sample Matrix	Spore Trap	Spore Trap	Spore Trap	Spore Trap	Spore Trap
Eurofins Sample No.	22-Au0021845	22-Au0021846	22-Au0021847	22-Au0021848	22-Au0021849
Date Sampled	Aug 01, 2022	Aug 01, 2022	Aug 01, 2022	Aug 01, 2022	Aug 01, 2022
Spore Trap Mould Analysis					
% Analysed	25	25	25	25	25
Flow Rate (L/min)	15	15	15	15	15
Sampling time (min)	5	5	5	5	5
LOR	53	53	53	53	53
Background Debris	1	2	1	1	2
	Raw Counts	Raw Counts	Raw Counts	Raw Counts	Raw Counts
Hyphal Structure					
Un-ID					
Identification					
<i>Acremonium</i> -like					
<i>Alternaria</i>					
<i>Ascomycetes</i> (NS)	14				1
<i>Asp/Pen</i> -like		>150	>100	>500	>100
<i>Basidiospores</i> (NS)	2		1	4	10
<i>Bipolaris</i> -like					
<i>Cladosporium</i> -like	3		1	36	
<i>Curvularia</i>					
<i>Epicoccum</i>					1
<i>Nigrospora</i>					
<i>Pithomyces</i>					
<i>Torula</i>	5				
<i>Trichoderma</i>					
<i>Scedosporium</i>					>100
<i>Smuts/Myxo/Peri.</i>					1
Water Indicators					
<i>Aureobasidium</i> *					
<i>Chaetomium</i>					
<i>Fusarium</i>					
<i>Scopulariopsis</i>					
<i>Stachybotrys</i>		>100		2	
<i>Ulocladium</i>					
Total (fs/m³)	1300	>13000	>5400	>29000	>11000
Woodrot Basidiospore					Yes
Active Fungal Hyphae					

Client Sample ID	BUILDING I INTERIOR	BUILDING J INTERIOR	BUILDING N INTERIOR
Sample Matrix	Spore Trap	Spore Trap	Spore Trap
Eurofins Sample No.	22-Au0021850	22-Au0021851	22-Au0021852
Date Sampled	Aug 01, 2022	Aug 01, 2022	Aug 01, 2022
Spore Trap Mould Analysis			
% Analysed	25	25	25
Flow Rate (L/min)	15	15	15
Sampling time (min)	5	5	5
LOR	53	53	53
Background Debris	2	2	3
	Raw Counts	Raw Counts	Raw Counts
Hyphal Structure	6	1	18
Un-ID			
Identification			
<i>Acremonium</i> -like			
<i>Alternaria</i>			
<i>Ascomycetes</i> (NS)		1	5
<i>Asp/Pen</i> -like	>100	31	>100
<i>Basidiospores</i> (NS)	>500	5	1
<i>Bipolaris</i> -like			
<i>Cladosporium</i> -like		15	51
<i>Curvularia</i>			
<i>Epicoccum</i>			2
<i>Nigrospora</i>			
<i>Pithomyces</i>			
<i>Scedosporium</i>	>200		
<i>Trichoderma</i>			
Water Indicators			
<i>Aureobasidium</i> *			
<i>Chaetomium</i>			4
<i>Fusarium</i>			
<i>Scopulariopsis</i>			
<i>Stachybotrys</i>		1	
<i>Ulocladium</i>			
Total (fs/m³)	>43000	2900	>9700
Woodrot Basidiospore	Yes		
Active Fungal Hyphae	Yes		

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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

Description**Spore Trap Mould Analysis**

- Method: ASTM Standard Test method D7391-20 and supplementary in-house LTM-MLD-5020

Bio-Tape Mould Analysis

- Method: ASTM Standard Test method D7658-17 and supplementary in-house LTM-MLD-5010

Testing Site

Mayfield East

Mayfield East

Extracted

Aug 10, 2022

Aug 10, 2022

Holding Time

N/A

N/A

General Glossary

General

1. QC data may be available on request.
2. Samples were analysed on an 'as received' basis.
3. Information identified on this report with blue colour, indicates data provided by customer, which may have an impact on the results.
4. This report replaces any interim results previously issued.
5. Spores of *Aspergillus*, *Penicillium*, and others are small with few distinguishing features and therefore can be difficult to differentiate.
6. If % analysed is <100%, spores per m³ is based on extrapolation and not actual count.

Holding Times

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

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

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

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

Units

fs/m³	Fungal Structures per cubic metre	g	Gram
fs/cm²	Fungal Structures per square centimetre	L/min	Litres per minute
cfu	Colony Forming Units	min	Minute
cfu/mL	Colony Forming Units per millilitre	%	Percentage

Terms

PLM	Polarising Light Microscope
COC	Chain of Custody
fs	Fungal Structures. A collective term for a fragment; or groups of fragments from fungi, including but not limited to conidia, conidiophores, hyphae and spores
Hyphal Structures	Hyphae, mycelia or fruiting bodies – fragmented or intact
-like	Spores lacking distinguishable characteristics from other similar spores
Smuts/Myxo./Peri.	Smuts/Myxomycetes/Periconia
LOR	Limit of Reporting
< LOR	Less than the Limit of Reporting
N/A	Not Applicable
NS	Non-Specified
Un-ID	Unidentified fungal particulate
Set	Set of four (4) agar plates per sample
TNTC	Too Numerous to Count
Detected	<i>Escherichia coli</i> /Coliforms were present in the samples submitted for analysis
Not-Detected	<i>Escherichia coli</i> /Coliforms were NOT present in the samples submitted for analysis
Raw Counts	The number of spores counted by the analyst
% Analysed	The amount of the trace that was analysed. If large amounts of any particulate is present, counts may be estimated

Water Indicator

Fungi most commonly associated with indoor mould growth in buildings with long-term water intrusion issues.

Background Debris: Background debris is the amount of non-fungal particulate present in the trace including dust, fibres, skin cells, dust mites, and insect parts. A debris rating is assigned each trace from 0 (lowest) to 5 (highest). A higher debris rating means samples are more difficult to analyse, and spores, especially smaller spores like *Aspergillus*/*Penicillium*, may be obscured. Counts with debris ratings of 4 or 5 should be regarded as minimal counts with actual counts assumed to be significantly higher. A further explanation of the debris rating is listed below:

0. None Detected. No debris observed.
1. Trace. Field of view obscured < 5%. Counts unaffected.
2. Light. Field of view obscured 5% to 25%. Counts slightly affected.
3. Moderate. Field of view obscured 25% to 75%. Actual counts may be higher than reported counts.
4. Heavy. Field of view obscured 75% to 90%. Actual counts may be significantly higher than reported counts.
5. Very Heavy. Field of view obscured > 90%. Actual counts may be significantly higher than reported counts.

Indoor and Outdoor Comparisons

There are no current industrial standards regarding permissible levels of airborne fungi that may be present in buildings. It is common for fungal spores to be present in a normal indoor environment. A general guideline that is widely accepted in the industrial hygiene industry is that the types and numbers of mould spores present in the indoor environment should be similar to those present in the outdoor environment. If inside spore counts are significantly higher than outside counts, this may indicate a potential mould problem. The comparison of outdoor and indoor spore types and concentrations is a useful tool in assessing abnormal mould contamination; however, it should not be the sole determining factor in evaluating health risks and remediation strategies.

Combustion Products

This is a semi-qualitative analytical method. The relative percentage of combustion-by-products such as char, ash, and soot is visually estimated and reported as a percentage using direct microscopy technique. Other opaque particulate such as paint, rubber, metal oxides, etc. are also reported as a combined percentage with a description of the major constituents.

^^The soot identification by PLM is presumptive.

Microbiology

This is a qualitative test only for the presence / absence of coliforms and *E. coli*.

Analytical results are not corrected for field and analytical blanks. Test results relate only to the items tested and cannot be extrapolated to anything larger than their original intent. Interpretation of the analytical results is the sole responsibility of the customer.

Comments**Sample Integrity**

Custody Seals Intact (if used)	N/A
Sample correctly preserved	N/A
Appropriate sample containers have been used	Yes
Some samples have been subcontracted	No

Authorised by:

Irem Haskara	Analytical Services Manager
Irem Haskara	Senior Analyst-Mould



Shay Xie
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request

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Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block F

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Meals on Wheels (Block F), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 4 samples collected by Ben Morgan of Greencap on Friday, 28 July 2017. The samples from given order number PO#29343341 were collected from Meals on Wheels (Block F), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block F

Site Location:		Meals on Wheels (Block F), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block F - 001	Meals on Wheels - Level 00 - Exterior - Surrounding - Wall Cladding - Moulded Fibre Cement White-painted light brown compressed fibre-cement sheet material ~ 41 x 11 x 9 mm	Chrysotile (white asbestos) Organic Fibres
2	J149255-05 - Block F - 002	Meals on Wheels - Level 00 - Exterior - Surrounding - Eaves - Fibre Cement Sheeting Cream-painted light brown compressed fibre-cement sheet material ~ 53 x 35 x 10 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres
3	J149255-05 - Block F - 003	Meals on Wheels - Level 00 - All rooms - Throughout - Wall Lining - Fibre Cement Sheeting Light blue-painted light brown compressed fibre-cement sheet material ~ 39 x 16 x 4 mm	Chrysotile (white asbestos) Organic Fibres
4	J149255-05 - Block F - 004	Meals on Wheels - Level 00 - Toilet - South - Floor Covering Adhesive - Bituminous Material Crushed black-brown compressed bituminous material ~ 42 x 38 x 2 mm	No Asbestos Detected

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



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Accreditation Number 1261
Site Number 18217

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

Attention: Bryan Denner

Report 694340-S
Project name ISLHD
Project ID J161155-05
Received Date Dec 18, 2019

Client Sample ID			J161155-05- ISLHD-BDH-A- LP001	J161155-05- ISLHD-BDH-C- LP001	J161155-05- ISLHD-BDH-D- LP001	J161155-05- ISLHD-BDH-F- LP001
Sample Matrix			Paint	Paint	Paint	Paint
Eurofins Sample No.			S19-De25496	S19-De25497	S19-De25498	S19-De25499
Date Sampled			Dec 12, 2019	Dec 10, 2019	Dec 11, 2019	Dec 11, 2019
Test/Reference	LOR	Unit				
Lead (% w/w)	0.01	%	0.07	1.7	0.08	0.01

Client Sample ID			J161155-05- ISLHD-BDH-I- LP001	J161155-05- ISLHD-BDH-I- LP002	J161155-05- ISLHD-BDH-K- LP001
Sample Matrix			Paint	Paint	Paint
Eurofins Sample No.			S19-De25500	S19-De25501	S19-De25502
Date Sampled			Dec 10, 2019	Dec 10, 2019	Dec 10, 2019
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.19	0.62	0.13

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

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

Description

Lead (% w/w)

Testing Site

Sydney

Extracted

Dec 19, 2019

Holding Time

6 Month

- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rourke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J161155-05-ISLHD-BDH-A-LP001	Dec 12, 2019		Paint	S19-De25496	X
2	J161155-05-ISLHD-BDH-C-LP001	Dec 10, 2019		Paint	S19-De25497	X
3	J161155-05-ISLHD-BDH-D-LP001	Dec 11, 2019		Paint	S19-De25498	X
4	J161155-05-ISLHD-BDH-F-LP001	Dec 11, 2019		Paint	S19-De25499	X
5	J161155-05-	Dec 10, 2019		Paint	S19-De25500	X

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
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Project Name: ISLHD
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Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail					Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271					
Sydney Laboratory - NATA Site # 18217					X
Brisbane Laboratory - NATA Site # 20794					
Perth Laboratory - NATA Site # 23736					
	ISLHD-BDH-I-LP001				
6	J161155-05-ISLHD-BDH-I-LP002	Dec 10, 2019	Paint	S19-De25501	X
7	J161155-05-ISLHD-BDH-K-LP001	Dec 10, 2019	Paint	S19-De25502	X
Test Counts					7

BULLI DISTRICT HOSPITAL - F - MEALS ON WHEELS 11-12-2019



Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066

Page 5 of 7

Date Reported: Dec 19, 2019

ABN : 50 005 085 521 Telephone: +61 2 9900 8400

Report Number: 694340-S

Quality Control Results

Comments
Sample Integrity

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

Authorised By

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


Glenn Jackson
General Manager

~~Final report - this Report replaces any previously issued Report~~

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Tuesday, 14/01/2020

Our ref: C109541:J161155-08 - ISLHD-BDH-G

Wayne Davies
NSW Health
Lawson House, Wollongong Hospital
WOLLONGONG NSW 2500

Dear Wayne,

Re: Asbestos Identification Analysis - Bulli District Hospital, Hospital Road, Bulli NSW

This letter presents the results of asbestos fibre identification analysis performed on 1 sample collected by Bryan Denner of Greencap on Friday, 13 December 2019. The sample was collected from Bulli District Hospital, Hospital Road, Bulli NSW.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at <https://www.greencap.com.au/terms-conditions> and are governed by our statements of limitation available at <https://www.greencap.com.au/statements-limitation>.

The analysis was completed on Wednesday, 16 December 2020.

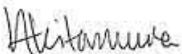
The sample will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

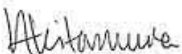
Should you require further information please contact Bryan Denner.

Yours sincerely,

Greencap



Holly Kitamura : Approved Identifier



Holly Kitamura : Approved Signatory



This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 21836 Wollongong Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.



Report Date: Tuesday, 14/01/2020

Our ref: C109541:J161155-08 - ISLHD-BDH-G

Site Location:		Bulli District Hospital, Hospital Road, Bulli NSW	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J161155-08 - ISLHD-BDH-G - 001	Block G - Rose Cottage - External - Level 00 - Northern External Brick Wall - Cover sheet - Fibre cement sheeting Unpainted gold-grey flat layered fibre-cement sheet material ~ 50 x 40 x 5 mm	No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.

If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block G

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Rose Cottage (Block G), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 7 samples collected by Ben Morgan of Greencap on Wednesday, 02 August 2017. The samples from given order number PO#29343341 were collected from Rose Cottage (Block G), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



This document shall not be reproduced except in full
Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.

The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block G

Site Location:		Rose Cottage (Block G), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block G - 001	Rose Cottage - Level 00 - Exterior - South - Infill Panels - High Level - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 29 x 16 x 3 mm	No Asbestos Detected Organic Fibres
2	J149255-05 - Block G - 002	Rose Cottage - Level 00 - Exterior - South - Window Beading - Construction Joint Mastic Light brown foam / sponge-like material ~ 18 x 14 x 5 mm	No Asbestos Detected Organic Fibres
3	J149255-05 - Block G - 003	Rose Cottage - Level 00 - Exterior - Southern wall - Roof Covering - Fibre Cement Sheeting Light green-painted light brown layered fibre-cement sheet material ~ 42 x 30 x 7 mm	No Asbestos Detected Organic Fibres
4	J149255-05 - Block G - 004	Rose Cottage - Level 00 - Exterior - Surrounding - Eaves - Fibre Cement Sheeting White-painted grey compressed fibre-cement sheet material ~ 55 x 12 x 4 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
5	J149255-05 - Block G - 005	Rose Cottage - Level 00 - Store BDHG0011 - Surrounding - Wall Lining - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 50 x 11 x 4 mm	Chrysotile (white asbestos) Organic Fibres
6	J149255-05 - Block G - 006	Rose Cottage - Level 00 - Kitchen BDHG0010 - South - Heat Mat - Bituminous Material A. Black-brown compressed resinous, organic fibrous board material B. Black bituminous, asbestiform fibrous adhesive material, attached to underside of sample 006A ~ A: ~ 96 x 59 x 3 mm B: ~ 40 x 38 x 1 mm	A: No Asbestos Detected Organic Fibres B. Chrysotile (white asbestos)
7	J149255-05 - Block G - 007	Rose Cottage - Level 00 - Subfloor - Central - Debris - Fibre Cement Sheeting Dirty light grey brittle compressed fibre-cement sheet material ~ 81 x 52 x 15 mm	Chrysotile (white asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Certificate of Analysis

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **Tom Oyston**

Report **629101-S**
 Project name J155696-05
 Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
		Fax:		Contact Name:	Tom Oyston
Project Name:	J155696-05				

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Label (u/w %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Greencap - NAA WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **BEN MORGAN**

Report **558871-S**
Project name **BULLI HOSPITAL HAZMAT 2017**
Project ID **C109541: J149255-05**
Received Date **Aug 16, 2017**

Client Sample ID			J149255-05_BLOCK G_LD_001
Sample Matrix			Dust
Eurofins mgt Sample No.			S17-Au19473
Date Sampled			Aug 11, 2017
Test/Reference	LOR	Unit	
Heavy Metals			
Lead	5	mg/kg	< 5

Sample History

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

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

Description

Heavy Metals

Testing Site

Sydney

Extracted

Aug 17, 2017

Holding Time

180 Day

- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)

Company Name: Greencap - NAA WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: BULLI HOSPITAL HAZMAT 2017
Project ID: C109541: J149255-05

Order No.:
Report #: 558871
Phone: 02 4298 2600
Fax:

Received: Aug 16, 2017 1:44 PM
Due: Aug 23, 2017
Priority: 5 Day
Contact Name: BEN MORGAN

Eurofins | mgt Analytical Services Manager : Andrew Black

Lead

Sample Detail

Melbourne Laboratory - NATA Site # 1254 & 14271

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794

Perth Laboratory - NATA Site # 23736

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J149255-05_BLOCK G_LD_001	Aug 11, 2017		Dust	S17-Au19473	X

Test Counts

1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

ug/L: micrograms per litre

ppb: Parts per billion

org/100mL: Organisms per 100 millilitres

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

mg/L: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

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

Quality Control Results

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank										
Heavy Metals										
Lead				mg/kg	< 5			5	Pass	
LCS - % Recovery										
Heavy Metals										
Lead				%	106			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Heavy Metals										
Lead	S17-Au21753	NCP	%	115				70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals										
Lead	S17-Au21930	NCP	mg/kg	8.1	15	60	30%	Fail		Q15

Comments

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
Q15	The RPD reported passes Eurofins mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Andrew Black Analytical Services Manager



Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Report Date: Tuesday, 05/09/2017

Our ref: C109541:J149255-05 - Block I

Site Location:		Nurses Home (Block I), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block I - 004	Nurses Home - Level 01 - BTHRM BDHI0108 - Throughout - Ceiling - Fibre Cement Sheeting White-painted light brown/pink layered fibre-cement sheet material ~ 45 x 20 x 3 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block I

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Nurses Home (Block I), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 3 samples collected by Ben Morgan of Greencap on Thursday, 13 July 2017. The samples from given order number PO#29343341 were collected from Nurses Home (Block I), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block I

Site Location:		Nurses Home (Block I), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block I - 001	Nurses Home - Level 00 - Bathroom BDHI0036 - Throughout - Ceiling - Fibre Cement Sheeting Light brown compressed fibre-cement sheet material ~ 37 x 16 x 2 mm	No Asbestos Detected
2	J149255-05 - Block I - 002	Nurses Home - Level 00 - Corridor BDHI0007 - Floor Throughout - Floor Covering - Sheet Vinyl Light brown/cream semi-flexible vinyl sheet material and associated amber adhesive material ~ 51 x 30 x 3 mm	No Asbestos Detected Organic Fibres
3	J149255-05 - Block I - 003	Nurses Home - Level 00 - Office BDHI0038 - Throughout - Floor Covering - Vinyl Tiles A. Light blue brittle vinyl sheet material B. Black bituminous, asbestiform fibrous adhesive material, attached to underside of sample 003A C. Light green brittle vinyl sheet material D. Black bituminous, asbestiform fibrous adhesive material, attached to underside of sample 003C A: ~ 89 x 58 x 3 mm B: ~ 50 x 30 x 1 mm C: ~ 76 x 45 x 3 mm D: ~ 30 x 17 x 1 mm	A: Chrysotile (white asbestos) B: Chrysotile (white asbestos) C: Chrysotile (white asbestos) D: Chrysotile (white asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



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Accreditation Number 1261
Site Number 18217

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 The results of the tests, calibrations and/or
 measurements included in this document are traceable
 to Australian/national standards.

Attention: **Bryan Denner**

Report **694340-S**
Project name **ISLHD**
Project ID **J161155-05**
Received Date **Dec 18, 2019**

Client Sample ID			J161155-05- ISLHD-BDH-A- LP001	J161155-05- ISLHD-BDH-C- LP001	J161155-05- ISLHD-BDH-D- LP001	J161155-05- ISLHD-BDH-F- LP001
Sample Matrix			Paint	Paint	Paint	Paint
Eurofins Sample No.			S19-De25496	S19-De25497	S19-De25498	S19-De25499
Date Sampled			Dec 12, 2019	Dec 10, 2019	Dec 11, 2019	Dec 11, 2019
Test/Reference	LOR	Unit				
Lead (% w/w)	0.01	%	0.07	1.7	0.08	0.01

Client Sample ID			J161155-05- ISLHD-BDH-I- LP001	J161155-05- ISLHD-BDH-I- LP002	J161155-05- ISLHD-BDH-K- LP001
Sample Matrix			Paint	Paint	Paint
Eurofins Sample No.			S19-De25500	S19-De25501	S19-De25502
Date Sampled			Dec 10, 2019	Dec 10, 2019	Dec 10, 2019
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.19	0.62	0.13

Sample History

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

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

Description**Testing Site****Extracted****Holding Time**

Lead (% w/w)

Sydney

Dec 19, 2019

6 Month

- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J161155-05-ISLHD-BDH-A-LP001	Dec 12, 2019		Paint	S19-De25496	X
2	J161155-05-ISLHD-BDH-C-LP001	Dec 10, 2019		Paint	S19-De25497	X
3	J161155-05-ISLHD-BDH-D-LP001	Dec 11, 2019		Paint	S19-De25498	X
4	J161155-05-ISLHD-BDH-F-LP001	Dec 11, 2019		Paint	S19-De25499	X
5	J161155-05-	Dec 10, 2019		Paint	S19-De25500	X

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
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Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail					Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271					
Sydney Laboratory - NATA Site # 18217					X
Brisbane Laboratory - NATA Site # 20794					
Perth Laboratory - NATA Site # 23736					
	ISLHD-BDH-I-LP001				
6	J161155-05-ISLHD-BDH-I-LP002	Dec 10, 2019	Paint	S19-De25501	X
7	J161155-05-ISLHD-BDH-K-LP001	Dec 10, 2019	Paint	S19-De25502	X
Test Counts					7

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments
Sample Integrity

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

Authorised By

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


Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name: Greencap WOLL P/L Address: Office 2, 120 Smith St Wollongong NSW 2500 Project Name: J155696-05	Order No.: Report #: 629101 Phone: 02 4298 2600 Fax:	Received: Nov 22, 2018 10:55 AM Due: Nov 28, 2018 Priority: 4 Day Contact Name: Tom Oyston
Eurofins mgt Analytical Services Manager : Andrew Black		

Sample Detail						Lead (µg/g %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block J

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Old Admin Building (Block J), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 2 samples collected by Ben Morgan of Greencap on Tuesday, 01 August 2017. The samples from given order number PO#29343341 were collected from Old Admin Building (Block J), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block J

Site Location:		Old Admin Building (Block J), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block J - 001	Old Admin Building - Level 00 - Exterior wall - South West - Wall Lining - Fibre Cement Sheeting Cream-painted light grey compressed fibre-cement sheet material ~ 33 x 14 x 4 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
2	J149255-05 - Block J - 002	Old Admin Building - Level 00 - All rooms - Various Throughout - Wall Lining - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 49 x 22 x 5 mm	No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: J155696-05

Order No.:
Report #: 629101
Phone: 02 4298 2600
Fax:

Received: Nov 22, 2018 10:55 AM
Due: Nov 28, 2018
Priority: 4 Day
Contact Name: Tom Oyston

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Lead (µg/g %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
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Test Counts						3

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5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

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

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

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

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

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ppm: Parts per million

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Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

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PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block K

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Storage and Change Room (Block K), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 7 samples collected by Ben Morgan of Greencap on Monday, 31 July 2017. The samples from given order number PO#29343341 were collected from Storage and Change Room (Block K), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.

The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block K

Site Location:		Storage and Change Room (Block K), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block K - 001	Storage and Change Room - Level 00 - Store BDHK002 - Floor Throughout - Floor Covering - Sheet Vinyl Khaki flexible vinyl sheet material and associated light brown woven organic fibrous matting material ~ 51 x 23 x 3 mm	No Asbestos Detected Organic Fibres
2	J149255-05 - Block K - 002	Storage and Change Room - Level 00 - Store BDHK002 - Floor Throughout - Floor Covering - Rigid Vinyl Tiles A. White brittle vinyl sheet material B. Amber adhesive material, attached to underside of sample 002A A: ~ 69 x 42 x 3 mm B: ~ 18 x 11 x 1 mm	A. Chrysotile (white asbestos) B: No Asbestos Detected
3	J149255-05 - Block K - 003	Storage and Change Room - Level 00 - Store BDHK002 - Throughout - Wall Lining - Fibre Cement Sheeting Light brown/pink layered fibre-cement sheet material ~ 45 x 26 x 3 mm	Chrysotile (white asbestos) Organic Fibres
4	J149255-05 - Block K - 004	Storage and Change Room - Level 00 - Change Room BDHK001 - Floor Throughout - Floor Covering - Rigid Vinyl Tiles A. Light blue/grey brittle vinyl sheet material B. Amber adhesive material, attached to underside of sample 004A A: ~ 81 x 43 x 9 mm B: ~ 38 x 26 x 1 mm	A. Chrysotile (white asbestos) B: No Asbestos Detected
5	J149255-05 - Block K - 005	Storage and Change Room - Level 00 - Change Room BDHK001 - Throughout - Ceiling - Compressed Cement Sheeting White-painted light brown/pink layered fibre-cement sheet material ~ 49 x 29 x 5 mm	Chrysotile (white asbestos) Organic Fibres
6	J149255-05 - Block K - 006	Storage and Change Room - Level 00 - Store BDHK002 - Throughout - Ceiling - Fibre Cement Sheeting Light brown dimpled layered fibre-cement sheet material ~ 34 x 20 x 6 mm	Chrysotile (white asbestos) Organic Fibres
7	J149255-05 - Block K - 007	Storage and Change Room - Level 00 - Driveway - North - Telecommunications Pit - Moulded Fibre Cement Light brown/grey dirty compressed fibre-cement sheet material ~ 40 x 18 x 6 mm	Chrysotile (white asbestos) Amosite (brown asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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The results of the tests, calibrations and/or
measurements included in this document are traceable
to Australian/national standards.

Attention: **Bryan Denner**

Report **694340-S**
Project name **ISLHD**
Project ID **J161155-05**
Received Date **Dec 18, 2019**

Client Sample ID			J161155-05- ISLHD-BDH-A- LP001	J161155-05- ISLHD-BDH-C- LP001	J161155-05- ISLHD-BDH-D- LP001	J161155-05- ISLHD-BDH-F- LP001
Sample Matrix			Paint	Paint	Paint	Paint
Eurofins Sample No.			S19-De25496	S19-De25497	S19-De25498	S19-De25499
Date Sampled			Dec 12, 2019	Dec 10, 2019	Dec 11, 2019	Dec 11, 2019
Test/Reference	LOR	Unit				
Lead (% w/w)	0.01	%	0.07	1.7	0.08	0.01

Client Sample ID			J161155-05- ISLHD-BDH-I- LP001	J161155-05- ISLHD-BDH-I- LP002	J161155-05- ISLHD-BDH-K- LP001
Sample Matrix			Paint	Paint	Paint
Eurofins Sample No.			S19-De25500	S19-De25501	S19-De25502
Date Sampled			Dec 10, 2019	Dec 10, 2019	Dec 10, 2019
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.19	0.62	0.13

Sample History

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

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

Description

Lead (% w/w)

Testing Site

Sydney

Extracted

Dec 19, 2019

Holding Time

6 Month

- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J161155-05-ISLHD-BDH-A-LP001	Dec 12, 2019		Paint	S19-De25496	X
2	J161155-05-ISLHD-BDH-C-LP001	Dec 10, 2019		Paint	S19-De25497	X
3	J161155-05-ISLHD-BDH-D-LP001	Dec 11, 2019		Paint	S19-De25498	X
4	J161155-05-ISLHD-BDH-F-LP001	Dec 11, 2019		Paint	S19-De25499	X
5	J161155-05-	Dec 10, 2019		Paint	S19-De25500	X

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
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Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
	ISLHD-BDH-I-LP001					
6	J161155-05-ISLHD-BDH-I-LP002	Dec 10, 2019		Paint	S19-De25501	X
7	J161155-05-ISLHD-BDH-K-LP001	Dec 10, 2019		Paint	S19-De25502	X
Test Counts						7

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments
Sample Integrity

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

Authorised By

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


Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Certificate of Analysis

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name: Greencap WOLL P/L Address: Office 2, 120 Smith St Wollongong NSW 2500 Project Name: J155696-05	Order No.: Report #: 629101 Phone: 02 4298 2600 Fax:	Received: Nov 22, 2018 10:55 AM Due: Nov 28, 2018 Priority: 4 Day Contact Name: Tom Oyston
Eurofins mgt Analytical Services Manager : Andrew Black		

Sample Detail						Label
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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Units

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Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
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USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
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Results >20 times the LOR : RPD must lie between 0-30%

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
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4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
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9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block L

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Maintenance Workshop (Block L), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 1 sample collected by Ben Morgan of Greencap on Friday, 28 July 2017. The sample from given order number PO#29343341 was collected from Maintenance Workshop (Block L), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The sample will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.

The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block L

Site Location:		Maintenance Workshop (Block L), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block L - 001	Maintenance Workshop - Level 00 - Store EQ BDHL004 - Throughout - Ceiling - Fibre Cement Sheeting Dirty light brown compressed fibre-cement sheet material ~ 43 x 26 x 8 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block N

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Maintenance Workshop (Block N), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 8 samples collected by Ben Morgan of Greencap on Friday, 28 July 2017. The samples from given order number PO#29343341 were collected from Maintenance Workshop (Block N), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block N

Site Location:		Maintenance Workshop (Block N), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block N - 001	Maintenance Workshop - Level 00 - Exterior window frames - North - Window Beading - Putty White-painted white brittle mastic material ~ 66 x 36 x 16 mm	No Asbestos Detected
2	J149255-05 - Block N - 002	Maintenance Workshop - Level 00 - Exterior wall - East & West - Expansion Joint - Bituminous Material Black-brown bituminous, organic fibrous mastic material ~ 45 x 21 x 4 mm	No Asbestos Detected
3	J149255-05 - Block N - 003	Maintenance Workshop - Level 00 - Exterior - Northwest Corner - Pipe - Moulded Fibre Cement Flue Black-painted light grey compressed fibre-cement sheet material ~ 56 x 35 x 9 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
4	J149255-05 - Block N - 004	Maintenance Workshop - Level 00 - Driveway - Southeast - Telecommunications Pit - Moulded Fibre Cement Dirty grey brittle compressed fibre-cement sheet material ~ 54 x 23 x 12 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
5	J149255-05 - Block N - 005	Maintenance Workshop - Level 00 - Exterior - South - Infill Panels - High Level - Fibre Cement Sheeting Light brown-painted light brown brittle compressed fibre-cement sheet material ~ 41 x 27 x 2 mm	No Asbestos Detected Organic Fibres
6	J149255-05 - Block N - 006	Maintenance Workshop - Level 00 - Exterior - South - Infill Panels - Low Level - Fibre Cement Sheeting Dirty light brown brittle compressed fibre-cement sheet material ~ 72 x 53 x 15 mm	No Asbestos Detected Organic Fibres
7	J149255-05 - Block N - 007	Maintenance Workshop - Level 00 - STF RM BDHN0009 - Floor - Floor Covering - Rigid Vinyl Tiles A. Light blue/grey brittle vinyl sheet material B. Amber adhesive material, attached to underside of sample 007A A: ~ 40 x 23 x 9 mm B: ~ 18 x 12 x 1 mm	A. Chrysotile (white asbestos) B: No Asbestos Detected
8	J149255-05 - Block N - 008	Maintenance Workshop - Level 00 - Store Gen BDHN0010 - Eastern wall - Wall - Dividing - Fibre Cement Sheeting Cream-painted light brown brittle compressed fibre-cement sheet material ~ 43 x 39 x 5 mm	No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Wednesday, 01/02/2012

Our ref: SS0272:97926-N

Paul Armstrong
SESIHNS
Hospital Road
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Block N, Bulli Hospital, Hospital Road, Bulli NSW

This letter presents the results of asbestos fibre identification analysis performed on 8 samples collected by Geoffrey Wright of Noel Arnold & Associates Pty Ltd on Tuesday, 24 January 2012. The samples were stated to be from Block N, Bulli Hospital, Hospital Road, Bulli NSW.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with Noel Arnold and Associates Pty Ltd Test Method NALAB 302 "Asbestos Identification Analysis" and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact Geoffrey Wright.

Yours sincerely

NOEL ARNOLD & ASSOCIATES PTY LTD



Simon Day : Approved Identifier



Simon Day : Approved Signatory



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Corporate Site No. 5450, Site No. 3402 Sydney Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to
Australian/national standards.

Accredited for compliance with ISO/IEC 17020, Corporate
Site No. 18349.

**Sydney Laboratory
Sample Analysis Results**



Wednesday, 01/02/2012

Our ref: SS0272:97926-N

Site Location:		Block N, Bulli Hospital, Hospital Road, Bulli NSW	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	97926-N 01	External, Northwest corner, Stored pipe - Moulded fibre cement Black/brown bituminous-painted white-grey compressed fibre-cement sheet material ~ 21 x 11 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
2	97926-N 02	External, South, Electrical shop, Infill panels - Fibre cement sheeting Unpainted gold-grey fibre-cement sheet material ~ 30 x 10 x 2 mm	No Asbestos Detected Organic Fibres
3	97926-N 03	Internal, Store room, West wall - Fibre cement sheeting Off white-painted gold-grey fibre-cement sheet material ~ 22 x 15 x 2 mm	No Asbestos Detected Organic Fibres
4	97926-N 04	Internal, Store/ general, West, Stored sheeting - Fibre cement sheeting Unpainted pink-grey fibre-cement sheet material ~ 15 x 7 x 2 mm	No Asbestos Detected Organic Fibres
5	97926-N 05	Internal, Staff room, Throughout, Floor covering - Vinyl tile A: Grey brittle vinyl material B: Amber adhesive material, attached to underside of sample 05A A: ~ 72 x 68 x 1.5 mm B: ~ 72 x 68 x <1 mm	A: Chrysotile (white asbestos) B: No Asbestos Detected
6	97926-N 06	Internal, Staff room, Throughout, Ceiling - Fibre cement sheeting Off white-painted gold-grey fibre-cement sheet material ~ 15 x 6 x 1 mm	Chrysotile (white asbestos) Organic Fibres
7	97926-N 07	Internal, Painters shop, South wall - Fibre cement sheeting Beige-painted gold-grey fibre-cement sheet material ~ 18 x 8 x 1 mm	No Asbestos Detected Organic Fibres
8	97926-N 08	Internal, Painters Shop, Painted panel - Fibre cement sheeting Off white-painted gold-grey fibre-cement sheet material ~ 16 x 12 x 5 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
Project Name:	J155696-05	Fax:		Contact Name:	Tom Oyston

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Lead (µg/g %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Friday, 23/11/2018

Our ref: C109541:J155696-05 - ISLHD-BDH-A

Wayne Davies
NSW Health
Lawson House, Wollongong Hospital, Loftus Street
WOLLONGONG NSW 2500

Dear Wayne,

Re: Asbestos Identification Analysis - Main Hospital Building - Bulli Hospital, Hospital Road, Bulli NSW 2516

This letter presents the results of asbestos fibre identification analysis performed on 1 sample collected by Tom Oyston of Greencap on Friday, 16 November 2018. The sample was collected from Main Hospital Building - Bulli Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at www.greencap.com.au/about-greencap/terms-and-conditions and are governed by our statements of limitation available at www.greencap.com.au/about-greencap/statements-of-limitation.

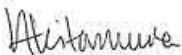
The analysis was completed on Friday, 23 November 2018.

The sample will be kept for three months and then disposed of, unless otherwise directed. The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of accreditation. Results relate only to the items tested and are for the sole use by the client.

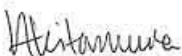
Should you require further information please contact Tom Oyston.

Yours sincerely,

Greencap



Holly Kitamura : Approved Identifier



Holly Kitamura : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 21836 Wollongong Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.



Report Date: Friday, 23/11/2018

Our ref: C109541:J155696-05 - ISLHD-BDH-A

Site Location:		Main Hospital Building - Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J155696-05 - ISLHD-BDH-A - 001	Main Hospital Building - Interior - Level 00 - EXAM RM BDHA00128 - East - Infill Panels - Low Level - Fibre Cement Sheeting Light blue-painted gold-grey fibre-cement sheet material ~ 25 x 20 x 3 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

Report Date: Tuesday, 05/09/2017

Our ref: C109541:J149255-05 - Block A

Paul Armstrong
Illawarra Shoalhaven Local Health District (ISLHD)
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 1 sample collected by Ben Morgan of Greencap on Friday, 01 September 2017. The sample from given order number PO#29343341 was collected from Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Tuesday, 05 September 2017.

The sample will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Tuesday, 05/09/2017

Our ref: C109541:J149255-05 - Block A

Site Location:		Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block A - 016	Main Hospital Building - Level 00 - CORRIDOR BDHA00003 - Throughout - Wall Lining - Fibre Cement Sheeting Cream-painted light grey compressed fibre-cement sheet material ~ 49 x 20 x 5 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block A

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 15 samples collected by Ben Morgan of Greencap on Thursday, 10 August 2017. The samples from given order number PO#29343341 were collected from Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.

The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block A

Site Location:		Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block A - 001	Main Hospital Building - Level 00 - Exterior - North - Roof - Corrugated Cement Sheet Dirty grey compressed fibre-cement sheet material ~ 34 x 12 x 5 mm	Chrysotile (white asbestos)
2	J149255-05 - Block A - 002	Main Hospital Building - Level 00 - Exterior - South - Infill Panels - Fibre Cement Sheeting Green-painted pink layered fibre-cement sheet material ~ 30 x 23 x 2 mm	Chrysotile (white asbestos) Organic Fibres
3	J149255-05 - Block A - 003	Main Hospital Building - Level 00 - Exterior - Southwest - Eaves - Fibre Cement Sheeting Orange-painted grey compressed fibre-cement sheet material ~ 31 x 18 x 2 mm	Chrysotile (white asbestos)
4	J149255-05 - Block A - 004	Main Hospital Building - Level 00 - Exterior - Southwest - Wall Lining - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 40 x 36 x 3 mm	No Asbestos Detected Organic Fibres
5	J149255-05 - Block A - 005	Main Hospital Building - Level 00 - Exterior - Southeast - Ceiling - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 30 x 12 x 2 mm	Chrysotile (white asbestos) Organic Fibres
6	J149255-05 - Block A - 006	Main Hospital Building - Level 00 - Exterior - Southeast - Infill Panels - High Level - Fibre Cement Sheeting White-painted pink layered fibre-cement sheet material ~ 53 x 23 x 9 mm	Chrysotile (white asbestos) Organic Fibres
7	J149255-05 - Block A - 007	Main Hospital Building - Level 00 - Exterior - Northeast - Telecommunications Pit - Moulded Fibre Cement Dirty grey compressed fibre-cement sheet material ~ 29 x 12 x 5 mm	Chrysotile (white asbestos)
8	J149255-05 - Block A - 008	Main Hospital Building - Level 00 - Exterior - Northeast - Infill Panels - Fibre Cement Sheeting Cream-painted grey compressed fibre-cement sheet material ~ 23 x 17 x 2 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
9	J149255-05 - Block A - 009	Main Hospital Building - Level 00 - Exterior - West - Ceiling - Fibre Cement Sheeting Cream-painted light brown layered fibre-cement sheet material ~ 47 x 32 x 3 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres
10	J149255-05 - Block A - 010	Main Hospital Building - Level 00 - Exterior - Northeast - Infill Panels - High Level - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 39 x 27 x 3 mm	No Asbestos Detected Organic Fibres

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block A

Site Location:		Main Hospital Building (Block A), Bulli District Hospital, Hospital Road, Bulli NSW 2516		
	Sample ID	Sample Location/Description/Weight or Size		Analysis Result
11	J149255-05 - Block A - 011	Main Hospital Building - Level 00 - Exterior - Roof - Waterproof Membrane - Bituminous Membrane Black-brown compressed bituminous, asbestiform fibrous sheet material ~ 88 x 61 x 5 mm		Chrysotile (white asbestos) Organic Fibres
12	J149255-05 - Block A - 012	Main Hospital Building - Level 00 - Air Con Plantroom BDHA00076 - East - Electrical - Switch Board - Compressed Bituminous Electrical Panel Orange-brown compressed resinous, organic fibrous board material ~ 18 x 13 x 3 mm		No Asbestos Detected Organic Fibres
13	J149255-05 - Block A - 013	Main Hospital Building - Level 00 - Kiosk BDHA00108 - Throughout - Floor Covering - Rigid Vinyl Tiles Bright orange brittle vinyl sheet material only (no distinct adhesive layer present) ~ 49 x 23 x 4 mm		No Asbestos Detected
14	J149255-05 - Block A - 014	Main Hospital Building - Level 00 - Store BDHA00111 - Throughout - Floor Covering - Vinyl Tiles A. Bright orange brittle vinyl material and associated green adhesive material B. Black-brown compressed bituminous, asbestiform fibrous sheet material A: ~ 50 x 36 x 4 mm B: ~ 15 x 10 x 3 mm		A: No Asbestos Detected Organic Fibres B. Chrysotile (white asbestos)
15	J149255-05 - Block A - 015	Main Hospital Building - Level 00 - Exterior - North and West - Wall Cladding - Moulded Fibre Cement Light brown layered fibre-cement sheet material ~ 41 x 28 x 5 mm		No Asbestos Detected Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **Bryan Denner**

Report **694340-S**
Project name **ISLHD**
Project ID **J161155-05**
Received Date **Dec 18, 2019**

Client Sample ID			J161155-05- ISLHD-BDH-A- LP001	J161155-05- ISLHD-BDH-C- LP001	J161155-05- ISLHD-BDH-D- LP001	J161155-05- ISLHD-BDH-F- LP001
Sample Matrix			Paint	Paint	Paint	Paint
Eurofins Sample No.			S19-De25496	S19-De25497	S19-De25498	S19-De25499
Date Sampled			Dec 12, 2019	Dec 10, 2019	Dec 11, 2019	Dec 11, 2019
Test/Reference	LOR	Unit				
Lead (% w/w)	0.01	%	0.07	1.7	0.08	0.01

Client Sample ID			J161155-05- ISLHD-BDH-I- LP001	J161155-05- ISLHD-BDH-I- LP002	J161155-05- ISLHD-BDH-K- LP001
Sample Matrix			Paint	Paint	Paint
Eurofins Sample No.			S19-De25500	S19-De25501	S19-De25502
Date Sampled			Dec 10, 2019	Dec 10, 2019	Dec 10, 2019
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.19	0.62	0.13

Sample History

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

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

Description**Testing Site****Extracted****Holding Time**

Lead (% w/w)

Sydney

Dec 19, 2019

6 Month

- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rourke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J161155-05-ISLHD-BDH-A-LP001	Dec 12, 2019		Paint	S19-De25496	X
2	J161155-05-ISLHD-BDH-C-LP001	Dec 10, 2019		Paint	S19-De25497	X
3	J161155-05-ISLHD-BDH-D-LP001	Dec 11, 2019		Paint	S19-De25498	X
4	J161155-05-ISLHD-BDH-F-LP001	Dec 11, 2019		Paint	S19-De25499	X
5	J161155-05-	Dec 10, 2019		Paint	S19-De25500	X

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
	ISLHD-BDH-I-LP001					
6	J161155-05-ISLHD-BDH-I-LP002	Dec 10, 2019		Paint	S19-De25501	X
7	J161155-05-ISLHD-BDH-K-LP001	Dec 10, 2019		Paint	S19-De25502	X
Test Counts						7

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments
Sample Integrity

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

Authorised By

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


Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
		Fax:		Contact Name:	Tom Oyston
Project Name:	J155696-05				

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Label (%)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
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9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Friday, 23/11/2018

Our ref: C109541:J155696-05 - ISLHD-BDH-B

Wayne Davies
NSW Health
Lawson House, Wollongong Hospital, Loftus Street
WOLLONGONG NSW 2500

Dear Wayne,

Re: Asbestos Identification Analysis - Palmer House and Syd Atkins Ward - Bulli Hospital, Hospital Road, Bulli NSW 2516

This letter presents the results of asbestos fibre identification analysis performed on 1 sample collected by Tom Oyston of Greencap on Friday, 16 November 2018. The sample was collected from Palmer House and Syd Atkins Ward - Bulli Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at www.greencap.com.au/about-greencap/terms-and-conditions and are governed by our statements of limitation available at www.greencap.com.au/about-greencap/statements-of-limitation.

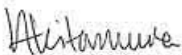
The analysis was completed on Friday, 23 November 2018.

The sample will be kept for three months and then disposed of, unless otherwise directed. The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of accreditation. Results relate only to the items tested and are for the sole use by the client.

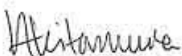
Should you require further information please contact Tom Oyston.

Yours sincerely,

Greencap



Holly Kitamura : Approved Identifier



Holly Kitamura : Approved Signatory



This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 21836 Wollongong Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.



Report Date: Friday, 23/11/2018

Our ref: C109541:J155696-05 - ISLHD-BDH-B

Site Location:		Palmer House and Syd Atkins Ward - Bulli Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J155696-05 - ISLHD-BDH-B - 001	Palmer House and Syd Atkins Ward - Exterior - Level 00 - Various - Window Beading - Mastic Sealant Cream-painted cream hardened mastic material ~ 38 x 30 x 6 mm	No Asbestos Detected

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block B

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Palmer House and Syd Atkins Ward (Block B), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 11 samples collected by Ben Morgan of Greencap on Thursday, 10 August 2017. The samples from given order number PO#29343341 were collected from Palmer House and Syd Atkins Ward (Block B), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.

The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block B

Site Location:		Palmer House and Syd Atkins Ward (Block B), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block B - 001	Palmer House and Syd Atkins Ward - Level 00 - Exterior - Surrounding - Eaves - Fibre Cement Sheeting White & green-painted light grey compressed fibre-cement sheet material ~ 49 x 26 x 9 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
2	J149255-05 - Block B - 002	Palmer House and Syd Atkins Ward - Level 00 - Exterior - Southwest corner - Infill Panels - High Level - Fibre Cement Sheeting White-painted light brown layered fibre-cement sheet material ~ 32 x 18 x 4 mm	No Asbestos Detected Organic Fibres
3	J149255-05 - Block B - 003	Palmer House and Syd Atkins Ward - Level 00 - Exterior - North - Roof - Corrugated Cement Sheet Dirty grey compressed fibre-cement sheet material ~ 36 x 29 x 5 mm	Chrysotile (white asbestos)
4	J149255-05 - Block B - 004	Palmer House and Syd Atkins Ward - Level 00 - Exterior - Northwest - Infill Panels - High Level - Fibre Cement Sheeting White-painted light brown compressed fibre-cement sheet material ~ 46 x 34 x 6 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Organic Fibres
5	J149255-05 - Block B - 005	Palmer House and Syd Atkins Ward - Level 00 - CLNRSRM BDHB0059 - Throughout - Ceiling - Fibre Cement Sheeting White-painted light grey compressed fibre-cement sheet material ~ 40 x 9 x 3 mm	Chrysotile (white asbestos)
6	J149255-05 - Block B - 006	Palmer House and Syd Atkins Ward - Level 00 - Gen X-Ray BDHB0037 - East - Wall Lining - Fibre Cement Sheeting White compressed powder, organic fibre, vitreous fibre plasterboard-type material ~ 22 x 17 x 2 mm	No Asbestos Detected Organic Fibres Synthetic Mineral Fibres
7	J149255-05 - Block B - 007	Palmer House and Syd Atkins Ward - Level 00 - Kitchen BDHB0066 - Throughout - Ceiling - Fibre Cement Sheeting Cream-painted light brown compressed fibre-cement sheet material ~ 24 x 19 x 1 mm	Chrysotile (white asbestos)
8	J149255-05 - Block B - 008	Palmer House and Syd Atkins Ward - Sub-Floor - Storage Plant Room - Southwest - Electrical - Switch Board - Compressed Bituminous Electrical Panel Black-brown compressed bituminous, asbestiform fibrous board material ~ 30 x 7 x 2 mm	Chrysotile (white asbestos)
9	J149255-05 - Block B - 009	Palmer House and Syd Atkins Ward - Sub-Floor - Storage Plant Room - Southwest - Ceiling - Compressed Cement Sheeting White-painted grey compressed fibre-cement sheet material ~ 37 x 26 x 6 mm	Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
10	J149255-05 - Block B - 010	Palmer House and Syd Atkins Ward - Level 00 - CLNRSRM BDHB0059 - Central - Ceiling - Moulded Fibre Cement Cream compressed/formed powder, mica, organic fibre vermiculite-type material ~ 27 x 13 x 1 mm	No Asbestos Detected Organic Fibres

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block B

Site Location:		Palmer House and Syd Atkins Ward (Block B), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
11	J149255-05 - Block B - 011	Palmer House and Syd Atkins Ward - Level 00 - Ceiling Space - Central - Toilet Cistern - Moulded Fibre Cement Dirty light grey compressed fibre-cement sheet material ~ 27 x 21 x 6 mm	Chrysotile (white asbestos) Crocidolite (blue asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Certificate of Analysis

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
		Fax:		Contact Name:	Tom Oyston
Project Name:	J155696-05				

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Lead (µg/g %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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2. All soil results are reported on a dry basis, unless otherwise stated.
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4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

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Results <10 times the LOR : No Limit

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

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Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block C

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Conference and Education Centre (Block C), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 3 samples collected by Ben Morgan of Greencap on Monday, 31 July 2017. The samples from given order number PO#29343341 were collected from Conference and Education Centre (Block C), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block C

Site Location:		Conference and Education Centre (Block C), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block C - 001	Conference and Education Centre - Level 00 - Exterior - Surrounding - Eaves - Fibre Cement Sheeting White-painted grey compressed fibre-cement sheet material ~ 37 x 18 x 4 mm	Chrysotile (white asbestos) Amosite (brown asbestos)
2	J149255-05 - Block C - 002	Conference and Education Centre - Level 00 - Exterior - North - Window Beading - Putty Green-painted compressed/formed cream putty/sealant material ~ 41 x 25 x 15 mm	No Asbestos Detected
3	J149255-05 - Block C - 003	Conference and Education Centre - Level 00 - Garage BDHC0001 - Floor - Floor Covering - Sheet Vinyl Ceam flexible vinyl material and associated amber adhesive material ~ 77 x 35 x 5 mm	No Asbestos Detected

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **Bryan Denner**

Report **694340-S**
Project name **ISLHD**
Project ID **J161155-05**
Received Date **Dec 18, 2019**

Client Sample ID			J161155-05- ISLHD-BDH-A- LP001	J161155-05- ISLHD-BDH-C- LP001	J161155-05- ISLHD-BDH-D- LP001	J161155-05- ISLHD-BDH-F- LP001
Sample Matrix			Paint	Paint	Paint	Paint
Eurofins Sample No.			S19-De25496	S19-De25497	S19-De25498	S19-De25499
Date Sampled			Dec 12, 2019	Dec 10, 2019	Dec 11, 2019	Dec 11, 2019
Test/Reference	LOR	Unit				
Lead (% w/w)	0.01	%	0.07	1.7	0.08	0.01

Client Sample ID			J161155-05- ISLHD-BDH-I- LP001	J161155-05- ISLHD-BDH-I- LP002	J161155-05- ISLHD-BDH-K- LP001
Sample Matrix			Paint	Paint	Paint
Eurofins Sample No.			S19-De25500	S19-De25501	S19-De25502
Date Sampled			Dec 10, 2019	Dec 10, 2019	Dec 10, 2019
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.19	0.62	0.13

Sample History

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

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

Description

Lead (% w/w)

Testing Site

Sydney

Extracted

Dec 19, 2019

Holding Time

6 Month

- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rourke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J161155-05-ISLHD-BDH-A-LP001	Dec 12, 2019		Paint	S19-De25496	X
2	J161155-05-ISLHD-BDH-C-LP001	Dec 10, 2019		Paint	S19-De25497	X
3	J161155-05-ISLHD-BDH-D-LP001	Dec 11, 2019		Paint	S19-De25498	X
4	J161155-05-ISLHD-BDH-F-LP001	Dec 11, 2019		Paint	S19-De25499	X
5	J161155-05-	Dec 10, 2019		Paint	S19-De25500	X

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2086
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

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

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

ABN – 50 005 085 521

web : www.eurofins.com.au

e.mail : EnviroSales@eurofins.com

Company Name: Greencap WOLL P/L
Address: Office 2, 120 Smith St
Wollongong
NSW 2500

Project Name: ISLHD
Project ID: J161155-05

Order No.: PO269774
Report #: 694340
Phone: 02 4298 2600
Fax:

Received: Dec 18, 2019 9:15 AM
Due: Dec 19, 2019
Priority: 1 Day
Contact Name: Bryan Denner

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Lead (% w/w)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
	ISLHD-BDH-I-LP001					
6	J161155-05-ISLHD-BDH-I-LP002	Dec 10, 2019		Paint	S19-De25501	X
7	J161155-05-ISLHD-BDH-K-LP001	Dec 10, 2019		Paint	S19-De25502	X
Test Counts						7

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments
Sample Integrity

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

Authorised By

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


Glenn Jackson
General Manager

~~Final report - this Report replaces any previously issued Report~~

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
Project Name:	J155696-05	Fax:		Contact Name:	Tom Oyston

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Label (u/w %)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

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ug/L: micrograms per litre

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Terms

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Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
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Results >20 times the LOR : RPD must lie between 0-30%

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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Report Date: Tuesday, 05/09/2017

Our ref: C109541:J149255-05 - Block D

Paul Armstrong
Illawarra Shoalhaven Local Health District (ISLHD)
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 2 samples collected by Ben Morgan of Greencap on Friday, 01 September 2017. The samples from given order number PO#29343341 were collected from CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Tuesday, 05 September 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Tuesday, 05/09/2017

Our ref: C109541:J149255-05 - Block D

Site Location:		CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block D - 006	CSSD - Level 00 - Exterior - West - Eaves - Fibre Cement Sheeting Unpainted light brown/pink compressed fibre-cement sheet material ~ 64 x 44 x 4 mm	Chrysotile (white asbestos)
2	J149255-05 - Block D - 007	CSSD - Level 00 - STORE BDHD0008, CORRIDOR INT BDHD0007, OFFICE BDHD0009 - Exterior: Northern walls; Interior: Throughout - Wall - Fibre Cement Sheeting Cream-painted light brown/pink compressed fibre-cement sheet material ~ 73 x 36 x 5 mm	Chrysotile (white asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block D

Paul Armstrong
Illawarra Shoalhaven Local Health District
Hospital Rd
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516, Order Number PO#29343341.

This letter presents the results of asbestos fibre identification analysis performed on 5 samples collected by Ben Morgan of Greencap on Wednesday, 02 August 2017. The samples from given order number PO#29343341 were collected from CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Wednesday, 23 August 2017.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact our project manager Erin Duff.

Yours sincerely,

Greencap



Erin Duff : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 21836 Wollongong
Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to Australian/National
standards.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block D

Site Location:		CSSD (Block D), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block D - 001	CSSD - Level 00 - Awning - East - Ceiling - Fibre Cement Sheeting White-painted light brown brittle compressed cement sheet material ~ 41 x 17 x 6 mm	No Asbestos Detected
2	J149255-05 - Block D - 002	CSSD - Level 00 - Roof - Northeast - Gable Verge Lining - Fibre Cement Sheeting Red / brown-painted grey compressed fibre-cement sheet material ~ 49 x 29 x 8 mm	Chrysotile (white asbestos) Organic Fibres
3	J149255-05 - Block D - 003	CSSD - Level 00 - Exterior - West and South - Wall Lining - Fibre Cement Sheeting Cream-painted light brown compressed fibre-cement sheet material ~ 61 x 39 x 6 mm	No Asbestos Detected
4	J149255-05 - Block D - 004	CSSD - Level 00 - Covered walkway - North - Wall Cladding - Compressed Cement Sheet Cream-painted light brown layered fibre-cement sheet material ~ 59 x 27 x 6 mm	No Asbestos Detected Organic Fibres
5	J149255-05 - Block D - 005	CSSD - Level 00 - Store BDHD0008 - Floor Throughout - Floor Covering - Rigid Vinyl Tiles A. Blue brittle blue material B. Clear adhesive material, attached to underside of sample 005A A: ~ 59 x 45 x 4 mm B: ~ 10 x 5 x 1 mm	A. Chrysotile (white asbestos) B: No Asbestos Detected

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Report Date: Friday, 25/08/2017

Our ref: C109541:J149255-05 - Block E

Site Location:		Old Mortuary (Block E), Bulli District Hospital, Hospital Road, Bulli NSW 2516	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J149255-05 - Block E - 001	Old Mortuary BDHE0001 - Ground Level - Exterior - Surrounding - Eaves - Fibre Cement Sheeting White-painted dirty grey compressed fibre-cement sheet material ~ 54 x 31 x 8 mm	Chrysotile (white asbestos) Organic Fibres

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Wednesday, 01/02/2012

Our ref: SS0272:97926-E

Paul Armstrong
SESIHNS
Hospital Road
BULLI NSW 2516

Dear Paul,

Re: Asbestos Identification Analysis - Block E, Bulli Hospital, Hospital Road, Bulli NSW

This letter presents the results of asbestos fibre identification analysis performed on 4 samples collected by Geoffrey Wright of Noel Arnold & Associates Pty Ltd on Friday 20 & Monday 23 January 2012. The samples were stated to be from Block E, Bulli Hospital, Hospital Road, Bulli NSW.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with Noel Arnold and Associates Pty Ltd Test Method NALAB 302 "Asbestos Identification Analysis" and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact Geoffrey Wright.

Yours sincerely

NOEL ARNOLD & ASSOCIATES PTY LTD



Simon Day : Approved Identifier



Simon Day : Approved Signatory



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Accredited for compliance with ISO/IEC 17025.
Corporate Site No. 5450, Site No. 3402 Sydney Laboratory.
The results of the tests, calibrations and/or measurements
included in this document are traceable to
Australian/national standards.

Accredited for compliance with ISO/IEC 17020, Corporate
Site No. 18349.

**Sydney Laboratory
Sample Analysis Results**



Wednesday, 01/02/2012

Our ref: SS0272:97926-E

Site Location:		Block E, Bulli Hospital, Hospital Road, Bulli NSW	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	97926-E 01	External, North, Infill panel - Fibre cement sheeting White-painted pink-brown fibre-cement sheet material ~ 14 x 8 x 2 mm	No Asbestos Detected Organic Fibres
2	97926-E 02	External, Surrounding, Eaves - Fibre cement sheeting White-painted white-grey compressed fibre-cement sheet material ~ 10 x 8 x 1 mm	Chrysotile (white asbestos)
3	97926-E 03	Internal, North & south, Electrical switch board - Compressed fibrous material Black-brown compressed resinous, fibrous board material ~ 16 x 15 x 2 mm	No Asbestos Detected Organic Fibres
4	97926-E 04	Internal, Ceiling throughout - Fibre cement sheeting Cream-painted white-grey fibre-cement sheet material ~ 38 x 16 x 5 mm	Chrysotile (white asbestos)

* Shaded row with bolded text indicates sample contains a positive result for asbestos.

Greencap WOLL P/L
Office 2, 120 Smith St
Wollongong
NSW 2500



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Tom Oyston

Report 629101-S
Project name J155696-05
Received Date Nov 22, 2018

Client Sample ID			J155696-05- ISLHD-BDH-C- LP-001	J155696-05- ISLHD-BDH-K- LP-001	J155696-05- ISLHD-BDH-N- LP-001
Sample Matrix			Paint	Paint	Paint
Eurofins mgt Sample No.			S18-No29281	S18-No29282	S18-No29283
Date Sampled			Nov 14, 2018	Nov 13, 2018	Nov 13, 2018
Test/Reference	LOR	Unit			
Lead (% w/w)	0.01	%	0.28	0.07	0.06

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Lead (% w/w)	Sydney	Nov 26, 2018	6 Month
- Method: E022.5 - ACID EXTRACTABLE METALS IN PAINT IN LIQUID AND POWDERED FORM BY ICP-MS ANALYSIS			

Company Name:	Greencap WOLL P/L	Order No.:		Received:	Nov 22, 2018 10:55 AM
Address:	Office 2, 120 Smith St Wollongong NSW 2500	Report #:	629101	Due:	Nov 28, 2018
		Phone:	02 4298 2600	Priority:	4 Day
		Fax:		Contact Name:	Tom Oyston
Project Name:	J155696-05				

Eurofins | mgt Analytical Services Manager : Andrew Black

Sample Detail						Label (%)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	J155696-05-ISLHD-BDH-C-LP-001	Nov 14, 2018		Paint	S18-No29281	X
2	J155696-05-ISLHD-BDH-K-LP-001	Nov 13, 2018		Paint	S18-No29282	X
3	J155696-05-ISLHD-BDH-N-LP-001	Nov 13, 2018		Paint	S18-No29283	X
Test Counts						3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

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

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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

QC Data General Comments

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

Quality Control Results

Comments

Eurofins | mgt accreditation number 1261, corporate site 1254 is currently in progress of a controlled transition to a new custom built location at 6 Monterey Road, Dandenong South, Victoria 3175. All results on this report denoted as being performed by Eurofins | mgt 2-5 Kingston Town Close, Oakleigh Victoria 3166 corporate site 1254, will have been performed on either Oakleigh or new Dandenong South site.

Sample Integrity

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

Authorised By

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



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Hazardous Materials Survey

Old Bulli Hospital, Hospital Road, Bulli NSW 2516

Appendix D: Technical Limitations

Limitations

This report has been prepared in accordance with the agreement between C120225 Australian Postal Corporation (Portfolio) and Greencap.

Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report relates only to the identification of Hazardous materials used in the construction of the building and does not include the identification of dangerous goods or hazardous substances in the form of chemicals used, stored or manufactured within the building or plant.

The following should also be noted:

While the survey has attempted to locate the Hazardous materials within the site it should be noted that the review was a visual inspection and a limited sampling program was conducted and/or the analysis results of the previous report were used. Representative samples of suspect Hazardous materials were collected for analysis. Other Hazardous materials of similar appearance are assumed to have a similar content.

Not all suspected Hazardous materials were sampled. Only those Hazardous materials that were physically accessible could be located and identified. Therefore it is possible that Hazardous materials, which may be concealed within inaccessible areas/voids, may not have been located during the audit. Such inaccessible areas fall into a number of categories.

- (a) Locations behind locked doors;
- (b) Inset ceilings or wall cavities;
- (c) Those areas accessible only by dismantling equipment or performing minor localised demolition works;
- (d) Service shafts, ducts etc., concealed within the building structure;
- (e) Energised services, gas, electrical, pressurised vessel and chemical lines;
- (f) Voids or internal areas of machinery, plant, equipment, air-conditioning ducts etc;
- (g) Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during major demolition works;
- (h) Height restricted areas;
- (i) Areas deemed unsafe or hazardous at time of audit;
- (j) Sub-surface soil layers; and
- (k) Areas around and below building slabs.

In addition to areas that were not accessible, the possible presence of hazardous building materials may not have been assessed because it was not considered practicable as:

1. It would require unnecessary dismantling of equipment; and/or
2. It was considered disruptive to the normal operations of the building; and/or
3. It may have caused unnecessary damage to equipment, furnishings or surfaces; and/or
4. The hazardous material was not considered to represent a significant exposure risk; and
5. The time taken to determine the presence of the hazardous building material was considered prohibitive.

Only minor destructive auditing and sampling techniques were employed to gain access to those areas documented in the Hazardous Register. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of hazardous material has been identified.

During the course of normal site works care should be exercised when entering any previously inaccessible areas or areas mentioned above and it is imperative that work cease pending further sampling if materials suspected of containing Hazardous materials or unknown materials are encountered. Therefore, during any refurbishment or demolition works, further investigations and assessment may be required should any suspect material be observed in previously inaccessible areas or areas not fully inspected previously, i.e. carpeted floors

ATTACHMENT 3

Date: 16 December 2021

Description: Site access via Hospital Road.



Date: 16 December 2021

Description: Site access via Hospital Road, photo taken facing North.



Date: 16 December 2021

Description: Existing buildings proposed to be demolished. View from North of the site, facing South.



Date: 16 December 2021

Description: Existing main building proposed to be demolished. View from East of site, facing West.



Date: 16 December 2021

Description: Existing cottage proposed to be demolished. Photo taken facing North-East.



Date: 16 December 2021

Description: Existing building proposed to be demolished.



Date: 16 December 2021

Description: Existing main buildings to be demolished. View from hardstand space proposed to be maintained during demolition (Stage 1). Photo taken facing North.



Date: 16 December 2021

Description: Existing hardstand space proposed to be maintained during demolition DA (Stage 1).



Date: 16 December 2021

Description: Existing hardstand space proposed to be maintained during demolition DA (Stage 1).
Photo taken facing North.



Date: 16 December 2021

Description: Existing site access via Dumbrell Road.



Date: 16 December 2021

Description: Existing building proposed to be demolished on Western boundary. Photo taken facing East.



Date: 16 December 2021

Description: Photo taken forward of existing site access via Dumbrell Road. View facing West.



Date: 16 December 2021

Description: Existing building proposed to be demolished. View facing North.



Date: 16 December 2021

Description: Existing vegetation on the site.



Date: 16 December 2021

Description: Existing building proposed to be demolished. Photo taken facing South.



Date: 16 December 2021

Description: Existing building proposed to be demolished. Photo taken facing South-West.



Date: 16 December 2021

Description: Existing vegetation along Eastern boundary. Photo taken facing North.



Date: 16 December 2021

Description: Existing vegetation along Eastern boundary. Photo taken facing North-East.



Date: 16 December 2021

Description: Existing vegetation along Eastern boundary. Photo taken facing East. Photo contains buildings proposed to be demolished.



Date: 16 December 2021

Description: Adjoining properties on Eastern Boundary. Photo contains existing vegetation along Eastern boundary. Photo taken facing West-East.



Date: 16 December 2021

Description: Existing building proposed to be demolished. Photo contains existing trees on the site. View facing South.



Date: 16 December 2021

Description: Existing buildings proposed to be demolished. Photo taken facing East.



Date: 16 December 2021

Description: Existing buildings proposed to be demolished. Photo taken facing South- East.



Date: 16 December 2021

Description: Existing buildings proposed to be demolished. Photo taken facing North, with view of Hospital Road.



Date: 16 December 2021

Description: Existing buildings proposed to be demolished. Photo taken facing North.



Date: 16 December 2021

Description: Existing building proposed to be demolished. Photo taken facing South-West.



Date: 16 December 2021

Description: Existing brickwork proposed to be demolished. Photo taken facing North.



Date: 16 December 2021

Description: View of Hospital Road, photo taken on Northern Boundary, facing North.



Attachment 4: WDCP 2009 compliance table

CHAPTER A2: ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The proposal is for demolition works.

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

The proposal is for demolition works.

CHAPTER D1 – CHARACTER STATEMENTS

Bulli

Chapter D1 indicates that Bulli is a historical township that lies between the Illawarra Escarpment and the ocean, where the coastal plain widens to the south of Thirroul. Bulli contains a mix of housing styles and building form, including older low density detached dwellinghouses as well as medium density housing in the form of villas and townhouses.

Bulli is also characterised by a large number of heritage items including the Bulli railway station and station masters residence, Bulli Colliery and associated railway bridge embankments, miner's cottages, Denmark Hotel and stables, Bulli Hotel, Bulli post office as well as a number of other significant circa 1920's and 1930's bungalows etc. Rural residential development also occurs within the landscape clearings adjacent to the Princes Highway, Bulli Pass and the foot hills of the escarpment.

The desired future character of Bulli should retain its relatively low density residential suburban character with some limited multi-dwelling housing opportunities within a short walking distance (ie 400 – 600 metres) to Bulli railway station. Any multi-dwelling housing should generally be restricted to two storeys in height. Therefore, villas, integrated developments and townhouses are considered the most appropriate forms of multi-dwelling housing.

New development or alterations and additions to an existing building must also be sympathetic in terms of its siting, scale, height and external appearance to any adjoining item.

Comment: The proposal is for demolition works only as Stage I of the future redevelopment of the site for residential purposes.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

It is considered that the proposed development satisfies the objectives of Council's requirements for traffic management. Details of the application including the Construction Traffic Management Plan were referred to Council's Development Engineering Officer for assessment. The Construction Traffic Management Plan has been assessed against the requirements of Chapter E3 of Wollongong DCP 2009 Section 6.2. It is considered that the matters discussed in the report are reasonable.

CHAPTER E6: LANDSCAPING

It is considered that the proposed development satisfies the objectives of WDCP2009 Chapter E6 Landscaping. Council's Landscape Officer has assessed the application submission in relation to vegetation impacts and provided conditionally satisfactory advice.

CHAPTER E7: WASTE MANAGEMENT

It is considered that the proposed development satisfies the objectives of WDCP2009 Chapter E7 Waste Management. Conditions will be imposed on the consent to ensure that Waste Management inventory is maintained, and that works is undertaken to industry and Australian Standards for demolition and in particular proper disposal of hazardous materials.

CHAPTER E11 HERITAGE CONSERVATION

Council's Heritage Officer has assessed the application submission and provided conditionally satisfactory advice.

Particular consideration was given to potential heritage impacts, and submissions have raised local community heritage values, relating to the built form and social and historic significance.

Whilst the subject site is not a locally listed heritage item within WLEP2009, it is noted that a previous 'cottage hospital' was located on the site that has since been demolished.

The applicant has prepared a Heritage Impact Statement/Archaeological Survey report (Australia Archaeology, dated December 2023).

An Aboriginal Due Diligence Assessment has also been prepared by Austral Archaeology, which assesses the site as being of low potential for relics and recommends a condition for an unexpected finds protocol which has been imposed.

The site has local community heritage values, relating to the built form and social and historic significance. These values will be required to be interpreted on the site through design of the concept DA, interpretation elements and consultation with the local community. An initial Strategy is conditioned as part of Stage 1, with further requirements envisaged for future DA's to further develop this outcome.

The consent has been specifically conditioned such that demolition works are to be to top of footings/ slab level only to minimise ground disturbance.

CHAPTER E12 GEOTECHNICAL ASSESSMENT

The site is classified as Unstable Land – Affected. The proposal involves demolition works only, therefore geotechnical constraints of the site are considered to be of limited relevance.

CHAPTER E13 FLOODPLAIN MANAGEMENT

Council's Development Engineering Officer has reviewed the proposal providing conditionally satisfactory referral advice.

CHAPTER E14 STORMWATER MANAGEMENT

Council's Development Engineering Officer has reviewed the proposal providing conditionally satisfactory referral advice.

CHAPTER E16 BUSHFIRE MANAGEMENT

Council records indicate that the subject site is located within a bushfire prone area. The proposal involves demolition works only, therefore bushfire management constraints of the site are considered to be of limited relevance.

CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

No significant tree removal is identified in the current proposal.

Council's Landscape officer has reviewed the application submission and provided for conditions relating to tree protection measures during demolition works with Arboricultural supervision.

CHAPTER E18 THREATENED SPECIES

Not applicable.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

The consent has been specifically conditioned such that demolition works are to be to top of footings/ slab level only to minimise ground disturbance.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT The consent has been specifically conditioned such that demolition works are to be to top of footings/ slab level only to minimise ground disturbance. Council has under assessment a Stage2 DA for site remediation and tree removals.

CHAPTER E21 DEMOLITION AND ASBESTOS MANAGEMENT

A Site Waste Minimisation Plan, Hazardous Materials Survey and demolition Work Plan including waste removal was included in the application submission. Conditions are proposed to minimise impacts and ensure that demolition including hazardous materials is carried out to Council's and Safe Work NSW requirements. An asbestos Clearance Certificate is also required at the completion of works.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

Conditions are proposed to minimise the impacts of the proposed works on the environment. Soil and water management details have been provided on the Demolition Work Plan

CHAPTER E23: RIPARIAN LAND MANAGEMENT



Not applicable.

ATTACHMENT 5

RE: DA-2022/1093 - 17-19 Hospital Road, BULLI



Jaybee Harris

To  Sarah Goodman;  John Wood

Cc  Kate Denney

 You replied to this message on 13/02/2023 8:48 PM.



Draft Conditions - DA-2022-1093 Landcom endorsed.docx
92 KB

Hi Sarah, John,

Please see attached final review of the draft conditions, it's noted that Landcom endorses the amended conditions in the attached.

Noting the timing for the Business Paper to be submitted for the WLPP, please don't hesitate to contact me should you wish to discuss.

Kind regards,

Jaybee Harris

Senior Development Manager



"Our Journey" by Danielle Mate



In the spirit of reconciliation, Landcom respectfully acknowledges the Traditional Custodians of Country throughout NSW and recognises and respects their continuing cultural heritage, beliefs and connection to land, sea and community. We pay our respects to their Elders past, present and emerging. This land always was and always will be traditional Aboriginal land.

ATTACHMENT 6 - DRAFT CONDITIONS FOR: DA-2022/1093

1. Approved Plans and Supporting Documentation

Development should be carried out in accordance with the following approved plans and supporting documentation (stamped by Council), except where the conditions of this consent expressly require otherwise.

Plan No	Revision No	Plan Title	Drawn By	Dated
A2384-DETAIL Sheet 1		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
A2384-DETAIL Sheet 2		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
A2384-DETAIL Sheet 3		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
A2384-DETAIL Sheet 4		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
A2384-DETAIL Sheet 5		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
A2384-DETAIL Sheet 6		Topographical Survey and Utility Mapping to Quality Level B – Engineering Design	Astrea	FEB. 2022
22-526-SK-C100	B	Demolition Plan	Infrastructure & Development Consulting	23.09.22

Document Title	Version No	Prepared By	Dated
Construction Traffic Management Plan for Demolition Works	2.0	SCT Consulting	21 September 2022
Demolition Statement	C	Infrastructure & Development Consulting	30 September 2022
Historical Heritage Assessment	5	Austral Archaeology	20 January 2023
Hazardous Materials Survey	4	Greencap	1 September 2022

In the event of any inconsistency between the approved plans and the supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a condition of this consent, the condition prevails.

Note: an inconsistency occurs between an approved plan and supporting documentation or between an approved plan and a condition when it is not possible to comply with both at the relevant time.

General Conditions

2. Development Contributions

In accordance with Section 4.17(1)(h) of the Environmental Planning and Assessment Act 1979 and the Wollongong City Wide Development Contributions Plan (2022), a monetary contribution of

\$49,500.00 (subject to indexation) should be paid to Council towards the provision of public amenities and services, prior to works commencing.

This amount has been calculated based on the proposed cost of development and the applicable percentage levy rate.

The contribution amount will be indexed quarterly until the date of payment using Consumer Price Index; All Groups, Sydney (CPI) based on the formula show in the Contributions Plan.

To request an invoice to pay the contribution go to www.wollongong.nsw.gov.au/contributions and submit a contributions enquiry. The following will be required:

- Application number and property address.
- Name and address of who the invoice and receipt should be issue to.
- Email address where the invoice should be sent.

A copy of the Contributions Plan and accompanying information is available on Council's website www.wollongong.nsw.gov.au.

3. Tree Management

The developer should retain all trees indicated on Demolition Plan by Infrastructure & development consulting Drawing Number 22-526-SK-C100 Rev B dated 23.09.22.

Tree Protection measures to be implemented including and not restricted to site induction, compliance documentation, modified footings, sub surface utility siting, crown lifting, remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones (TPZ) and watering and root hormone application if required. Soil levels within the TPZ should remain the same.

All tree protection measures should be installed in accordance with Australian standard AS 4970-2009 Protection of Trees on development Sites.

4. Tree Protection

Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970:2009).

Tree Protection Zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

5. Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures

Prior to the commencement of any demolition, excavation or construction works, the supervising Arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the Arborist's recommendations and relevant conditions of this consent.

6. Restricted Washing of Equipment of Disposal of Materials on any Tree Dripline Area

No washing of equipment and or the disposal of building materials such as cement slurry must occur within the drip line of any tree which has been nominated for retention of the site and adjacent property.

7. Certification from Arborist - Adequate Protection of Trees to be Retained

A qualified Arborist is required to be engaged to supervise on-site works when demolition works may impact a tree's health. The submission of appropriate certification from the appointed Arborist to Council's confirming that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any demolition works.

8. Treatment of any Tree Damage by a Supervised Arborist

Any damage inflicted on a tree during the construction phase which has been nominated for retention shall be treated by an approved arborist at the developer's expense.

9. Heritage – No Ground Disturbance

No ground disturbance is permitted under this consent. Demolition must be undertaken to ground level only, with all footings, slabs and other structures left in situ. A Heritage Demolition

Management Plan or addendum to the Demolition Statement prepared by Infrastructure and Development Consulting dated September 2022, that includes suitable control measures to limit ground disturbance to ground level only, during the demolition phases, is to be prepared prior to the commencement of works and provided to Council's Heritage Staff. All recommended actions within the management plan or addendum should be implemented during the course of the demolition works.

The Plan is also to detail how recommendations of the Heritage Interpretation Strategy, such as re-use of bricks or other materials will be implemented at demolition phase and where these materials are proposed to be stored.

An Archaeological Research Design and s140 permit under the NSW Heritage Act 1977 will be required for any future application that requires ground disturbance such as site remediation (Stage 2).

10. Heritage – Photographic Recording

Prior to the commencement of works the existing building condition is to be documented through a photographic recording prepared in accordance with the NSW Heritage Branch Guidelines.

11. Heritage – Heritage Documents Local Studies Library

A bound hard copy and digital copy of all heritage documents related to this development application should be provided to Council's Heritage Staff for inclusion in the local studies library. The documents should be included as one document with an index page. Documents required include but are not limited to:

- Historical Heritage Assessment;
- Photographic Recording;
- Heritage Interpretation Strategy.

12. Heritage – Interpretation Strategy

A Heritage interpretation strategy should be provided to Council's Heritage Staff to guide appropriate the delivery of onsite heritage interpretation material and interpretive devices, to reference the history of the site, its past ownership and use as a cottage hospital, the possible presence of military structures and that acknowledges the social significance of the site and the mining history of the area to present day use and individuals such as Sid Warne, Syd Atkins and Charlie Stanbridge.

Recommendation 4 of the HIS including the reuse of brick or other materials such as signage, windows, tiles, memorial plaques and time capsules and options for storage of these materials should be considered and fed into the demolition plan.

The Strategy should also consider that in the event that relics or archaeology are located during the course of the works strategies for the interpretation of relics and/or archaeological finds in future stages.

This report should also include culturally appropriate Aboriginal heritage interpretation.

The Strategy is expected to be updated following the completion of the demolition phase and after the archaeological investigation is undertaken, and a more detailed Plan will be required as part of any future development application.

13. Heritage – Unexpected Archaeological Finds

Should an archaeological find of local or state significance be identified during demolition works, particularly in relation to the cottage hospital or air raid shelters, work should cease and the area be cordoned off to prevent any further disturbance.

The applicant should engage an archaeologist to assess the condition and significance of the find. Should the find be determined to be of heritage significance (local or State), the Heritage Council should be notified under s.146 of the NSW Heritage Act 1977. Depending on the nature of the discovery, additional assessment and possibly an excavation permit may be required prior to the recommencement of excavation in the affected area. Works should only recommence by prior agreement with Heritage Council and or Council's Heritage officers.

14. Dilapidation Report

Prior to the commencement of works a suitably qualified engineer should prepare a dilapidation report detailing the structural condition of adjoining buildings, structures or works, and public land.

If the engineer is denied access to any adjoining properties to prepare the dilapidation report, the report should be based on a survey of what can be observed externally and demonstrate, in writing, that all reasonable steps were taken to obtain access to the adjoining properties.

15. Site Management, Pedestrian and Traffic Management Plan

The submission of a Final Construction Traffic Management Plan to Council's Development Engineering Manager, prior to the commencement of works. This plan should address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and should be in compliance with the requirements of the latest versions of Australian Standard AS 1742 - Traffic Control Devices for Works on Roads and the TfNSW Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition phases of the development. This plan should include the following aspects:

- a. Proposed ingress and egress points for vehicles to/from the construction site;
- b. proposed protection of pedestrians, adjacent to the construction site;
- c. proposed pedestrian management whilst vehicles are entering/exiting the construction site;
- d. proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
- e. proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- f. proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period.
- g. proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc are required to be displayed where works are in progress in any road reserve and should be in accordance the latest versions of the TfNSW Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS 1742: "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- h. proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by a Registered Certifier in Civil Engineering; and
- i. proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.
- j. Inclusion of additional commentary in accordance with the requirements of Wollongong DCP 2009 Chapter E3 Section 6.2

The traffic control plan should be implemented for the duration of all works on the site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

16. Demolition Works

The demolition of the existing structures should be carried out in accordance in accordance with the Demolition Work Plan approved by this consent and Australian Standard AS 2601-2001: The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the SafeWork NSW, and with reference to the Hazardous Materials Survey prepared by Greencap and dated September 2022, and the Technical Specification – HAZMAT Removal Project prepared by Greencap, dated October 6, 2022.

No demolition materials should be burnt or buried on-site. The person responsible for the demolition works should ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Hazardous and/or intractable wastes should be disposed of in accordance with the Hazardous Materials Assessment

and to the satisfaction of Council. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application should be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

17. Consultation with SafeWork NSW - Prior to Asbestos Removal

A licensed asbestos removalist should give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

18. Before the Commencement of Building Work - Demolition Notification

At least five (5) days notice should be given in writing to any residence or business within 100 metres of the premises to which this consent pertains of the impending demolition works. The written notice should include at least the following information:

- a. A summary of the work plan and method for the demolition and a timetable for completion of works, including hours of operation, transport routes etc;
- b. details of the primary contractor and/or company conducting the demolition works;
- c. the name and telephone number for a person supervising the works to which residents can direct questions, comments and/or concerns about the works for the duration of the works.

19. While Building Work is Being Carried Out - Demolition Works Noise Limits

Demolition noise should not exceed the background noise level (LA90 (15 min)) plus 10 dB(A), and a continuous equivalent sound pressure level (LAeq (15 min)) of 75 dB(A) when measured at the residential property boundary that is most exposed to construction noise, and at a height of 1.5 m above ground level. If the property boundary is more than 30 m from the residence, the location for measuring noise levels is at the most noise-affected point within 30 m of the residence.

20. While Building Work is Being Carried Out - Demolition Operations Not to Discharge Pollutants

Demolition operations should not lead to the discharge of materials into the stormwater drainage system or natural watercourse.

21. While Building Work is Being Carried Out - New Information/Unexpected Finds

In the event that demolition works cause the generation of odours or the uncovering of other previously unidentified contaminants or hazardous materials, works should immediately cease and Council should be notified in writing within seven (7) days and an appropriately qualified environmental consultant appointed to undertake an assessment of the potential contaminant and works required to make the site safe from potential human health and environmental harm.

22. While Building Work is Being Carried Out - Demolition Materials - Disposal

All demolition materials not being reused on-site should be disposed of only at a recycling or waste management facility that may lawfully receive that waste.

23. While Building Work is Being Carried Out - PCB Containing Electrical Equipment

If any metal cased capacitors are found during demolition works that were previously identified or unidentified they should be treated as containing Polychlorinated Biphenyls (PCBs). Details on storing, conveying and disposing of PCB material or PCB wastes can be found in Polychlorinated Biphenyls Management Plan, Environmental Protection & Heritage Council, Revised Edition April 2003.

24. While Building Work is Being Carried Out - SMF Materials

All Synthetic Mineral Fibre (SMF) containing materials should be removed in accordance with the National Standard for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:1004 (1990)] and the National Code of Practice for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:2006 (1990)].

25. Lead Based Paint

To prevent contamination of the soil and human health risks associated with lead dust, safeguards should be used when removing flaking paint or sanding paint surfaces that are suspected to contain lead.

26. Site Management

Stockpiles of sand, gravel, soil and the like should be located to ensure that the material:

- a. Does not spill onto the road pavement and
- b. is not placed in drainage lines or watercourses and cannot be washed into these areas.

27. Waste Inventory Report

A Waste Inventory should be maintained on-site during demolition work. The waste inventory is a register of all materials and waste removed from the site during the demolition work. The register should record each load or movement of material and waste from the site and should include at a minimum the following information:

- a. the description of material (including identified hazardous material);
- b. an estimate of the quantity by volume and weight;
- c. the transporter and registration details of the relevant vehicle;
- d. the intended destination of the material.

A copy of the Waste Inventory which was maintained on-site during the demolition work and copies of relevant receipts of waste material being deposited at a waste disposal facility should be forwarded to Council's Regulation and Enforcement Division within fourteen (14) days of the completion of works.

28. Dust Suppression Measures

Activities occurring during the demolition phase of the development should be conducted in a manner that will minimise the generation of dust.

29. Asbestos - Removal, Handling and Disposal Measures/Requirements Asbestos Removal by a Licensed Asbestos Removalist

The removal of any asbestos material should be carried out by a licensed asbestos removalist if over 10 square metres in area of non-friable asbestos, or if any type of friable asbestos in strict accordance with SafeWork NSW requirements (<https://www.safework.nsw.gov.au>).

30. Asbestos Waste Collection, Transportation and Disposal

Any asbestos waste should be prepared, contained, transported and disposed of in accordance with SafeWork NSW and NSW Environment Protection Authority requirements. Asbestos waste should only be disposed of at a landfill site that can lawfully receive this type of waste. A receipt should be retained and submitted to Council within fourteen (14) days of the completion works.

31. Asbestos Clearance Certificate

A Clearance Certificate to certify that the site area is free of asbestos should be submitted to Council by a licensed asbestos assessor within fourteen (14) days of the completion of demolition works.

32. Loading/Unloading Operations/Activities

All loading/unloading operations are to take place at all times wholly within the confines of the site or within the road reserve under an approved traffic control plan. Primary access and egress is to via Hospital road Bulli only.