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# Asbestos and Hazardous Materials Limited Pre-Demolition Assessment

Prepared for  
CBRE on Behalf of Health Infrastructure

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# Executive Summary

Coffey Services Australia Pty Ltd (Coffey) was commissioned by CBRE on behalf of Health Infrastructure to conduct an asbestos and hazardous materials (hazmat) pre demolition assessment of nominated areas, as per the scope of works (see Appendix C), within Building A of Sutherland Hospital located at Kingsway & Kareena Road, Caringbah NSW 2229 (the site).

The purpose of the hazmat pre demolition assessment was to Identify and assess the health risk posed by hazmat, including asbestos-containing materials (ACM) which may be encountered during future demolition/refurbishment works of the building. This is in order to meet the requirements of the relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Please note nominated areas to be inspected were not vacant at the time of inspection, due to the active nature of the site unlimited intrusion was not possible, therefore the inspection is regarded as a limited pre demolition assessment. Should any other material suspected to contain asbestos or hazmat be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.

State/Territory legislation and industry guidance requires that information in this report is supplied on the understanding that the area surveyed is scheduled for demolition/refurbishment works, and that identified asbestos and other hazmat will be removed prior to, or as part of these works. Asbestos or other hazmat remaining in situ will need to be detailed in the asbestos and hazmat register and site specific asbestos management plan designed to control the risks of exposure to hazardous materials.

The following hazardous building materials were identified or suspected at the time of the assessment:

Property	Asbestos-containing Materials		Synthetic Mineral Fibre	Lead-based Paint	Lead-containing dust	Poly-chlorinated Biphenyls	Ozone Depleting Substances
	Non-friable	Friable					
<b>Building A</b>	✓	✓	✓	✓	✓	✓	✓

Full details of the material assessments can be located within **Appendix A: Asbestos and Hazmat Register**.

During the audit conducted by Coffey, the following key asbestos findings were noted:

- Exterior: level 5, roof area, TSHARF04, throughout, roof covering – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF06, lining – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF07, lining – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF21, lining – asbestos containing bituminous membrane;
- Exterior: level 4, roof area TSHA4R05, north eastern eaves – asbestos containing fibre cement sheet;
- Exterior: level 4, platform, throughout, waterproof membrane – asbestos containing bituminous membrane;
- Exterior: level 4, platform, south perimeter, waterproof membrane – asbestos containing bituminous membrane;
- Exterior: level 4, surrounding, eaves – asbestos containing fibre cement sheet;
- Exterior: level 4, southern elevation, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: levels 4, western elevation, louvres – asbestos containing moulded fibre cement;
- Exterior: level 4, courtyard TSHA4B08, eaves/awning – asbestos containing fibre cement sheet;

- Exterior: level 4, courtyard TSHA4D29, eaves/awning – asbestos containing fibre cement sheet;
- Exterior: level 4, courtyard TSHA4D35, eaves/awning – asbestos containing fibre cement sheet;
- Exterior: level 3, south western perimeter, roof area (adjacent plant room), debris – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, platform (Level 2 Roof), north west roof – asbestos containing bituminous membrane;
- Exterior: level 3, western elevation, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, south western perimeter, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, western elevation, louvres – asbestos containing moulded fibre cement;
- Exterior: level 3, cladding, external walls adjacent rooms TSHA3G29, TSHA3F51, TSHA3F39 – suspected asbestos containing fibre cement sheet;
- Exterior: level 2, north western fire stairs, TSHA2ST5, south western perimeter wall, electrical box – suspected asbestos containing electrical backing board;
- Interior: level 5, north eastern fire stairs, TSHA5ST2, to roof, single fire door, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, north eastern riser, TSHA5DU2, Fan Control Room 2, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material,
- Interior: level 5, north eastern riser, TSHA5DU2, Fan Room 2, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, south eastern fire stairs, TSHA5ST3, to roof, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU3, Fan Control Room 3, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU3, Fan Control Room 3, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, north western fire stairs, TSHA5ST4, to roof, single fire door (No. 17137), fire door core – asbestos containing internal insulation material;
- Interior: level 5, north western riser, TSHA5DU4, Fan Control Room 4, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, north western riser, TSHA5DU4, Fan Room 4, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, south western fire stairs, TSHA5ST5, to roof, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU5, Fan Control Room 5, single fire door, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU5, Fan Control Room 5, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, plant room, AC ductwork (yellow), mastic – asbestos containing mastic sealant;
- Interior: level 5, plant room, TSHA5RP3, south western boiler room, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, plant room, raised concrete slab, bituminous remnants – asbestos containing bituminous material;
- Interior: level 5, plant room, boiler – suspected asbestos containing internal insulation material;

- Interior: level 4, ceiling space, throughout, AC ductwork, flange – asbestos containing mastic sealant;
- Interior: level 4, riser TSHA4DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 4, riser TSHA4DU2, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 4, north western fire stairs, TSHA4ST4, single fire door (No. 12829), fire door core – asbestos containing internal insulation material;
- Interior: level 4, corridor TSHA4C32/TSHA4C31, double fire doors, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 4, corridor TSHA4C32/TSHA4C34, double fire doors, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, south western fire stairs, TSHA3ST1, single fire door (no label), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, central fire stairs, TSHA3ST2, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, central fire stairs, TSHA3ST2, AC ductwork – asbestos containing mastic sealant;
- Interior: level 3, north western fire stairs, TSHA3ST4, single fire door (Fire Control No. 17109), fire door core – asbestos containing internal insulation material;
- Interior: level 3, north western fire stairs, TSHA3ST4, AC ductwork – asbestos containing mastic sealant;
- Interior: level 3, operating theatre, single fire door (No. 4810), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC3, adjacent WC TSHA3F25, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC3/TSHA3FC5, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC5/LNGE TSHA3G29, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC9/ TSHA3FC10, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, foyer/Waiting Room, TSHA3T06/ TSHA3F31, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, room TSHA3F11, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, rooms TSHA3F47/TSHA3F48, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, riser TSHA3D10, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 3, riser TSHA3DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, riser TSHA2DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, south western fire stairs, TSHA2ST2, single fire door (Fire Control No. 18829), fire door core – suspected asbestos containing internal insulation material;

- Interior: level 2, riser TSHA2DU2, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, north western fire stairs, TSHA2ST5, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, corridor TSHA2RC7/TSHA2L51, double fire doors, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, corridor TSHA2LT12, double fire doors (No. 0438), fire door core – suspected asbestos containing insulation material;
- Interior: level 2, corridor TSHA2LC12, single fire door (to TSH Waste Area), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, electrical distribution cupboard, TSHA2T22 – asbestos containing black electrical backing board; and
- Interior: level 2, electrical distribution cupboard, TSHA2T22, HRC fuse – suspected asbestos containing millboard insulation.

In addition to the above, areas of No Access or Limited Access were present and are described in Section 3.3. It should be presumed that hazmat are present in these areas until further inspection can confirm or refute their presence.

A number of other recommendations were made in the body of this report which address the ongoing management of hazardous building materials at this site.

This executive summary must be read in conjunction with this entire report and the limitations contained therein.



# 1. Introduction

Coffey Services Australia Pty Ltd (Coffey) was commissioned by CBRE on behalf of Health Infrastructure to conduct an asbestos and hazardous materials (hazmat) limited pre-demolition assessment of Sutherland Hospital located at Kingsway & Kareena Road, Caringbah NSW 2229 (the Site). Matt Hemingway and Jake Iskenderian of Coffey conducted the assessment from the 26<sup>th</sup> to 28<sup>th</sup> May 2020.

Please note nominated areas to be inspected were not vacant at the time of inspection, due to the active nature of the site unlimited intrusion was not possible, therefore the inspection is regarded as a limited pre demolition assessment. Should any other material suspected to contain asbestos or hazmat be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.

## 1.1. Site information

The limited hazmat pre-demolition assessment was undertaken of nominated areas within Building A of Sutherland Hospital located at Kingsway & Kareena Road, Caringbah NSW 2229 (the site).

<b>Table 1: Site information</b>	
<b>Site: Sutherland Hospital, Kingsway &amp; Kareena Road, Caringbah NSW 2229</b>	
<b>Age (Circa):</b> 1960	<b>External walls:</b> Brick, metal and glass
<b>Approximate area:</b> 2500m <sup>2</sup>	<b>Internal walls:</b> Plasterboard, concrete and fibre cement
<b>Levels:</b> 2, 3, 4 and 5	<b>Ceiling:</b> Plasterboard, concrete and metal
<b>Roof type:</b> Concrete	<b>Floor and coverings:</b> Concrete, carpet and vinyl

## 1.2. Objective and Scope of Works

The objectives/scope of the hazmat assessment was to:

- Identify the presence of the following confirmed and or suspected hazmat building materials within accessible areas of the nominated building:
  - Asbestos-Containing Material (ACM);
  - Lead-Based Paint (LBP);
  - Lead-Containing Dust (LCD);
  - Synthetic Mineral Fibres (SMF);
  - Polychlorinated Biphenyls in fluorescent light capacitors (PCBs); and
  - Ozone depleting substances (ODSs).
- Collect samples of suspected ACM and/or LBP and LCP, for analysis by a NATA accredited laboratory;
- Visually determine the presence of SMF, PCB-containing light fittings and ODSs;
- Recommend risk management strategies to mitigate risks associated with ACM and other hazmat for removal and ongoing occupancy;

- Prepare a detailed assessment report in alignment with the requirements of relevant State/Territory Regulations, Compliance Codes, Codes of Practice and Guidance Notes, and
- Provide a copy of the assessment report in electronic (PDF) format to the client.

## 2. Findings

The results of the limited hazmat pre-demolition assessment are provided in a register format which is designed to provide readily available information about the presence of hazmat prior to demolition or refurbishment.

### 2.1. Assessment Findings

The findings of this assessment are presented in tabulated format, including building materials that have been photographed are depicted in **Appendix A: Asbestos and Hazmat Register**.

The following significant key findings are noted:

#### 2.1.1. Asbestos Containing Materials

- Exterior: level 5, roof area, TSHARF04, throughout, roof covering – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF06, lining – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF07, lining – asbestos containing bituminous membrane;
- Exterior: level 5, roof area, TSHARF21, lining – asbestos containing bituminous membrane;
- Exterior: level 4, roof area TSHA4R05, north eastern eaves – asbestos containing fibre cement sheet;
- Exterior: level 4, platform, throughout, waterproof membrane – asbestos containing bituminous membrane;
- Exterior: level 4, platform, south perimeter, waterproof membrane – asbestos containing bituminous membrane;
- Exterior: level 4, surrounding, eaves – asbestos containing fibre cement sheet;
- Exterior: level 4, southern elevation, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: levels 4, western elevation, louvres – asbestos containing moulded fibre cement;
- Exterior: level 4, courtyard TSHA4B08, eaves/awning – asbestos containing fibre cement sheet;
- Exterior: level 4, courtyard TSHA4D29, eaves/awning – asbestos containing fibre cement sheet;
- Exterior: level 4, courtyard TSHA4D35, eaves/awning – asbestos containing fibre cement sheet;
- Exterior: level 3, south western perimeter, roof area (adjacent plant room), debris – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, platform (Level 2 Roof), north west roof – asbestos containing bituminous membrane;
- Exterior: level 3, western elevation, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, south western perimeter, eaves – suspected asbestos containing fibre cement sheet;
- Exterior: level 3, western elevation, louvres – asbestos containing moulded fibre cement;

- Exterior: level 3, cladding, external walls adjacent rooms TSHA3G29, TSHA3F51, TSHA3F39 – suspected asbestos containing fibre cement sheet;
- Exterior: level 2, north western fire stairs, TSHA2ST5, south western perimeter wall, electrical box – suspected asbestos containing electrical backing board;
- Interior: level 5, north eastern fire stairs, TSHA5ST2, to roof, single fire door, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, north eastern riser, TSHA5DU2, Fan Control Room 2, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material,
- Interior: level 5, north eastern riser, TSHA5DU2, Fan Room 2, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, south eastern fire stairs, TSHA5ST3, to roof, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU3, Fan Control Room 3, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU3, Fan Control Room 3, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, north western fire stairs, TSHA5ST4, to roof, single fire door (No. 17137), fire door core – asbestos containing internal insulation material;
- Interior: level 5, north western riser, TSHA5DU4, Fan Control Room 4, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, north western riser, TSHA5DU4, Fan Room 4, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, south western fire stairs, TSHA5ST5, to roof, single fire door, fire door core – asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU5, Fan Control Room 5, single fire door, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 5, south eastern riser, TSHA5DU5, Fan Control Room 5, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, plant room, AC ductwork (yellow), mastic – asbestos containing mastic sealant;
- Interior: level 5, plant room, TSHA5RP3, south western boiler room, AC ductwork – asbestos containing mastic sealant;
- Interior: level 5, plant room, raised concrete slab, bituminous remnants – asbestos containing bituminous material;
- Interior: level 5, plant room, boiler – suspected asbestos containing internal insulation material;
- Interior: level 4, ceiling space, throughout, AC ductwork, flange – asbestos containing mastic sealant;
- Interior: level 4, riser TSHA4DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 4, riser TSHA4DU2, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 4, north western fire stairs, TSHA4ST4, single fire door (No. 12829), fire door core – asbestos containing internal insulation material;
- Interior: level 4, corridor TSHA4C32/TSHA4C31, double fire doors, fire door core – suspected asbestos containing internal insulation material;

- Interior: level 4, corridor TSHA4C32/TSHA4C34, double fire doors, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, south western fire stairs, TSHA3ST1, single fire door (no label), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, central fire stairs, TSHA3ST2, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, central fire stairs, TSHA3ST2, AC ductwork – asbestos containing mastic sealant;
- Interior: level 3, north western fire stairs, TSHA3ST4, single fire door (Fire Control No. 17109), fire door core – asbestos containing internal insulation material;
- Interior: level 3, north western fire stairs, TSHA3ST4, AC ductwork – asbestos containing mastic sealant;
- Interior: level 3, operating theatre, single fire door (No. 4810), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC3, adjacent WC TSHA3F25, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC3/TSHA3FC5, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC5/LNGE TSHA3G29, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, corridor TSHA3FC9/ TSHA3FC10, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, foyer/Waiting Room, TSHA3T06/ TSHA3F31, double fire doors (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, room TSHA3F11, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, rooms TSHA3F47/TSHA3F48, single fire door (2003), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 3, riser TSHA3D10, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 3, riser TSHA3DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, riser TSHA2DU1, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, south western fire stairs, TSHA2ST2, single fire door (Fire Control No. 18829), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, riser TSHA2DU2, AC ductwork – suspected asbestos containing mastic sealant (not observed);
- Interior: level 2, north western fire stairs, TSHA2ST5, single fire door (Fire Control), fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, corridor TSHA2RC7/TSHA2L51, double fire doors, fire door core – suspected asbestos containing internal insulation material;
- Interior: level 2, corridor TSHA2LT12, double fire doors (No. 0438), fire door core – suspected asbestos containing insulation material;
- Interior: level 2, corridor TSHA2LC12, single fire door (to TSH Waste Area), fire door core – suspected asbestos containing internal insulation material;

- Interior: level 2, electrical distribution cupboard, TSHA2T22 – asbestos containing black electrical backing board; and
- Interior: level 2, electrical distribution cupboard, TSHA2T22, HRC fuse – suspected asbestos containing millboard insulation.

### **2.1.2. Synthetic Mineral Fibre Materials**

- Exterior: level 5, roof area, various throughout, pipework – suspected SMF containing insulation material;
- Interior: level 5, plant room, throughout, underside of roof – suspected SMF sarking insulation;
- Interior: level 5, plant room, hot water heater – suspected SMF internal insulation material;
- Interior: level 5, plant room, throughout, pipework – suspected SMF insulation material;
- Interior: level 5, plant room, throughout, AC ductwork – suspected SMF insulation material;
- Interior: level 5, plant room, boiler room, boiler – suspected SMF internal insulation material;
- Interior: level 5, plant room, insulation mats to Weishaupt plant – suspected SMF insulation material;
- Exterior: level 4, roof area, throughout, pipework – suspected SMF containing insulation material;
- Exterior: level 4, roof area, plant room TSHAF09, pipework – suspected SMF containing insulation material;
- Exterior: level 4, roof area, plant room TSHAF09, underside of roof – suspected SMF sarking insulation;
- Interior: level 4, ceiling space, throughout, AC ductwork – suspected SMF insulation material;
- Interior: level 4, ceiling space, throughout, flexible ductwork – suspected SMF insulation material;
- Interior: level 4, ceiling, throughout, ceiling – suspected SMF compressed ceiling tiles;
- Interior: level 4, ceiling space, throughout, pipework – suspected SMF insulation material;
- Interior: level 4, risers, throughout, pipework – suspected SMF insulation material;
- Interior: level 3, ceiling space, throughout, ceiling space – suspected SMF sarking insulation;
- Interior: level 3, ceiling space, throughout, AC ductwork – suspected SMF insulation material;
- Interior: level 3, ceiling space, throughout, flexible ductwork – suspected SMF insulation material;
- Interior: level 3, ceiling, throughout various offices, ceiling – suspected SMF compressed ceiling tiles;
- Interior: level 3, risers, throughout, pipework – suspected SMF insulation material;
- Interior: level 2, ceiling space, throughout, AC ductwork – suspected SMF insulation material;
- Interior: level 2, ceiling space, throughout, flexible ductwork – suspected SMF insulation material;
- Interior: level 2, ceiling space, throughout, ceiling space – suspected SMF sarking insulation;
- Interior: level 2, ceiling, throughout, ceiling – suspected SMF compressed ceiling tiles; and
- Interior: level 2, risers, throughout, pipework – suspected SMF insulation material.

### **2.1.3. Polychlorinated Biphenyls**

- Interior: level 5, plant room, throughout, florescent lights – suspected PCB containing capacitors.

### **2.1.4. Lead-based Paint**

- Interior: level 3, risers, throughout, pipework – lead-based black paint (0.34%).

### **2.1.5. Lead-containing Dust**

- Interior: level 5, plant room structural metal beams – dust (160 mg/kg lead content);
- Interior: level 5, plant room, mezzanine level floor – dust (36 mg/kg lead content);
- Interior: level 5, plant room, south western fan control room – dust (240 mg/kg lead content); and
- Interior: level 5, plant room, north western fan control room – dust (130 mg/kg lead content).

### **2.1.6. Ozone Depleting Substances**

- Exterior: level 5, roof area, air conditioning units – ODS containing R22 Hydrochlorofluorocarbon (HCFC) refrigerant; and
- Exterior: level 2, north western perimeter, air conditioning units – ODS containing R22 Hydrochlorofluorocarbon (HCFC) refrigerant.

## **2.2. Access restrictions**

Where no access or limited access areas have been identified it should be presumed that hazmat are present in these areas until further investigation can confirm or refute their presence.

No inspection can be guaranteed to locate all asbestos and hazmat in specific locations. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

### **2.2.1. No access areas**

The following areas were not accessible at the time of the assessment:

- Within lift shafts;
- Within live electrics, plant and ductwork throughout;
- Within wall voids;
- Subfloors;
- Behind wall ceramic tiles;
- Various obstructed risers throughout;
- Exterior: level 5, roof, top of telecom tower;
- Exterior: level 5, roof, telecom demountable sheds (x3);
- Exterior: level 2, roof area (south west of scope of work area);
- Exterior: level 2, north western fire stairs, TSHA2ST5, south western perimeter wall, electrical box;
- Interior: level 3, room TSHA3F07;
- Interior: level 3, room TSHA3K40;
- Interior: level 3, room TSHA3K42;
- Interior: level 3, room TSHA3F03;
- Interior: level 3, room TSHA3F04;
- Interior: level 3, room TSHA3F42;
- Interior: level 3, room TSHA3F70;
- Interior: level 3, room TSHA3F71;
- Interior: level 3, room TSHA3G16;
- Interior: level 3, room TSHA3G24;
- Interior: level 2, room TSHA3R62;
- Interior: level 2, room TSHA2N17;
- Interior: level 2, room TSHA2M11;
- Interior: level 2, room TSHA2M14;

- Interior: level 2, room TSHA2PC12; and
- Areas outside the scope of the assessment.

## 2.2.2. Limited access areas

Access to the following areas was limited at the time of the assessment:

- Fire doors;
- Ceiling voids; and
- Beneath floor coverings.

## 3. Recommendations

The following recommendations are provided with respect to hazmat identified during the assessment of the site. This assessment only covers the parts of the site that have been accessed and been assessed in accordance with the approved scope.

### 3.1. Asbestos-containing materials

Asbestos containing materials are referred to as either friable or bonded.

The preference will always be to eliminate the asbestos hazards from the site and if it is practicable for the occupier to do so then asbestos removal should always be considered. ACM on site, which were found to be in a friable/bonded and stable condition, may be managed in situ and periodically inspected if removal is not practicable.

If managed in situ, all identified or presumed ACM should be appropriately labelled, where possible, and regularly inspected to assess their condition and potential changes to health risk.

**Friable asbestos** is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance.

Friable asbestos was identified or suspected during the site inspection in the form of fire door insulation, boiler insulation and an HRC fuses.

When asbestos removal works are to be undertaken, the person that commissions the works must ensure that this is undertaken by a Class A licensed asbestos contractor.

**Bonded asbestos** products are ones in which the asbestos fibres are bound within the matrix of the material. Bonded asbestos is difficult to damage or cause the release of fibres by hand and includes materials such as asbestos cement sheeting (fibre cement or fibro), vinyl floor tiles and zelemite electrical switchboards. However, bonded ACMs that have been subjected to weathering, physical damage, water damage, fire or other conditions may contain exposed fibres which could be released upon disturbance.

With the exception of the aforementioned identified and suspected friable asbestos containing materials, the remaining asbestos containing materials identified or suspected throughout site should be considered non-friable. These materials should be removed under controlled non-friable asbestos removal conditions by a Class B (non-friable) licensed asbestos removal contractor. Intact gaskets on pipework or on flanges should wherever possible, be removed using a “wrap and cut” method, whereby the asbestos-containing materials is subject to no or minimal disturbance during the removal process.

Based on the findings of this hazardous materials survey, the general recommendations regarding ACM are:

- ACM that has been identified in this survey must be removed prior to the commencement of general demolition works.
- When asbestos removal works are to be undertaken, the person that commissions the works must ensure that this is undertaken by an appropriately licensed asbestos contractor. The asbestos removal works must be conducted under controlled asbestos removal working conditions.
- When friable or non-friable asbestos removal works are to be conducted within or adjacent to a highly sensitive area or public location, Coffey recommends that a hygienist (or licenced asbestos assessor for friable) who is independent of the asbestos contractor should be engaged to undertake airborne asbestos fibre monitoring along the boundary of the works and within the work area on completion of the works.
- If friable asbestos is identified during future works (i.e. asbestos pipe insulation) and is to be removed, a licensed asbestos assessor who is independent of the asbestos contractor must be engaged to:
  - Inspect the asbestos removal work area prior to commencement of the works;
  - Undertake asbestos fibre air monitoring before and during friable removal works in the surrounding areas and clearance asbestos fibre air monitoring at the conclusion of the asbestos removal work; and
  - Complete a visual inspection of the asbestos removal area and the area immediately surrounding it and ensure these are free from visible asbestos contamination.
- The licensed asbestos assessor must provide a Clearance Certificate that documents the visual clearance inspection and the satisfactory completion of the asbestos removal works. The Clearance Certificate should state that all visible asbestos dust and debris resulting from the asbestos removal process has been removed from the removal area(s) and from areas adjacent to the removal work area(s).

Prior to any demolition, partial demolition, renovation or refurbishment, ACM likely to be disturbed by those works should be removed in accordance with relevant codes of practices, compliance codes and legislation.

### 3.1.1. Asbestos control measures

- If the ACM is friable, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied, and removal is required as soon as practicable using a licensed contractor.
- If the ACM is friable, accessible but in a stable condition, removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, sealing, enclosure etc) may be employed until removal can be facilitated.
- If the ACM is non-friable and, in a poor/unstable condition, disturbance should be minimised. Removal or encapsulation may be appropriate controls. ACM which are found in localised areas and identified as damaged, consisting of small quantities of non-friable cement debris may not require the highest removal priority. The removal priority may be lowered due to a low risk of disturbance. Further confirmation can be obtained via asbestos fibre air monitoring where the result is found to be < 0.01 fibre/mL.
- For the instances above and further assessment of the risk, airborne fibre monitoring is recommended and can assist with decisions on the most appropriate, and urgency of, control measures.
- Where ACM is in a good, stable condition, ongoing maintenance and periodic inspection would be appropriate control measures.
- Remaining ACM identified or presumed should be appropriately labelled where possible. Those items should be regularly inspected to ensure they are not deteriorating and resulting in a potential risk to health.



- An asbestos management plan (AMP) should be created and maintained for all ACM that remain at the site to assist the persons conducting a business or undertaking (PCBU) with the management of these materials. The AMP must ensure that suitable control measures are implemented to prevent site personnel and others from being exposed to airborne asbestos fibres.
- Schedule periodic reassessment of ACM remaining on-site to monitor their aging/deterioration so that the PCBU can be alerted if any ACM require encapsulation or removal.
- Prior to any demolition or refurbishment works, all asbestos and hazardous materials identified and likely to be disturbed by demolition or refurbishment works should be removed in accordance with the legislative requirements and relevant codes of practice or compliance codes.
- During future demolition works, if any materials that are not referenced in this report and are suspected of containing asbestos are encountered, then works must cease and an asbestos hygienist should be notified to determine whether the material contains asbestos.

The recommendations, conclusions or stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with statutory requirements, codes of practice, guidelines, material safety data sheets, work instructions or reasonable work practices.

### 3.2. Synthetic mineral fibres

- SMF materials that are likely to be disturbed during any proposed demolition/refurbishment works should be handled in accordance with *The National Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC:2006(1990)].

### 3.3. Lead-based paint

- Any works that are likely to disturb LCP surface should be undertaken in accordance with the Australian Standard (AS4361.2:2017: Part 2), Guide to hazardous paint management: Lead paint in residential, public and commercial buildings.
- Any loose and peeling LBP should be stabilised (using hand -held scrapers, drop cloths and wet misting where appropriate) and the paint chips disposed of as hazardous waste.
- Any remediation works that may generate dust or fumes (i.e. sanding, burning) must be performed under controlled conditions by a suitably resourced and experienced hazardous material/waste abatement contractor (e.g. a Class A licensed asbestos removal contractor).

### 3.4. Lead-containing dust

- Any work processes involving lead-containing dust must be undertaken in a manner to ensure that no worker is exposed to lead at concentrations above occupational exposure standard (OES) of 0.05mg/m<sup>3</sup> over an eight-hour day. Low level lead contamination was identified at site, a risk assessment should be undertaken to assess remediation strategies.
- Lead-containing dust removal works should include the use of high efficiency particulate air (HEPA) filtered vacuum cleaners and wet wiping techniques by a licensed contractor under controlled lead-containing dust conditions in conjunction with air monitoring and clearances by a competent hygienist.

### 3.5. Polychlorinated biphenyls

- It may not be considered feasible to inspect every light fitting within a premise as information available in the public domain on the identification of PCB-containing capacitors is limited. However, all metal capacitors should be treated as containing PCB unless determined otherwise

- All capacitors containing or suspected as PCB or the fluorescent light fittings likely to be disturbed during future works should be removed prior to any future demolition, partial demolition, renovation or refurbishment in accordance with Department of Occupational Health, Safety and Welfare, *Safe Handling of PCB in Fluorescent Light Capacitors* – 1993 and with the *Polychlorinated Biphenyls Management Plan, Revised Edition April 2003*.

### 3.6. Ozone depleting substances

- Removal of refrigerants should to be undertaken prior to any future demolition, partial demolition, renovation or refurbishment, where ODS's are likely to be disturbed. A licensed contractor who will recycle and reuse the refrigerant should decommission CFC and HCFC based equipment that is being disposed of in accordance with Association of Fluorocarbon Consumers and Manufacturers, The Australian Refrigeration and Air Conditioning Code of Good Practice – 1992 and the Australian Commonwealth Government Ozone Protection Act – 1989.

### 3.7. Training

Information, instruction and training must be provided to workers, contractors and others who may come into contact with hazardous materials in a workplace, either directly or indirectly.

Depending on the circumstances this hazardous materials awareness training may include:


- The purpose of the training;
- The health risks of hazardous materials;
- The types, uses and likely occurrence of hazardous materials on site, in plant and/or equipment in the workplace;
- The trainee's roles and responsibilities for hazmat management;
- Where the register of hazmat is located and how it can be accessed;
- The timetable for removal of hazmat from the workplace;
- The processes and procedures to be followed to prevent exposure, including exposure from any accidental release of hazmat into the workplace;
- Where applicable, the correct use of maintenance and control measures, protective equipment and work methods to minimise the risks from hazmat, limit the exposure of workers and limit the spread of hazmat outside any work area;
- The National Exposure Standard (NES) and control levels for hazmat; and
- The purpose of any air monitoring or health surveillance that may occur.



Should any further suspect asbestos and/or hazmat become evident during future disturbance/ refurbishment works which have not been addressed in this report, Coffey should be contacted immediately so that a WHS consultant can confirm the status of the suspect material/s.




**Coffey is able to assist with all aspects of Risk Management for removal of asbestos and other hazardous materials resulting from these findings.**

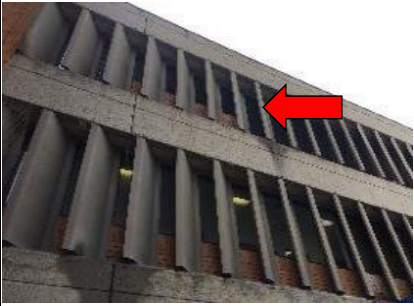


## **Appendix A: Asbestos and Hazmat Register**

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Surveyors: Matt Hemingway and Jake Iskenderian									Assessment Type: HAZMAT Audit		Date: 26-05-2020 to 28-05-2020	
Site Contact: Steph Rossi									Site / Location: Kingsway & Kareena Rd, Caringbah NSW 2		Review Date: May 2025	
Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations	
<b>Asbestos-containing Materials</b>												
Exterior: level 5	Roof area, TSHARF04, throughout, roof covering	Bituminous membrane	Refer to 85241-A-01	Chrysotile Asbestos Detected	~10m <sup>2</sup>	N	G	L	Very Low	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	
Exterior: level 5	Roof area, TSHARF06, lining	Bituminous membrane	Refer to 85241-A-01	Chrysotile Asbestos Detected	~2000m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	
Exterior: level 5	Roof area, TSHARF07, lining	Bituminous membrane	Refer to 85241-A-01	Chrysotile Asbestos Detected	~30m <sup>2</sup>	N	G	L	Very Low	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	

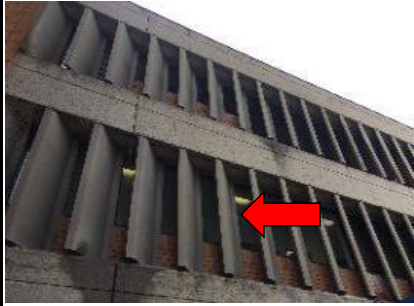
Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 5	Roof area, TSHARF21, lining	Bituminous membrane	Refer to 85241-A-01	Chrysotile Asbestos Detected	~30m <sup>2</sup>	N	G	L	Very Low	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Roof area TSHA4R05, north eastern eaves	Fibre cement sheet	Refer to 85241-A-10	Chrysotile Asbestos Detected	~6m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Platform, throughout, waterproof membrane	Bituminous membrane	Refer to 85241-A-24	Chrysotile Asbestos Detected	~200m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.



Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 4	Platform, south perimeter, waterproof membrane	Bituminous membrane	Refer to 85241-A-24	Chrysotile Asbestos Detected	~2000m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Surrounding, eaves	Fibre cement sheet	Refer to 85241-A-10	Chrysotile Asbestos Detected	~200m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Western elevation, eaves	Fibre cement sheet	Visual observation	Assumed to contain Asbestos	~30m <sup>2</sup>	N	G	L	Very Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.

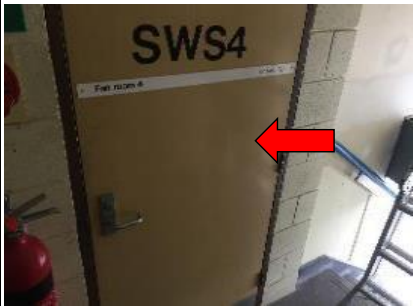


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: levels 4	Western elevation, louvres	Moulded fibre cement	Refer to 69290	Chrysotile Asbestos Detected	~50m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Courtyard TSHA4B08, eaves/awning	Fibre cement sheet	Refer to 69267 and 85241-A-12	Chrysotile Asbestos Detected	~40m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 4	Courtyard TSHA4D29, eaves/awning	Fibre cement sheet	69267 and refer to 85241-A-12	Chrysotile Asbestos Detected	~25m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.





Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 4	Courtyard TSHA4D35, eaves/awning	Fibre cement sheet	Refer to 69267 and 85241-A-23	Chrysotile Asbestos Detected	~40m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 3	South western perimeter, roof area (adjacent plant room), debris	Fibre cement sheet	Visual observation	Assumed to contain Asbestos	<1m <sup>2</sup>	N	P	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 3	Platform (Level 2 Roof), north west roof	Bituminous membrane	Refer to 85241-A-24	Chrysotile Asbestos Detected	~100m <sup>2</sup>	N	G	L	Very Low	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 3	Southern elevation, eaves	Fibre cement sheet	Visual observation	Assumed to contain Asbestos	~30m <sup>2</sup>	N	G	L	Very Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 3	South western perimeter, eaves	Fibre cement sheet	Visual observation	Assumed to contain Asbestos	~30m <sup>2</sup>	N	G	L	Very Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 3	Western elevation, louvres	Moulded fibre cement	69290	Chrysotile Asbestos Detected	~50m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.



Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 3	Cladding, external walls adjacent rooms TSHA3G29, TSHA3F51, TSHA3F39	Fibre cement sheet	Visual observation	Assumed to contain Asbestos	~100m <sup>2</sup>	N	G	L	Very Low		No access. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Exterior: level 2	North western fire stairs, TSHA2ST5, south western perimeter wall, electrical box	Electrical backing board	Visual observation	Assumed to contain Asbestos	<1m <sup>2</sup>	N	G	L	Very Low		No access. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Interior: level 5	North western fire stairs, TSHA5ST4, to roof, single fire door (No. 17137), fire door core	Insulation material - internal	Refer to 69266	Chrysotile & Amosite Asbestos Detected	1 unit	Y	G	L	Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 5	North western riser, TSHA5DU4, Fan Control Room 4, single fire door (Fire Control), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 5	North western riser, TSHA5DU4, Fan Room 4, AC ductwork	Mastic sealant	Refer to 85241-A-03	Chrysotile Asbestos Detected	~20m	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 5	South western fire stairs, TSHA5ST5, to roof, single fire door, fire door core	Insulation material - internal	Refer to 69266	Chrysotile & Amosite Asbestos Detected	1 unit	Y	G	L	Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 5	South eastern riser, TSHA5DU5, Fan Control Room 5, single fire door, fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 5	South eastern riser, TSHA5DU5, Fan Control Room 5, AC ductwork	Mastic sealant	Refer to 85241-A-03	Chrysotile Asbestos Detected	~20m	N	G	L	Very Low	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 5	Plant room, AC ductwork (yellow), mastic	Mastic sealant	69283	Chrysotile Asbestos Detected	~100m	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.



Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 5	Plant room, TSHA5RP3, south western boiler room, AC ductwork	Mastic sealant	Refer to 85241-A-03	Chrysotile Asbestos Detected	~100m	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 5	Plant room, raised concrete slab, membrane	Bituminous material	69280	Chrysotile Asbestos Detected	<1m <sup>2</sup>	N	P	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Interior: level 5	Plant room, boiler	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 4	Ceiling space, throughout, AC ductwork, flange	Mastic sealant	69264	Chrysotile Asbestos Detected	Undetermined	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 4	South west fire stairs, TSHA4DU1, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 4	North east fire stairs, TSHA4DU2, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 4	North western fire stairs, TSHA4ST4, single fire door (No. 12829), fire door core	Insulation material - internal	69266	Chrysotile & Amosite Asbestos Detected	1 unit	Y	G	L	Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 4	Corridor TSHA4C32/TSHA4C31, double fire doors, fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 4	Corridor TSHA4C32/TSHA4C34, double fire doors, fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.



Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	South western fire stairs, TSHA3ST1, single fire door (no label), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Central fire stairs, TSHA3ST2, single fire door (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Central fire stairs, TSHA3ST2, AC ductwork	Mastic sealant	Refer to 85241-A-22	Chrysotile Asbestos Detected	~20m	N	-	-	-		Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	North western fire stairs, TSHA3ST4, single fire door (Fire Control No. 17109), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	North western fire stairs, TSHA3ST4, AC ductwork	Mastic sealant	Refer to 85241-A-22	Chrysotile Asbestos Detected	~20m	N	-	-	-		Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Operating theatre, single fire door (No. 4810), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Corridor TSHA3FC3, adjacent WC TSHA3F25, double fire doors (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Corridor TSHA3FC3/TSHA3FC5, double fire doors (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Corridor TSHA3FC5/LNGE TSHA3G29, double fire doors (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.

# Asbestos Materials Register

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Corridor TSHA3FC9/TSHA3FC10, double fire doors (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Corridor TSHA3JC2 and Plant Room TSHA3J06, east pipe work, gasket, original steam pipe work	Gasket material	-	-	-	-	-	-	-	-	Item Removed: 12-08-2015. Clearance certificate not cited.
Interior: level 3	Corridor TSHA3JC2 and Plant Room TSHA3J06, east pipe work, gasket, original steam pipe work	Gasket material	-	-	-	-	-	-	-	-	Item Removed: 12-08-2015. Clearance certificate not cited.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Foyer/Waiting Room, TSHA3T06/TSHA3F31, double fire doors (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Room TSHA3F11, single fire door (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 3	Rooms TSHA3F47/TSHA3F48, single fire door (2003), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Electrical distribution cupboard TSHA3J17, electrical distribution board	Bituminous material	-	-	-	-	-	-	-	-	Item Removed: 12-08-2015. Clearance certificate not cited.
Interior: level 3	Riser TSHA3D10, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 3	Riser TSHA3DU1, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 2	Riser TSHA2DU1, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.
Interior: level 2	South western fire stairs, TSHA2ST2, single fire door (Fire Control No. 18829), fire door core	Insulation material internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	<b>Low</b>		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 2	Riser TSHA2DU2, AC ductwork	Mastic sealant	Visual observation	Assumed to contain Asbestos	~20m	N	-	-	-	-	Not observed during 2020 inspection. Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled asbestos removal conditions prior to refurbishment or demolition works by an appropriately licensed asbestos removal contractor.

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 2	North western fire stairs, TSHA2ST5, single fire door (Fire Control), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 2	Corridor TSHA2RC7/TSHA2L51, double fire doors, fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 2	Corridor TSHA2LT12, double fire doors (No. 0438), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low	-	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.



Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 2	Corridor TSHA2LC12, single fire door (to TSH Waste Area), fire door core	Insulation material - internal	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
Interior: level 2	Electrical distribution cupboard, TSHA2T22	Black electrical backing board	69297	Chrysotile Asbestos Detected	~3m <sup>2</sup>	N	G	L	Very Low		Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.
Interior: level 2	Electrical distribution cupboard, TSHA2T22, HRC Fuse	Millboard insulation	Visual observation	Assumed to contain Asbestos	1 unit	Y	G	L	Low		Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.
<b>Non Asbestos-containing Materials</b>											

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 5	Roof area TSHA4R05, roof exit door, north eastern wall	Fibre cement sheet	Refer to 85241-A-09	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 5	Roof area, roof top surface, water proof membrane (pebblecrete pattern)	Bituminous membrane	Refer to 85241-A-02	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: levels 5	Roof area, below pebblecrete waterproofing membrane	Bituminous material	69274	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 4	Roof area TSHA4R46, south western perimeter wall of TSHA4ST2, cladding	Fibre cement sheet	69272	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 4	Roof area TSHA4R01, rooftop surface, waterproofing membrane	Bituminous membrane	69273	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 4	Roof area adjacent corridor TSHA4D01, cladding	Fibre cement sheet	69270	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 4	Roof area TSHA4R46, rooftop surface waterproofing membrane	Bituminous membrane	69271	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 3	Western elevation, expansion joint	Mastic sealant	69291	No Asbestos Detected	-	-	-	-	-	-	-

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 2	Western elevation, eaves/awning	Fibre cement sheet	69289	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	Ext, level 2, eastern wall, cladding	Fibre cement sheet	69293	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	Eastern walkway, awning	Fibre cement sheet	69294	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	South western fire stairs, TSHA2ST2, south western perimeter wall, single fire door, fire door core	Timber	Visual observation	Not Suspected	-	-	-	-	-	-	-
Exterior: level 2	Emergency entrance, west side, awning	Fibre cement sheet	Refer to 85241-A-26	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	South perimeter, brick wall threshold, waterproof membrane	Bituminous membrane	Refer to 85241-A-25	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	West, awning	Fibre cement sheet	Refer to 85241-A-26	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: level 2	West perimeter, brick wall threshold, waterproof membrane	Bituminous membrane	Refer to 85241-A-25	No Asbestos Detected	-	-	-	-	-	-	-

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Exterior: level 2	West, eaves	Fibre cement sheet	Refer to 85241-A-26	No Asbestos Detected	-	-	-	-	-	-	-
Exterior: ground level	Western elevation, old entrance, carpark structure, fascia	Fibre cement sheet	69292	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, Aquaplus plant, gasket	Gasket material	69276	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, Weishaupt plant, gasket	Gasket material	69277	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, Nu Way plant, gasket	Gasket material	69279	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, Ecoflam plant, gasket	Gasket material	69281	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, yellow boiler, gasket	Fibre cement sheet	69282	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room, mezzanine, steel platform, bituminous remnants	Bituminous material	69285	No Asbestos Detected	-	-	-	-	-	-	-

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 5	Plant room TSHA5RP2, south western boiler room, western boiler, gasket	Gasket material	Refer to 85241-A-05	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room TSHA5RP2, south western boiler room, Fulton boiler, gasket	Gasket material	Refer to 85241-A-06	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room TSHA5RP2, south western boiler room, west side, debris	Millboard	Refer to 85241-A-07	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 5	Plant room TSHA5RP2, south western boiler room, entry, wall lining	Fibre cement sheet	Refer to 85241-A-04	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4A01, riser, pipework, red gasket	Gasket material	82780	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Risers throughout, pipework, red gasket	Gasket material	Refer to 82780	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4D01, steps to roof area, nosing	Bituminous material	84173	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Hose reel & hydrant room, insulation packer panels to blockwork	Fibre cement	84174	No Asbestos Detected	-	-	-	-	-	-	-

# Asbestos Materials Register

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 4	Corridor TSHA4A06, riser adjacent office TSHA4D22, expansion joint	Bituminous material	84175	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4D02, ceiling space, services pipework through bulkhead, filler	Fibrous cement	84176	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4D02, ceiling space, services pipework through bulkhead	Caulking	84177	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Meeting room, TSHA4B01, north western corner, low level infill panel (below windows)	Fibre cement sheet	69265	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4D01, ceiling space, mastic remnants to concrete slab	Mastic sealant	69268	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	Corridor TSHA4D01, ceiling space, various throughout	Sprayed insulation	Refer to J133510-Building-A-006	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 4	North eastern fire stairs TSHA4ST2, single fire door (200_), fire door core	Insulation material	69269	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Operating theatre, riser, pipework, gasket	Mastic	84135	No Asbestos Detected	-	-	-	-	-	-	-




Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Fire hose reel cupboard, TSHA3JC3, brown floor covering	Vinyl floor sheet	69299	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Throughout, brown floor/wall covering	Vinyl floor sheet	Refer to 69299	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3G32, wall lining	Fibre cement sheet	69300	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3G20, wall lining	Fibre cement sheet	Refer to 69300	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3G13, wall lining	Fibre cement sheet	69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3G06, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F02, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F25, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-

Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Room TSHA3F47, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F55, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F46, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F41, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F07, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F19, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3F20, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3K44, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-



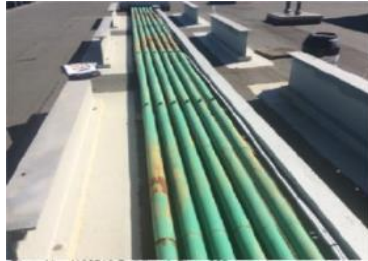


Primary Location	Secondary Location	Description	Sample Number	Sample Results	Approx. Quantity	Friability	Condition	Accessibility	Action Rating	Photograph	Recommendations
Interior: level 3	Room TSHA3K40, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3K45, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Room TSHA3K32, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 3	Corridor TSHA3GC3, wall lining	Fibre cement sheet	Refer to 69302	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 2	Corridor TSHA2T30/TSHA2L T12, double fire doors (No. 02506), fire door core	Insulation material	69295	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 2	Cardiac ward, change room, TSHA2M09 wall lining	Fibre cement sheet	69296	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 2	South western fire stairs, TSHA2ST2, AC ductwork, flange	Mastic sealant	69298	No Asbestos Detected	-	-	-	-	-	-	-
Interior: level 2	North western fire stairs, TSHA2ST4, single fire door (Fire Control), fire door core	Timber	Visual observation	Not Suspected	-	-	-	-	-	-	-

# Hazardous Materials Register

Surveyors: Matt Hemingway and Jake Iskenderian											Assessment Type: HAZMAT Audit		Date: 26-05-2020 to 28-05-2020	
Site Contact: Steph Rossi											Site / Location: Kingsway & Kareena Rd, Caringbah NSW 2229		Review Date: May 2025	
Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations	
<b>&gt; 0.1 Lead-based paint (LBP)</b>														
Interior: level 3, risers, throughout	Black - Top coat	Pipework	1	69301	>0.1% Lead content (0.34%)	Throughout	P	P	N/A	L	Low		<p>RESULT &gt;0.1% lead content, remove flaking sections and over paint with a lead-free paint. Remove under controlled conditions in accordance with AS 4361.2: Part 2, Guide to Hazardous Paint Management - Lead paint in residential, public and commercial buildings.</p>	
No access was gained within and behind walls, floors, subfloors, tiles, urinals, cavities, ceiling voids, plant/machinery, live electrics or to heights above 3m. Limited access below floor coverings, behind wall coverings and where large amounts of stored units were present. These areas may require further investigation.														
<b>Lead containing dust (&lt;1500 mg/kg)</b>														
Interior: level 5, plant room	Dust	Structural metal beams	-	69275	<1500 mg/kg Lead content (160 mg/kg)	Throughout	P	P	N/A	M	Low		<p>RESULT &lt;1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Perform risk assessment and remediate dusts under controlled conditions prior to refurbishment or demolition works.</p>	
Interior: level 5, plant room, mezzanine level	Dust	Floor	-	69284	<1500 mg/kg Lead content (36 mg/kg)	Throughout	P	P	N/A	M	Low		<p>RESULT &lt;1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Perform risk assessment and remediate dusts under controlled conditions prior to refurbishment or demolition works.</p>	





# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 5, plant room, south western fan control room	Dust	Floor	-	69286	<1500 mg/kg Lead content (240 mg/kg)	Throughout	P	P	N/A	M	Low		RESULT <1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Perform risk assessment and remediate dusts under controlled conditions prior to refurbishment or demolition works.
Interior: level 5, plant room, north western fan control room	Dust	Floor	-	69288	<1500 mg/kg Lead content (130 mg/kg)	Throughout	P	P	N/A	M	Low		RESULT <1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Perform risk assessment and remediate dusts under controlled conditions prior to refurbishment or demolition works.
No access was gained within and behind walls, floors, subfloors, tiles, urinals, cavities, ceiling voids, plant/machinery, live electrics or to heights above 3m. Limited access below floor coverings, behind wall coverings and where large amounts of stored units were present. These areas may require further investigation.													
<b>Synthetic Mineral Fibre (SMF)</b>													
Exterior: level 5, roof area, various throughout	Insulation material	Pipework	2	Visual Observation	Suspected SMF	~150m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].





# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 5, plant room, throughout	Sarking insulation	Underside of roof	3	Visual Observation	Suspected SMF	~150m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 5, plant room	Insulation material - internal	Hot water heater	4	Visual Observation	Suspected SMF	4 units	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 5, plant room, throughout	Insulation material	Pipework	5	Visual Observation	Suspected SMF	~150m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 5, plant room, throughout	Insulation material	AC ductwork	6	Visual Observation	Suspected SMF	~150m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].





# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 5, plant room, boiler room	Insulation material - internal	Boiler	7	Visual Observation	Suspected SMF	1 unit	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 5, plant room	Insulation material	Insulation mats to Weishaupt plant	8	Visual Observation	Suspected SMF	<1m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Exterior: level 4, roof area, throughout	Insulation material	Pipework	9	Visual Observation	Suspected SMF	~100m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Exterior: level 4, roof area, plant room TSHAF09	Insulation material	Pipework	10	Visual Observation	Suspected SMF	~50m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].





# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Exterior: level 4, roof area, plant room TSHAF09	Sarking insulation	Underside of roof	11	Visual Observation	Suspected SMF	~50m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 4, ceiling space, throughout	Sarking insulation	Underside of roof	12	Visual Observation	Suspected SMF	~1000m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 4, ceiling space, throughout	Insulation material	AC ductwork	13	Visual Observation	Suspected SMF	~300m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 4, ceiling space, throughout	Insulation material	Flexible ductwork	14	Visual Observation	Suspected SMF	~200m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].

# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 4, ceiling space, throughout	Insulation material	Pipework	15	Visual Observation	Suspected SMF	~300m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 4, ceiling, throughout	Compressed ceiling tiles	Ceiling	16	Visual Observation	Suspected SMF	~1000m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 4, risers, throughout	Insulation material	Pipework	17	Visual Observation	Suspected SMF	~200m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 3, ceiling space, throughout	Insulation material	AC ductwork	18	Visual Observation	Suspected SMF	~300m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].

# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 3, ceiling space, throughout	Insulation material	Flexible ductwork	19	Visual Observation	Suspected SMF	~200m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 3, ceiling, throughout various offices	Compressed ceiling tiles	Ceiling	20	Visual Observation	Suspected SMF	~1000m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 3, risers, throughout	Insulation material	Pipework	21	Visual Observation	Suspected SMF	~200m	S	P	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 2, ceiling space, throughout	Insulation material	AC ductwork	22	Visual Observation	Suspected SMF	~300m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].



# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 2, ceiling space, throughout	Insulation material	Flexible ductwork	23	Visual Observation	Suspected SMF	~200m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 2, ceiling space, throughout	Sarking insulation	Ceiling space	24	Visual Observation	Suspected SMF	~1000m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 2, ceiling, throughout	Compressed ceiling tiles	Ceiling	25	Visual Observation	Suspected SMF	~1000m <sup>2</sup>	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].
Interior: level 2, risers, throughout	Insulation material	Pipework	26	Visual Observation	Suspected SMF	~200m	S	G	F	L	Low		Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].

No access was gained within and behind walls, floors, subfloors, tiles, urinals, cavities, ceiling voids, plant/machinery, live electrics or to heights above 3m. Limited access below floor coverings, behind wall coverings and where large amounts of stored units were present. These areas may require further investigation.

# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
<b>Ozone Depleting Substance (ODS)</b>													
Exterior: level 5, roof area	R22 Hydrochlorofluorocarbon (HCFC)	Air conditioning unit(s)	27	Visual Observation	ODS Refrigerant	2 units	-	-	-	L	Low		Hydrochlorofluorocarbon (HCFC), ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulation 2012.
Exterior: level 2, north western perimeter	R22 Hydrochlorofluorocarbon (HCFC)	Air conditioning unit(s)	28	Visual Observation	ODS Refrigerant	2 units	-	-	-	L	Low		Hydrochlorofluorocarbon (HCFC), ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulation 2012.
No access was gained within and behind walls, floors, subfloors, tiles, urinals, cavities, ceiling voids, plant/machinery, live electrics or to heights above 3m. Limited access below floor coverings, behind wall coverings and where large amounts of stored units were present. These areas may require further investigation.													
<b>Polychlorinated Biphenyls (PCB)</b>													
Interior: level 5, plant room, throughout	Capacitor(s)	Florescent light(s)	29	Visual Observation	PCB Capacitor	<10 units	S	G	-	-	Low		PCB-containing capacitors are suspected due to age & appearance of electrical fittings. Remove and dispose of in accordance with the Polychlorinated Biphenyls Management Plan, Revised Edition April 2003.
No access was gained within and behind walls, floors, subfloors, tiles, urinals, cavities, ceiling voids, plant/machinery, live electrics or to heights above 3m. Limited access below floor coverings, behind wall coverings and where large amounts of stored units were present. These areas may require further investigation.													
<b>&lt;0.1 Lead-based paint (LBP)</b>													
Interior: level 5, plant room, throughout	Grey - Top coat	Wall(s)	-	69278	<0.1% Lead content (<0.005)	-	-	-	-	-	-	-	RESULT <0.1% lead content, not lead-containing paint as described in AS 4361.2: Part 2, Guide to Hazardous Paint Management - 2017, lead paint in residential, public and commercial buildings.

# Hazardous Materials Register

Primary Location	Description	Secondary Location	Photograph No.	Sample Number	Sample Results	Approx. Quantity	Surface Treatment	Extent of Damage	Friability	Likelihood of Disturbance	Action Rating	Photograph	Recommendations
Interior: level 5, south western fire stairs, throughout	Yellow (dark) - Top coat	Wall(s)	-	69287	<0.1% Lead content (0.005)	-	-	-	-	-	-	-	RESULT <0.1% lead content, not lead-containing paint as described in AS 4361.2: Part 2, Guide to Hazardous Paint Management - 2017, lead paint in residential, public and commercial buildings.

## **Appendix B: Laboratory Analysis Certificate**

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## Bulk Identification Report

**Job No:** 754-SYDEN273910 Sutherland Hospital 09062020  
**Client:** CBRE  
**Client Address:** Level 21, 363 George Street,  
 Sydney NSW 2000



**Contact:** Steph Rossi  
**E-mail:** [Steph.Rossi@cbre.com](mailto:Steph.Rossi@cbre.com)  
**Date Sampled:** 26/05/2020  
**Date Printed:** 6/06/2020  
**Sampled By:** Matthew Hemingway & Jake Iskenderian  
**Site:** Kingsway & Kareena Rd, Caringbah NSW 2229

Accredited for compliance with ISO/IEC 17025 - Testing  
 Accreditation No:2220  
 Corporate Site No:16909

Please note: In accepting the results, you (the client) agree that Coffey Services Australia Pty Ltd does not accept any responsibility for the sample submitted in relation to its source and is not liable for any works undertaken at site based on the analytical data provided. Only the samples submitted for analysis have been considered in presenting these results. Should any other material suspected to contain asbestos be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.

### Asbestos in Bulk Samples and Non-homogenous Material

**Test Method:** Coffey analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Coffey SOP WILAB1, and Australian Standard (AS) 4964 – 2004, Method for the qualitative identification of asbestos in bulk samples (AS 4964). The detection limit for the test method as per AS 4964 is 0.1 g/kg. For non-homogenous samples a semi quantitative aspect is adopted for the test method and is taken into account when reporting the results. As per Coffey's NATA approved SOP WILAB1 sample retention periods are set at 1 month (no asbestos detected) and 3 months (asbestos detected).

**Total Samples:** 39

Matthew Tang  
 Approved Identifier

Patricy Cortes  
 Approved Signatory

Sample No.	Location & Description	Sample Size	Results
82780	Int, level 4, corridor TSHA4A01, riser, pipework, gasket, gasket material - Red gasket material	~ 9 x 8 x 3 mm	No asbestos fibres detected
84135	Int, level 3, operating theatre, riser, pipework, gasket, mastic - Grey sticky mastic material	~ 17 x 15 x 3 mm	No asbestos fibres detected
84173	Int, level 4, corridor TSHA4D01, steps to roof area, nosing, bituminous material - Grey hardened bituminous material	~ 20 x 17 x 4 mm	No asbestos fibres detected
84174	Int, level 4, hose reel & hydrant room, insulation packer panels to blockwork - White vitreous fibrous insulation material	~ 27 x 25 x 4 mm	No asbestos fibres detected Synthetic mineral fibres detected
84175	Int, level 4, corridor TSHA4A06, riser adjacent office TSHA4D22, expansion joint, bituminous material - Black fibrous bituminous material	~ 50 x 40 x 10 mm	No asbestos fibres detected Organic fibres detected
84176	Int, level 4, corridor TSHA4D02, ceiling space, services pipework through bulkhead, fibrous cement filler - Grey vitreous crumbly cement-like material	~ 40 x 30 x 20 mm	No asbestos fibres detected Synthetic mineral fibres detected
84177	Int, level 4, corridor TSHA4D02, ceiling space, services pipework through bulkhead, caulking - Beige hardened mastic material with attached paper-like backing	~ 20 x 19 x 5 mm	No asbestos fibres detected Organic fibres detected
69264	Int, level 4, ceiling space, throughout, AC ductwork, flange, mastic sealant - Beige sticky mastic material	~ 27 x 5 x 4 mm	<b>Chrysotile (white asbestos) detected</b>
69265	Int, level 4, meeting room, TSHA4B01, north western corner, low level infill panel (below windows), fibre cement sheet - White painted beige layered fibre cement sheet material	~ 12 x 9 x 4 mm	No asbestos fibres detected Organic fibres detected
69266	Int, level 4, north western fire stairs, TSHA4ST4, single fire door (no date), fire door core, insulation material - Grey fibre cement sheet material	~ 13 x 12 x 4 mm	<b>Chrysotile (white asbestos) detected</b> <b>Amosite (brown asbestos) detected</b>
69267	Ext, level 4, courtyard TSHA4D29, eaves, fibre cement sheet - Grey fibre cement sheet material	~ 11 x 10 x 4 mm	<b>Chrysotile (white asbestos) detected</b> <b>Organic fibres detected</b>

Sample No.	Location & Description	Sample Size	Results
69268	Int, level 4, corridor TSHA4D01, ceiling space, mastic remnants to concrete slab, mastic sealant - Beige sticky mastic material	~ 37 x 25 x 5 mm	No asbestos fibres detected
69269	Int, level 4, north eastern fire stairs TSHA4ST2, single fire door (200_), fire door core, insulation material - Beige crumbly mica material	~ 12 x 10 x 2 mm	No asbestos fibres detected
69270	Ext, level 4, roof area adjacent corridor TSHA4D01, infill panels, fibre cement sheet - Beige layered fibre cement sheet material	~ 10 x 5 x 4 mm	No asbestos fibres detected Organic fibres detected
69271	Ext, level 4, roof area TSHA4R46, waterproofing membrane, bituminous membrane - Black vitreous fibrous membrane material	~ 10 x 9 x 3 mm	No asbestos fibres detected Synthetic mineral fibres detected
69272	Ext, level 4, roof area TSHA4R46, cladding, fibre cement sheet - Beige layered fibre cement sheet material	~ 17 x 15 x 10 mm	No asbestos fibres detected Organic fibres detected
69273	Ext, level 4, roof area TSHA4R01, waterproofing membrane, bituminous membrane - Black bituminous membrane material	~ 26 x 22 x 4 mm	No asbestos fibres detected Organic fibres detected
69274	Ext, level 5, roof area, below pebblecrete waterproofing membrane, bituminous material - Black vitreous fibrous membrane material	~ 30 x 26 x 4 mm	No asbestos fibres detected Organic fibres detected Synthetic mineral fibres detected
69276	Int, level 5, plant room, Aquaplus plant, gasket, gasket material - Orange fibrous gasket material	~ 17 x 15 x 4 mm	No asbestos fibres detected Organic fibres detected
69277	Int, level 5, plant room, Weishaupt plant, gasket, gasket material - White fibrous gasket material	~ 9 x 7 x 3 mm	No asbestos fibres detected Organic fibres detected
69279	Int, level 5, plant room, Nu Way plant, gasket, gasket material - Beige fibrous gasket material	~ 18 x 17 x 3 mm	No asbestos fibres detected Organic fibres detected
69280	Int, level 5, plant room, raised concrete slab, bituminous remnants, bituminous material - Black fibrous bituminous material	~ 19 x 17 x 4 mm	<b>Chrysotile (white asbestos) detected</b> <b>Organic fibres detected</b>
69281	Int, level 5, plant room, Ecoflam plant, gasket, gasket material - Beige fibrous gasket material	~ 25 x 21 x 4 mm	No asbestos fibres detected Organic fibres detected Synthetic mineral fibres detected
69282	Int, level 5, plant room, yellow boiler, gasket, fibre cement sheet - Green fibrous gasket material	~ 40 x 30 x 4 mm	No asbestos fibres detected Organic fibres detected
69283	Int, level 5, plant room, AC ductwork, mastic, mastic sealant - Beige sticky mastic material	~ 30 x 24 x 4 mm	<b>Chrysotile (white asbestos) detected</b>
69285	Int, level 5, plant room, mezzanine, steel platform, bituminous remnants, bituminous material - Black crumbly bituminous material	~ 22 x 19 x 4 mm	No asbestos fibres detected
69289	Ext, level 2, western elevation, eaves/awning, fibre cement sheet - Beige layered fibre cement sheet material	~ 16 x 14 x 4 mm	No asbestos fibres detected Organic fibres detected
69290	Ext, level 3, western elevation, louvres, moulded fibre cement - Grey fibre cement sheet material	~ 29 x 16 x 10 mm	<b>Chrysotile (white asbestos) detected</b>
69291	Ext, level 3, western elevation, expansion joint, mastic sealant - Brown rubbery mastic material	~ 18 x 15 x 5 mm	No asbestos fibres detected
69292	Ext, ground level, western elevation, old entrance, carpark structure, fascia, fibre cement sheet - Beige fibre cement sheet material	~ 9 x 7 x 3 mm	No asbestos fibres detected Organic fibres detected
69293	Ext, level 2, eastern wall, cladding, fibre cement sheet - Red painted beige fibre cement sheet material	~ 10 x 9 x 5 mm	No asbestos fibres detected Organic fibres detected
69294	Ext, level 2, eastern walkway, awning, fibre cement sheet - Cream painted beige fibre cement sheet material	~ 11 x 9 x 3 mm	No asbestos fibres detected
69295	Int, level 2, corridor TSHA2LC12, double fire doors, fire door core, insulation material - Beige crumbly mica material	~ 7 x 5 x 2 mm	No asbestos fibres detected
69296	Int, level 2, Cardiac ward, change room, TSHA2M09 wall lining, fibre cement sheet - Beige layered fibre cement sheet material	~ 6 x 5 x 2 mm	No asbestos fibres detected Organic fibres detected
69297	Int, level 2, electrical distribution cupboard, TSHA2T22, black electrical backing board - Black bituminous board material	~ 10 x 6 x 4 mm	<b>Chrysotile (white asbestos) detected</b>

Sample No.	Location & Description	Sample Size	Results
69298	Int, level 2, south western fire stairs, TSHA2ST2, AC ductwork, flange, mastic sealant - Beige fibrous organic matted material	~ 32 x 28 x 4 mm	No asbestos fibres detected Organic fibres detected
69299	Int, level 3, fire hose reel cupboard, TSHA3JC3, brown floor covering, vinyl floor sheet - Brown semi-flexible vinyl tile & amber adhesive	~ 25 x 21 x 4 mm	No asbestos fibres detected
69300	Int, level 3, room TSHA3G32, wall lining, fibre cement sheet - Cream painted beige layered fibre cement sheet material	~ 10 x 7 x 4 mm	No asbestos fibres detected Organic fibres detected
69302	Int, level 3, room TSHA3G13 wall lining, fibre cement sheet - White painted beige layered fibre cement sheet material	~ 11 x 8 x 4 mm	No asbestos fibres detected Organic fibres detected

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**Greencap - NAA Pty Ltd**  
**ABN: 76 006 318 010**  
Office 2/120 Smith Street  
Wollongong NSW 2500  
Australia  
P: (02) 4298 2600  
www.greencap.com.au

Friday, 21/08/2015

Our ref: C107948:J133510-Building A

Gaurang Sheth  
South East Sydney Local Health District  
430 Kingsway  
**CARINGBAH NSW 2229**

Dear Gaurang,

**Re: Asbestos Identification Analysis - Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2229**

This letter presents the results of asbestos fibre identification analysis performed on 7 samples collected by Geoff Wright of Greencap-NAA Pty Ltd on Monday, 17 August 2015. The samples were collected from Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2229.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Wollongong Laboratory in accordance with Greencap-NAA 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 Geoff Wright.

Yours sincerely  
**GreencapNAA**



**Daniel Cottom : Approved Identifier**



**Daniel Cottom : Approved Signatory**



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

# Sample Analysis Results

Sutherland Hospital - A - Main Building 06-08-2015

Wollongong Laboratory  
Sample Analysis Results



Friday, 21/08/2015

Our ref: C107948:J133510-Building A

Site Location:		Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2229	
Sample ID	Sample Location/Description/Weight or Size	Analysis Result	
1	J133510-Building A 001 Main Building - Level 01 - Loading Dock (TSHA1LD2) - Air Conditioning Ductwork - Sprayed Vermiculite Grey compressed/formed powder, mica vermiculite-type material ~ 35 x 15 x 5 mm	No Asbestos Detected	
2	J133510-Building A 002 Main Building - Level 01 - Kitchen 20 (TSHA1K35) - Southeast - Wall Lining - Fibre Cement Sheeting White painted gold-grey fibre cement sheet material ~ 12 x 10 x 3 mm	No Asbestos Detected Organic Fibres	
3	J133510-Building A 003 Main Building - Level 01 - Kitchen 20 (TSHA1K35) - Throughout - On Ground - Sheet Vinyl Red brittle vinyl material only (no distinct adhesive layer present) ~ 80 x 30 x 3 mm	No Asbestos Detected Organic Fibres	
4	J133510-Building A 004 Main Building - Level 01 - Electrical Lamp Storage Room (TSHA1P17) - East - Electrical Distribution Board - Compressed Bituminous Electrical Panel Black brown compressed bituminous, asbestiform fibrous board material ~ 11 x 5 x 2 mm	<b>Chrysotile (white asbestos)</b>	
5	J133510-Building A 005 Main Building - Level 01 - Store (TSHA1N03) - Various Throughout - Walls - Behind Ceramic Tiles - Adhesive Black-brown hardened adhesive material ~ 15 x 8 x 2 mm	No Asbestos Detected	
6	J133510-Building A 006 Main Building - Level 04 - Corridor (TSHA4D01) - Various Throughout - Ceiling Space - Sprayed Insulation Gold-grey compressed/formed powder, mica vermiculite-type material ~ 100 x 20 x 70 mm	No Asbestos Detected Organic Fibres	
7	J133510-Building A 007 Main Building - Ground Level - Gazebo - East - Gable - Fibre Cement Sheeting Dark red painted gold-grey fibre cement sheet material ~ 20 x 8 x 3 mm	No Asbestos Detected Organic Fibres	

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



Risk  
Management  
Services

NOEL ARNOLD & ASSOCIATES PTY LTD  
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Tuesday, 07/02/2012

Our ref: SS0272:96100-A

Laurie Boyd  
SESIAHS  
430 Kingsway  
CARINGBAH NSW 2229

Dear Laurie,

Re: Asbestos Identification Analysis - Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2219

This letter presents the results of asbestos fibre identification analysis performed on 5 samples collected by Scott Mcllwain of Noel Arnold & Associates Pty Ltd on Monday, 14 November 2011. The samples were stated to be from Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2219.

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 Scott Mcllwain.

Yours sincerely  
NOEL ARNOLD & ASSOCIATES PTY LTD



Scott Mcllwain : Approved Identifier



Simon Day : Approved Signatory



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Australian/national standards.

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Site No. 18349.

# Sample Analysis Results

Sutherland Hospital - A - Main Building 06-08-2015

Sydney Laboratory  
Sample Analysis Results



Tuesday, 07/02/2012

Our ref: SS0272:96100-A

Site Location:		Building A, Sutherland Hospital, 430 Kingsway, Caringbah NSW 2219	
Sample ID	Sample Location/Description/Weight or Size	Analysis Result	
<b>1</b>	96100-A 01 TSHA1M04, Suspended ceiling tile - Insulation Off white-painted white-grey compressed fibre-cement sheet material ~ 15 x 6 x 5 mm	Chrysotile (white asbestos)	
<b>2</b>	96100-A 02 Store TSHA1N03, Plywood ceiling tile - Adhesive with compressed fibre cement sheet debris A: Amber adhesive material and attached brown organic wood fibre material B: White-grey fibre-cement material residue, attached to underside of sample 01A A: ~ 30 x 10 x 1 mm B: ~ 10 x 10 x <1 mm	A: No Asbestos Detected B: Chrysotile (white asbestos)	
<b>3</b>	96100-A 03 Store TSHA1N03, Behind ceramic wall tiles - Rubbery adhesive Black, grey rubbery mastic material ~ 30 x 18 x 4 mm	No Asbestos Detected	
<b>4</b>	96100-A 04 Store TSHA1N03, Wall penetrations for pipes - Fibrous insulation White loosely-formed vitreous fibre material ~ 55 x 45 x 10 mm	No Asbestos Detected Synthetic Mineral Fibres	
<b>5</b>	96100-A 05 Store TSHA1N03, Wall penetrations adjacent soffit - Fibrous insulation White loosely-formed vitreous fibre material ~ 35 x 22 x 10 mm	No Asbestos Detected Synthetic Mineral Fibres	

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



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## CERTIFICATE OF ANALYSIS 244180

### Client Details

<b>Client</b>	Coffey Environment
<b>Attention</b>	Jake Iskenderian, Richard Wilkinson
<b>Address</b>	Level 19, Tower B, Citadel Tower, 799 Pacific Hwy, Chatswood, NSW, 2067

### Sample Details

<b>Your Reference</b>	<u>754-SYDEN273910, Sutherland Hospital</u>
<b>Number of Samples</b>	4 Dust, 3 Paint
<b>Date samples received</b>	04/06/2020
<b>Date completed instructions received</b>	04/06/2020

### Analysis Details

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

### Report Details

<b>Date results requested by</b>	10/06/2020
<b>Date of Issue</b>	09/06/2020
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. <b>Tests not covered by NATA are denoted with *</b>	

#### Results Approved By

Jaimie Loa-Kum-Cheung, Metals Supervisor

#### Authorised By

Nancy Zhang, Laboratory Manager

Lead in Paint				
Our Reference		244180-2	244180-5	244180-7
Your Reference	UNITS	69278	69287	69301
Date Sampled		26/05/20	26/05/20	28/05/20
Type of sample		Paint	Paint	Paint
Date prepared	-	05/06/2020	05/06/2020	05/06/2020
Date analysed	-	05/06/2020	05/06/2020	05/06/2020
Lead in paint	%w/w	<0.005	0.005	0.34

Lead (dust)					
Our Reference		244180-1	244180-3	244180-4	244180-6
Your Reference	UNITS	69275	69284	69286	69288
Date Sampled		26/05/20	26/05/20	26/05/20	26/05/20
Type of sample		Dust	Dust	Dust	Dust
Date prepared	-	05/06/2020	05/06/2020	05/06/2020	05/06/2020
Date analysed	-	05/06/2020	05/06/2020	05/06/2020	05/06/2020
Lead	mg/kg	160	36	240	130

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



Client Reference: 754-SYDEN273910, Sutherland Hospital

QUALITY CONTROL: Lead in Paint				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			05/06/2020	7	05/06/2020	05/06/2020		05/06/2020	[NT]
Date analysed	-			05/06/2020	7	05/06/2020	05/06/2020		05/06/2020	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	7	0.34	0.24	34	93	[NT]

Client Reference: 754-SYDEN273910, Sutherland Hospital

QUALITY CONTROL: Lead (dust)				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			05/06/2020	[NT]	[NT]	[NT]	[NT]	05/06/2020	[NT]
Date analysed	-			05/06/2020	[NT]	[NT]	[NT]	[NT]	05/06/2020	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]

## Result Definitions

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

## Quality Control Definitions

<b>Blank</b>	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.
<b>Duplicate</b>	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.
<b>Matrix Spike</b>	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.
<b>LCS (Laboratory Control Sample)</b>	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.
<b>Surrogate Spike</b>	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.

## **Appendix B: Scope Clarification Site Plan**

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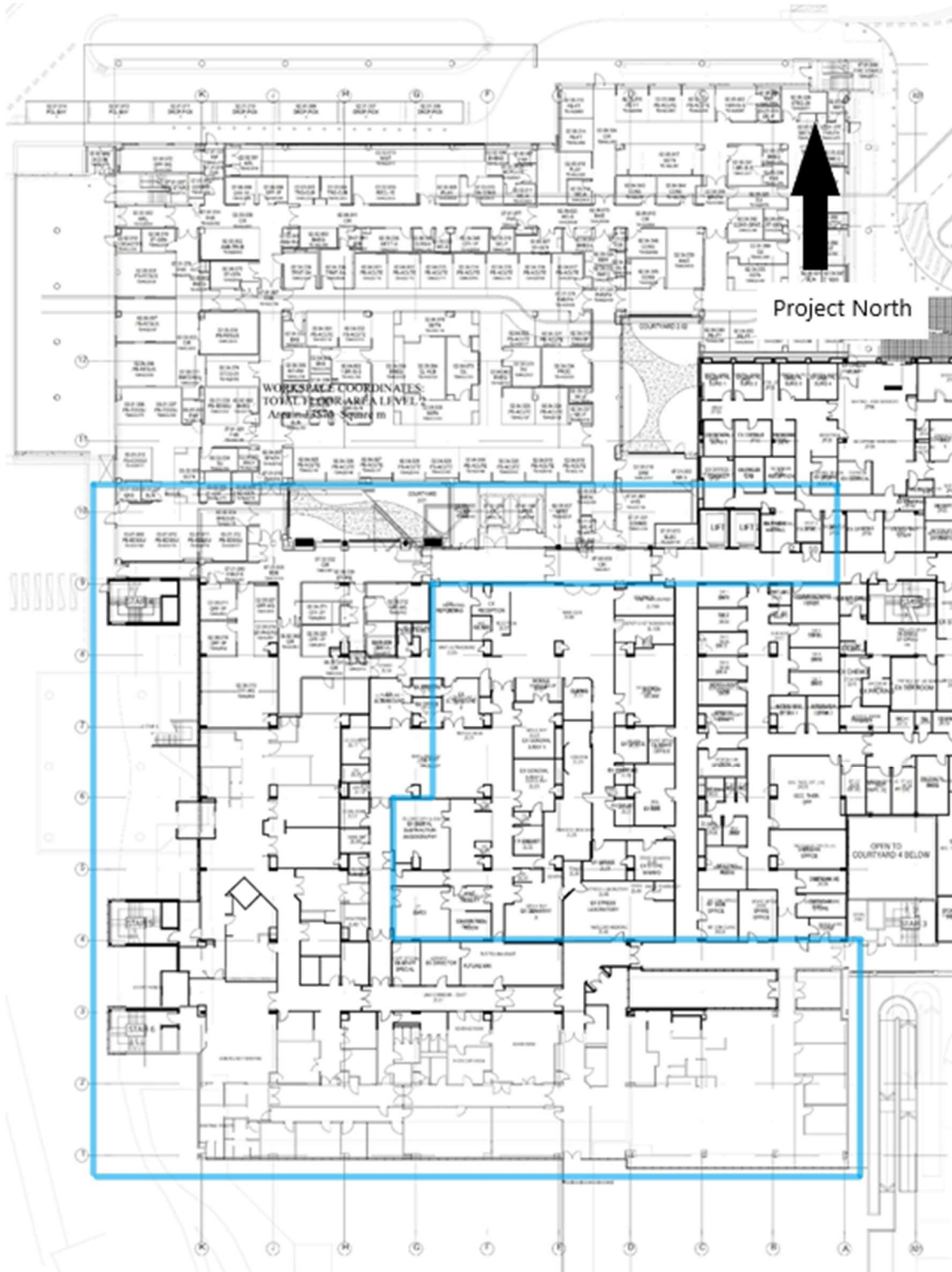
## Site Plan Location Mark-Ups

The Sutherland Hospital Operating Theatre Upgrade Project

Site Plan Location Mark-Ups Schedule.

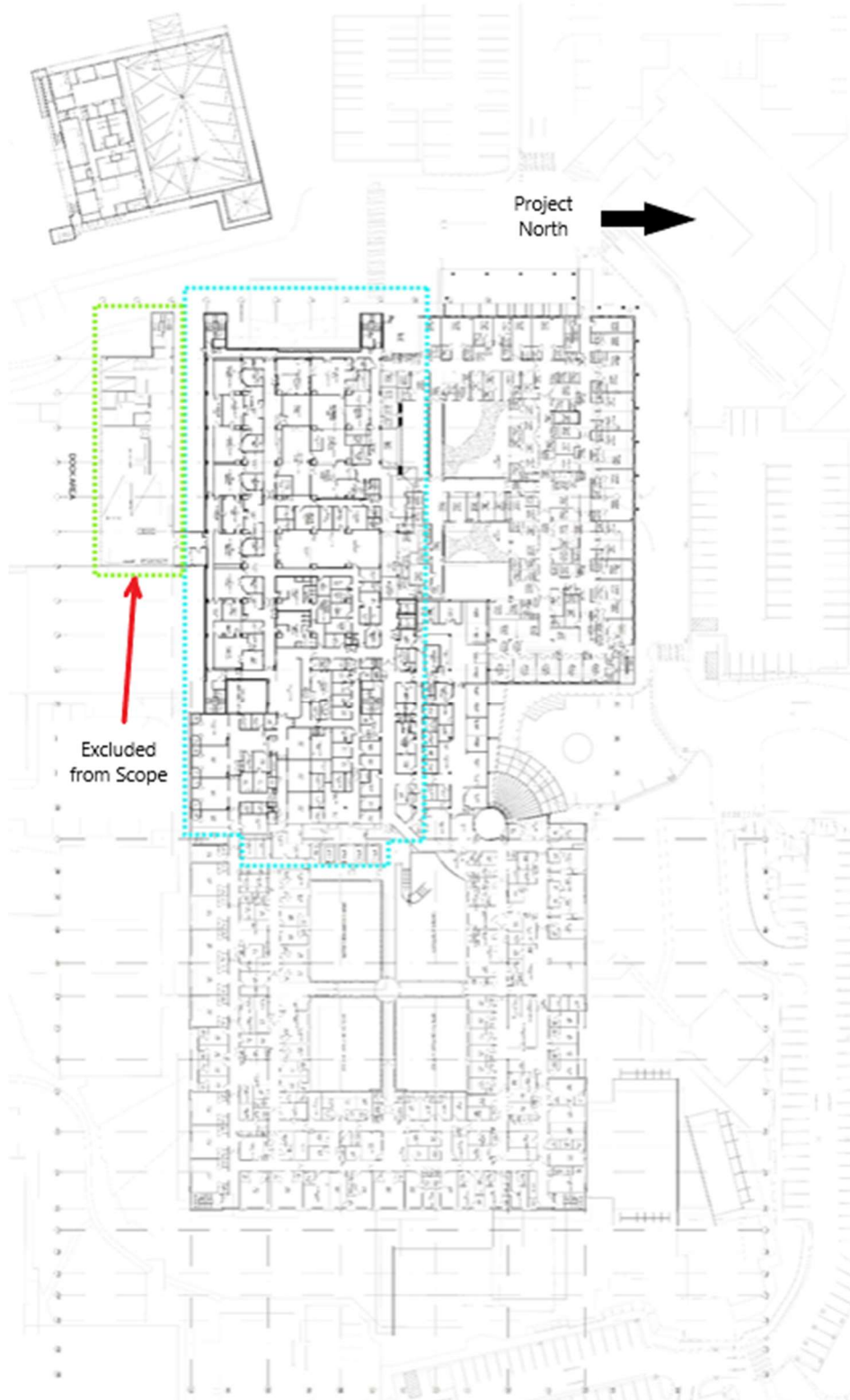
DRAWING REFERENCE	CONTENT
SK001	Level 2
SK002	Level 3
SK003	Level 4
SK004	Level 5 – Roof

SK001  
Level 2

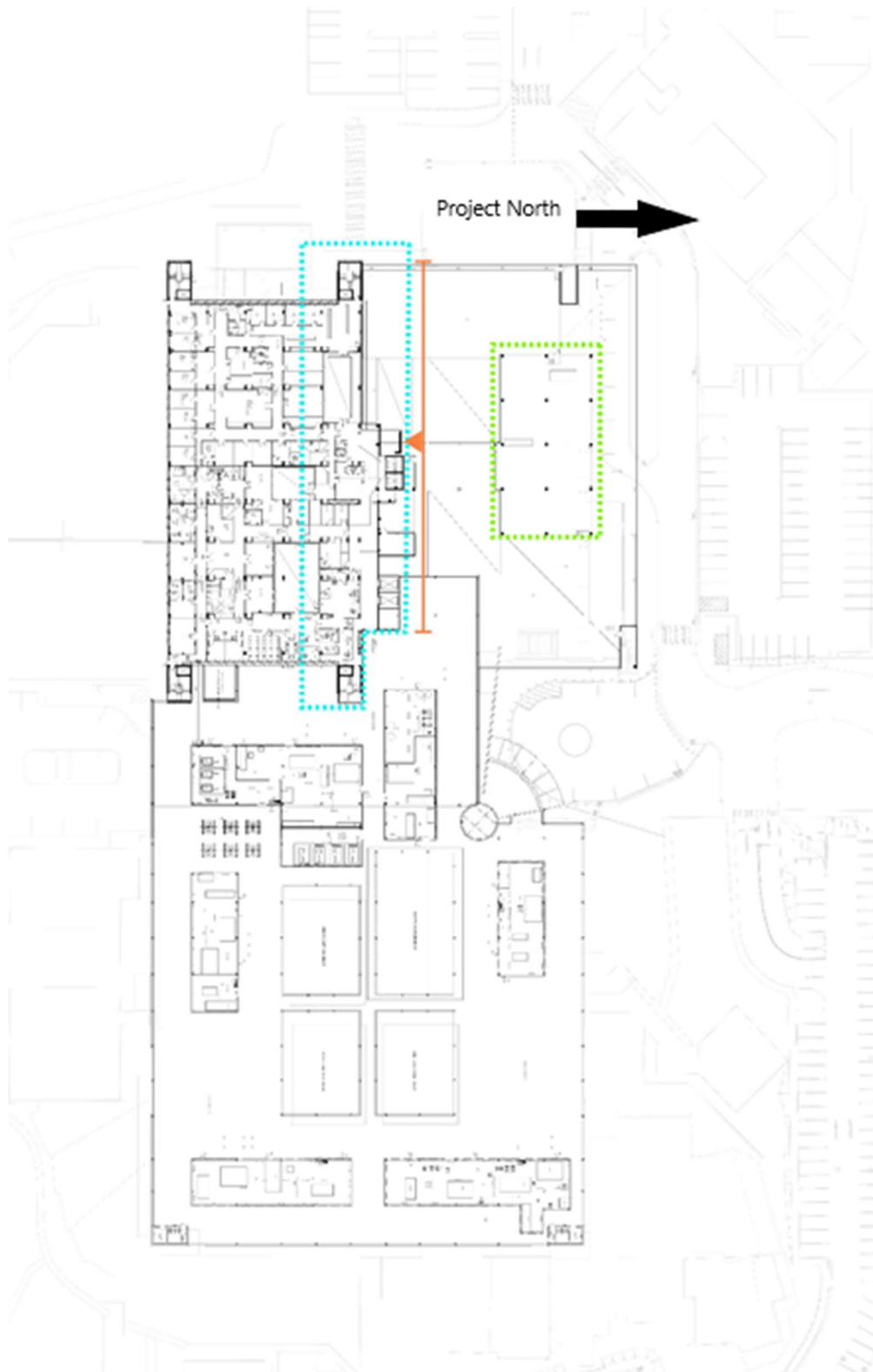




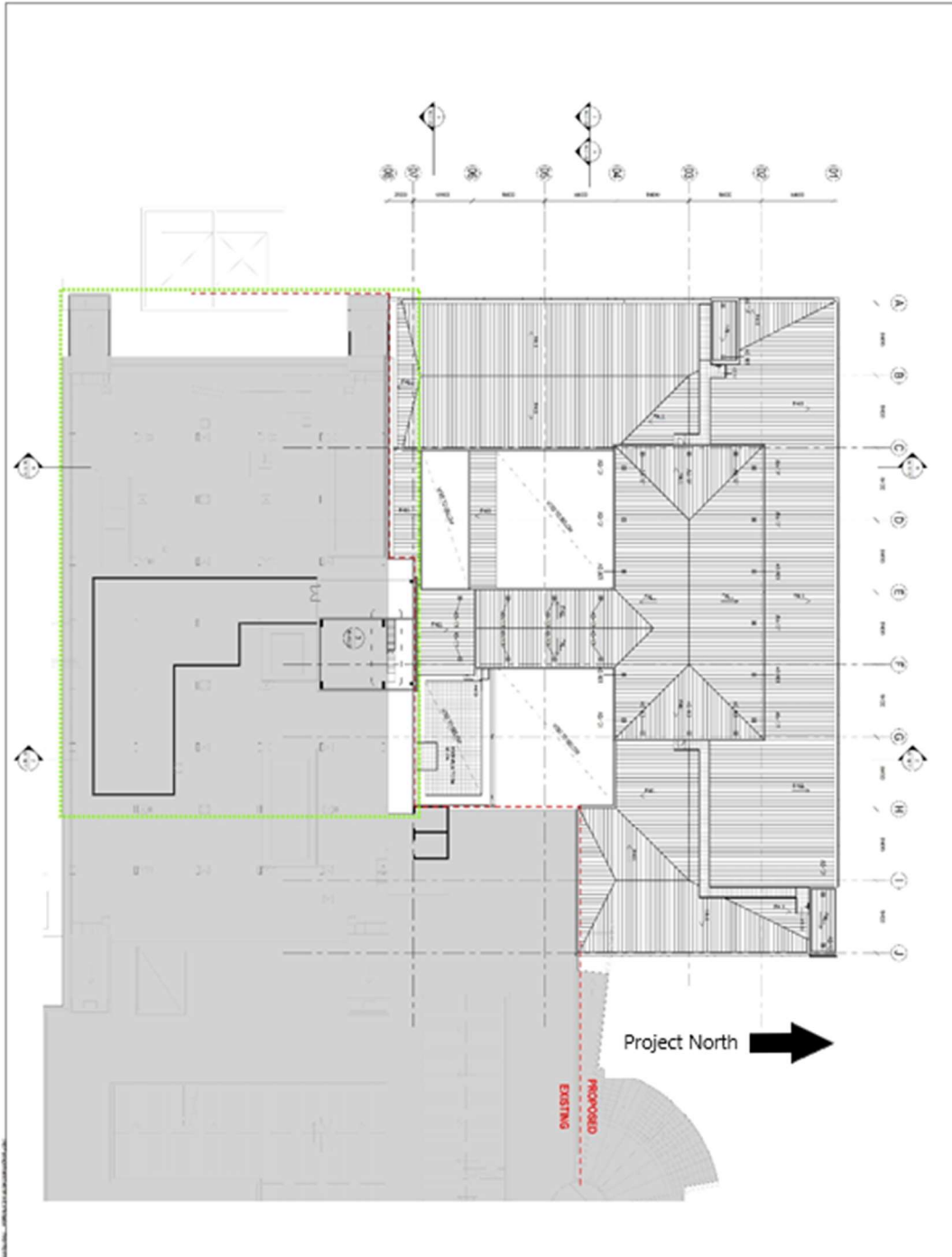
SK002  
Level 3



SK003  
Level 4



SK004  
Level 5 – Roof



**BVH**

PROJECT: SK004 - Level 5 - Roof  
 DRAWING NO: SK004-05  
 DATE: 10/10/2018  
 SCALE: 1:100  
 SHEET NO: 2 OF 2

DESIGNED BY: [Name]  
 CHECKED BY: [Name]  
 APPROVED BY: [Name]

NSW HEALTH  
 CENTRAL & WESTERN DISTRICTS HEALTH SERVICE  
 PROJECT MANAGER: [Name]

ARCHITECT: [Name]

STRUCTURAL ENGINEER: [Name]

MECHANICAL ENGINEER: [Name]

ELECTRICAL ENGINEER: [Name]

PLUMBING ENGINEER: [Name]

MECHANICAL/ELECTRICAL/PLUMBING ENGINEER: [Name]

PROJECT MANAGER: [Name]

CLIENT: [Name]

DATE: 10/10/2018

SCALE: 1:100

SHEET NO: 2 OF 2

## **Appendix D: Risk Assessment**

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## Risk assessment

The presence of hazmat can represent a real or potential health risk to humans. Where, due to material condition and location, a pathway to human exposure does not exist, and then the risks to human health are significantly reduced.

### Asbestos-containing materials (ACM)

This section details the categorising of each instance of ACM with regards to friability, condition, accessibility, risk where applicable. Note that the samples which were found not to contain ACM were not categorised for friability, condition, accessibility or risk. Coffey included in the ACM register, the estimated quantities of the material from which the sample originated, for identification purposes.

In order to determine the level of risk associated with the identified ACMs the following aspects need to be assessed:

- Friability;
- Condition assessment; and
- Accessibility.

The following sections identify the descriptors used in the abovementioned categories observed on site.

### ACM friability

Each instance of confirmed ACM was categorised by Coffey in accordance with the categories outlined in the table below:

#### ACM friability assessment

Rating	Descriptor	Decision Rule
N/A	Not-Applicable	Non-asbestos containing material.
N - No	Non- Friable	Asbestos-containing material which, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure alone.
Y - Yes	Friable	Asbestos-containing material which, when dry, is or may become crumbled, pulverized or reduced to powder by hand pressure.

### ACM condition assessment

The condition of each instance of confirmed or presumed ACM was classified as one of the three categories outlined in the two tables below:

#### ACM Condition assessment

Rating	Ranking / Descriptor	Non-Friable ACM	Friable ACM
VG	Very Good	Sealed/Encapsulated, no damage	Sealed/Encapsulated, no damage
G	Good	Unsealed, no damage	Sealed/Encapsulated
F	Fair	Unsealed, cracked and weathered	Cracked and damaged
P	Poor	Damaged or Debris	Damaged and or debris

## Detailed condition assessment descriptors (ACM)

Descriptor	Guideline
Good	<p>Material is intact and shows no signs of deterioration;</p> <p>No water staining or evidence of material being impacted by water; and/or</p> <p>Any stable (sealed), non-friable asbestos material with no exposed edges.</p> <p>The material must also be well sealed along the surface and edges (i.e. well painted and ceiling/wall sheets must be butt jointed into moulded plastic and the corners or edges must be similarly covered with moulding such a timber quadrant or timber strap).</p>
Fair	<ul style="list-style-type: none"> <li>• Material is breaking up, delaminating or coming loose from the substrate; and/or</li> <li>• Slight water staining or buckling is evident; and/or</li> <li>• Unsealed and not damaged asbestos cement material used internally.</li> </ul> <p>This is recorded only if the damage/deterioration is less than ten per cent (10%) of the total area of the material.</p>
Poor	<ul style="list-style-type: none"> <li>• Material is non-cohesive. Parts of an installation may be dislodged, or large amounts of dust or pieces of material debris are located on ground near/below the installation; and/or</li> <li>• Water has dislodged some of the material or has caused it to break away from the substrate, or the material is saturated with the potential to fall.</li> <li>• Signs of accumulated dust or small pieces of material debris on ground near or below the installation and accidental or deliberate damage.</li> </ul> <p>Also applies to debris and friable asbestos material with ANY degree of compromised encapsulation and/or enclosure.</p>

## Accessibility (ACM)

The accessibility to each instance of confirmed ACM was classified one of the three categories outlined in the table below:

## Accessibility (ACM)

Descriptor	Guideline
Low	<p>Where activities within the area where ACM are located are unlikely to impact the material;</p> <p>or</p> <p>Areas where the probability of being occupied by building users for extended periods on a regular basis are rare.</p> <p><i>(e.g. The material is located externally or above a suspended ceiling, in the roof space, or concealed in service ducts or piping)</i></p>
Medium	<p>Where activities within the area where ACMs are located may occasionally impact the material,</p> <p>or</p> <p>Areas where the probability of being occupied by building users for short periods on a regular basis is high.</p> <p>e.g. Plant rooms and workshops containing operational plant or equipment and are occasionally visited. Corridors, lunchrooms, toilets and internal elevated surfaces where a ladder is required for access.</p>
High	<p>Where activities within the area where ACM are located are readily impact the material,</p> <p>or</p> <p>Areas where the probability of being occupied by building users for extended periods on a regular basis is high.</p> <p>E.g. Offices and workshops which are always occupied. As part of job occupants may come into contact with damaged or deteriorated ACM.</p>

## ACM level of risk

A risk assessment for each individual ACM to allow informed decisions about control measures during the ongoing occupancy of the assets was undertaken. The risk assessment then identifies the risk treatment options on how to manage *in situ* ACM, determined during the site inspection and is presented in the table below:

### ACM risk matrix

Condition	High Accessibility	Medium Accessibility	Low Accessibility
Very Good	Medium	Low	Very Low
Good	Medium	Medium	Low
Fair	High	Medium	Medium
Poor	High	High	Medium

\*Note that the above decision rules are a guide only and some instances of ACM may have additional risk assessment outcomes, as appropriate.

### Description of risk levels (ACM)

Risk Level	Guideline
Very Low	Material stable. Reassess condition prior any planned works likely to have an impact on these materials.
Low	Material stable. Reassess condition within 12 months.
Medium	Material may remain <i>in situ</i> under effective interim administrative controls. Material condition to be improved or likelihood of disturbance to be reduced within 12 months.
High	Area where the material is present; is not suitable for occupancy, remediation is required as soon practicable. Imminent risk of harm. <b>This category also applies to demolition and/or refurbishment works that will be impacting on asbestos-containing materials.</b>

### Other hazardous materials

This section details the categorising of each instance of other hazmat with regards to friability, condition, accessibility, risk where applicable. The following sections identify the descriptors used in the abovementioned categories observed on site:

#### Hazmat friability

Variable	Score	Description
Friable	F	Unsealed SMF
	NF	Sealed SMF
	NA	Applicable to ODS, PCB, Lead in paint

#### Hazmat extent of damage and surface treatment

Variable	Score	Examples of Score Descriptions
Extent of Damage	G	Good condition
	Av	Average condition
	P	Poor condition
Surface Treatment	S	Sealed
	P	Part sealed
	U	Unsealed



## Material and location assessment

Coffey adopts the following material and location assessment algorithms in order to assess the risks associated with individual hazardous materials other than asbestos located.

### Hazmat friability

Variable	Score	Description
Friable	F	Unsealed SMF
	NF	Sealed SMF
	NA	Applicable to ODS, PCB, Lead in paint

### Hazmat extent of damage and surface treatment

Variable	Score	Examples of Score Descriptions
Extent of Damage	G	Good condition
	Av	Average condition
	P	Poor condition
Surface Treatment	S	Sealed
	P	Part sealed
	U	Unsealed

### Hazmat likelihood of disturbance

Variable	Score	Examples of Score Descriptions
Occupant Activity	L	Low traffic area
	M	Medium traffic area
	H	High traffic area

### Hazmat risk score

The hazardous materials other than asbestos risk score is a qualitative assessment determined by the combination of Material and Location Assessments. Depending on the material one or all of these criteria may be used in assessing the recommended Action.

### Hazmat risk score

Variable	Score	Examples of Score Descriptions
Risk Score	L	Low exposure risk
	M	Medium exposure risk
	H	High exposure risk

## **Appendix E: Legislative Requirements**

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## Legislative requirements

The assessment, and preparation of this report have been undertaken in accordance with the requirements of State/Territories legislation and standards outlined below.

### State/Territories relevant legislation

States & Territories	Acts	Legislation
<b>Australian Capital Territory (ACT)</b>	ACT Work Health & Safety Act 2011	ACT Work Health & Safety Regulation 2011
<b>New South Wales (NSW)</b>	NSW Work Health & Safety Act 2011	NSW Work Health & Safety Regulation 2017
<b>Northern Territory (NT)</b>	NT Work Health & Safety Act 2011	NT Work Health & Safety Regulation 2017
<b>Queensland (QLD)</b>	QLD Work Health & Safety Act 2011	QLD Work Health & Safety Regulation 2011
<b>South Australia (SA)</b>	SA Work Health & Safety Act 2012	SA Work Health & Safety Regulation 2012
<b>Tasmania (TAS)</b>	Tasmanian Work Health & Safety Act 2012	Tasmanian Work Health & Safety Regulation 2012
<b>Victoria (VIC)</b>	Victorian Occupational Health and Safety Act 2004	Victorian Occupational Health and Safety Regulation 2017
<b>Western Australia (WA)</b>	Occupational Safety and Health Act 1984	Occupational Safety and Health Regulation 1996

### States/Territories code of practices & compliance codes

States & Territories	Codes of Practices & Compliance Codes		
<b>Australian Capital Territory (ACT)</b>	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.
<b>New South Wales (NSW)</b>	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.
<b>Northern Territory (NT)</b>	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.
<b>Queensland (QLD)</b>	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.
<b>South Australia (SA)</b>	Code of Practice: How to manage and Control asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.
<b>Tasmania (TAS)</b>	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.	Code of Practice: Demolition.

<b>Victoria (VIC)</b>	Compliance Code: Managing Asbestos in Workplaces.	Compliance Code: Removing Asbestos in Workplaces.	Compliance Code: Demolition.
<b>Western Australia (WA)</b>	Code of Practice for Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].	Code of Practice for the Safe Removal of Asbestos [NOHSC:2002(2005)].	Code of Practice: Demolition.

The Victorian Compliance Codes align with the intent of the SafeWork Australia Model Code of Practice

### Hazardous materials standard & guidance notes

<b>Hazardous material</b>	<b>Guidance Notes</b>
<b>Lead based paint</b>	AS/NZS 4361.2:2017 Guide to hazardous paint management – Part 2: Lead paint in residential, public and commercial buildings
<b>Lead-containing dust</b>	National Environmental Protection Measure (NEPM) (NEPC,1999) as updated in 2013.
<b>Synthetic Mineral Fibres</b>	National Occupational Health and Safety Commission (1990) Synthetic Mineral Fibres; National Standard for Synthetic Mineral Fibres; and the National Code of Practice for the Safe Use of Synthetic Mineral Fibres
<b>Polychlorinated Biphenyls in fluorescent light capacitors</b>	ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors
<b>Ozone Depleting Substances</b>	UNEP (2001) Inventory of Trade Names of Chemical Products containing Ozone Depleting Substances and their Alternatives

Each section is to be read in conjunction with the whole of this report, including the appendices.

## **Appendix F: Methodology**

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## Methodology

Hazmat surveys are undertaken considering a risk management approach, in accordance with relevant statutory regulations and relevant Codes of Practice. A risk assessment was conducted based on a number of factors associated with hazmat identified during the survey and prioritised through Risk and Action Classifications.

The assessment involved the onsite investigation for the presence of ACM, SMF, LBP systems, LCD, PCB and ODS including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs). Information was collected from the site owners/occupiers/tenants where available on relevant issues pertaining to the site. Based on the available data and the status at the time of inspection, where items were identified, visual and/or analytical characterisation (where required) was performed and reported in **Appendix A: Asbestos and Hazmat Register**.

The assessment was conducted on the basis of the condition, type and location of the materials at the time of inspection. The scope of this investigation did not allow intrusive sampling techniques to be undertaken in all locations, and consequently the register may have limitations as a reference document for the purposes of renovation or demolition.

Only 'typical' suspected material occurrences are inspected and sampled. Sampling is undertaken on a representative basis, for example, the inspection of one fire door of the same type within the same area is undertaken (i.e. not every 'matching' fire door is examined), unless specifically instructed. Sample collection was performed in a non-destructive and non-invasive manner by competent persons. Presumptions, based on knowledge and experience, that inaccessible areas contain asbestos materials may also be made and stated within the register.

Samples collected are representative of the material sampled, individually identified, transported, analysed and reported in accordance with relevant Statutory Regulations, Codes of Practice and Coffey's Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted. LCD thresholds are adopted from lead in soil thresholds found in the National Environment Protection Assessment of Site Contamination (ASC) Measure (1999) as amended in 2013 (NEPM).

The presence of asbestos in bulk samples is determined by Polarised Light Microscopy (PLM) with dispersion staining techniques. Where asbestos was found to exist, a risk assessment was conducted on each item and a priority rating applied. This was conducted in accordance with the protocols described in **Appendix C: Risk Assessment**.

The asbestos and hazmat register is made up of relevant information gathered on site plus Coffey's assessment of risk and assignment of action ratings. Reference to photographs, where available, is made in the register along with sample identification and analysis results, where applicable. Sample analysis results from previous assessments may be utilised and referenced in this register.



## **Appendix G: Statement of Limitations**

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## Statement of limitations

Coffey has conducted work concerning the environmental status of the property which is the subject of this report and has prepared this report on the basis of that assessment.

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within the time and budgetary requirements of the client, and in reliance on certain data and information made available to Coffey. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Investigations have been based on inspections conducted in accordance with relevant guidelines and standards, and normal industry practice, having regard to the client's instruction, and interpretations of conditions are based on the data from those inspections and, where relevant and conducted, testing. To the best of our knowledge, they represent a reasonable interpretation of the condition of the site as able to be inspected.

This report has been provided by Coffey for the sole use of the client and only for the purpose for which it was prepared. Any representation contained in the report is made only for the client.

No inspection can be guaranteed to locate all asbestos in a specific location. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

The assessment brief is to identify every reasonably accessible hazmat. Reasonably accessible does not extend to searching for concealed hazmat beneath concrete encased structural beams or beneath concrete floors, behind another hazmat, or any other locations which, to access, would cause structural damage that could potentially destabilise the structure or the building. Given the way in which hazmat was used in the construction of buildings, some may only be detected during the course of subsequent demolition.

Any areas within the remit of the assessment but not described within the body of the report or in the hazmat register should be regarded by the client as un-assessed, and suspected as ACM potentially containing amphibole asbestos. A competent person should assess such areas before any work affecting them is carried out.

It must be assumed that materials visually assessed as presumed asbestos contain amphibole asbestos, unless sampled and analysed to prove otherwise. All areas where access was not possible must also be presumed to contain asbestos until proven otherwise.

### **Asbestos-containing materials**

Coffey assessors take samples at any situations known, or suspected, to contain Asbestos. Where the analysis determines that No Asbestos is Detected (NAD) the samples are listed in the report to provide information for potential future assessments.

Representative sampling is defined as one like sample per consistent material type, situation or item. In these instances, only one test sample will be collected for analytical confirmation and the results expressed as consistent and typical of the building. It is advisable to presume that materials similar to those positively identified as asbestos also contain asbestos until proved otherwise. It should not be presumed that materials similar in appearance to those tested and found not to contain asbestos also do not contain asbestos.

Due to the very low concentration of asbestos fibres and the non-homogenous matrix of vinyl floor tiles, false negative results may be obtained. Therefore, the accuracy of all results cannot be guaranteed.

Notably, with some asbestos-containing bulk material it can be very difficult, or impossible to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres

present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials.

The analysis of many asbestos products used as a component of insulation materials, may be compromised in instances where the material has been heat affected, as heat may alter the morphology of the fibrous material.

Internal building materials should be assumed to contain asbestos until otherwise assessed.

Subsurface drains and pipes may be constructed of asbestos cement, but this could not be assessed. Any subsurface pipes, particularly those constructed of fibre-cement or concrete, should be assumed to contain asbestos until otherwise assessed.

It is also noted that sub-surface conditions can change with time, and the report is based on data that was gathered at the time of the report. Coffey will not update the report and has not taken into account events occurring after the time the assessment was conducted.

The following limitations and restrictions to specific materials, installations and locations are commonly found during assessments of this nature, even if safe access can be provided through consultation with the client this inspection and report may not include the following areas:

- **Risers / Ceiling, Floor or Wall Cavities, and Voids** - may be completely blocked or bricked in. Occasionally may only be detected if shown on building construction plans or during demolition
- **Columns / Structural Elements** - these will not be penetrated if doing so will damage the stability of the building
- **Roofs / External Areas** - these will not be checked if safe access cannot be achieved
- **Confined Spaces** - these will not be checked if safe access cannot be achieved
- **Restricted Access** - areas subject to restricted access will not be checked unless special arrangements have been made through the client within the remit of the assessment
- **Live Plant or Electrical Installations** - live electrical installations including fuse boxes, electrical control cabinets, distribution panels etc. are not routinely checked for safety reasons. Electrical equipment will only be examined if it is locked off and an isolation certificate has been issued. Under exceptional circumstances, when arranged by the client, examination of non-isolated equipment may take place under the supervision of an electrician
- **Live Refrigerators / Cold Rooms / Mechanical Equipment / Heater Units / Kilns** - may contain asbestos internally, which is not visible or accessible until the unit is isolated and dismantled

The Client must not rely on an inspection or report as indicating that a site or a building is "asbestos free". All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

Please note nominated areas to be inspected were not vacant at the time of inspection, due to the active nature of the site unlimited intrusion was not possible, therefore the inspection is regarded as a limited pre demolition assessment.

**Should any other material suspected to contain asbestos or hazmat be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.**