

---

**Hazardous Building Materials (HAZMAT)  
Report  
SSD-70283710: 1 Crescent Street Holrou**

**Proposed Crescent Parklands**

**1 Crescent Street, Holroyd**

**Prepared for Tiberius (Holroyd) Pty Ltd atf  
the Holroyd Unit Trust**

**Project 84770.05**

**14 November 2024**

## Document History

### Details

---

<b>Project No.</b>	84770.05
<b>Document Title</b>	Hazardous Building Materials (HAZMAT) Report
<b>Site Address</b>	1 Crescent Street, Holroyd
<b>Report Prepared For</b>	Tiberius (Holroyd) Pty Ltd
<b>Filename</b>	84770.05.R.006 Rev0

### Status and Review

---

<b>Status</b>	<b>Prepared by</b>	<b>Reviewed by</b>	<b>Date issued</b>
Revision 0	Irha Riaz / Huy Tran	Tim Kulmar / Paul Gorman	4 November 2024
Revision 1	Irha Riaz / Huy Tran	Tim Kulmar	14 November 2024

### Distribution of Copies

---

<b>Status</b>	<b>Issued to</b>
Revision 0	Tiberius (Holroyd) Pty Ltd
Revision 1	Tiberius (Holroyd) Pty Ltd

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings and test results have been checked and reviewed for errors, omissions and inaccuracies.

### Signature

### Date

---

<b>Author</b>		14 November 2024
<b>Reviewer</b>		14 November 2024

## Glossary and abbreviations

---

Reference	Description
SSDA	State Significant Development Application
SEARs	Secretary's Environmental Assessment Requirements
DCP	Development Control Plan Cumberland Development Control Plan 2021 (CDCP 2021)
HAZMAT	Hazardous Building Materials
ACM	Asbestos Containing Material
SMF	Synthetic mineral fibre insulation
PCB	Polychlorinated biphenyls
WHS	Work Health and Safety
WHS Act	NSW Work Health and Safety Act 2011
WHS Regulation	NSW Work Health and Safety Regulation 2017
NOHSC	National Occupational Health and Safety Commission
EPA	Environmental Protection Authority
NATA	National Association of Testing Authorities
PLM	Polarised Light Microscopy
POEO	NSW Protection of the Environment Operations
EPHC	Environment Protection and Heritage Council

## Executive Summary

This Hazardous Building Materials (HAZMAT) survey has been prepared by Douglas Partners Pty Ltd (Douglas) to accompany a State Significant Development Application (SSDA) for a proposed mixed-use precinct located at 1 Crescent Street, Holroyd (the site). The site is shown on Drawing 1, Appendix A.

This report has also been prepared to address the relevant Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Housing, and Infrastructure (DPHI) for SSD-70283710 on 6 May 2024

The purpose of the HAZMAT survey, which comprised a visual inspection and limited program of testing and analysis, was to help identify relevant HAZMAT prior to demolition / alteration works. For the purposes of this assessment HAZMAT comprise:

- Asbestos containing material (ACM);
- Lead paint;
- Synthetic mineral fibre (SMF) insulation; and
- Polychlorinated biphenyls (PCB) in fluorescent light fittings.

HAZMAT were identified or suspected present in the nominated structures at the Site as indicated in Table 1 below.

**Table 1: Hazardous building materials (HAZMAT) risk profile**

Item	Non-friable asbestos	Friable asbestos	Lead paint	SMF	PCB
Residual above-ground structure(s)	✓	✗	✗	✗	✓

SMF = synthetic mineral fibre, PCB = polychlorinated biphenyls, ✓ = identified or suspected present, ✗ = not identified and / or not suspected present. Refer to the Register(s) in Appendix B for details / clarification.

Limited or no access was available to certain areas of the site at the time of inspection, as discussed in Section 10 of the report. Inaccessible areas should be assumed to potentially contain HAZMAT unless assessment of these areas by a Competent Person confirms otherwise.

HAZMAT should be managed in accordance with the requirements of the NSW Work Health and Safety (WHS) Act 2011 (WHS Act), NSW WHS Regulation 2017 (WHS Regulation) and relevant Codes of Practice, Australian Standards and guidelines.

HAZMAT should be removed prior to any significant disturbance including from maintenance, refurbishment and demolition work.

Limitations apply to this HAZMAT assessment and report as outlined in Section 10.

***This report should be read in its entirety and may not be reproduced other than in full, except with the prior written approval of Douglas.***

## Table of Contents

---

	Page No
1. Introduction.....	1
2. Site context.....	1
2.1 Site description.....	1
3. Proposed development .....	2
4. Scope of work .....	3
5. Site description and proposed development.....	4
6. Regulatory framework.....	4
7. Method.....	5
8. Asbestos risk assessment.....	6
9. Results.....	8
9.1 General.....	8
10. Recommendations.....	9
10.1 General.....	10
10.2 Asbestos-containing material (ACM) .....	11
10.3 Lead paint .....	12
10.4 Synthetic mineral fibre (SMF).....	13
10.5 Polychlorinated biphenyls (PCBs).....	14
11. Limitations.....	15

**Appendix A:** About this Report and Drawings

**Appendix B:** HAZMAT Register and Plates

**Appendix C:** Laboratory Report

# Hazardous Building Materials (HAZMAT) Report

## Proposed Crescent Parklands

### 1 Crescent Street, Holroyd

---

## 1. Introduction

This Hazardous Building Materials (HAZMAT) survey has been prepared by Douglas Partners Pty Ltd (Douglas) to accompany a State Significant Development Application (SSDA) for a proposed mixed-use precinct located at 1 Crescent Street, Holroyd (the site). The site is shown on Drawing 1, Appendix A.

This report has also been prepared to address the relevant Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Housing, and Infrastructure (DPHI) for SSD-70283710 on 6 May 2024. Specifically, this report has been prepared to respond to the SEARs requirement issued below.

**Table 2: SEARs requirements – SSD70283710**

Item	Description of requirement	Report section / response
17	Waste Management. If buildings are proposed to be demolished or altered, provide a hazardous materials survey	All sections of this report including Section 10 Results and Appendix B HAZMAT Register.

The investigation was undertaken in accordance with Douglas proposal 84770.05.P.003.Rev0 and the work was engaged by Lucas Flecha via email on the 14 October 2024.

## 2. Site context

### 2.1 Site description

The land to which this SSDA relates is located at 1 Crescent Street, Holroyd (the site). The site is legally described as Lot 700 in Deposited Plan 1241836.

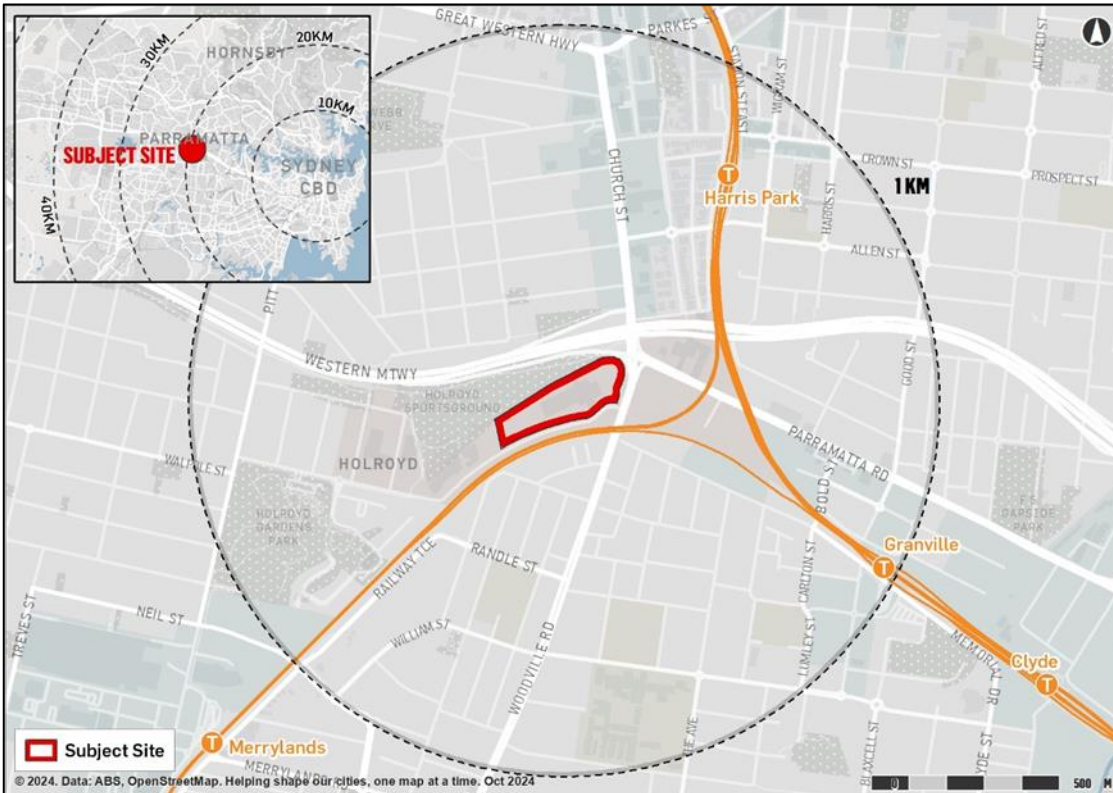
The site comprises an irregularly shaped allotment with an area of 37,877 m<sup>2</sup> and has a primary frontage to Crescent Street to the south and a frontage to Woodville Road to the east. The northern boundary of the site adjoins the Holroyd Sports ground with the M4 Motorway beyond.

The site is located in the Cumberland Local Government Area (LGA) and is currently vacant and cleared after WesTrac ceased operations of an industrial facility at the site in early 2018. The site contains existing scattered pockets of landscaped vegetation, predominately located along the site's southern and eastern boundaries to Crescent Street and Woodville Road.

The northern frontage of the site faces the Holroyd Sportsground and the M4 Motorway beyond. It is noted that the eastern portion of the site fronting Woodville Road has been identified for

potential future acquisition by Transport for NSW for future planned intersection upgrades to Woodville / Parramatta Road / M4.

A Location Plan for the site is provided in Figure 1 below.



**Figure 1: Location plan**

### 3. Proposed development

Based on information provided to Douglas the SSDA for a mixed-use precinct with public open spaces comprising the following components:

- Site establishment works, tree removal, site preparation, earthworks and excavation, services augmentation, and remediation works.
- Development of seven residential buildings comprising four shop top housing buildings and three residential flat buildings as outlined below:
  - o Buildings 1-3 are integrated with an eastern mixed-use podium building, while Building 4 is situated above mixed residential / commercial space, offering shop-top housing.
  - o Buildings 5-7 consist of residential flat buildings.

- Delivery of 15% of the total floor space as affordable housing to be distributed across each of the 7 residential buildings.
- Approximately 134,000 m<sup>2</sup> total floor space comprising:
  - o A total of 2,500 m<sup>2</sup> retail GFA and 5,000 m<sup>2</sup> commercial GFA.
  - o Communal amenity facilities for residents.
  - o Building services areas.
- Activation of Crescent Street through a mix of amenity areas and pockets of open space.
- Shared car parking for Buildings 1-3 and the commercial and retail tenancies within the podium.
- Shared car parking for Buildings 4 to 7 on the lower ground levels and within the above ground parking structures adjoining Buildings 5 and 6.
- The widening of Crescent Street and upgrades to Crescent Street.
- Landscaping and accompanying place making works including:
  - o Public open space, hard and soft landscape works.
  - o Ground and rooftop communal open space.
  - o Publicly accessible through-site links.
  - o At grade car parking for the park, forecourt and retail areas.
  - o Vehicle access via a new internal publicly accessible road and vehicle accessway.
  - o New pedestrian footpaths and access arrangements to the site.
  - o Café tenancy within park-side structure.
- Staged completion of a public park.
- (If you need more specific metrics for your assessment (GFA, FSR etc) – refer to the architectural plans or contact the project manager).

#### 4. Scope of work

The purpose of the HAZMAT survey, which comprised a visual inspection and limited program of testing and analysis, was to help identify relevant HAZMAT prior to demolition / alteration work. For the purposes of this assessment HAZMAT comprise:

- Asbestos containing material (ACM);
- Lead paint;
- Synthetic mineral fibre (SMF) insulation; and
- Polychlorinated biphenyls (PCB) in fluorescent light fittings.

The overall results of the assessment are indicated by the HAZMAT Risk Profile in Table 1 of the Executive Summary.

The results of the assessment, including details of the HAZMAT identified, the results of ACM risk assessments and associated photographs, are provided in the HAZMAT Register (the Register) in Appendix B.

Laboratory certificate(s) of analysis are provided in Appendix C.

Limited or no access was available to certain areas as outlined in the Register and Section 10 of this report (including Table 5).

## 5. Site description and proposed development

The Site is located at 1 Crescent Street, Holroyd (refer Drawing 1) and covers an area of approximately 37,877 m<sup>2</sup>. For the purpose of this HAZMAT survey the following areas are identified:

- Building footprints, i.e. residual above-ground building foundations, underside of concrete slab (where exposed) and remnant structures; and
- Streetlights.

Based on provided Woods Bagot drawings the proposed development is understood to comprise the construction of seven residential buildings (up to 38 storeys), separate townhouses along the Crescent Street frontage, above ground car parking, with mixed commercial usages in the eastern half of the site. Open space areas are proposed around the structures, including peripheral landscaping and a new park area in the north of the site adjoining A'Becketts Creek., and linkages to Holroyd Sportsground (north).

Removal of all existing slabs and remnant structures may be required for the development works, subject to site remediation, civil and landscaping requirements.

## 6. Regulatory framework

In NSW, occupational health and safety is regulated under the *NSW Work Health and Safety Act 2011* (WHS Act) and the *NSW Work Health and Safety Regulation 2017* (WHS Regulation). The WHS Act and WHS Regulation place a broad range of responsibilities on key stakeholders to promote and secure the safety and health of persons in the workplace. The WHS Regulation also outlines specific requirements pertaining to the identification, assessment and control of asbestos and other hazardous materials in the workplace.

In addition to the WHS Act and WHS Regulation there are a range of Codes of Practice, Guidance Notes, Australian Standards and other guidelines relating to the management of HAZMAT in the workplace including their removal and disposal. These include (as updated / replaced from time to time):

- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace (2022)*;
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos (2022)*;

- National Occupational Health and Safety Commission (NOHSC) *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2<sup>nd</sup> Edition* [NOHSC:3003(2005)];
- AS/NZS 4361.2 – 2017, *Guide to hazardous paint management, Part 2 – Lead paint in residential, public and commercial buildings*;
- SafeWork NSW *Safe management of synthetic mineral fibres (SMF) – glasswool and rockwool* (information guide);
- Safe Work Australia *Guide to Handling Refractory Ceramic Fibres*, December 2013;
- NSW EPA *Polychlorinated Biphenyl (PCB) Chemical Control Order*, 1997;
- Environment Protection and Heritage Council *Polychlorinated Biphenyls Management Plan, Revised Edition*, April 2003;
- NSW *Protection of the Environment Operations (Waste) Regulation 2014*; and
- NSW Environment Protection Authority (EPA) *Waste Classification Guidelines, Part 1: Classifying Waste*, November 2014 (EPA, 2014).

## 7. Method

The survey conducted by Douglas comprised a non-destructive, non-intrusive, walkthrough visual inspection supplemented by a limited program of testing and sample analysis. The testing and sample analysis regimes comprise a screening assessment only and are not designed to delineate the extent of HAZMAT or hazard areas.

Samples of suspected ACM were collected by Douglas using hand tools (e.g., knife or pliers) and analysed for asbestos by a National Association of Testing Authorities (NATA) accredited laboratory. Sample size and locations are typically limited to minimise disturbance of the material and potential functional or aesthetic impacts. The samples were analysed by polarised light microscopy (PLM) with dispersion staining in accordance with AS 4964-2004 *Method for the qualitative identification of asbestos in bulk samples*.

Paints were screened for lead using 3M™ LeadCheck™ colourimetric swabs which provide an indication of the presence of lead. Bulk samples of paint were also analysed for lead (% w / w) by a NATA accredited laboratory. Analysis was by Inductively Coupled Plasma - Atomic Emission Spectrometry / Mass Spectrometry and / or Cold Vapour / Atomic Absorption Spectrometry. Analysis results typically reflect the average lead content of the overall paint system at the location sampled.

SMF insulation was identified primarily by visual inspection or incidentally as a result of laboratory analysis for asbestos.

Where applicable, fluorescent light fittings were visually inspected and an assessment of PCB content made based on apparent age and / or start type (i.e. resonant vs. instant start). Light fittings were not dismantled to confirm capacitor or ballast details.

Limitations apply to the method(s) adopted and, as such, Douglas cannot guarantee that all HAZMAT or issues of concern have been identified.

## 8. Asbestos risk assessment

ACM poses a health risk if asbestos fibres are released to the atmosphere and inhaled. There is also a risk of environmental contamination whenever asbestos is disturbed. The degree of risk associated with any given ACM depends on a range of factors such as the friability, extent, condition, and location / accessibility of the material, the asbestos mineral type(s) present, the nature of site activities and ventilation.

The asbestos risk assessment method employed by Douglas considers several key factors that influence risk and a numerical score is assigned to each (refer Table 3 below). These scores are then added together to determine an overall risk rating for the ACM (refer Table 4 below). A degree of professional judgement may be applied when determining the final risk scores and rating since, for example, it is not practicable to include in Table 3 all risk factors that may be relevant to a given situation.

Risk assessments for ACM should be reviewed on a regular basis including when:

- The Asbestos Management Plan is reviewed;
- Further asbestos or ACM is identified at the workplace;
- Asbestos is removed, disturbed, sealed, enclosed or undergoes any other change in condition;
- There is evidence that the risk assessment is no longer valid;
- There is evidence that control methods are not effective; or
- A significant change is proposed for the workplace or for work practices or procedures relevant to the risk assessment.

An asbestos risk assessment review is to be conducted at least every five (5) years. The review is to be performed by a Competent Person.

**Table 3: Key risk factors**

Risk factor	Score	Description
<b>Friability</b>	0	Non-friable (fibre reinforced vinyls, bituminous materials, adhesives).
	1	Non-Friable (fibre reinforced cement products such as wall and roof sheeting).
	2	Semi-Friable (low density insulation board, millboard, ropes, paper, textiles, gaskets or highly weathered asbestos cement).
	3	Friable (thermal insulation to pipes / boilers, sprayed insulation, loose fill insulation).
<b>Condition</b>	0	Very Good. Very little or no visible indication of damage. Structurally sound. No significant repairs required. Material performs as intended.
	1	Good – Minor damage in small, localised areas. Structurally sound. Minor preventative action may be required as a precaution and / or to prolong material life. Material generally performs as intended.
	2	Fair. Localised damage in various areas. Material is generally structurally sound however local removal and replacement of damaged sections may be required. Material performance may be somewhat impaired in areas.

Risk factor	Score	Description
	3	Poor. Material exhibits significant damage throughout. Overall structural stability may be compromised. Material performance is significantly impaired.
<b>Treatment</b>	0	Fully enclosed, encapsulated or sealed. ACM is entirely contained, and the enclosure / encapsulation / sealing material is in good condition.
	1	Generally enclosed, encapsulated or sealed. ACM is generally contained however enclosure / encapsulation / sealing material may not be completely continuous or exhibits minor damage / penetrations.
	2	Partially enclosed, encapsulated or sealed. ACM is contained in area(s) however enclosure / encapsulation / sealing material is not present, significantly damaged or ineffective in area(s).
	3	Enclosure / encapsulation / sealing material is significantly damaged and / or generally ineffective or there is no treatment.
<b>Accessibility</b>	0	The ACM is not directly accessible to occupants. Contact is highly unlikely unless a significant, dedicated effort is made. Substantial demolition, dismantling and / or special access equipment would be required.
	1	The ACM is generally not accessible to occupants. Contact is unlikely but could be made with special tools or equipment (e.g. elevating work platform) or minor demolition / dismantling.
	2	Some portion(s) of ACM are accessible to occupants. Direct contact may occur periodically but often requires basic tools / equipment (e.g. step ladder).
	3	The majority of the ACM is accessible to occupants. Direct contact is a common occurrence and may be made with minimal effort or unintentionally.
<b>Activity</b>	0	Area generally not occupied. Normally very little or no activity. Activities may be highly restricted, or the area secured. Examples may include subfloor voids, ceiling cavities, confined spaces and other inaccessible areas.
	1	Low level occupancy. Some activity in parts or area only occupied periodically. Examples may include plant rooms and storerooms.
	2	Moderate level occupancy. Activity normally present throughout area. May include offices, laboratories, classrooms, workshops, and warehouses.
	3	High level occupancy. Generally high levels of activity. Activities may be wide-ranging and / or largely unrestricted. Examples may include production/manufacturing areas, construction sites and public areas / thoroughfares.
<b>Ventilation</b>	0	Exterior area where natural ventilation and associated dilution is largely unlimited. Significant retention and / or build-up of airborne contaminants is unlikely.
	1	Interior area. Natural ventilation and dilution are limited but area is not particularly confined. Limited retention and / or build-up of airborne contaminants is possible.
	2	Confined areas where ventilation and associated dilution is significantly limited. Significant retention and / or build-up of airborne contaminants is possible or likely.
	3	Asbestos material subject to direct ventilation (e.g. inside an AC system or near a fan or air exhaust) which may result in disturbance and / or elevated fibre concentrations in air.

**Table 4: Risk rating**

Overall score	Risk rating	Description
15-18	High (H)	The ACM poses an elevated and typically unacceptable risk of exposure and /or environmental contamination. Controls should generally be implemented as soon as possible to address the risk. Removal of the whole or part of the ACM is typically required. Other controls such as enclosure, encapsulation and /or sealing may also be necessary if portion(s) of ACM are to remain in place. As an interim measure, access to the area should be appropriately restricted. Air monitoring is often recommended to confirm airborne asbestos concentrations and provide a written record for future reference.
10-14	Moderate (M)	The ACM poses a moderate risk of exposure and /or environmental contamination. Often there has been minor damage or there is potential for disturbance /degradation in the foreseeable future. Consideration should be given to implementing appropriate controls in the short to medium term to address the risk(s) and /or prolong the lifespan of the material. Relevant controls typically include enclosure, encapsulation and /or sealing. Extensive removal is generally not required, and the material can generally be managed on site if desired and serving a useful purpose.
0-9	Low (L)	The risk of exposure and environmental contamination is generally low while the material remains undisturbed and in its present condition. The material may generally remain in place without the requirement for significant, material-specific control measures such as removal, enclosure, encapsulation or sealing.

**Note:** If the ACM is likely to be disturbed (e.g. by maintenance, refurbishment, or demolition work) and /or is no longer serving a useful purpose then the ACM should generally be removed. All ACM should be clearly identified with a label / signage where reasonably practicable.

## 9. Results

### 9.1 General

The overall results of the assessment are summarised in Table 1 in the Executive Summary of this report. Further details of the HAZMAT identified at the site, including the results of asbestos risk assessments, are provided in the Register in Appendix B. These results are indicative only since the scope of work excluded destructive / intrusive investigations.

Limited or no access was available to certain areas as outlined below (including Table 4) and in the Register in Appendices B.

**Table 5: Access limitations\***

Location / area	Access type	Reason(s)
Building slabs	Limited to nil	Opportunistic access (visual only) limited to existing penetrations through building slabs.
Areas / materials at height (e.g. upper streetlights)	Limited	Access limited to safely accessible areas and use of 1.8 m multi-fold ladder. Works at height and use of specialised access equipment were not included in the scope of this assessment.
Confined spaces (e.g. interior of pits) and crawl spaces	Nil	Access to confined spaces and crawl spaces was outside the scope of this assessment.
Fluorescent light fittings, internal components	Limited	Access was limited due to electrical hazard and / or height etc. Light poles / fittings were not dismantled.
Other potentially energised plant, equipment and services (e.g. electrical panels, light fittings).	Nil	Access was outside the scope of this assessment. and requires certified isolation, de-energisation and lock-out confirmed on-site by a qualified / licensed technician or similar.
Subsurface areas including building footings and contamination in soil / fill / mulch	Nil	Not included in the scope of this assessment.

\* Refer also to the Registers (Appendix B).

## 10. Recommendations

A summary note and / or recommendation for each HAZMAT identified or suspected present in the remnant structures at the Site is provided in the Register (Appendix B). The general recommendations in Section 11.1 onwards are provided for informative purposes and should be considered where the relevant HAZMAT has been identified or suspected present by Douglas or is subsequently suspected present based on reasonable grounds.

Any inaccessible areas should generally be suspected to contain HAZMAT until confirmed otherwise by a Competent Person.

The presence of identified and suspected HAZMAT in the building footprint at the site, and the potential presence of any as-yet undetected HAZMAT, should be considered during the risk assessment for any proposed work at the Site or Site use. In particular, where HAZMAT are identified / suspected present in one particular area / material they may also be present in other similar area / materials.

A HAZMAT management plan, and scope of work specification for any planned abatement, should be developed to aid compliance with the requirements of the WHS Act and Regulation including those that relate to the identification of hazards and control of associated risks.

HAZMAT abatement work should be appropriately monitored and /or audited to help ensure quality and compliance.

A destructive /intrusive HAZMAT survey of all areas is warranted and recommended prior to substantive demolition, refurbishment, maintenance, and similar work but can normally only be undertaken with assistance of appropriate tools to access the inaccessible areas.

## 10.1 General

HAZMAT should be:

- Managed in accordance with the requirements of the WHS Act, WHS Regulation and subordinate Codes of Practice, Australian Standards, and guidelines;
- Visually inspected on a regular basis. Any change to the condition of the material or relevant site conditions should be reported; and
- Removed prior to any significant disturbance such as maintenance, refurbishment, and demolition work.

A HAZMAT management plan, and scope of work specification for any planned abatement, should be developed to aid compliance with the requirements of the WHS Act and Regulation including those that relate to the identification of hazards and control of associated risks.

HAZMAT abatement work should be appropriately monitored and /or audited to help ensure quality and compliance.

An appropriate level of stakeholder consultation and communication should be undertaken at all times to help ensure that all relevant operational and project risks associated with HAZMAT are adequately controlled.

The scope, fees, and terms / conditions applicable to any HAZMAT work, including abatement, should be carefully assessed by a suitably qualified, experienced, and competent person to help ensure that associated costs remain within reasonable limits. Such assessment should include consideration of the fees that may apply to the management and control of any unexpected or additional finds.

Prior to any work involving HAZMAT a risk assessment should be conducted and Safe Work Method Statement (SWMS) developed. The SWMS should outline the controls necessary to ensure that the risks of exposure and environmental contamination are adequately controlled.

HAZMAT remediation and removal work should be undertaken in controlled conditions.

HAZMAT remediation /removal and demolition work should be undertaken and closely supervised by personnel trained and experienced to identify additional HAZMAT, should they be encountered, so as to preclude the risks of exposure and cross-contamination (e.g. of waste streams).

Waste should be assessed and classified for disposal in accordance with relevant legislation and EPA (2014).

At the completion of HAZMAT abatement and / or removal work a clearance inspection should be conducted by a Competent Person, or in the case of friable asbestos, by a Licensed Asbestos Assessor.

## 10.2 **Asbestos-containing material (ACM)**

Asbestos and ACM must be managed in accordance with the WHS Regulation, the SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace and the SafeWork NSW Code of Practice: How to Safely Remove Asbestos.

Exposure to airborne asbestos in the workplace must be eliminated to the extent reasonably practicable. If it is not reasonably practicable to eliminate exposure, it must be minimised to the extent reasonably practicable.

An Asbestos Management Plan must be developed to enable compliance with the WHS Regulation (Clause 429).

The presence and location of asbestos or ACM identified at a workplace must be clearly indicated by a label if it is reasonably practicable to do so.

Warning labels and signs should be consistent with the examples provided in the SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace and comply with AS 1319 Safety Signs for the Occupational Environment.

Non-friable ACM that are structurally intact and in good to fair condition may typically remain in place provided that they are not significantly disturbed.

Tools and equipment that generate dust must generally not be used on asbestos or ACM. These include high-speed abrasive power and pneumatic tools (e.g. angle grinders, sanders, saws and high-speed drills, brooms, and brushes).

Tools and equipment that cause the release of asbestos, including power tools and brooms, may only be used on asbestos if the equipment is enclosed and / or designed to capture or suppress asbestos fibers and / or the equipment is used in a way that is designed to capture or suppress asbestos fibers safely. In such a case, other controls including PPE may also be required based upon the results of a pre-work risk assessment and the SWMS adopted.

The use of high-pressure water spray and compressed air on asbestos or ACM is specifically prohibited under the WHS Regulation.

If ACM become damaged, they should be repaired or removed and replaced with an alternative, non-asbestos building product as soon as possible.

The scope of asbestos removal work should be outlined in a technical specification (i.e. Scope of Work Report) developed by a Competent Person (in the case of non-friable asbestos) or a Licensed Asbestos Assessor (in the case of friable asbestos).

Removal of friable asbestos must only be undertaken by a Class A licensed asbestos removalist. Removal of 10 m<sup>2</sup> or more of non-friable asbestos must only be undertaken by a Class A or Class B licensed asbestos removalist.

Air monitoring, including background, control, and clearance monitoring, is a mandatory requirement during removal of friable asbestos. Air monitoring should also be considered during removal of non-friable asbestos particularly where sensitive receptors exist such as at schools, hospitals, in public areas and at similar sites.

Air monitoring must be undertaken in accordance with the National Occupational Health and Safety Commission (NOHSC) Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition [NOHSC:3003(2005)].

All air monitoring samples must be analysed by a NATA accredited laboratory that holds accreditation for the required analysis.

At the completion of licensed asbestos removal work, a clearance inspection must be conducted by a Competent Person (for non-friable asbestos removal) or a Licensed Asbestos Assessor (for friable asbestos removal).

Air monitoring and clearance inspections must be performed by person/s independent of the licensed asbestos removalist.

All waste should be classified for disposal in accordance with relevant legislation and EPA (2014). Asbestos waste is preclassified as Special Waste under EPA (2014).

Asbestos transporters and facilities receiving asbestos waste must report the movement of asbestos waste to the EPA. Entities involved with the transport or disposal of asbestos waste in NSW, or arranging the transport of asbestos waste in NSW, must use the EPA's applicable online tool (WasteLocate / Integrated Waste Tracking Solution).

All asbestos waste must be disposed at a waste collection facility licensed to receive asbestos waste. All disposal receipts should be retained.

A person who relinquishes management or control of the workplace must ensure that the asbestos register is given to the person, if any, assuming management or control of the workplace.

### 10.3 **Lead paint**

The potential presence of lead paint(s) should be considered during the risk assessment for any proposed works. Additionally, targeted sampling and analysis for lead paints should also be considered prior to any work that may result in significant disturbance of paint system(s).

Lead paints should be managed in accordance with the WHS Regulation (including Chapter 7, Part 7.2 Lead) and:

- AS/NZS 4361.1, Guide to hazardous paint management, Part 1 - Lead and other hazardous metallic pigments in industrial applications; and
- AS/NZS 4361.2, Guide to hazardous paint management, Part 2 - Lead paint in residential, public and commercial buildings.

Generally, when one or more tests from a building or portion of a building indicate that lead is present, the paint should be treated as lead paint. Further, a project should not be classified as free of lead unless all samples within the relevant area / building are proven to be free of lead and the sampling is comprehensive.

Lead paint that is in sound condition, not directly accessible (e.g. over-painted with lead-free paint) and unlikely to be disturbed may not require any immediate action.

Area(s) of lead paint that are in poor condition (e.g. flaking, delaminating) should generally be removed along with any lead paint debris and associated dust.

Exposed area(s) of lead paint that are intact may be stabilised by over-painting with a lead-free paint, or by covering with a suitable encapsulant. Stabilisation can provide an interim to long-term solution to a lead paint hazard.

The lead paint removal method and control measures adopted should be determined by risk assessment and a detailed knowledge of the workplace and proposed use / activities.

Exposure to airborne lead must be maintained below the relevant SWA exposure standards pertaining to lead. The SWA 8-hour Time Weighted Average (TWA) exposure standard for lead (inorganic dusts and fumes) is 0.05 mg/m<sup>3</sup>. Other exposure standards apply for substances such as lead chromate.

Air monitoring for lead may be required during lead paint remediation works based on risk assessment and the requirements to maintain airborne lead levels below the abovementioned exposure standards.

At the completion of lead paint removal, a clearance inspection should be conducted by a Competent Person. The Competent Person should determine the requirements for clearance including any air monitoring or sample analysis that may be required.

Lead paint waste should be assessed and classified for disposal in accordance with relevant legislation and EPA (2014).

Based on previous correspondence with the NSW EPA, Douglas understands that EPA (2014) does not consider AS/NZS 4361.1 or AS/NZS 4361.2, including the definition of lead paint therein, for waste classification assessment. As such:

- These standards have no bearing on how waste is classified in NSW; and
- Waste classification should be carefully considered and an appropriate degree of liaison with the NSW EPA may be required to help ensure correct waste classification.

All disposal receipts should be retained.

#### 10.4 **Synthetic mineral fibre (SMF)**

SMF insulation materials may generally remain in place providing that they are in good condition and unlikely to be disturbed.

To reduce the potential for disturbance, exposure, and environmental contamination SMF insulation materials may be isolated, enclosed or encapsulated. Higher risk materials, such as loose fill insulation, may also be removed and replaced if necessary.

SMF work is to be undertaken in accordance with the requirements of the WHS Regulation and subordinate Codes of Practice, Guidance Notes, and other documents. These include:

- SafeWork NSW Safe management of synthetic mineral fibres (SMF) - glasswool and rockwool (information guide);
- Safe Work Australia Guide to Handling Refractory Ceramic Fibres, December 2013; and
- Guidance Note on the Membrane Filter Method for the Estimation of Airborne Synthetic Mineral Fibres [NOHSC:3006(1989)].

Reference should also be made to the Australian Institute of Occupational Hygienists (AIOH) *Synthetic Mineral Fibres (SMF) And Occupational Health Issues, Position Paper* for guidance and information.

Where reasonable concern exists over possible respirable fibre concentrations in any application, the first step is often to confirm that the work practices, as recommended for the particular product, are being followed. Air monitoring may not be required when it has been clearly established that appropriate work practices are being carried out.

Notwithstanding the above, exposures to airborne SMF should not exceed the relevant Safe Work Australia (SWA) exposure standards outlined in Table 6 below.

**Table 6: SWA exposure standards for SMF**

Standard name	Time weighted average (TWA) exposure standard
Glass wool, rock (stone) wool, slag wool and continuous glass filament and low biopersistence Man Made Vitreous Fibres (MMVF)	2 mg/m <sup>3</sup> (inhalable dust)
Refractory ceramic fibres , special purpose glass fibres and high biopersistence MMVF	0.5 f/mL (respirable) 2 mg/m <sup>3</sup> (inhalable dust)

SMF waste should be disposed at a licensed waste collection facility. Note that synthetic fibre waste (from materials such as fibreglass, polyesters, and other plastics) packaged securely to prevent dust emissions is pre-classified as General Solid Waste (non-putrescible) under EPA (2014).

All disposal receipts should be retained.

### 10.5 Polychlorinated biphenyls (PCBs)

Prior to any significant disturbance, such as demolition, refurbishment or maintenance works, fluorescent light fittings should be electrically isolated and inspected in detail for components (e.g. metal canister-type capacitors and ballasts etc.) that may contain PCB's. Any components containing, or suspected to contain, PCB should be removed by a Competent Person.

Where PCB containing components have been identified / suspected present in a building they may also be present in other similar areas of the same building or in buildings of similar age / construction.

PCB-containing components should be managed in accordance with the general requirements of the WHS Regulation and relevant environmental laws and guidelines including:

- NSW Protection of the Environment Operations (POEO) Act 1997 and subordinate Polychlorinated Biphenyl (PCB) Chemical Control Order 1997; and
- Polychlorinated Biphenyls Management Plan, Revised Edition, April 2003, issued by the Environment Protection and Heritage Council (EPHC).

Any PCB-containing components that exhibit leakage should be removed and replaced by a Competent Person as soon as possible. Access to areas containing leaking components should be suitably restricted.

The conveyance and disposal of PCB material and PCB waste must be undertaken in accordance with the requirements outlined in the *Polychlorinated Biphenyl (PCB) Chemical Control Order 1997*. All disposal receipts should be retained.

## 11. Limitations

Douglas has prepared this HAZMAT report for Tiberius (Holroyd) Pty Ltd as described herein in accordance with Douglas' proposal reference 84770.05.P.003 accepted on the 14 October 2024.

This report is provided for the exclusive use of the Tiberius (Holroyd) Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Douglas, does so entirely at its own risk and without recourse to Douglas for any loss or damage. In preparing this report Douglas has necessarily relied upon information provided by the client and / or their agents.

The results provided in the report are indicative of the conditions on the Site only at the specific inspection, sampling and testing locations, and then only to the extent practicable and safely accessible at the time the work was carried out. Site conditions may change after Douglas' field inspection, sampling and testing has been completed.

Douglas' advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by Douglas in this report may be affected by undetected variations in site conditions across the Site between and beyond the inspection, sampling and / or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. Douglas cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by Douglas. This is because this report has been written as advice and opinion rather than instructions for construction.

Although the inspection, sampling and testing plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the Site that have not been inspected, sampled and / or tested. This is either due to undetected variations in conditions or to budget constraints (as discussed above), or to parts of the Site being inaccessible or unavailable, or to occupants, furnishings or stored items preventing access. It is therefore considered possible that HAZMAT, including asbestos, may be present in unobserved or untested parts of the Site, between and beyond the inspection, sampling and testing locations, and hence no warranty can be given that all HAZMAT have been identified.

Inspections are limited to areas that are safely accessible at the time of the inspection without undue damage to building finishes or disturbance of occupants. Inspections exclude hidden and inaccessible locations such as within building cavities, voids and enclosed sections of risers / shafts as well as materials encased within the building structure or located below the exposed ground surface (e.g. pipes, drains and formwork). In addition, residual asbestos materials (e.g. asbestos lagging to pipes and vessels) may remain undiscovered below newer, asbestos-free materials (e.g. preformed SMF insulation). Such residual asbestos materials may not be identified without extensive intrusive investigation and / or dismantling / demolition work if at all.

Any disturbance of building materials, such as during refurbishment, maintenance or demolition work, may reveal additional HAZMAT.

Limitations apply to the laboratory analytical methods used. For example, it can be very difficult or impossible to detect the presence of asbestos in some bulk materials (e.g. vinyl tiles) using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the small length or diameter of asbestos fibres present in the material or attributed to the fact that very fine fibres have been dispersed individually throughout the material.

While work is undertaken in a professional manner the nature of HAZMAT and the limitations of the method(s) used mean that we cannot guarantee that all HAZMAT or issues of concern have been identified. This report should therefore not be considered a definitive account of all HAZMAT that may be present at the Site.

Douglas personnel are not experienced, licenced or accredited quantity surveyors. Any quantities quoted in this report are initial, unmeasured estimates provided for rudimentary guidance only and should not be relied upon. The services of a licenced quantity surveyor should be engaged in order to determine reliable quantities.

The recommendations and conclusions contained in this report shall not abrogate a person of their responsibility to work in accordance with statutory requirements, codes of practice, standards, guidelines, safety data sheets, work instructions or industry best practice.

The assessment of atypical safety hazards arising from this advice is restricted to the environmental components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

---

## **Appendix A**

About this Report and Drawings

## Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

## Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

## Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

## Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at

the time of construction as are indicated in the report; and

- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

## Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

continued next page

## About this Report

### Site Anomalies

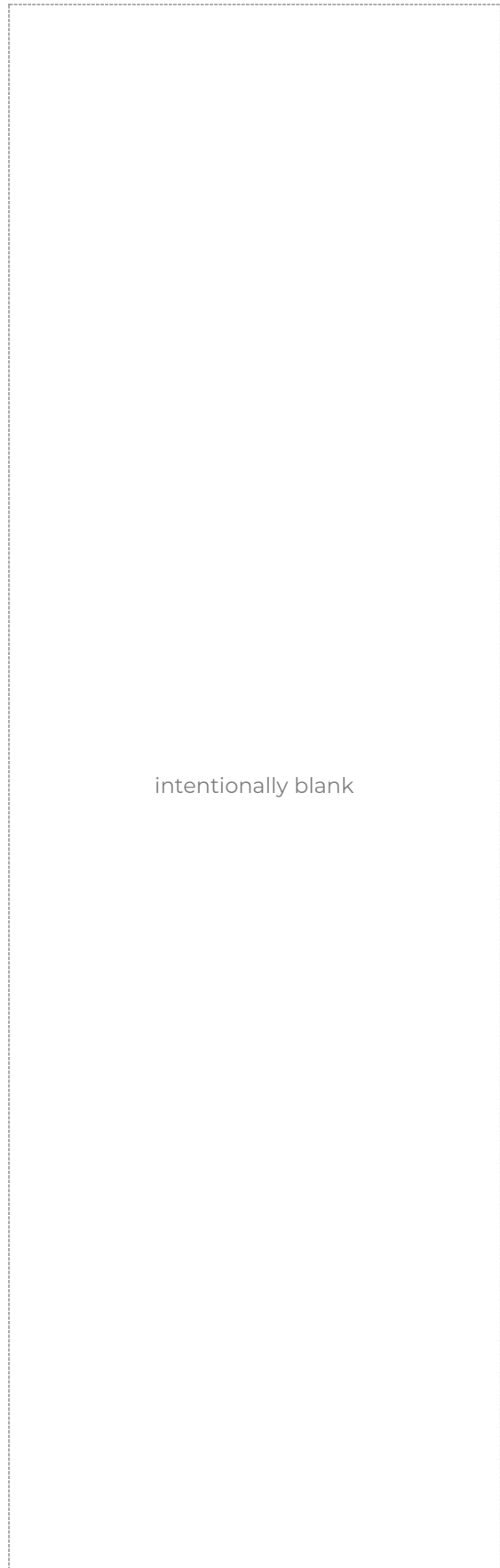
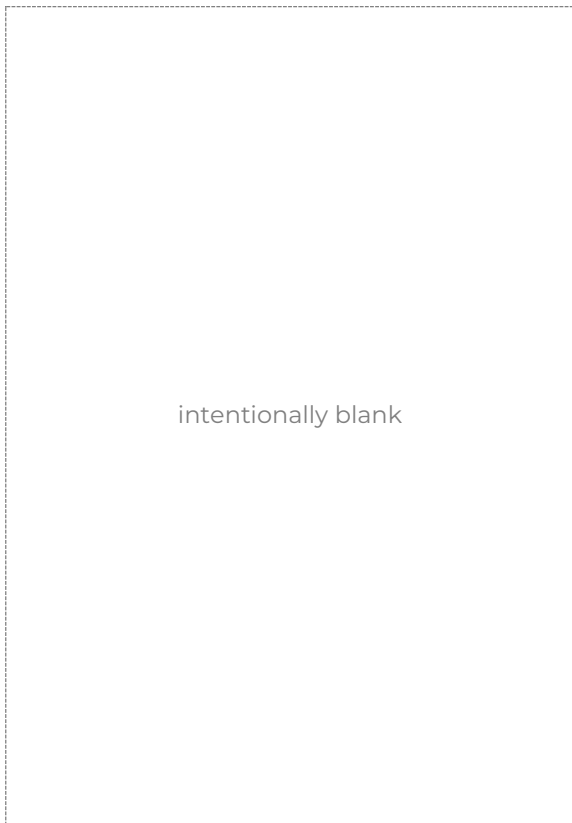
In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

### Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

### Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.








SITE LOCATION

LEGEND

Approximate Sample Locations

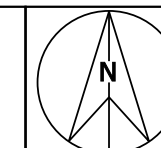
-  Asbestos sample
-  Lead paint sample
-  Site Boundary

0 10 20 30 40 50 m



CLIENT: Tiberius (Holroyd) Pty Ltd	
OFFICE: Sydney	DRAWN BY: HT
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE: **HAZMAT approximate sample locations**  
**Proposed Crescent Parklands**  
**1 The Crescent, Holroyd, NSW**



PROJECT:	84770.05
DRAWING No:	1
REVISION:	0

---

## **Appendix B**

HAZMAT Register and Plates

RESULTS - ASBESTOS

Item	Area	Material Location	Material Type	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Comment/Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
Loose debris	eastern parking	surface	fibrous debris	A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	N/A	No asbestos identified.
Floor linoleum	eastern area	surface	linoleum fragment	A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	N/A	No asbestos identified.
Electrical panel	adjacent southern street light 2	electrical backing board	fibre cement	A03	<b>asbestos detected by analysis</b>	0	0	1	1	0	0	2	low	1	Remove asbestos material prior to any disturbance and prior to general demolition work proceeding. Removal should be undertaken by a licensed asbestos removalist.
Concrete joints	building footprint / northern area	jointing	black mastic	A04	<b>asbestos detected by analysis</b>	1	2	1	2	1	0	7	low	2	Remove asbestos material prior to any disturbance and prior to general demolition work proceeding. Removal should be undertaken by a licensed asbestos removalist.
Concrete joints	building footprint / north-eastern area	jointing	grey mastic	A05	<b>asbestos detected by analysis</b>	1	2	1	2	1	0	7	low	3	Remove asbestos material prior to any disturbance and prior to general demolition work proceeding. Removal should be undertaken by a licensed asbestos removalist.
Concrete joints	building footprint / north-eastern area	jointing	black mastic	A06	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	N/A	No asbestos identified.
Floor Linoleum	building footprint / north-eastern area	surface	linoleum 1	A07	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	4	No asbestos identified.
Floor Linoleum	building footprint / north-eastern area	surface	linoleum 2	A08	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	5	No asbestos identified.
Loose debris	southern area	surface	fibrous debris	A09	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	N/A	No asbestos identified.
Underside of accessible exposed slab	building footprint / central area	exposed surface	n/a	n/a	no asbestos visually detected	N/A	N/A	N/A	N/A	N/A	N/A	NIL	N/A	N/A	No asbestos identified.
Concrete joints generally	throughout building footprint	jointing generally	mastic generally	refer to A04 and A05	<b>suspected asbestos</b>	1	2	1	2	1	0	7	low	N/A	Jointing material suspected to be asbestos as a precaution. Remove all jointing material prior to general demolition work proceeding. Removal should be undertaken by a licensed asbestos removalist

RESULTS - LEAD PAINT SCREENING ASSESSMENT

						Analytical Results			
Item	Area	Material Location	Material Type	Sample / Test No.	Spot Test Result	Analyte	% w/w	Photo No.	Summary Comment/Recommendation
Bollard	north-eastern area	bollard surface	paint	LP01	n/a	lead	<0.008	n/a	Analysis results non-detect and/or below the threshold concentration criteria for lead paint outlined in AS4361.2. Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines and segregate material, if required, for disposal. Minimise disturbance and implement controls to prevent exposure and dispersal during any paint disturbance or building work (e.g. maintenance, refurbishment and demolition)
Ground surface	adjacent former service pits	ground surface	paint	LP02	n/a	lead	<0.005	n/a	Analysis results non-detect and/or below the threshold concentration criteria for lead paint outlined in AS4361.2. Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines and segregate material, if required, for disposal. Minimise disturbance and implement controls to prevent exposure and dispersal during any paint disturbance or building work (e.g. maintenance, refurbishment and demolition)
Fence	western area	fence surface	paint	LP03	n/a	lead	<0.005	n/a	Analysis results non-detect and/or below the threshold concentration criteria for lead paint outlined in AS4361.2. Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines and segregate material, if required, for disposal. Minimise disturbance and implement controls to prevent exposure and dispersal during any paint disturbance or building work (e.g. maintenance, refurbishment and demolition)



DP Project No: 84770.05

HAZMAT Survey

1 The Crescent, Holroyd

**RESULTS - SYNTHETIC MINERAL FIBRE (SMF)**

Item	Area	Material Location	Material Type	Sample No.	Material Status	Photo No.	Summary Comment/Recommendation
Area in general	surface in general	n/a	n/a	n/a	n/a	n/a	No SMF insulation material found present during inspection.



DP Project No: 84770.05

HAZMAT Survey

1 The Crescent, Holroyd

**RESULTS - POLYCHLORINATED BIPHENYLS (PCBs)**

Item	Area	Material Location	Material Type	Sample No.	Material Status	Photo No.	Summary Comment/Recommendation
Southern street lights	along southern boundary fence	internal components	capacitors / ballasts	n/a	<b>PCB (suspected)</b>	6	Inaccessible area/material. Internal components suspected to contain PCB as a precaution. Confirm presence/absence of PCB by further inspection and/or sampling and analysis when safe access is available and prior to any disturbance.
Northern street lights	along northern boundary fence	internal components	capacitors / ballasts	n/a	<b>PCB (suspected)</b>	7	Inaccessible area/material. Internal components suspected to contain PCB as a precaution. Confirm presence/absence of PCB by further inspection and/or sampling and analysis when safe access is available and prior to any disturbance.



Photo 1: Electrical panel electrical backing board, fibrous cement, asbestos detected by analysis.



Photo 2: Concrete joints, northern area, jointing, black mastic, asbestos detected by analysis.


	<b>Site Photographs</b>		PROJECT:	84770.05
	<b>Proposed Crescent Parklands</b>		PLATE No:	1
	<b>1 The Crescent, Holroyd, NSW</b>		REV:	0
	CLIENT	Tiberius (Holroyd) Pty Ltd		



Photo 3: Concrete joints, north-eastern area, jointing, grey mastic, asbestos detected by analysis.



Photo 4: Floor Linoleum, building footprint / north-eastern area, surface, linoleum 1, no asbestos detected by analysis.


	<b>Site Photographs</b>		PROJECT:	84770.05
	<b>Proposed Crescent Parklands</b>		PLATE No:	2
	<b>1 The Crescent, Holroyd, NSW</b>		REV:	0
	CLIENT	Tiberius (Holroyd) Pty Ltd		



Photo 5: Floor Linoleum, building footprint / north-eastern area, surface, linoleum 2, no asbestos detected by analysis.



Photo 6: Southern street lights, along northern boundary fence, internal components (e.g. capacitors, ballasts) PCB (suspected).

	<b>Site Photographs</b>		PROJECT:	84770.05
	<b>Proposed Crescent Parklands</b>		PLATE No:	3
	<b>1 The Crescent, Holroyd, NSW</b>		REV:	0
	CLIENT	Tiberius (Holroyd) Pty Ltd		



**Photo 7: Northern street lights, along northern boundary fence, internal components (e.g. capacitors, ballasts), PCB (suspected).**



**Site Photographs**

**Proposed Crescent Parklands**

**1 The Crescent, Holroyd, NSW**

CLIENT

PROJECT: 84770.05

PLATE No: 4

REV: 0

Tiberius (Holroyd) Pty Ltd

---

## **Appendix C**

Laboratory Report



Envirolab Services Pty Ltd

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

## **CERTIFICATE OF ANALYSIS 364479**

### **Client Details**

<b>Client</b>	Douglas Partners Pty Ltd
<b>Attention</b>	Joel Hall
<b>Address</b>	96 Hermitage Rd, West Ryde, NSW, 2114

### **Sample Details**

<b>Your Reference</b>	<b>84770.05, Holroyd</b>
<b>Number of Samples</b>	9 Material, 3 Paint
<b>Date samples received</b>	22/10/2024
<b>Date completed instructions received</b>	22/10/2024

### **Analysis Details**

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

**Please refer to the last page of this report for any comments relating to the results.**

### **Report Details**

**Date results requested by** 29/10/2024

**Date of Issue** 24/10/2024

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with \***

#### **Asbestos Approved By**

Analysed by Asbestos Approved Analyst: Stuart Chen

Authorised by Asbestos Approved Signatory: Nyovan Moonean

#### **Results Approved By**

Giovanni Agosti, Group Technical Manager

Stuart Chen, Asbestos Approved Identifier/Report coordinator

#### **Authorised By**

Nancy Zhang, Laboratory Manager

Asbestos ID - materials						
Our Reference		364479-1	364479-2	364479-3	364479-4	364479-5
Your Reference	UNITS	A01	A02	A03	A04	A05
Date Sampled		21/10/2024	21/10/2024	21/10/2024	21/10/2024	21/10/2024
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	23/10/2024	23/10/2024	23/10/2024	23/10/2024	23/10/2024
Mass / Dimension of Sample	-	82x51x3mm	109x39x2mm	5x4x1mm	16x13x4mm	21x17x8mm
Sample Description	-	White vinyl sheet	Grey vinyl tile & adhesive	Brown putty	Black bituminous material	Grey mastic
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected
		Synthetic mineral fibres detected	Synthetic mineral fibres detected		Amosite asbestos detected	Amosite asbestos detected
		Organic fibres detected			Organic fibres detected	
Trace Analysis	-	No asbestos detected	No asbestos detected	[NT]	[NT]	[NT]

Asbestos ID - materials					
Our Reference		364479-6	364479-7	364479-8	364479-9
Your Reference	UNITS	A06	A07	A08	A09
Date Sampled		21/10/2024	21/10/2024	21/10/2024	21/10/2024
Type of sample		Material	Material	Material	Material
Date analysed	-	23/10/2024	23/10/2024	23/10/2024	23/10/2024
Mass / Dimension of Sample	-	31x16x3mm	95x88x2mm	133x92x2mm	91x49x8mm
Sample Description	-	Grey putty & debris	Grey vinyl tile & adhesive	Grey vinyl tile & adhesive	Beige fibre cement material
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Lead in Paint				
Our Reference		364479-10	364479-11	364479-12
Your Reference	UNITS	LP01	LP02	LP03
Date Sampled		21/10/2024	21/10/2024	21/10/2024
Type of sample		Paint	Paint	Paint
Date prepared	-	23/10/2024	23/10/2024	23/10/2024
Date analysed	-	23/10/2024	23/10/2024	23/10/2024
Lead in paint	%w/w	<0.008	<0.005	<0.005

Method ID	Methodology Summary
<b>ASB-001</b>	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
<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: 84770.05, Holroyd

QUALITY CONTROL: Lead in Paint				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			23/10/2024	[NT]	[NT]	[NT]	[NT]	23/10/2024	[NT]
Date analysed	-			23/10/2024	[NT]	[NT]	[NT]	[NT]	23/10/2024	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	[NT]	[NT]	[NT]	[NT]	103	[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.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

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

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

## Report Comments

Note, even after disintegration, it can be difficult to detect the presence of asbestos in some asbestos containing bulk materials using PLM and dispersion staining. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.


### Acid Extractable Metals in Paint:

- Minimal sample was supplied for sample/s #10 (<0.01g).
- The PQL has been raised due to the limited amount of sample/s available for testing.

<b>Project No:</b> 84770.05	<b>Suburb:</b> Holroyd	<b>To:</b> Envirolab Services
<b>Project Manager:</b> Joel James-Hall	<b>Order Number:</b>	12 Ashley St, Chatswood NSW 2067
<b>Email:</b> joel.james-hall@douglaspartners.com.au, Huy.Tran@douglaspartners.com.au, Irha.Riaz@douglaspartners.com.au		<b>Attn:</b> Sample Receipt
<b>Turnaround time:</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 72 hour <input type="checkbox"/> 48 hour <input type="checkbox"/> 24 hour <input type="checkbox"/> Same day		(02) 9910 6200 <a href="mailto:samplereceipt@envirolab.com">samplereceipt@envirolab.com</a>

**Prior Storage:**  Fridge  Freezer  Esky  Shelf **Do samples contain 'potential' HBM?**  No  Yes (if YES, then handle, transport and store in accordance with FPM HAZID)

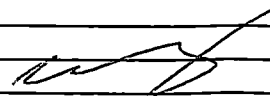
Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes										Notes/ Preservation/ Additional Requirements		
	Location / Other ID	Depth From	Depth To		S - soil W - water M - Material	C - glass P - plastic	Asbestos ID	Lead (w/w%)											
1	A01			21/10/24	M	P	x												Fibrous debris
2	A02			21/10/24	M	P	x												Linoleum fragment
3	A03			21/10/24	M	P	x												electrical backing board
4	A04			21/10/24	M	P	x												northern concrete jointing - black
5	A05			21/10/24	M	P	x												Eastern grey jointing
6	A06			21/10/24	M	P	x												north-eastern black jointing
7	A07			21/10/24	M	P	x												northern linoleum 1
8	A08			21/10/24	M	P	x												northern linoleum 2
9	A09			21/10/24	M	P	x												fibrous cement debris
10	LP01			21/10/24	M	P		x											Job No: 364479 bollard yellow paint
11	LP02			21/10/24	M	P		x											Date Received: 22-10-24 Time Received: 1240 Received By: TTV Temp: Cool/Ambient surface grey paint
12	LP03			21/10/24	M	P		x											Temp: Cool/Ambient Cooling: Ice/Icepack Security: Intact/Broken/None fence yellow paint



Envirolab Services  
12 Ashley St  
Chatswood NSW 2067  
Ph: (02) 9910 6200

Job No: 364479

Date Received: 22-10-24  
Time Received: 1240  
Received By: TTV  
Temp: Cool/Ambient  
Cooling: Ice/Icepack  
Security: Intact/Broken/None

<b>Metals to analyse:</b>		<b>LAB RECEIPT</b>	
<b>Number of samples in container:</b>	<b>Transported to laboratory by:</b>	<b>Lab Ref. No:</b> 364479	
<b>Send results to:</b> Douglas Partners Pty Ltd		<b>Received by:</b> Tony Trish	
<b>Address:</b> 96 Hermitage Road, West Ryde NSW 211	<b>Phone:</b> (02) 9809 0666	<b>Date &amp; Time:</b> 22.10.24 1240	
<b>Relinquished by:</b> HT	<b>Date:</b> 22/10/2024	<b>Signed:</b> 	<b>Signed:</b> TTV