



# **Douglas Partners**

*Geotechnics | Environment | Groundwater*

**Integrated Practical Solutions**

Hazardous Building Materials (HBM) Survey

Proposed Residential Development  
147, 151 and 153 Kurraba Road  
Kurraba Point NSW

Prepared for  
Thirdi Group

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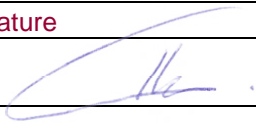
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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

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## Executive Summary

Douglas Partners Pty Ltd (DP) was engaged by Thirdi Group to conduct a Hazardous Building Materials (HBM) survey of 147, 151 and 153 Kurraba Road, Kurraba Point NSW (the Site). The survey, which was undertaken to provide a general indication of the location, extent and condition of HBM prior to demolition, comprised a visual inspection of designated areas and was supplemented by a limited program of sample collection and laboratory analysis.

HBM were identified or assumed present during the survey as indicated in Table 1 below.

**Table 1: Hazardous Building Materials (HBM) Risk Profile**

Building / Area	Non-Friable Asbestos	Friable Asbestos	SMF	Lead Paint	Lead Dust	PCB
147 Kurraba Road	✓	✓	✓	✓	✓	✓
151 Kurraba Road	✓	✓	✓	✓	✓	✓
153 Kurraba Road	✓	✓	✓	✓	✓	✓

SMF = synthetic mineral fibre, PCB = polychlorinated biphenyls, ✓ = identified or assumed/suspected present, ✕ = not identified and / or not assumed/suspected present. Refer to the Registers in Appendix B, C and D for details / clarification.

In addition to the items identified in Table 1 above, lead-containing flashing was identified or assumed present in areas of the Site. Formal assessment of such material, however, did not form part of the scope of work proposed.

Limited or no access was available to certain areas of the buildings and / or the Site. Inaccessible areas should be assumed to potentially contain HBM unless assessment of these areas by a Competent Person confirms otherwise.

HBM 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.

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

Limitations apply to this HBM survey 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 DP.***

## Table of Contents

	<b>Page</b>
1. Introduction.....	1
2. Site Description .....	2
3. Method .....	2
4. Asbestos Risk Assessment Method.....	4
5. Results .....	7
6. Recommendations .....	9
6.1 General .....	9
6.2 Asbestos-Containing Material (ACM) .....	10
6.3 Synthetic Mineral Fibre (SMF) .....	12
6.4 Polychlorinated Biphenyls (PCBs) .....	13
6.5 Lead Paint.....	13
6.6 Lead Dust.....	15
7. Limitations .....	17
 Appendix A      About This Report	
Site and Building Plans	
Appendix B      HBM Register and Plates – 147 Kurraba Road	
Appendix C      HBM Register and Plates – 151 Kurraba Road	
Appendix D      HBM Register and Plates – 153 Kurraba Road	
Appendix E      Laboratory Certificate(s) of Analysis	



## **Hazardous Building Materials (HBM) Survey**

### **147, 151 and 153 Kurraba Road, Kurraba Point NSW**

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#### **1. Introduction**

Douglas Partners Pty Ltd (DP) was engaged by Thirdi Group to conduct a Hazardous Building Materials (HBM) survey of 147, 151 and 153 Kurraba Road, Kurraba Point NSW (the Site). The survey was undertaken to provide a general indication of the location, extent and condition of the following HBM prior to demolition:

- Asbestos containing materials (ACM);
- Synthetic mineral fibre (SMF) insulation;
- Polychlorinated biphenyls (PCBs) in fluorescent light fittings;
- Lead paint systems; and
- Lead dust in ceiling cavities.

The survey, which comprised a limited visual inspection and a limited program of sample collection and laboratory analysis, was primarily undertaken using non-destructive, non-intrusive techniques to due occupation in areas of the Site.

Notes about this report and relevant Site and Building Plans are contained in Appendix A.

The results of the survey, including details of the HBM identified, the results of ACM risk assessments and selected photographs, are provided in the HBM Registers (the Registers) in Appendices B to D.

Laboratory analysis certificate(s) for the samples collected and analysed are provided in Appendix E.

Limited or no access was available to certain areas as outlined in the Registers and Section 6 of this report (including Table 4).

## 2. Site Description

The Site comprises three separate unit blocks located on the eastern side of Kurraba Road toward the southern end of Kurraba Point, NSW. These are described as follows:

- 147 Kurraba Road - a four-storey brick building comprising two semi-detached blocks (herein termed North Block and South Block) with entrance areas, garages, communal laundry and storage at Ground Level and a total of 12 overlying units (4 units each on the First, Second and Third Levels);
- 151 Kurraba Road - a three-storey brick building with pitched roof containing a main entrance, garages, laundry emergency exit tunnel and subfloor void(s) (level 1), a unit with covered balcony (level 2), and a total of 4 overlying units (2 units each on levels 3 and 4);
- 153 Kurraba Road being a three-storey brick building comprising 6 units (2 each on the Ground, First and Second Floors) plus rooftop plant area and subfloor storage, voids and communal laundry situated below the units.

Building Plans that identify the buildings, and indicate building and unit layout, are provided in Appendix A.

## 3. Method

The HBM survey comprised a limited visual inspection supplemented by a limited program of sample analysis as follows:

- 147 Kurraba Road – a non-destructive, non-intrusive visual inspection was conducted in safely accessible exterior and accessible common property areas. Due to general building occupation only units 6 and 12 were inspected wherein a limited range of intrusive/destructive inspection techniques was applied; and
- 151 Kurraba Road – a non-destructive, non-intrusive visual inspection was conducted in safely accessible exterior and accessible common property areas. Due to general building occupation only units 1 and 4 were inspected wherein a limited range of intrusive/destructive inspection techniques was applied; and
- 153 Kurraba Road – a non-destructive, non-intrusive visual inspection was conducted in safely accessible exterior and accessible common property areas. Due to general building occupation only unit 5 and 6 were inspected wherein:
  - A limited range of intrusive/destructive inspection techniques was applied in unit 5; and
  - A non-destructive, non-intrusive walkthrough visual inspection without material sampling was conducted in unit 6 due to occupation.

Samples of suspected ACM were collected by DP using hand tools (e.g., knife or pliers) and analysed for asbestos by a National Association of Testing Authorities (NATA) accredited laboratory. Sample size is typically limited to minimise disturbance of the material and potential structural or aesthetic impacts. The samples were analysed by polarised light microscopy (PLM) with dispersion staining in accordance with AS4964-2004 *Method for the qualitative identification of asbestos in bulk samples*.

Spot testing for lead paints was conducted in selected locations using 3M LeadCheck™ swabs which, according to the manufacturer's instructions, reliably detected lead in paints at 0.5 % (5,000 ppm) and may indicate lead in some lead paint films as low as 0.06 % (600 ppm).

Paint samples were collected by DP in selected locations and analysed for lead by a NATA accredited laboratory. Analysis was by Inductively Coupled Plasma - Atomic Emission Spectrometry / Mass Spectrometry (ICP-AES / MS). Paint samples contained approximately equal portions of all layers of paint at the locations sampled, to the extent reasonably practicable, and therefore typically reflect the average lead content of the overall paint system at the location sampled.

The lead paint spot testing and sample analysis conducted was a screening assessment only designed to assess the general presence / absence of lead in paints as opposed to identifying and/or delineating all occurrence of lead paint.

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

Light fittings were visually inspected to assess their general age and type. Where deemed safe to do so, the details of relevant internal components (e.g. capacitors and ballasts) were accessed, recorded and compared to the list of PCB-containing and PCB-free equipment listed in *Identification of PCB containing capacitors: An information booklet for electricians and electrical contractors*, Australian and New Zealand Environment and Conservation Council (ANZECC, 1997).

Lead dust samples were collected from readily accessible ceiling cavities. Samples were collected from a surface area of 100 cm<sup>2</sup> and analysed for lead by a NATA accredited laboratory using ICP-AES / MS. The sampling area and laboratory analysis results (total lead in µg) were then used to calculate the lead dust loading in milligrams of lead per square metre (mg/m<sup>2</sup>).

Surveys typically proceed on a 'risk management' basis whereby priority is given to addressing material(s) of higher quantity and / or risk and as they are encountered. Further, material sampling and analysis programs are necessarily limited and, in the case of similar or repetitive buildings, building elements and / or rooms / areas, it is often necessary to assume consistent use of construction materials including HBM.

#### 4. Asbestos Risk Assessment Method

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 DP considers several key factors that influence risk and a numerical score is assigned to each (refer Table 2 below). These scores are then added together to determine an overall risk rating for the ACM (refer Table 3 below). A degree of professional judgement may be applied when determining the final risk rating since, for example, it is not practicable to include in Table 2 all risk factors or descriptions 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 5 years. The review is to be performed by a Competent Person.

**Table 2: 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.
	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 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 store rooms.
	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 3: 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.

## 5. Results

The overall results of the survey are summarised in Table 1 in the Executive Summary of this report. Further details of the HBM identified at the Site, including the results of asbestos risk assessments, are provided in the Registers in Appendix B, C and D.

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

Generally speaking, the HBM identified in the areas inspected by DP have the potential to occur in other areas of the buildings at the Site which were not accessed by DP. This should be taken into consideration when interpreting this report.

Asbestos cement sheeting debris, asbestos containing bituminous linings and/or packing materials were identified or assumed/suspected present in some building cavities. ACM was also assumed/suspected present in retaining wall backfill and associated waste. Where such ACM are identified or assumed/suspected present it is considered likely that additional occurrences of these ACM may be identified at various locations within these cavities and areas/materials.

Access to ceiling and subfloor cavities was generally limited due to the location of access point(s), degree of clearance within the cavities, the location/extent of building structure and services etc. As a result, it should be noted that HBM (e.g., asbestos cement sheeting fragments and asbestos cement packing materials) may well be present in these cavities even if such materials were not identified during this survey.

Due to the use of the non-destructive and non-intrusive inspection techniques in occupied areas (including common property), and the presence of fixtures / furnishings / stored items etc., it is possible that further asbestos-containing materials (e.g., vinyl flooring, backing materials and / or adhesives) may be present below the exposed flooring materials encountered during this survey.

Asbestos was identified in some putties, mastics, and sealants in/around window frames, and in building expansion gaps, and to pointing material in a sandstone block wall<sup>1</sup>. Where identified, and as a precaution, such asbestos containing materials should be taken to potentially occur throughout the particular building / area in general and may also be expected in buildings of similar age and construction. In some cases, older asbestos-containing putties / mastics / sealants / pointing may be hidden below non-asbestos putties / mastics / sealants / pointing.

Notwithstanding the HBM assessed by DP (refer Section 1), the presence of lead flashing was also identified via colourmetric spot test(s). Based on the general age of construction such materials may potentially occur throughout all of the buildings at the Site.

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<sup>1</sup> Asbestos was detected in a sample (sample 151-E-A05) of pointing to a sandstone block wall at the western exterior side of 151 Kurraba Road. The analysing laboratory has indicated that the asbestos comprised one chrysotile fibre bundle.

**Table 4: Access Limitations\***

Location / Area	Access Type	Reason(s)
Areas / materials at height (e.g. upper exteriors of buildings in general and unprotected roofs)	Limited	Access limited to safely accessible areas and use of 1.8 m step ladder. Work at height and use of specialised access equipment not included in survey scope.
Confined spaces (e.g. interior of tanks and larger pits)	Nil	Not included in survey scope.
Ceiling cavities	Limited	Access generally limited by height, location and size of access points, location of services, building structure and general clearance within ceiling cavities. No access to roof cavity above stairwell at 153 Kurraba Road due fixed ceilings.
Subfloor voids	Limited	Subfloor voids identified at 151 and 153 Kurraba Road only. Access to subfloor areas was generally limited by the number and location of designated access points, by storage and clearance within the subfloor cavity and location of services etc. Assessment of crawl spaces was not part of the scope of work.
Below floor covering materials (e.g., carpet, vinyl sheeting etc.) and ceramic tiled surfaces	Limited	Destructive/intrusive inspection was not conducted in occupied units or common areas for safety reasons etc. Destructive/intrusive inspection was conducted at selected locations in the limited units nominated for inspection where these had been permanently vacated.
Enclosed building cavities and voids (e.g., within masonry walls).	Limited	Destructive/intrusive inspection was not conducted in occupied units or common areas for safety reasons etc. Destructive/intrusive inspection was conducted at selected locations in the limited units nominated for inspection where these had been permanently vacated. Intrusion through masonry walls and the like is generally not practicable.
Energised plant, equipment and services (e.g. electrical/gas appliances).	Limited	Full access requires certified isolation and de-energisation by a qualified / licensed technician or similar.
Subsurface areas including building footings and contamination in soil / fill	Nil	Not included in survey scope.
Exterior grounds, garden beds	Limited	Access limited by vegetation in various areas.

\* Refer also to the Registers (Appendices B, C and D).



## 6. Recommendations

Relevant notes and / or a summary recommendation for each HBM identified or assumed present at the Site are provided in the Registers (Appendix B, C and D).

The general recommendations in Section 7.1 onwards are provided for informative purposes and should be considered where the relevant HBM has been identified or assumed present by DP or is subsequently suspected to be present based on reasonable grounds.

The presence of identified and assumed HBM at the Site, and the potential presence of any as-yet undetected HBM, should be considered during the risk assessment for any proposed work at the Site or Site use.

A full inspection of the building at the Site, which includes all residential units and any inaccessible areas identified in this report, should be undertaken prior to any substantive disturbance (including building demolition work) to help ensure, as far as reasonably practicable, that all relevant HBM have been identified. Such an inspection should be undertaken using intrusive/destructive techniques.

### 6.1 General

HBM should be managed in accordance with the requirements of the WHS Act, WHS Regulation and subordinate Codes of Practice, Australian Standards and guidelines.

HBM should be visually inspected on a regular basis. Any change to the condition of the material or relevant site conditions should be reported.

HBM should be removed prior to any significant disturbance such as maintenance, refurbishment and demolition work.

A HBM 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.

HBM 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 are adequately controlled.

The scope, fees and terms/conditions applicable to any HBM 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 additional finds.

Prior to any work involving HBM 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.

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

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

At the completion of HBM 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.

## 6.2 Asbestos-Containing Material (ACM)

Asbestos was detected in a sample (sample 151-E-A05) of pointing to a sandstone block wall at the western exterior side of 151 Kurraba Road. Consideration should be given to further confirmatory sampling and analysis of such pointing materials at 151 Kurraba Road, and the Site generally, prior to disturbance of the pointing due to the potential impacts that the presence of asbestos may have on waste classification and management/disposal.

Asbestos and ACM must be managed in accordance 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 that is reasonably practicable. If it is not reasonably practicable to eliminate exposure it must be minimised to the extent that is 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 AS1319 *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 fibres and / or the equipment is used in a way that is designed to capture or suppress asbestos fibres 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 EPA (2014). Asbestos waste is preclassified as Special Waste under these guidelines.

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 online tool, WasteLocate.

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.

### 6.3 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 encapsulated or enclosed. 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:

- WorkCover NSW *Safe management of synthetic mineral fibres (SMF) - glasswool and rockwool*;
- 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*, October 2011 (reformatted January 2018) 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 5 below.

**Table 5: 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 (RCF), 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.

## 6.4 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.

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

- Environmentally Hazardous Chemicals (EHC) Act 2008 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.

## 6.5 Lead Paint

The potential presence of lead paint(s) at the Site should be considered during the risk assessment for any proposed works. Additional, targeted sampling and analysis for lead paints should 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:

- AS4361.1 - 2017, *Guide to hazardous paint management - Lead and other hazardous metallic pigments in industrial applications*; and
- AS4361.2 - 2017, *Guide to hazardous paint management - 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 area 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 EPA (2014).

Under EPA (2014) the following wastes (other than special waste, liquid waste, hazardous waste, restricted solid waste or general solid waste (putrescible)) are pre-classified as 'general solid waste (non-putrescible)':

- Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions.

Under EPA (2014) the following waste types (other than special waste or liquid waste) have been pre-classified by the EPA as 'hazardous waste':

- Lead paint waste arising otherwise than from residential premises or educational or child care institutions.

Based on previous correspondence with the NSW EPA DP understands that EPA (2014) does not consider AS4361.1 - 2017 or AS4361.2 - 2017, including the definition of lead paint therein, for waste classification assessment. As such:

- These standards, including the definition of 'lead paint' therein, have no bearing on how waste is classified in NSW; and
- Waste classification should be very 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.

## 6.6 Lead Dust

Laboratory analysis results for lead dust should be taken as an approximate indication of actual conditions only since sampling is limited and the concentration of lead in dust may vary considerably between locations within the same general area.

No recognised Australian guidelines have been identified for the direct assessment of lead concentrations in ceiling cavity dust. Notwithstanding this, AS4361.2-1998 *Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings* (superseded) outlined acceptance limits for lead in surface dust after lead paint management activities. These limits were:

- Interior floors: 1 mg/m<sup>2</sup> (as lead).
- Interior window sills: 5 mg/m<sup>2</sup> (as lead); and
- Exterior surfaces: 8 mg/m<sup>2</sup> (as lead).

The United States Environmental Protection Authority (US EPA) 40 CFR Part 745 *Lead; Identification of Dangerous Levels of Lead; Final Rule* identifies the following clearance standards following abatement:

- Floors - 40 µg/ft<sup>2</sup> (~0.43 mg/m<sup>2</sup>) lead;
- Interior Window sills - 250 µg/ft<sup>2</sup> (~2.7 mg/m<sup>2</sup>) lead; and
- Window troughs - 400 µg/ft<sup>2</sup> (~4.3 mg/m<sup>2</sup>) lead.

The above acceptance limits may be used as a guide to assessing lead concentrations in settled dust. As a precaution, and due to the nature of the Site, a lead concentration of 0.5 mg/m<sup>2</sup> has been used to identify potentially hazardous conditions in this assessment.

Where the concentration of lead in dust exceeds 0.5 mg/m<sup>2</sup> appropriate control and / or remedial measures may need to be identified via risk assessment and with a detailed knowledge of the workplace and proposed use/activities.

Where ceiling spaces and similar cavities are effectively enclosed and provide very limited or no opportunity for lead containing dust to enter occupied areas, the dust may typically remain in place. In such a case, access to the cavities should be suitably restricted and all entrances signposted with appropriate warning signs.

Any personnel required to enter building cavities or other areas containing elevated concentrations of lead in dust should undertake an appropriate risk assessment and develop a SWMS for the work. The SWMS must identify controls that ensure the risk of exposure to lead and environmental contamination remains at an acceptable level for the personnel entering the area and for occupants of the building and surrounds.

Consideration should be given to removal of lead containing dust including when:

- There is a significant risk of the lead entering occupied areas;
- Significant disturbance of lead dust is likely due to maintenance, refurbishment, demolition or other reason(s); or



- Removal is a reasonably practical means of eliminating the hazard.

Removal of lead dust should be undertaken by a suitably qualified and experienced removalist.

The lead dust 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 TWA exposure standard for lead (inorganic dusts and fumes) is 0.05 mg/m<sup>3</sup>.

Air monitoring for lead may be required based on the results of risk assessment and the requirement to maintain airborne lead concentrations below the abovementioned exposure standard(s).

At the completion of lead dust 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 waste should be assessed and classified for disposal in accordance with EPA (2014).

All disposal receipts should be retained.



## 7. Limitations

Douglas Partners (DP) has prepared this report (or services) for this project at 147, 151 and 153 Kurraba Road, Kurraba Point NSW in accordance with DP's proposal SYD200304.P.001.Rev0 of 24 March 2020 and following email correspondence between Tim Kulmar (DP) and Hayden Clarke (Thirdi Group).

This report is provided for the exclusive use of Thirdi Group 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 DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP 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 / or 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 DP's field inspection, sampling and testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP 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. DP 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 DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Although the sampling 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 HBM, 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 HBM 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 renovation, maintenance or demolition work, may reveal additional HBM.

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 HBM and the limitations of the method(s) used mean that we cannot guarantee that all HBM or issues of concern have been identified. This report should therefore not be considered a definitive account of all HBM that may be present at the Site.

DP personnel are not licenced or accredited quantity surveyors. Any quantities quoted in this report are provided for general 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 contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

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**Douglas Partners Pty Ltd**

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## Appendix A

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About This Report

Site and Building Plans

# About this Report

# Douglas Partners



## 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.

# *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.



MGA

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APPROX

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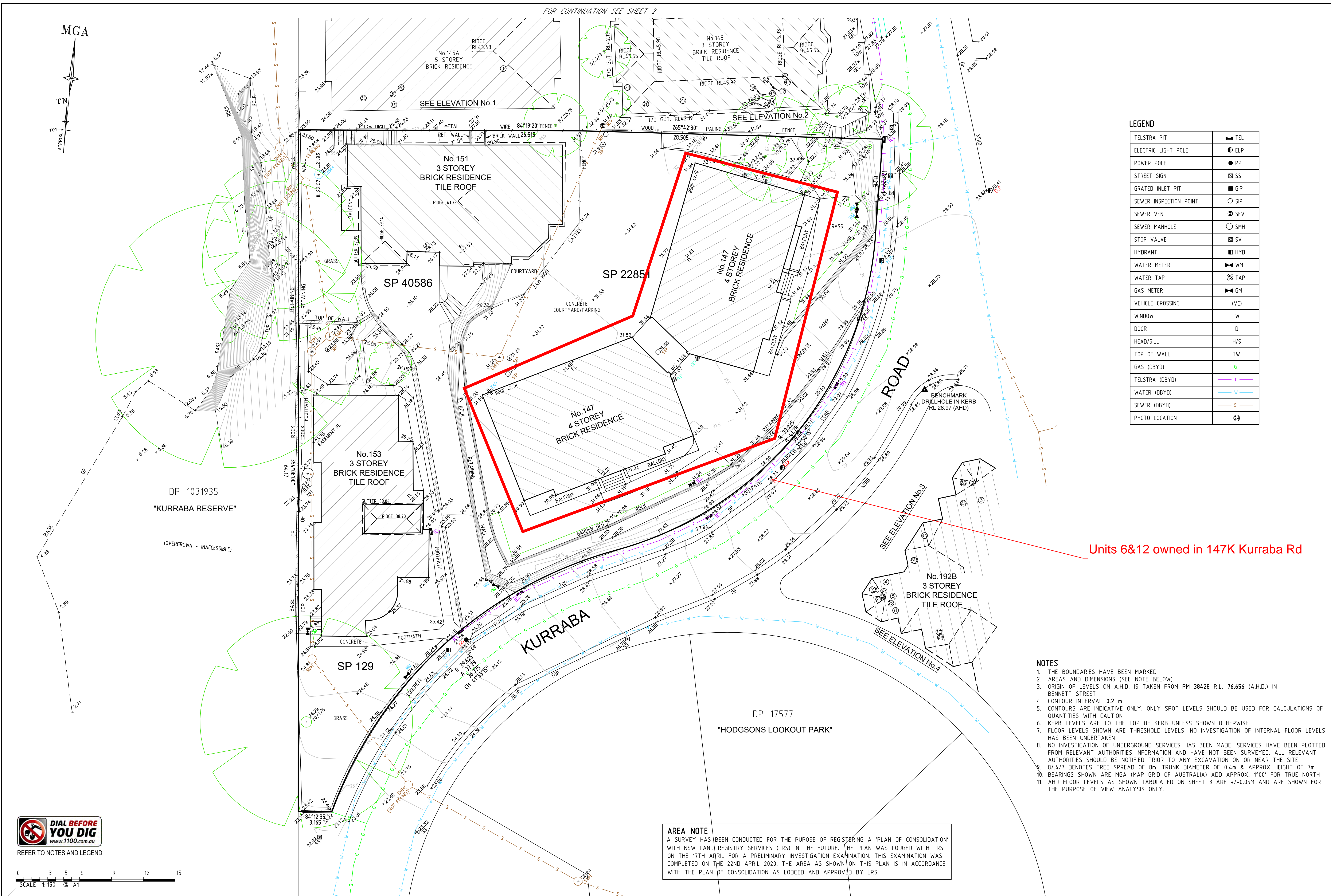
REFER TO NOTES AND LEGEND

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Revision	Date	Description	Reference	Revision	Date	Description	Reference
				G	27/04/20	BOUNDARIES UPDATED TO ALIGN WITH DP SURVEYED BOUNDARIES	50206 005
				F	04/10/19	ADDITIONAL TREES ADDED BETWEEN ADJOINING LOTS 145 & 145A	50206 005

E	18/07/19	ADDITIONAL PHOTO LOCATIONS ADDED	50206 005
D	18/04/19	ADDITIONAL DETAIL AND ELEVATIONS ADDED	50206 004
C	12/11/18	ADDITIONAL PHOTO LOCATIONS ADDED	50206 003
B	04/10/18	ADDITIONAL ELEVATIONS & PHOTO LOCATIONS ADDED	50206 003

50206 005	THIS IS THE PLAN REFERRED TO IN MY LETTER DATED:	Registered Surveyor NSW
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810 Pacific Highway  
Gordon NSW 2072  
Locked Bag 5  
Gordon NSW 2072  
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F 02 9499 7760Client THIRDI GROUP  
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COUNCIL'S CERTIFICATE

The Council of the **City of North Sydney** having satisfied itself that the requirements of the Strata Titles Act, 1973 (other than the requirement for the registration of plans) have been complied with, approves of the proposed **strata plan of subdivision**.

It is stated herein:

"The Council does not object to the encroachment of the building beyond the alignment of

... approval is given on the condition that (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z) (aa) (ab) (ac) (ad) (ae) (af) (ag) (ah) (ai) (aj) (ak) (al) (am) (an) (ao) (ap) (aq) (ar) (as) (at) (au) (av) (aw) (ax) (ay) (az) (ba) (bb) (bc) (bd) (be) (bf) (bg) (bh) (bi) (bj) (bk) (bl) (bm) (bn) (bo) (bp) (bq) (br) (bs) (bt) (bu) (bv) (bw) (bx) (by) (bz) (ca) (cb) (cc) (cd) (ce) (cf) (cg) (ch) (ci) (cj) (ck) (cl) (cm) (cn) (co) (cp) (cq) (cr) (cs) (ct) (cu) (cv) (cw) (cx) (cy) (cz) (da) (db) (dc) (dd) (de) (df) (dg) (dh) (di) (dj) (dk) (dl) (dm) (dn) (do) (dp) (dq) (dr) (ds) (dt) (du) (dv) (dw) (dx) (dy) (dz) (ea) (eb) (ec) (ed) (ee) (ef) (eg) (eh) (ei) (ej) (ek) (el) (em) (en) (eo) (ep) (eq) (er) (es) (et) (eu) (ev) (ew) (ex) (ey) (ez) (fa) (fb) (fc) (fd) (fe) (ff) (fg) (fh) (fi) (fj) (fk) (fl) (fm) (fn) (fo) (fp) (fq) (fr) (fs) (ft) (fu) (fv) (fw) (fx) (fy) (fz) (ga) (gb) (gc) (gd) (ge) (gf) (gg) (gh) (gi) (gj) (gk) (gl) (gm) (gn) 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(li) (lj) (lk) (ll) (lm) (ln) (lo) (lp) (lq) (lr) (ls) (lt) (lu) (lv) (lw) (lx) (ly) (lz) (ma) (mb) (mc) (md) (me) (mf) (mg) (mh) (mi) (mj) (mk) (ml) (mm) (mn) (mo) (mp) (mq) (mr) (ms) (mt) (mu) (mv) (mw) (mx) (my) (mz) (na) (nb) (nc) (nd) (ne) (nf) (ng) (nh) (ni) (nj) (nk) (nl) (nm) (nn) (no) (np) (nq) (nr) (ns) (nt) (nu) (nv) (nw) (nx) (ny) (nz) (oa) (ob) (oc) (od) (oe) (of) (og) (oh) (oi) (oj) (ok) (ol) (om) (on) (oo) (op) (oq) (or) (os) (ot) (ou) (ov) (ow) (ox) (oy) (oz) (pa) (pb) (pc) (pd) (pe) (pf) (pg) (ph) (pi) (pj) (pk) (pl) (pm) (pn) (po) (pp) (pq) (pr) (ps) (pt) (pu) (pv) (pw) (px) (py) (pz) (qa) (qb) (qc) (qd) (qe) (qf) (qg) (qh) (qi) (qj) (qk) (ql) (qm) (qn) (qo) (qp) (qq) (qr) (qs) (qt) (qu) (qv) (qw) (qx) (qy) (qz) (ra) (rb) (rc) (rd) (re) (rf) (rg) (rh) (ri) (rj) (rk) (rl) (rm) (rn) (ro) (rp) (rq) (rr) (rs) (rt) (ru) (rv) (rw) (rx) (ry) (rz) (sa) (sb) (sc) (sd) (se) (sf) (sg) (sh) (si) (sj) (sk) (sl) (sm) (sn) (so) (sp) (sq) (sr) (ss) (st) (su) (sv) (sw) (sx) (sy) (sz) (ta) (tb) (tc) (td) (te) (tf) (tg) (th) (ti) (tj) (tk) (tl) (tm) (tn) (to) (tp) (tq) (tr) (ts) (tt) (tu) (tv) (tw) (tx) (ty) (tz) (ua) (ub) (uc) (ud) (ue) (uf) (ug) (uh) (ui) (uj) (uk) (ul) (um) (un) (uo) (up) (uq) (ur) (us) (ut) (uu) (uv) (uw) (ux) (uy) (uz) (va) (vb) (vc) (vd) (ve) (vf) (vg) (vh) (vi) (vj) (vk) (vl) (vm) (vn) (vo) (vp) (vq) (vr) (vs) (vt) (vu) (vv) (vw) (vx) (vy) (vz) (wa) (wb) (wc) (wd) (we) (wf) (wg) (wh) (wi) (wj) (wk) (wl) (wm) (wn) (wo) (wp) (wq) (wr) (ws) (wt) (wu) (wv) (ww) (wx) (wy) (wz) (xa) (xb) (xc) (xd) (xe) (xf) (xg) (xh) (xi) (xj) (xk) (xl) (xm) (xn) (xo) (xp) (xq) (xr) (xs) (xt) (xu) (xv) (xw) (xx) (xy) (xz) (ya) (yb) (yc) (yd) (ye) (yf) (yg) (yh) (yi) (yj) (yk) (yl) (ym) (yn) (yo) (yp) (yq) (yr) (ys) (yt) (yu) (yv) (yw) (yx) (yy) (yz) (za) (zb) (zc) (zd) (ze) (zf) (zg) (zh) (zi) (zj) (zk) (zl) (zm) (zn) (zo) (zp) (zq) (zr) (zs) (zt) (zu) (zv) (zw) (zx) (zy) (zz)

SURVEYOR'S CERTIFICATE

**MICHAEL JOHN STYNES**

P.O. BOX 132 BONDURUM JUNCTION, 2022

a surveyor registered under the Surveyors Act, 1929, hereby certify that—

(1) any wall, the inner surface or any part of which corresponds substantially with any line shown on the accompanying floor plan as a boundary of a proposed lot, exists;

(2) any floor or ceiling, the upper or under surface or any part of which forms a boundary of a proposed lot, shown in the accompanying floor plan, exists;

(3) any wall, floor, ceiling or structural cubic space, by reference to which any boundary of a proposed lot shown in the accompanying floor plan is defined, exists;

(4) any building containing proposed lots erected on the land shown on the accompanying location plan and each proposed lot shown on the accompanying floor plan are wholly within the perimeter of the parcel \* subject to subparagraphs (a) and (b) —

\* (a) ~~except to the extent that the building encroaches on a public place.~~

\* (b) ~~save and getting on of the building encroaches on land other than a public place in respect of which an order and getting on appropriate consent has been created by registered.~~

\* (5) the survey information recorded in the accompanying location plan is accurate.

Signature: **Michael Stynes**

Date: **16th July 1984**

\* Delete if inapplicable

† State whether dealing or plan, and quote registered number.

This is sheet 1 of my Plan in **3** sheets.

PLAN OF OF LOTS 2, 3 AND 4 IN

DEPOSITED PLAN 17443

Mun./Shire City: **NORTH SYDNEY** Locality: **NEUTRAL BAY**

Parish: **WILLOUGHBY** County: **CUMBERLAND**

Reduction Ratio 1: 400 Lengths are in metres

Name of, and \*address for service of notices on, the body corporate

**THE PROPRIETORS - STRATA PLAN 22851**

**147 KURRABA ROAD, NEUTRAL BAY, 2089**

\*Address required on original strata plan only.

STRATA PLAN 22851

Registered: **31-5-1985**

C.A.: **Nº 1640 OF 3-5-1985**

Purpose: **STRATA PLAN**

Ref. Map: **U1852-742**

Last Plan: **D.P. 17443**

Signatures, seals and statements of intention to create easements or restrictions as to user.

**CAMEROON COURT PTY. LTD.**

**General**

**16th July 1984**

Table of mm

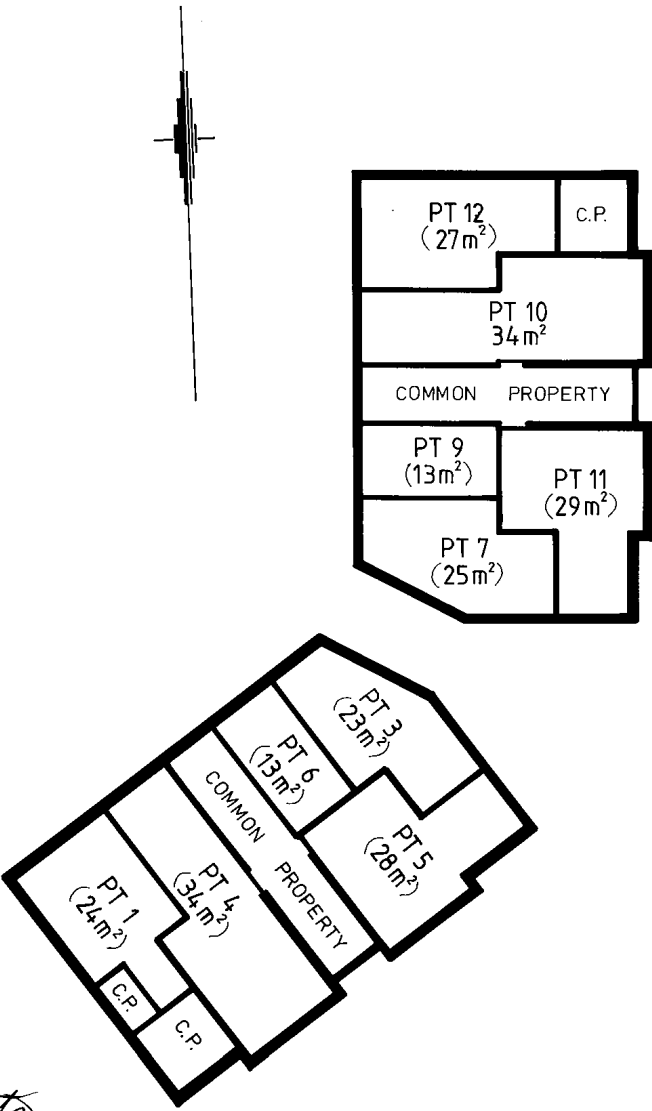
10 20 30 40 50 60 100 110 120 130 140 150 160

M.P.D.

SURVEYOR'S REFERENCE: **84/6285**

STRATA PLAN 22851

Req: R683831 / Doc: SP 0022851 P / Rev: 29-Oct-2008 / Sts: SC.OK / Pgs: ALL / Prt: 13-Nov-2017 09:23 / Seq: 2 of 3  
Ref: / Src: U  
255821 2H513



SCHEDULE OF UNIT ENTITLEMENT

LOT	NUMBER	UNIT ENTITLEMENT
	1	6400
	2	6000
	3	6900
	4	6900
	5	7150
	6	7150
	7	6400
	8	6000
	9	6900
	10	6900
	11	7150
	12	7150
	AGGREGATE	81000

*y Mesto*  
*W. R. H.*  
*W. R. H.*  
C.P. DENOTES COMMON PROPERTY  
AREAS ARE APPROXIMATE  
*y Mesto*

GROUND LEVEL



Reduction Ratio 1: 200

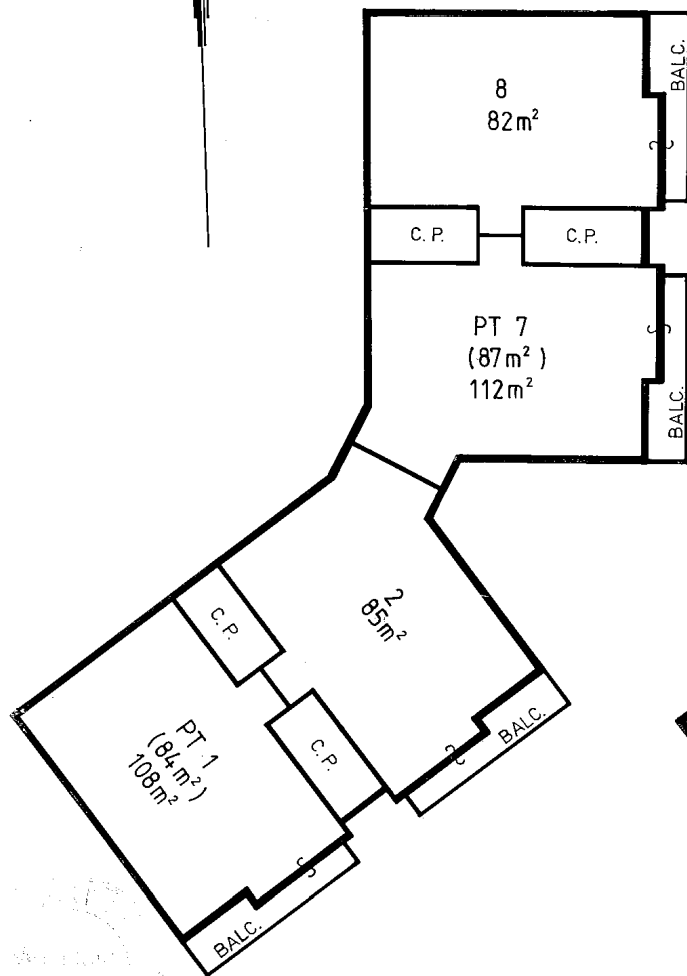
Lengths are in metres

*Michael Pynes*  
Registered Surveyor

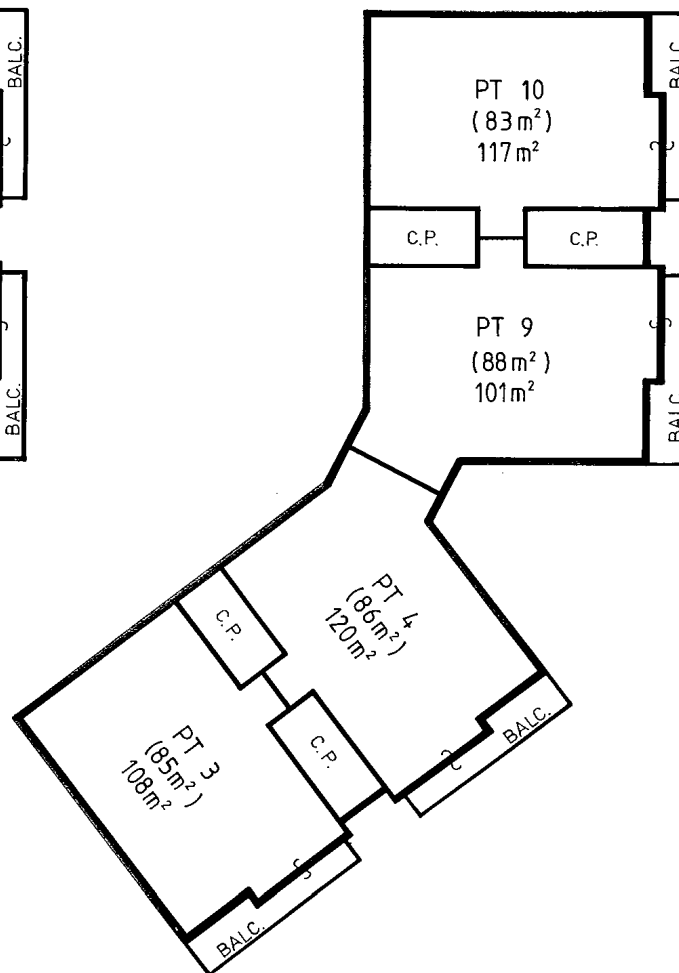
*R. Humphreys*  
Coun. Clerk



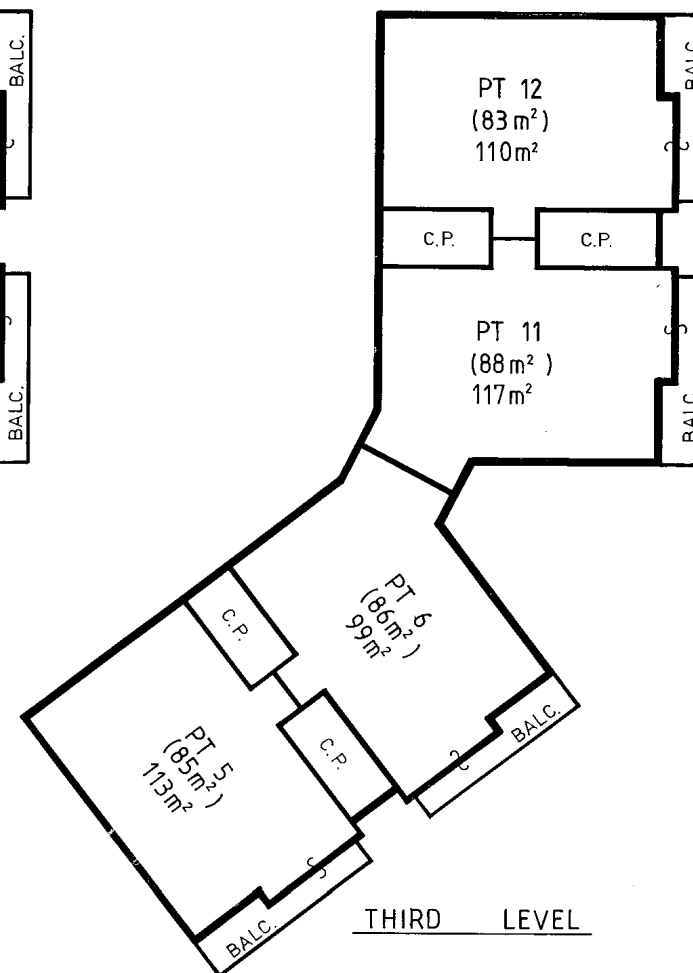
STRATA PLAN 22851



FIRST LEVEL



SECOND LEVEL



THIRD LEVEL

C.P. DENOTES COMMON PROPERTY

AREAS ARE APPROXIMATE

THE STRATUM OF THE BALCONIES IS RESTRICTED  
IN HEIGHT TO THE UNDERSURFACE OF THE  
CEILING OF THEIR RESPECTIVE UNITS

Reduction Ratio 1: 200

Lengths are in metres

Michael O'Byrne  
Registered Surveyor

Chambers  
Council Clerk

SURVEYOR'S REFERENCE: 84/6285

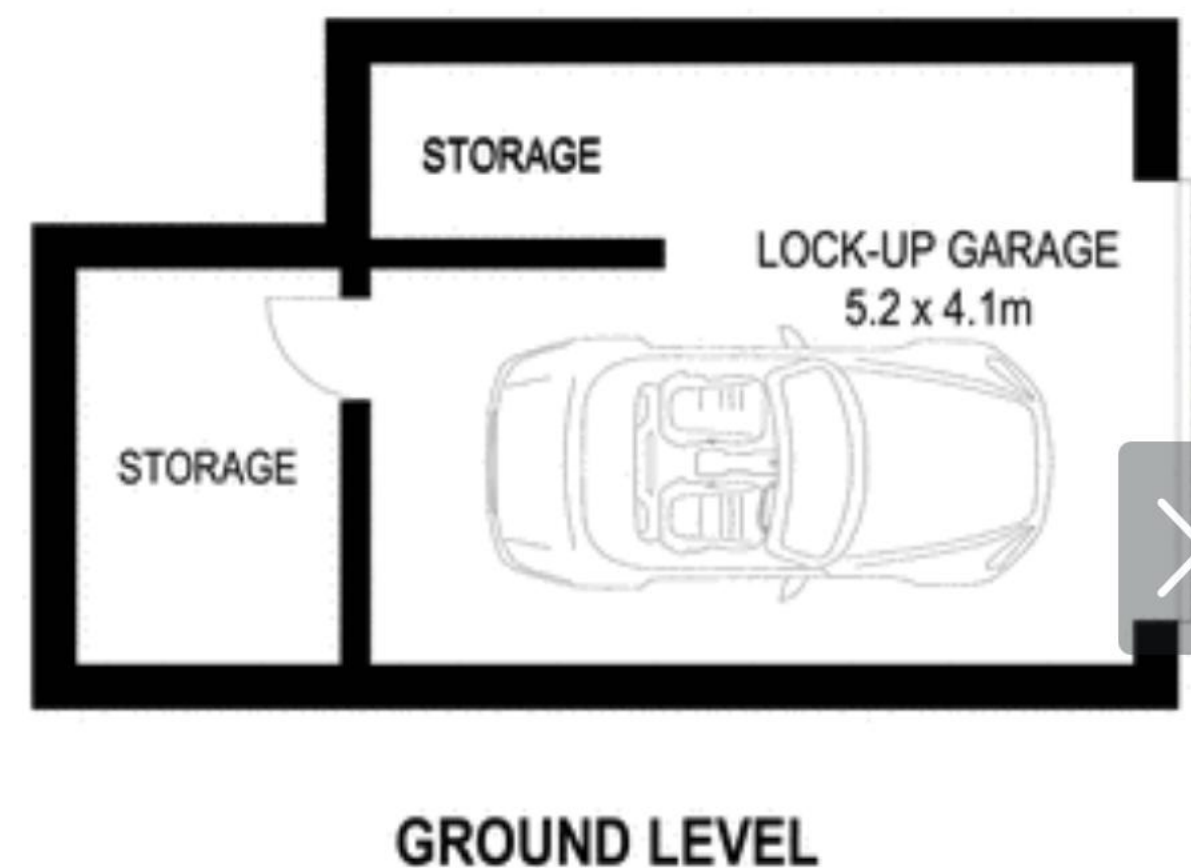




NOTE: SHARED LAUNDRY ON GROUND LEVEL

6/147 Kurraba





Scale in metres. Indicative only. Dimensions are approximate. All information contained herein is gathered from sources we believe to be reliable. However we cannot guarantee its accuracy and interested persons should rely on their own enquiries.

APPROX.INT. : 77m<sup>2</sup>  
APPROX.EXT. : 34m<sup>2</sup>



### COUNCIL'S CERTIFICATE

The Council of the City of Municipality of ~~City of~~ NTH SYDNEY  
having satisfied itself that the requirements of the Strata Titles Act, 1973  
(other than the requirements for the registration of plans) have been  
complied with, approves of the proposed

- \* strata plan
- \* strata plan of subdivision

illustrated herein.

~~Council does not object to the encroachment of the building beyond  
the alignment of~~

*\*This approval is given on the condition that lot(s)*

~~is/are subject to the restriction on user referred to in section 39 of the Strata Titles Act, 1973.~~

Date 10.5.89

Subdivision No. 1870 R Kempshall  
Council Clerk.

\*Complete, or delete if inapplicable.

### SURVEYOR'S CERTIFICATE

COPLAND CHRISTOPHER LETHBRIDGE  
BEE & LETHBRIDGE PTY LTD  
P.O. BOX 330 FORESTVILLE 2087  
a surveyor registered under the Surveyors Act, 1929, hereby certify that

- (1) any wall, the inner surface or any part of which corresponds substantially with any line shown on the accompanying floor plan as a boundary of a proposed lot, exists;
- (2) any floor or ceiling, the upper or under surface or any part of which forms a boundary of a proposed lot, shown in the accompanying floor plan, exists;
- (3) any wall, floor, ceiling or structural cubic space, by reference to which any boundary of a proposed lot shown in the accompanying floor plan is defined, exists;
- (4) any building containing proposed lots erected on the land shown on the accompanying location plan and each proposed lot shown on the accompanying floor plan is wholly within the perimeter of the parcel subject to subparagraphs (a) and (b) -

~~\*(a) except to the extent that the building encroaches on a public place;~~

~~\*(b) eaves and guttering of the building encroach on land other than a public place, in respect of which eaves and guttering an appropriate easement has been created by registered title~~

\* (5) the survey information recorded in the accompanying location plan is accurate.

Signature \_\_\_\_\_  
Date 10 TH APRIL 1989

\* Delete if inapplicable  
† State whether dealing or plan, and quote registered number.


This is sheet 1 of my Plan in 2 sheets.

PLAN OF SUBDIVISION OF LOT 34 IN D.P.17443 AND  
LOT 1 IN D.P.338790

Mun./Shire  
City : NORTH SYDNEY Locality : NEUTRAL BAY

Parish : WILLOUGHBY County : CUMBERLAND

Reduction Ratio 1:250

Lengths are in metres 

Name of, and \*address for  
service of notices on, the  
body corporate  
\*Address required on  
original strata plan only.

THE PROPRIETORS STRATA PLAN NO 40586  
151 KURRABA ROAD NEUTRAL BAY, 2089.

## STRATA PLAN 40586

Registered  21-1-1992

C.A. : N° 1870 OF 10-5-1989

Purpose : **STRATA PLAN**

Ref. Map : U 1852 - 742

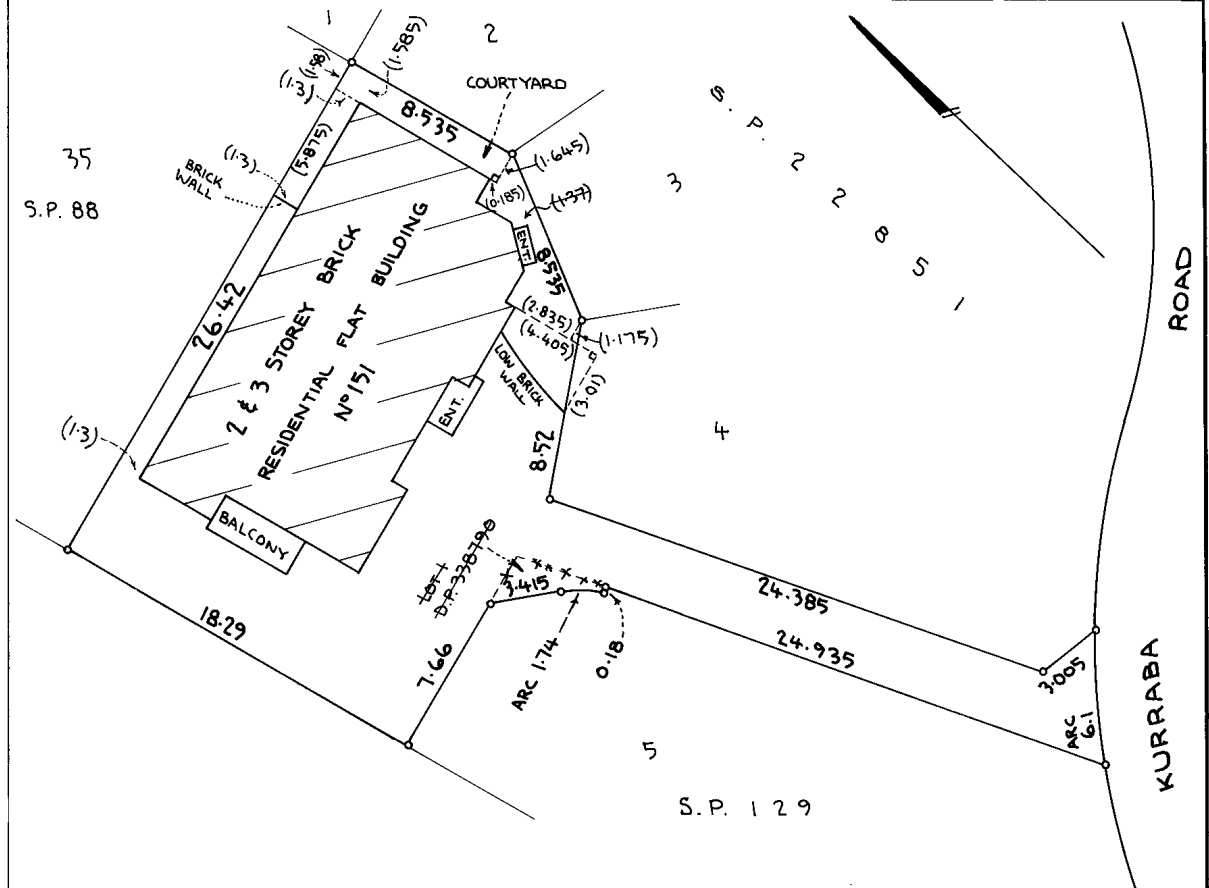
Last Plan : DP 17443  
DP 338790

Signatures, seals and statements of intention to create easements, restrictions on the use of land or positive covenants.

18/10/91  
DIRECTOR

M. McLaughlin  
DIRECTOR 16/12/91

SECRETARY 16/12/91



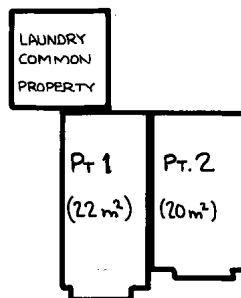
**Plan Drawing only to appear in this space**

SURVEYOR'S REFERENCE: 3297

**Plan Drawing only to appear in this space**

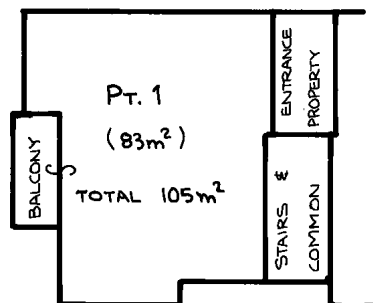
STRATA PLAN 40586

\*OFFICE USE ONLY



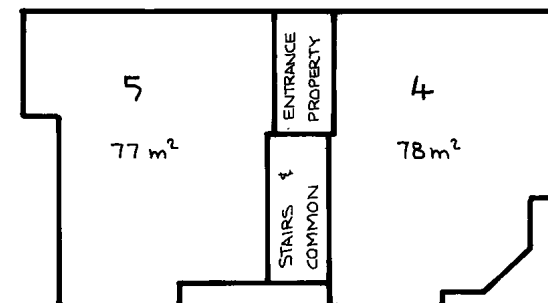
LEVEL 1

GARAGES &amp; LAUNDRY

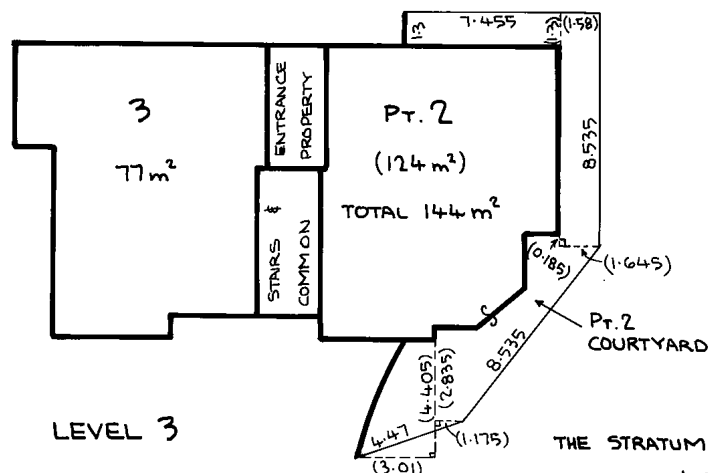


LEVEL 2

BALCONY IS WHOLLY COVERED



LEVEL 4



LEVEL 3

THE STRATUM OF THE COURTYARD EXTENDS BETWEEN 1 BELOW AND 2.4 ABOVE THE UPPER SURFACE OF THE GROUND FLOOR OF THE RESPECTIVE ADJOINING UNIT EXCEPT WHERE COVERED.

SCHEDULE OF UNIT ENTITLEMENT

LOT NUMBER	UNIT ENTITLEMENT
1	22
2	27
3	17
4	17
5	17
TOTAL	100

Reduction Ratio 1:200

Lengths are in metres

*Registered Surveyor*

*Council Clerk*

SURVEYOR'S REFERENCE: 3297

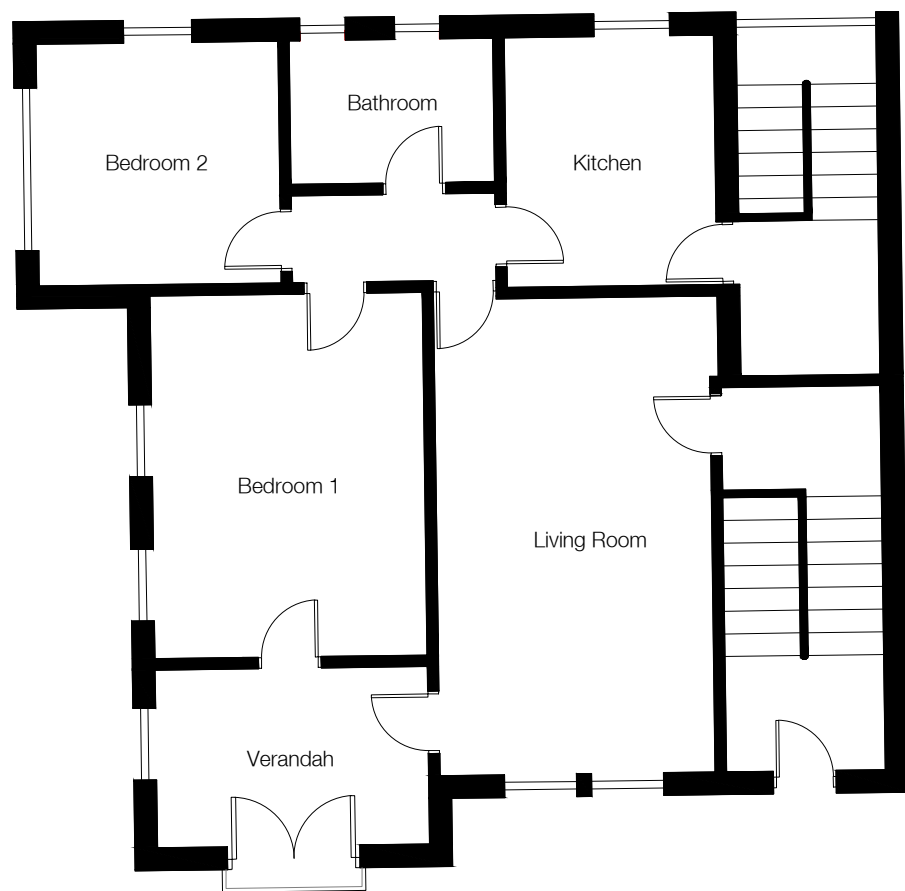
In accepting and utilising this document the recipient agrees that SJB Architects (NSW) Pty. Ltd. ACN 061 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use, to waive all claims against SJB Architects resulting from unauthorised changes, or to reuse the document on other projects without the prior written consent of SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose.

The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

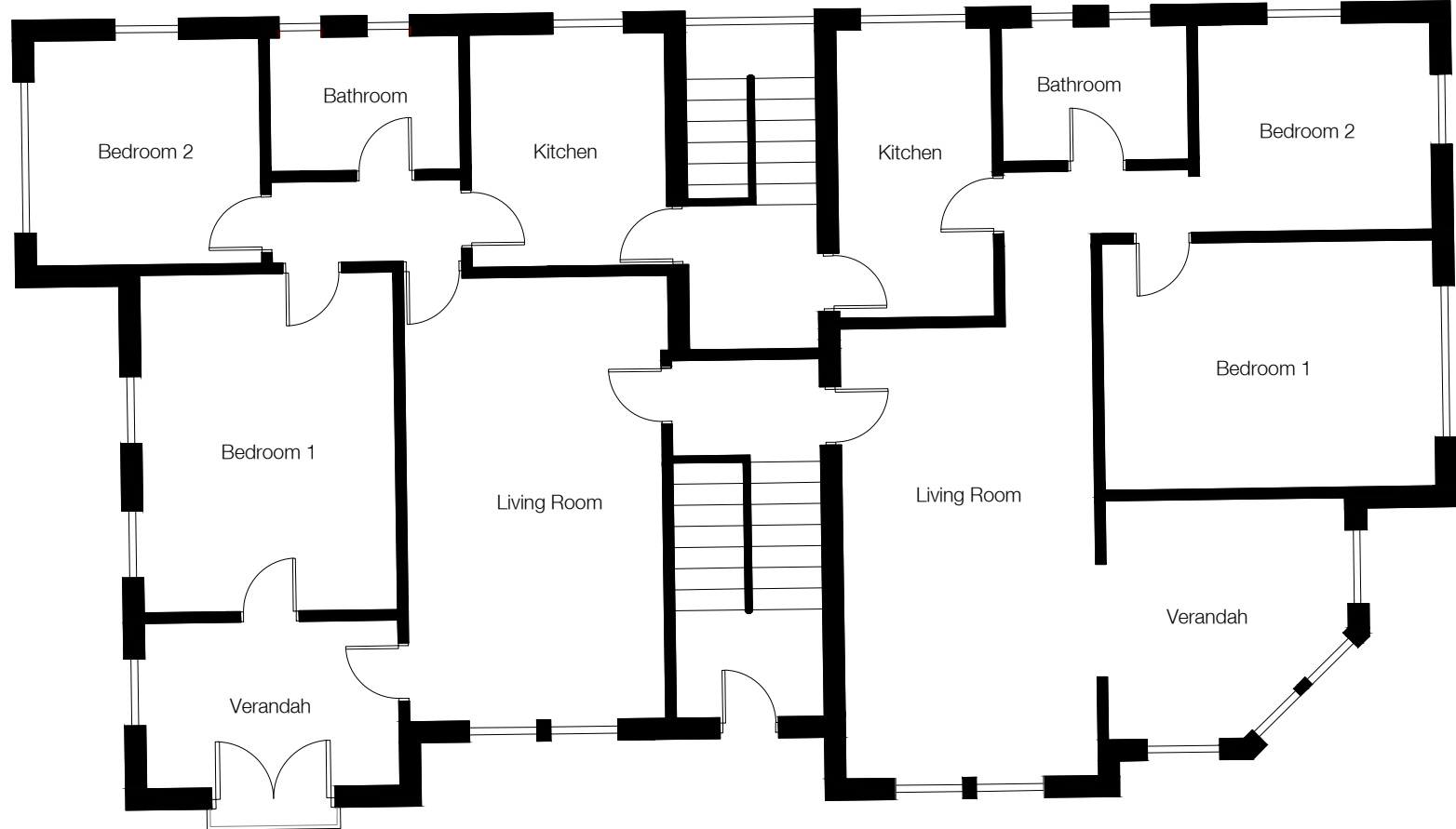
Nominated Architects Adam Haddow 7188 John Pradel 7004

## FOR APPROVAL

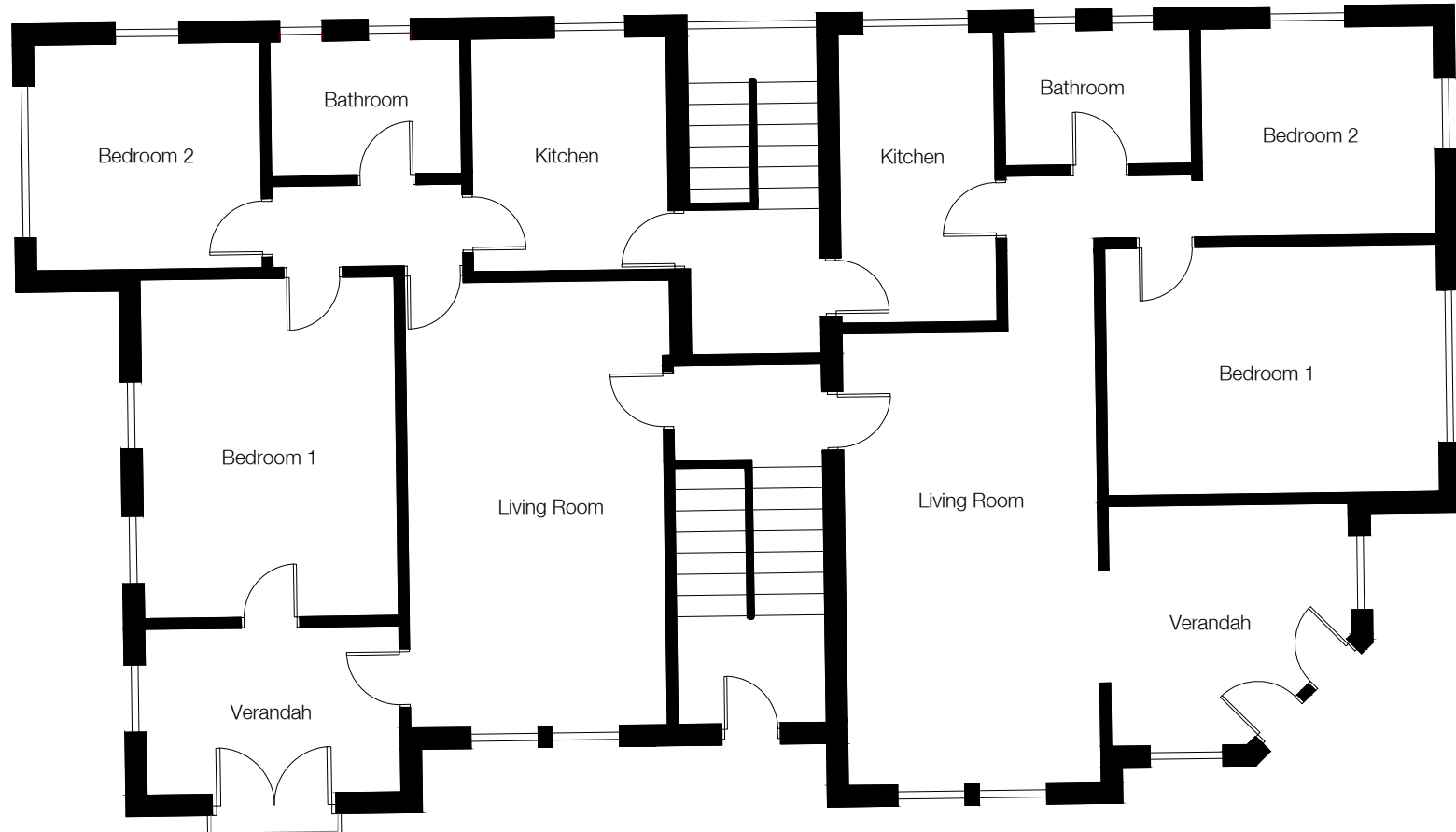
Rev.	Date	Revision	By	Chk.
01	19.08.19	DA Set	TK	CP



1 Ground 1:100



3 Level 2 1:100



2 Level 1 1:100

### Key

Existing Buildings

Project

147-153 Kurraba Road  
Kurraba Point

for  
Thirdi Group

Drawing Name

Existing Apartments;  
Apartment layouts for No.151

0 1 2 5  
1:100

Date	Scale	Sheet Size
19.08.2019	1:100	@ A1

Reg No.	Drawn	Chk.
	TK	CP

Job No.	Drawing No.	Revision
5762	DA-2505	/01

Form 1

# STRATA PLAN

OFFICE USE ONLY

3

Mun./Shire/City... NORTH... SYDNEY...

Locality... NEUTRAL... BAY...

Reference to Title Vol. 5131, Fol. 57

Parcel comprises (a) PART... of (b) LOT 5

IN DEP. PLAN N° 17443

Parish... WILLOUGHBY... County... CUMBERLAND...

The address for service of notices on the body corporate is:- } THE PROPRIETORS... STRATA PLAN N° 129  
 THE "ROOSEVELT"... KURRABA RD... NEUTRAL BAY

STRATA PLAN 129

E



Registered: 22/6

C.A.: 11 of 3/4/1962

Ref. Map: NORTH SYDNEY SHT 1

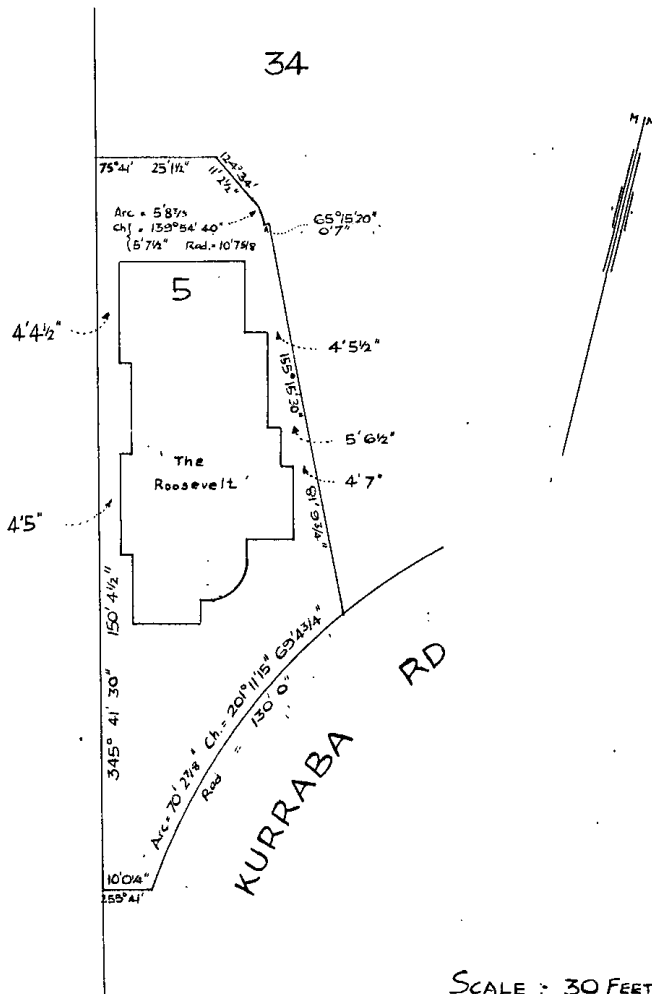
Last Plan: D.P. 17443, C728854

(a) State if whole or part.

(b) Refer to number of Lot, Allotment, or Portion and to the Deposited Plan, Town, or as the case may be.

External surface boundaries of the parcel and location of the building in relation thereto to be delineated in space opposite

Appn 20051 Pt. 700 ac. (Por 352 Ph.) Gtd to Alfred Thrupp on 22nd July, 1830  
 Vol. 5131 Fol. 57 Contn. Contained in Tsf. B926884.



SCALE = 30 FEET TO AN INCH

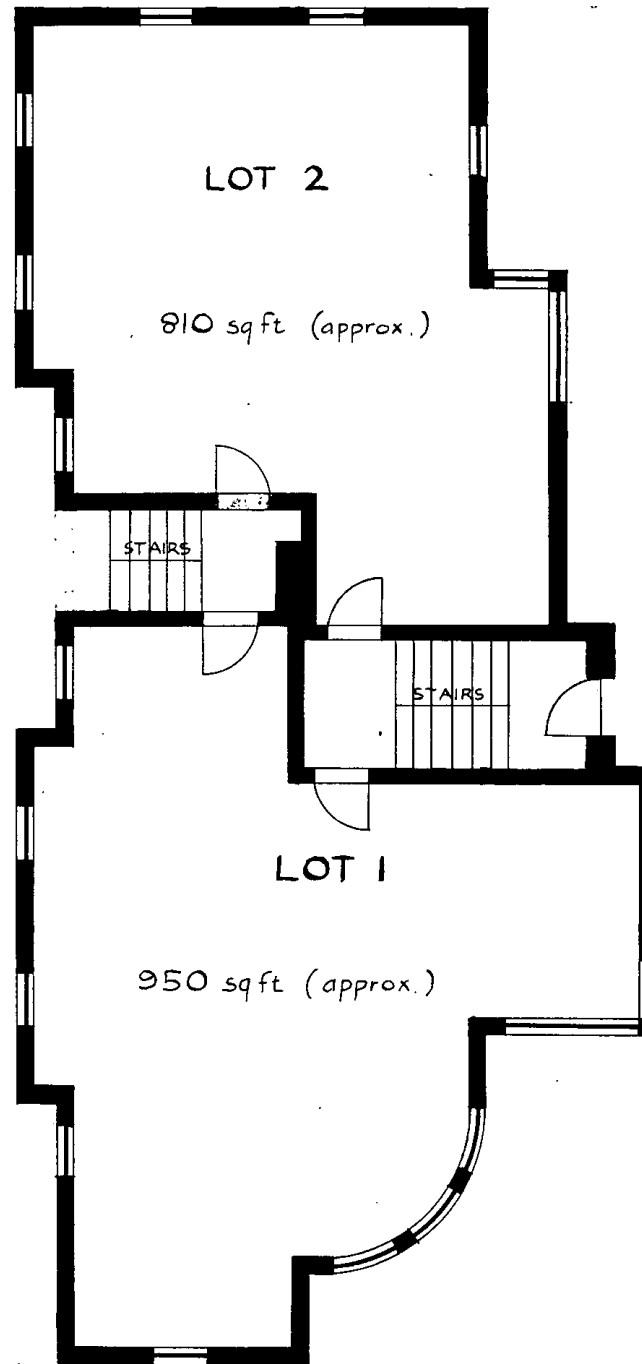
Schedule of Unit Entitlement		OFFICE USE ONLY		1. Denis... James... Finney... of 33, Hunter St., Sydney... a surveyor registered under the Surveyors Act, 1923, as amended, hereby certify that: (1) the building erected on the parcel described above is within the external boundaries of the parcel (c) subject to clause (2) of this certificate. (2) eaves or guttering of the building project beyond such external boundaries and an appropriate easement has been granted as an appurtenance of the parcel by registered Transfer N°... Dated... 15.2.62 Signature... [Signature] Approved by the Council for the purposes of the Conveyancing (Strata Titles) Act, 1961. Date... 3 APR 1962 Subdivision No. 11 [Signature] Council Clerk
Lot No.	Unit Entitlement	Vol.	Fol.	
1	81	92.12-149		
2	75	92.12-150		
3	83	92.12-151		
4	77	92.12-152		
5	85	92.12-153		
6	79	92.12-154		
AGGREGATE	480			

(c) Delete if inappropriate



# STRATA PLAN No. 129

## GROUND FLOOR



CONVERSION TABLE ADDED IN  
 REGISTRAR GENERAL'S DEPARTMENT

### STRATA PLAN 129

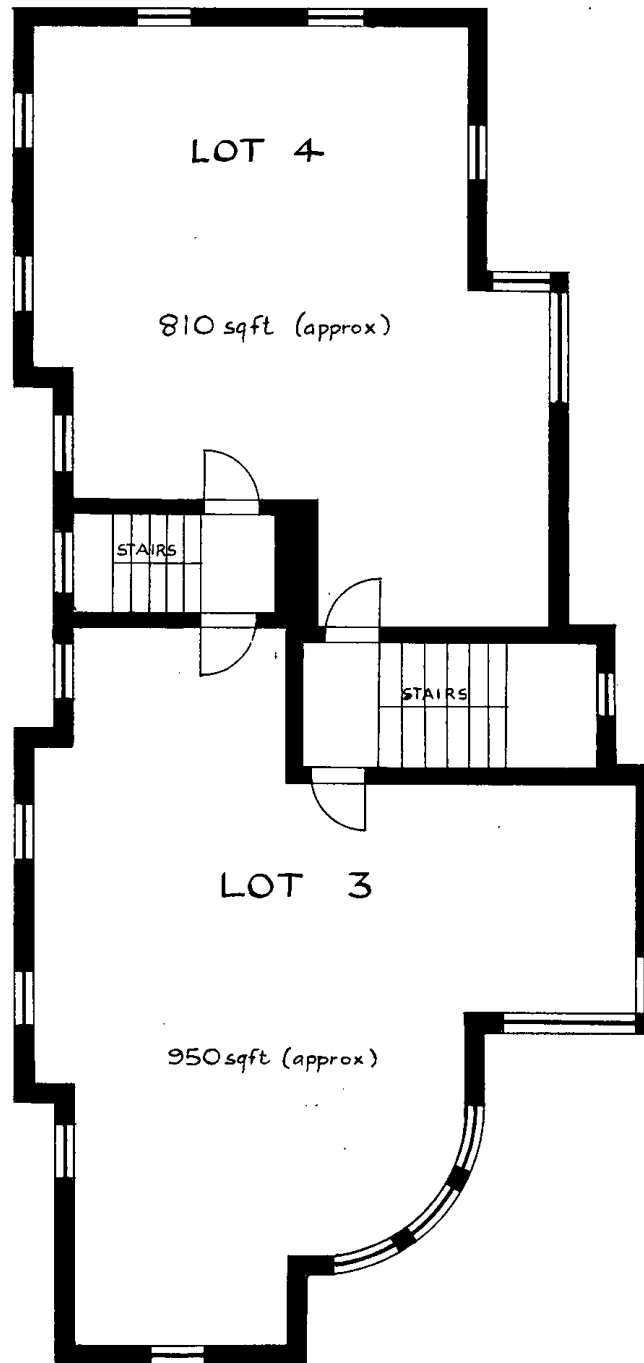
FEET	INCHES	METRES
-	7	0.18
4	4 1/2	1.335
4	5	1.345
4	5 1/2	1.36
4	7	1.395
5	6 1/2	1.69
5	7 1/2	1.715
5	8 5/8	1.745
5	8 7/8	1.75
10	0 1/4	3.055
10	7 5/8	3.24
11	2 1/2	3.415
25	1 1/2	7.66
69	4 3/4	21.15
70	2 7/8	21.41
75	4	22.96
81	9 3/4	24.935
130	-	39.625
150	4 1/2	45.835

SQ FT	SQ M
810	75.3
950	88.3

*L. J. G. G. G.*  
 Council Clerk.

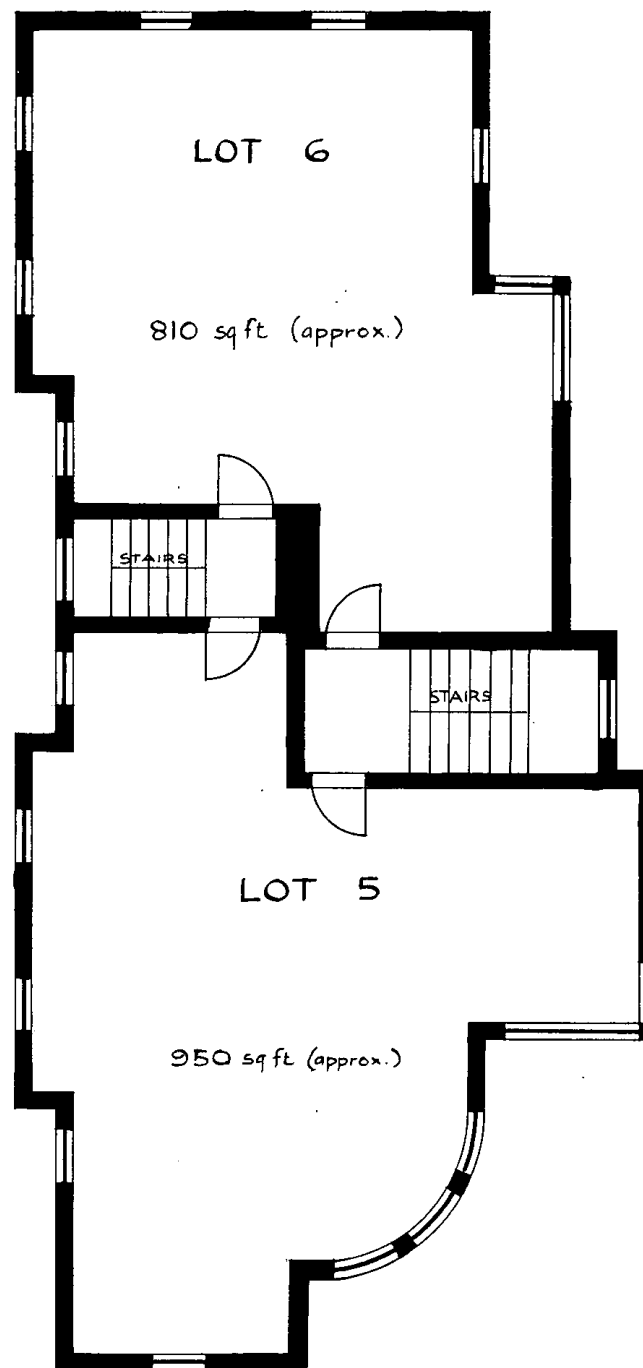
**STRATA PLAN No. 129**

**FIRST FLOOR**



*L. Kypratich*  
Council Clerk.

**STRATA PLAN No. 129**  
**SECOND FLOOR**



*L. Repatrik*  
Council Clerk.



---

## **Appendix B**

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HBM Register and Plates – 147 Kurraba Road

DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

Building	Room / 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		
147 Kurraba Road	North Block, exterior northern façade	paving, expansion gap	bituminous sheet	147-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	North Block, exterior northern façade	expansion gap between brick wall and paving	bituminous sheet	147-A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	exterior, front driveway	paving, expansion gap	sheeting	147-A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	exterior, front driveway	PMG pit	fibre cement product	147-A04	<b>asbestos detected by analysis</b>	1	1	2	2	2	1	9	Low	1	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	North Block, exterior southern façade	expansion gap between brick wall and paving	fibrous bitumastic	147-A05	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	exterior, breezeway between North Block and South Block	ceiling , expansion gap	exposed mastic/sealant (white/cream)	147-A06	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	exterior, breezeway between North Block and South Block	eastern façade, expansion gap in wall	exposed mastic/sealant (grey)	147-A07	<b>asbestos detected by analysis</b>	1	1	1	1	2	1	7	Low	2	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	exterior generally	expansion gap(s) in walls generally	mastic/sealant	refer 147-A07	<b>may contain asbestos</b>	1	1	1	1	2	1	7	Low	refer 2	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	South Block, exterior, southern garden bed	PMG pit	fibre cement product	147-A08	<b>asbestos detected by analysis</b>	1	1	2	2	2	1	9	Low	3	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	South Block, exterior western façade	expansion gap between brick wall and paving	bituminous sheet	147-A09	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	South Block, exterior western façade	electrical conduit (pipe)	fibre cement product	147-A10	<b>asbestos detected by analysis</b>	1	1	1	2	2	1	8	Low	4	Appears to extend to electrical room at base of front stairwell (refer Photo No 12 and 35) however extent should be confirmed when full access is available.  Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	North Block, roof	surface of roof generally	textured waterproofing membrane and underlying bitumastic	147-A11	no asbestos detected by analysis. <b>SMF detected by analysis.</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
147 Kurraba Road	South Block, roof	surface of roof generally	textured waterproofing membrane and underlying bitumastic	147-A12	no asbestos detected by analysis. <b>SMF detected by analysis.</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
147 Kurraba Road	North Block, interior, base of front stairwell	electrical room	loose fuse insulation	147-A13	<b>asbestos detected by analysis</b>	3	3	3	2	1	1	13	Moderate	6, 7	Restrict access. Remove material as soon as possible, prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
147 Kurraba Road	North Block, interior, base of front stairwell	electrical room, fire door	outer core insulation (exposed surface)	147-A14	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 11	No asbestos detected by laboratory analysis.

DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

Building	Room / 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			
147 Kurraba Road	North Block, interior, base of front stairwell	electrical room, fire door	inner core insulation (if present)	N/A	may contain asbestos	3	0	0	0	2	1	6	Low	similar 11	Inaccessible due to potential asbestos content of outer core at time of assessment. Consider further destructive sampling and analysis of inner core now that asbestos has not been identified in outer core (refer sample 147-14). Alternately, remove material as asbestos prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	North Block, interior	ground level, communal laundry	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Limited access due number and location of washers/dryers. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room	loose and bagged fuse insulation	refer 147-A13	asbestos identified visually	3	3	3	2	1	1	13	Moderate	8, 9, 10	Restrict access. Remove material as soon as possible, prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room, fire door	outer core insulation (exposed surface)	refer 147-A14	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	No asbestos detected by laboratory analysis.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room, fire door	inner core insulation (if present)	N/A	may contain asbestos	3	0	0	0	2	1	6	Low	refer 11	Inaccessible due to potential asbestos content of outer core at time of assessment. Consider further destructive sampling and analysis of inner core now that asbestos has not been identified in outer core (refer sample 147-14). Alternately, remove material as asbestos prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room, service duct (pipe)	fibre cement pipe	refer 147-A10	asbestos assumed	1	1	1	2	2	1	8	Low	12	Appears to extend to southwest to exterior of building (refer Photo No. 4 and 35) however extent should be confirmed when full access is available.  Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room, main electrical board	resinous board	N/A	asbestos assumed	0	1	2	1	2	1	7	Low	13	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room, fuses generally	internal insulation	refer 147-A13	asbestos assumed	3	1	1	1	1	1	8	Low	14	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior, base of front stairwell	main breaker, electrical board	resinous board	N/A	asbestos assumed	0	1	2	1	2	1	7	Low	15	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment									
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority	Photo No.	Summary Comment/Recommendation
147 Kurraba Road	South Block, interior, base of front stairwell	enclosed panels and equipment generally (e.g. Main Contactor 415V, 415 Volt Links, Main Breaker)	internal components	N/A	may contain asbestos	0	1	2	0	1	1	5	Low	16	Inaccessible area/material - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
147 Kurraba Road	South Block, interior, base of front stairwell	electrical room	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	Limited access due storage. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
147 Kurraba Road	South Block, exterior	garages generally	materials in general	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No access to garages generally due occupation and no access to garages for Unit 12 or Unit 6 due to vehicles parked in front of garage doors. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
147 Kurraba Road	Unit 12, interior	entrance and living areas, floor below carpet	slab topping	147-12-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	bedrooms, floor below carpet	slab topping	147-12-A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	refer 18	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	kitchen floor (below floorboards and bitumastic layer)	vinyl flooring	147-12-A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	kitchen floor (below vinyl flooring)	slab topping	147-12-A05	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	kitchen floor (below floorboards)	bituminous layer containing cork (or similar) and surficial adhesives	147-12-A06	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	bedrooms and associated entry vestibule, floor (below carpet)	blue fibrous underlay	147-12-A07	no asbestos detected by analysis. <b>SMF detected by analysis.</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
147 Kurraba Road	Unit 12, interior	entrance and living areas, floor below carpet	slab topping	147-6-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 12, interior	fireplace and/or chimney	internal components	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material - Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
147 Kurraba Road	Unit 12, interior	bedroom 1, window sill	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
147 Kurraba Road	Unit 12, interior	dining room, window sill	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
147 Kurraba Road	Unit 12, interior	living room, skirting board	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
147 Kurraba Road	Unit 12, interior	bathroom, doorframe	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
147 Kurraba Road	Unit 6, interior	bedrooms, floor below carpet	slab topping	147-6-A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 6, interior	linen cupboard	wallpaper	147-6-A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 6, interior	living rom, heater	filament guard	147-6-A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.
147 Kurraba Road	Unit 6, interior	living room, fireplace and chimney	internal components	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material - Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
147 Kurraba Road	Unit 6, interior	bathroom, wall lining to mirror cabinet	fibre cement	147-6-A05	asbestos detected by analysis	1	1	1	2	2	1	8	Low	22	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.



DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment										
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority	Photo No.	Summary Comment/Recommendation	
147 Kurraba Road	Unit 6, interior	dining room, light fitting	orange O-ring	147-6-A06	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos detected by laboratory analysis.	
147 Kurraba Road	Unit 6, interior	dining room, light fitting, drop cord	woven insulation (black)	147-6-A07	no asbestos detected by analysis. <b>SMF detected by analysis.</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.	
147 Kurraba Road	Unit 6, interior	dining room, light fitting, electrical wiring	woven insulation (white)	147-6-A08	no asbestos detected by analysis. <b>SMF detected by analysis.</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.	
147 Kurraba Road	Unit 6, interior	kitchen, hot water unit (circa 2019)	bulk insulation	N/A	<b>suspected SMF</b> or foam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	Inaccessible area/material (due height and private residence). Confirm status of hazardous material(s) when safe access available and prior to any disturbance. Remove and dispose accordingly.	
147 Kurraba Road	Unit 6, interior	kitchen, ceiling, fluorescent light fitting	internal component (ballast)	N/A	<b>PCB (assumed)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24	Inspect older fluorescent light fittings in detail when safe access is available and prior to any disturbance. Remove any components containing, or assumed to contain, PCB prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
147 Kurraba Road	Unit 6, exterior	balcony, fluorescent light fitting	internal components (e.g. capacitor/ballast)	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material (risk of fall). Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
147 Kurraba Road	Units in general	ceiling cavity(s) (if present)	settled dust	N/A	<b>suspected elevated lead</b> ( $\geq 0.5 \text{ mg/m}^2$ )	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ensure access to contaminated building cavities is adequately restricted and entry is only made under controlled conditions.  Remove contamination if reasonably practicable to do so and prior to any substantive disturbance.  Implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition work).	
147 Kurraba Road	Units in general	electrical panel(s) (if present)	resinous board(s)	N/A	<b>may contain asbestos</b>	0	1	1	2	2	1	7	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	electrical panel(s) (if present)	fuse insulation	N/A	<b>may contain asbestos</b>	3	1	1	2	2	1	10	Moderate	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	electrical panel(s) (if present)	other components (e.g. internal linings, wire insulation etc.)	N/A	<b>may contain asbestos</b>	1	1	1	2	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	floors	various linings (particularly underlying layers)	N/A	<b>may contain asbestos</b>	3	1	0	1	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	floor (below carpet)	carpet underlays	refer 147-12-A07	<b>may contain SMF</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	bathroom, wall lining to mirror cabinet	fibre cement	refer 147-6-A05	<b>may contain asbestos</b>	1	1	1	2	2	1	8	Low	similar	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

Kurraba Road, Kurraba Point NSW						Asbestos Risk Assessment									Photo No.	Summary Comment/Recommendation
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
147 Kurraba Road	Units in general	electrical cords and wiring	woven insulation	147-6-A07 and 147-6-A08	may contain asbestos of SMF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	kitchen, hot water units	bulk insulation	N/A	may contain asbestos of SMF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	floors	slab topping	N/A	may contain asbestos	3	3	0	1	2	1	10	Moderate	N/A	Further confirmatory analysis of floor topping materials is recommended as a precaution. Remove any asbestos material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	Units in general	kitchen, underside of sink	bituminous lining	N/A	may contain asbestos	1	1	2	2	2	1	9	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	living room	fireplace and/or chimney interior (if present)	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material - Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
147 Kurraba Road	Units in general	throughout, sheeted and framed walls and ceilings	possible fibre cement sheeting in areas	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	These materials generally found to comprise gyprock, plaster or similar in the areas inspected however inspection was limited. Proceed with caution and further assess these materials for asbestos prior to any disturbance.	
147 Kurraba Road	Units in general	hot water units	internal insulation	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
147 Kurraba Road	Units in general	materials in general	paints	e.g. 147-LP07 and 147-LP09	may contain lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement controls to prevent exposure and dispersal during demolition. Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions is pre-classified as general solid waste (non-putrescible) under the NSW EPA Waste Classification Guidelines.	
147 Kurraba Road	Units in general	older fluorescent light fittings (if present)	internal components (e.g. capacitors and ballasts), insulating oil	N/A	may contain PCB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	As a precaution, older fluorescent light fittings (if present) should be assumed to potentially house components containing PCBs. Inspect older fluorescent light fittings in detail when safe access is available and prior to any disturbance. Remove any components containing, or assumed to contain, PCB prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
147 Kurraba Road	South Block, interior	communal laundry, service conduit	fibre cement pipe	refer 147-A10	asbestos assumed	1	1	1	2	2	1	8	Low	35	Appears to extend from the exterior southwest facade (refer Photo No. 4) to the electrical room at the base of the front stairwell (refer Photo No. 12) however extent should be confirmed when full access is available.  Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
147 Kurraba Road	South Block, interior	cleaner's room (southwest)	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Limited access due storage. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	

DP Project No: 86447.06  
Hazardous Building Materials (HBM) Register  
Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment										
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority	Photo No.	Summary Comment/Recommendation	
147 Kurraba Road	North Block, exterior northern façade	typical pipe work	typical red/orange paint system	147-LP01	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	North Block, exterior northern façade	door/window lintels	typical white paint system	spot test and 147-LP02	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	North Block, exterior eastern façade	handrail	typical cream paint system	147-LP04	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.	
147 Kurraba Road	exterior, breezeway between North Block and South Block	eastern façade, pipe	typical cream paint system	147-LP05	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.	
147 Kurraba Road	South Block, exterior eastern façade	concrete support to balcony	typical cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	North Block, rear stairwell	handrail	brown paint system	147-LP07	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	North Block, rear stairwell	wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	North Block, front stairwell	handrail	white paint system	spot test and 147-LP08	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	North Block, front stairwell	wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	South Block, rear stairwell	handrail	brown paint system	147-LP09	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	South Block, rear stairwell	wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	South Block, rear stairwell	ground level, lower wall	peach paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	South Block, rear stairwell	ground level, upper wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
147 Kurraba Road	Unit 6, exterior	balcony, floor	grey and underlying green paint system	147-6-LP01	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
147 Kurraba Road	Unit 6, interior	bedroom 1, window sill	cream paint system	147-LP02	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.	
147 Kurraba Road	Unit 6, interior	dining room wall	white paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	

DP Project No: 86447.06  
Hazardous Building Materials (HBM) Register  
Kurraba Road, Kurraba Point NSW

Building	Room / 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		
147 Kurraba Road	Unit 6, interior	living room, skirting board	undercoats to cream paint system	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
147 Kurraba Road	North Block, exterior northern façade	concrete balcony support	typical cream paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
147 Kurraba Road	exterior, breezeway between North Block and South Block	eastern façade, walls	undercoat(s) to typical cream paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
147 Kurraba Road	exterior, breezeway between North Block and South Block	western façade, walls	undercoat(s) to typical cream paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
147 Kurraba Road	Unit 12, interior	doorframe to rear stairs	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test





Photograph 1: 147 Kurraba Road, exterior, front driveway, PMG pit, fibre cement product, asbestos detected by analysis.



Photograph 2: 147 Kurraba Road, exterior, breezeway between North Block and South Block, eastern façade, expansion gap in wall, exposed mastic/sealant (grey), asbestos detected by analysis.

	<b>Site Photographs</b>	PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register	PLATE No: 1
	147-153 Kurraba Road, Kurraba Point NSW	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 3: 147 Kurraba Road, South Block, exterior, southern garden bed, PMG pit, fibre cement product, asbestos detected by analysis.



Photograph 4: 147 Kurraba Road, South Block, exterior western façade, electrical conduit (pipe), fibre cement product, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 2
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 5: 147 Kurraba Road, North Block, roof, surface of roof generally, textured waterproofing membrane and underlying bitumastic, no asbestos detected by analysis. SMF detected by analysis..



Photograph 6: 147 Kurraba Road, North Block, interior, base of front stairwell, electrical room, loose fuse insulation, asbestos detected by analysis.

	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 3
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 7: 147 Kurraba Road, North Block, interior, base of front stairwell, electrical room, loose fuse insulation, asbestos detected by analysis.



Photograph 8: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, loose and bagged fuse insulation, asbestos identified visually.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 4
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 9: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, loose and bagged fuse insulation, asbestos identified visually.



Photograph 10: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, loose and bagged fuse insulation, asbestos identified visually.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 5
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20



Photograph 11: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, fire door, outer core insulation (exposed surface), suspected non-asbestos.

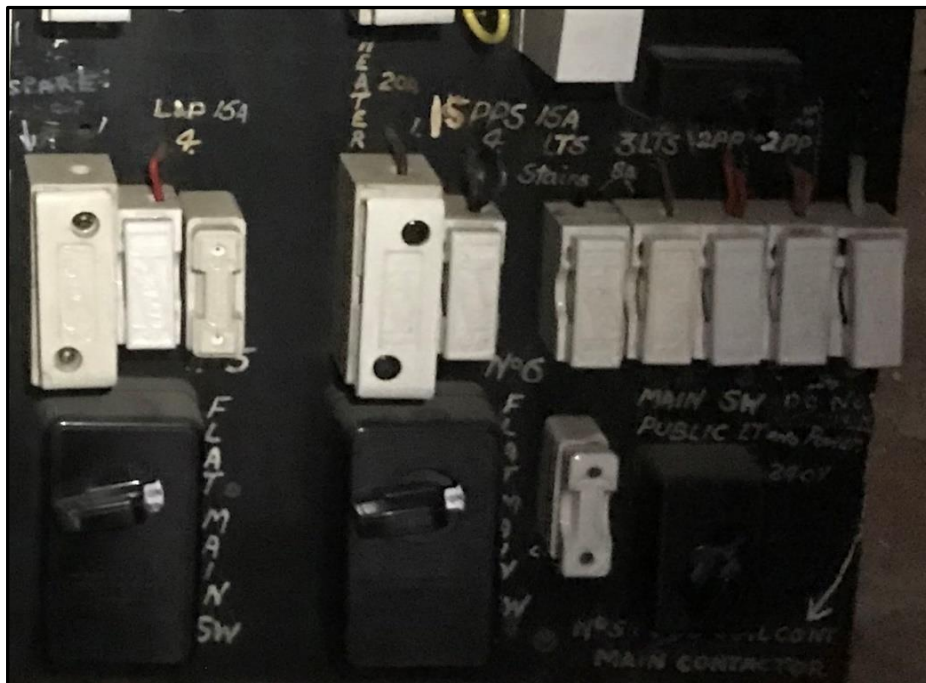


Photograph 12: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, service duct (pipe), fibre cement pipe, asbestos assumed.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 6
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



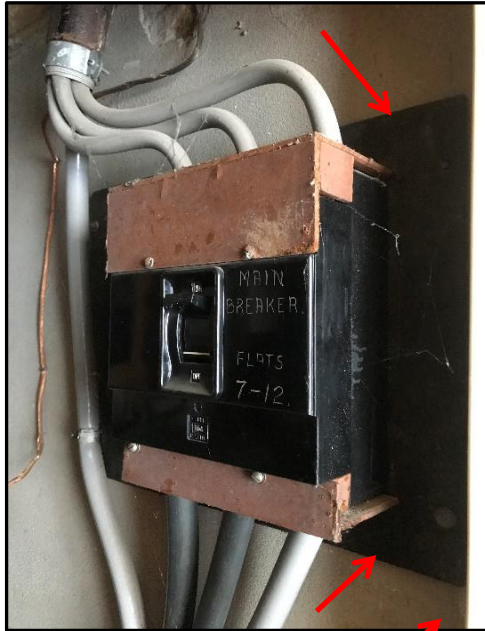
Photograph 13: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, main electrical board, resinous board, asbestos assumed.



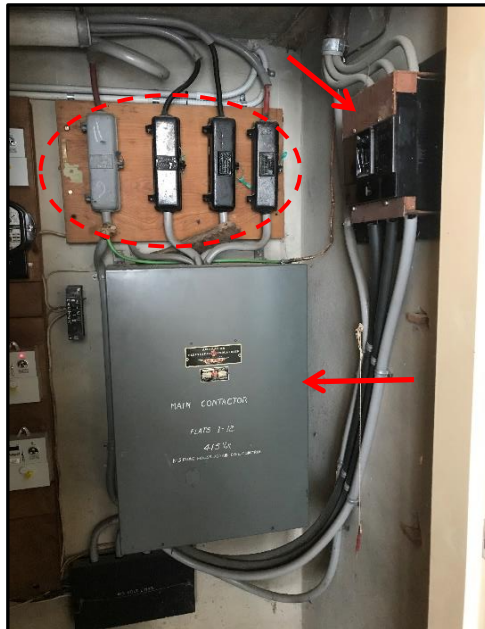
Photograph 14: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, fuses generally, internal insulation, asbestos assumed.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 7
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20



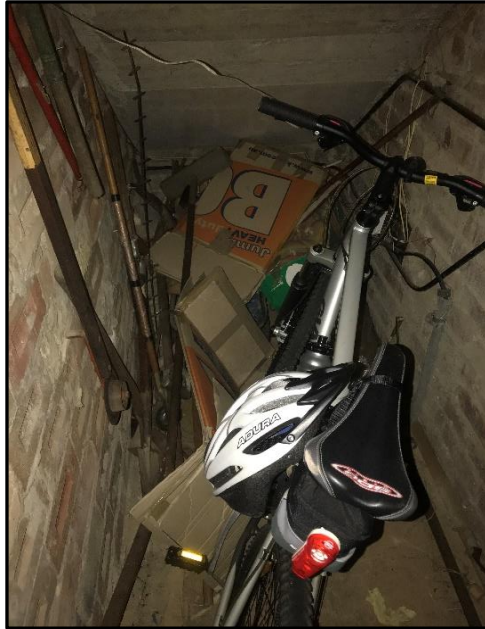


Photograph 15: 147 Kurraba Road, South Block, interior, base of front stairwell, main breaker, electrical board, resinous board, asbestos assumed.



Photograph 16: 147 Kurraba Road, South Block, interior, base of front stairwell, enclosed panels and equipment generally (e.g. Main Contactor 415V, 415 Volt Links, Main Breaker), internal components, may contain asbestos.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 8
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



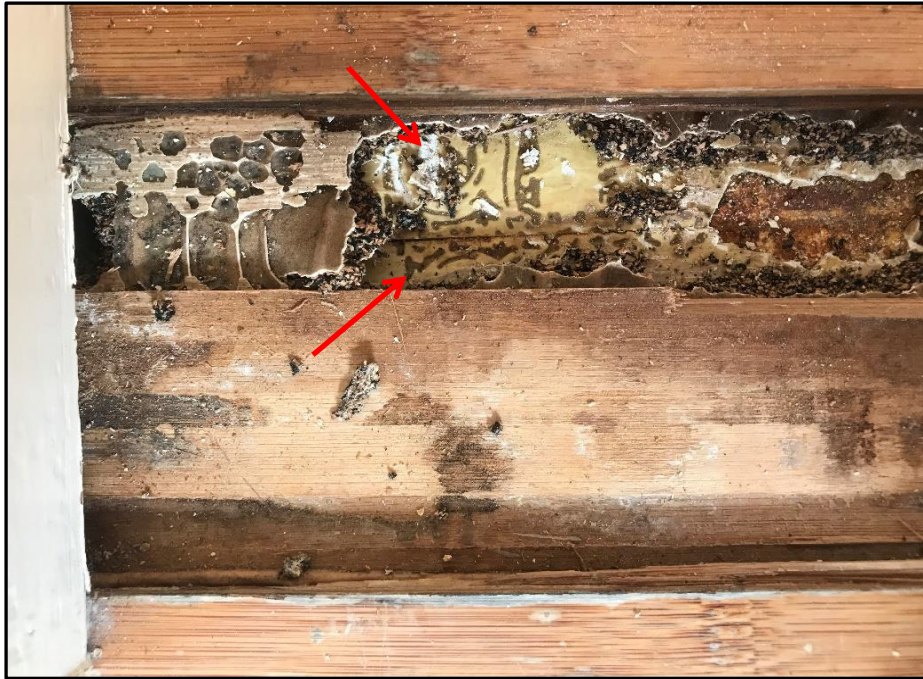
Photograph 17: 147 Kurraba Road, South Block, interior, base of front stairwell, electrical room, materials in general, limited access.



Photograph 18: 147 Kurraba Road, Unit 12, interior, entrance and living areas, floor below carpet, slab topping, no asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 9
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 19: 147 Kurraba Road, Unit 12, interior, kitchen floor (below floorboards and bitumastic layer), vinyl flooring, no asbestos detected by analysis.



Photograph 20: 147 Kurraba Road, Unit 12, interior, kitchen floor (below vinyl flooring), slab topping, no asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 10
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 21: 147 Kurraba Road, Unit 12, interior, kitchen floor (below floorboards), bituminous layer containing cork (or similar) and surficial adhesives, no asbestos detected by analysis.

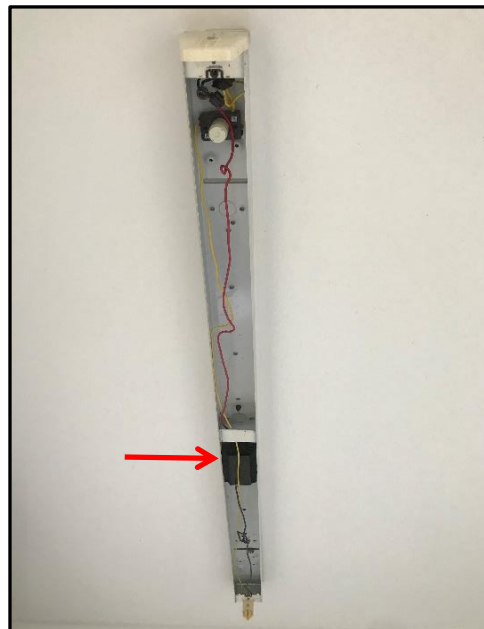


Photograph 22: 147 Kurraba Road, Unit 6, interior, bathroom, wall lining to mirror cabinet, fibre cement, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 11
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20

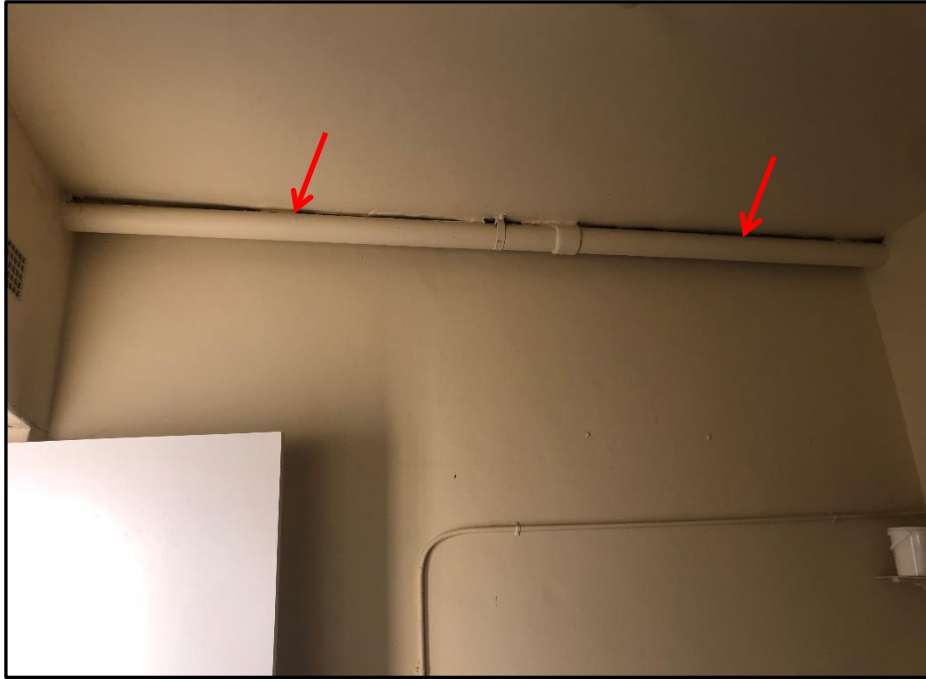


Photograph 23: 147 Kurraba Road, Unit 6, interior, kitchen, hot water unit (circa 2019), bulk insulation, suspected SMF or foam.



Photograph 24: 147 Kurraba Road, Unit 6, interior, kitchen, ceiling, fluorescent light fitting, internal component (ballast), PCB (assumed).

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 12
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20



Photograph 25: 147 Kurraba Road, South Block, interior, communal laundry, service conduit, fibre cement pipe, asbestos assumed.

	<b>Site Photographs</b>	PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register	PLATE No: 13
	147-153 Kurraba Road, Kurraba Point NSW	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20

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## **Appendix C**

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HBM Register and Plates – 151 Kurraba Road

DP Project No: 86447.06  
Hazardous Building Materials (HBM) Register  
Kurraba Road, Kurraba Point NSW

Building	Room / 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		
151 Kurraba Road	roof cavity	throughout	settled dust	151-CC-LD01	elevated lead concentration detected (340 mg/m <sup>2</sup> )	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	<p>Ensure access to contaminated building cavities is adequately restricted and entry is only made under controlled conditions.</p> <p>Remove contamination if reasonably practicable to do so and prior to any substantive disturbance.</p> <p>Implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition work).</p>
151 Kurraba Road	roof cavity	northern side of cavity, western end	low-density and/or weathered fibre board	151-CC-A01	asbestos detected by analysis	3	2	3	1	0	2	11	Moderate	2	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	roof cavity	southeastern corner of cavity	bituminous lining debris	151-CC-A02	asbestos detected by analysis	1	2	3	1	0	2	9	Low	3	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	roof cavity	throughout ceiling cavity	suspected bituminous lining debris	refer 151-CC-A02	asbestos (assumed)	1	2	3	1	0	2	9	Low	similar 3	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	roof cavity	near centre of cavity, water tank and lid	fibre cement product	N/A	asbestos (assumed)	1	1	3	1	0	2	8	Low	4	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	roof cavity	northwestern corner	cylindrical cannisters	151-CC-PCB1	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	No hazardous material identified.
151 Kurraba Road	roof cavity	northwestern corner	cylindrical cannisters	151-CC-PCB1	Nil PCB detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 5	No hazardous material identified.
151 Kurraba Road	Unit 4	verandah, floor below carpet	bituminous lining	151-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	living room, floor below carpet	bituminous lining	refer 151-A01	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	hallway, floor below carpet	bituminous lining	refer 151-A01	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	bedroom 1, floor below carpet	timber lining with hessian backing	refer 151-A04	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	bedroom 1, floor below carpet and timber lining	bituminous lining	refer 151-A05	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	bedroom 2, floor below carpet	timber lining with hessian backing	151-A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

Building	Room / 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		
151 Kurraba Road	Unit 4	bedroom 2, floor below carpet and timber lining	bituminous lining	151-A05	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	kitchen, exposed flooring	cream vinyl with fibrous backing	151-A07	No asbestos detected by analysis <b>SMF detected by analysis</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	refer 6	Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
151 Kurraba Road	Unit 4	kitchen, below exposed flooring	cream vinyl tile and laminate	151-A08	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	refer 6	No hazardous material identified.
151 Kurraba Road	Unit 4	kitchen, below exposed flooring	pebble patterned vinyl sheeting with fibrous backing	151-A09	<b>asbestos detected by analysis</b>	3	1	0	1	2	1	8	Low	refer 6	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	Unit 4	kitchen, below exposed flooring	grey floor topping	151-A10	<b>asbestos detected by analysis</b>	3	3	0	1	2	1	10	Moderate	refer 6	Asbestos suspected to be associated with fibrous underlay to the overlying vinyl sheeting (refer preceding entry in this register) however further confirmatory analysis of floor topping materials in other areas is recommended as a precaution. Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	Unit 4	verandah, exterior of window	glazing putty	151-A11	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	verandah, window	sash cord	151-A12	No asbestos detected by analysis <b>SMF detected by analysis</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 7	Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
151 Kurraba Road	Unit 4	living room, walls below paint	paper lining	151-A13	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	Unit 4	bathroom, mirror cabinet, rear lining	fibre cement sheeting	N/A	<b>asbestos (assumed)</b>	1	1	1	2	2	1	8	Low	8	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	Unit 4	kitchen, underside of sink	bituminous lining	151-A14	<b>asbestos detected by analysis</b>	1	1	2	2	2	1	9	Low	9	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	Unit 4	living room	chimney interior	N/A	<b>may contain asbestos</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	Inaccessible area/material - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	Unit 4	verandah, exterior window frame	white/cream paint	spot test and 151-1-LP01	<b>lead paint (&gt;0.1% lead w/w)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 4	living room, exterior window frame	white/cream paint	spot test	<b>positive for lead</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 4	living room, wall	white/cream paint	spot test	<b>faint positive for lead</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.



DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment										
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority	Photo No.	Summary Comment/Recommendation	
151 Kurraba Road	Unit 4	kitchen, door frame to stairwell	undercoat paint(s)	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
151 Kurraba Road	Unit 4	bedroom 2, door frame	undercoat paint(s)	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
151 Kurraba Road	Unit 4	kitchen, ceiling	white paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
151 Kurraba Road	Unit 1	cupboard at entry, electrical panel	exposed materials in general	N/A	no asbestos identified visually	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.	
151 Kurraba Road	Unit 1	living room (per site plan), exterior of window	glazing putty	151-1-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.	
151 Kurraba Road	Unit 1	bathroom, mirror cabinet, rear lining	fibre cement sheeting	N/A	asbestos (assumed)	1	1	1	2	2	1	8	Low	refer 8	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
151 Kurraba Road	Unit 1	verandah, bedroom 1 and living room (per site plan), floor below ceramic tiles	flooring material(s)	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Materials generally inaccessible below ceramic tiles. Assess area when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).	
151 Kurraba Road	Unit 1	subfloor accessed from kitchen (per site plan)	materials in general	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	Area inaccessible due to depth of cavity, size of access point and potential confined space. Assess area when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).	
151 Kurraba Road	Unit 1	subfloor, packing materials (e.g. between piers and joists)	fibre cement sheeting or similar	N/A	suspected asbestos	1	2	2	0	0	2	7	Low	refer 11	Inaccessible area/material. Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	Unit 1	subfloor, ground surfaces	fibre cement debris	N/A	suspected asbestos	1	3	3	0	0	2	9	Low	refer 11	Inaccessible area/material. Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	Unit 1, garage	ceiling	bituminous lining	151-G-1	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.	
151 Kurraba Road	Unit 1	exterior, balcony handrail	grey and green paints	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	
151 Kurraba Road	Unit 1	exterior, balcony window sill	white paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

151 Kurraba Road, Kurraba Point NSW						Asbestos Risk Assessment									Photo No.	Summary Comment/Recommendation
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
151 Kurraba Road	Unit 1	interior, kitchen (per site plan), window sill	white paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 1	interior, bedroom 2, window sill	white paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 1	interior, verandah, window sill	white paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 1	interior, verandah, masonry wall	white paint system, undercoats	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 1	interior, bathroom, door frame	undercoat(s)	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	units in general	ceiling cavity(s) (if present)	settled dust	refer 151-CC-LD01	suspected elevated lead (≥0.5 mg/m <sup>2</sup> )	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ensure access to contaminated building cavities is adequately restricted and entry is only made under controlled conditions.  Remove contamination if reasonably practicable to do so and prior to any substantive disturbance.  Implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition work).
151 Kurraba Road	units in general	underside of concrete slab and similar areas	bituminous membranes/linings (if present)	refer 151-CC-A02	may contain asbestos	0	2	1	1	2	1	7	Low	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	electrical panel(s) (if present)	resinous board(s)	N/A	may contain asbestos	0	1	1	2	2	1	7	Low	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	electrical panel(s) (if present)	fuse insulation	N/A	may contain asbestos	2	1	1	2	2	1	9	Low	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	electrical panel(s) (if present)	other components (e.g. internal linings, wire insulation etc.)	N/A	may contain asbestos	1	1	1	2	2	1	8	Low	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

Building	Room / 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		
151 Kurraba Road	units in general	bathroom, mirror cabinet, rear lining	fibre cement sheeting	N/A	may contain asbestos	1	1	1	2	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	floors	various linings (particularly underlying layers)	refer 151-A09	may contain asbestos	3	1	0	1	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	floors	floor topping materials	refer 151-A10	may contain asbestos	3	3	0	1	2	1	10	Moderate	N/A	Asbestos may be associated with fibrous underlay to any overlying vinyl sheeting (refer materials identified in Unit 4, kitchen) however further confirmatory analysis of floor topping materials is recommended as a precaution. Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
151 Kurraba Road	units in general	windows	glazing putty	refer 151-A11, 151-1-A01 and 151-E-A07	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units and areas in general	windows	sash cord	refer 151-A12	assumed SMF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Classify material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
151 Kurraba Road	units in general	walls below paint	paper lining (if present)	refer 151-A13	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	kitchen, underside of sink	bituminous lining	refer 151-A14	may contain asbestos	1	1	2	2	2	1	9	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	living room	fireplace and/or chimney interior (if present)	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material - Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	units in general	throughout, sheeted and framed walls and ceilings	possible fibre cement sheeting in areas	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	These materials generally found to comprise gyprock, plaster or similar in the areas inspected however inspection was limited. Proceed with caution and further assess these materials for asbestos prior to any disturbance.
151 Kurraba Road	units in general	hot water units	internal insulation	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
151 Kurraba Road	units in general	materials in general	paints	refer 151-1-LP01, 151-E-LP02, 151-LP01.	may contain lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement controls to prevent exposure and dispersal during demolition. Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions is pre-classified as general solid waste (non-putrescible) under the NSW EPA Waste Classification Guidelines.

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment									Photo No.	Summary Comment/Recommendation
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
151 Kurraba Road	units in general	older fluorescent light fittings (if present)	internal components (e.g. capacitors and ballasts), insulating oil	N/A	may contain PCB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Older style fluorescent lights were generally not identified in the areas inspected however inspection was limited. As a precaution, older fluorescent light fittings (if present) should be assumed to potentially house components containing PCBs. Inspect older fluorescent light fittings in detail when safe access is available and prior to any disturbance. Remove any components containing, or assumed to contain, PCB prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	northern end, ground, PMG pit	fibre cement product	151-E-A01	asbestos detected by analysis	1	1	2	1	1	1	7	Low	12	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	gas plant	typical gasket(s)	151-E-A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	behind retaining wall	waste/fill materials	N/A	inaccessible and may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13, 14	Inaccessible area/material (e.g. due height, potential instability of materials and risk of fall) - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	subfloor area at top of retaining wall	materials in general	N/A	inaccessible and may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible area/material (e.g. due height, potential instability of materials and risk of fall) - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	subfloor area(s) generally	packing materials (e.g. between piers and joists)	fibre cement sheeting or similar (suspected)	N/A	suspected asbestos	1	2	2	0	0	2	7	Low	refer 14	Inaccessible area/material (e.g. due height, potential instability of materials and risk of fall) - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	subfloor area(s) generally	ground surfaces	fibre cement debris	N/A	suspected asbestos	1	3	3	0	0	2	9	Low	refer 14	Inaccessible area/material (e.g. due height, potential instability of materials and risk of fall) - hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	ceiling	upper bituminous lining	151-E-A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	No hazardous material identified.	
151 Kurraba Road	base or rear stairwell, emergency exit tunnel	ceiling	lower bituminous lining	151-E-A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	No hazardous material identified.	
151 Kurraba Road	exterior	western façade, typical sandstone block wall	pointing	151-E-A05	asbestos detected by analysis	1	1	2	1	2	1	8	Low	16	Consider further confirmatory sampling and analysis prior to disturbance due to detection of asbestos and nature and extent of pointing materials present. Remove asbestos material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
151 Kurraba Road	exterior	sandstone block walls generally	pointing	refer 151-E-A05	may contain asbestos	1	1	2	1	2	1	8	Low	refer 16	Consider further confirmatory sampling and analysis prior to disturbance due to detection of asbestos and nature and extent of pointing materials present. Remove asbestos material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	
151 Kurraba Road	interior, communal laundry	ceiling	fibre cement sheeting	151-E-A06	asbestos detected by analysis	1	1	3	1	2	1	9	Low	17	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.	

DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

Building	Room / 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		
151 Kurraba Road	exterior	communal laundry, window frame	glazing putty	151-E-A07	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
151 Kurraba Road	exterior	northern façade, hot water units (x2)	internal insulation	N/A	suspected SMF or foam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	Inaccessible area/material (due height and private residence). Confirm status of hazardous material(s) when safe access available and prior to any disturbance. Remove and dispose accordingly.
151 Kurraba Road	exterior	eastern facade and portion of northern façade	materials in general	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19, 20	Materials generally inaccessible due to private courtyard at ground level. Assess area when access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
151 Kurraba Road	exterior	southwest corner building, parapet roof	waterproofing membrane(s)	N/A	suspected asbestos	0	2	2	0	0	0	4	Low	21	Inaccessible area/material (no designated safe access identified). Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	exterior	southwest corner building, parapet roof	materials in general	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	refer 21	Inaccessible area/material (no designated safe access identified). Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	exterior	southern entrance alcove, roof	waterproofing membrane(s)	N/A	suspected asbestos	0	2	2	0	0	0	4	Low	22	Inaccessible area/material (height and site activity at time of inspection). Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	rear stairwell	lower section, stair and landing(s)	green paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourimetric spot test
151 Kurraba Road	rear stairwell	typical handrail	grey and underlying green paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourimetric spot test
151 Kurraba Road	exterior	communal laundry, window frame	cream paint	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	interior	main entrance stairs, handrail	aqua and underlying cream and red paints	spot test and 151-E-LP02	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	interior	main entrance stairs, typical window sill	cream paint	spot test and 151-LP01	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
151 Kurraba Road	Unit 4	bedroom 2, ceiling	white and underlying paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourimetric spot test
151 Kurraba Road	Unit 4	kitchen, ceiling	white and underlying paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourimetric spot test
151 Kurraba Road	interior	main entrance, electrical panel at base of stairs, fuses	internal insulation	N/A	suspected asbestos	3	1	1	1	2	1	9	Low	23	Inaccessible area/material (electrical hazard). Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
151 Kurraba Road	interior	main entrance, electrical panel at base of stairs	portion of wire insulation	N/A	suspected asbestos	2	1	1	1	2	1	8	Low	24	Inaccessible area/material (electrical hazard). Asbestos suspected present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

DP Project No: 86447.06  
Hazardous Building Materials (HBM) Register  
Kurraba Road, Kurraba Point NSW

Building	Room / 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		
151 Kurraba Road	Unit 4	living room, wall	white paint	151-4-LP01	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.





Photograph 1: 151 Kurraba Road, roof cavity, throughout, settled dust, elevated lead concentration detected (340 mg/m2).



Photograph 2: 151 Kurraba Road, roof cavity, northern side of cavity, western end, low-density and/or weathered fibre board, asbestos detected by analysis.

	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 1
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 3: 151 Kurraba Road, roof cavity, southeastern corner of cavity, bituminous lining debris, asbestos detected by analysis.



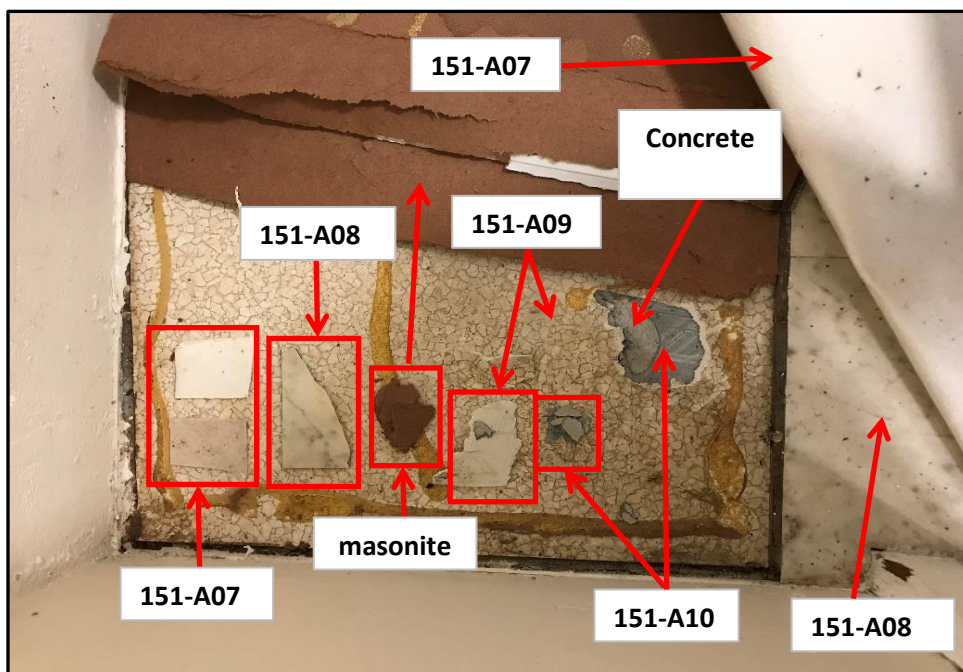
Photograph 4: 151 Kurraba Road, roof cavity, near centre of cavity, water tank and lid, fibre cement product, asbestos (assumed).

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 2
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 5: 151 Kurraba Road, roof cavity, northwestern corner, cylindrical cannisters, no asbestos or PCB detected by analysis.

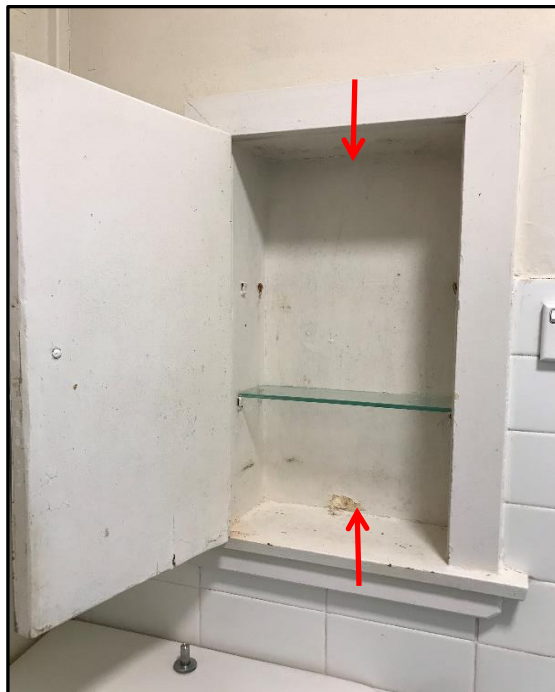


Photograph 6: 151 Kurraba Road, Unit 4, kitchen, flooring layers from top (151-A07) to bottom (151-A10) and apparent concrete slab.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 3
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 7: 151 Kurraba Road, typical sash cord.



Photograph 8: 151 Kurraba Road, Unit 4, bathroom, mirror cabinet, rear lining, fibre cement sheeting, asbestos (assumed).

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 4
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 9: 151 Kurraba Road, Unit 4, kitchen, underside of sink, bituminous lining, asbestos detected by analysis.



Photograph 10: 151 Kurraba Road, Unit 4, living room, chimney interior, inaccessible.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 5
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 11: 151 Kurraba Road, Unit 1, subfloor accessed from kitchen (per site plan), materials in general, inaccessible.



Photograph 12: 151 Kurraba Road, base or rear stairwell, emergency exit tunnel, northern end, ground, PMG pit, fibre cement product, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 6
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20



Photograph 13: 151 Kurraba Road, base or rear stairwell, emergency exit tunnel, behind retaining wall, waste/fill materials, inaccessible and may contain asbestos.



Photograph 14: 151 Kurraba Road, base or rear stairwell, emergency exit tunnel, behind retaining wall, waste/fill materials, inaccessible and may contain asbestos.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 7
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 15: 151 Kurraba Road, base or rear stairwell, emergency exit tunnel, ceiling, upper bituminous linings, no asbestos detected by analysis.



Photograph 16: 151 Kurraba Road, exterior, western façade, typical sandstone block wall, pointing, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 8
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 17: 151 Kurraba Road, interior, communal laundry, ceiling, fibre cement sheeting, asbestos detected by analysis.



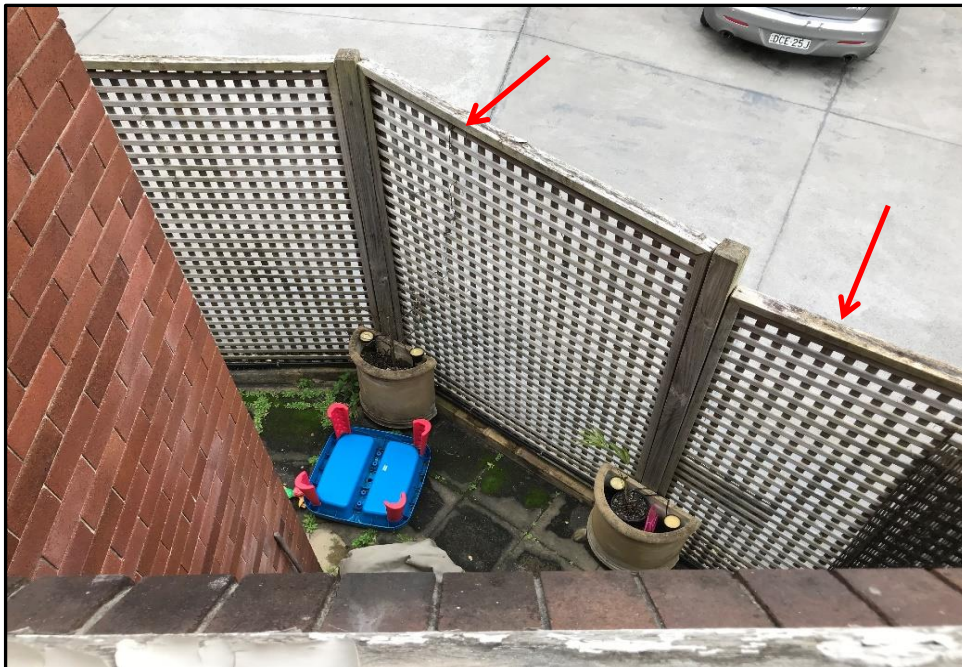
Photograph 18: 151 Kurraba Road, exterior, northern façade, hot water units (x2), internal insulation, suspected SMF or foam.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 9
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 19: 151 Kurraba Road, exterior, eastern facade and portion of northern façade, materials in general, inaccessible.



Photograph 20: 151 Kurraba Road, exterior, eastern facade and portion of northern façade, materials in general, inaccessible.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 10
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



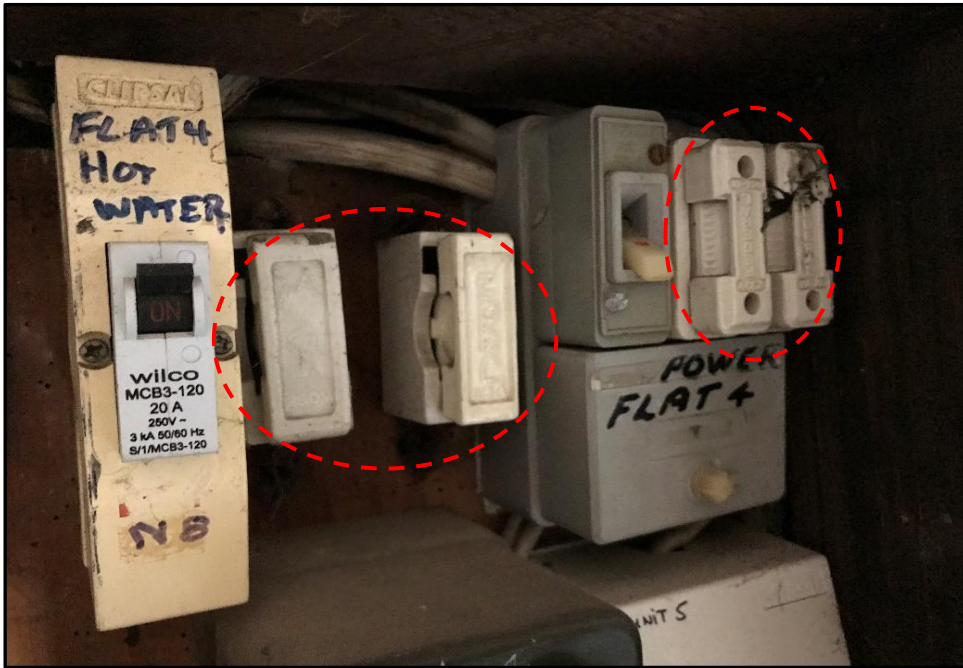


Photograph 21: 151 Kurraba Road, exterior, southwest corner building, parapet roof, waterproofing membrane(s), suspected asbestos.



Photograph 22: 151 Kurraba Road, exterior, southern entrance alcove, roof, waterproofing membrane(s), suspected asbestos.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 11
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 23: 151 Kurraba Road, interior, main entrance, electrical panel at base of stairs, fuses, internal insulation, suspected asbestos.



Photograph 24: 151 Kurraba Road, interior, main entrance, electrical panel at base of stairs, portion of wire insulation, suspected asbestos.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 12
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20

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## **Appendix D**

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HBM Register and Plates – 153 Kurraba Road

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

Building	Room / 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		
153 Kurraba Road	Unit 5	bedrooms 1 and 2, floor below carpet	floor topping	153-5- A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	No asbestos/hazardous material identified.
153 Kurraba Road	Unit 5	living room, dining room and hallway, floor below timber laminate	floor topping	153-5-A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 1	No asbestos/hazardous material identified.
153 Kurraba Road	Unit 5	bathroom, below ceramic tiles to bathtub	grey waterproofing membrane and fibre cement sheeting	153-5-A06	No asbestos detected by analysis <b>SMF detected by analysis</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
153 Kurraba Road	Unit 5	living room, wall, typical light fitting	wire insulation	153-5-A07	No asbestos detected by analysis <b>SMF detected by analysis</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
153 Kurraba Road	Unit 5	kitchen, lining behind gas hot water unit	flexible panel	153-5-A08	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos/hazardous material identified.
153 Kurraba Road	Unit 5	bedroom 1, exterior, between window frame and wall	putty/sealant	153-5-A09	<b>asbestos detected by analysis</b>	0	2	2	1	1	1	7	Low	4	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
153 Kurraba Road	Unit 5	bedroom 2, exterior, between window frame and wall	putty/sealant	153-5-A10	<b>asbestos detected by analysis</b>	0	2	2	1	1	1	7	Low	5	Remove and dispose material prior to any substantive disturbance and prior to general demolition work proceeding.
153 Kurraba Road	Unit 5	electrical panel	materials in general	N/A	not identified	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Item not identified. Proceed with caution.
153 Kurraba Road	Unit 5	living room, window sill	white paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	Unit 5	dining room, window sill	white paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	Unit 5	bedroom 1, window sill	white paint	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	Unit 5	front entrance, door frame	underlying paint(s)	spot test	<b>positive for lead</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	Unit 5	kitchen, wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	Unit 5	kitchen, door to rear stairwell, doorframe	cream paint system, underlying paints	spot test	<b>faint positive for lead</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	Unit 5	hallway, wall	cream paint system, underlying paints	spot test	<b>faint positive for lead</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	Unit 5	living room wall	cream paint system	153-5- LP01	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

Building	Room / 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		
153 Kurraba Road	Unit 6	throughout	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assessment limited to a walkthrough visual inspection only due to unit occupation. Conduct a further detailed assessment when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
153 Kurraba Road	Unit 6	kitchen, living room and hallway	materials below exposed flooring	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6, 7	Assessment limited to a walkthrough visual inspection only due to unit occupation. Conduct a further destructive/intrusive assessment when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
153 Kurraba Road	Unit 6	bedrooms	floor topping below carpet	N/A	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	No samples collected for analysis due unit occupation. Consider confirmatory sampling analysis for asbestos prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
153 Kurraba Road	Unit 6	bathroom, below ceramic tiles (including bathtub)	substrate material(s)	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9, 10	Assessment limited to a walkthrough visual inspection only due to unit occupation. Conduct a further destructive/intrusive assessment when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
153 Kurraba Road	Unit 6	sash windows generally	sash cords	refer 153-ST-A01	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	No asbestos/hazardous material identified.
153 Kurraba Road	Unit 6	kitchen, electrical panel	materials in general	N/A	no asbestos identified visually	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	No asbestos/hazardous material identified.
153 Kurraba Road	Unit 6	bathroom, wall	fluorescent light fitting, internal components	N/A	may contain PCBs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	Area inaccessible due to electrical hazard and unit occupation. Assess area when safe access available and prior to any substantive disturbance (e.g. renovation, demolition or maintenance work).
153 Kurraba Road	Unit 6	throughout	paints	refer 153-ST-LP02, 153-R-LP03 and 153-E-LP01	may comprise lead paints	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	units in general	bathrooms, below ceramic tiles	fibre cement sheeting (if present)	N/A	asbestos (assumed)	1	1	0	1	2	1	6	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
153 Kurraba Road	units in general	ceiling cavity(s) (if present)	settled dust	N/A	suspected elevated lead ( $\geq 0.5 \text{ mg/m}^2$ )	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ensure access to contaminated building cavities is adequately restricted and entry is only made under controlled conditions.  Remove contamination if reasonably practicable to do so and prior to any substantive disturbance.  Implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition work).
153 Kurraba Road	units in general	electrical panel(s) (if present)	resinous board(s)	N/A	may contain asbestos	0	1	1	2	2	1	7	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.
153 Kurraba Road	units in general	electrical panel(s) (if present)	fuse insulation	N/A	may contain asbestos	2	1	1	2	2	1	9	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.



DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

Building	Room / 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			
153 Kurraba Road	units in general	electrical panel(s) (if present)	other components (e.g. internal linings, wire insulation etc.)	N/A	may contain asbestos	1	1	1	2	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	units in general	floors	various linings/substrates (including fibrous backing to vinyl sheeting)	N/A	may contain asbestos	3	1	0	1	2	1	8	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	units in general	sash windows generally	sash cord	refer 153-ST-A01	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos/hazardous material identified.	
153 Kurraba Road	units in general	kitchen, underside of sink	bituminous lining (if present)	N/A	may contain asbestos	1	1	2	2	2	1	9	Low	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	units in general	throughout, sheeted and framed walls and ceilings	possible fibre cement sheeting in areas	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	These materials generally found to comprise gyprock, plaster or similar in the areas inspected however inspection was limited. Proceed with caution and further assess these materials for asbestos prior to any disturbance.	
153 Kurraba Road	units in general	older hot water units	internal insulation	N/A	may contain asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Undertake confirmatory inspection, sampling and analysis prior to substantive disturbance. Remove hazardous materials prior to disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	units in general	throughout	paints	refer 153-ST-LP02, 153-R-LP03 and 153-E-LP01	may comprise lead paints	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
153 Kurraba Road	units in general	older fluorescent light fittings (if present)	internal components (e.g. capacitors and ballasts), insulating oil	N/A	may contain PCB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Older style fluorescent lights were generally not identified in the areas inspected however inspection was limited. As a precaution, older fluorescent light fittings (if present) should be assumed to potentially house components containing PCBs. Inspect older fluorescent light fittings in detail when safe access is available and prior to any disturbance. Remove any components containing, or assumed to contain, PCB prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
153 Kurraba Road	rear stairwell	typical sash window	sash cord	153-ST-A01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	No asbestos/hazardous material identified.	
153 Kurraba Road	rear stairwell	typical sash window	glazing putty	153-ST- A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	No asbestos/hazardous material identified.	
153 Kurraba Road	rear stairwell	base of stairwell, underside of concrete slab	paper/card lining	153-ST-A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	No asbestos/hazardous material identified.	
153 Kurraba Road	rear stairwell	base of stairwell, gas plant	gaskets	N/A	suspected non-asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Generally inaccessible. Proceed with caution.	
153 Kurraba Road	rear stairwell	base of stairwell, gas plant	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Limited access due to strong gas smell at time of inspection. Proceed with caution.	
153 Kurraba Road	rear stairwell	sash window, window sill	white paint	153-ST- LP02	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
153 Kurraba Road	rear stairwell	wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test	

DP Project No: 86447.06  
 Hazardous Building Materials (HBM) Register  
 Kurraba Road, Kurraba Point NSW

Building	Room / 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		
153 Kurraba Road	front stairwell	glass brick windowlight	pointing	153-ST-A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	No asbestos/hazardous material identified.
153 Kurraba Road	front stairwell	base of stairs, electrical cupboard	wire insulation	N/A	asbestos assumed	2	1	2	1	2	1	9	Low	10	Inaccessible area/material (electrical hazard). Hazardous materials assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
153 Kurraba Road	front stairwell	wall	cream paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	front stairwell	handrail to stairs	white paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	rooftop	ceiling cavity over stairwell	materials in general	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	Inaccessible area/material (occupied building, no designated access hatch identified). Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
153 Kurraba Road	rooftop	ceiling cavity over stairwell	settled dust/debris	N/A	elevated lead (≥0.5 mg/m <sup>2</sup> ) assumed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	refer 11	Inaccessible area/material (occupied building, no designated access hatch identified). Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
153 Kurraba Road	rooftop	throughout (below loose pebbles)	bituminous lining	153-R-A01 and 153-R-A02	asbestos detected by analysis	0	1	1	1	2	1	6	Low	12	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
153 Kurraba Road	rooftop	top of stairwell, doorframe	blue paint system	153-R-LP03	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	rooftop	eastern exterior side of stairwell, downpipe	white paint	153-R-LP04	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No lead paint identified by sample analysis.
153 Kurraba Road	rooftop	around base of parapet walls	flashing	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.
153 Kurraba Road	rooftop	typical parapet wall	white paint system	spot test	negative for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Lead not detected by colourmetric spot test
153 Kurraba Road	rooftop	hot water unit (manufactured 2015)	internal insulation	N/A	SMF or foam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.
153 Kurraba Road	exterior	window frames generally, between frame and wall	putty/sealant	refer 153-5-A09 and 153-5-A10	suspected asbestos	0	2	2	1	1	1	7	Low	similar 4 and 5	Consider confirmatory sampling and analysis prior to disturbance. Remove and dispose suspected/confirmed asbestos prior to any substantive disturbance and prior to general demolition work proceeding.
153 Kurraba Road	exterior	sidewalk adjacent Kurraba Road	fibrous pit	153-E-A09	asbestos detected by analysis	1	1	2	2	2	1	9	Low	14	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
153 Kurraba Road	exterior	pavement adjacent main entrance to building	fibrous pit	153-E-A10	asbestos detected by analysis	1	1	2	2	2	1	9	Low	15	Remove material prior to disturbance and prior to general demolition work proceeding. Removal must be undertaken by a licensed asbestos removalist.
153 Kurraba Road	exterior	western façade, laundry window	glazing putty	153-E-A11	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No asbestos/hazardous material identified.
153 Kurraba Road	exterior	eastern façade, glass brick windowlight	putty/sealant	153-E-A12	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16	No asbestos/hazardous material identified.

DP Project No: 86447.06

Hazardous Building Materials (HBM) Register

Kurraba Road, Kurraba Point NSW

						Asbestos Risk Assessment										
Building	Room / Area	Material Location	Material Type	Sample No.	Material Status	Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority	Photo No.	Summary Comment/Recommendation	
153 Kurraba Road	exterior	laundry window	cream paint	153-E-LP01	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Avoid disturbance and implement appropriate controls to prevent exposure and dispersal during building work (e.g. maintenance, refurbishment and demolition). Classify and remove lead-containing waste for disposal in accordance with the NSW EPA Waste Classification Guidelines and WHS Regulation.	
153 Kurraba Road	exterior	laundry window, below window sill	flashing	spot test	positive for lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Remove and dispose material prior to any substantive disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	exterior	northern end of western façade	unmarked rooms x 2	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	Rooms not accessible with key sets provided. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
153 Kurraba Road	exterior	sandstone block walls	typical pointing	153-5-A11	no asbestos detected by analysis (caution advised)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	No asbestos identified in the sample analysed however caution is advised as asbestos was identified in a sample (sample 151-E-A05) of similar pointing material at 151 Kurraba Road. Consider a further program of sampling and analysis prior to any disturbance.	
153 Kurraba Road	exterior	western side building, pavement	unidentified pit	N/A	inaccessible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	Inaccessible area/material - Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
153 Kurraba Road	exterior, subfloor	several hot water units (circa 1997 to 2000's)	bulk internal insulation	N/A	SMF or foam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20, 21, 22	Classify SMF material for disposal in accordance with the NSW EPA Waste Classification Guidelines. Implement appropriate controls to prevent exposure and dispersal during removal and disposal.	
153 Kurraba Road	exterior, subfloor	ground surfaces	fibre cement debris	N/A	asbestos identified visually	1	3	3	1	0	2	10	Moderate	23	Remove and dispose material prior to any substantive disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	exterior, subfloor	building joints	fibre cement packing materials (assumed)	N/A	asbestos assumed	1	3	2	1	0	2	9	Low	N/A	Material assumed present as a precaution and due limited access. Remove and dispose material prior to any substantive disturbance and prior to general demolition work proceeding.	
153 Kurraba Road	exterior, subfloor	throughout	materials in general	N/A	limited access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Access limited due to height of cavity, subfloor walls, presence of construction waste and location/number of designated access points etc. Proceed with caution.	



Photograph 1: 153 Kurraba Road, typical Unit, bedroom, floor below carpet, floor topping.



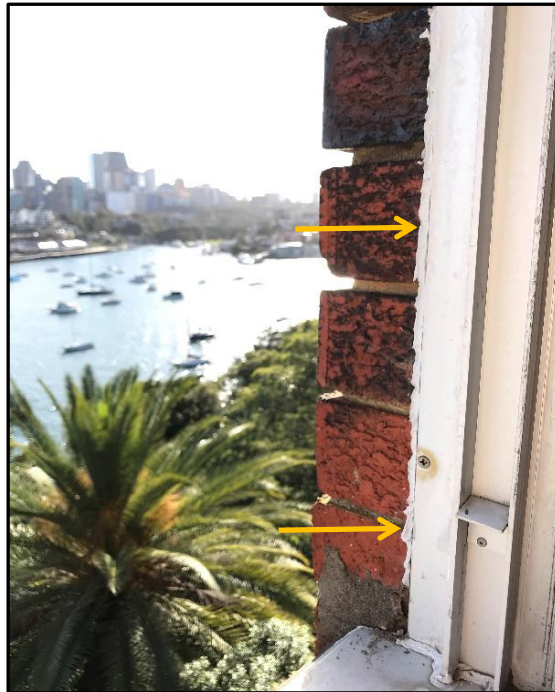
Photograph 2: 153 Kurraba Road, Unit 5, bathroom, below ceramic tiles to bathtub, grey waterproofing membrane and fibre cement sheeting, no asbestos detected by analysis

	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 1
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20









Photograph 5: 153 Kurraba Road, Unit 5, bedroom 2, exterior, between window frame and wall, putty/sealant, asbestos detected by analysis.



Photograph 6: 153 Kurraba Road, rear stairwell, typical sash window, sash cord, no asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 3
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20

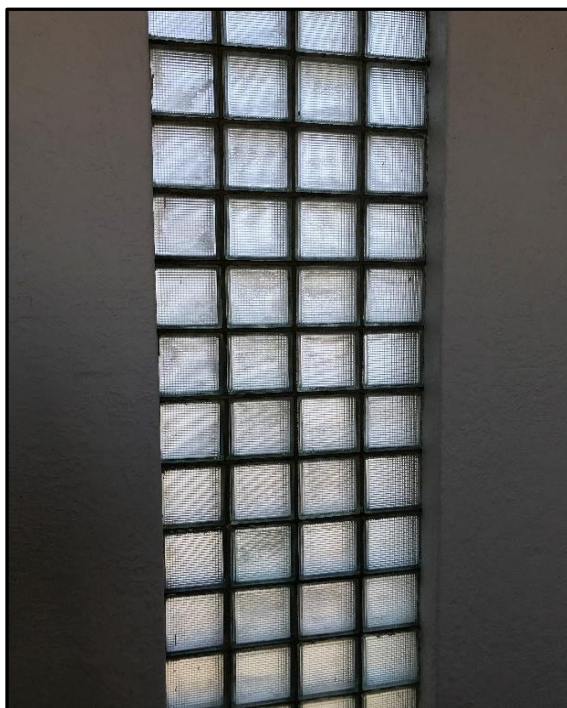


Photograph 7: 153 Kurraba Road, rear stairwell, typical sash window, glazing putty, no asbestos detected by analysis.

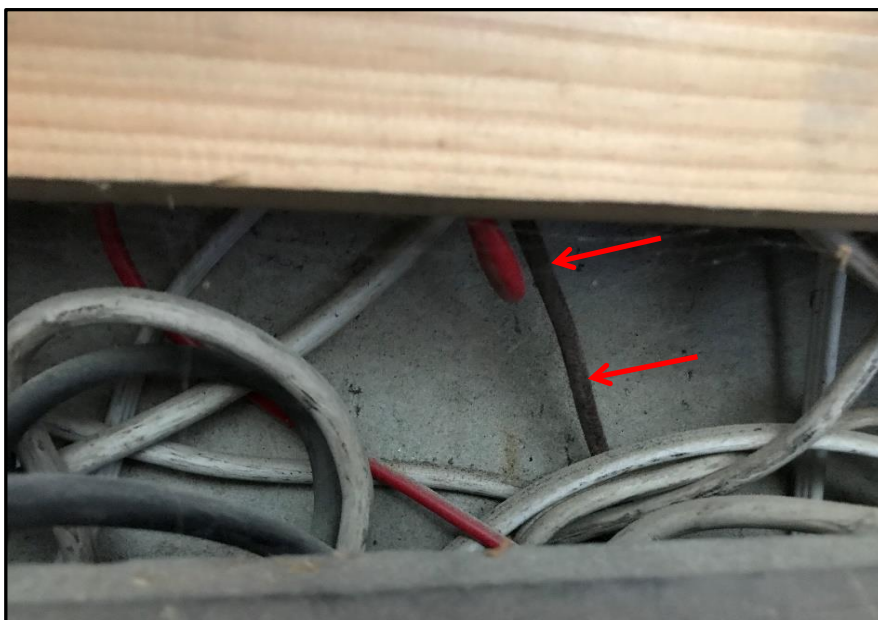


Photograph 8: 153 Kurraba Road, rear stairwell, base of stairwell, underside of concrete slab, paper/card lining, no asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 4
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 9: 153 Kurraba Road, front stairwell, glass brick windowlight, pointing, no asbestos detected by analysis.



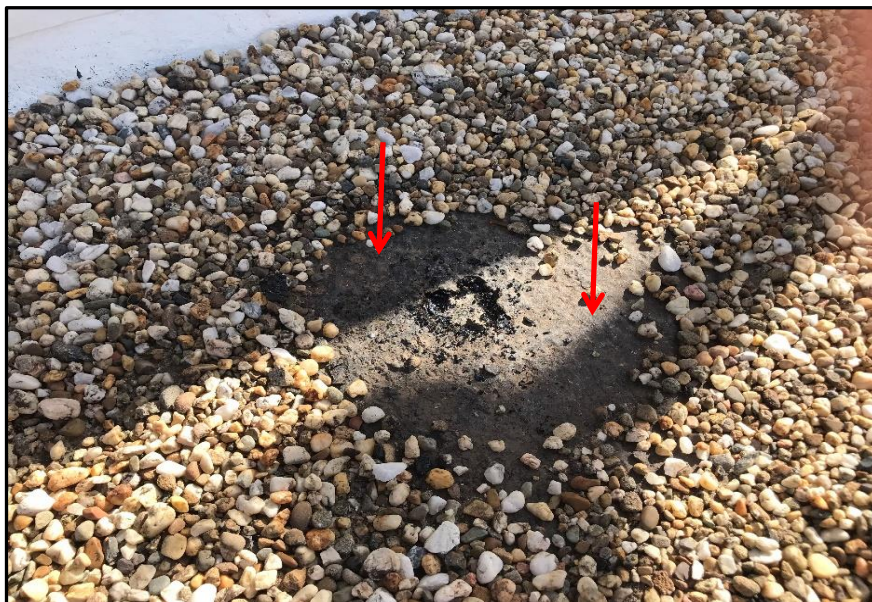
Photograph 10: 153 Kurraba Road, front stairwell, base of stairs, electrical cupboard, wire insulation, asbestos assumed.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 5
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 11: 153 Kurraba Road, rooftop, ceiling cavity over stairwell, materials in general, inaccessible.



Photograph 12: 153 Kurraba Road, rooftop, throughout (below loose pebbles), bituminous lining, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 6
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 13: 153 Kurraba Road, rooftop, hot water unit (manufactured 2015), internal insulation, SMF or foam.



Photograph 14: 153 Kurraba Road, exterior, sidewalk adjacent Kurraba Road, fibrous pit, asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 7
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





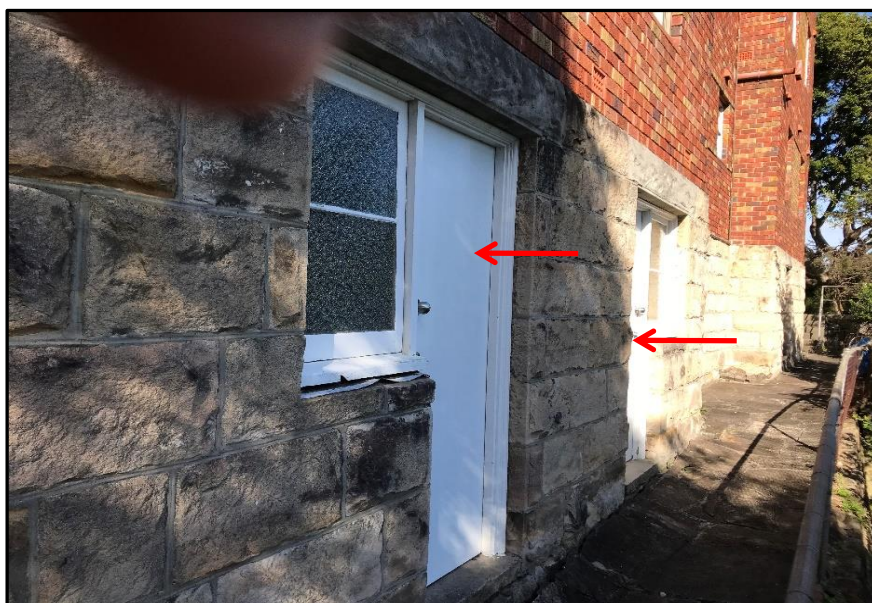
Photograph 15: 153 Kurraba Road, exterior, pavement adjacent main entrance to building, fibrous pit, asbestos detected by analysis.



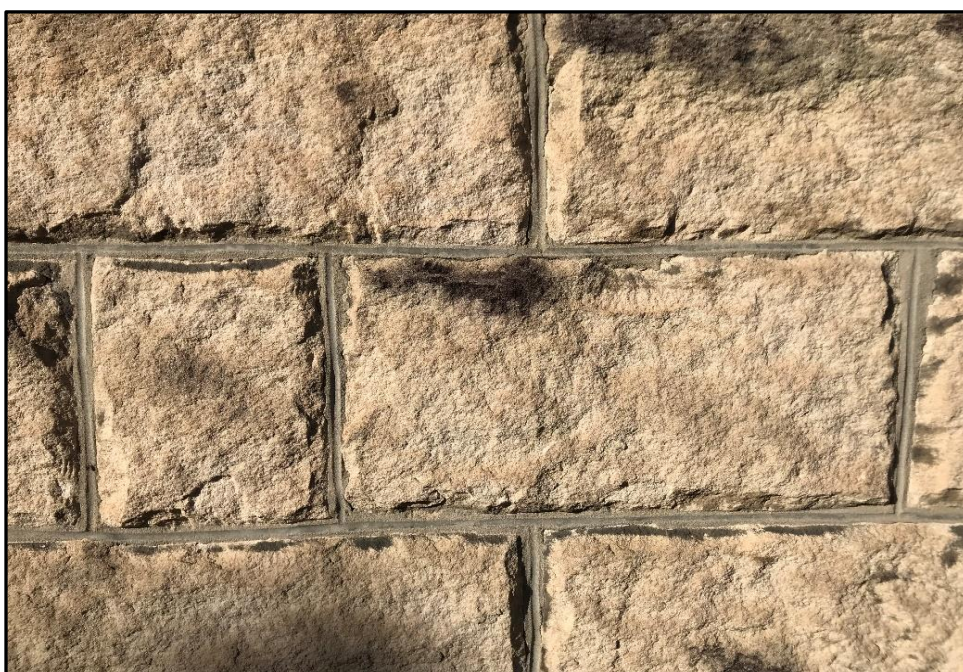
Photograph 16: 153 Kurraba Road, exterior, eastern façade, glass brick windowlight, putty/sealant, no asbestos detected by analysis.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 8
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 17: 153 Kurraba Road, exterior, northern end of western façade, unmarked rooms x 2, inaccessible.



Photograph 18: 153 Kurraba Road, exterior, sandstone block walls, typical pointing, no asbestos detected by analysis (caution advised).

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 9
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20



Photograph 19: 153 Kurraba Road, exterior, western side building, pavement, unidentified pit, inaccessible.



Photograph 20: 153 Kurraba Road, exterior, subfloor, several hot water units (circa 1997 to 2000's), bulk internal insulation, SMF or foam.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>		PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>		PLATE No: 10
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20





Photograph 21: 153 Kurraba Road, exterior, subfloor, several hot water units (circa 1997 to 2000's), bulk internal insulation, SMF or foam.



Photograph 22: 153 Kurraba Road, exterior, subfloor, several hot water units (circa 1997 to 2000's), bulk internal insulation, SMF or foam.

 <b>Douglas Partners</b> Geotechnics   Environment   Groundwater	<b>Site Photographs</b>	PROJECT: 86447.06
	<b>Hazardous Building Materials (HBM) Register</b>	PLATE No: 11
	<b>147-153 Kurraba Road, Kurraba Point NSW</b>	REV: A
	CLIENT: Thirdi Group	DATE: Jul-20





Photograph 23: 153 Kurraba Road, exterior, subfloor, ground surfaces, fibre cement debris, asbestos identified visually.

	<b>Site Photographs</b>		PROJECT: 86447.06
	Hazardous Building Materials (HBM) Register		PLATE No: 12
	147-153 Kurraba Road, Kurraba Point NSW		REV: A
	CLIENT: Thirdi Group		DATE: Jul-20

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## Appendix D

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Laboratory Certificate(s) of Analysis

## **CERTIFICATE OF ANALYSIS 246430**

### **Client Details**

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

### **Sample Details**

<b>Your Reference</b>	<b><u>86447.06 - Kurraba Point</u></b>
<b>Number of Samples</b>	28 Material, 9 Paint
<b>Date samples received</b>	07/07/2020
<b>Date completed instructions received</b>	07/07/2020

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

### **Report Details**

<b>Date results requested by</b>	14/07/2020
<b>Date of Issue</b>	14/07/2020
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>	

#### **Asbestos Approved By**

Analysed by Asbestos Approved Identifier: Lucy Zhu  
 Authorised by Asbestos Approved Signatory: Lucy Zhu

#### **Results Approved By**

Hannah Nguyen, Senior Chemist  
 Lucy Zhu, Asbestos Supervisor

#### **Authorised By**



Nancy Zhang, Laboratory Manager

Asbestos ID - materials						
Our Reference	UNITS	246430-1	246430-2	246430-3	246430-4	246430-5
Your Reference		147-A01	147-A02	147-A03	147-A04	147-A05
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	45x35x10mm	75x40x10mm	45x10x10mm	40x20x5mm	60x50x10mm
Sample Description	-	Brown fibrous material	Brown fibrous material	Grey foam insulation	Grey fibre cement material	Brown fibrous material
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected		Amosite asbestos detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	[NT]	No asbestos detected



Asbestos ID - materials						
Our Reference	UNITS	246430-6	246430-7	246430-8	246430-9	246430-10
Your Reference		147-A06	147-A07	147-A08	147-A09	147-A10
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	50x40x10mm	30x25x2mm	35x15x10mm	70x35x10mm	15x10x1mm
Sample Description	-	Beige/White coating material	Beige crumbly mastic	Grey fibre cement material	Brown fibrous material	Grey crumbly fibre cement material
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	No asbestos detected Organic fibres detected	Chrysotile asbestos detected
Trace Analysis	-	No asbestos detected	[NT]	[NT]	No asbestos detected	[NT]

Asbestos ID - materials						
Our Reference	UNITS	246430-11	246430-12	246430-13	246430-14	246430-15
Your Reference		147-A11	147-A12	147-12-A01	147-12-A02	147-12-A04
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	115x50x10mm	115x60x10mm	70x60x5mm	75x60x15mm	90x60x3mm
Sample Description	-	Black bituminous membrane	Black bituminous membrane	Beige vermiculite	Beige vermiculite	Beige vinyl tile & adhesive
Asbestos ID in materials	-	No asbestos detected Synthetic mineral fibres detected	No asbestos detected Synthetic mineral fibres detected	No asbestos detected	No asbestos detected	No asbestos detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	246430-16	246430-17	246430-18	246430-19	246430-20
Your Reference		147-12-A05	147-12-A06	147-12-A07	147-6-A01	147-6-A02
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	55x28x8mm	103x45x10mm	80x60x5mm	60x60x12mm	55x55x12mm
Sample Description	-	Beige vermiculite	Beige vinyl tile & adhesive	Blue fibrous matted material	Beige vermiculite	Beige vermiculite
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
				Synthetic mineral fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	246430-21	246430-22	246430-23	246430-24	246430-25
Your Reference		147-6-A03	147-6-A04	147-6-A05	147-6-A06	147-6-A07
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	80x25x2mm	13x10x5mm	10x10x1mm	25x25x2mm	10x8x1mm
Sample Description	-	Beige fibrous sheet	White ceramic material	Grey crumbly fibre cement material	Orange gasket	Black loose fibrous material
Asbestos ID in materials	-	No asbestos detected  Organic fibres detected	No asbestos detected	Chrysotile asbestos detected  Amosite asbestos detected	No asbestos detected  Organic fibres detected	No asbestos detected  Synthetic mineral fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	[NT]	No asbestos detected	No asbestos detected

Asbestos ID - materials				
Our Reference	UNITS	246430-26	246430-36	246430-37
Your Reference		147-6-A08	147-A13	147-A14
Date Sampled		02/07/2020	02/07/2020	02/07/2020
Type of sample		Material	Material	Material
Date analysed	-	13/07/2020	13/07/2020	13/07/2020
Mass / Dimension of Sample	-	18x15x1mm	70x23x5mm	15x12x2mm
Sample Description	-	White loose fibrous material	White fibrous rope	White fibre cement-like material
Asbestos ID in materials	-	No asbestos detected  Synthetic mineral fibres detected	Chrysotile asbestos detected  Synthetic mineral fibres detected	No asbestos detected  Organic fibres detected
Trace Analysis	-	No asbestos detected	[NT]	No asbestos detected

Lead in Paint						
Our Reference		246430-27	246430-28	246430-29	246430-30	246430-31
Your Reference	UNITS	147-LP01	147-LP02	147-LP04	147-LP05	147-LP07
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Lead in paint	%w/w	0.49	0.12	0.067	<0.005	1.3

Lead in Paint						
Our Reference		246430-32	246430-33	246430-34	246430-35	246430-38
Your Reference	UNITS	147-LP08	147-LP09	147-6-LP01	147-LP02	147-LP02 - [TRIPLICATE]
Date Sampled		02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Date analysed	-	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Lead in paint	%w/w	1.4	2.3	0.22	0.02	0.12



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: 86447.06 - Kurraba Point

QUALITY CONTROL: Lead in Paint					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			10/07/2020	28	10/07/2020	10/07/2020		10/07/2020	[NT]
Date analysed	-			13/07/2020	28	13/07/2020	13/07/2020		13/07/2020	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	28	0.12	0.21	55	97	[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.



## Report Comments

Lead in Paint -The laboratory RPD acceptance criteria has been exceeded for 246430-28 for Pb. Therefore a triplicate result has been issued as laboratory sample number 246430-38.

## CERTIFICATE OF ANALYSIS 247584

### Client Details

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

### Sample Details

<b>Your Reference</b>	<b>86447.06 - Kurraba Point</b>
<b>Number of Samples</b>	41 Material, 9 Paint, 1 Swab
<b>Date samples received</b>	23/07/2020
<b>Date completed instructions received</b>	23/07/2020

### 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.

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

### Report Details

<b>Date results requested by</b>	30/07/2020
<b>Date of Issue</b>	30/07/2020
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#### Asbestos Approved By

Analysed by Asbestos Approved Identifier: Wonnie Condos  
 Authorised by Asbestos Approved Signatory: Lucy Zhu

#### Results Approved By

Dragana Tomas, Senior Chemist  
 Hannah Nguyen, Senior Chemist  
 Lucy Zhu, Asbestos Supervisor

#### Authorised By



Nancy Zhang, Laboratory Manager

Asbestos ID - materials						
Our Reference		247584-1	247584-3	247584-4	247584-5	247584-6
Your Reference	UNITS	151- 1- A01	151- E- A01	151- E- A02	151- E- A03	151- E- A04
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	60x10x10mm	70x30x20mm	30x3x3mm	100x50x1mm	90x80x1mm
Sample Description	-	Beige putty	Beige mastic	Grey and Brown mastic	Black fibrous bituminous material	Black fibrous bituminous material
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	[NT]	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	247584-7	247584-8	247584-9	247584-13	247584-14
Your Reference		151- E- A05	151- E- A06	151- E- A07	151-A01	151-A04
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	80x15x15mm	10x4x1mm	60x10x3mm	80x80x2mm	90x60x2mm
Sample Description	-	Beige cement mixture	Grey fibre cement material	Beige putty	Black bituminous material	Brown laminate, paint & fibrous backing
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected	Amosite asbestos detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	[NT]	[NT]	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	247584-15	247584-16	247584-17	247584-18	247584-19
Your Reference		151-A05	151-A07	151-A08	151-A09	151-A10
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	150x80x2mm	100x60x2mm	95x50x2mm	A)70x40x2mm B)10x10x2mm	50x40x2mm
Sample Description	-	Black bituminous material	White vinyl material	Beige vinyl tile and fibrous backing	A)White vinyl tile B)Grey adhesive	Grey fibre cement material
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	A) Chrysotile asbestos detected	Chrysotile asbestos detected
		Organic fibres detected	Synthetic mineral fibres detected	Organic fibres detected	Organic fibres detected	
			Organic fibres detected		B) No asbestos detected	
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	[NT]

Asbestos ID - materials						
Our Reference	UNITS	247584-20	247584-21	247584-22	247584-23	247584-24
Your Reference		151-A11	151-A12	151-A13	151-A14	151-CC- PCB1
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	60x10x8mm	10x10x2mm	70x45x3mm	45x25x2mm	90x33x33mm
Sample Description	-	Beige putty	White woven material	Beige fibrous material and paint	Black bituminous material	Rolled fibrous material
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	No asbestos detected
		Organic fibres detected	Synthetic mineral fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	[NT]	No asbestos detected



Asbestos ID - materials						
Our Reference	UNITS	247584-25	247584-26	247584-28	247584-29	247584-30
Your Reference		151-CC-A01	151-CC-A02	151-G-1	153-5- A01	153-5- A03
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	50x25x3mm	120x35x2mm	110x70x2mm	130x40x8mm	120x50x10mm
Sample Description	-	White fibrous material	Black bituminous material	Black bituminous material	Beige debris and grey cement mixture	Beige debris and grey cement mixture
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	[NT]	[NT]	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	247584-31	247584-32	247584-33	247584-34	247584-36
Your Reference		153-5- A06	153-5- A07	153-5- A08	153-5- A09	153-5-A10
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	60x30x3mm	10x10x1mm	30x10x2mm	50x20x3mm	40x40x10mm
Sample Description	-	Beige debris and grey cement mixture	White woven material	Beige vinyl tile	Beige putty	Grey putty
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected
		Synthetic mineral fibres detected	Synthetic mineral fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
		Organic fibres detected				
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	[NT]	[NT]

Asbestos ID - materials						
Our Reference	UNITS	247584-37	247584-38	247584-39	247584-40	247584-41
Your Reference		153-5-A11	153-E-A09	153-E-A10	153-E-A11	153-E-A12
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	90x20x7mm	30x20x4mm	50x20x10mm	50x7x3mm	40x30x7mm
Sample Description	-	Grey render	White fibre cement material	Grey render	White mastic	Beige putty
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected			Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	[NT]	[NT]	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference	UNITS	247584-43	247584-44	247584-47	247584-48	247584-50
Your Reference		153-R-A01	153-R-A02	153-ST- A01	153-ST- A02	153-ST-A03
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020
Mass / Dimension of Sample	-	60x50x6mm	60x40x10mm	30x7x6mm	70x10x3mm	110x90x3mm
Sample Description	-	Black bituminous material	Black bituminous material	Beige fibrous rope	Beige putty	Beige fibrous material
Asbestos ID in materials	-	Chrysotile asbestos detected  Organic fibres detected	Chrysotile asbestos detected  Organic fibres detected	No asbestos detected  Organic fibres detected	No asbestos detected	No asbestos detected  Organic fibres detected
Trace Analysis	-	[NT]	[NT]	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials		
Our Reference	UNITS	247584-51
Your Reference		153-ST-A04
Date Sampled		21/07/2020
Type of sample		Material
Date analysed	-	28/07/2020
Mass / Dimension of Sample	-	30x30x5mm
Sample Description	-	Beige render
Asbestos ID in materials	-	No asbestos detected
Trace Analysis	-	No asbestos detected

Lead in Paint						
Our Reference		247584-2	247584-10	247584-11	247584-12	247584-35
Your Reference	UNITS	151- 1- LP01	151- E- LP02	151- LP01	151-4- LP01	153-5- LP01
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	30/07/2020	30/07/2020	30/07/2020	30/07/2020	30/07/2020
Date analysed	-	30/07/2020	30/07/2020	30/07/2020	30/07/2020	30/07/2020
Lead in paint	%w/w	0.18	2.3	0.63	<0.005	0.03

Lead in Paint					
Our Reference		247584-42	247584-45	247584-46	247584-49
Your Reference	UNITS	153-E-LP01	153-R-LP03	153-R-LP04	153-ST- LP02
Date Sampled		21/07/2020	21/07/2020	21/07/2020	21/07/2020
Type of sample		Paint	Paint	Paint	Paint
Date prepared	-	30/07/2020	30/07/2020	30/07/2020	30/07/2020
Date analysed	-	30/07/2020	30/07/2020	30/07/2020	30/07/2020
Lead in paint	%w/w	0.34	0.12	<0.005	12

Lead in swab		
Our Reference		247584-27
Your Reference	UNITS	151-CC-LD01
Date Sampled		21/07/2020
Type of sample		Swab
Date prepared	-	30/07/2020
Date analysed	-	30/07/2020
Lead in Swabs	µg/swab	3,400



PCBs in Material		
Our Reference		247584-24
Your Reference	UNITS	151-CC- PCB1
Date Sampled		21/07/2020
Type of sample		Material
Date extracted	-	27/07/2020
Date analysed	-	27/07/2020
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	104

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.
<b>Metals-020/021/022</b>	Digestion of Dust wipes/swabs and /or miscellaneous samples for Metals determination by ICP-AES/MS and/or CV-AAS
<b>Org-021</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
<b>Org-021</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.

Client Reference: 86447.06 - Kurraba Point

QUALITY CONTROL: Lead in Paint					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			30/07/2020	11	30/07/2020	30/07/2020		30/07/2020	[NT]
Date analysed	-			30/07/2020	11	30/07/2020	30/07/2020		30/07/2020	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	11	0.63	0.57	10	97	[NT]

Client Reference: 86447.06 - Kurraba Point

QUALITY CONTROL: Lead in swab						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			30/07/2020	[NT]	[NT]	[NT]	[NT]	30/07/2020	[NT]
Date analysed	-			30/07/2020	[NT]	[NT]	[NT]	[NT]	30/07/2020	[NT]
Lead in Swabs	µg/swab	1	Metals-020/021/022	<1	[NT]	[NT]	[NT]	[NT]	94	[NT]

QUALITY CONTROL: PCBs in Material					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			27/07/2020	[NT]	[NT]	[NT]	[NT]	27/07/2020	[NT]
Date analysed	-			27/07/2020	[NT]	[NT]	[NT]	[NT]	27/07/2020	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-021	101	[NT]	[NT]	[NT]	[NT]	98	[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.

## Report Comments

Sample 247584-18; The supplied sample was sub-sampled (A & B) in order to accurately report the analytical results representative of the entire sample, as per AS4964-2004.