Douglas Partners
Geotechnics / Environment / Groundwater

Integrated Practical Solutions

# Hazardous Building Materials Report

137-151 Anzac Parade
Kensington, NSW

Prepared for
Toga Group

Project 85151.00
October 2015

Douglas Partners
Geotechnics / Environment / Groundwater

## Document History

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

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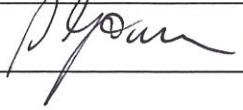
| Reviewer |  | 28 October 2015 |

NCS INTERNATIONAL CERTIFIED QUALITY MANAGEMENT SYSTEM

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## Executive Summary

Douglas Partners Pty Ltd (DP) conducted a location and visual hazardous materials survey at 137-151 Anzac Parade, Kensington, NSW. The survey was undertaken to facilitate the identification of asbestos-containing materials (ACM) and other hazardous materials for due diligence purposes and to assist with their future management at the subject site. It involved locating and visually identifying suspected ACM and recording the type, location and condition of these and other hazardous materials throughout the buildings, i.e. materials highly likely to contain asbestos or materials where asbestos is known to have been commonly added in the past will be presumed to be ACM.

From the site survey and presumptive visual identification a register of ACM and other hazardous materials has been produced in accordance with the requirements of the Work Health and Safety Regulation 2011 (NSW) and other relevant legislation.

**Asbestos-containing Materials**

Materials presumed to be ACM were identified at the time of the survey. Full details of the material assessments are located within the register in Appendix A.

Other materials presumed to be hazardous were identified at the time of the survey. Full details are located within the register in Appendix A.

The surveyors were unable to gain access to the following areas:

| Building Location | Non-accessed area | Reason |
|---|---|---|
| 137 Anzac Parade | Entire building | No access provided by client/tenants |
| 139 – 145A Anzac Parade | Building Internals | No access provided by tenants |
| 139 – 145A Anzac Parade | Roof spaces | No access provided by tenants |
| 147-151 Anzac Parade | Above suspended ceilings throughout | No intrusive access |
| 147-151 Anzac Parade | Beneath floor coverings throughout | No intrusive access |

All areas where access was not possible must be presumed to contain asbestos until proven otherwise. See also limitations in Section 6.

This document (i.e. register of ACM and other hazardous materials) is to be held at the workplace and made readily available for use by the following:

- Authorised WorkCover inspectors;
- Property owners;
- Employers and workers;
- People intending to conduct business at the premises; and
- Health and safety representatives.

In accordance with Work Health and Safety Regulation 2011 requirements, an Asbestos Management Plan (AMP) should be developed with this survey. The AMP is to be maintained and made available with this report register at the work place for the use of workers, people intending to conduct business at the site and to health and safety representatives.

***The client should be made aware of the limitations of a survey being conducted in a non-destructive manner and is referred to in Section 6 – Limitations.***

***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.***

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## 1. Introduction

This report presents the findings of an asbestos and other hazardous building materials survey undertaken by Paul Patton of DP at 137-151 Anzac Parade, Kensington, NSW on 26 October 2015. The survey was undertaken in accordance with DP's proposal dated 15 October 2015, reference SYD151381. The survey and report was commissioned by Mr Rob Thomas of Toga Group.

The hazardous building materials survey included all building structures on site where access was possible. These areas were defined by the client and during discussion with the client's representative at the time of inspection. The purpose of the survey was to exercise due diligence in keeping with the relevant Regulations and help enable future management of ACM and other hazardous building materials at the subject site. The assessment was conducted on the basis of the condition of the materials at the time of the survey and the future anticipated activities at the site.

The survey was undertaken to visually identify and record the type, location, condition and extent of those materials presumed or strongly presumed to contain asbestos, lead or other hazardous materials throughout the buildings.

## 2. Scope of Work

The scope of the hazardous building materials survey included:

i. Undertake a location and visual hazardous materials building survey to identify building materials presumed to be hazardous in the accessible areas of the subject building. Hazardous building materials (HBM) include asbestos-containing building materials (ACM), synthetic mineral fibre (SMF) products, lead-containing paint (LCP) and polychlorinated biphenyls (PCBs) contained in capacitors in fluorescent light fittings.

ii. Provision of an asbestos register in accordance with the requirements of WHS Regulation (NSW), and Hazardous Building Materials Assessment Report.

The scope of this due diligence investigation did not allow for intrusive sampling techniques to be employed and as such this report is not intended for use or referral for the purpose of demolition, refurbishment, decommissioning or structural alterations.

## 3. Site Description

The area requested to be surveyed is 137-151 Anzac Parade, Kensington, NSW. The layout of the site is shown in Drawing 1, Appendix B. 137 Anzac Parade was not surveyed as no access was provided by client/tenant.

137 Anzac Parade is a four level concrete and brick structure with metal framed windows and presumed to have a tiled roof. Presumed asbestos cement is present as soffits to the roof. No access could be afforded to the property. See Figure 1.

**Figure 1**

139 Anzac Parade is a single level rendered brick structure with wooden eaves, wooden sash windows and a terracotta tiled roof. Presumed asbestos cement is present as under-cloaking and cladding to upper roof gable ends. No access could be afforded to the internals. See Figure 2.

**Figure 2**

141 Anzac Parade is a single level rendered brick structure with wooden eaves, wooden sash windows and a terracotta tiled roof. Presumed asbestos cement is present as lining to the porch canopy and cladding to upper roof gable ends. No access could be afforded to the internals. See Figure 3.


**Figure 3**

143 Anzac Parade is a two level brick structure with a bicycle shop to the street and flats to the rear and first floor with profiled metal roofing throughout. Presumed asbestos cement is present as lining to the shop canopy and cladding to ground and first floor flats. No access could be afforded to the internals. See Figure 4.


**Figure 4**

145 Anzac Parade is a two level brick structure abutted to 143 with a badminton sports shop to the street and flats to the rear and first floor with profiled metal roofing throughout. Presumed asbestos cement is present as cladding to the two rear units ('Able Carriage' and Unit 3 (Large Garage)) accessed via side alley. No access could be afforded to the internals. See Figure 5.


**Figure 5**

145A Anzac Parade is a two level brick structure with a terracotta tiled roof. The ground floor has a child car seat fitting shop ('Baby Things') with offices above. Presumed asbestos cement is present as eaves to the roof. No access could be afforded to the property. See Figure 6.

**Figure 6**

147 - 151 Anzac Parade is a four level concrete, rendered brick and brick structure with metal framed windows and a split-level flat concrete roof incorporating lift motor room, AC plant and antennae. Internals are predominantly brick, rendered brick and concrete slab throughout. The basement is mainly car parking and storage with a boiler room and laundry. Vermiculite spray coating is thought to be present to all structural steel beams on the ground floor which houses the Hotel reception and a (currently closed) Chinese Restaurant. All first to third floor bedrooms and communal areas are carpeted except bathrooms which have ceramic floor tiles. Suspended ceilings are present only in bathrooms and on the ground floor. See Figure 7.

**Figure 7**

## 4. Fieldwork Methodology

### 4.1 Inspection Methods

The DP competent person (Paul Patton) undertook a systematic survey of the nominated and accessible areas to visually identify the type, location, condition and extent of asbestos and other hazardous building materials at the subject site.

Location and assessment hazardous material surveys are restricted to areas that are reasonably accessible and are essentially non-sampling, non-invasive and non-destructive. This type of survey does not extend to searching for concealed ACM in cavity walls, within concrete encased structural beams, below floorboards, behind ACM, above solid plaster ceilings or any other locations which, to access, would cause damage to fixtures, fittings, structure or decorative finishes.

Where the surveyor encounters access restrictions during the survey, these situations are documented and reported (Executive Summary).

Suspect ACM or LCP were identified by visual inspection only using the judgement and experience of the surveyor.

Similarly SMF and PCB materials were identified by visual inspection only. Serial numbers of capacitors in lift switch machinery or fluorescent light capacitors are recorded only where it is safe to do so and the details of the capacitor identified within is checked against the 1997 ANZECC register

for Identification of PCB-Containing Capacitors. Only one of each type of fluorescent light fitting is inspected.

# 5. Recommendations Summary

Refer to Appendix A for the register of ACM and other hazardous materials.

## 5.1 Asbestos-containing materials Identified

In accordance with current legislation [Work Health and Safety Regulation 2011] requirements, an Asbestos Management Plan (AMP) should be developed with the findings of this survey. The AMP is to be maintained and made available with this Hazardous Materials Register Report at the workplace for the use of property owners, employers, workers, persons intending to conduct business at the site, and to health and safety representatives. Legislation requires that any asbestos identified in the workplace, be clearly indicated. Labels are required to state the presence of asbestos and the number and position be determined by a competent person. Signs must comply with AS 1319 Safety Signs for the Environment.

### 5.1.1 Friable & bonded asbestos

ACM are referred to as either friable or bonded. Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance.

***Friable asbestos*** is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable asbestos includes materials such as: sprayed insulation, pipe or cylinder insulation, low density boards, woven textiles, millboard, paper and gaskets. These products can release fibres with only minimal disturbance.

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

### 5.1.2 Control Measures

The selection of the most appropriate management actions should be determined from the detailed asbestos and other hazardous materials risk assessments in the site register located in Appendix A of this report, the hierarchy of controls in the Code of Practice '*How to Manage and Control Asbestos in the Workplace*' and the client's knowledge of activities in the workplace. The following general principles may be applied.

Friable ACM identified in an accessible area in a poor condition with potential risk to human health should be subject to immediate access restrictions and removal undertaken as soon as practicable using a Class A licensed removalist. Removal and reinstatement with non-ACM is the preferred control if identified in areas of routinely accessed plant, heating or air conditioning systems.

For friable ACM identified in an accessible area but in a good condition, removal must be considered. However if removal is not immediately practicable, control measures including sealing, enclosure or similar, labelling and regular re-inspection should be employed until removal can be undertaken.

Bonded ACM in a poor condition should be removed, or remediated by encapsulation or encasement, labelled and subject to periodic re-inspection.

Bonded ACM in good condition (e.g. encapsulated cement panel) should be labelled and subject to periodic re-inspection.

A pre-demolition/pre-major refurbishment survey, including sampling should be undertaken by a competent person prior to any demolition, refurbishment or decommissioning works. ACM likely or liable to be disturbed by those works should be removed in accordance with the National Code of Practice How to Safely Remove Asbestos *(Safe Work Australia 2011)*.

## 5.2 Other hazardous materials identified

### 5.2.1 Synthetic Mineral Fibre

Loose SMF or bonded SMF in poor condition has the potential of becoming airborne. Health effects that may occur with exposure to certain SMF materials include: irritation of the skin, eyes and upper respiratory tract. SMF products should be maintained in good condition so as to minimise the release of fibres or dust.

Prior to any demolition, refurbishment or decommissioning, SMF materials liable or likely to be disturbed by those works should be removed in accordance with the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006 (1990)]. SMF waste must be disposed of in accordance with EPA and local guidelines at a licensed land fill facility.

### 5.2.2 Lead-based paint

The management of *in-situ* lead paint is to ensure that the paint does not become damaged or deteriorate over time to a condition where it could potentially become an exposure risk to building occupants through inhalation or ingestion. Controls may include over painting or encapsulation, labelling and re-inspecting at periodic intervals to ensure no deterioration of the paint has occurred.

Removal is to be undertaken prior to any demolition, refurbishment or decommissioning in accordance with AS 4361.2 - 1998 Guide to lead paint management, Part 2: Residential and commercial buildings'. Disposal of waste contaminated with lead (including lead paint waste) should be undertaken according to EPA Waste Classification Guidelines, Part 1 Classifying Waste (2014).

### 5.2.3 PCBs

Capacitors should be inspected periodically to ensure the unit is sealed and there is no leakage. All capacitors containing or suspected as containing PCB should be removed by a specialist electrical contractor within two years and in any case prior to any demolition, refurbishment or decommissioning in accordance with the Code of Practice for the safe handling of equipment containing Polychlorinated Biphenyl (PCB) Electrical Contractors' Association of Australia (1993). PCB material and waste must be transported in accordance with the Australian Dangerous Goods Code, EPA guidelines, Chemical Control Order (CCO 1997) and other applicable legislative requirements. PCB waste must be legally disposed of or treated at an appropriately licensed waste disposal facility and records kept of disposal i.e. waste dockets or receipts.

## 6. Limitations

Douglas Partners (DP) has prepared this report for a project at 137-151 Anzac Parade, Kensington, NSW in accordance with DP's Proposal dated 15 October 2015, reference SYD151381 and acceptance received from Mr Rob Thomas of Toga Group. The work was carried out under DP's Conditions of Engagement. The report is provided for the exclusive use of Toga Group. 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 observed on the date of inspection. Changes may occur after DP's inspection and field testing has been completed. Whilst the surveyors make every reasonable effort, DP cannot guarantee that every ACM has been identified and survey results are definitive. Assessments that are effectively management compliance surveys are non-destructive and as such are not intended for use or referral for the purposes of demolition or refurbishment.

In the event of future demolition, refurbishment, renovation, decommissioning or structural alterations, further investigation by a competent person, which may entail invasive or destructive sampling and survey techniques, must be undertaken. Some ACM could be present in the building that may only be discovered by extensive invasion of structures, or when the building is subject to demolition or major refurbishment works.

DP's advice is based upon the conditions encountered during this investigation and by the scope and feasibility of the investigations based on accessibility and other limitations. The accuracy of the advice provided by DP in this report may be limited by inaccessible areas and differing conditions between observed locations. The advice may also be limited by budget constraints imposed by others and the scope of works undertaken constrained as a result, or may have been limited 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.

Any areas within the scope of the survey but not described within the body of the report or in the asbestos and other hazardous materials register should be regarded by the client as not having been surveyed, and thus may potentially contain ACM. A competent person should assess such areas before any work affecting them is carried out.

It must be assumed that building materials visually assessed as ACM actually contain asbestos including amphibole asbestos, until sampled and laboratory analysis proves otherwise. All areas where access was not possible must also be assumed to contain asbestos until proven otherwise. Sub-surface drains, pipes and formwork or surrounds may be constructed of asbestos cement but sub-surface areas are not accessed. Any sub-surface pipes, particularly those constructed of cement should be assumed to contain asbestos until proven otherwise.

The scope of this survey does not include the identification of ACM in many of the following building areas (including areas not routinely examined for safety reasons):

- **Ceiling voids**

  Ceiling voids are not generally checked in occupied areas for safety reasons. Entering a ceiling void carries a risk of fibre release from the disturbance of any ACM within it. Ceiling voids may only be checked in unoccupied areas where safe access is available;

- **Wall cavities**

  May be completely blocked or bricked in, or concealed by decorative features and finishes;

- **Risers**

  Often completely blocked or bricked in. An assessment will be made of the risk and risers may only be checked in unoccupied areas where safe access is available;

- **Fitted carpets**

  Fitted carpets are not lifted due to the risk of damage and relaying them satisfactorily. They may conceal ACM, such as asbestos-containing flooring materials or void access points;

- **Beneath floor boards**

  ACM may be present beneath floorboards. Floorboards are not lifted as part of standard surveys unless specifically required and prior arrangements have been made;

- **Floor voids**

  May be completely enclosed;

- **Windows**

  ACM can be located above, below windows or surrounding window frames and are often inaccessible;

- **Columns**

  These will not be examined if doing so will cause decorative damage;

- **Plaster ceilings**

  If access above cannot be made without utilising destructive techniques then the void above cannot be examined;

- **Roof, high level and external areas**

  These will not be examined if safe access cannot be achieved;

- **Confined spaces**

  These will not be examined if safe access cannot be achieved;

- **Restricted access**

  Building areas subject to specialist access requirements will not be examined unless prior arrangements have been made with the client;

- **Ductwork**

  May contain ACM internally that is not accessible until the ducting is disassembled;

- **Fire doors**

  May contain ACM internally. Partial disassembly for inspection may compromise the fire rating of the door and is not normally undertaken; and

- **Lift shafts**

  These will not be examined for safety reasons unless a lift engineer accompanies the surveyor.

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, Guidelines, Material Safety Data Sheets, Work Instructions or industry best practices.

## 7. Legislation and References

Work Health and Safety Act and Regulations 2011 (Commonwealth, NSW, ACT & QLD).

Dangerous Substances Act and Regulations 2004 (ACT).

Work Health and Safety Act and Regulations 2012 (SA, TAS).

Occupational Health and Safety Act 2004 and Regulations 2007 (VIC).

Occupational Health and Safety Act 1984 [Amended 7 January 2011] and Regulations 1996 (WA). Health (Asbestos) Regulations 1992 (WA).

Work Health and Safety (National Uniform Legislation) Act 2011 (NT).

Work Health and Safety (National Uniform Legislation) Regulations 2013 (NT).

**Asbestos**

Code of Practice: How to Manage and Control Asbestos in the Workplace [Safe Work Australia (2011)].

Code of Practice: How to Safely Remove Asbestos [Safe Work Australia (2011)].

Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].

Code of Practice for the Safe Removal of Asbestos, [NOHSC: 2002 (2005)].

Compliance Code Managing asbestos in workplaces [Worksafe VIC (2008)].

Compliance Code Removing asbestos in workplaces [Worksafe VIC (2008)].
AS 4964 – 2004 ''Australian Standard™ Method for the qualitative identification of asbestos in bulk samples''.

Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition, [NOHSC:3003 (2005)].

AS 2601 - 2001 ''Australian Standard™ The Demolition of Structures, Section 1.6''.

Health and Safety Laboratory UK – HSG 264 Asbestos The Survey Guide 2010.

Health and Safety Laboratory UK - Methods for the Determination of Hazardous Substances (MDHS) 100 Surveying, sampling and assessment of asbestos-containing materials 2001.

Health and Safety Laboratory UK - HSG 227 A Comprehensive Guide to Managing Asbestos in Premises 2002.

**SMF**

National Standard for Synthetic Mineral Fibres [NOHSC: 1004 (1990)].

Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].

''Position Paper on Synthetic Mineral Fibres (SMF) & Occupational Health Issues'', AIOH including exposure Standards Committee 2011.

''Industry Code of Practice for the Safe Use of Glass Wool and Rock Wool Products'', jointly developed by AMNWU, CFMEU, CEPU and FARIMA, 2003.

**Lead in paint**

AS 4361.2 - 1998 ''Australian Standard™ Guide to lead paint management, Part 2: Residential and commercial buildings''.

AS 4361.1—1995 ''Australian Standard™ Guide to lead paint management, Part 1: Industrial applications''.

National Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC: 2015 (1994)].

AS 4874 - 2000 ''Australian Standard™ Guide to the investigation of potentially contaminated soil and deposited dust as source of lead available to humans''.

'Standard for the Uniform Scheduling of Medicines and Poisons No. 3', National Health and Medical Research Council (NHMRC), Poisons Standard 2012.

AS 3640 - 2009 ''Australian Standard™ Workplace Atmospheres Method for Sampling and Gravimetric Determination of Inhalable Dust''.

**PCBs**

Identification of PCB–containing capacitors [(ANZECC) 1997].

Polychlorinated Biphenyls Management Plan, [(ANZECC) 1999 revised 2003].

Code of Practice for the safe handling of equipment containing Polychlorinated Biphenyl (PCB) Electrical Contractors' Association of Australia, 1993.

Polychlorinated Biphenyl (PCB) Chemical Control Order 1997

**Classification and Wastes**

Approved Criteria for Classifying Hazardous Substances, [NOHSC: 1008 (2004)].

EPA Waste Classification Guidelines, Part 1 Classifying Waste (2014).

## Douglas Partners Pty Ltd

# Appendix A

Asbestos and other Hazardous Materials Register

## Asbestos Materials Register

### For Action Classification, Material Descriptions and Register Terminology please refer to GLOSSARY

| | | | |
|---|---|---|---|
| **Client:** | **Toga Group** | **Assessment by:** | **P. Patton** |
| **Site location:** | **137-151 Anzac Parade, Kensington, NSW** | **Assessment date:** | **26 October 2015** |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 137 Anzac Parade, Roof Level, presume asbestos-containing cement eaves, (~68 lin m x 0.75m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 137 Anzac Parade, No access to property. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |
| 139 Anzac Parade, Roof Level, presume asbestos-containing cement under-cloaking to gable ends, (~12 lin m) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 139 Anzac Parade, Ground Level, external, electrical box, presume asbestos-containing electrical board, (~0.5m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 139 & 141 Anzac Parade, Roof Level, presume asbestos-containing cement cladding to gable ends, (~2 x 8m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 141 Anzac Parade, external, presume asbestos-containing cement lining to porch canopy, (~12m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Unsealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, seal, affix asbestos warning labels, manage and re-inspect. |
| 141 Anzac Parade, Ground Level, external, electrical cupboard, presume asbestos-containing cement to hatch, (~0.5m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 141 Anzac Parade, Ground Level, external, electrical cupboard, presume asbestos-containing paper backing to switch, (~0.1m$^2$). | V.O | - | Assume amphibole | Friable | Good | Part Sealed | 5 | Low | 9 | A3 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, seal, affix asbestos warning labels, manage and re-inspect. |
| 139 Anzac Parade, No access to property internals. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |
| 141 Anzac Parade, No access to property internals. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |
| 143 Anzac Parade, external, presume asbestos-containing cement lining to 'Happy Wheels' Bike Shop canopy, (~20m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 143 Anzac Parade, external, presume asbestos-containing cement cladding to First Floor Flat porch (~8m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 143 Anzac Parade, external, presume asbestos-containing cement cladding to rear Ground Floor Flats (~2 x 6m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 143 Anzac Parade, external, presume asbestos-containing cement cladding to rear and gable ends of First Floor Flats (~40m$^2$ & 3 x 12m$^2$) viewed from 145 Car Park. | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 143 Anzac Parade, No access to property internals. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |
| 145 Anzac Parade, external, presume asbestos-containing cement cladding to 'Able Carriage' unit at rear (~90m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 145 Anzac Parade, external, presume asbestos-containing cement cladding to Large garage (unit 3?) at rear (~20m$^2$). | V.O | - | Assume amphibole | Bonded | Average | Part Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, seal, affix asbestos warning labels, manage and re-inspect. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 145 Anzac Parade, No access to property internals. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |
| 145A Anzac Parade, Ground Level, external, electrical box, presume asbestos-containing electrical board, (~1.0m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 145A Anzac Parade, external, presume asbestos-containing cement lining to 'Baby Things' Shop canopy, (~10m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 145A Anzac Parade, Roof Level, presume asbestos-containing cement eaves, (~48 lin m x 0.3m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 145A Anzac Parade, No access to property internals. | V.O | - | Assume amphibole | - | - | - | - | - | - | - | Further investigation required. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 147-151 Anzac Parade, external, Basement car park, presume asbestos-containing cement wall cladding to garages, (~14m$^2$) | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 147-151 Anzac Parade, Basement, Boiler Room, presume asbestos-containing CAF gaskets to redundant 'Sainsburys' Boiler (~ 4 units). | V.O | - | Assume amphibole | Friable | Good | Part Sealed | 5 | Low | 9 | A3 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, seal, affix asbestos warning labels, manage and re-inspect. |
| 147-151 Anzac Parade, Basement, external, electrical box, presume asbestos-containing electrical board, (~0.5m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 147-151 Anzac Parade, Ground Floor, Restaurant Area, presume asbestos-containing vermiculite to steel beam in ceiling void. (~12 lin m) Presume present to all steel beams throughout this level. | V.O | - | Assume amphibole | Friable | Good | Unsealed | 9 | Low | 13 | A2 | Further investigation required. Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, seal, affix asbestos warning labels, manage and re-inspect. |

| Location, Description / Product Type and Extent | Sample No | Photo No | Asbestos Type | Friability Status | Condition | Surface Treatment | Material Assessment score | Likelihood of Access or Disturbance. | Priority Risk Score | Recommendation (A1 - A4)* | Comments / Action |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 147-151 Anzac Parade, Roof Level, Lift Motor Room, presume asbestos-containing CAF gaskets to Lift Motors (~ 2 units). | V.O | - | Assume amphibole | Friable | Good | Sealed | 5 | Low | 9 | A3 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |
| 147-151 Anzac Parade, Roof Level, external, presume asbestos-containing cement cladding to AC ducting, (~12m$^2$) | V.O | - | Assume amphibole | Bonded | Poor | Part Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, remove debris and seal, affix asbestos warning labels, manage and re-inspect. |
| 147-151 Anzac Parade, Roof Level, external, electrical boxes to AC Plant, presume asbestos-containing electrical board, (~2 x 0.5m$^2$). | V.O | - | Assume amphibole | Bonded | Good | Sealed | 3 | Low | 7 | A4 | Remove prior to any major demolition / refurbishment works that may disturb the installation. Should the material not be affected by the proposed works, leave in-situ, affix asbestos warning labels, manage and re-inspect. |

## Other Hazardous Materials Register

## Lead Paint

| Location and description | Sample ID | % Lead | Photo No. | Condition | Likelihood of disturbance | Recommendation |
|---|---|---|---|---|---|---|
| 139 Anzac Parade, Ground Level, leaded glass to sash windows (~6 units). | Visual observation | Assume +ve | - | Good | Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 139 Anzac Parade, Ground Level, suspect flaking paint systems to sash windows (~6 units). | Visual observation | Assume +ve | - | Av | Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 139 Anzac Parade, External, suspect flaking paint systems to eaves and fascias throughout. | Visual observation | Assume +ve | - | Av | Low | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 141 Anzac Parade, External, suspect flaking paint systems to eaves, gables, walls , railings and fascias throughout. | Visual observation | Assume +ve | - | Av | Low / Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 143 Anzac Parade, External, suspect flaking paint systems to rear flats and upper building frontage throughout. | Visual observation | Assume +ve | - | Av | Low / Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 145 Anzac Parade, External, suspect flaking paint systems to Large Garage and Unit at rear. | Visual observation | Assume +ve | - | Av | Low / Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |

| Location and description | Sample ID | % Lead | Photo No. | Condition | Likelihood of disturbance | Recommendation |
|---|---|---|---|---|---|---|
| 147-151 Anzac Parade, All Levels, suspect flaking paint systems to metal fire door frames and metal railings to stairs throughout. | Visual observation | Assume +ve | - | Av | Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 147-151 Anzac Parade, All Levels, suspect flaking paint systems to window frames and doors to roof. | Visual observation | Assume +ve | - | Av | Med | Remove prior or during major demolition/ refurbishment works without discharge to the environment. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 137-145A No access to roof spaces, presume lead-containing dust/materials present. | Visual observation | Assume +ve | - | Poor | Low | Further investigation required. Remove prior or during major demolition/ refurbishment works without discharge to the environment. |

## Synthetic Mineral Fibres (SMF)

| Location and description | Sample ID | Photo No. | Friability | Condition | Surface Treatment | Likelihood of disturbance | Recommendation |
|---|---|---|---|---|---|---|---|
| 137-145A Anzac Parade, No access to property roof spaces, suspected SMF loose batts throughout. | Visual observation | - | Yes | Average | No | Low | Remove prior to major demolition/ refurbishment works. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 147-151 Anzac Parade Basement, Boiler Room, SMF insulation to two Rheem HWUs. | Visual observation | - | No | Good | Yes | Low | Remove prior to major demolition/ refurbishment works. Should the material not be affected by any proposed works, leave and maintain in good condition. |
| 147-151 Anzac Parade Basement, Boiler Room, SMF insulation to redundant 'Sainsburys' Boiler. | Visual observation | - | No | Good | Yes | Low | Remove prior to major demolition/ refurbishment works. Should the material not be affected by any proposed works, leave and maintain in good condition. |

## Polychlorinated Biphenyls (PCB)

| Location and description | Sample ID | Photo No | Condition | Recommendation |
|---|---|---|---|---|
| 147-151 Anzac Parade, fluorescent twin tube light fittings throughout, suspect PCB containing capacitors | Visual observation | - | Good | Further investigation required. Remove prior to maintenance, major refurbishment or demolition works and in any case within two years of identification. |

## Glossary

Douglas Partners adopt the following material and location assessment algorithms in order to assess the risks associated with **ACM**;

***ASBESTOS REGISTER SECTION***

**Friability**

| Variable | | Description |
|---|---|---|
| **Friability** | Yes | Asbestos debris, or material which when dry may become crumbled, pulverised or reduced to powder by hand pressure. |
| | No | Bonded material |

**Material Assessment**

| Variable | Score | Examples of Score Descriptions |
|---|---|---|
| **Asbestos Type** | 0 | No asbestos |
| | 1 | Chrysotile only |
| | 2 | Amphibole asbestos (excluding crocidolite) |
| | 3 | Crocidolite |
| **Product Type** | 0 | No asbestos detected |
| | 1 | Bonded asbestos in good condition |
| | 2 | Friable asbestos in good condition or cement in poor condition |
| | 3 | Friable asbestos in poor condition |
| **Extent of Damage** | 0 | No visible damage |
| | 1 | Minor scratches or mark, broken edges |
| | 2 | Significant breakage, many small areas of damage to friable material |
| | 3 | High damage, visible debris |
| **Surface Treatment** | 0 | Bonded asbestos including encapsulated asbestos cement |
| | 1 | Enclosed laggings, sprays and boards or bare cement |
| | 2 | Bare board or encapsulated lagging/spray or cement debris |
| | 3 | Unsealed lagging/spray |

**Location Priority Assessment**

| Variables | Scores | Examples of Score Descriptions |
|---|---|---|
| **Occupant Activity** | 0 | Rare disturbance, e.g. infrequently used store room |
| | 1 | Low disturbance, e.g. normal office type activity |
| | 2 | Periodic disturbance, e.g. industrial activity which may contact ACM |
| | 3 | High levels of disturbance e.g. swing door with asbestos backing board in constant use |
| **Likelihood of Disturbance** | 0 | Usually inaccessible or unlikely to be disturbed |
| | 1 | Minimal likelihood for disturbance |
| | 2 | Likely disturbance |
| | 3 | Frequent disturbance |
| **Human Exposure Potential** | 0 | Infrequent |
| | 1 | Monthly |
| | 2 | Weekly |
| | 3 | Daily |
| **Maintenance Activity** | 0 | Minor disturbance (e.g. low chance of contact when gaining access for routine works) |
| | 1 | Low disturbance (e.g. changing light bulbs affixed to asbestos ceiling tiles). |
| | 2 | Medium disturbance (e.g. lifting one or two ceiling tiles for minor maintenance works) |
| | 3 | High level of disturbance (e.g. moving a number of ceiling tiles for maintenance works) |

**Risk Score**

The asbestos containing material risk score is a quantitative assessment determined by the sum of the Material Assessment and Location Priority Assessment; i.e. Risk score = Material Score + Location Score (out of a possible 24).

Should no asbestos be detected then the register will indicate a risk score of 0.

| Variable | Scores | Score Descriptions and Action Levels |
|---|---|---|
| **Risk Score** | 0 - 6 | Very Low Risk - Action Score A4 |
| | 7 - 12 | Low Risk – Action Score A3 |
| | 13 - 18 | Medium Risk – Action Score A2 |
| | 19 - 24 | High Risk – Action Score A1 |

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## ACTIONS FOR ASBESTOS (AND OTHER HAZARDOUS) MATERIALS*

Following the assessment for both asbestos-containing and hazardous materials an action score is assigned. For **ACM** this will be assigned according to the risk score associated with the material. For other hazardous materials the action will be assigned according to the surveyor's assessment of the situation.

### Action

| | | |
|---|---|---|
| **A1** | **Action 1** | **Restrict access and remove as soon as reasonably practicable.** |
| | | As a guide, the material conforms to one, or more, of the following:<br>Friable or very poor condition bonded material, located in accessible areas;<br>Severely damaged, or unstable;<br>Further damage or deterioration likely;<br>Friable asbestos material located in air conditioning ducting;<br>Asbestos debris in reasonably accessible areas;<br>Update Register and Asbestos Management Plan after works. |
| **A2** | **Action 2** | **Encase or encapsulate and label - programme for removal. Re-inspect according to Asbestos Management Plan.** |
| | | As a guide, the material conforms to one, or more, of the following:<br>Damaged material;<br>In reasonably accessible area;<br>Friable material or bonded material in poor condition;<br>Possibility of disturbance through contact;<br>Possibility of deterioration caused by weathering;<br>Update Register and Asbestos Management Plan after works. |
| **A3** | **Action 3** | **Label and re-inspect according to Asbestos Management Plan. Remove during routine maintenance or refurbishment.** |
| | | As a guide, the material conforms to one, or more, of the following:<br>Asbestos debris or stored material in rarely accessed areas;<br>Further disturbance or damage unlikely other than during maintenance or service;<br>Readily visible for further assessment;<br>Asbestos friction materials, gaskets and brake linings. |
| **A4** | **Action 4** | **No remedial action. Label and re-inspect according to Asbestos Management Plan.** |
| | | As a guide, the material conforms to one, or more, of the following:<br>Bonded material in good condition and readily visible for inspection;<br>Inaccessible and fully contained;<br>Stable condition and unlikely to be damaged. |

Douglas Partners adopt the following material assessments in order to assess the risks associated with hazardous materials identified other than asbestos:

**Friability**

| Variable | Score | Description |
|---|---|---|
| **Friable** | **Y** | Loose or unsealed SMF |
| | **N** | Sealed SMF |
| | **N/A** | Applicable to PCB, LCP |

**Material Assessment**

| Variable | Score | Description |
|---|---|---|
| **Extent of Damage** | **G** | Good condition |
| | **Av** | Average condition |
| | **P** | Poor condition |
| **Surface Treatment** | **Y** | Sealed |
| | **P** | Part sealed |
| | **N** | Not sealed |

**Location Assessment**

| Variable | Score | Description |
|---|---|---|
| **Likelihood of Disturbance** | H | High |
| | M | Medium |
| | L | Low |

The following abbreviations or acronyms may be used in the report or register:

| | |
|---|---|
| CH | Chrysotile (white) asbestos |
| CR | Crocidolite (blue) asbestos |
| AM | Amosite (brown) asbestos |
| NAD | No Asbestos Detected |
| SMF | Synthetic Mineral Fibre |
| PCB | Polychlorinated Biphenyls |
| LCP | Lead-containing Paint |
| VO | Visual observation |

# Appendix B

Site Drawing

About this Inspection Report

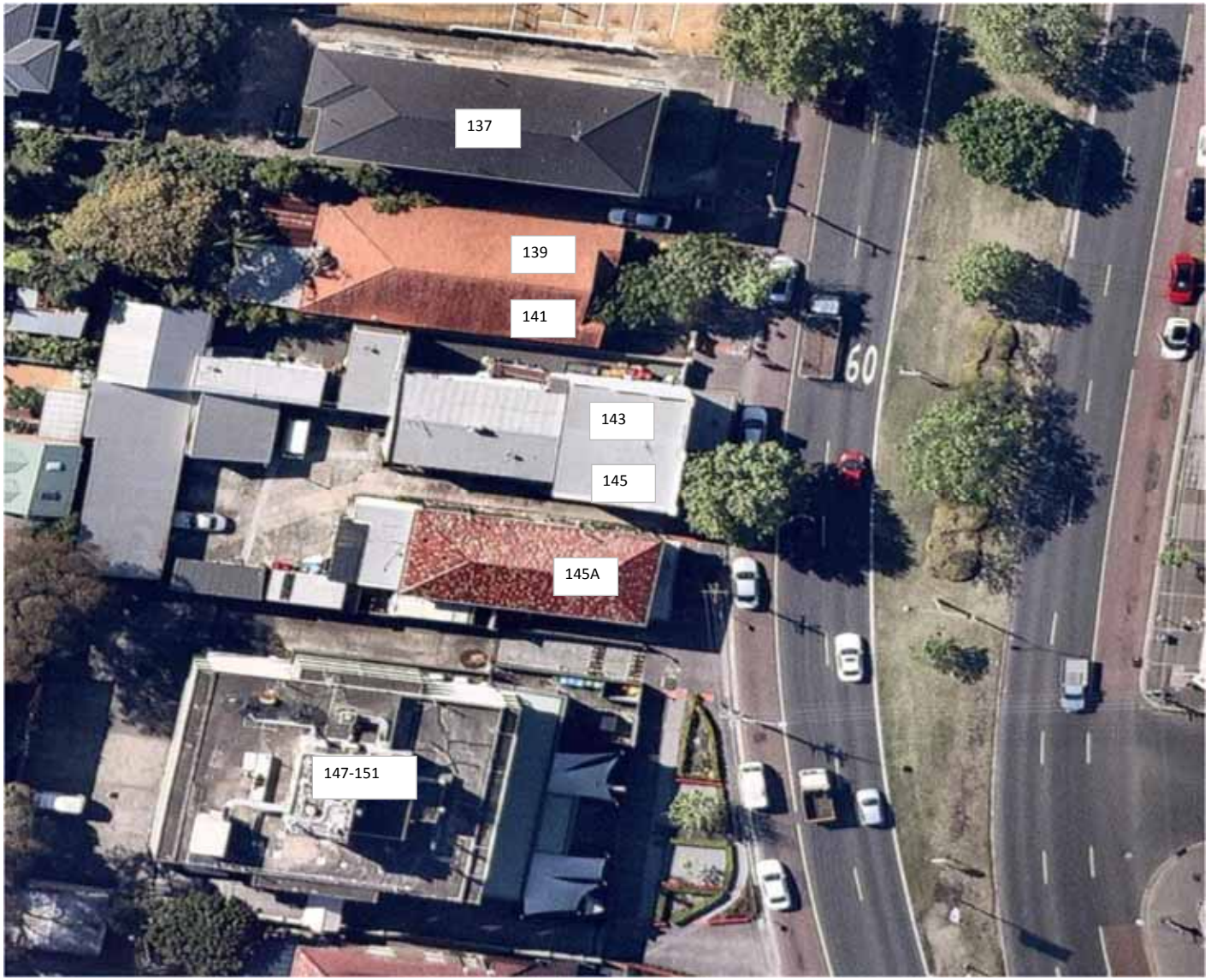


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Photo: Nearmap 2015

| | | | | | |
|---|---|---|---|---|---|
| Douglas Partners<br>Geotechnics / Environment / Groundwater | CLIENT: Toga Group | | TITLE: **137-151 Anzac Parade**<br>**Kensington, NSW** | PROJECT No: | 85151.00 |
| | OFFICE: Sydney | DRAWN BY: PP | | DRAWING No: | 1 |
| | SCALE: NA | DATE: 26 Oct 2015 | | REVISION: | A |

# About this Inspection Report



## Introduction

These notes are provided to amplify DP's inspection report in regard to the limitations of carrying out inspection work. Not all notes are necessarily relevant to this report.

### Standards

This inspection report has been prepared by qualified personnel to current engineering standards of interpretation and analysis.

### Copyright and Limits of Use

This inspection report is the property of DP and is provided for the exclusive use of the client for the specific project and purpose as described in the report. It should not be used by a third party for any purpose other than to confirm that the construction works addressed in the report have been inspected as described. Use of the inspection report is limited in accordance with the Conditions of Engagement for the commission.

DP does not undertake to guarantee the works of the contractors or relieve them of their responsibility to produce a completed product conforming to the design.

### Reports

This inspection report may include advice or opinion that is based on engineering and/or geological interpretation, information provided by the client or the client's agent, and information gained from:

- an investigation report for the project (if available to DP);
- inspection of the work, exposed ground conditions, excavation spoil and performance of excavating equipment while DP was on site;
- investigation and testing that was carried out during the site inspection;
- anecdotal information provided by authoritative site personnel; and
- DP's experience and knowledge of local geology.

Such information may be limited by the frequency of any inspection or testing that was able to be practically carried out, including possible site or cost constraints imposed by the client/ contractor(s). For these reasons, the reliability of this inspection report is limited by the scope of information on which it relies.

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

- unexpected variations in subsurface conditions that are not evident from the inspection; and
- the actions of contractors responding to commercial pressures.

Should these issues occur, then additional advice should be sought from DP and, if required, amendments made.

This inspection report must be read in conjunction with any attached information. This inspection report should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions from review by others of this inspection report or test data, which are not otherwise supported by an expressed statement, interpretation, outcome or conclusion stated in this inspection report.