OCTIEF PTY LTD
ABN: 82 163 1772 478
Unit 12 / 16 Charlton Court Woolner NT 0820
Enquiries: 1800 OCTIEF (628 433)
Fax: (07) 3382 6895
corporate@octief.com.au
www.octief.com.au

12 December 2017

GF Morandini Earthworks Pty Ltd
Frank Morandini
6 College Road
Berrimah, NT 0828

Ref: J7590

ASBESTOS MANAGEMENT PLAN FOR 6 COLLEGE ROAD, BERRIMAH NT 0828

OCTIEF Pty Limited (OCTIEF) is pleased to submit the Asbestos Management Plan (AMP) for 6 College Road, Berrimah NT 0828.

No Asbestos or Asbestos Containing Materials were identified within the accessible areas of the subject site. It is essential that this AMP is readily accessible to all staff, contractors and visitors. This report is a controlled document and must be observed as such, as per your quality assurance program.

The person with management or control of the workplace is responsible for making this AMP known and accessible to all building occupants, site visitors and external contractors prior to any maintenance or project works being undertaken. The person with management or control of the workplace is also responsible for ensuring the AMP and asbestos register are updated in accordance with the relevant jurisdictions Work Health and Safety legislation.

Please do not hesitate to contact OCTIEF should you require any further information or assistance with the report or associated recommendations.

Yours faithfully,

OCTIEF Pty Ltd

OCTIEF

GF MORANDINI EARTHWORKS PTY LTD

ASBESTOS MANAGEMENT PLAN

6 COLLEGE ROAD, BERRIMAH NT 0828

REPORT PREPARED FOR:
GF Morandini Earthworks Pty Ltd
December 2017

OCTIEF PTY LTD
ABN: 82 163 772 478
12/16 Charlton Ct. Woolner
Enquiries: 1800 OCTIEF (628 433)
corporate@octief.com.au
www.octief.com.au

Date:12/12/2017

Reference #: J7590

DOCUMENT CONTROL RECORD

OCTIEF Pty Ltd		Reference No:	J7590
Telephone:	1800 OCTIEF (628 433)	Certificate of Analysis:	NT1712111033
Email:	corporate@octief.com.au	Date of Inspection:	8th December 2017

Title:	Asbestos Management Plan – 6 College Road, Berrimah NT 0828
Project Manager:	Laura Smith
Prepared by:	Nicholas Cambridge
Reviewed by:	Laura Smith
Approved by:	Laura Smith
Version:	1.0
Client:	GF Morandini Earthworks Pty Ltd
Client Contact:	Frank Morandini
Contact Details:	M: 0418 892 890 E: gm@clubtropicalresortdarwin.com.au

Date:	Version:	Approved by:	Distributed to:	No. of Copies
12/12/2017	1.0	L. Smith	GF Morandini Earthworks Pty Ltd	1

DISCLAIMER

The management and staff of OCTIEF Pty Ltd have taken every care in completing the information contained in this report. The interpretation of the scientific data contained in reports of this nature is often subject to professional judgement and it is possible that errors may occur.

In consequence of the often subjective nature of the scientific interpretation of data, OCTIEF Pty Ltd does not guarantee the completeness or accuracy of the information provided, and clients are advised they should not rely entirely upon this information when making commercial decisions as a result of information contained in this document.

Any opinion, statement, representation or advice given by us on behalf of OCTIEF Pty Ltd is given in good faith on the basis that OCTIEF Pty Ltd, its servants, employees and agents are not subject to any liability whatsoever (whether by reason of lack of due care and attention or otherwise) and the client releases and discharges OCTIEF Pty Ltd and its servants, agents or employees from all actions, suits claims, demands, causes of actions, costs and expenses, legal equitable under statute and otherwise and all other liabilities of any nature (whether or not the parties were or could have been aware of them) which the client may have; or but for this disclaimer, could or might have had against OCTIEF Pty Ltd and its servants, agents or employees in any way related to the information provided, or the circumstances recited in this disclaimer or allegations arising out of or in any way related to the information provided to the client by OCTIEF Pty Ltd.

The information provided is for the benefit and use of the client only and cannot be relied upon by any third party.

EXECUTIVE SUMMARY

OCTIEF Pty Limited (OCTIEF) was commissioned to undertake an asbestos audit with the purpose of identifying the presence of asbestos and asbestos containing materials (ACM) within the nominated building/s located at 6 College Road, Berrimah (the subject site). The subject site was audited on the 8th December 2017 by Nicholas Cambridge (Asbestos Assessor License Number: LAA001193).

The existence of asbestos and ACM within buildings and structures throughout Australia has created the need for specific management procedures to be developed and implemented. These procedures are designed to minimise health risks to all building occupants including visitors and contractors arising from the presence of asbestos and ACM.

The objectives of the asbestos audit were to:

- Identify or presume the presence of asbestos and ACM within the boundaries of the subject site;
- Carry out risk assessments for the identified or presumed ACM, taking into account the material type, friability, condition, surface treatment, location, quantity etc.;
- Compile an Asbestos Register; and
- Make recommendations for the management and control of the identified or presumed asbestos and ACM based on the risk assessment.

All recommended actions and works carried out must be done so in accordance with the Northern Territory Government *Work Health and Safety Act 2011* (WHS Act) *and Work Health and Safety Regulation 2011* (WHS Regulation), and the following codes of practice approved under section 274 of the WHS Act:

- *Code of Practice: How to Manage and Control Asbestos in the Workplace*; and
- *Code of Practice: How to Safely Remove Asbestos*.

COMMENTS AND RECOMMENDATIONS

No asbestos or ACM was identified within the boundaries of the subject site. Areas that have not been accessed or sampled may still contain asbestos or ACM.

Under no circumstances should unidentified potential asbestos or ACM be disturbed in any way. If unidentified potential asbestos or ACM are found within the boundaries of the subject site, then that material must either be assumed to contain asbestos and be treated with the appropriate caution based on the level of risk, or a sample should be taken and analysed. If it is assumed to contain asbestos, it is considered to be asbestos for all legal purposes.

TABLE OF CONTENTS

1. GENERAL INFORMATION

A person with management or control of a workplace must ensure that all buildings and/or structures built prior to 31 December 2003 are inspected for the presence of asbestos and ACM. Where asbestos or ACM has been identified, they must ensure that all persons entering the building and/or structure are aware of the presence and location of the asbestos or ACM and ensure an asbestos management plan (AMP) and asbestos register are developed, reviewed and revised in accordance with the WHS Regulations.

A person conducting a business or undertaking (PCBU) must not carry out, direct or allow a worker to carry out work involving asbestos if that work involves manufacturing, supplying, transporting, storing, removing, using, installing, handling, treating, disposing of or disturbing asbestos or ACM, except in prescribed circumstances. The prohibition on the supply of asbestos also prohibits the sale of asbestos or ACM.

The final prohibition for asbestos in the workplace came into effect on 31 December 2003. The following prohibitions do not apply if any of the work involving asbestos is any of the following:

- Genuine research and analysis;
- Sampling and identification in accordance with the WHS Regulations;
- Maintenance of, or service work on, non-friable asbestos or ACM, fixed or installed before 31 December 2003, in accordance with the WHS Regulations;
- Removal or disposal of asbestos or ACM, including demolition, in accordance with the WHS regulations;
- Transport and disposal of asbestos and asbestos waste in accordance with jurisdictional legislation;
- Demonstrations, education or practical training in relation to asbestos or ACM;
- Management in accordance with the WHS Regulations of in situ asbestos that was installed or fixed before 31 December 2003;

A comprehensive list of exclusions to the prohibition can be found within the *Code of Practice for Management and Control of Asbestos in the Workplace.*

1.1 Legislative Requirements

The WHS Act and Regulations superseded the existing Occupational / Workplace Health and Safety Act and Regulations on 1 January 2012. The legislative requirements with regard to asbestos can be found in Chapter 8 of the WHS Regulations. Further information with regard to asbestos management in the workplace can be found in the following codes of practice approved under section 274 of the WHS Act:

- *Code of Practice: How to Manage and Control Asbestos in the Workplace*; and
- *Code of Practice: How to Safely Remove Asbestos.*

Approved codes of practice are practical guides to achieving the standard of health, safety and welfare required under the WHS Act and Regulations. They apply to any person who has a duty of care in the circumstances described in the code. Codes of practice are admissible in court proceedings under the WHS Act and Regulations where they may be regarded as evidence of what is known about a hazard, risk or control and used to determine what is reasonably practical in the circumstances to which the code relates. Codes of Practices, unlike the WHS Act and Regulations, are not mandatory and a duty holder may choose to use some other way to achieve compliance with the WHS Act and Regulations. However, alternative methods must provide equivalent or higher standards of work health and safety than those suggested in the code of practices.

Through the synthesis of information provided in the WHS Act, WHS Regulations, and approved codes of practice, the following mandatory requirements are now in force.

- A person with management or control of a workplace must ensure, so far as reasonably practical, that all asbestos or ACM at the workplace is identified by a competent person. A competent person means a person who has acquired through training, qualification or experience the knowledge and skills to carry out the task;
- Any samples from materials at the workplace which are to be analysed for asbestos must be done so by a laboratory which is NATA-accredited for the relevant test method/s;
- If the presence of asbestos or ACM at the workplace is identified or presumed it must be clearly indicated and, if reasonably practicable to do so, have a label affixed to it;
- A person with management or control of a workplace must ensure that an asbestos register is prepared for the workplace and kept up to date. The asbestos register must record any asbestos or ACM identified at the workplace or assumed to be present. The asbestos register must also identify where asbestos or ACM are known to not be present at the workplace;
- If the asbestos register outlines that asbestos or ACM were identified or assumed to be present at the workplace, the person with management or control of that workplace must ensure that a management plan accompanies the asbestos register. The AMP must be kept up to date and made readily accessible to workers, health and safety representatives, or persons conducting a business or undertaking at the workplace; and
- The asbestos register and AMP must be reviewed if further asbestos or ACM is identified or presumed to be present within the workplace; asbestos is removed, disturbed, sealed or enclosed at the workplace; the plan is no longer adequate for managing asbestos or ACM at the workplace; or a health and safety representative requests a review. In the absence of these events occurring the asbestos register and AMP must be reviewed no less than once every 5 years.

1.2 Asbestos

The related health aspects of exposure to airborne asbestos fibres have been well documented. The inhalation of asbestos fibres is known to cause mesothelioma, lung cancer and asbestosis and other respiratory diseases. Asbestos poses a risk to health by inhalation whenever asbestos fibres become airborne and people are exposed to these fibres. Accordingly, exposure should be prevented.

Malignant mesothelioma is a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelium cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness.

Mesothelioma was once rare, but its incidence is increasing throughout the industrial world as a result of past exposures to asbestos. Australia has the highest incidence rate in the world.

Lung cancer has been shown to be caused by all types of asbestos. The average latency period from first exposure to developing the disease ranges from 20 to 30 years. Lung cancer symptoms are rarely felt until the disease has developed to an advanced stage.

Asbestosis is a form of lung disease (pneumoconiosis) directly caused by inhaling asbestos fibres, causing a scarring (fibrosis) of the lung tissue which decreases the ability of the lungs to transfer oxygen to the blood. The latency period of asbestosis is generally between 15 and 25 years.

Asbestos poses a risk to health by inhalation whenever respirable asbestos fibres become airborne. Airborne respirable fibre concentrations can be estimated using available data (for example, monitoring reports, data from scientific literature) or past experience (for example, monitoring reports) of the process in question. In cases of doubt, it may be necessary to confirm the estimates by measurement using the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC: 3003 (2005)].*

Exposure monitoring measures the levels of respirable fibres in the breathing zone of the worker while work is being undertaken. Exposure monitoring must be carried out by a competent person, who may include a licensed asbestos assessor or a person who has undertaken the endorsed unit of competency for licensed asbestos assessors. An occupational hygienist who has experience in asbestos exposure monitoring may also be used.

Where exposure monitoring is carried out, it is good practice to stop work and investigate the cause if the level of airborne asbestos in the breathing zone reaches half the exposure standard.

Although the need for exposure air monitoring will depend on the particular circumstances, the results may assist in assessing risks associated with asbestos.

Other forms of air monitoring that are relevant to asbestos work are discussed in more detail in the approved *Code of Practice: How to Safely Remove Asbestos*. These include:

- Control monitoring for ensuring that an enclosure or other controls used during asbestos removal are effective at preventing fibres from being found outside the work area; and
- Clearance monitoring to ensure that the work area is free of asbestos fibres prior to being certified for reoccupation.

The degree of respirable asbestos fibre released and subsequent exposure is in part dependent upon the matrix material binding the asbestos and its general condition.

There are six commercial varieties of asbestos which are currently regulated the approved *Code of Practice: How to Manage and Control Asbestos in the Workplace*:

- **Actinolite** (Amphibole)
- **Amosite/Grunerite** (Amphibole) - commonly known as grey or brown asbestos
- A**nthophyllite** (Amphibole)
- **Chrysotile** (Serpentine group) - commonly known as white asbestos
- **Crocidolite** (Amphibole) - commonly known as blue asbestos
- **Tremolite**(Amphibole)

The highest health risk is associated with exposure to amphibole asbestos (all varieties with the exception of chrysotile) with crocidolite being cited as the material of greatest concern.

2. MANAGING ASBESTOS AND ASBESTOS CONTAINING MATERIALS

The person with management or control of the workplace is responsible for implementing the planning, control and management measures outlined within this report. It is also their responsibility to ensure that the management plan including asbestos register is regularly reviewed in accordance with the relevant legislative requirements.

OCTIEF shall retain a digital copy of the document on file for the purpose of re-issue and re-auditing. It is the responsibility of the person with management or control of the workplace to contact the authors to attain and revise the file when necessary.

Section 429 of the WHS Regulation states that the person with management or control of the workplace must ensure that the asbestos management plan is readily accessible to:

- A worker who has carried out, carries out or intends to carry out work at the workplace;
- Health and safety representatives who represent workers that carry out or intend to carry out work at the workplace;
- A person conducting a business or undertaking who has carried out, carries out or intends to carry out work at the workplace; and
- A person conducting a business or undertaking, who has required, requires or intends to require work to be carried out at the workplace.

It is imperative that this document be kept at the workplace to ensure its accessibility.

Section 428 of the WHS Regulation states that if the person with management or control of a workplace plans to relinquish management or control (for instance, selling the workplace or the business or undertaking), they must ensure, so far as practicable, that a copy of the asbestos register is given to the person who is assuming management or control of the workplace.

2.1 Training

Section 445 of the WHS Regulations state that a person conducting a business or undertaking must ensure workers who they reasonably believe may be involved in asbestos removal work in the

workplace of carrying out of asbestos-related work are trained in the identification, safe handling and suitable control measure for asbestos and ACM.

The required level of training is more general than that of a qualified asbestos removalist which required workers to undertake specific units of competency. Topics include:

- Asbestos related health risks;
- Historical uses or likely presence of asbestos or ACM;
- Processes and safe work procedures to be followed to prevent exposure;
- Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE); and
- Exposure standards and control levels for asbestos.

Section 39 of the WHS Regulations states a person conducting a business or undertaking must ensure that information, training, and instruction provided to a worker is suitable and adequate, having regard to:

- The nature of the work carried out by the worker;
- The nature of the risks associated with the work at the time the information, training or instruction is provided; and
- The control measures are implemented.

The person must, so far as is reasonably practicable, ensure the information, training and instruction is provided in a way that is readily understandable by any person to whom it is provided.

For more information relating to training courses available please contact OCTIEF directly.

2.2 Record Keeping

The person with management or control of the workplace should maintain detailed records of all activities relating to asbestos works which are undertaken within the subject site, in line with all current legislation and codes of practices. The records should include:

- Copies of the AMP and asbestos register, including updates and amendments;
- Permits to conduct works in restricted work areas;
- Induction records of contractors, visitors and employees noting the presence and location of the AMP and asbestos register for the subject site;
- Records of all asbestos related works, including maintenance and removal;
- Clearance certificates relating to asbestos works; and
- Air monitoring certificates of analysis relating to any asbestos works.

2.3 Warning Signs

Section 424 of the WHS Regulations states that a person with management or control of a workplace must ensure where reasonably practicable, that the presence of asbestos or ACM is indicated by a label. In areas where it is not practicable to label asbestos or ACM, warning signs should be installed.

The purpose of warning signs and labels are to advise all relevant people on site that asbestos or ACM has been identified or assumed to be present and that an AMP exists. They should be located in a position near or on a specified area where asbestos or ACM was identified or assumed to be present. All warning signs must be compliant with AS 1319-1994 – Safety Signs for the Occupational Environment. Examples of warning signs and labels can be found in Appendix F – Example Warning Signs and Label.

Should you require warning labels or signs, please do not hesitate to contact OCTIEF directly.

2.4 Permit to Work System

Areas in which asbestos or ACM has been confirmed or assumed to be present are classified as restricted work areas. All works which may disturb asbestos or ACM within these areas are prohibited unless the person with control or management of the workplace has issued a permit to work to the parties undertaking the works.

The permit to work will authorise the listed signatories of the parties undertaking the works to access the restricted work area. It must detail the task/s to be performed, control measures and the conditions to be complied with during the access period. The purpose of the permit to work is to transfer responsibility for compliance with the WHS legislation and approved code of practices from the person with management or control of the workplace to the parties undertaking the works. On completion of the work, the listed signatories of the parties undertaking the works will relinquish the permit and return it to the person with management or control of the workplace. The person with management or control of the workplace is responsible for the supervision, enforcement and recording keeping of the permit to work system.

A permit to work template can be found in Appendix E – Example Permit to Work.

2.5 High Risk Areas

Areas of potential high risk should not be touched or disturbed in any way. Expert advice or assistance should be sought from a suitably qualified asbestos removalists or assessor prior to any works being conducted within these areas. Such areas include but are not limited to any identified heater banks, damaged or fragmented ACM, fire doors, boiler and pipe lagging, sprayed on insulation and other areas containing friable asbestos or ACM. All potential high risk areas identified within the boundaries of the subject site are listed in the asbestos register. For more information relating to the management of these areas, please contact OCTIEF directly.

2.6 Safe Work Practices

The asbestos register and management plan must be consulted prior to undertaking any works such as refurbishment, maintenance, or demolition in order to determine if any asbestos or ACM is present in the proposed work areas. Safe work practices must be in place prior to commencing any asbestos work or asbestos related works.

Working with dry asbestos or ACM should be avoided wherever possible. Techniques that prevent or minimise the generation of airborne asbestos fibres must be employed at all times. Such techniques include but are not limited to the following:

- Wetting the asbestos or ACM with surfactants or wetting agents, such as detergent water;
- The use of thickened substances, pastes or gels, including hair gel and shaving cream, to cover the surface of asbestos or ACM being worked on (these substances should be compatible with the conditions of use, including temperature, and should not pose a risk to health);
- The use of shadow vacuuming; and
- Performing the task in a controlled environment (for instance, a ventilated enclosure).

Control measures must be employed for all asbestos work or asbestos related work. The use of high-speed abrasive power and pneumatic tools is prohibited under the WHS Regulations, except where used with dust suppression/extraction controls. These controls include local exhaust ventilation (LEV) dust control hoods that attach to the tool and isolate the area being worked on from the environment, ensuring that dust is captured.

Examples of safe work practices can be found in Appendix D of this report.

2.7 Asbestos Removal

All asbestos removal works must be conducted by a licensed asbestos removalist unless specified otherwise in the WHS Regulations.

All Friable asbestos removal works must be performed by a Class A licensed asbestos removalist. All Friable asbestos or ACM must be removed as soon as reasonably practical, in accordance with the WHS Regulations and the approved *Code of Practice: How to Safely Remove Asbestos*. Class A licensed asbestos removalist can remove any amount or quantity of friable and non-friable asbestos or ACM, and any asbestos contaminated dust (ACD).

Non-friable asbestos removal works that exceed $10m^2$ must be performed by a Class B licensed asbestos removalist, in accordance with WHS Regulations and the approved *Code of Practice: How to Safely Remove Asbestos*. Class B licensed asbestos removalist can also remove any ACD except that associated with friable asbestos removal works. Note: If determined that the non-friable material should be removed, it must be removed as soon as practical.

No license is required in order remove: up to $10m^2$ of non-friable asbestos or ACM; ACD that is associated with the removal of less than $10m^2$ of non-friable asbestos or ACM; and other minor ACD contaminations.

Other control measures to ensure that people are not exposed to airborne asbestos should only be implemented if it is not reasonable practicable to remove that asbestos. Examples of such control measures include sealing or encapsulating the asbestos or ACM.

Detailed information regarding asbestos removal can be found in the approved *Code of Practice: How to Safely Remove Asbestos.*

2.8 Asbestos Response Procedures

Asbestos response procedures may be required to be followed where existing ACM have been inadvertently disturbed through actions of staff, maintenance personnel, contractors, visitors, members of the public or damage by severe weather conditions (e.g. hail damage to a corrugated asbestos cement roof).

Where such incidences occur, the relevant Site Manager and/or Site Safety Officer shall be notified immediately. The immediate shall be quarantined, with all access restricted.

It is recommended that expert advice be sought from a suitably qualified asbestos removalists or assessor prior to any works being conducted within these areas.

All such incidences are to be recorded, categorised and notified to the relevant positions in timely and efficient manner as per the sites own incident management framework.

2.9 Occupational Exposure Standards

Where occupational exposure to asbestos is likely to occur, exposure is not to exceed the National Exposure Standard (NES). Occupational exposure is measured using the Membrane Filter Method, by collecting a sample of air from the breathing zone of a person, over minimum four hours duration. The current occupational exposure standards for asbestos are:

- Chrysotile (white) asbestos – 0.1 fibres per millilitre;
- Amosite (brown) asbestos – 0.1 fibres per millilitre;
- Crocidolite (blue) asbestos – 0.1 fibres per millilitre;
- Other forms of asbestos fibres – 0.1 fibres per millilitre; and
- Any mixture of fibre types or where the composition is unknown – 0.1 fibres per millilitre;

All precautions should be taken to completely minimise dust generation and appropriate PPE and respiratory protection (RPE) should be work at all times when disturbing asbestos or ACM or entering a high risk area.

2.10 Air Monitoring For Asbestos Fibres

Air monitoring for asbestos fibres may be necessary during asbestos removal projects. Depending on the type of asbestos or ACM and the associated risk rating, there are different methods of removal that are required to be employed. This is in order to ensure that exposure to airborne asbestos fibres is minimised and controlled in such a way that airborne concentrations of asbestos fibres do not exceed the control levels and exposure standards. 'Control levels' are airborne asbestos fibre concentrations which, if exceeded, indicate there is a need to review current control measures or take other action. These control levels are occupational hygiene 'best practice', and are not health-based standards.

Control level	Control/Action
<0.01 fibres/ml	Continue with control measures
≥0.01 fibres/ml	Review control measures
≥0.02 fibres/ml	Stop removal work and find cause

3. RISK ASSESSMENT AND MANAGEMENT

ACM represents a risk to human health only when respirable asbestos fibres become airborne, and are subsequently inhaled. The risk relates to the potential level of exposure; meaning the risk to human health increase as the level of airborne respirable fibres in an environment increases.

The potential level of exposure associated with an ACM is to be assessed using the tools below (Figure 1 and Table 1). Where an uncontrolled item results in a high or extreme risk rating, control measures are required to be implemented to reduce the risk to moderate or to eliminate the risk. Once controls are implemented, all residual risk ratings should be no higher than moderate.

		Consequence Rating	
		4 - Major	5 - Severe
Likelihood Rating	5 – Almost Certain	Extreme – 9	Extreme – 10
	4 - Likely	High – 8	Extreme – 9
	3 - Possible	High – 7	High – 8
	2 - Unlikely	Moderate – 6	High – 7
	1 - Rare	Moderate – 5	Moderate – 6

Figure 1: Risk Matrix

Table 1: Risk Assessment Definitions

Likelihood	**Almost Certain**	Typically includes 'Partially Sealed' / 'Unsealed' ACM found in a 'Poor' condition, AND is either accessible to building occupants on a regular basis OR has the potential to enter the Supply Air AND is likely to have already generate elevated levels (>0.01f/ml) or airborne asbestos.
	Likely	Typically includes 'Unsealed' ACM found in a 'Fair' condition or 'Sealed' ACM found in a 'Poor' Condition, AND is either accessible to building occupants on a regular basis OR has the potential to enter the Supply Air AND is unlikely to generate elevated levels (>0.01f/ml) or airborne asbestos.
	Possible	Typically includes 'Unsealed' ACM found in a 'Good' Condition or 'Sealed' / 'Partially Sealed' ACM found in a 'Fair' Condition, AND is either accessible to building occupants on a regular basis OR has the potential to enter the Supply Air AND is unlikely to generate elevated levels (>0.01f/ml) or airborne asbestos.
	Unlikely	Typically includes 'Unsealed' ACM found in a 'Very Good' Condition or 'Sealed' and "Partially Sealed' ACM found in a 'Good' Condition, has a low level of disturbance AND is not likely to generate measurable levels (<0.01f/ml) of airborne asbestos in its general state.
	Rare	Typically includes 'Sealed' and 'Partially Sealed' ACM found in a 'Very Good' condition, has a low level of disturbance AND is not likely to generate measurable levels (<0.01f/ml) of airborne asbestos in its general state.
Consequence	**Severe**	Typically **Friable ACM** Can cause multiple fatalities or significant irreversible effects. Very serious long-term impairment of ecosystem function.
	Major	Typically **Non-friable ACM.** Can cause a single fatality or irreversible health effects or disabling illness to one or more persons. Serious long-term impairment of ecosystem function.

All ACM identified shall have an overall risk rating recorded. As asbestos fibres are a known carcinogen, the associated risk rating of an ACM will be either 'Moderate', 'High' , 'Extreme' or 'Unknown'.

Utilising this risk management process, ACM will never result in a risk rating of low. This is due to the consequence of a single exposure to a measurable level of respirable airborne asbestos fibres (>0.01 f/ml) may result in either a single fatality or irreversible health effect.

Qualified Occupational Hygienists have conducted this audit and utilised methods including but not limited to visual inspection, sampling of potential asbestos or ACM, and NATA accredited laboratory analysis of samples. Where practical, the presence or absence of asbestos has been established through laboratory analysis. The type location and condition of asbestos found on the site has been identified and assessed within the asbestos register. On the basis of the information obtained, risk assessments have been conducted on all entries within the asbestos register.

The first step in managing the risk of asbestos or ACM in buildings or structures is having an asbestos audit conducted in order to identify the following:

- Presence of asbestos or ACM;
- Type of asbestos or ACM;
- Location of asbestos or ACM; and
- Condition of asbestos of ACM.

Following the audit, a risk assessment of the potential health risk to personnel, other building occupants (e.g. subcontractors) and the public is conducted. The risk assessment incorporates the points mentioned above as well as the actual hazard (where the hazard is confirmed through laboratory analysis of samples), condition, and accessibility of the asbestos or ACM. It is imperative that this assessment is carried out by a suitably trained and experienced person using a standard risk assessment approach (e.g. AS/NZS ISO 31000:2009). Risk assessment of asbestos and ACM must include the following factors:

- Friability of asbestos or ACM;
- Accessibility of asbestos or ACM;
- Type of asbestos or ACM;
- Quantities of asbestos or ACM present;
- Potential for transport of respirable asbestos fibres by air movement;
- Ventilation factors;
- Number of persons that may potentially be exposed;
- Frequency of potential exposures; and
- Activities that may disturb the asbestos or ACM.

These factors must be carefully considered in order to determine whether a real risk of exposure to asbestos exists. If deemed necessary, this can be achieved by assessing the potential or real exposure in terms of National Exposure Standards (NES). The condition of the asbestos or ACM and the likelihood of contaminant release; access by personnel; potential personnel exposure; and the length of time for which exposure may occur, are each factors to be taken into account. When the asbestos

or ACM is deemed to potentially release airborne respirable fibres, air monitoring may be conducted to determine is airborne concentrations exceed the NES.

The selection of a suitable management strategy to control the risk of exposure also requires an experienced and knowledgeable person to implement the most suitable control option. Where possible the standard hierarchy of risk control should be followed with avoidance the best and most preferable options, although where a hazard already exists on of the other three control strategies or a combined approach should be implemented. The choice of which to implement will depend on the best practice management, locally available options and cost. Note that cost should not be the deciding factor in choosing which option or combination of options to implement.

- Avoid;
- Eliminate;
- Implement engineering controls; and
- Implement administration controls (including Personal Protective Equipment)

For asbestos and ACM, examples of options include:

- Labelling;
- Training;
- Permit to work systems;
- Restricted Access;
- Enclosure or encapsulation; and
- Removal.

The selection of the most appropriate control option, or a combination of options, requires consultation and coordination between the person with management or control of the workplace, and building occupants.

4. LIMITATIONS

There is no guarantee, *expressed* or *implied*, that all asbestos and ACM has been identified or presumed to be present within the boundaries of the subject site. Areas where samples have not been taken and analysed, including samples which have been classified as 'similar to' other samples, and areas not accessed during the audit must be investigated further and all care and caution taken in the event of future project building work, including refurbishment, removal and/or demolition work.

All measurements and quantities mentioned in this report are approximations only and should not be relied on for asbestos removal tendering purposes.

Asbestos or ACM may be present in inaccessible areas. Inaccessible areas are areas that cannot be accessed during normal daily activities or routine maintenance. Examples of inaccessible areas that may contain asbestos or ACM include, but are not limited to:

- A cavity in a building that is completely (or almost completely) enclosed and suspected of containing asbestos (based on where asbestos is located elsewhere in the building) and access is only possible through destruction of part of the walls of the cavity;
- The inner lining of an old boiler pressure vessel (information on this type of vessel suggests it contains asbestos) and the inner lining is not accessible due to the design and operation of the boiler and access can only be via partial destruction of the outer layer;
- Vinyl tiles or cement based flooring that may contain asbestos, which have had a number of layers of non-ACM placed over them and secured, where the layers above it have been well secured and require some form of destruction in order to access the vinyl or cement based material that may contain asbestos;
- Enclosed riser shafts in multi-storey buildings containing cables that may be insulated with ACM;
- Underground services such as electrical conduits, water pipes, and fire fighting pipelines may contain or be contracted from asbestos or ACM; and
- Air conditioning ducts that may contain asbestos gaskets or linings.

Unless otherwise mentioned in the asbestos register, electrical switchboards, electrical cabling, plant equipment / machinery, air conditioning units, boilers, pumps, transformers, generations and any other equipment or machinery not specifically mentioned which were 'live' at the time of the audit were not accessed or inspected for safety reasons.

Fire door cores were accessed only along the top edge of the door. No lock or door mechanisms were dismantled. If the door was fully enclosed or the edges beaded, the fire door is classed as inaccessible.

Subject sites which have undergone renovation and refurbishments throughout their lifetime have a large variety and range of potential asbestos or ACM. Representative samples from these potential asbestos or ACM are taken for identification purposes however without sampling each individual sheet, panel or area, the results of the sampling can only give an indication of the presence of asbestos. If unsure, the material must either be assumed to contain asbestos and be treated with the appropriate caution based on the level of risk, or a sample should be taken and analysed. If it is assumed to contain asbestos, it is considered to be asbestos for all legal purposes.

5. AREA NOT ACCESSED

In addition to the inaccessible areas listed in the limitations, the following areas were not accessed and therefore, the possible presence of asbestos of ACM cannot be ruled out

- External – Main switchboard
- Warehouse – Switchboard DB2 – Southern elevation
- Warehouse – Switchboard DB4 – Southern elevation
- Warehouse – Switchboard DB3 – Eastern elevation

6. REFERENCES

Australian / New Zealand Standard® 1716 2012. Respiratory Protective Devices.

Australian / New Zealand Standard® ISO 3100:2009. Risk Management – Principles and Guidelines

Australian Standard® AS1319 1994. Safety Signs for the Occupational Environment.

Australian / New Zealand Standard® 1715 2009. Selection Use and Maintenance of Respiratory Protective Devices.

Google Earth 2016

National Occupational Health and Safety Commission (NOHSC) (1995), *Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment* [NOHSC:3008(1995)], NOHSC, Canberra, Australia

National Occupational Health and Safety Commission (NOHSC) (2005), *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* [NOHSC:3003(2005)], NOHSC, Canberra, Australia

Northern Territory Government, *Code of Practice: How to Management and Control Asbestos in the Workplace*

Northern Territory Government, *Code of Practice: How to Safely Remove Asbestos*

Northern Territory Government, *Work Health and Safety Act 2011*

Northern Territory Government, *Work Health and Safety Regulation 2011*

APPENDIX A – ASBESTOS REGISTER

OCTIEF PTY LTD
ABN: 82 163 1772 478
Unit 34 /53-57 Link Drive Yatala, QLD 4207
Enquiries: 1800 OCTIEF (628433)
Fax: (07) 3382 6895
corporate@octief.com.au
www.octief.com.au

Date: 11/12/2017

Job #: J7590

Audit Number:	J7590	**Client Name:**	GF Morandini Earthworks Pty Ltd	**Client Contact:**	Frank Morandini
Version:	1.0	**Site Name / Address:**	6 College Road, Berrimah		

Site Name	
6 College Road, Berrimah	
Site Inspection Details	
Asbestos Assessor:	Nicholas Cambridge
Inspection Date:	08/12/2017
Re-inspection date:	N/A
Site Details	
Number of Building / Structures:	1
Approximate Age of Buildings / Structures:	40

OCTIEF

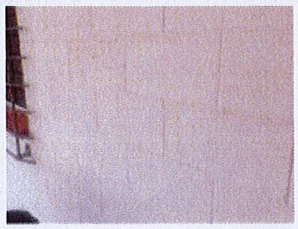
Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Brick walls. Metal soffits. Metal fascias. Metal sun hoods. Metal and PVC down pipes.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Other - Refer to Comments	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Car port	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Brick pavers. Metal columns. Metal roofing.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	76810	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	All elevations	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Textured paint to external brick walls.					**Urgent Action Required?** -

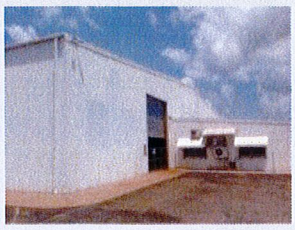
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Mastic / Filler	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	35 - lm	**Sample #:**	76811	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Southern elevations	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Mastic to the intersection of the external brick walls.					**Urgent Action Required?** -

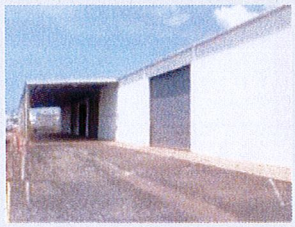
OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	1 - Item	**Sample #:**	-	
Position Installed:	Electrical Component Box	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Car port	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Main switchboard	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	No access to internal components of main switch board due to risk of electric shock					**Urgent Action Required?** No

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Storage shed	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Southwestern area of site	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal walls and roof. Concrete slab to floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Warehouse	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	South elevation	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal sheeting to walls and roof.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Warehouse	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	West elevation	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal sheeting to walls and roof. Metal support columns.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Warehouse	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	North elevation	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal sheeting to walls and roof.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Warehouse	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	East elevation	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal sheeting to walls and roof. Metal support columns.					**Urgent Action Required?** -

OCTIEF

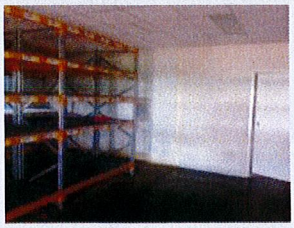
Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Mastic / Filler	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	35 - lm	**Sample #:**	76812	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Eastern elevation	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Mastic to the intersection of the external brick walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	External	**Material Type:**	Cement Based	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	1 - Item	**Sample #:**	76813	
Position Installed:	Preformed Moulded Product	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Southeast corner of building	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Fibre cement communications pit to southeast corner of building.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

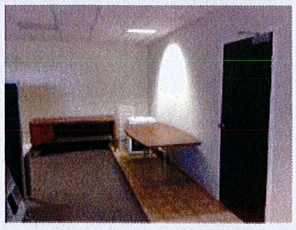
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 1	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Rubber matting to concrete slab floor.					**Urgent Action Required?** -

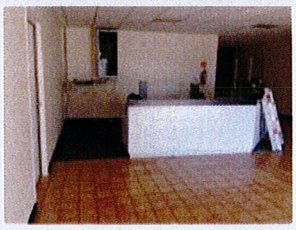
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 2	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Carpet to concrete slab floor.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 3	**Friability:**	-	**Risk Rating:**		
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Carpet to concrete slab floor.					**Urgent Action Required?** -

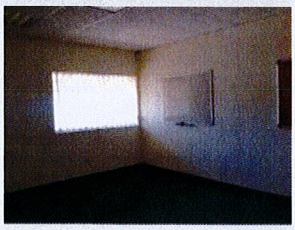
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 4	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Carpet and ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

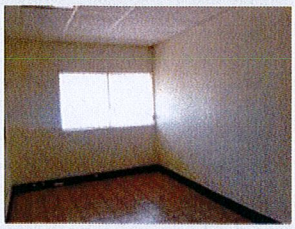
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Reception	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick, plasterboard and timber walls. Carpet and ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 5	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Carpet tiles to concrete slab floor.					**Urgent Action Required?** -

OCTIEF

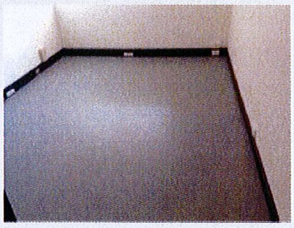
Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 6	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Carpet tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 7	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and plasterboard walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

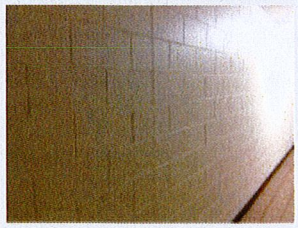
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 8	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and plasterboard walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 9	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and plasterboard walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Vinyl Floor Coverings	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	20 - m2	**Sample #:**	76814	
Position Installed:	Floor	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Office 9	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Blue vinyl sheeting to floor					**Urgent Action Required?** -

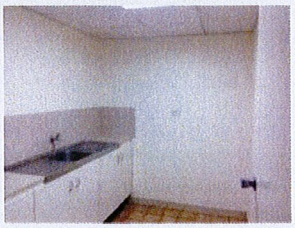
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 10	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and plasterboard walls. Carpet tiles to concrete slab floor. Timber filler panel to riser.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Hallway	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick, plasterboard and timber walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Mastic / Filler	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	4 - lm	**Sample #:**	76816	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Hallway	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Expansion joint to brickwork	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Mastic to expansion joint.					**Urgent Action Required?** -

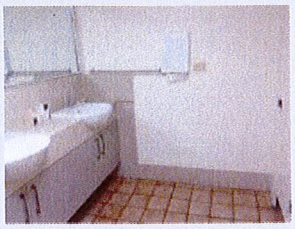
OCTIEF

Job #:J7590

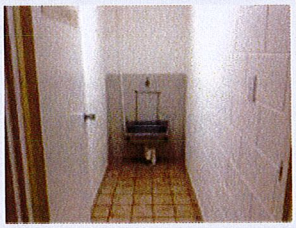
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Kitchenette	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Male bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Excluding cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor. Timber filler panel to riser.					**Urgent Action Required?** -

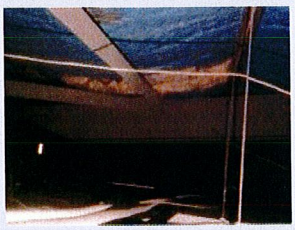
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Cement Based	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	15 - m2	**Sample #:**	76815	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Male bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Fibre cement cubicle partition walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Female bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Excluding cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor. Timber filler panel to riser.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Cement Based	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	15 - m2	**Sample #:**	Similar to 76815	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Female bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Fibre cement cubicle partition walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Cleaners store	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

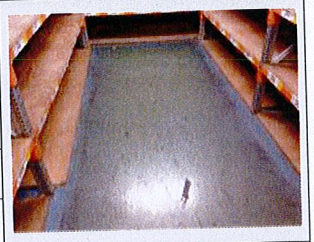
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Office 11	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

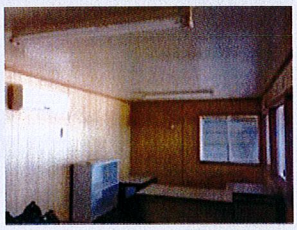
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Throughout	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Ceiling void	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Synthetic ceiling insulation throughout. Metal structural frames work. Concrete slab ceiling.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Mastic / Filler	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	50 - lm	**Sample #:**	76820	
Position Installed:	Plant, Equipment & Machinery	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Ceiling	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Air conditioning ducting	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Mastic to air conditioning ductwork throughout ceiling void.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	All Externals	**Condition:**	-	**Sample Result:**	-	
Primary Location:	All elevations	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal sheeting to walls and roof.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Internal	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plasterboard ceiling. Plasterboard walls.					**Urgent Action Required?** -

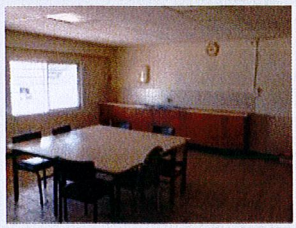
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Vinyl Floor Coverings	**Status:**	Not Present (Tested)	
Elevation:	Ground Floor	**Quantity:**	20 - m2	**Sample #:**	76817	
Position Installed:	Floor	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Internal	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Blue vinyl sheeting to floor.					**Urgent Action Required?** -

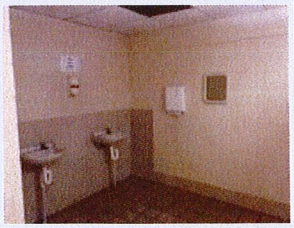
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Internal	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Timber paneling to ceiling and walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Vinyl Floor Coverings	**Status:**	Not Present (Tested)	
Elevation:	Level 1	**Quantity:**	20 - m2	**Sample #:**	76818	
Position Installed:	Floor	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Internal	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Brown vinyl sheeting to floor. Top layer of sheeting.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Demountable	**Material Type:**	Vinyl Floor Coverings	**Status:**	Not Present (Tested)	
Elevation:	Level 1	**Quantity:**	20 - m2	**Sample #:**	76819	
Position Installed:	Floor	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Internal	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Cream vinyl sheeting to floor. Bottom layer of sheeting.					**Urgent Action Required?** -

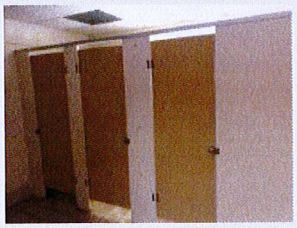
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Records store room	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Ceramic tiles to concrete slab floor.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Lunchroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick and timber walls. Ceramic tiles to concrete slab floor. Timber panels to bulkhead.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Female bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Excluding cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor. Timber panels to riser.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Cement Based	**Status:**	Not Present (Tested)	
Elevation:	Level 1	**Quantity:**	15 - m2	**Sample #:**	76821	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Female bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Fibre cement cubicle partition walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Male bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Excluding cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Plaster ceiling tiles. Brick walls. Ceramic tiles to concrete slab floor. Timber panels to bulkhead.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Cement Based	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	15 - m2	**Sample #:**	Similar to 76821	
Position Installed:	Wall	**Condition:**	-	**Sample Result:**	No Asbestos Detected	
Primary Location:	Male bathroom	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	Cubicle partitions	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Fibre cement cubicle partition walls.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Internal	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Level 1	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Throughout	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Metal roofing and framework above suspended ceiling.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	2 - Items	**Sample #:**	-	
Position Installed:	Electrical Component Box	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Southern elevation	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	DB4	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	No access to internal components of electrical board due to risk of electric shock.					**Urgent Action Required?** No

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	2 - Items	**Sample #:**	-	
Position Installed:	Electrical Component Box	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Southern elevation	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	DB2	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	No access to internal components of electrical board due to risk of electric shock.					**Urgent Action Required?** No

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	1 - Item	**Sample #:**	-	
Position Installed:	Electrical Component Box	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Western elevation	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	DB3	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	No access to internal components of electrical board due to risk of electric shock.					**Urgent Action Required?** No

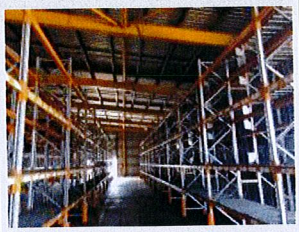
Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Southwest	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Concrete slab floor. Brickwork walls. Metal framework and roof sheeting.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Northwest	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Concrete slab floor. Metal sheeting to walls and roof. Metal framework.					**Urgent Action Required?** -

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Northeast	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Concrete slab floor. Metal sheeting to walls and roof. Metal framework.					**Urgent Action Required?** -

OCTIEF

Job #:J7590

Location Details		Material Details		Results / Management Details		Photographs
Building ID:	Warehouse	**Material Type:**	Other - Refer to Comments	**Status:**	Not Present (Not Tested)	
Elevation:	Ground Floor	**Quantity:**	-	**Sample #:**	-	
Position Installed:	Walls / Floor / Ceiling	**Condition:**	-	**Sample Result:**	-	
Primary Location:	Southeast	**Friability:**	-	**Risk Rating:**	-	
Secondary Location:	-	**Surface Treatment:**	-	**Recommendation:**	-	
Comments:	Concrete slab floor. Brickwork walls. Metal framework and roof sheeting.					**Urgent Action Required?** -

APPENDIX B – NATA ACCREDITED LABORATORY REPORT/S

Darwin Branch: Unit 12, 16 Charlton Court, Woolner NT 0820
Enquiries: 1800 628 433
www.octief.com.au

Asbestos Bulk Sample Analysis Report
Certificate No NT1712111033

Client:	GF Morandini Earthworks Pty Ltd	**Sampled By:**	JM & NC
Client Contact:	Frank Morandini	**# of Samples Submitted:**	12
Telephone:	0418 892 890	**Sampling Date:**	08/12/2017
Email:	-	**Date Received:**	08/12/2017
Project:	J7590	**Identification Date:**	11/12/2017
Site Location:	6 College Road, Berrimah	**Issue Date:**	11/12/2017

Test Methodology: Polarized light microscopy examination including dispersion staining techniques for the presence of asbestos in accordance with the methodology outlined in the In-House Procedure QP-930-001 which is based on Australian Standard (AS4964-2004)

Sample ID	Sample Location	Sample Description	Approximate Size or Weight	Asbestos Detected (Yes/No)	Fibre Types Detected
76810	External - Textured paint - White	Paint	30x20x1mm	No	NAD-NFD
76811	External - Southern elevation	Mastic	40x10x5mm	No	NAD-NFD
76812	External - Eastern elevation	Mastic	40x10x2mm	No	NAD-NFD
76813	External - Communications pit	Cementitious material	10x5x2mm	No	NAD-ORG-SMF
76814	Internal - Office #9 (Data room)	Vinyl sheeting	25x25x2mm	No	NAD-NFD
76815	Internal - Male bathroom - Ground level	Fibre cement sheeting	4x2x2mm	No	NAD-ORG
76816	Internal - Hallway expansion joint	Mastic	30x10x2mm	No	NAD-NFD

Fibre Types

CHR	*Chrysotile (white asbestos) fibres detected*	*ORG*	*Organic fibres detected*
AMO	*Amosite (brown / grey asbestos) fibres detected*	*SMF*	*Synthetic mineral fibres detected*
CRO	*Crocidolite (blue asbestos) fibres detected*	*UMF*	*Unidentified mineral fibres detected*
NFD	*No fibres detected*	*NAD*	*No Asbestos Detected*

Notes: *Hand-picked refers to small discrete amounts of asbestos distributed unevenly in a large body of non-asbestos material.*
Detection limit (AS 4964) – 0.1 g/kg.
Due to their nature, confirmation using another independent analytical technique is recommended if no asbestos is detected in samples of vinyl tiles, bituminous materials, mastics, adhesives, paints, sealants, resins or ore.
The results contained within this report relate only to the sample(s) submitted for analysis and OCTIEF accepts no responsibility for the collection, packaging and transportation of sample submitted by external parties. Sample descriptions, sizes and weights are approximate only.

Darwin Branch: Unit 12, 16 Charlton Court, Woolner NT 0820
Enquiries: 1800 628 433
www.octief.com.au

Asbestos Bulk Sample Analysis Report
Certificate No NT1712111033

76817	Internal - Demountable - Ground level	Vinyl sheeting	25x25x2mm	No	NAD-SMF
76818	Internal - Demountable - Level one - Top layer	Vinyl sheeting	30x20x2mm	No	NAD-SMF
76819	Internal - Demountable - Level one - Bottom layer	Vinyl sheeting	30x20x2mm	No	NAD-NFD
76820	Internal - Air conditioning vent - Ground level	Mastic	15x10x1mm	No	NAD-NFD
76821	Internal - Toilet dividers - Level one - Female bathroom	Fibre cement sheeting	2x2x2mm	No	NAD-ORG

Detection limit (AS 4964) – 0.1 g/kg
The NATA Accreditation does not cover the sampling performance

Approved Identifier: Dianne Loffler

Report Approved By: Dianne Loffler

Fibre Types

CHR	*Chrysotile (white asbestos) fibres detected*	*ORG*	*Organic fibres detected*
AMO	*Amosite (brown / grey asbestos) fibres detected*	*SMF*	*Synthetic mineral fibres detected*
CRO	*Crocidolite (blue asbestos) fibres detected*	*UMF*	*Unidentified mineral fibres detected*
NFD	*No fibres detected*	*NAD*	*No Asbestos Detected*

Notes: *Hand-picked refers to small discrete amounts of asbestos distributed unevenly in a large body of non-asbestos material.*
Detection limit (AS 4964) – 0.1 g/kg.
Due to their nature, confirmation using another independent analytical technique is recommended if no asbestos is detected in samples of vinyl tiles, bituminous materials, mastics, adhesives, paints, sealants, resins or ore.
The results contained within this report relate only to the sample(s) submitted for analysis and OCTIEF accepts no responsibility for the collection, packaging and transportation of sample submitted by external parties. Sample descriptions, sizes and weights are approximate only.

APPENDIX C – LIST OF ACRONYMS & GLOSSARY OF TERMS

Asbestos fibre types

AMO	Amosite (Brown Grey Asbestos) fibres
CHR	Chrysotile (White Asbestos) fibres
CRO	Crocidolite (Blue Asbestos) fibres

Asbestos product / material types

AD	Adhesive
CB	Cement Based
FD	Fire Door
GB	Galbestos galvanized sheet / asbestos compound fixed to one side
GS	Gasket
IB	Insulation Board
LA	Lagging
LDB	Low Density Board
LF	Loose Fill
MF	Mastic / Filler
MI	Millboard
MA	Machinery
OTHER	Refer to Comments
NAD	No Asbestos Detected
PB	Polymer bound i.e. vinyl tiles, electrical switchboards etc.
SC	Spray Coating
TX	Textile – woven sheet, rope, insulation etc.
VS	Vinyl Sheeting (incl. Backing)

Accredited Laboratory: Defines a testing laboratory accredited by NATA (National Association of Testing Authorities, Australia).

ACM: Asbestos Containing Material (ACM) means any material, object, product or debris containing asbestos.

Air Monitoring: Refers to airborne asbestos air sampling to assist in assessing exposure and the effectiveness of control measures. This includes exposure monitoring, clearance monitoring and control monitoring.

AMO: Abbreviation within asbestos register for amosite (Brown/Grey Asbestos) fibres.

Asbestos: Defined as the fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite/grunerite (brown or grey asbestos), anthohyllite, crocidolite (blue asbestos), chrysotile (white asbestos), tremolite, or any mixture containing one or more of these.

Asbestosis: A form of lung disease (pneumoconiosis) directly caused by inhaling asbestos fibres, causing a scarring (fibrosis) of the lung tissue which decreases the ability of the lungs to transfer oxygen to the blood. The latency period of asbestosis is generally between 15 and 25 years.

Asbestos Removalist: Means a competent person who performs asbestos removal work.

Asbestos Removal Work: Means the removal of asbestos or ACM.

Asbestos Work Area: The immediate area in which work on ACM is taking place. The boundaries off the work area must be determined by a risk assessment.

Bonded Asbestos: Means asbestos or ACM in which the asbestos fibres are bound into a firm matrix (i.e. cementations or resinous).

CHR: Abbreviation within asbestos register for chrysotile (White Asbestos) fibres.

CRO: Abbreviation within asbestos register for crocidolite (Blue Asbestos) fibres.

Clearance Inspection: Refers to an inspection carried out by a competent person, to verify that an asbestos work area is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection, and may also include clearance monitoring and/or settled dust sampling.

Clearance Monitoring: Air monitoring using static or positional samples to measure the level of airborne asbestos in an area following work on ACM. An area is cleared when the level of airborne asbestos fibres is measured as being below 0.01 fibres/mL.

Competent Person: Means a person who has acquired through training, qualification or experience the required knowledge, and skills to carry out a task.

Control Monitoring: Air monitoring using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM. Control monitoring is designed to assist in assessing the

effectiveness of control measures. Its results are not representative of actual occupational exposures and should not be used for that purpose.

Friable Asbestos: Means asbestos or ACM which, when dry, is or may become crumbled, pulverised or reduced to powder by hand.

Condition: The physical state of the material in question.

Hazard: Refers to any matter, thing, process, or practice that may cause death, injury, illness or disease.

HEPA Vacuum Cleaner: Means a vacuum cleaner that is fitted with a High Efficiency Particulate Air (HEPA) Filter which complies with AS 4260-1997 High efficiency particulate air (HEPA) filters – classification, construction and performance. A domestic vacuum cleaner is not suitable for use with asbestos.

Lung Cancer: This disease been shown to be caused by all types of asbestos. The average latency period of the disease, from the first exposure to asbestos, ranges from 20 to 30 years. Lung cancer symptoms are rarely felt until the disease has developed to an advanced stage.

Malignant Mesothelioma: A cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is (continued) increasing throughout the industrial world as a result of past exposures to asbestos. Australia has the highest incidence rate in the world.

Masonry: Concrete work, brickwork or stone work.

NAD: No asbestos or ACM detected.

NATA: National Association of Testing Authorities, Australia.

Non-friable (Asbestos): Material, not in its natural state, that is bonded by a cement matrix, vinyl, resin or other binding material.

Occupational Hygienist: A qualified and/or experience person with tertiary qualification in a science or occupational health related field. To work within the asbestos industry, Occupational Hygienists should be NATA Accredited, and must be experience in the assessment and control of asbestos, and other chemical, physical or biological hazards in the workplace.

Person Conducting a Business or Undertaking (PCBU): Means a person conducting a business or undertaking alone or with others, whether or not for profit or gain. A PCBU can be a sole trader (for example a self-employed person), a partnership, company, unincorporated association or government department of public authority (including municipal council). An elected member of a municipal council acting in that capacity if not a PCBU.

Permit to Work: A formal written authority to operate a planned procedure, which is designed to protect personnel working in hazardous areas or activities. Authority for a safe system of work.

Person with Management or Control of a Workplace: means a PCBU with management or control over the workplace.

Personal Protective Equipment (PPE): Means equipment and clothing that is used or worn by an individual person to protect them against, or minimize their exposure to, workplace risks. It includes items such as facemasks and respirators, coveralls, goggles, helmets, gloves and footwear.

Respirable Asbestos Fibres: Asbestos fibres less than 3 µm wide, more than 5 µm long with a width ratio of more 3:1.

Respiratory Protective Equipment (RPE): Equipment used to protect personnel from inhalation of asbestos and other hazardous or radioactive materials.

Risk: The likelihood and consequence of a hazard causing harm to a person or the environment.

Workplace: Is any place where work is, or is to be, performed by a worker; or a person conducting a business or undertaking.

APPENDIX D – RECOMMENDED SAFE WORKING PROCEDURES

The following safe working practices are excerpts from the approved code of practice: How to Manage and Control Asbestos in the Workplace. These practices demonstrate how control measure can be used when asbestos or ACM is present in the workplace. Note this is not an exhaustive list of safe working practices.

- Safe work practice 1 – Drilling for asbestos-containing material
- Safe work practice 2 – Sealing, painting, coating and cleaning of asbestos-cement products
- Safe work practice 3 – Cleaning leaf litter from gutters of asbestos cement roofs
- Safe work practice 4 – Replace cabling in asbestos cement conduits or boxes
- Safe work practice 5 – Working on electrical mounting boards (switchboards) containing asbestos
- Safe work practice 6 – Inspection of asbestos friction materials

SAFE WORK PRACTICE 1 - DRILLING OF ASBESTOS-CONTAINING MATERIALS	
The drilling of asbestos cement sheeting can release asbestos fibres into the atmosphere, so precautions must be taken to protect the drill operator and other persons from exposure to these fibres. A hand drill is preferred to a battery-powered drill, because the quantity of fibres is drastically reduced if a hand drill is used.	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	• A non-powered hand drill or a low-speed battery-powered drill or drilling equipment. Battery-powered drills should be fitted with a local exhaust ventilation (LEV) dust control hood wherever possible. If an LEV dust control hood cannot be attached and other dust control methods – such as pastes and gels – are unsuitable then shadow vacuuming techniques should be used. • Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • Duct tape. • Sealant. • Spare PPE. • A thickened substance such as wallpaper paste, shaving cream or hair gel. • 200 µm plastic sheeting. • A suitable asbestos waste container (e.g. 200 µm plastic bags or a drum, bin or skip lined with 200 µm plastic sheeting). • Warning signs and/or barrier tape. • An asbestos vacuum cleaner. • A sturdy paper, foam or thin metal cup, or similar (for work on overhead surfaces only).
PPE	• Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	• If the work is to be carried out at a height, appropriate precautions must be taken to prevent the risk of falls. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. close door and/or use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • If drilling a roof from outside, segregate the area below. • If access is available to the rear of the asbestos cement, segregate this area as well, as above. • If possible, use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area that could become contaminated. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Drilling vertical surfaces	• Tape both the point to be drilled and the exit point, if accessible, with a strong adhesive tape such as duct tape to prevent the edges crumbling. • Cover the drill entry and exit points (if accessible) on the asbestos with a generous amount of thickened substance. • Drill through the paste. • Use damp rags to clean off the paste and debris from the wall and drill bit. • Dispose of the rags as asbestos waste, as they will contain asbestos dust and fibres • Seal the cut edges with sealant. • If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.
Drilling overhead horizontal surfaces	• Mark the point to be drilled. • Drill a hole through the bottom of the cup. • Fill or line the inside of the cup with shaving cream, gel or a similar thickened substance. • Put the drill bit through the hole in the cup so that the cup encloses the drill bit, and make sure the drill bit extends beyond the lip of the cup. • Align the drill bit with the marked point. • Ensure the cup is firmly held against the surface to be drilled. • Drill through the surface. • Remove the drill bit from the cup, ensuring that the cup remains firmly against the surface. • Remove the cup from the surface. • Use damp rags to clean off the paste and debris from the drill bit. • Dispose of the rags as asbestos waste, as they will contain asbestos dust and fibres. • Seal the cut edges with sealant.

	• If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.
Decontaminating the asbestos work area and equipment	• Use damp rags to clean the equipment. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • If necessary, use damp rags and/or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area. • Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

SAFE WORK PRACTICE 2 - SEALING, PAINTING, COATING AND CLEANING OF ASBESTOS-CEMENT PRODUCTS	
These tasks should only to be carried out on asbestos that are in good condition. For this reason, the AC material should be thoroughly inspected before commencing the work. There is a risk to health if the surface of asbestos cement sheeting is disturbed (e.g. from hail storms and cyclones) or if the sheeting has deteriorated as a result of aggressive environmental factors such as pollution. If asbestos cement sheeting is so weathered that its surface is cracked or broken, the asbestos cement matrix may be eroded, increasing the likelihood that asbestos fibres will be released. If treatment of asbestos cement sheeting is considered essential, a method that does not disturb the matrix of the asbestos cement sheeting should be used. Under no circumstances should asbestos cement products be water blasted or dry sanded in preparation for painting, coating or sealing.	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	• Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • Sealant. • Spare PPE. • A suitable asbestos waste container. • Warning signs and/or barrier tape.
PPE	• Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed. Where paint is to be applied, appropriate respiratory protection to control the paint vapours/mist must also be considered.
Preparing the asbestos work area	• If work is to be carried out at a height, precautions must be taken to prevent the risk of falls. • Before starting, assess the asbestos cement for damage. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. close door and/or use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • If working at a height, segregate the area below. • If possible, use plastic sheeting, secured with duct tape, to cover any floor surface within the asbestos work area which could become contaminated. This will help to contain any runoff from wet sanding methods. • Ensure there is adequate lighting. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag. • Never use high-pressure water cleaning methods. • Never prepare surfaces using dry sanding methods. Where sanding is required you should consider removing the asbestos and replacing it with a non-asbestos product. • Wet sanding methods may be used to prepare the asbestos, provided precautions are taken to ensure all the runoff is captured, and filtered where possible. • Wipe dusty surfaces with a damp cloth.
Painting and sealing	• When using a spray brush, *never* use a high pressure spray to apply the paint. • When using a roller, use it lightly to avoid abrasion or other damage.
Decontaminating the asbestos work area and equipment	• Use damp rags to clean the equipment. • Where required, use damp rags and/or an asbestos vacuum cleaner to clean the asbestos work area. • Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

SAFE WORK PRACTICE 3 - CLEANING LEAF LITTER FROM GUTTERS OF ASBESTOS CEMENT ROOFS	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	• A bucket of water, or more as appropriate, and detergent. • A watering can or garden spray. • A hand trowel or scoop. • Disposable cleaning rags. • A suitable asbestos waste container. • Warning signs and/or barrier tape. • An asbestos vacuum cleaner.
PPE	• Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	• Since the work is to be carried out at a height, appropriate precautions must be taken to prevent the risk of falls. • Ensure appropriately marked asbestos waste disposal containers are available. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Segregate the area below. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Gutter cleaning	• Disconnect or re-route the downpipes to prevent any entry of contaminated water into the waste water system and ensure there is a suitable container to collect contaminated runoff. Contaminated water must be disposed of as asbestos waste. • Mix the water and detergent. • Using the watering can or garden spray, pour the water and detergent mixture into the gutter, but avoid over-wetting as this will create a slurry. • Remove the debris using a scoop or trowel. Do not allow debris or slurry to enter the water system. • Wet the debris again if dry material is uncovered. • Place the removed debris straight into the asbestos waste container.
Decontaminating the asbestos work area and equipment	• Use damp rags to wipe down all equipment used. • Use damp rags to wipe down the guttering. • Where practicable, and if necessary, use an asbestos vacuum cleaner to vacuum the area below. • Place debris, used rags and other waste in the asbestos waste container. • Wet wipe the external surfaces of the asbestos waste container to remove any adhering dust before it is removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

SAFE WORK PRACTICE 4 - REPLACE CABLING IN ASBESTOS CEMENT CONDUITS OR BOXES	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	• Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • 200 µm thick plastic sheeting. • Cable slipping compound. • Appropriately marked asbestos waste disposal bags. • Spare PPE. • Duct tape. • Warning signs and/or barrier tape. • An asbestos vacuum cleaner.
PPE	• Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	• If the work will be carried out in a confined space, appropriate precautions must be taken to prevent the risk of asphyxiation. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area which could become contaminated. • Place plastic sheeting below the conduits through which cable(s) are to be pulled, prior to pulling any cables. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Replacement or installation of cables	• Wet down the equipment and apply adequate cable slipping compound to the conduits/ducts throughout the process. • Clean all ropes, rods or snakes used to pull cables after use. Cleaning should be undertaken close to the point(s) where the cables exit from the conduits/ducts. • Ropes used for cable pulling should have a smooth surface that can easily be cleaned. • Do not use metal stockings when pulling cables through asbestos cement conduits. • Do not use compressed air darts for pulling cables through asbestos cement conduits/ducts.
Decontaminating the asbestos work area and equipment	• Use damp rags to clean the equipment. • Wet wipe around the end of the conduit, sections of exposed cable and the pulling eye at the completion of the cable pulling operation. • If the rope or cable pass through any rollers, these must also be wet wiped after use. • Wet wipe the external surface of excess cable pulled through the conduit/duct, as close as possible to the exit point from the conduit, before it is removed from the work site. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • If required, use damp rags or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area. • Place all debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

SAFE WORK PRACTICE 5 - WORKING ON ELECTRICAL MOUNTING BOARDS CONTAINING ASBESTOS	
If the asbestos-containing electrical mounting panel has to be removed for work behind the board, the procedures for removing electrical meter boards outlined in the *Code of Practice: How to Safely Remove Asbestos* should be followed. If drilling is required, the control process should be consistent with the measures described in ***Safe Work Practice 1***.	
Equipment that may be required on site prior to commencing the work (in addition to equipment required to complete particular task)	• A non-powered hand drill or a low-speed battery-powered drill or drilling equipment. Battery-powered drills should be fitted with a LEV dust control hood wherever possible. If a LEV dust control hood cannot be attached and other dust control methods, such as pastes and gels, are unsuitable then shadow vacuuming techniques should be used. • Duct tape. • Warning signs and/or barrier tape. • Disposable cleaning rags. • A plastic bucket of water and/or a misting spray bottle. • Spare PPE. • A suitable asbestos waste container. • 200 mm plastic sheeting. • An asbestos vacuum cleaner.
PPE	• Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	• Because the asbestos work area will involve electrical hazards, appropriate precautions must be taken to prevent the risk of electrocution. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area which could become contaminated. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Work on electrical mounting panels	• Providing the panel is not friable, maintenance and service work may include: o replacement of asbestos containing equipment on the electrical panel with non-asbestos equipment o operation of main switches and individual circuit devices o pulling / inserting service and circuit fuses o bridging supplies at meter bases o using testing equipment o accessing the neutral link, and o installation of new components/equipment.
Decontaminating the asbestos work area and equipment	• Use damp rags to clean the equipment. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • In areas where there is an electrical hazard, an asbestos vacuum cleaner should be used to remove any dust or debris from the mounting panel and other visibly contaminated sections of the asbestos work area. • In areas where there is no electrical hazard, wet wiping with a damp rag can be used to remove minor amounts of dust or debris. • Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

OCTIEF

Date: 12/12/2017 Job #: J7590

SAFE WORK PRACTICE 6 - INSPECTION OF ASBESTOS FRICTION MATERIALS	
This guide may be used when friction materials containing asbestos (e.g. brake assemblies or clutch housings) need to be inspected or housings need to be cleaned. Compressed air must not be used to clean dust from a brake assembly.	
Equipment that may be required on site prior to commencing the work (in addition to equipment required to complete particular task)	• A misting spray bottle. • Duct tape. • Warning signs and/or barrier tape. • Disposable cleaning rags. • A bucket of water and detergent. • Spare PPE. • A suitable asbestos waste container. • A catch tray or similar container. • An asbestos vacuum cleaner.
PPE	• Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	• Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • A risk assessment should determine whether to segregate the asbestos work area, but it may be necessary to ensure unauthorised personnel are restricted from entry (e.g. using barrier tape and/or warning signs). • Use a suitable collection device below the location where the work will be carried out to collect any debris or runoff. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Inspection of asbestos friction materials	• A misting spray bottle should be used to wet down any dust. If using spray equipment to wet the asbestos might disturb asbestos fibres, use alternative wetting agents, e.g. a water-miscible degreaser or a water/detergent mixture. • The wet method should be used, but if this is not possible the dry method may then be used. Wet method: • Use the misting spray bottle to wet down any visible dust. • Use a damp rag to wipe down the wheel or automobile part before removal. Ensure the dust is kept wet to prevent atmospheric contamination. • Use hand tools rather than power tools to reduce the generation of airborne fibres. • Partially open the housing and softly spray the inside with water using the misting spray bottle. Any spillage of dust, debris or water must be controlled (e.g. capturing any runoff in a container) and either filtered or disposed of as asbestos waste. • Open the housing and clean all asbestos parts using a damp rag, ensuring all runoff water is caught in a suitable asbestos waste container. Dry method: • Place a tray under the components to catch dust or debris spilling from the housing or components during the inspection and dispose of any material as asbestos waste. • Use an asbestos vacuum cleaner to remove asbestos fibres from the brakes and rims or other materials before carrying out the inspection.
Decontaminating the asbestos work area and equipment	• Use damp rags to clean the equipment, including the dust collection tray. • If necessary, use damp rags or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area. • Place debris, used rags and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before removing them from the asbestos work area.
Personal decontamination should be carried out in a designated area	• If disposable coveralls are worn, clean the coveralls and RPE while still wearing them using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.
Clearance procedure	• Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. Refer to the *Code of Practice: How to Safely Remove Asbestos* for more information.

APPENDIX E – EXAMPLE PERMIT TO WORK

PERMIT TO WORK

VALID FROM _____Date / / TO _____ Date / /

DESCRIPTION OF RESTRICTED WORK AREA:

Reason for Access:

Asbestos Management Plan and Asbestos Register sited

Name: Signature:
Time: Date:

Safe Work Method Statement (SWMS) Ref #:

Job Safety Analysis (JSA) Ref #:

(Copies of SWMS & JSA must be attached to this Permit)

Warning Signs / Barriers Required:

Special Conditions:

PPE:

Health and Safety Representative/s & Stakeholders advised:

ACKNOWLEDGMENT: I understand the above instructions and undertake to carry out all work in accordance with the requirements of the *Work Health and Safety Act and Regulations 2011,* approved *Codes of Practices*, current asbestos management plan and this permit to work. I have received instruction on Fire evacuation and Safety procedures.

Name of PCBU: **Signature:**

Time : **Date:** / /

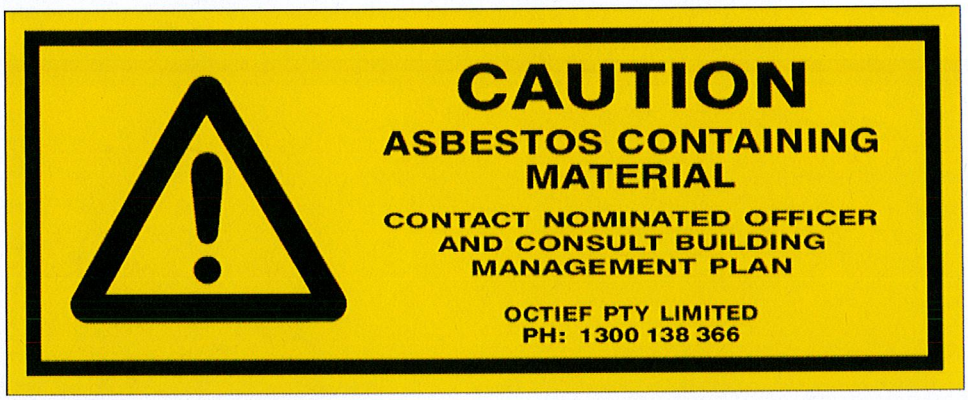
AUTHORISATION: Access to this Restricted Work Area is authorised according to the conditions of this permit.
Person with control of management the workplace:
Signature:

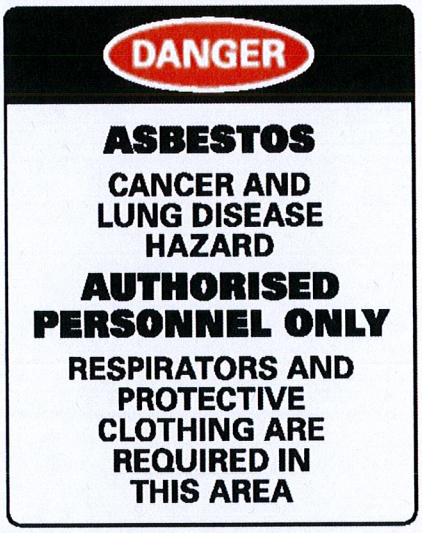
Time **Date** / /

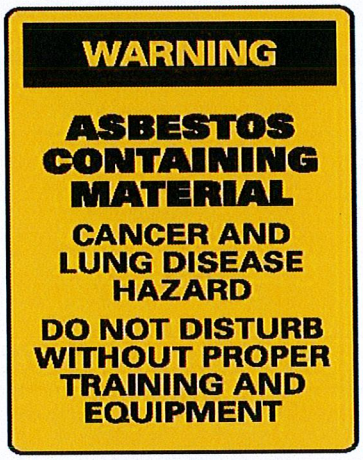
CANCELLATION: Satisfactory Completion of work is acknowledged. The workplace has been left in a clean and tidy condition.
Person with control of management of workplace:
Signature:

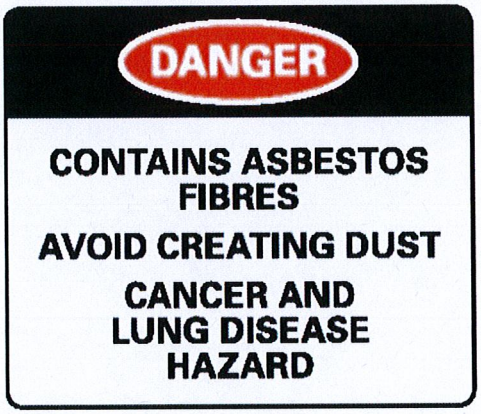
Time **Date** / /

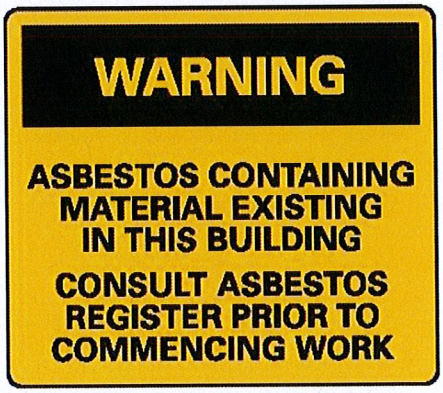
APPENDIX F – EXAMPLE WARNING SIGNS AND LABELS











APPENDIX G – SUBJECT SITE IMAGE