ASBESTOS MANAGEMENT PLAN

Auckland Film Studios
12 Hickory Avenue Henderson, Auckland
Prepared for: Tātaki Auckland Unlimited
Report Date: 12/09/2024
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GLOSSARY OF TERMS

Abbreviation	Term of Phrase
ACD	Asbestos Contaminated Dust or Debris
ACM	Asbestos Containing Materials
AMP	Asbestos Management plan
ARCP	Asbestos Removal Control Plan
Asbestos Regulations	The Health and Safety at Work (Asbestos) Regulations 2016
HEPA	High Efficiency Particulate Air
PCBU	Person Conducting Business or Undertaking
SSSP	Site Specific Safety Plan
TCL	Thomas Consultants Ltd

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Asbestos containing materials existing within areas not specifically covered by this report are considered outside the scope of this work. This inspection was semi-intrusive so therefore cannot guarantee to locate all asbestos containing material. Please note that some asbestos containing material may have residues of asbestos below the material in question that cannot be identified without removal, demolition or intrusive investigation. All inaccessible areas are presumed to have asbestos.

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LIMITATIONS

Residual asbestos material may be present beneath re-lagged services and its presence cannot be conclusively ruled out unless the surface material is systematically removed. Caution should therefore be taken when working on such materials for the potential presence of asbestos residue.

Hard plaster textured coatings (or stipple) may contain a trace quantity of Chrysotile asbestos. Due to the low asbestos content, applications of this product may be non-homogenous and may elicit both positive and negative samples. Where both positive and negative samples are obtained from the same area, the client should presume that the textured coating contains Chrysotile throughout even though a non-detected result has been obtained.

Vinyl flooring installed after 2000 may have asbestos containing residues underneath. In some cases, these have been found to be non-uniformly distributed, and therefore it cannot be guaranteed that the surveyor will locate these residues.

All fibrous materials and items will be included in the survey unless, in the surveyors' professional opinion, these items can be excluded (e.g. wood, wallpaper, man-made mineral fibres). Samples of all thermoplastic floor coverings will be taken unless, in the surveyors' professional opinion, such items can be excluded. All textured coatings and novel bituminous materials will be sampled as far as practicable.

Non-fibrous materials and items known not to contain asbestos (e.g. breeze block, plasterboard, plastics and non-textured paints) will be excluded from the survey unless the surveyor suspects that these materials have been contaminated with asbestos from other sources or specifically requested by the client.

All measurements detailing the extent of materials are merely approximations and as such should not be relied upon for the quoting removal works. The quantity of samples taken may have been minimised by using 'strongly presumed'. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the comments section of the survey and referenced against the original sampled material.

For safety reasons it is may not be possible to inspect all areas. Where areas have been designated as 'no access', or 'restricted area', unless further inspection/sampling proves otherwise, the presumption has been made that the structures/areas contain asbestos materials.

SECTION ONE - ASBESTOS MANAGEMENT SURVEY

EXECUTIVE SUMMARY

This report has been prepared by Brett Abraham to identify and manage the potential asbestos containing materials (ACM) within the buildings located at 12 Hickory Avenue Henderson, Auckland.

The report details the location of asbestos containing materials, which have been identified through both a visual inspection and samples tested at an International Accreditation New Zealand (IANZ) laboratory. Some areas are presumed to contain asbestos containing materials but have not been sampled e.g. if access is limited or there are live services. These areas may not contain asbestos containing materials but must be treated as if they are until proven otherwise.

The asbestos register must be made available to any person that carries out work on the buildings concerned.

Asbestos containing materials (ACM) were identified in the following areas of the buildings at 12 Hickory Avenue Henderson, Auckland:

Studio 1 and 2

- Presumed ACM in the switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box in Studio 2, on the southern side of the building.
- Presumed ACM in the switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box external to Studio 1, by Canopy 17.

Building 3a

- Chrysotile (white asbestos) detected in the black bitumastic paper below the roof.
- Amosite (brown asbestos) and Chrysotile detected in the fibre cement wall panels and ceiling panel at the entrance of the building.

Building 5

- No asbestos containing materials were identified within the building.

Building 10

- No asbestos containing materials were identified within the building.

Building 12-13

- Presumed asbestos containing materials in the electrical switchboard, flash guards and fuse backings in the buildings.
- Presumed asbestos in the bituminous roof sheeting debris above the rafter on the south-eastern side of Building 13.
- Strongly presumed fibre cement soffits and infill panels on the eastern side of the building.

Building 14-16

- Amosite and Chrysotile detected in the fibre cement panels under the bay windows on the north-eastern corner of the building.
- Chrysotile detected in the fibre cement soffits on the northern, western and eastern sections of the building.
- Chrysotile detected in the fibre cement window infill panels on the northern and eastern sides of the building.
- Chrysotile detected in the vinyl flooring on the stairs to the workshops.
- Strongly presumed corrugated fibre cement panel in the north-eastern corner of the building.
- Amosite and Chrysotile detected in the corrugated fibre cement roofing and flashings covering the original building.
- Strongly presumed fibre cement ridge cap running along the entire length of the roof.
- Strongly presumed asbestos containing dust (ACD) between the old building paper and the corrugated fibre cement roofing. This is presumed to have been contaminated from being in close proximity to the roofing material.
- Strongly presumed corrugated fibre cement cladding on the upper half of the southern end of the building.
- Strongly presumed corrugated fibre cement gable ends on the northern end of the building.
- Strongly presumed electrical flashboards and fuse backings inside the electrical boxes behind the office area.

Building 18 (Number 7)

- Presumed ACM in the Bakelite switch located in the hot water cupboard in the male toilets.
- Presumed ACM in the grey vinyl floor and residual materials underneath it in the male toilets.
- Presumed ACM in the beige vinyl floor and residual materials underneath it in the kitchen.
- Presumed ACM in the grey vinyl floor and residual materials underneath it in the female toilets.
- Presumed ACM in the vinyl underneath the carpets throughout the building.
- Presumed ACM in the vinyl floor and residual materials underneath it in Cabinet A and B.
- Presumed ACM in the electrical board located in the conference room.

Building 19-19a

- Strongly presumed corrugated fibre cement panels on the western and south-western sides of the ground and first floors.
- Strongly presumed woodgrain patterned fibre cement cladding around the northern and western sides of the first floor and the vestibule area.
- Strongly presumed fibre cement boards with textured coating on the northern, southern and western sides of the building.
- Strongly presumed fibre cement soffits by the three entrance ways on the western side of the building.
- Presumed asbestos switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box on the western side of the vestibule (exterior).

Canopy 17

- No asbestos containing materials were identified within the building.

Building 34-38

- Amosite and Chrysotile detected in the corrugated fibre cement “super-six” roofing material covering the entirety of the main building.
- Amosite and Chrysotile detected in the corrugated fibre cement “super-six” wall cladding covering the northern, eastern, and western sides of the main building.
- Amosite and Chrysotile detected in the corrugated fibre cement wall cladding lining the southern side of the building.
- Amosite and Chrysotile detected in the fibre cement rain headers and downpipes in various locations around the building.
- Amosite and Chrysotile detected in the fibre cement guttering surrounding the main building.
- Amosite and Chrysotile detected in the fibre cement cladding around the southern and eastern sides of the AA Carriers office. This includes the fascia panels on the southern end.
- Amosite and Chrysotile detected in the fibre cement soffits on the eastern and western sides of the AA Carriers office and on the southern side of the warehouse.
- Amosite and Chrysotile detected in the profiled fibre cement wall cladding surrounding Shed #2 on the southern end of the warehouse. This material has also been used as cladding in various locations around the southern end of the building.
- Amosite and Chrysotile detected in the fibre cement fascia panels on the southern end of the warehouse.
- Amosite, Chrysotile and Crocidolite (blue asbestos) detected in the fibre cement ceiling panel on the southern end of the warehouse.
- Amosite, Chrysotile, and Crocidolite detected in the fibre cement “super-six” debris embedded in the concrete floor running down the centre of the dividing wall on the eastern side of the building.
- Presumed flashboard within the electrical box on the middle partition wall.
- Presumed flashboard within the electrical box on the western side of the building.
- Presumed flashboard within the electrical box on the southern side of the building.
- Presumed fibre cement pipe leading into the ground in the middle of the warehouse.

Temporary Building

- Strongly presumed fibre cement corrugated cladding surrounding the building.
- Presumed fibre cement soffits on the northern and southern sides of the building.
- Presumed flash board and fuse backings in the electrical box on the western side of the building.
- Presumed corrugated roofing on the canopy at the entrance.

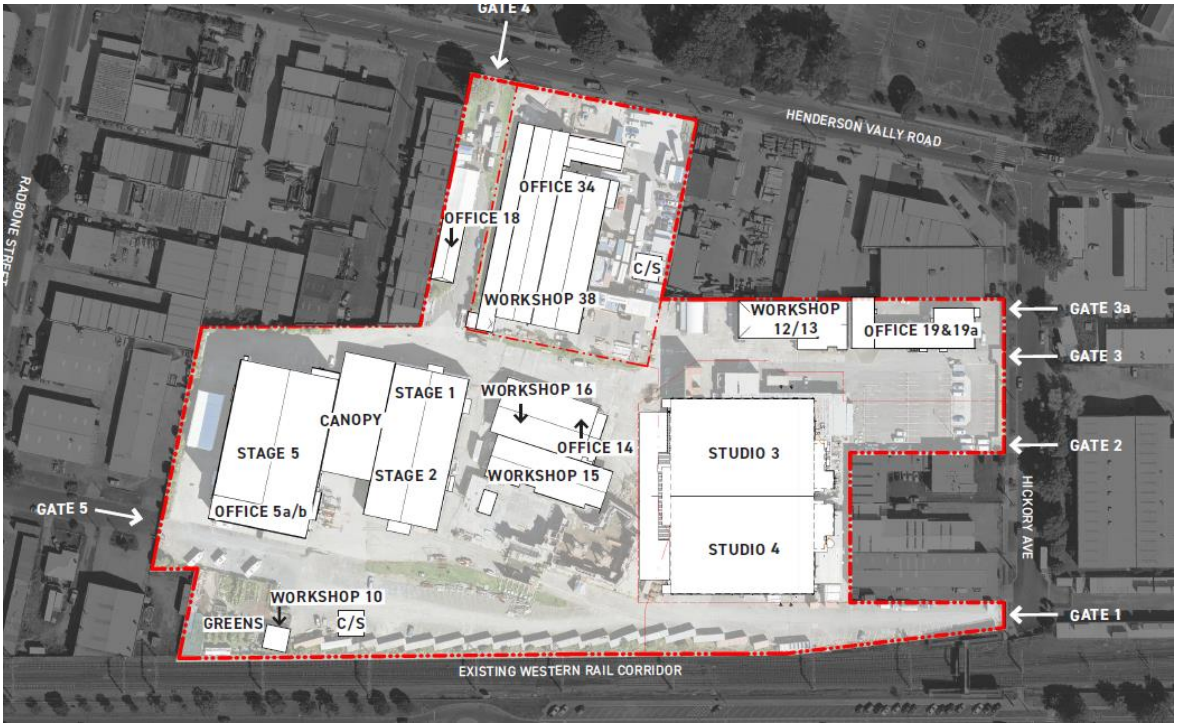


Figure 1: 12 Hickory Avenue Henderson, Auckland

VISUAL OBSERVATIONS

The following observations were made by the Surveyor Simon Ness, pertinent to the management survey, during the work activities at 12 Hickory Avenue Henderson, Auckland:

- As a precaution, personnel onsite wore disposable gloves and a P2 mask as required.
- A moderate predominant westerly wind prevailed throughout the course of the day.
- Access to the roofs was via a ladder and/or drone.

SPECIFIC RECOMMENDATIONS

Item	Deferral	Encapsulation	Enclosure	Air Monitoring
Fibre cement roof (Building 34-38)	No immediate remedial work required.	Product is encapsulated	Not Applicable.	Conduct Periodically (1-2 monthly)
Fibre cement roof (Building 14-16)	No immediate remedial work required.	Not Applicable.	Not Applicable.	Conduct Periodically (1-2 monthly)

SCOPE OF WORK

A thorough examination of the site to enable evaluation of the structure's accessible equipment and materials for the presence of asbestos. All areas should be accessed and inspected so far as is reasonably practicable.

Gathering samples for investigation of asbestos (if visual identification is unable to confirm material not previously sampled). When it is impossible to sample suspect materials (because of height, electrical risk, or accessibility issues), it may be necessary to presume that the materials contain asbestos.

Completion of an asbestos register detailing:

- The location of any samples collected and the results of the laboratory analysis
- Risk rating for each identified occurrence of asbestos
- Management options for each occurrence
- The person in charge of the register
- The date of identified or assumed asbestos in the workplace
- The type of materials (both identified and assumed)
- Whether the asbestos is friable, non-friable, or both
- The condition of the asbestos
- The specific location of the asbestos
- Whether or not the area is accessible

An asbestos management plan sets out where any identified asbestos or asbestos-containing material is present, and how it will be managed. The workplace PCBU must make sure a copy of the asbestos management plan is readily accessible to workers and their representatives, as well as to other PCBUs. A copy of the plan should be kept at the workplace.

The workplace PCBU must review and (if necessary) revise the asbestos management plan every five years, or when asbestos controls are reviewed, asbestos is removed, disturbed, sealed or enclosed or the plan is no longer adequate for managing the asbestos risks.

This report is based on New Zealand legislation, regulations and guidelines including but not limited to:

- **Health and Safety at Work Act 2015**, and the **Health and Safety at Work (Asbestos) Regulations 2016**, Ministry of Business, Innovation and Employment
- Good Practice Guidelines, **Conducting Asbestos Surveys, Worksafe**, 2016
- Approved Code of Practice, **Management and Removal of Asbestos, Worksafe**, 2016.

TYPE OF SURVEY

Management Survey

The purpose of the asbestos management survey is to help the workplace PCBU and property owners to systematically identify and manage all asbestos in their workplace. The survey has to provide sufficient information for the workplace PCBU to indicate the presence and location of asbestos or ACM, carry out a suitable risk assessment, and develop an asbestos management plan.

In most cases, the survey will have three aims:

- To find and record the location, extent and product type of any assumed or known asbestos and ACM
- To inspect and record information on the accessibility, condition and surface treatment of any assumed or known asbestos and ACM
- To determine and record the asbestos type, either by collecting representative samples of suspect materials for laboratory identification, or by making an assumption based on the product type and its appearance, etc.

An asbestos management plan helps people with management and control of buildings and other relevant structures to prevent exposure to airborne asbestos fibres by their workers and site visitors. Reasonable steps must be taken to label and record asbestos in a register and inform everyone on the premises where asbestos is present, the consequences of exposure to asbestos and other appropriate control measures.

The plan should set out clear aims, stating what is going to be done, when it is going to be done, and how it is going to be done. It must include:

- The workplace's register of asbestos
- Decisions about management options and the reasons for these decisions
- A timetable for action, including priorities and dates for reviewing risk assessments and specific circumstances that may affect the timetable
- Monitoring arrangements
- The responsibilities of people involved in the plan
- Safe work methods
- Where maintenance or service work is done on the asbestos the following information is to be included:
  - who performed the work
  - the dates it was done
  - the scope of the work
  - qualifications of the worker/s
  - any clearance certificates (see clearance inspections.

PROCEDURE

On the 30/04 & 15/05/2024, Simon Ness, a IP402 Asbestos Assessor visited the site to inspect the buildings in relation to asbestos identification and compiling an asbestos management plan. During the site visit, building materials were visually inspected, and where possible, sampled as per the Good Practice Guidelines, **Conducting Asbestos Surveys**, WorkSafe 2016. Comments were made on their composition, condition, approximate quantity and location. Suspected asbestos containing materials were sampled for laboratory analysis at an IANZ accredited laboratory. Once the laboratory results were returned, a material and risk assessment were compiled in relation to the site inspection report and the analysis results. The full laboratory report is presented in Appendix E. Samples known to contain asbestos and/or where sampling is unable to be undertaken were labelled as 'presumed' within the site audit report unless parallel testing proved otherwise.

Following the compilation of the risk assessment, all asbestos containing materials were identified on a floor plan of the building/s and management procedures recommended. The process is as follows:

- Thomas Consultants Limited engaged to complete an asbestos management plan
- Asbestos audit undertaken, visual inspection, samples collected
- Samples sent to an IANZ accredited laboratory
- Results returned
- Asbestos containing materials identified, risk analysis compiled, and management procedures recommended
- Completion of the final asbestos register, and plan
- Compilation of report.

EQUIPMENT/PPE USED ON SITE

- Ladder
- Disposable nitrile gloves
- Steel toe boots
- Disposable P2 mask
- Wet wipes
- Swab wipes
- Sampling bags
- iPad

QUALITY ASSURANCE/QUALITY CONTROL

Data Quality Review

Thomas Consultants considers that adequate QA/QC has been achieved as the following milestones have been met. An IANZ accredited laboratory (Focus Analytics and Eurofins) was used for all analyses:

- Sample integrity is maintained including sampling and analytical equipment decontamination, minimisation of cross contamination of samples and cross checking of sample identities
- Field and laboratory procedures are followed to assure the laboratory method accuracy
- Data precision is maintained through laboratory instrumentation checks and record review and laboratory quality control analysis.

Field QC procedures for the present investigation included stand sample collection, decontamination, handling and transfer protocols. The laboratory selected for carrying out the analyses was certified by IANZ to carry out the analysis. The project laboratory (Focus Analytics and Eurofins) performed their normal internal QA/QC testing in accordance with their IANZ registration and industry standards.

Their QA/QC procedures include:

- Sample receipt and registration documentation
- Sample handling and decontamination procedures
- Results cross checked and authorised by a key technical person (KTP).

Disposable nitrile gloves and laboratory supplied containers are used to collect each sample to minimise any opportunity for cross sample contamination and all re-useable sampling equipment was thoroughly decontaminated between samples.

QA/QC Conclusions

In conclusion, the results of the laboratory QA/QC programmes and Thomas Consultants' field procedures document that the analyses reported by the laboratory are of sufficient quality to allow confidence in the use of the reported results.

INACCESIBLE AREAS

All areas expected to be disturbed during routine occupancy and maintenance of the building could be accessed.

DOCUMENTS REVIEWED

*Asbestos Management Survey Report ECON2139 – Studio 1 and Studio 2 Auckland Film Studios v1.*03, Thomas Consultants, 2/09/2022.

Asbestos Management Survey Report ECON2139 – Building3a, Auckland Film Studios v1.03, Thomas Consultants, 2/09/2022.

Asbestos Management Survey Report ECON2139 – Building 5 Auckland Film Studios v1.03, Thomas Consultants, 2/09/2022.

*Asbestos Management Survey Report ECON2139 – Building10 Auckland Film Studios v1.*03, Thomas Consultants, 2/09/2022.

Asbestos Management Survey Report ECON2139 – Building 12 - 13 Auckland Film Studios v1.03, Thomas Consultants, 02/09/2022.

Asbestos Management Survey Report ECON2139 – Building14-16 Auckland Film Studios v1.03, Thomas Consultants, 02/09/2022.

Asbestos Management Survey Report ECON2139 – Building 18 (Number 7) Auckland Film Studios v1.0, Thomas Consultants, 2/09/2022

Asbestos Management Survey Report ECON2139 – 19 - 19a Auckland Film Studios v1.03, Thomas Consultants, 02/09/2022.

Asbestos Management Survey Report ECON2139 – Building AA Carriers Auckland Film Studios v1.03, Thomas Consultants, 2/09/2022.

Asbestos Management Survey Report ECON2139 – Canopy 17 Auckland Film Studios v1.03. Thomas Consultants, 02/09/2022.

*Asbestos Management Survey Report ECON2139 – Temporary Building Auckland Film Studios v1.*0, Thomas Consultants, 29/06/2023.

GENERAL RECOMMENDATIONS

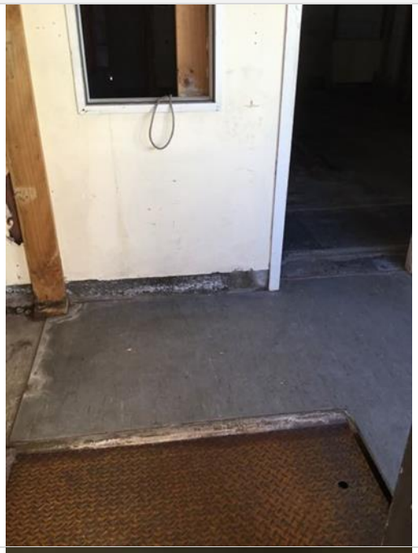
- Schedule periodic (5 year as a minimum) re-assessments of the asbestos containing materials remaining in situ on the property in accordance with the **Health and Safety at Work (Asbestos) Regulations 2016**
- Implement an Asbestos Management Policy, Plan to manage the asbestos on site
- Provide Asbestos Awareness training to workers and site personnel working in areas containing asbestos materials
- Consult with workers and Health and Safety Representatives on the findings of this survey and ensure the report is made available on request in accordance with the **Health and Safety at Work Act 2015**
- Areas highlighted as 'Inaccessible Areas' should be presumed to contain asbestos materials. Appropriate management planning should be implemented in order to control access to and maintenance activities in these areas until such time as they can be inspected, and the presence or absence of asbestos can be confirmed
- Where asbestos debris or asbestos in poor condition has been found it is recommended that access is restricted and / or controlled to these areas
- Prior to any demolition/refurbishment works undertake an intrusive sampling survey for asbestos containing materials on the premises
- Detailed recommendations relevant to specific areas of the site are detailed in the Summary of Results
- In refurbishment or demolition surveys on premises where asbestos removal may not take place for some time any ACMs identified will still need to be managed in the interim period
- Asbestos containing material quantities referred to in this report are estimates only and asbestos removal contractors should satisfy themselves that these are accurate before pricing any asbestos removal work.

SECTION TWO - ASBESTOS REGISTER

SUMMARY OF RESULTS

Site Details		Audit Details	
Full Address	12 Hickory Avenue Henderson, Auckland	Survey Dates	30/04 & 15/05/2024
Project ID	ECON3748-AMP	Surveyor	Simon Ness
Client Name	Tātaki Auckland Unlimited	Company	Thomas Consultants Ltd

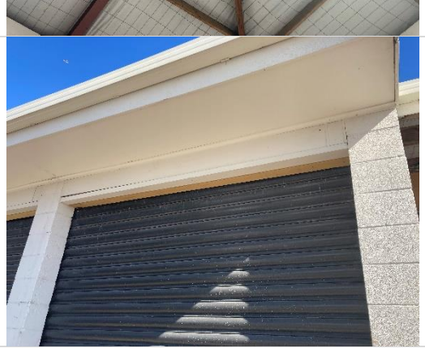
Material Description and Location	Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Studio 1 & 2								
	Switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box in Studio 2, on the southern side of the building	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m²	Non-Friable	Very Low	**Presumed Asbestos**	**7 – Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 4. Re-inspect condition periodically. 5. Manage material in accordance with asbestos management plan (AMP).
	Switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box external to Studio 1, by Canopy 17	Presumed ACM - Unable to sample due to live electrical services	Low Damage; few visible scratches, surface marks and broken edges	<1m²	Non-Friable	Very Low	**Presumed Asbestos**	**7 – Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 4. Re-inspect condition periodically. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 3a									
	Blue vinyl flooring throughout the building.	Sampled #3 Laboratory Reference Number S11470-3	-	10m²	-	-	**Asbestos NOT detected**	**N/A**	N/A
	Bitumastic building paper below the roof.	Sampled # 4 Laboratory Reference Number S11470-4	Low Damage; few visible scratches, surface marks and broken edges	10m^2	Non-Friable	Very Low	**Chrysotile (white asbestos) detected**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with asbestos management plan (AMP).

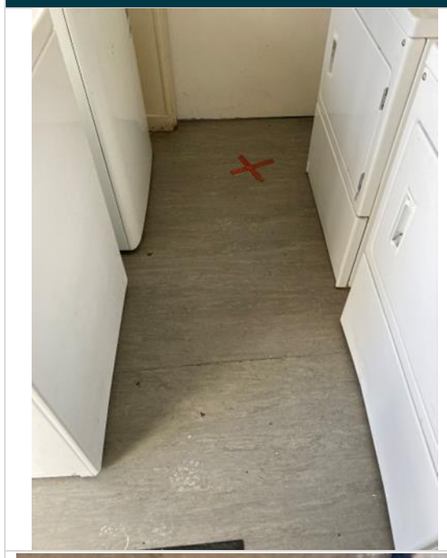
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Blue vinyl flooring at the entrance of the building.	Presumed - Same as Sample #3 Laboratory Reference Number S11470-3	-	1m²	-	-	**Asbestos NOT detected**	**N/A**	N/A
	Fibre cement wall and ceiling panels located at the entrance of the building.	Sampled - # 6 Laboratory Reference Number S11470-6	Low Damage; few visible scratches, surface marks and broken edges	5m²	Non-Friable	Low	**Amosite (brown asbestos) and Chrysotile detected**	**11 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Fibre cement soffits	Sampled # 5 Laboratory Reference Number S11470-5	-	20m²	-	-	**Asbestos NOT detected**	**N/A**	N/A
	Fibre cement fascia board.	Presumed - Same as Sample # 5 Laboratory Reference Number S11470-5	-	5m²	-	-	**Asbestos NOT detected**	**N/A**	N/A

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 5									
	No asbestos containing materials identified within the building.	Visually Inspected - Not ACM	-	-	-	-	**Asbestos NOT detected**	**N/A**	N/A
Building 10									
	Fibre cement wall panels on the exterior of the building.	Sampled # 1 Laboratory Reference Number S11469-1	-	10m²	-	-	**Asbestos NOT detected**	**N/A**	N/A

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 12-13									
	Electrical switchboards, flash guards and fuse backings	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m²	Non-Friable	Low	**Yes - Presumed.**	**6 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with asbestos management plan (AMP).
	Bituminous roof sheeting material above the rafter on the south-eastern side of Building 13	Presumed ACM - Unable to inspect due to inaccessibility	Low Damage; few visible scratches, surface marks and broken edges	<1m²	Non-Friable	Low	**Yes - Presumed.**	**8 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with asbestos management plan (AMP).
	Fibre cement soffit and infill panels on the eastern side of the building	Strongly Presumed - Asbestos has been confirmed in similar looking materials	Good Condition; no visible damage	20m²	Non-Friable	Low	**Yes - Presumed.**	**8 - Very Low**	

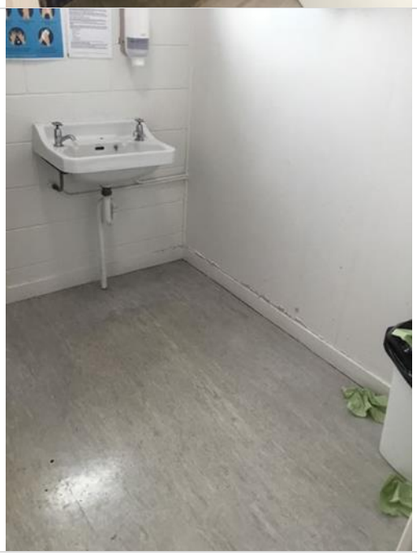
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 14-16 (Internal)									
	Vinyl flooring on the stairs to the workshops.	Sampled - # 2 Laboratory Reference Number 1600203.2	Good Condition; no visible damage	<10m^2	Non-Friable	Low	**Chrysotile (White Asbestos) detected.**	**7 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with asbestos management plan (AMP).
	Vinyl flooring in the first-floor kitchen.	Sampled - # 3 Laboratory Reference Number 1600203.3	Good Condition; no visible damage	<10m^2	Non-Friable	Low	**Asbestos NOT detected.**	**N/A**	N/A

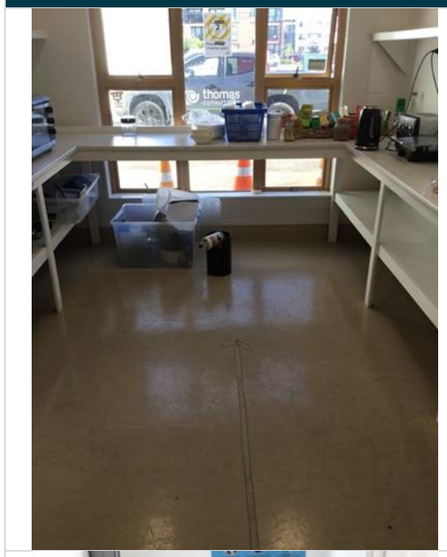
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Vinyl flooring in the bathroom, toilets and laundry on the ground floor.	Sampled - # 7 Laboratory Reference Number 1600203.7	Good Condition; no visible damage	<10m^2	Non-Friable	Low	**Asbestos NOT detected.**	**N/A**	N/A
	Fibre cement panels under the bay windows on the north-eastern corner of the building. Please refer to Figure 2, Appendix B for additional photographs.	Sampled - # 4 Laboratory Reference Number 1600203.4	Low Damage; few visible scratches, surface marks and broken edges	<20m^2	Non-Friable	Low	**Amosite (Brown Asbestos) and Chrysotile detected.**	**9 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement soffits and window infill panels on the eastern side of building. Please refer to Appendix C for additional photographs.	Sampled - # 6 Laboratory Reference Number 1600203.6	Good Condition; no visible damage	<15m^2	Non-Friable	Low	**Chrysotile detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.

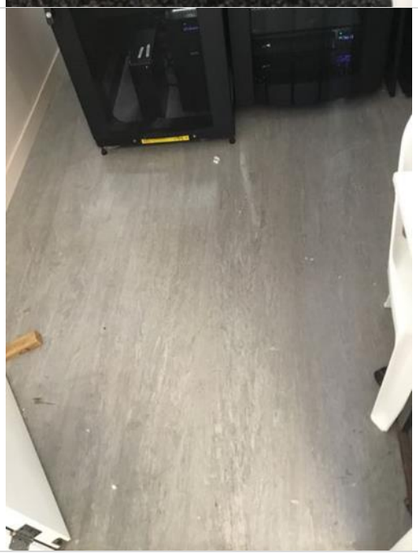
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Corrugated fibre cement panel in the north-eastern corner of the building.	Presumed - Same as Sample # 5 Laboratory Reference Number 1600203.5	Low Damage; few visible scratches, surface marks and broken edges	<2m^2	Non-Friable	Low	**Yes - Presumed.**	**9 - Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.
	Electrical flashboards and fuse backings behind the office area.	Presumed ACM - Unable to sample due to live electrical services	Low Damage; few visible scratches, surface marks and broken edges	<1m^2	Non-Friable	Low	**Yes - Presumed.**	**7 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.
Building 14-16 (External)									
	Fibre cement soffits on the northern and western sides of building. Please refer to Appendix B for additional photographs.	Presumed - Same as Sample # 6 Laboratory Reference Number 1600203.6	Good Condition; no visible damage	<15m2	Non-Friable	Low	**Chrysotile detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Fibre cement window infill panels on the northern end of the building.	Presumed - Same as Sample # 6 Laboratory Reference Number 1600203.6	Good Condition; no visible damage	<15m2	Non-Friable	Low	**Chrysotile detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Corrugated fibre cement sheet roofing, flashings and associated ridge cap. Please note that the original (contaminated) building paper (roof felt) is now behind a new layer of black building paper. There are, however, small sections where the original building paper is visible. Please refer to Appendix B for additional photographs	Sampled - # 5 Laboratory Reference Number 1600203.5	Low Damage; few visible scratches, surface marks and broken edges	900m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**11 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Full PPE and RPE (e.g. P3) must be worn when removing debris from the gutter 5. Debris in the gutter must be removed wet 6. All debris removed from the gutter must be disposed of as asbestos contaminated waste 7. Manage material in accordance with AMP.
	Corrugated fibre cement sheet roofing on the western section of the building. Please note that there are no gutters or downpipes on this section of the roof	Presumed - Same as Sample # 5 Laboratory Reference Number 1600203.5	Low Damage; few visible scratches, surface marks and broken edges		Non-Friable	Low	**Amosite and Chrysotile detected.**	**11 - Low**	1. Install gutters, rain headers and downpipes on this section of the roof. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.

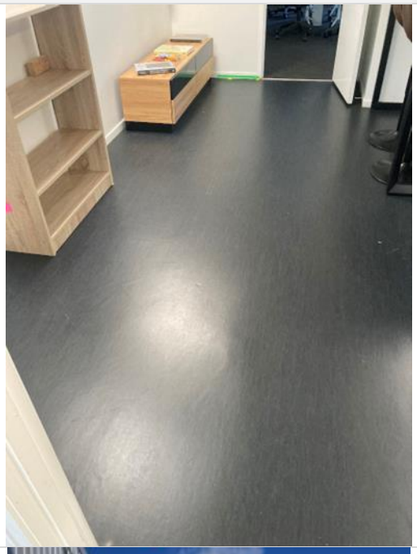
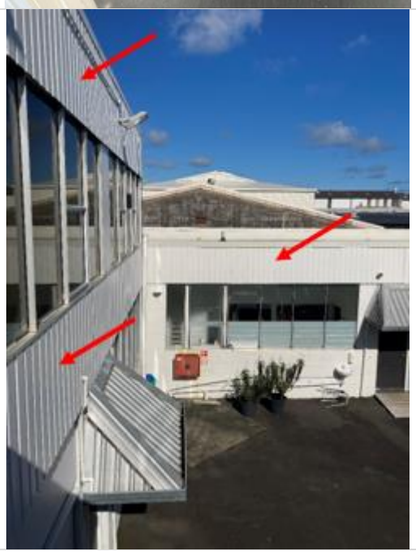
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Corrugated fibre cement ('Super-12') cladding on the upper half of the southern end of the building. Please refer to Appendix B for additional photographs.	Presumed - Same as Sample # 5 Laboratory Reference Number 1600203.5	Low Damage; few visible scratches, surface marks and broken edges	50m2	Non-Friable	Low	**Yes - Presumed.**	**11 - Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. Manage material in accordance with AMP.
	Corrugated fibre cement gable ends on the northern end of the building. Please refer to Appendix B for additional photographs.	Presumed - Same as Sample # 5 Laboratory Reference Number 1600203.5	Low Damage; few visible scratches, surface marks and broken edges	30m2	Non-Friable	Low	**Yes - Presumed.**	**9 - Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.

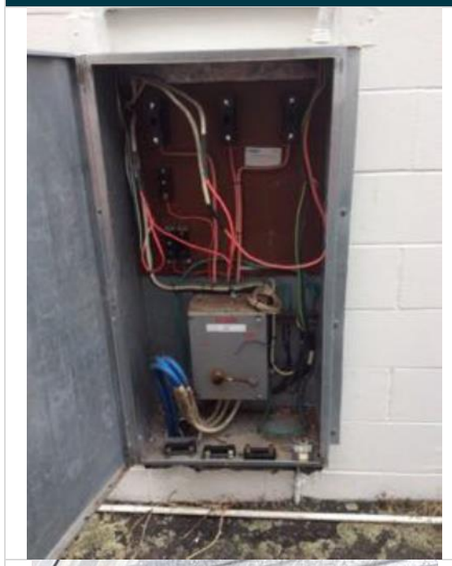
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 18 (Number 7)									
	Bakelite switch in the hot water cupboard in the male toilets.	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m²	Non-Friable	Very Low	**Presumed Asbestos**	**7 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Grey vinyl floors and residual materials underneath it in the male toilets.	Presumed ACM - Sampling will affect the material's integrity	Low Damage; few visible scratches, surface marks and broken edges	5m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Beige vinyl floor and residual materials underneath it located in the kitchen.	Presumed ACM - Sampling will affect the material's integrity	Low Damage; few visible scratches, surface marks and broken edges	10m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Grey vinyl floor and residual materials underneath it in the female toilets	Presumed ACM - Sampling will affect the material's integrity	Low Damage; few visible scratches, surface marks and broken edges	5m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Vinyl floors underneath the carpets throughout the building.	Presumed ACM - Sampling will affect the material's integrity	Low Damage; few visible scratches, surface marks and broken edges	30m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Grey vinyl floors and residual materials underneath it in Cabinet A and B.	Presumed ACM - Sampling will affect the material's integrity	Low Damage; few visible scratches, surface marks and broken edges	5m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Electrical board in the conference room.	Presumed ACM - Unable to sample due to live electrical services	Low Damage; few visible scratches, surface marks and broken edges	1m²	Friable	Very Low	**Presumed Asbestos**	**7 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Ceiling space insulation.	Visually Inspected - Not ACM	-	N/A	-	-	**Asbestos NOT detected**	**N/A**	N/A

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 19-19a									
	Vinyl flooring in the first-floor kitchen.	Visually Inspected - Not ACM	<15m^2	N/A	Non- Friable	Low	**Asbestos NOT detected**	**N/A**	N/A
	Corrugated fibre cement cladding on the western and south-western sides of the ground and first floors. Please refer to Appendix B for additional photographs.	Strongly Presumed - Asbestos has been confirmed in similar looking materials	Good Condition; no visible damage	<160m^2	Non-Friable	Very Low	**Presumed Asbestos**	**10 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

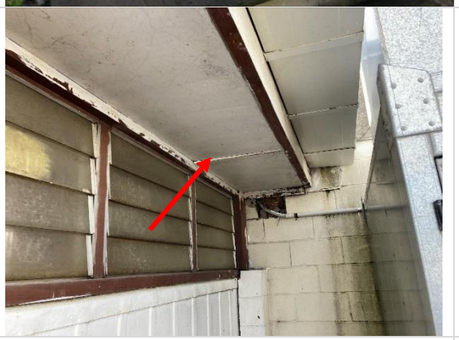
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Switchboard backing and insulating rope (flash guard) behind the fuses in the electrical box on the western side of the vestibule (exterior).	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m²	Non-Friable	Very Low	**Presumed Asbestos**	**6 – Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Fibre cement soffits by the three entrance ways on the western side of the building. Please refer to Appendix B for additional photographs.	Strongly Presumed - Asbestos has been confirmed in similar looking materials	Good Condition; no visible damage	<10m²	Non-Friable	Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Wood-grain patterned fibre cement cladding around the northern and western sides of the first floor and the vestibule area. Please refer to Appendix B for additional photographs.	Presumed ACM - Sampling will affect building aesthetics	Good Condition; no visible damage	<50m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).
	Fibre cement boards with textured coating on the northern, southern and western sides of the building. Please refer to Appendix B for additional photographs.	Presumed ACM - Unable to inspect due to inaccessibility	Good Condition; no visible damage	<30m²	Non-Friable	Very Low	**Presumed Asbestos**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Confirm the presence or absence of asbestos prior to refurbishment or demolition. 5. Manage material in accordance with asbestos management plan (AMP).

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Canopy 17									
	Roof sarking	Visually Inspected - Not ACM	-	200m^2	-	-	**Asbestos NOT detected**	**N/A**	N/A

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 34-38 (External)									
	Corrugated fibre cement "super-six" roofing material covering the entirety of the main building. Please refer to Appendix B for additional photographs.	Sampled - # 1 Laboratory Reference Number A-00843/1	Low Damage; few visible scratches, surface marks and broken edges	<500m^2	Non-Friable	Low	**Amosite (Brown Asbestos) and Chrysotile (White Asbestos) detected.**	**12 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Manage material in accordance with asbestos management plan (AMP).
	Corrugated fibre cement "super-six" wall cladding covering the northern, eastern, and western sides of the main building. Please refer to Appendix B for additional photographs.	Sampled - # 11 & 14 Laboratory Reference Numbers A-00843/11 & A-00843/14	Medium Damage; significant breakage or several small areas of damage revealing loose fibres	<500m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**13 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Corrugated fibre cement wall cladding lining the southern side of the building. Please refer to Appendix B for additional photographs.	Sampled - # 7 Laboratory Reference Number A-00843/7	Low Damage; few visible scratches, surface marks and broken edges	<100m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**10 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Manage material in accordance with AMP.

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Fibre cement rain headers, gutters and downpipes in various locations around the building. Please refer to the Site Plan for specific locations. Please refer to Appendix B for additional photographs.	Sampled - # 2 Laboratory Reference Number A-00843/2	Medium Damage; significant breakage or several small areas of damage revealing loose fibres	<50m	Non-Friable	Low	**Amosite and Chrysotile detected.**	**13 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Label and re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement guttering surrounding the main building.	Sampled - # 2 Laboratory Reference Number A-00843/2	Low Damage; few visible scratches, surface marks and broken edges	<250m	Non-Friable	Low	**Amosite and Chrysotile detected.**	**9 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement soffits around the roller doors.	Sampled - # 3 Laboratory Reference Number A-00843/3	Low Damage; few visible scratches, surface marks and broken edges	-	-	-	**Asbestos NOT detected.**	**N/A**	N/A
	Fibre cement wall cladding around the roller doors.	Sampled - # 4 Laboratory Reference Number A-00843/4	Low Damage; few visible scratches, surface marks and broken edges	-	-	-	**Asbestos NOT detected.**	**N/A**	N/A

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Fibre cement cladding around the southern and eastern sides of the AA Carriers office. This includes the fascia panels on the southern end.	Sampled - # 6 Laboratory Reference Number A-00843/6	Good Condition; no visible damage	<50m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**10 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement soffits on the eastern and western sides of the AA Carriers office and on the southern side of the warehouse.	Sampled - # 10 Laboratory Reference Number A-00843/10	Low Damage; few visible scratches, surface marks and broken edges	<60m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Profiled fibre cement wall cladding surrounding Shed #2 on the southern end of the warehouse. This material has also been used as cladding in various locations around the southern end of the building.	Sampled - # 13 Laboratory Reference Number A-00843/13	Medium Damage; significant breakage or several small areas of damage revealing loose fibres	<8m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**12 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement fascia panels on the southern end of the warehouse.	Sampled - # 17 Laboratory Reference Number A-00843/17	Low Damage; few visible scratches, surface marks and broken edges	10m^2	Non-Friable	Low	**Amosite and Chrysotile detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Building 34-38 (External)									
	Fibre cement ceiling panel on the southern end of the warehouse.	Sampled - # 2 Laboratory Reference Number 2205570.2	Good Condition; no visible damage	<10m^2	Non-Friable	Low	**Amosite, Chrysotile and Crocidolite (Blue Asbestos) detected.**	**8 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.
	Fibre cement “super-six” debris embedded in the concrete floor running down the centre of the dividing wall on the eastern side of the building.	Presumed - Same as Sample # 1 Laboratory Reference Number A-00843/1	Good Condition; no visible damage	<10m^2	Non-Friable	Low	**Amosite, Chrysotile and Crocidolite detected.**	**9 - Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Manage material in accordance with AMP.

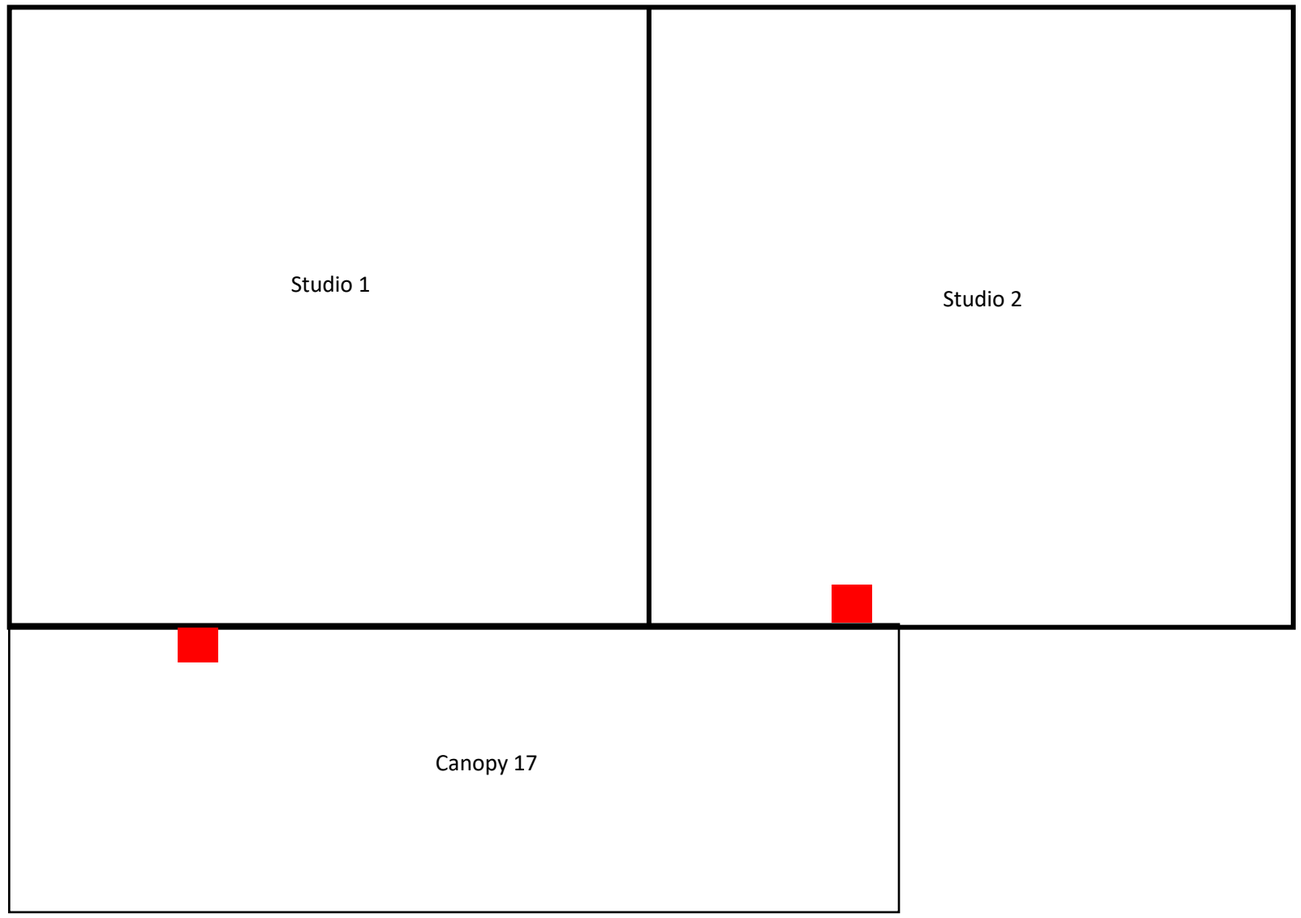
Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Flashboard within the electrical box on the middle partition wall.	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m^2	Non-Friable	Low	**Yes - Presumed.**	**7 - Very Low**	1. No urent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Confirm presence of ACM before refurbishment or demolition. 5. Manage material in accordance with AMP.
	Fibre cement pipe going into the floor in the centre of the warehouse	Presumed ACM - Sampling will affect the material's integrity	Good Condition; no visible damage	<1m^2	Non-Friable	Low	**Yes - Presumed.**	**7 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Confirm presence of ACM before refurbishment or demolition. 5. Manage material in accordance with AMP.
	Flashboard within the electrical box on the western side of the building.	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m^2	Non-Friable	Low	**Yes - Presumed.**	**7 - Very Low**	1. No urgent remedial action required. 2. Notify all contractors of the materials presence before works commence in this area. 3. Re-inspect condition periodically. 4. Confirm presence of ACM before refurbishment or demolition. 5. Manage material in accordance with AMP.

Material Description and Location	Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
Temporary Building								
	Corrugated fibre cement cladding surrounding the building	Presumed ACM - Sampling will affect building aesthetics	Good Condition; no visible damage	70m^2	Non-Friable	Low	**Yes - Presumed.**	**9 - Low**	1. No urent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with asbestos management plan (AMP).
	Fibre cement soffits on the northern and southern sides of the building	Presumed ACM - Unable to inspect due to inaccessibility	Good Condition; no visible damage	10m^2	Non-Friable	Low	**Yes - Presumed.**	**8 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.
	Corrugated roofing on the canopy at the entrance	Presumed ACM - Unable to inspect due to inaccessibility	Good Condition; no visible damage	2m^2	Non-Friable	Low	**Yes - Presumed.**	**7 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.

Material Description and Location		Inspection Type	Condition	Approx. Quantity	Friability in Current State	Disturbance Potential	Asbestos Containing Material	Current Presumed Health Risk	Recommended Management Procedure
	Flashboard and flash guards in the electrical board on the western side of the building	Presumed ACM - Unable to sample due to live electrical services	Good Condition; no visible damage	<1m^2	Non-Friable	Low	**Yes - Presumed.**	**6 - Very Low**	1. No urgent remedial action required. 2. Confirm presence of ACM through laboratory testing before refurbishment or demolition. 3. Notify all contractors of the materials presence before works commence in this area. 4. Re-inspect condition periodically. 5. Manage material in accordance with AMP.

ASBESTOS LOCATIONS – STUDIO 1 & 2, AUCKLAND FILM STUDIOS

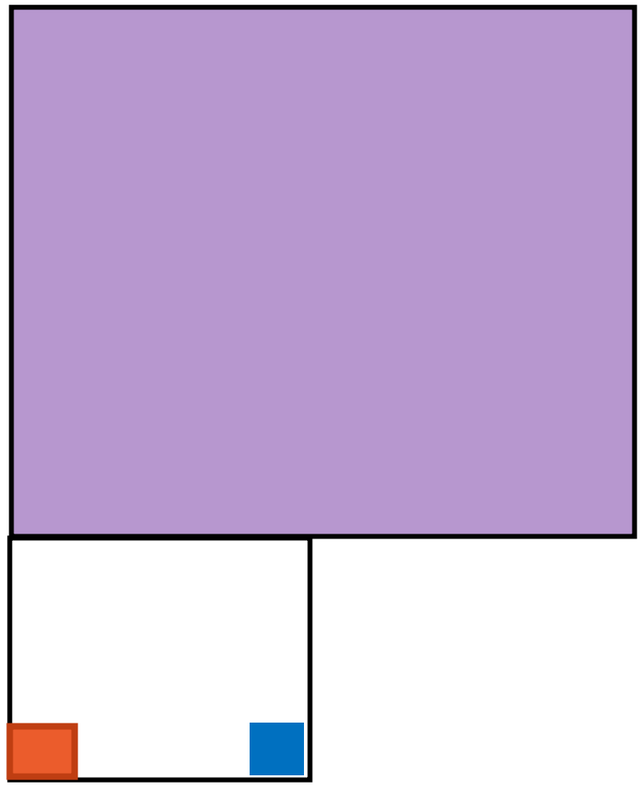
Legend	
	Presumed ACM in the switchboard backing and insulating rope (flash guard) behind the fuses in the electrical boxes
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Dates:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Studio 1 and 2
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 3A, AUCKLAND FILM STUDIOS

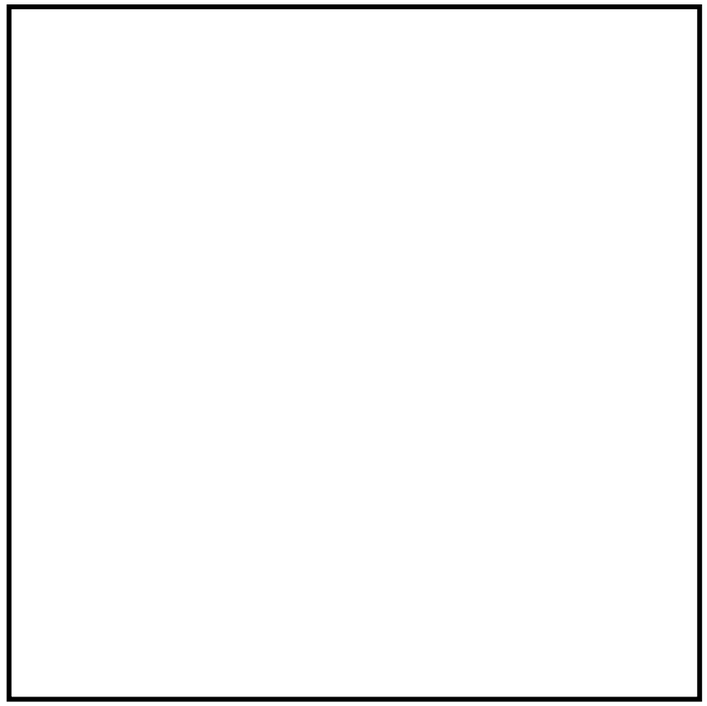
Legend	
	Fibre cement walls and ceiling panel in the entrance
	Black bitumastic paper below the roof



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Dates:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 3a
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 5, AUCKLAND FILM STUDIOS

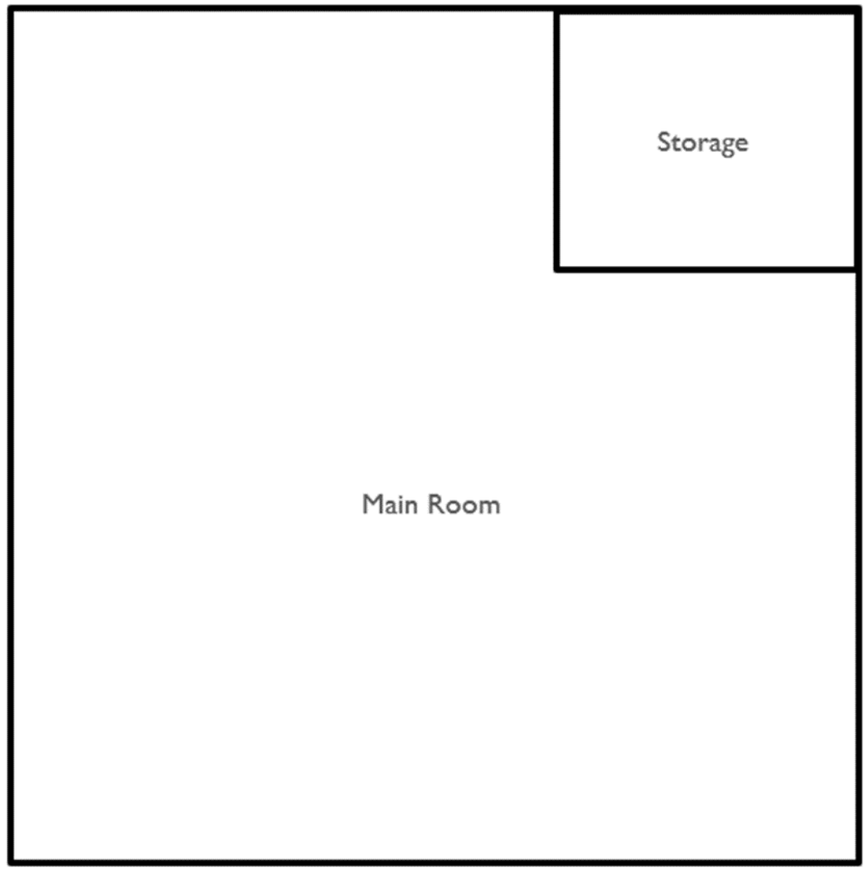
Legend	
	No ACM identified in the building
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Dates:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 5
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 10, AUCKLAND FILM STUDIOS

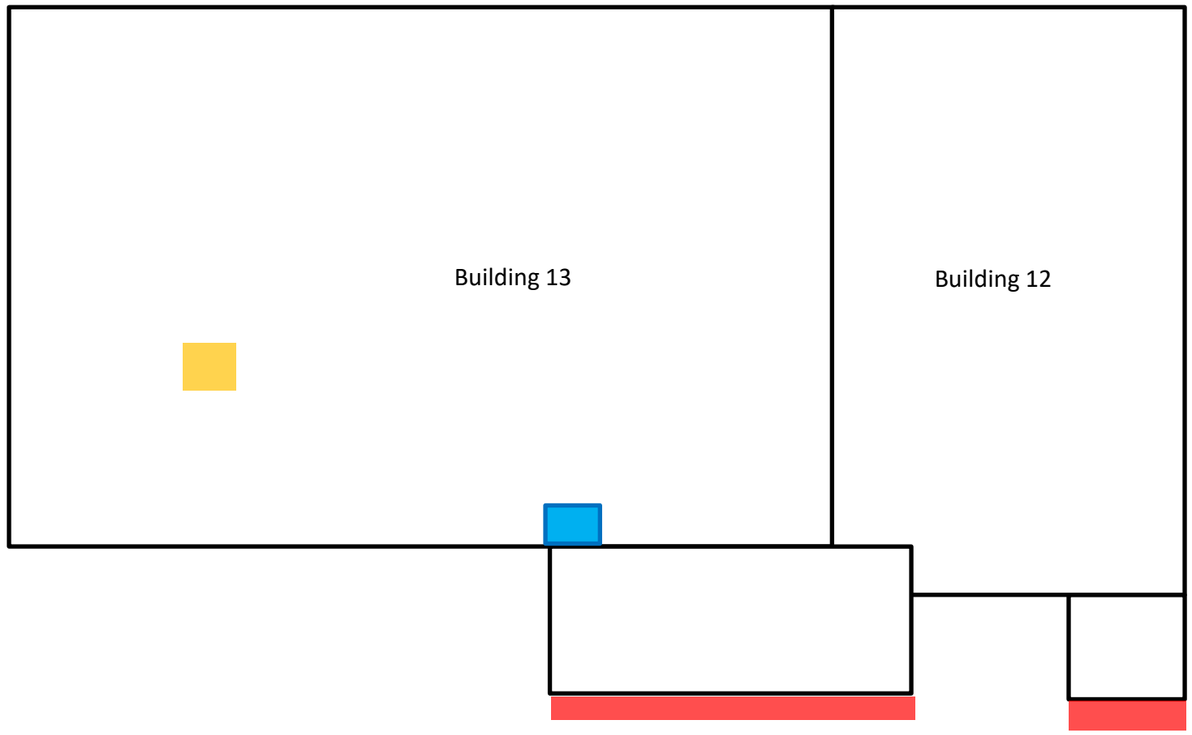
Legend	
	No ACM detected within the scope of the survey



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 10
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 12-13, AUCKLAND FILM STUDIOS

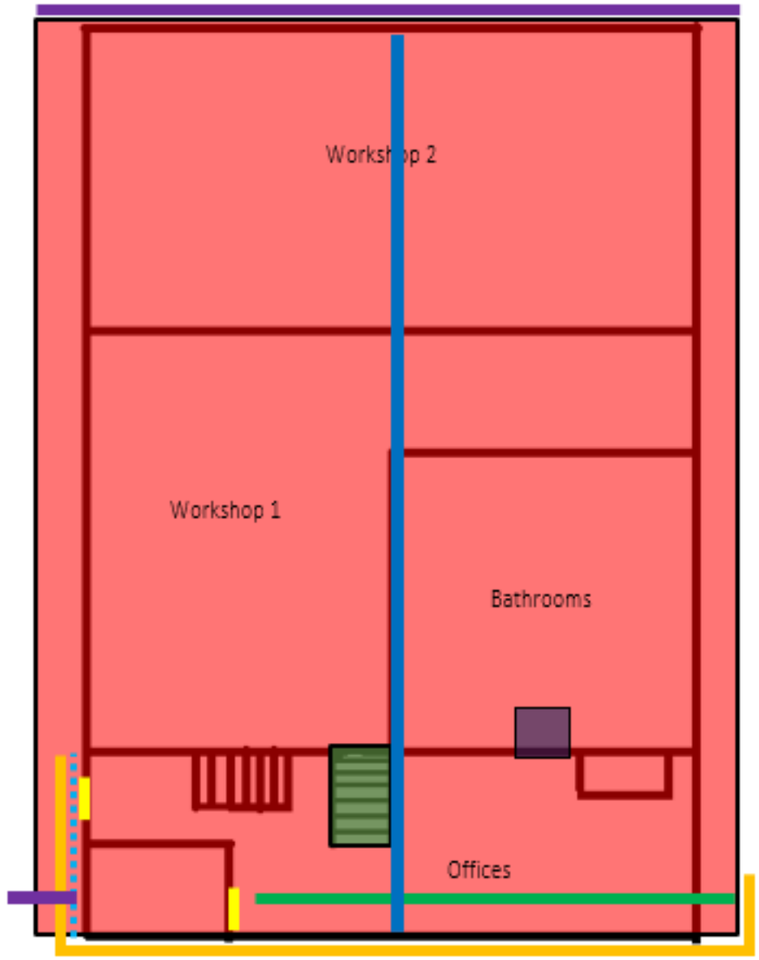
Legend	
	Switchboard backing and insulating rope (flash guard) behind the fuses
	Bituminous roof sheeting debris
	Fibre cement soffits and infill panels
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 12 and 13
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 14-16, AUCKLAND FILM STUDIOS

Legend	
	Fibre cement board – Panels under the bay windows
	Fibre cement board – Soffits
	Fibre cement board – Window infill panels
	Asbestos containing roofing, flashings and associated building paper. Please note that the original (contaminated) building paper is now behind a new layer of black building paper
	Asbestos containing vinyl floor backing
	Corrugated fibre cement boards
	Corrugated fibre cement board – Gable ends
	Fibre cement ridge cap
	Electrical flashboards and fuse backings inside the electrical boxes behind the office area.
N	

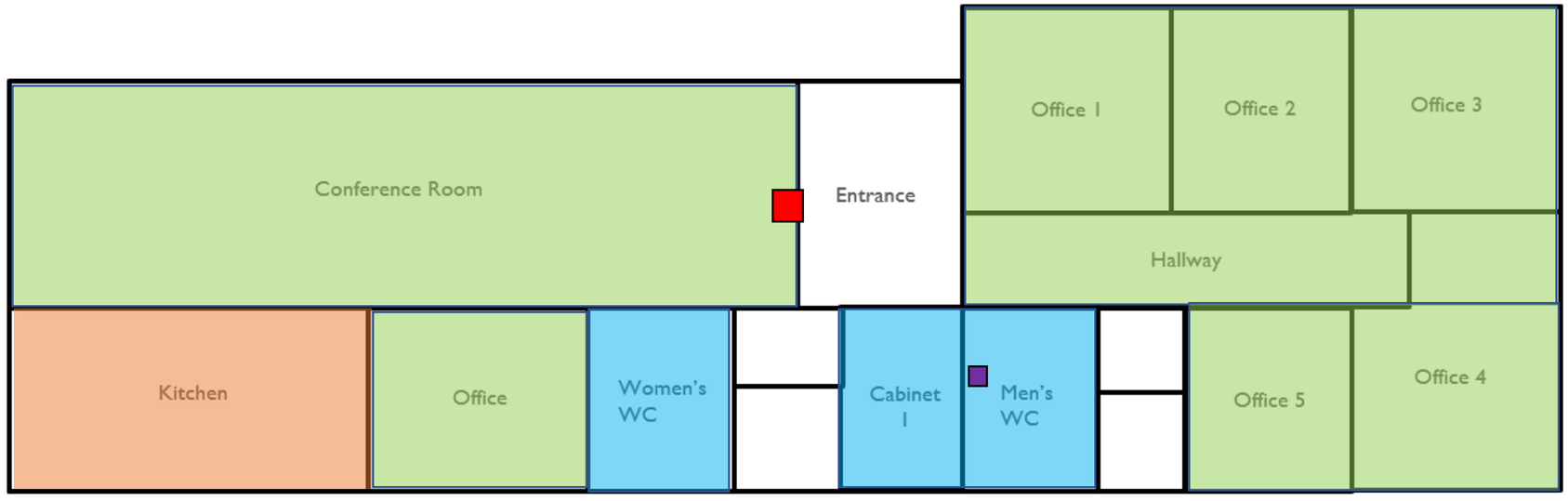


Ground Floor

Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 14 - 16
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 18 (NUMBER 7), AUCKLAND FILM STUDIOS

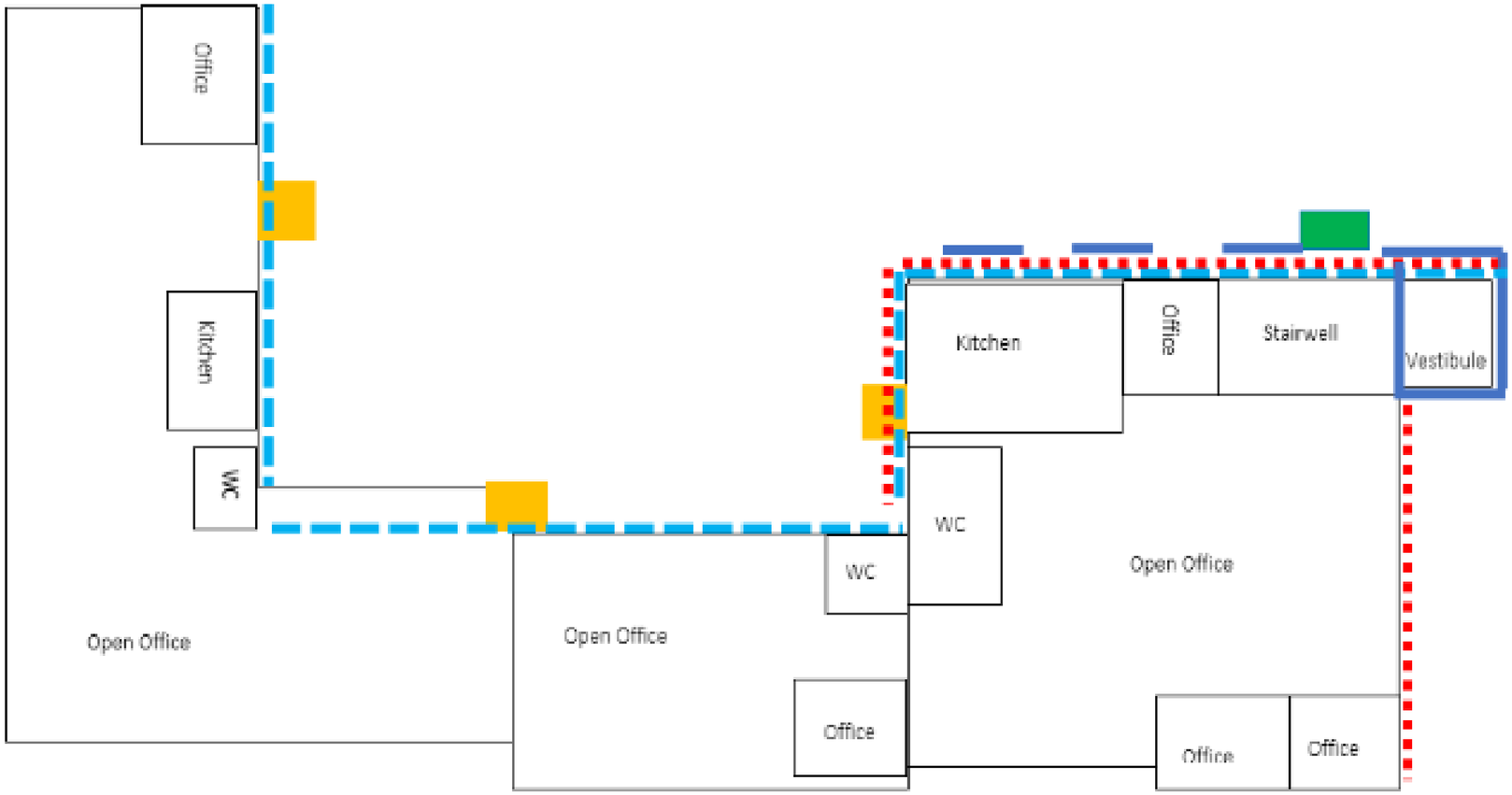
Legend	
	Vinyl floor under the carpet
	Beige vinyl floor and residual materials underneath it
	Grey vinyl floor and residual materials underneath it
	Presumed ACM in the electrical board
	Presumed ACM in the Bakelite switch
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 18 (Number 17)
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 19-19A, AUCKLAND FILM STUDIOS (GROUND FLOOR)

Legend	
	Corrugated fibre cement board
	Asbestos switchboard backing and insulating rope (flash guard) behind the fuses
	Fibre cement soffits above the back entrances
	Wood-grain patterned textured fibre cement board
	Fibre cement board with textured coating
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 19 - 19a Ground Gloor
Notes:	Drawing not to scale.				

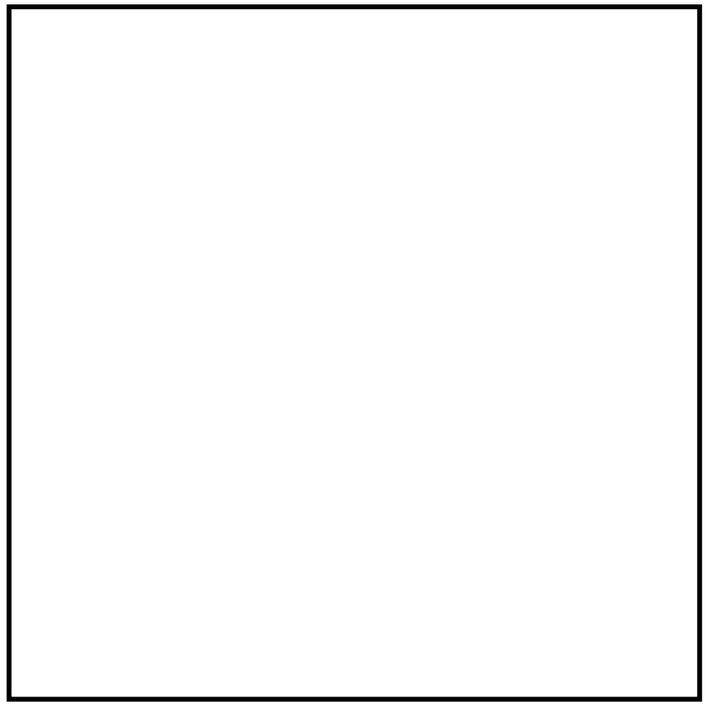
ASBESTOS LOCATIONS – BUILDING 19-19A, AUCKLAND FILM STUDIOS (FIRST FLOOR)

Legend	
	Corrugated fibre cement board
N	

Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024	thomas consultants
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 19 - 19a First Floor	

ASBESTOS LOCATIONS – CANOPY 17, AUCKLAND FILM STUDIOS

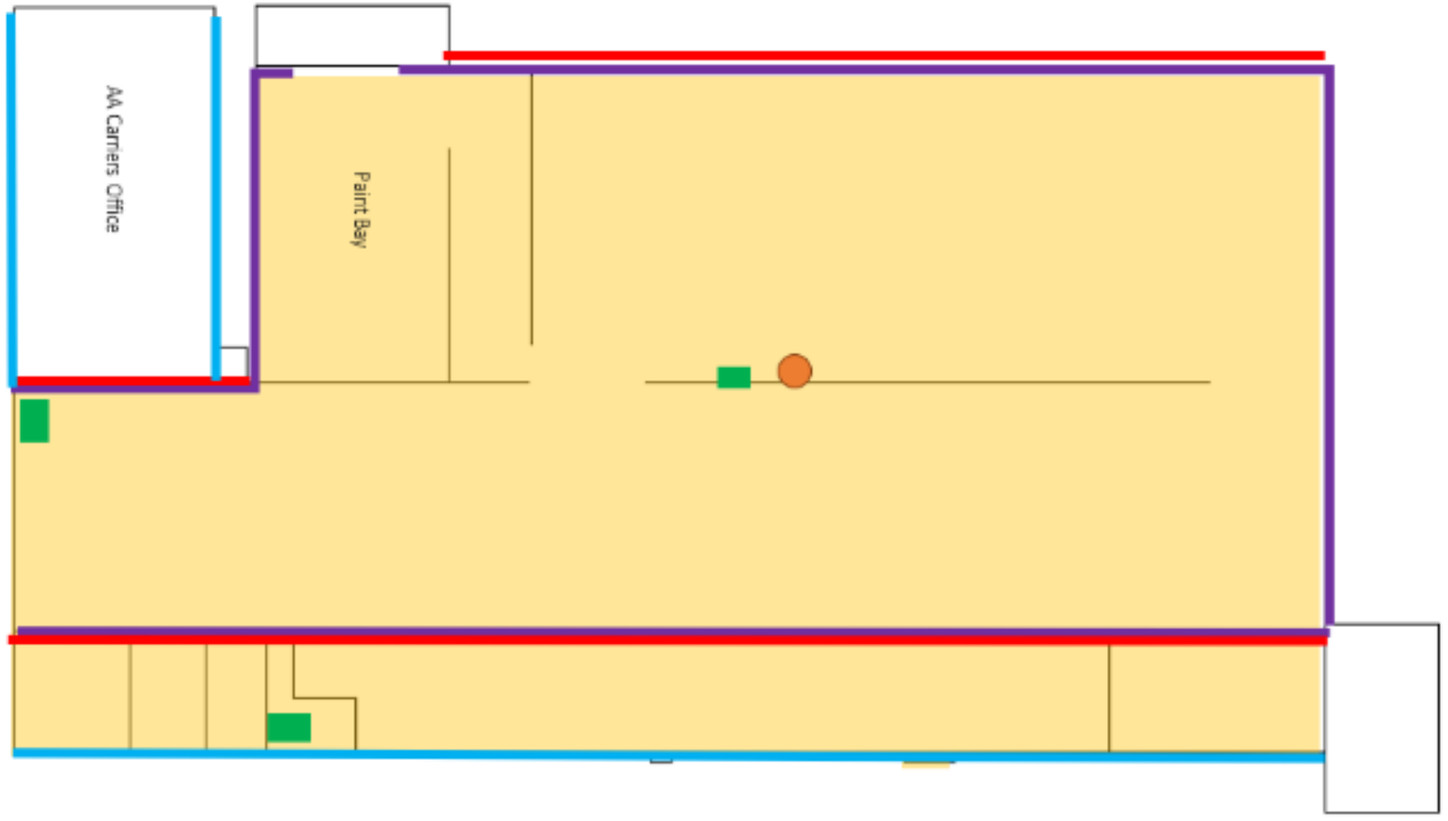
Legend	
	No ACM identified in the building
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Canopy 17
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 34-38, AUCKLAND FILM STUDIOS (1 OF 2)

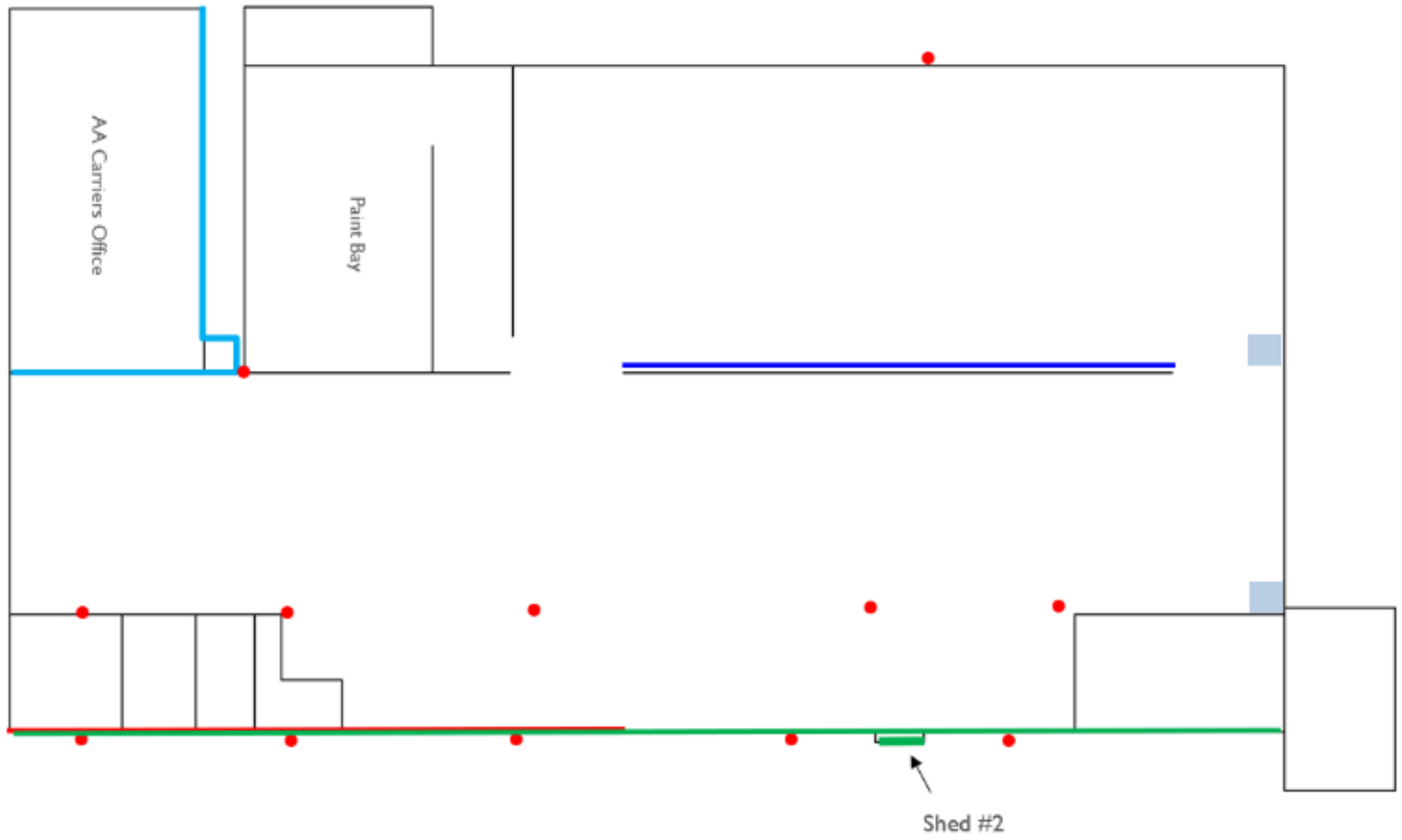
Legend	
	Asbestos containing flashboards in the electrical boxes
	Corrugated fibre cement “super-six” wall cladding
	Corrugated fibre cement “super-six” roofing material
	Fibre cement soffits
	Fibre cement gutters
	Fibre cement pipe leading into the ground
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 34-38 (Plan 1 of 2)
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – BUILDING 34-38, AUCKLAND FILM STUDIOS (2 OF 2)

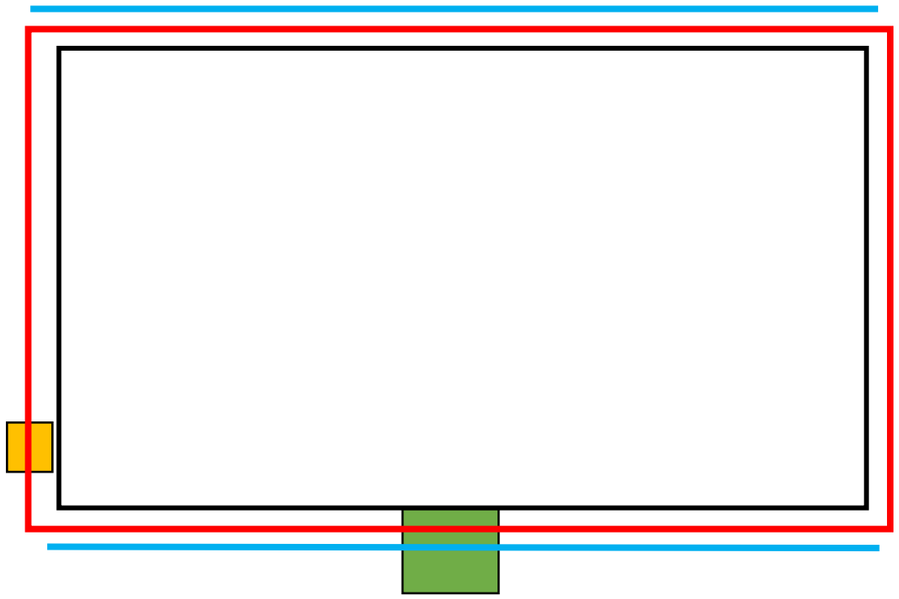
Legend	
	Asbestos containing flat sheet wall cladding surrounding the AA Carriers office. This also includes the fascia panels on the southern end
	Fibre cement rain headers and downpipes
	Residual asbestos containing “super-six” sheet embedded in the cement floor, adjacent to the partition wall in the middle of the warehouse
	Fibre cement corrugated wall cladding
	Fibre cement fascia panels
	Fibre cement ceiling panel at the southern of the building
N	



Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Building 34-38 (Plan 2 of 2)
Notes:	Drawing not to scale.				

ASBESTOS LOCATIONS – TEMPORARY BUILDING, AUCKLAND FILM STUDIOS

Legend	
	Corrugated fibre cement cladding
	Fibre cement soffits
	Electrical board
	Corrugated roofing on the canopy
N	

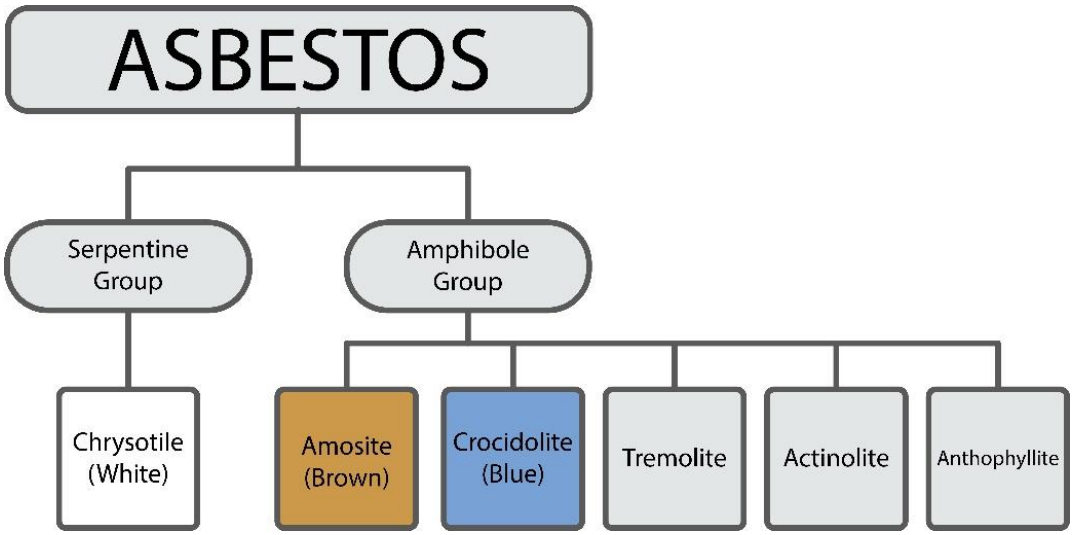


Client:	Tātaki Auckland Unlimited	Site Name:	12 Hickory Avenue Henderson, Auckland	Survey Date:	30/04 & 15/05/2024
Job #:	ECON3748-AMP, 1.0	Surveyor:	Simon Ness	Area of site:	Temporary Building
Notes:	Drawing not to scale.				

SECTION THREE - ASBESTOS MANAGEMENT

ASBESTOS TYPES

Asbestos is a term describing naturally occurring fibrous silicate minerals, which are divided into two groups and six common types. These are shown in the figure below.



Types of asbestos (Source: Approved Code of Practice, **Management and Removal of Asbestos**, WorkSafe, 2016).

White asbestos was the most common form of asbestos used in New Zealand, followed by brown asbestos and to a lesser extent, blue asbestos. Tremolite, Actinolite and Anthophyllite were rarely used.

White asbestos is distinct from all other forms of asbestos in that it has long, curly fibres, which are flexible. Its versatility made it the most common type of asbestos in building and household products.

Brown asbestos has harsh, spiky fibres. It was mostly mined in Africa and was often used in asbestos cement and insulation. It was also used in insulating board, ceiling tiles and thermal insulation.

Blue asbestos is known for its excellent heat resistance and ability to repel water. It was mostly mined in South Australia. In South Africa it was called 'woolly stone'. It has straight, thin, blue fibres. It is brittle and products with this asbestos often malfunction. This increases the potential of airborne asbestos exposure for people doing maintenance, repair or replacement work.

Blue asbestos is claimed to be the most dangerous asbestos because its fibres are so thin. This makes them easy to inhale and lodge in the linings of a person's lungs. However, all types of asbestos should be treated with equal caution because their fibres can be inhaled into the lungs.

ASBESTOS MANAGEMENT PLAN REQUIREMENT

An asbestos management survey, or reinspection will be prepared in instances where:

- There is a requirement to record the presence and location of asbestos within a building/structure constructed prior to January 2000
- The property has not been inspected within five years
- The AMP will be made readily available to the tenant/occupier of a building/property. The tenant/occupier shall make it available to all workers, contractors and maintenance workers involved in any physical/intrusive work on that building.

HOW ASBESTOS WILL BE REMOVED, ENCAPSULATED, SEALED

Asbestos Treatment Options

- If asbestos cannot be removed, it will be encapsulated.
- If encapsulation is not feasible, it will be sealed.
- In some cases, undamaged asbestos that poses no immediate risk may be left as is, after a risk assessment.
- If asbestos removal is not immediately possible, safety measures will be taken until removal can occur.

Prioritisng Asbestos Removal

The sequence of asbestos removal will be determined based on factors such as risk to people, building plans, fire safety, seismic considerations, and the following priority list:

- Exposed friable asbestos
- Unexposed friable asbestos
- Deteriorating non-friable asbestos
- Exposed non-friable asbestos
- Unexposed non-friable asbestos

Qualified Contractors

Removal, encapsulation, and sealing of asbestos will be carried out by qualified contractors holding either a Class A or Class B asbestos removal license, based on the type of asbestos.

Contractor Requirements: Before starting asbestos work, contractors must provide the following:

- An asbestos removal control plan (kept for at least two years)
- Details of certified asbestos workers and their qualifications
- Site signage information
- Site Specific Safety Plan (including risk assessment)
- WorkSafe NZ notification proof (if required, with a minimum notice of five days)
- Evidence of health monitoring for workers in potential asbestos contact
- Assurance of proper disposal of removed asbestos and disposable PPE at an approved facility, with receipts provided.

REMEDIAL ACTIONS

If the ACM is to remain on site:
This management plan must be made accessible to workers, their representatives and other companies who carry out, or intend to carry out work in the workplace because of the risk of exposure to airborne asbestos fibres. Any persons entering the property should be made aware of the risk. Any persons contracted to perform maintenance activities on the building must be provided with a copy of this report, so they are aware of the exposure-to-asbestos risk.

To ensure all employees, contractors and visitors to the premise do not disturb ACM and are safe from potential exposure; the following procedures should be implemented:

- A designated person should be responsible for all asbestos related management including updating asbestos documents and organising ongoing visual inspections
- Work involving asbestos including removal or maintenance on ACM listed in the register within this report must be documented
- Asbestos containing materials must be included in the site hazard register and communicated to incoming employees/contractors during their induction.

If the ACM is to be removed (at a future stage):

If under 10m^2 - (this is the maximum quantity of **non-friable** asbestos that can be removed from a property without employing a licensed asbestos removalist). It is strongly recommended that all asbestos removal activities are carried out by a competent and licensed asbestos removal company. However, by law, removal can take place if the material of concern is less than 10 square metres and is non-friable or unlikely to become friable during removal:

- Read and familiarise the Approved Code of Practice, **Management and Removal of Asbestos**, Worksafe, 2016. Ensure the best practice techniques from this document are employed for the removal
- If unsure of how to precede, seek guidance from a consultancy specialising in asbestos removal
- Isolate the area ensuring no one is in the vicinity of the removal taking place
- Wear appropriate PPE and RPE including, at a minimum standard:
  - P2 dust mask, impermeable coveralls, disposable gloves, disposable shoes coveralls
  - All openings between disposable garments sealed with tape
- Set up 200-micron polythene drop sheets to capture fallen dust and debris
- Use dust suppression techniques such as misting with a water sprayer
- During removal, minimise damage and breakage to the ACM
- Dispose of materials in 200-micron polythene wrap or waste bags
- De-contaminate area with a Class-H HEPA vacuum and tack rags
- Dispose of all asbestos contaminated material to a landfill approved in managing asbestos containing waste.

If more than 10m^2(non-friable) or any amount of friable ACM:

- Engage a licensed asbestos removalist to undertake work
- Engage independent reputable asbestos consultant if further advice and quality assurance of removal work needed
- Notification to Worksafe New Zealand five days prior to carrying out asbestos removal work
- Vacation of the work area including machinery, furniture and employees
- Access to the area should be immediately restricted and only permitted to competent persons
- Provision of contractor Site Specific Safety Plan (SSSP) and Asbestos Removal Control Plan (ARCP) for carrying out asbestos removal, including management and methodology of removal including:
  - Site preparation prior to removal, dust suppression techniques, isolation/exclusion zones, decontamination procedures, clearance testing and certification
- Provision of site supervision by a qualified supervisor nominated by the company carrying out the removal work
- Provision of decontamination units for all site staff, equipment and vehicles

SPECIFIC ACTIONS

Option	Option Involves	Appropriate When	Not Appropriate When
Removal	Complete removal of asbestos or ACM from a building	• Surface is friable or asbestos is poorly bonded. • Asbestos is severely water damaged or liable to damage or deterioration. • There is lichen growth or lichen related damaged. • Asbestos is located in air condition ducts. • Airborne asbestos levels exceed exposure standard. • If ACMs are showing signs of deterioration, such as crumbling, flaking, or breaking apart. • When planning to renovate or demolish a building or structure that contains ACMs, removal is often required. • If ACMs are located in areas where they are likely to be disturbed frequently or where occupants may come into direct contact with them. • Other control techniques are inappropriate.	• Asbestos is located on complex or inaccessible surfaces. • Removal would be extremely difficult and other techniques are satisfactory.
Encapsulation	Coating ACM with a product that penetrates and hardens the material	• Asbestos removal is difficult or not feasible. • Minimal likelihood of asbestos being damaged. • Building has a short life expectancy. • Asbestos is readily visible for regular assessment. • ACMs are in stable and relatively good condition encapsulation can help maintain their integrity and prevent the release of fibres. • In cases where the ACMs are located in areas that are difficult to access. • If the building or structure is slated for renovation or demolition in the near future, encapsulation can serve as an interim measure to mitigate the risk. • In buildings with historical or architectural significance, where removing ACMs could compromise the integrity or aesthetics of the structure. • Encapsulation might be suitable for ACMs located in areas of non-living spaces, that are not regularly accessed by occupants, such as crawlspaces, attics, or utility rooms.	• Asbestos is deteriorating or has been water damaged. • Applying the sealant may damage the asbestos. • Area of damaged asbestos is large.
Sealing	Applying a protective coating to the ACM that creates an impermeable seal of the asbestos i.e. paint		

Option	Option Involves	Appropriate When	Not Appropriate When
Enclosure	Enclosure involves constructing a physical barrier around the ACMs to prevent the release of asbestos fibres into the air. Placing a barrier between ACM and the surrounding environment	• Asbestos removal is extremely difficult. • Fibres can be fully contained within the enclosure. • Most of the surface is inaccessible (enclosed). • Disturbance to, or entry into the enclosure is unlikely. • Where there is a high risk of fibre release. • If suitable, it can be a more cost effective option to complete removal. • A short term solution for an area that is scheduled for renovation or demolition. • In cases where removing the ACMS could compromise the structural integrity of the building or its historic features. • When unexpected issue arise such as accidental damage to ACMs.	• Enclosure is liable to be damaged or water damage may occur. • Asbestos cannot be fully enclosed.
Restrict Access	Restrict access to the high-risk area/s and place Restricted access hazard signs and inform any Tenants/Occupiers of the restrictions	• Risk of asbestos exposure is high. • Known or presumed asbestos fibres are or have the potential to be airborne (i.e. there is high risk asbestos exposure because of deteriorated friable asbestos lagging through the building) Hazard and access signs are placed on all access points. • Once access has been restricted only qualified, competent workers/contractors wearing appropriate PPE and RPE with decontamination units are able to enter the area. • Restricted access will only be lifted once the asbestos has been removed completely and a third part has provided clearance verification for reoccupation.	
Deferral	No action taken at the present time	• Asbestos is inaccessible and fully contained. • Asbestos is stable and unlikely to be damaged.	• There is a possibility of asbestos damage or deterioration. • Airborne asbestos dust levels exceed exposure standards.

RISK ASSESSMENT ALGORITHIM

Thomas Consultants uses both the Material Assessment and Priority Assessment as a guide on assessing Asbestos Containing Materials. The Material and Priority score are added together to form an overall Risk Assessment Score. The material assessment looks at the type and condition of the ACM and the ease which it will release fibres if disturbed. The priority assessment looks at the likelihood of someone disturbing the ACM.

The following table is extracted from Great Britain's governing health and safety body website; **Health and Safety Executive** (www.hse.gov.uk). Please note the table is for reference only, the scores are not applicable to the survey.

Material Risk Assessment		
Sample variable	**Examples of scores**	**Score**
Product type	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc.)	1
	Asbestos insulating board, mill boards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt	2
	Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing	3
Extent of damage (Condition)	Good condition: no visible damage	0
	Low damage: a few scratches or surface marks; broken edges on boards, tiles etc.	1
	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres	2
	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris	3
Surface type/treatment	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles	0
	Enclosed sprays and lagging, asbestos insulating board (with exposed face painted or encapsulated), asbestos cement sheets etc.	1
	Unsealed asbestos insulating board, or encapsulated lagging and sprays	2
	Unsealed laggings and sprayed asbestos	3
Asbestos type	White (Chrysotile) only	1
	Brown (Amphibole asbestos excluding crocidolite) and mixtures (not blue)	2
	Blue (Crocidolite) and mixtures or type unknown	3
Priority Assessment - Normal Occupant Activity Level		
Sample variable	**Examples of scores**	Score
Main type of activity in area	Rare disturbance activity (e.g. little used storeroom)	0
	Low disturbance activities (e.g. office type activity)	1
	Periodic disturbance (e.g. industrial or vehicular activity)	2
	High levels of disturbance (e.g. fire door)	3
Likelihood of Disturbance		
Location	Outdoors	0
	Large rooms, warehouse or well-ventilated areas	1
	Rooms up to 100 square metres in area	2
	Restricted or confined areas	3
Accessibility	Usually inaccessible or unlikely to be disturbed	0
	Occasionally likely to be disturbed	1
	Easily disturbed	2
	Routinely disturbed	3
Extent/amount	Small amounts or single items (e.g. strings, gaskets)	0
	Less than 10 square metres area, or 10-metre pipe run	1
	10 to 50 square metres area or 10 to 50 metres pipe run	2
	More than 50 square metres area, or 50 metres pipe run	3

Human exposure potential		
Number of occupants	None	0
	1 to 3	1
	4 to 10	2
	More than 10	3
Frequency of use of area	Infrequent	0
	Monthly	1
	Weekly	2
	Daily	3
Average time area is in use	Less than 1 hour	0
	1 to less than 3 hours	1
	3 to less than 6 hours	2
	More than 6 hours	3
Maintenance Activity		
Type of maintenance activity	Minor disturbance (e.g. possibility of contact when gaining access)	0
	Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling tiles)	1
	Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve)	2
	High levels of disturbance (e.g. removing a number of asbestos insulating board ceiling tiles to replace a valve or for re-cabling, or leak repair)	3
Frequency of maintenance	Unlikely – almost never	0
	Less than once a year	1
	Less than once a month	2
	More often than once a month	3

Human exposure potential	
Number of occupants	None
	1 to 3
	4 to 10
	More than 10
Frequency of use of area	Infrequent
	Monthly
	Weekly
	Daily
Average time area is in use	Less than 1 hour
	1 to less than 3 hours
	3 to less than 6 hours
	More than 6 hours
Maintenance Activity	
Type of maintenance activity	Minor disturbance (e.g. possibility of contact when gaining access)
	Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling tiles)
	Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve)
	High levels of disturbance (e.g. removing a number of asbestos insulating board ceiling tiles to replace a valve or for re-cabling, or leak repair)
Frequency of maintenance	Unlikely – almost never
	Less than once a year
	Less than once a month
	More often than once a month

RISK ASSESSMENT

In order to determine an asbestos containing materials' recommended management procedure, a risk assessment should be carried out as per Asbestos: **The Survey Guide, HSG264**, Health and Safety Executive, 2012. The risk assessment identifies the 'high-hazard' asbestos containing materials, i.e. those materials which will most likely release fibres if disturbed and establishes priority for those ACMs needing remedial action and the type of action that will be taken.

Each of the bullet points listed above, making up the material and priority assessment scores, are given a score of 0 – 3 and when combined can have a maximum score of 12 for each assessment. Scores between 9 – 12 are high risk, 6 – 8 are medium risk, 4 – 5 are low risk, and 2 – 3 are very low risk.

The total risk assessment score is based upon the addition of the material assessment score and the priority assessment score and can have a maximum score of 24. Total risk scores between 18 – 24 are high risk, 13 – 18 are medium risk, 8 - 13 are low risk, and 8 or less very low risk. This combination of scores defines the asbestos containing materials management procedures and will then be implemented based on these scores, which are outlined in the section below (See Appendix A for matrix use for scoring).

The current presumed health risk is a rating system adopted to assist the control and management of asbestos containing materials to the atmosphere. It has four levels of risk, with each level being handled appropriately.

High Risk	19 - 24	Recommended action:	Restrict Access to area and organise remediation works as soon as practicable. Manage remaining materials with an Asbestos Management Plan (AMP)
This area is highly contaminated with asbestos containing materials and the risk of fibres being airborne is high. Even brief exposure presents significant risk. The ACM must be removed from the building by a competent and qualified asbestos removalist.			

Moderate Risk	13 - 18	Recommended action:	Organise remediation works as soon as practicable. Manage remaining materials with an Asbestos Management Plan (AMP).
Changes in few contributory factors may cause the presumed health risk to increase to high. The contamination of asbestos containing materials is moderate and the risk of fibres becoming airborne is moderate. Removal of ACM is recommended as soon as practicable. Other management options such as encapsulation, enclosure and sealing are recommended as temporary measures if removal is not imminent.			

Low Risk	9 - 12	Recommended action:	No urgent remediation required. Manage remaining materials with an Asbestos Management Plan and review periodically.
If any deterioration of materials occurs, the area needs to be re-assessed for an updated current presumed health risk. This should also be recorded on the asbestos register. Encapsulation, enclosure or sealing are all recommended as soon as practicable as reasonable actions for the ACM.			

Very Low Risk	0 - 8	Recommended action:	No urgent remediation required. Manage remaining materials with an Asbestos Management Plan and review periodically
Any deterioration of the materials should be recorded on the asbestos register and if significant deterioration occurs, having the area re-assessed for an updated current presumed health risk. If further deterioration occurs, encapsulation, enclosure or sealing are suitable actions for the ACM.			

STATUTORY REQUIREMENTS, CODES OF PRACTICE, GUIDELINES

There are a number of regulatory requirements, codes of practice and guidelines that apply to the identification and management of asbestos in the workplace (including in soil) in New Zealand. The most important of these are:

- Health and Safety at Work Act 2015
- Health and Safety at Work (Asbestos) Regulations 2016 (referred to as the 'Asbestos Regulations')
- Code of Practice for the Management and Removal of Asbestos (November 2016) (referred to as the 'ACOP')
- Code of Practice for Conducting Asbestos Surveys (October 2016)
- New Zealand Guidelines for Assessing and Managing Asbestos in Soil (BRANZ, November 2017).

It is important that all owners, property managers, workers and contractors delivering property management services, asbestos surveys, asbestos removalist and asbestos related works services, are familiar with and operate in accordance with these regulations and codes of practice.

WHAT IS THE ASBESTOS REGISTER

The Asbestos Register is a vital part of a comprehensive Management Plan (AMP). The AMP and Asbestos Register must be accessible for review by owners, property managers, tenants/occupiers, employers, workers, union representatives, government officials, contractors, and maintenance staff. This access is required before starting any work that might affect any identified Asbestos-Containing Material (ACM) on the premises. The Asbestos Register serves as a reference to show where ACM is located, and relevant parties must receive it. Everyone on-site (building occupants and external contractors) needs to know about ACM presence in their working/visiting areas and must ensure these materials are not disturbed.

TRAINING

a. Anyone who might encounter or suspects they could encounter asbestos will have access to relevant information and, if needed, training.
b. WorkSafe acknowledges that different levels of information and training may be necessary based on the potential asbestos exposure level and type. For instance, office workers with low-risk asbestos exposure compared to those dealing with possibly hazardous friable asbestos.
c. All training will be documented and retained for at least five years.

OWNERS/PCBUS/PROPERTY MANAGER

If the PCBU, owner or property manager of a building knows that there is asbestos present, they must inform anyone who occupies or may work in or on the building of the potential health risk. Any asbestos records must be made available to any individuals affected, including contractors. Before contractors perform maintenance or refurbishment works on the building, this document should be provided to them prior to starting any intrusive works.

TENANTS/OCCUPIERS OF RESIDENTIAL PROPERTIES

All tenants/occupiers of residential buildings/properties are required to:

- Have received a copy of, or have access to, the AMP
- Comply with their tenancy agreement terms and conditions
- If controls identified in this AMP are not adequate to control asbestos in the building, the tenant/occupier must inform the property owner, or its external property manager, to ensure further controls are put in place and managed
- Report all damage/incidents relating to identified or suspected asbestos to property owner or property manager.

TENANTS/OCCUPIERS OF NON-RESIDENTIAL PROPERTIES

In this Management Plan for non-residential buildings, a non-residential building refers to a building initially designed and constructed for purposes other than just residential use. This includes buildings originally intended for non-residential functions, even if they are now used solely for residential purposes. Examples include disused school sites, hospitals, industrial facilities, and commercial buildings.

All occupants of non-residential buildings/properties must:

- Understand and share this Management Plan with their employees, visitors, and third-party suppliers.
- Obtain written approval from the property owner or property manager before conducting any work on the buildings.
- Report any damage or incidents related to known or suspected Asbestos-Containing Material (ACM) to the property owner or property manager.
- Follow the roles and responsibilities outlined in asbestos identification.
- Inform the property owner or the property manager if the controls mentioned in this plan are insufficient to manage asbestos in the workspace, so additional measures can be taken.
- Comply with relevant policies and laws, such as the Health and Safety at Work Act 2015 and Asbestos Regulations.

LICENSED ASBESTOS REMOVAL

If a job involves taking out bonded or easily breakable asbestos, it's treated as specialised work under the Asbestos Regulations. A licensed asbestos remover (Class A or Class B) or someone supervised by them must do the work. The removalist plans out the job in an Asbestos Removal Control Plan (ARCP) and informs WorkSafe NZ five days ahead. An independent asbestos consultant reviews the ARCP as per the regulations.

- The Asbestos Removal Control Plan (ARCP) must be checked by an independent asbestos expert. Following the Asbestos Regulations, an independent licensed asbestos inspector will do a final check (called a clearance inspection) for Class A asbestos removal work. For Class A asbestos jobs, an independent licensed asbestos assessor does it.

The licensed asbestos consultant decides if air quality monitoring is required during the work, as described in the ARCP. These tests follow the Asbestos Regulations, done by a knowledgeable person (consultant or asbestos assessor). Tests happen as the work goes on (needed for Class A, suggested for Class B), making sure the safety steps (like sealed areas and air filters) are effective.

WORK AREA ISOLATION

An exclusion zone will need to be setup to isolate the work area to ensure only permitted personnel with appropriate training and those wearing the appropriate PPE and RPE can enter. Appropriate signage will also need to be installed and be clearly visible at all entrances to the work areas. Protective safety equipment must be available and used by those workers involved in all asbestos related and removal work to minimise exposure. PPE shall include but not be limited to the following and be based on an assessment of the level of risk of exposure to asbestos fibres:

- Safety boots (covers as required)
- Type 5 and 6 disposable coveralls
- Protective gloves for any personnel handling asbestos
- Safety glasses
- Appropriate fit tested particulate filter respirators (minimum P2)
- For licenced asbestos removal work, additional PPE may be required to complete the work, at the discretion of the licenced removalist.

DECONTAMINATION

Decontaminating the work area, workers, PPE and tools used in asbestos related and asbestos removal work is vital to eliminate or minimise exposure to airborne asbestos fibres. Refer to WorkSafe's Approved Code of Practice for the Management and Removal of Asbestos and specific safe work practices for further detail on decontamination.

The following decontamination methods shall be used:

- Wet decontamination, or wet wiping, using damp rags to wipe down contaminated areas. Rags should only be used once and then be treated as asbestos waste.
- Dry decontamination by carefully rolling, or folding up, and sealing plastic sheeting and/or vacuuming the asbestos work area with a vacuum cleaner used for asbestos work. Dry decontamination may only be used when the wet method is not suitable or is risky because of other hazards such as electricity or slipping. All waste material shall be treated as potentially containing asbestos and disposed of accordingly.

All tools and equipment must be decontaminated using the wet or dry decontamination method before they are removed from the asbestos work area. The appropriate method will depend on its practicality, the level of contamination and electrical hazards. Any tools or equipment that cannot be decontaminated must be placed in a sealed and labelled container. In some circumstances, it may be better to dispose of contaminated tools and equipment, depending on the level of contamination and the ease of replacement.

DISPOSAL OF ASBESTOS WASTE

Any removed asbestos and any asbestos contaminated waste (including used PPE/decontaminating consumables) shall be packaged, transported and disposed of in accordance with the Asbestos Regulations. Disposal of asbestos waste shall be to a facility (landfill) licensed to accept asbestos under a valid disposal permit. Waste manifest records and landfill dockets should be retained on file to document the asbestos waste disposal and produced to the property owner or property manager upon request.

ASBESTOS RELATED WORK

This definition includes several 'small tasks' that involve lightly disturbing asbestos, like making a small hole or drilling a few holes in a cement sheet (for maintenance, installation, reconfiguration, or repairs). This might cover various activities linked to general repairs and maintenance. Contractor's handling 'asbestos work' don't have to be licensed asbestos removers, but they should:

- Show proof of asbestos awareness training in writing.
- Give a Safety Plan and work method details for the job, following minimum safety and cleaning rules from the Approved Code of Practice (ACOP).
- If the work could disturb known, suspected, or presumed asbestos, they need to explain how they'll do it safely.

Please refer to the *Asbestos Quick Guides for Tradespeople* section on the Worksafe NZ website for further guidance.

HEALTH MONITORING

Asbestos health monitoring is required for workers undertaking ongoing asbestos related works and are at risk of exposure to airborne asbestos while performing that work. Asbestos removalist and asbestos surveyors are required to be involved in a health monitoring regime. Persons undertaking asbestos related works should indicate if they are part of a health monitoring regime. If not, they must complete a risk assessment that takes into account every task that potentially involves asbestos in their role and determine whether health monitoring is required.

ACCIDENTAL DISCOVERY OF ASBESTOS AND EMERGENCIES

If previously unidentified or suspected asbestos (including potential asbestos in soils) is encountered during any works, or where damage has occurred to confirmed or suspected asbestos material, then the following shall be carried out:

- Works in that area should cease immediately and the area isolated, access restricted and control measures implemented as well as maintained to prevent exposure to site workers.
- Signage should be installed during these works, which states that the area cannot be entered unless authorised, and decontamination procedure is established for anyone entering the site
- The property owner or property manager shall be contacted immediately to confirm that the control procedures are appropriate for the situation.
- If a potential exposure risk exists the area shall be restricted, covered, sealed or dust suppression measures implemented until removal and/or remedial works can proceed. This should be carried out in consultation with the property owner or property manager
- The property owner or property manager in consultation with an asbestos consultant, and/or licenced removalist, may advise a requirement for confirmation testing (i.e. sampling of building materials or soil) and to determine the appropriate course of action to allow the work to proceed or controls implemented for the long term to management of asbestos at that site.

USE OF EQUIPMENT

The following are prohibited for use on actual/potential asbestos in accordance with Asbestos Regulations:

- A high-pressure water spray with a capacity of more than 350 Kpa or 50 PSI
- Compressed air
- A power tool, broom or any other implement that causes the release of airborne asbestos into the atmosphere (except under controlled conditions where airborne asbestos is captured or suppressed safely).

LABELS

A system should be created that identifies ACM on site through signs or labels and is visible to persons working in the area or in areas that could become damaged due to daily workplace activities (See Appendix C for acceptable stickers/labels). However, it may not be plausible to label all ACM in the building such as vinyl flooring, soffits and exterior wall panels. Labels should be applied to materials that could become damaged during everyday activities or where materials could be disturbed by routine maintenance activities such as electrical switchboards, gaskets, ceiling hatches, and where the cavities contain asbestos insulation.

RECORD MANAGEMENT

All records relating to:

- Asbestos inspection and management plan updates
- Asbestos sampling and laboratory results
- Asbestos label locations
- Asbestos removal work and associated air monitoring results
- Incidents or emergencies involving asbestos
- Asbestos health monitoring
- Asbestos training.

Must be retained in accordance with the Approved Code of Practice: **Guidelines for Management and Removal of Asbestos**, Worksafe, 2016.

ASBESTOS MANAGEMENT PLAN REVIEW

ACM within a property must be continually and periodically inspected to ensure the health risk associated with each material does not change and become more severe over time. The PCBU with management or control of the workplace must ensure that this asbestos management plan is reviewed and, if necessary, revised if:

- There is a review of a control measure
- Asbestos is removed from, or disturbed, sealed, or enclosed at, the workplace
- The plan is no longer adequate for managing the risk arising from asbestos or ACM at the workplace
- A representative for workers within the workplace requests a review
- **5 years have passed since the plan was last reviewed.**

If it is not practical to eliminate the exposure-to-asbestos risk through removal of the ACM from the building, then the health risk must be minimised. This can be achieved through periodic inspection by a competent asbestos assessor undertaking an audit and risk assessment of known ACM within the property. This risk assessment determines the exposure-to-asbestos health risk. The exposure-to-asbestos risk associated with each material is not determined solely on the condition of the ACM, and its deterioration overtime but also other changing factors such as number of occupants in the area, and duration and time in the area with the known ACM.

ROLES AND RESPONSIBILITIES

Title	Roles	Responsibilities
Tātaki Auckland Unlimited	Landlord	▪ Provide this asbestos management plan to all workers/tenants operating/occupying within the building ▪ Communicate locations of all asbestos containing materials as per the Asbestos Register section of this document ▪ Take steps to isolate, minimise and eliminate the asbestos hazard as per the Remedial Actions and Management Procedures section of this document ▪ To ensure the management plan is kept up to date and reviewed periodically as per the Periodic Review section of this document ▪ To provide a copy of the asbestos register to all contractors carrying out maintenance and intrusive works on the building ▪ Ensure all documentation is recorded as per the Record Management section of this document ▪ Ensure that a Demolition or Refurbishment survey is undertaken on the building before refurbishment or demolition works.
Businesses operating within the building	Senior Management	▪ To provide a copy of the asbestos register to all contractors carrying out work commissioned by the PCBU occupying the building, which may not be known to the landlord or owner ▪ To ensure all workers/occupants fully understand the locations and risks associated with all ACM within the building ▪ To ensure all workers/occupants fully understand the disturbance emergency procedures ▪ To ensure this document is made available to all workers/occupiers (this includes contractors) ▪ Take steps to isolate, minimise and eliminate the asbestos hazard as per the Remedial Actions section of this document ▪ The PCBU occupying the building must notify the landlord/owner if they wish to undertake refurbishment or demolition works.
Businesses operating in the building Occupants of a building	Workers/Occupants	▪ Comply with all policies, procedures and instructions as stipulated in this asbestos management plan ▪ For workers to ensure their own and others health and safety is preserved by following instructions given by senior management ▪ To report all incidents, discoveries and/or disturbances of asbestos to the person in charge/manager/owner/property manager.
Contractors	Anyone performing maintenance or intrusive work activities	▪ To ensure they receive and understand the most current asbestos register ▪ To understand and follow the management procedures within the most current asbestos management plan ▪ Do not carry out work on the building that may disturb existing ACM ▪ To report all incidents, discoveries and/or disturbances of asbestos to the person in charge/manager/owner/property manager.

APPENDIX A: TENANT AGREEMENT

This agreement between the Tenants and Property Owner is to confirm that the information regarding the Asbestos Management Plan developed for the site has been fully explained and understood by all parties involved.

The Property Owner must fully explain the Asbestos Management Plan to the Tenant, clearly outlining the responsibilities of the Tenant and the procedures that must be undertaken by the Tenant prior to commencing works likely to disturb any asbestos containing material at the site.

It is a condition of the tenancy agreement that the Asbestos Management Plan developed for this site is to be strictly adhered to by the Tenant.

The Property Owner must supply the following to the Tenant:

- A copy of the Asbestos Management Plan
- Copy of the current Asbestos Register
- Information, and if required, clarification of asbestos issues at the site.

Tenant Responsibility

As a tenant of this site you are obliged by the Health and Safety at Work Act 2015, and the Health and Safety at Work (Asbestos Regulations) 2016 to comply with the Asbestos Management Plan that has been developed for this site.

Your responsibilities require you to inform the Property Owner/Property owner/Property Manager of the following:

- When planning refurbishment works at the site
- Of maintenance or repair works on the building/s at the site
- Any other works likely to disturb the building structures or fabric.

Asbestos Register

It is a requirement of the Health and Safety at Work (Asbestos Regulations) 2016 that the Property Owner makes the current Asbestos Register for the site available to the Tenant. This register must state the location and condition of the asbestos containing materials on site. Should the Asbestos Register not adequately cover the area of the Tenant's or Property Owner's proposed works, further asbestos surveys must be conducted prior to commencing work.

Statement by the Tenant

I have been made aware of the Asbestos Management Plan and the Asbestos register for the site listed below and understand its implications regarding future maintenance and building works at the site.

Site Address:	12 Hickory Avenue Henderson, Auckland

Signed: _____ **Date:** _____

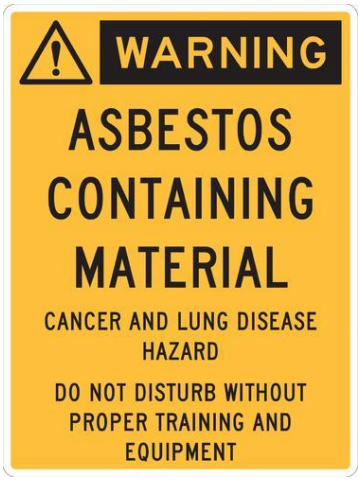
Tenant name in full: _____

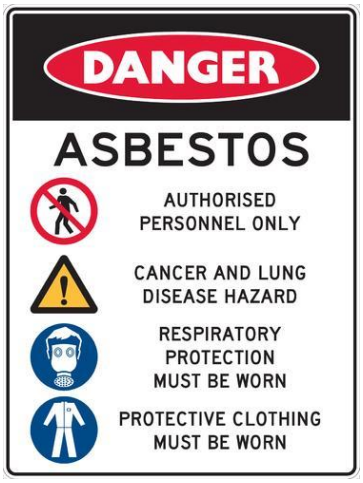
Witnessed: _____ **Date:** _____

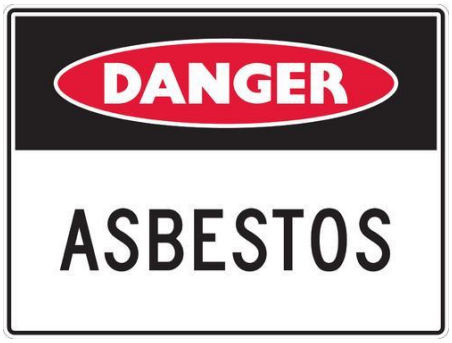
Property Owner name in full _____

This agreement is to remain with the Property Owner's copy of the Asbestos Management Plan.

APPENDIX B: EXAMPLES OF SUITABLE SIGNS AND LABELS FOR ASBESTOS MANAGEMENT

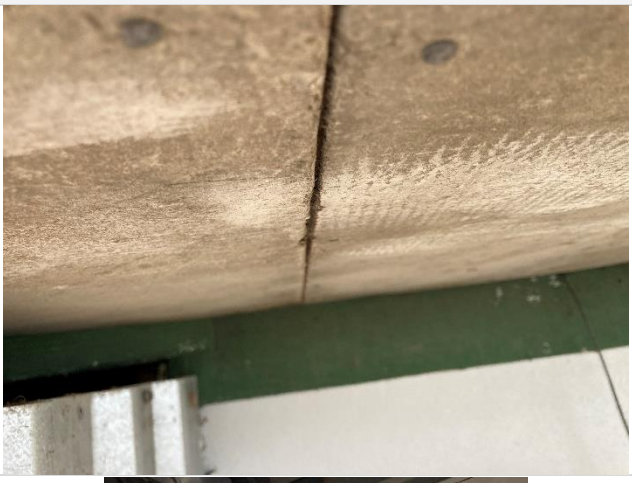




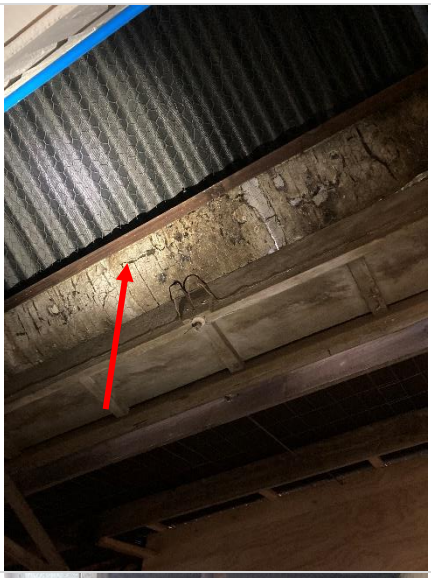
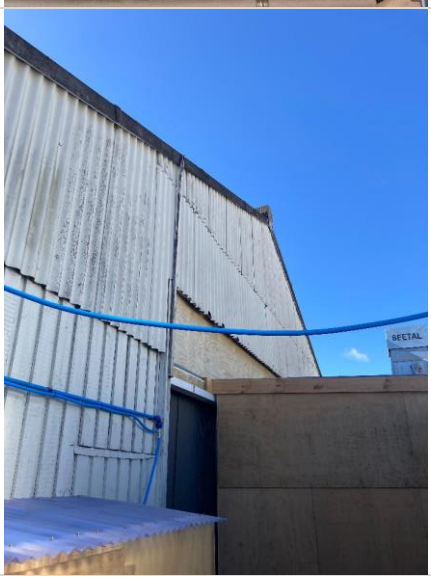


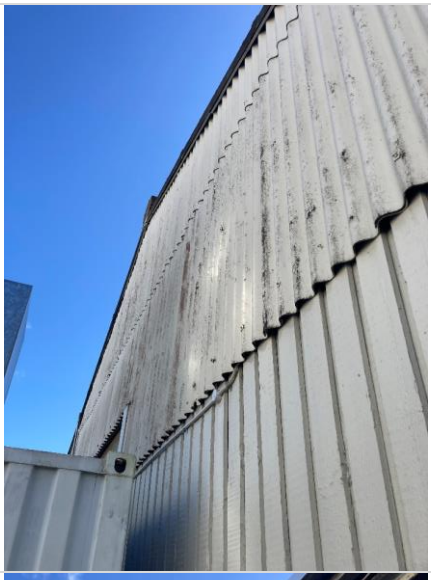
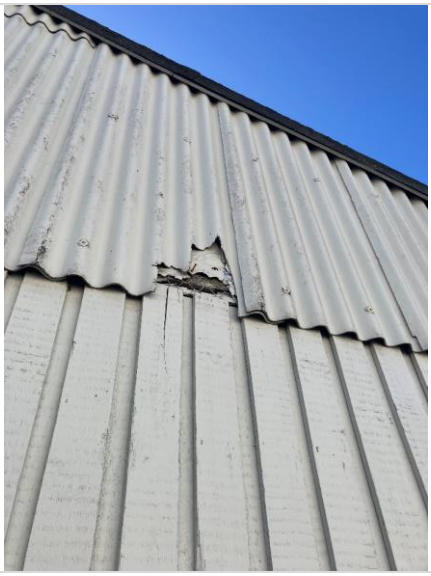
APPENDIX C: SUPPLEMENTARY PHOTOGRAPHS

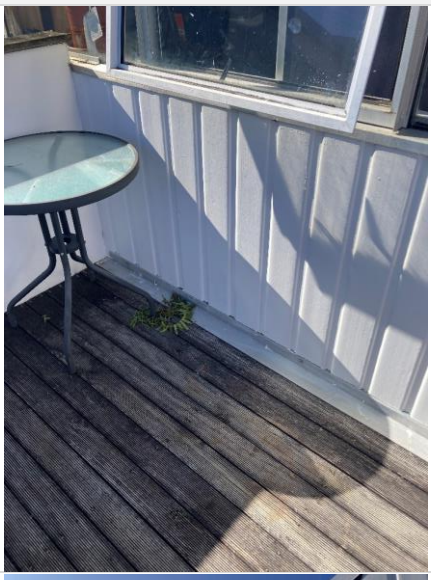
Building 12-13

Building 14-16		
Fibre cement panels under the bay windows on the north-eastern corner of the building		
Fibre cement soffits and window infill panels on the eastern side of building.		
Fibre cement soffits on the northern and western sides of building.		

			
			
Corrugated fibre cement sheet roofing, flashings and associated ridge cap.			

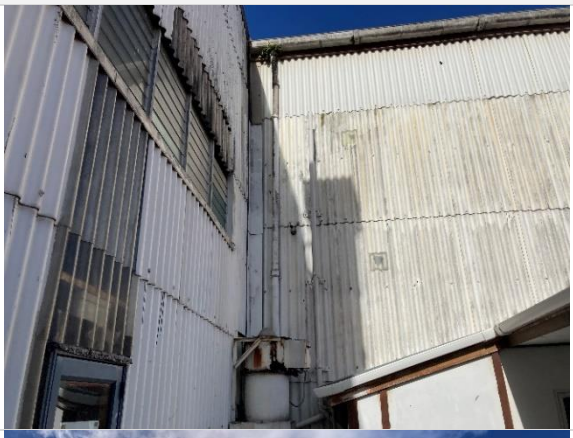
		
		
Corrugated fibre cement ('Super-12') cladding on the upper half of the southern end of the building.		

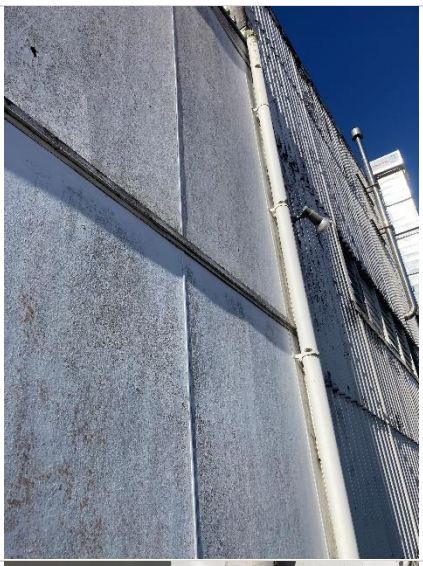
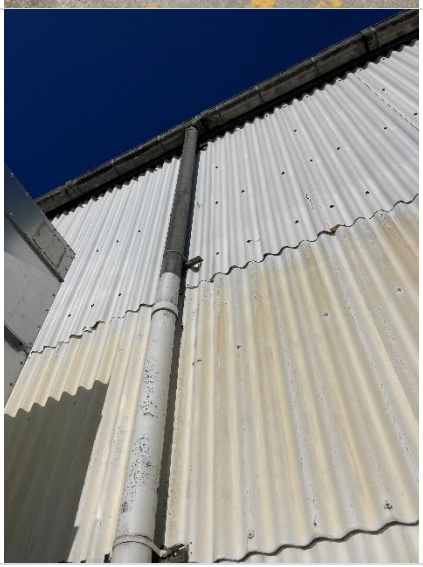
			
			
Corrugated fibre cement gable ends on the northern end of the building.			

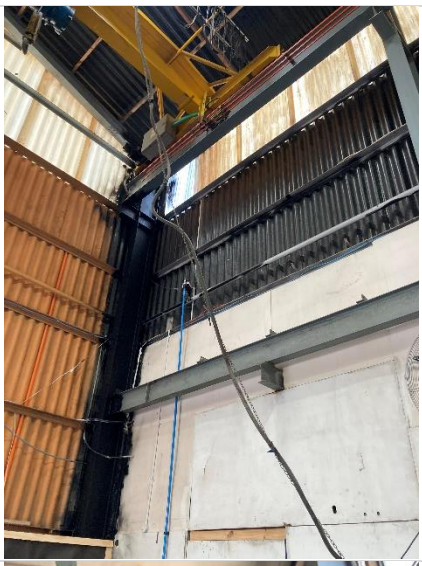
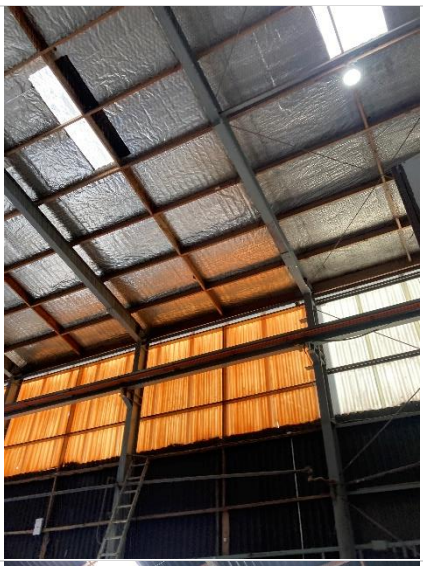
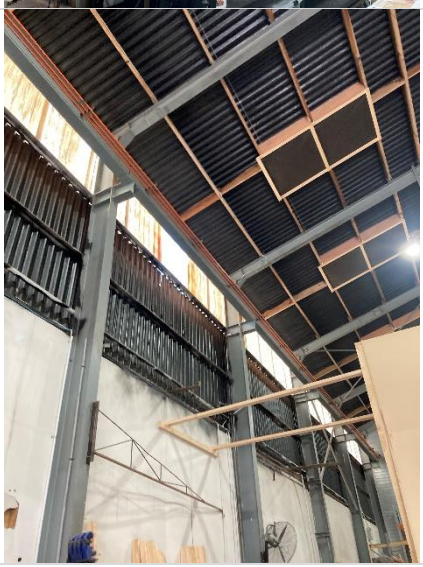
Building 19-19a		
Corrugated fibre cement cladding on the western and south-western sides of the ground and first floors.		
		
		

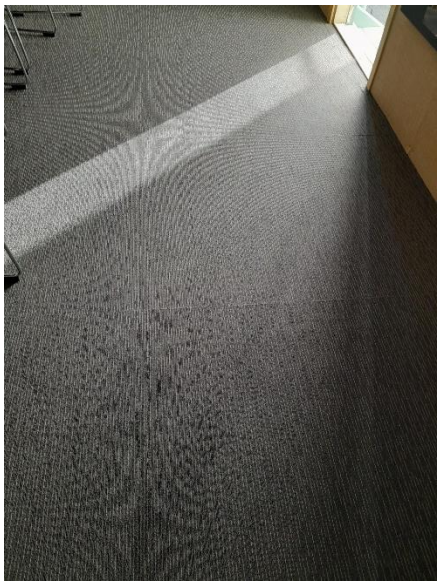
Corrugated fibre cement cladding on the western and south-western sides of the ground and first floors.		
Fibre cement soffits by the three entrance ways on the western side of the building.		
Woodgrain patterned fibre cement cladding around the northern and eastern sides of the first floor and the vestibule area.		

Fibre cement boards with textured coating on the northern, southern and western sides of the building.		
		

Building 34-38		
Fibre cement wall cladding on the building.		
		
Corrugated fibre cement wall cladding on the southern side of the building.		
Corrugated fibre cement wall cladding on the southern side of the building.		

				
Fibre cement gutters, downpipes, and rain headers on the building.				
				

Corrugated fibre cement “super-six” roofing material covering the entirety of the main building				
				
				

Temporary Building		
		
		

APPENDIX D: MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires testing/calibration laboratories to apply procedures for estimating uncertainty of measurement, report the estimated uncertainty of measurement, and where applicable retain records as necessary.

Uncertainties can arise through systematic errors and random errors. The laboratory shall identify all the potential contributions to uncertainty in the sampling and testing methodology. The factors which contribute to uncertainty associated with laboratory results are important to identify and control. Due to the nature of the fibre counting method, there is always a large subjective variability inherent within the results. The causes of measurement uncertainty arise from two main sources:

Sources relating to environment variables in the workplace: The uncertainty that arises from environmental conditions within the workplace being sampled is extremely difficult to define. This is as there is any number of factors that could affect the level of dust that an air monitor picks up. These may include, but are not limited to, air speed and direction, humidity, temperature, sources of dust creation or disturbance, height and position of the air monitor and rainfall. As each workplace environment is different, and changes with time, there is no real method to account for this variation empirically. The best way to account for this source of variation is by taking multiple samples, and counting a subsequent number of slides, from a single workplace.

Sources relating to sampling and fibre counting processes: The sources of variation intrinsic to the sampling and counting processes are easier to account for. Each set of equipment used in the process introduces a new source of error and therefore variability that needs to be accounted for. As this is a standardized process, the sources of error should be mostly the same for any laboratory. The sources of variability arising from sampling include master flow meter calibration, pump flow rate calibration, pump flow rate variability, time of sampling, and sampling uncertainty. The sources of variability arising from sample analysis include master stage micrometer, calibration of graticule, area of exposed filter and analysis uncertainty.

Prior research outlined in both the National Occupational health and Safety Commission (NOHSC 3003) and in HSG 248 identify that the sources of variability used to establish their confidence limits, which are used by this laboratory, are mainly caused by inter-laboratory variability. The study done by the National Asbestos Program (NAP) processed a total of 25,840 slides and found that over 80% of uncertainty was contributed by inter-laboratory variability, with 10-20% being caused by known sampling and counting variables. Similarly, a study done using data from the Regular inter-laboratory Counting Exchange (RICE) in the United Kingdom found that the total contribution to uncertainty from calibration, timing and flow measurements could be regarded as negligible when compared to the much large contribution from random and subjective errors associated with fibre counting and that they are adequately described using the already established 95% confidence limits.

APPENDIX E: LABORATORY RESULTS

FocusAnalytics

Certificate of Analysis

Client: Thomas Consultants
Client Contact: Simon Ness
Tel: 09 836 1804
Email: simon.ness@tcec.co.nz
Address: PO Box 12-1393, Henderson, Auckland 0650

Focus Analytics Ltd
Unit C1, 4 Pacific Rise
Mount Wellington
Auckland 1060
Tel: +64 (0) 9 525 0568

Site: Henderson Film Studios - 3a

Date sample(s) received: 04/08/2022 **Date sample(s) analysed and issued:** 5/08/2022

Samples taken by: Simon Ness **Certificate / Job Number:** S-11470/Henderson Film Studios - 3a

Lab ID	Sample ID	Sample Details	Sample type	Sample size	Fibres Identified
1	1	Swab - service trenches	Swab	Sufficient	**CHR**, ORF, SMF *
2	2	Swab - service trenches	Swab	Sufficient	**CHR**, ORF, SMF *
3	3	Vinyl - external and internal	Vinyl Products	Sufficient	ORF, NAD
4	4	Paper below roof	Bituminous Product	Sufficient	**CHR**, ORF
5	5	Soffit	Cement Product	Sufficient	ORF, NAD
6	6	Entrance fibre cement panels	Cement Product	Sufficient	**AMO**, **CHR**

Analytical Notes:	* Lab ID Henderson Film Studios - 3a-1: 1 bundle of CHR * Lab ID Henderson Film Studios - 3a-2: Multiple bundles of CHR

Fibre Identification Key:

*** – See Analytical Notes**
CHR – Chrysotile (White Asbestos)
AMO – Amosite (Brown / Grey Asbestos)
CRO – Crocidolite – (Blue Asbestos)
UMF – Unknown Mineral Fibre
ORF – Organic Fibre
SMF – Synthetic Mineral Fibre
NFD – No Fibres Detected
NAD – No Asbestos Detected

Analysis Methods:

1. **Samples submitted have been analysed to determine the presence of asbestos using low powered stereo microscopy followed by polarised light microscopy including dispersion staining techniques as documented in *AS 4964-2004* and in company procedures NPM-TP03 Technical Procedure for Qualitative identification of asbestos in bulk samples.**
2. **Any opinions and interpretation of test results fall outside the scope of accreditation.**
3. **Focus Analytics did not carry out any sampling and the data presented are based on the samples submitted.**
4. **This certificate should be read in its entirety and shall not be reproduced except in full, without written approval of the laboratory.**

FocusAnalytics

Analyst Name:	Lauren Pickett	**Analyst Signature:**	
Reviewed By KTP:	Colin Wang	**Reviewer Signature:**	Colin Wang

FocusAnalytics

Certificate of Analysis

Client: Thomas Consultants
Client Contact: Simon Ness
Tel: 09 836 1804
Email: simon.ness@tcec.co.nz
Address: PO Box 12-1393, Henderson, Auckland 0650

Focus Analytics Ltd
Unit C1, 4 Pacific Rise
Mount Wellington
Auckland 1060
Tel: +64 (0) 9 525 0568

Site: Henderson Film Studios - 10

Date sample(s) received: 04/08/2022 **Date sample(s) analysed and issued:** 4/08/2022

Samples taken by: Simon Ness **Certificate / Job Number:** S-11469/Henderson Film Studios - 10

Lab ID	Sample ID	Sample Details	Sample type	Sample size	Fibres Identified
1	1	Fibre cement panel - External cladding	Cement Product	Sufficient	ORF, NAD
Analytical Notes:	**-**				

Fibre Identification Key:

*** – See Analytical Notes**
CHR – Chrysotile (White Asbestos)
AMO – Amosite (Brown / Grey Asbestos)
CRO – Crocidolite – (Blue Asbestos)
UMF – Unknown Mineral Fibre
ORF – Organic Fibre
SMF – Synthetic Mineral Fibre
NFD – No Fibres Detected
NAD – No Asbestos Detected

Analysis Methods:

1. **Samples submitted have been analysed to determine the presence of asbestos using low powered stereo microscopy followed by polarised light microscopy including dispersion staining techniques as documented in *AS 4964-2004* and in company procedures NPM-TP03 Technical Procedure for Qualitative identification of asbestos in bulk samples.**
2. **Any opinions and interpretation of test results fall outside the scope of accreditation.**
3. **Focus Analytics did not carry out any sampling and the data presented are based on the samples submitted.**
4. **This certificate should be read in its entirety and shall not be reproduced except in full, without written approval of the laboratory.**

Analyst Name: Lauren Pickett **Analyst Signature:**

Reviewed By KTP: Kathryn MacKay **Reviewer Signature:**

Hill Laboratories
BETTER TESTING BETTER RESULTS

R J Hill Laboratories Limited
1 Clyde Street
Private Bag 3205
Hamilton 3240, New Zealand

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Email mail@hill-labs.co.nz
Web www.hill-labs.co.nz

ANALYSIS REPORT

Client:	Thomas Civil & Environmental Consultants	**Lab No:**	1600203 A2Pv1
Contact:	Thomas Civil & Environmental Consultants	**Date Registered:**	14-Jun-2016
	PO Box 121393	**Date Reported:**	16-Jun-2016
	Henderson	**Quote No:**	72895
	Auckland 0650	**Order No:**	
		Client Reference:	AFS-Workshops 14,16
		Submitted By:	Thomas Civil & Environmental Consultants

Sample Type: Building Material

Sample Name	Lab Number	Sample Category	Sample Weight on receipt	Asbestos Presence / Absence
1	1600203.1	Gasket	9.83	Chrysotile (White Asbestos) detected.
2	1600203.2	Linoleum / Vinyl floor tile	11.60	Chrysotile (White Asbestos) detected.
3	1600203.3	Linoleum / Vinyl floor tile	12.36	Asbestos NOT detected.
4	1600203.4	Fibre Cement	86.70	Amosite (Brown Asbestos) and Chrysotile (White Asbestos) detected.
5	1600203.5	Fibre Cement	90.95	Amosite (Brown Asbestos) and Chrysotile (White Asbestos) detected.
6	1600203.6	Fibre Cement	18.04	Chrysotile (White Asbestos) detected.
7	1600203.7	Linoleum / Vinyl floor tile	15.53	Asbestos NOT detected.

Analyst's Comments

Appendix No.1 - Chain of Custody

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Building Material

Test	Method Description	Default Detection Limit	Sample No
Asbestos in Bulk Material			
Sample Category	Assessment of sample type. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland.	-	1-7
Sample Weight on receipt	Sample weight. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland.	0.01 g	1-7
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	-	1-7

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

This report must not be reproduced, except in full, without the written consent of the signatory.

Ian Murgatroyd BSc
Auckland Branch Manager

APPENDIX 2 CERTIFICATES

FocusAnalytics

ACCREDITED LABORATORY
ACCREDITATION Nº: 1308

Certificate of Analysis

Client: Protec Consulting
Client Contact: Simon Brailey
Tel: 02758406841
Email: simon.brailey@weareprotec.co.nz
Address: Unit 1 Lower Floor 57 Walls Road
Penrose, Auckland 1061

Focus Analytics Ltd
Unit 3
57 Walls Road
Penrose
Auckland 1061
Tel: +64 (0) 9 525 0568

Site: 34-38 Henderson Valley Road, Henderson

Date sample(s) received: 16/05/19

Date sample(s) analysed: 16/05/19

Samples taken by: Simon Brailey

Certificate / Job Number: B-19-1009/ A-00843

Lab ID	Sample ID	Sample Details	Sample type	Size/weight cm /g	Fibres Identified	Asbestos present
1	001	External walls, cladding	Cement product	Medium	CHR, AMO	YES
2	002	External walls, guttering	Cement product	Small	CHR, AMO	YES
3	003	External walls, soffit	Cement product	Small	ORF, NAD	NO
4	004	External walls, cladding	Cement product	Medium	ORF, NAD	NO
5	005	External ground	Cement product	Medium	CHR, AMO	YES
6	006	External walls, cladding	Cement product	Medium	CHR, ORF	YES
7	007	External walls, cladding	Cement product	Large	CHR, AMO	YES
8	008	External ground	Cement debris	Medium	CHR, AMO	YES
9	009	External ground	Cement debris	Medium	CHR, AMO	YES
10	010	External roof soffits	Cement product	Small	CHR, AMO	YES
11	011	External roof	Cement product	Small	CHR, AMO, CRO	YES
12	012	External walls, fascia, & doors	Cement product	Small	CHR, ORF	YES
13	013	External walls, cladding	Cement product	Small	CHR, ORF	YES
14	014	External roof	Cement product	Medium	CHR, AMO	YES
15	015	External ground	Cement debris	Small	CHR, AMO	YES
16	016	External ground	Cement debris	Large	CHR	YES
17	017	External walls, cladding	Cement product	Medium	CHR, ORF	YES
18	018	Store floor	Vinyl product	Medium	ORF, NAD	NO

Fibre Identification Key:

CHR – Chrysotile (White Asbestos)
AMO – Amosite (Brown / Grey Asbestos)
CRO – Crocidolite – (Blue Asbestos)
UMF – Unknown Mineral Fibre
ORF – Organic Fibre
SMF – Synthetic Mineral Fibre
NFD – No Fibres Detected
NAD – No Asbestos Detected

Analysis Methods:

1. Samples submitted have been analysed to determine the presence of asbestos using low powered stereo microscopy followed by polarised light microscopy including dispersion staining techniques as documented in AS 4964-2004 and in company procedures TP04 Technical Procedure for Qualitative identification of asbestos in bulk samples
2. Any opinions and interpretation of test results fall outside the scope of accreditation.
3. The laboratory is not responsible for sampling errors when we have not taken the sample.
4. This certificate should be read in its entirety and shall not be reproduced except in full, without written approval of the laboratory.

FocusAnalytics

ACCREDITED LABORATORY
ACCREDITATION Nº: 1308

Analyst Name:	Rosavina Palmer	Analyst Signature:	
Reviewed By KTP:	Ian Greaves	Reviewer Signature:	

Hill Laboratories
TRIED, TESTED AND TRUSTED

R J Hill Laboratories Limited
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Grafton
Auckland 1010 New Zealand

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T +64 7 858 2000
E mail@hill-labs.co.nz
W www.hill-laboratories.com

Certificate of Analysis

Client:	Thomas Consultants Limited	**Lab No:**	2205570 A2Pv1
Contact:	Thomas Consultants Limited	**Date Received:**	09-Jul-2019
	PO Box 121393	**Date Reported:**	10-Jul-2019
	Henderson	**Quote No:**	72895
	Auckland 0650	**Order No:**	
		Client Reference:	AA Carriers - AFS BULK
		Add. Client Ref:	Sampled: 8/07/19
		Submitted By:	Nick McCormick

Sample Type: Building Material

Sample Name	Lab Number	Sample Category	Sample Weight on receipt (g)	Asbestos Presence / Absence
1	2205570.1	Fibre Cement	19.58	Chrysotile (White Asbestos) detected. Organic fibres detected.
2	2205570.2	Fibre Cement	15.35	Chrysotile (White Asbestos) detected. Organic fibres detected.
3	2205570.3	Fibre Board	12.15	Asbestos NOT detected. Organic fibres detected.
4	2205570.4	Bituminous Product	0.59	Asbestos NOT detected. Organic fibres detected.
5	2205570.5	Linoleum / Vinyl floor tile	0.67	Asbestos NOT detected.

Analyst's Comments

Appendix No.1 - Chain of Custody

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.
Unless otherwise indicated, analyses were performed at Hill Laboratories, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Building Material

Test	Method Description	Default Detection Limit	Sample No
Asbestos in Bulk Material			
Sample Category	Assessment of sample type. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland.	-	1-5
Sample Weight on receipt	Sample weight. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland.	0.01 g	1-5
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; 72 Grafton Road, Auckland. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	-	1-5

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

Keith Benson HNC Chem
Laboratory Technician - Asbestos