



## **Hazardous Building Materials Assessment**

David Braley Research Centre  
20 Copeland Avenue, Hamilton,  
Ontario

Prepared for:

### **Hamilton Health Sciences**

237 Barton Street East  
Hamilton, Ontario, L8L 2X2

January 14, 2021

Pinchin File: 269453.021



**Hazardous Building Materials Assessment**

David Braley Research Centre, 20 Copeland Avenue, Hamilton, Ontario  
Hamilton Health Sciences

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**Issued to:** Hamilton Health Sciences  
**Issued on:** January 14, 2021  
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**Issuing Office:** Hamilton, ON

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## **EXECUTIVE SUMMARY**

Hamilton Health Sciences (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment David Braley Research Centre, located at 20 Copeland Avenue, Hamilton, Ontario. Pinchin performed the assessment on December 18, 2020.

The objective of the assessment was to identify specified hazardous building materials in preparation for long-term management and limited pre-construction work. The objective of the assessment was to document the locations of specified hazardous building materials, evaluate their condition and develop corrective action plans as required for the purposes of long-term management. If performing construction, results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed area consisted of all parts of the building, except for the roof.

## **SUMMARY OF FINDINGS**

Asbestos: Asbestos-containing materials were not found.

Lead: Lead is presumed to be present in electrical components, including wiring connectors, grounding conductors, glazing on ceramic tiles, and solder on pipe connections.

Silica: Crystalline silica is present in concrete, mortar, masonry, ceramics, and grout.

Mercury: Mercury vapour is present in light tubes.

Mould and Water Damage: Water staining was observed on an acoustic ceiling tile on the Third Floor (Location 3001).



## SUMMARY OF RECOMMENDATIONS

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations.

1. Prepare plans and perform specifications for hazardous material removal required for the planned work. The specifications should include the scope of work, safe work practices, personal protective equipment, respiratory protection and disposal of waste materials.
2. If suspected hazardous building materials are discovered during the planned work, which are not identified in this report, do not disturb and inform Pinchin immediately to conduct further testing.
3. Investigate any items excluded from the scope of work of this report (destructive testing (i.e. coring and/or removal of building finishes and components), and sampling of materials not previously tested (i.e. roofing materials, caulking, mastics/adhesives, gaskets, elevator and lift breaks, etc.)). Ideally this investigation will be performed as part of the development of the specifications, or at minimum immediately prior to commencing renovations.
4. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
5. Retain a qualified consultant to specify, inspect and verify the successful removal of hazardous materials.
6. Update the asbestos inventory upon sampling of items excluded from this assessment.
7. If damage to hazardous materials are found, they are to be reported to the HHS Project Manager immediately for corrective actions.
8. Recycle mercury-containing light tubes when removed from service.
9. Follow appropriate safe work procedures when handling or disturbing silica, lead and potential mould.

*This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.*



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## **1.0 INTRODUCTION AND SCOPE**

Hamilton Health Sciences (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of the David Braley Research Centre, located at 20 Copeland Avenue, Hamilton, Ontario. Pinchin performed the assessment on December 18, 2020.

The objective of the assessment was to identify specified hazardous building materials in preparation for long-term management and limited pre-construction work. The objective of the assessment was to document the locations of specified hazardous building materials, evaluate their condition and develop corrective action plans as required for the purposes of long-term management. If performing construction, results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed area consisted of all parts of the building, except for the roof.

### **1.1 Scope of Assessment**

The assessment was performed to establish the location and type of specified hazardous building materials incorporated in the structure(s) and its finishes. The assessment area consisted of all parts of the building, except for the roof.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos
- Lead
- Silica
- Mercury
- Mould

The following Designated Substances are not typically found in building materials in a composition/state that is hazardous and were not included in this assessment:

- Arsenic
- Acrylonitrile
- Benzene
- Coke oven emissions
- Ethylene oxide
- Isocyanates
- Vinyl chloride monomer



## 2.0 BACKGROUND INFORMATION

### 2.1 Building Description

Description Item	Details
Use	Research Centre
Number of Floors	The building is 6 stories with 1 below grade.
Total Area	The assessed area is approximately 200,000 square feet.
Year of Construction	The building was constructed in 2008.
Structure	Concrete, structural steel
Exterior Cladding	Masonry, glass curtain wall
HVAC	Forced air
Roof	Not assessed
Flooring	Ceramic tiles, linoleum sheet flooring, carpet, vinyl floor tiles
Interior Walls	Drywall, concrete block
Ceilings	Acoustic ceiling tiles, drywall

### 2.2 Existing Reports

No existing reports were provided for reference.

## 3.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the hazardous materials identified and their locations. For details on approximate quantities, assessment and locations of hazardous materials; refer to the Hazardous Material Summary Report and All Data Report in Appendix V and VI.

### 3.1 Asbestos

#### 3.1.1 Pipe Insulation

Pipes are insulated with fibreglass, or other non-asbestos insulation such as mineral fibre or elastomeric foam insulation.

#### 3.1.2 Duct Insulation and Mastic

Ducts are either uninsulated or insulated with non-asbestos fibreglass (foil-faced).

Grey duct mastic (Photo 1) present on seams and joints on ducts throughout the assessed area does not contain asbestos (samples S0001A-C).

Red duct mastic (Photo 2) present on seams and joints on ducts throughout the assessed area does not contain asbestos (samples S0003A-C).

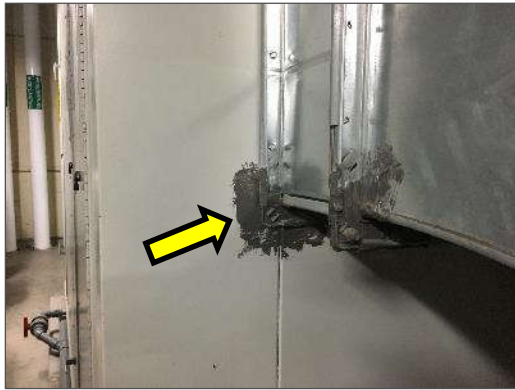


Photo 1

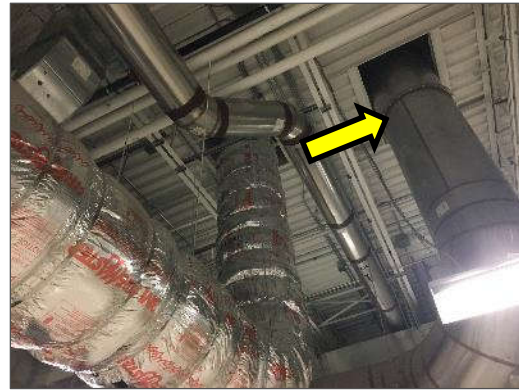


Photo 2

### 3.1.3 Mechanical Equipment Insulation

Mechanical equipment are either uninsulated or insulated with non-asbestos fibreglass.

### 3.1.4 Vermiculite

Loose fill vermiculite debris was not observed in the spaces or areas inspected. Destructive testing was not performed, and vermiculite may be present within masonry block walls, above solid ceilings or other void spaces.

### 3.1.5 Acoustic Ceiling Tiles

All ceiling tiles are presumed to be non-asbestos based on the age of the materials determined from the age of the building construction (2008). The tiles were manufactured after asbestos was stopped being used in acoustic ceiling tiles.

### 3.1.6 Drywall Joint Compound

Asbestos in drywall joint compound was banned in Canada in 1980. Drywall joint compound was installed after 1986 (1980 plus a reasonable non-compliance period based on our experience) and is assumed to contain no asbestos.

### 3.1.7 Sheet Flooring

Sheet flooring present throughout the assessed area is presumed to be non-asbestos based on historical knowledge of the date of installation (2008) and the type of flooring (linoleum without paper backing layer).



### 3.1.8 Vinyl Floor Tiles

Vinyl floor tiles and mastic (12"x12", grey dense fleck pattern) is presumed to be non-asbestos based on historical knowledge of the date of installation (2008).

### 3.1.9 Firestopping

Firestopping sealant (Photo 1) present at conduit penetrations through floors throughout the assessed area does not contain asbestos (samples S0007A-C).



Photo 1

### 3.1.10 Caulking and Putty

The following table presents a summary of caulking and putty present:

Material, Colour, Photo #	Location	Sample Number	Asbestos Type
Caulking, White, Photo 1	On piping, throughout the assessed area	S0002A-C	None Detected
Caulking, Grey, Photo 2	At wall and floor joints, throughout the assessed area	S0006A-C	None Detected
Glazing Putty, Black, Photo 3	At firewall separation above ceilings, throughout the assessed area	S0005A-C	None Detected



Photo 1



Photo 2



Photo 3

### 3.1.11 Other Building Materials

Textured paint (Photo 1) present on concrete block walls throughout the assessed area does not contain asbestos (samples S0004A-C).



Photo 1



### 3.1.12 Presumed Asbestos Materials

The following is a list of materials which may contain asbestos, which were not observed and/or not sampled during the assessment; these materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Roofing tar/asphalt roof coatings (stand-alone adhesive/coating)
- Elevator and lift brakes
- Electrical components
- Mechanical packing, ropes and gaskets
- Vermiculite
- Mastics/adhesives
- Exterior caulking, putties and butyl tape

## 3.2 Lead

### 3.2.1 Paints and Surface Coatings

Refer to the lab report in Appendix II-B and the Hazardous Materials Summary Report in Appendix V for details on paints sampled and their locations.

The following table summarizes the analytical results for paints sampled:

Sample Number, Photo #	Colour, Substrate Description	Location (Location #)	Lead (%)
L0001, Photo 1	Cream, concrete block	Third Floor (Location 3001)	0.0071%
L0002, Photo 2	Cream, drywall	West Atrium (Location 1002)	0.0069%
L0003, Photo 3	Blue/grey, drywall	First Floor (Location 1003)	0.0061%
L0004, Photo 4	Brown, drywall	First Floor (Location 1003)	0.0088%
L0005, no photo	Olive, drywall	Third Floor (Location 3001)	0.0073%

Sample Number, Photo #	Colour, Substrate Description	Location (Location #)	Lead (%)
L0006, Photo 5	Sea foam green, drywall	Third Floor (Location 3001)	0.0077%

Results below 0.009% are considered non-lead-containing paints or surface coatings in accordance with Surface Coating Materials Regulation.



Photo 1



Photo 2



Photo 3

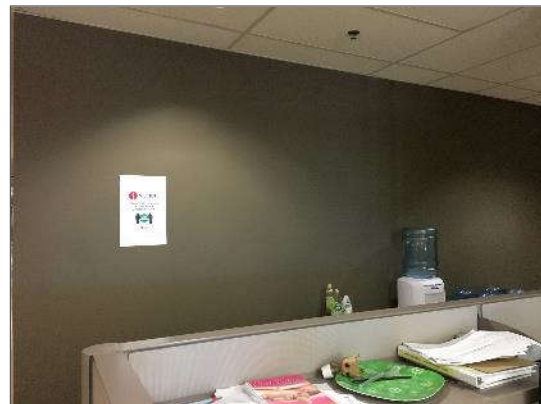


Photo 4



Photo 5

### 3.2.2 *Lead Products and Applications*

Lead products were not found during the assessment.

### 3.2.3 *Presumed Lead Materials*

Lead may be present in a number of materials which were not assessed and/or sampled. The following materials, where found, should be considered to contain lead.

- Electrical components, including wiring connectors, grounding conductors, and solder
- Solder on pipe connections
- Glazing on ceramic tiles

## 3.3 **Silica**

Crystalline silica is a presumed component of the following materials:

- Poured concrete
- Masonry and mortar
- Ceramic tiles and grout

## 3.4 **Mercury**

### 3.4.1 *Lamps*

Mercury vapour is present in fluorescent lamps.

### 3.4.2 *Mercury-Containing Devices*

Thermostats inspected did not contain liquid mercury ampules.

Other mercury-containing devices were not found during the assessment.

### 3.5 Mould

Water staining (Photo 1) is present on an acoustic ceiling tile on the Third Floor (Location 3001). There is approximately 4 sq. ft. of visible water staining.



Photo 1

## 4.0 RECOMMENDATIONS

### 4.1 General

1. Prepare plans and performance specifications for hazardous material removal required for the planned work. The specifications should include the scope of work, safe work practices, personal protective equipment, respiratory protection, and disposal of waste materials.
2. If suspected hazardous building materials are discovered during the planned work, which are not identified in this report, do not disturb and inform Pinchin immediately to conduct further testing.
3. Investigate any items excluded from the scope of work of this report (destructive testing (i.e. coring and/or removal of building finishes and components), and sampling of materials not previously tested (i.e. roofing materials, caulking, mastics/adhesives, gaskets, elevator and lift brakes, etc.)). Ideally this investigation will be performed as part of the development of the specifications, or at minimum immediately prior to commencing renovations.
4. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
5. Retain a qualified consultant to specify, inspect and verify the successful removal of hazardous materials.
6. Update the asbestos inventory upon sampling of items excluded from this assessment.



## **4.2 Remedial Work**

Water staining was noted on one acoustic ceiling tile. Retain a qualified consultant to perform investigation and bulk sampling to determine if mould growth is present. As an alternative, the ceiling tile can be presumed to have mould growth and can be removed and disposed of using methods that comply with provincial guidelines.

## **4.3 Building Renovation Work**

The following recommendations are made regarding renovation involving the hazardous materials identified.

### *4.3.1 Lead*

Presumed lead-containing items should be recycled when taken out of service.

### *4.3.2 Silica*

Construction disturbance of silica-containing products may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with provincial standards or guidelines.

### *4.3.3 Mercury*

Do not break lamps. Recycle mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

### *4.3.4 Mould*

If mould is uncovered inside wall cavities during hand demolition, use appropriate precautions and protect workers using methods that comply with provincial guidelines.

## **5.0 TERMS AND LIMITATIONS**

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties.



Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

## 6.0 REFERENCES

The following legislation and documents were referenced in completing the assessment and this report:

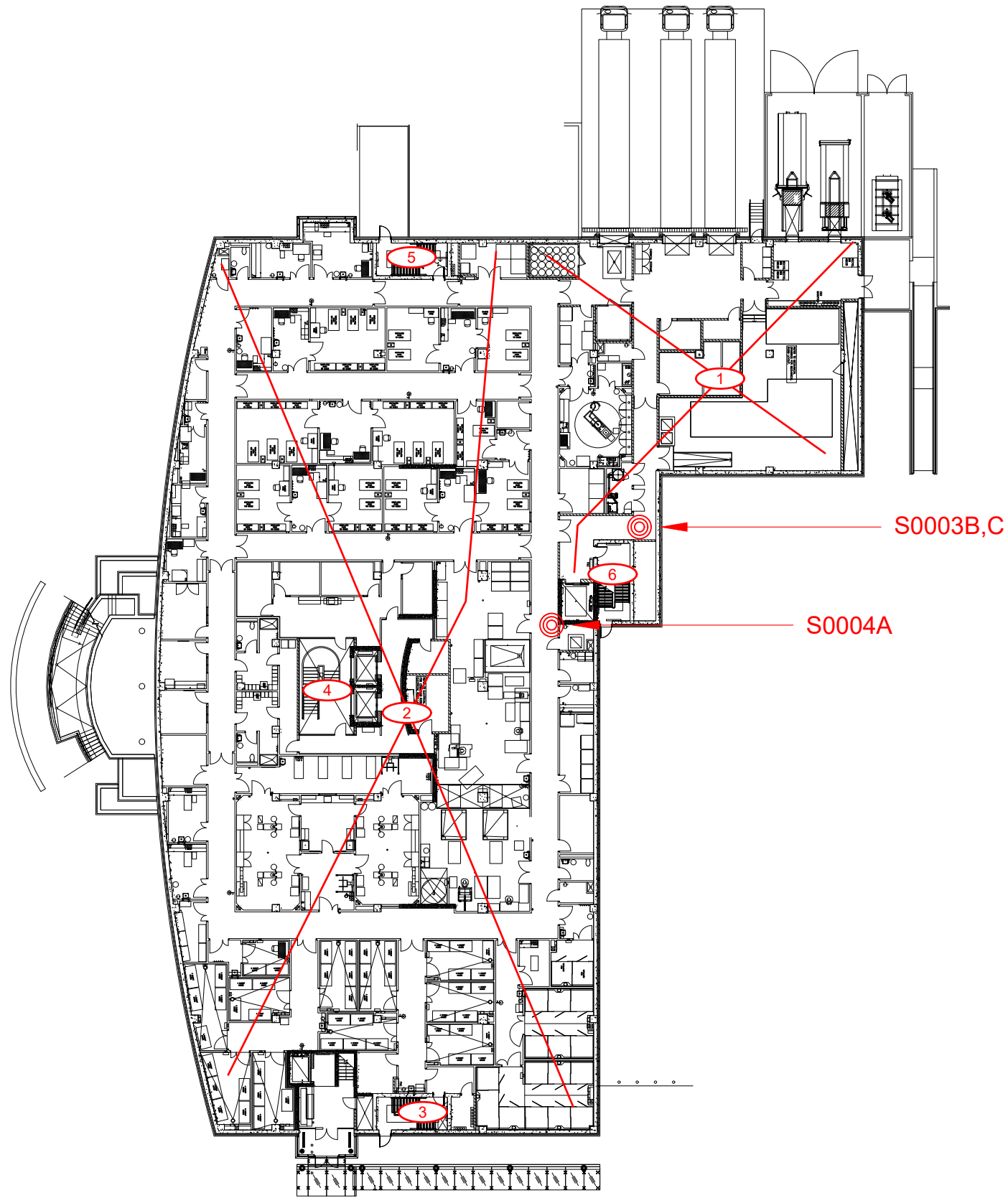
1. Asbestos on Construction Projects and in Buildings and Repair Operations, Ontario Regulation 278/05.
2. Designated Substances, Ontario Regulation 490/09.
3. Lead on Construction Projects, Ministry of Labour Guidance Document.
4. The Environmental Abatement Council of Ontario (EACO) Lead Guideline for Construction, Renovation, Maintenance or Repair.
5. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.
6. Silica on Construction Projects, Ministry of Labour Guidance Document.
7. Alert – Mould in Workplace Buildings, Ontario Ministry of Labour.

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Template: Master Report for Hazardous Materials Assessment (Pre-Construction), HAZ, February 26, 2020



**APPENDIX I**  
**Drawings**



**LEGEND**

- X PINCHIN LOCATION NUMBER
- ⊙ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.

BASE PLAN PROVIDED BY CLIENT.



PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**HAMILTON HEALTH SCIENCES  
237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:  
**DAVID BRALEY RESEARCH BUILDING  
20 COPELAND AVENUE  
HAMILTON, ONTARIO**

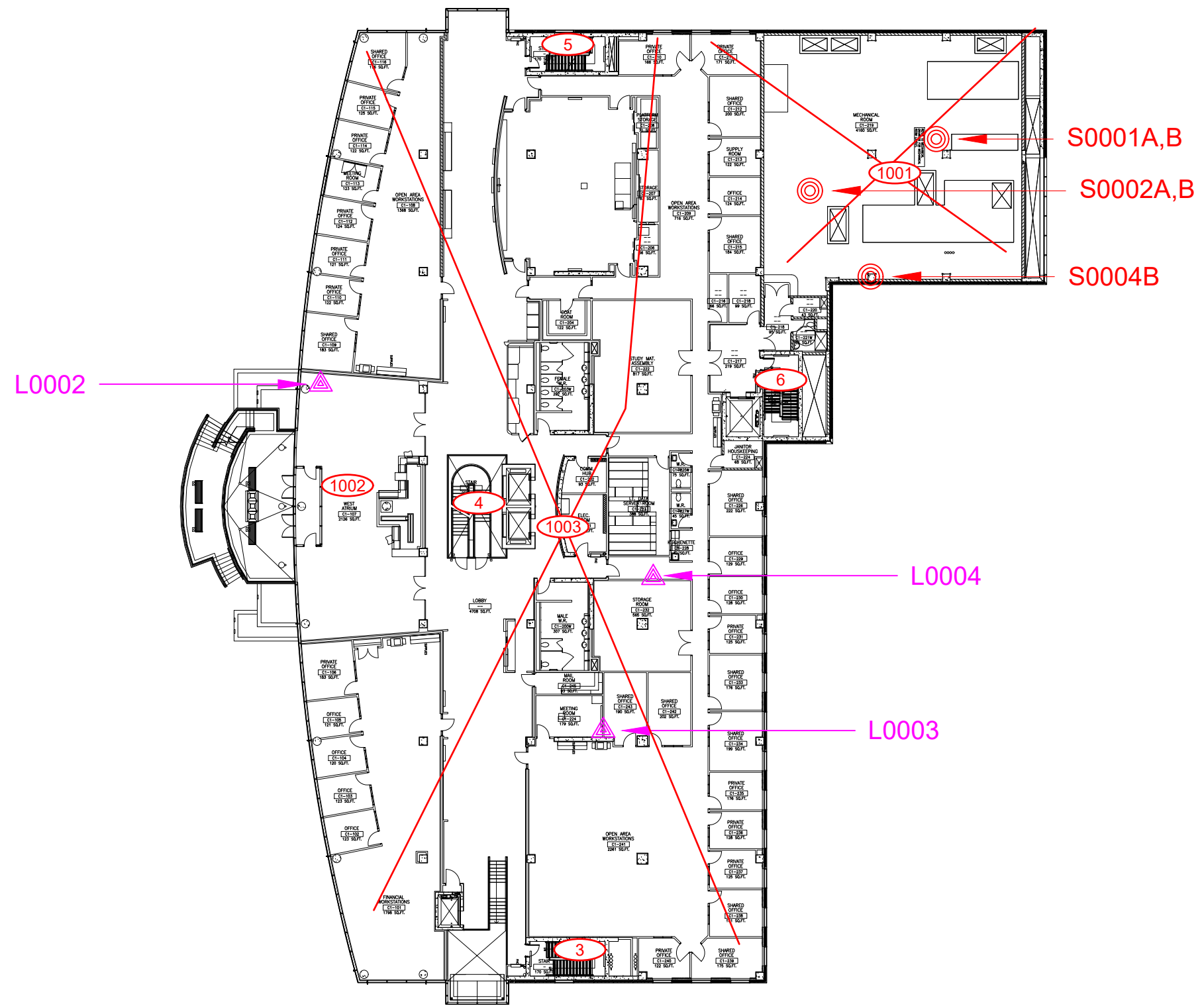
FIGURE NAME:  
**LEVEL B - BASEMENT**

PROJECT NUMBER: 269453.021	SCALE: NOT TO SCALE
DRAWN BY: SR	REVIEWED BY: EB
DATE: JANUARY 2021	FIGURE NUMBER: 1 OF 7



**LEGEND**

- X PINCHIN LOCATION NUMBER
- ◎ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE



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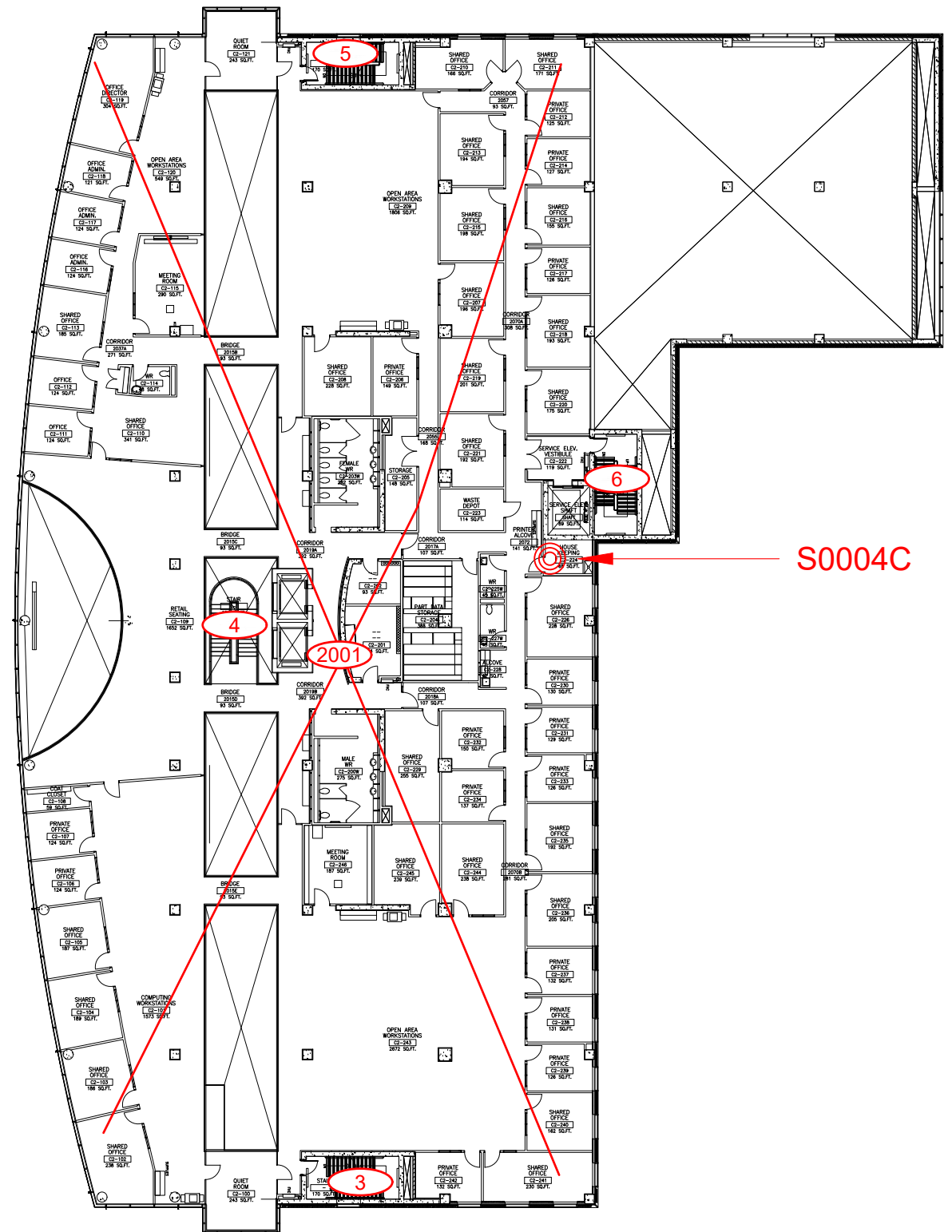
PROJECT NAME:  
**HAZARDOUS BUILDING MATERIALS ASSESSMENT**

CLIENT NAME:  
**HAMILTON HEALTH SCIENCES  
237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:  
**DAVID BRALEY RESEARCH BUILDING  
20 COPELAND AVENUE  
HAMILTON, ONTARIO**

FIGURE NAME:  
**LEVEL 1 - FIRST FLOOR**

PROJECT NUMBER: 269453.021	SCALE: NOT TO SCALE
DRAWN BY: SR	REVIEWED BY: EB
DATE: JANUARY 2021	FIGURE NUMBER: 2 OF 7



- LEGEND**
- X PINCHIN LOCATION NUMBER
  - ◎ ASBESTOS BULK SAMPLE
  - ▲ LEAD BULK SAMPLE

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CLIENT NAME:  
**HAMILTON HEALTH SCIENCES  
237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:  
**DAVID BRALEY RESEARCH BUILDING  
20 COPELAND AVENUE  
HAMILTON, ONTARIO**

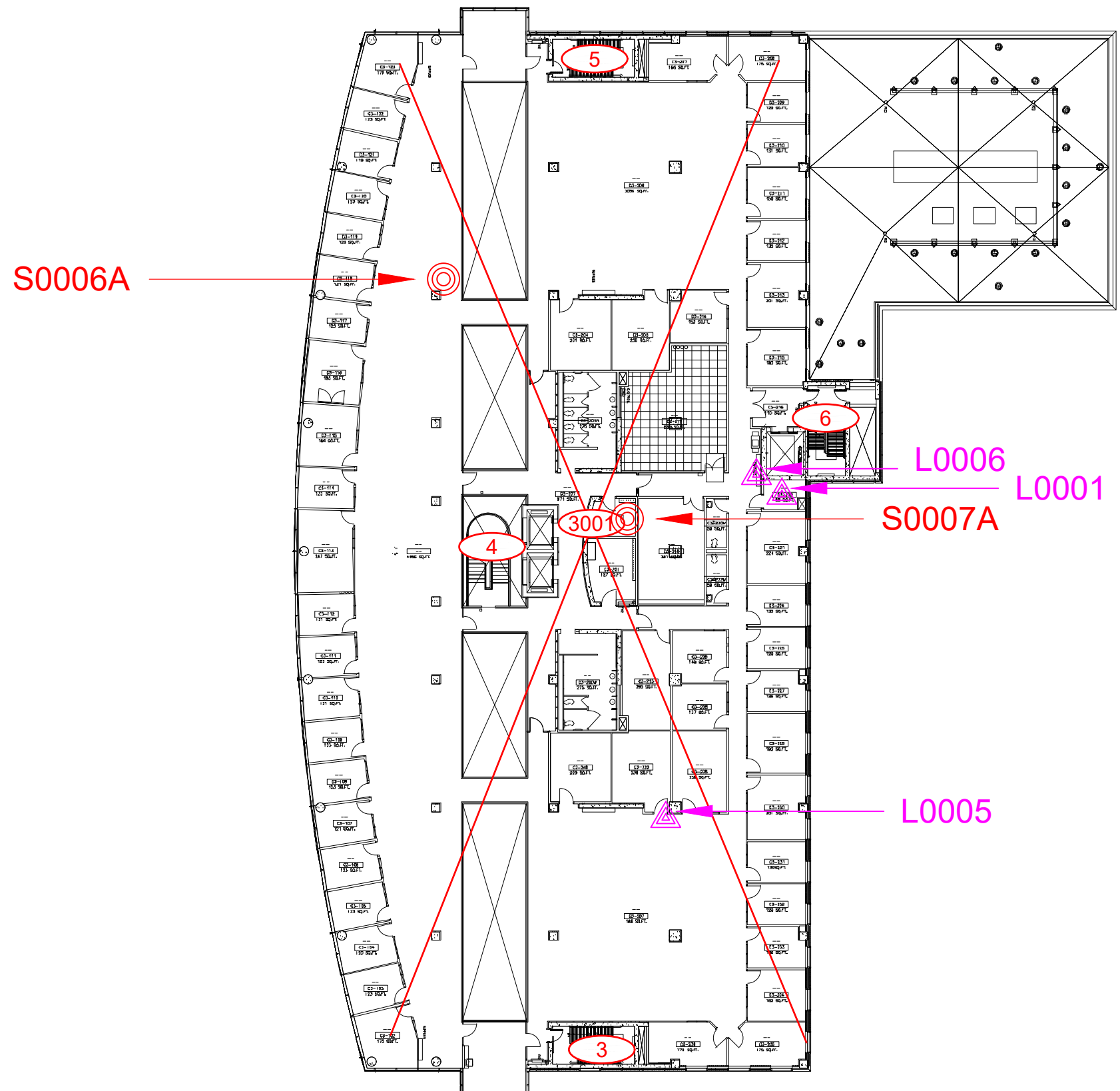
FIGURE NAME:  
**LEVEL 2 - SECOND FLOOR**

PROJECT NUMBER: 269453.021	SCALE: NOT TO SCALE
DRAWN BY: SR	REVIEWED BY: EB
DATE: JANUARY 2021	FIGURE NUMBER: 3 OF 7



**LEGEND**

- X PINCHIN LOCATION NUMBER
- ◎ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE



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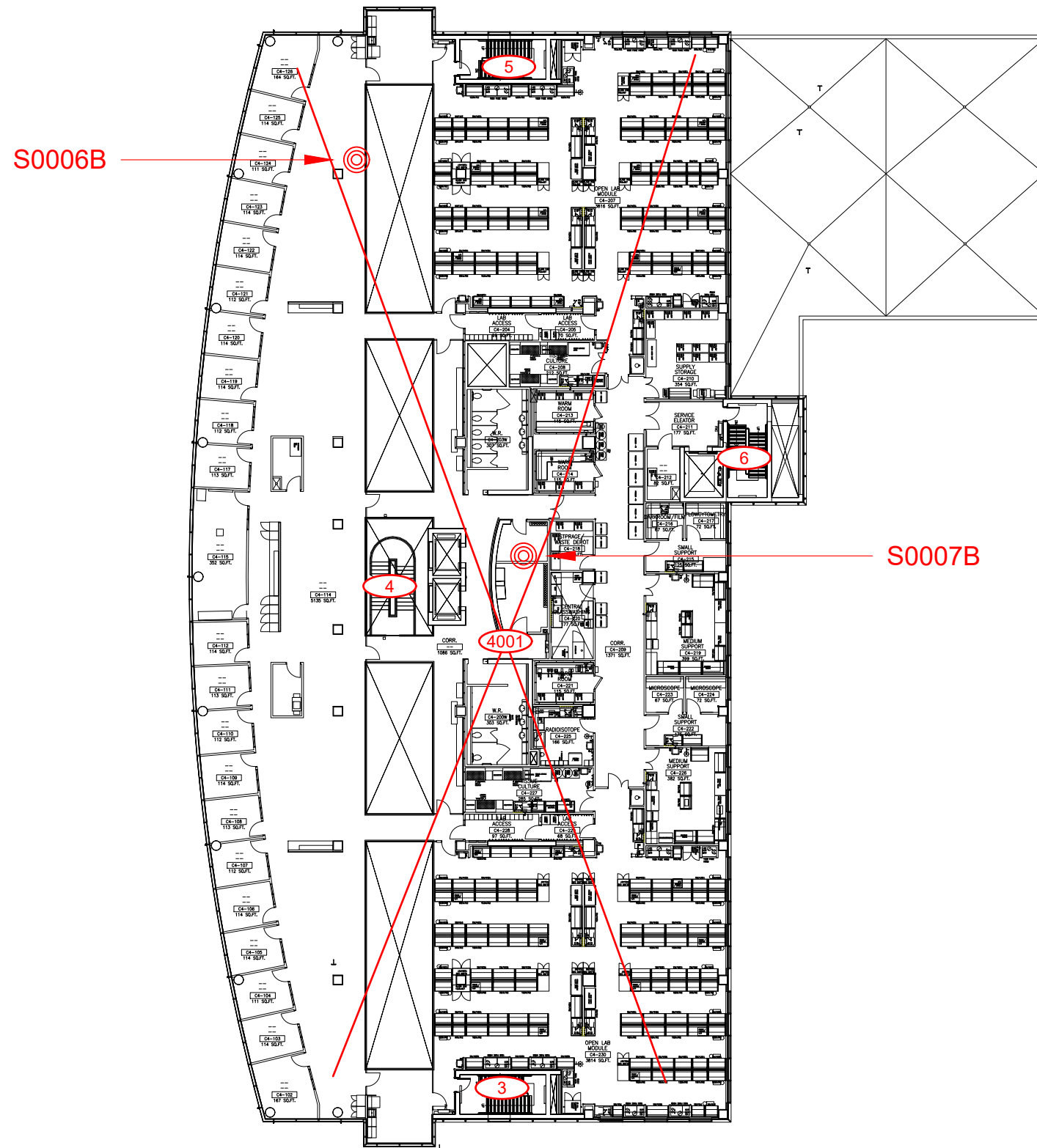
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237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:  
**DAVID BRALEY RESEARCH BUILDING  
20 COPELAND AVENUE  
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FIGURE NAME:  
**LEVEL 3 - THIRD FLOOR**

PROJECT NUMBER: 269453.021	SCALE: NOT TO SCALE
DRAWN BY: SR	REVIEWED BY: EB
DATE: JANUARY 2021	FIGURE NUMBER: 4 OF 7



**LEGEND**

- X PINCHIN LOCATION NUMBER
- ◎ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE

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HAMILTON, ONTARIO**

PROJECT LOCATION:

**DAVID BRALEY RESEARCH BUILDING  
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HAMILTON, ONTARIO**

FIGURE NAME:

**LEVEL 4 - FOURTH FLOOR**

PROJECT NUMBER:

**269453.021**

SCALE:

**NOT TO SCALE**

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DATE:




**JANUARY 2021**

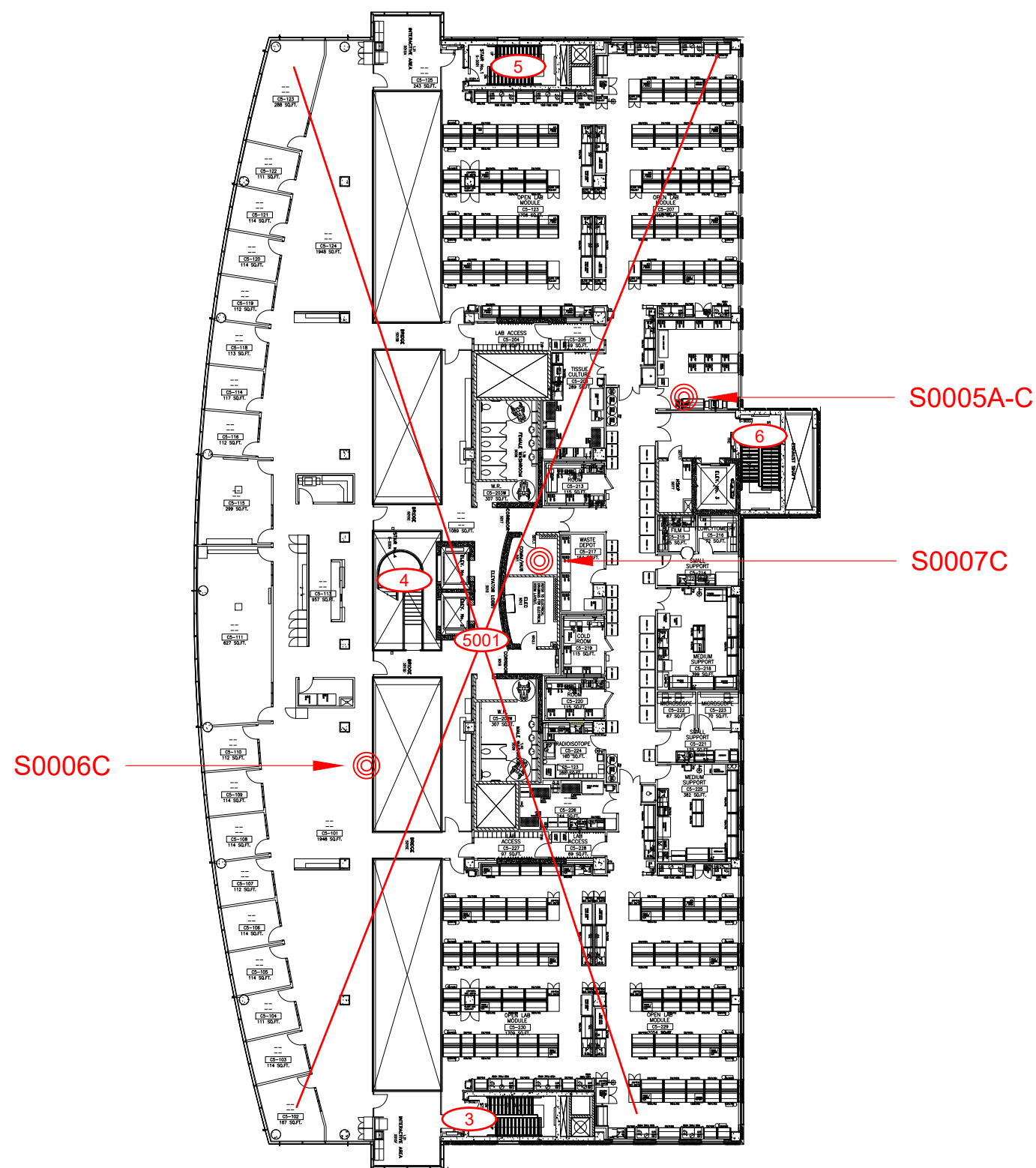
FIGURE NUMBER:

**5 OF 7**



**LEGEND**

-  PINCHIN LOCATION NUMBER
-  ASBESTOS BULK SAMPLE
-  LEAD BULK SAMPLE



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**HAMILTON HEALTH SCIENCES  
237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:

**DAVID BRALEY RESEARCH BUILDING  
20 COPELAND AVENUE  
HAMILTON, ONTARIO**

FIGURE NAME:

**LEVEL 5 - FIFTH FLOOR**

PROJECT NUMBER:

**269453.021**

SCALE:

**NOT TO SCALE**

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**SR**

REVIEWED BY:

**EB**

DATE:

**JANUARY 2021**

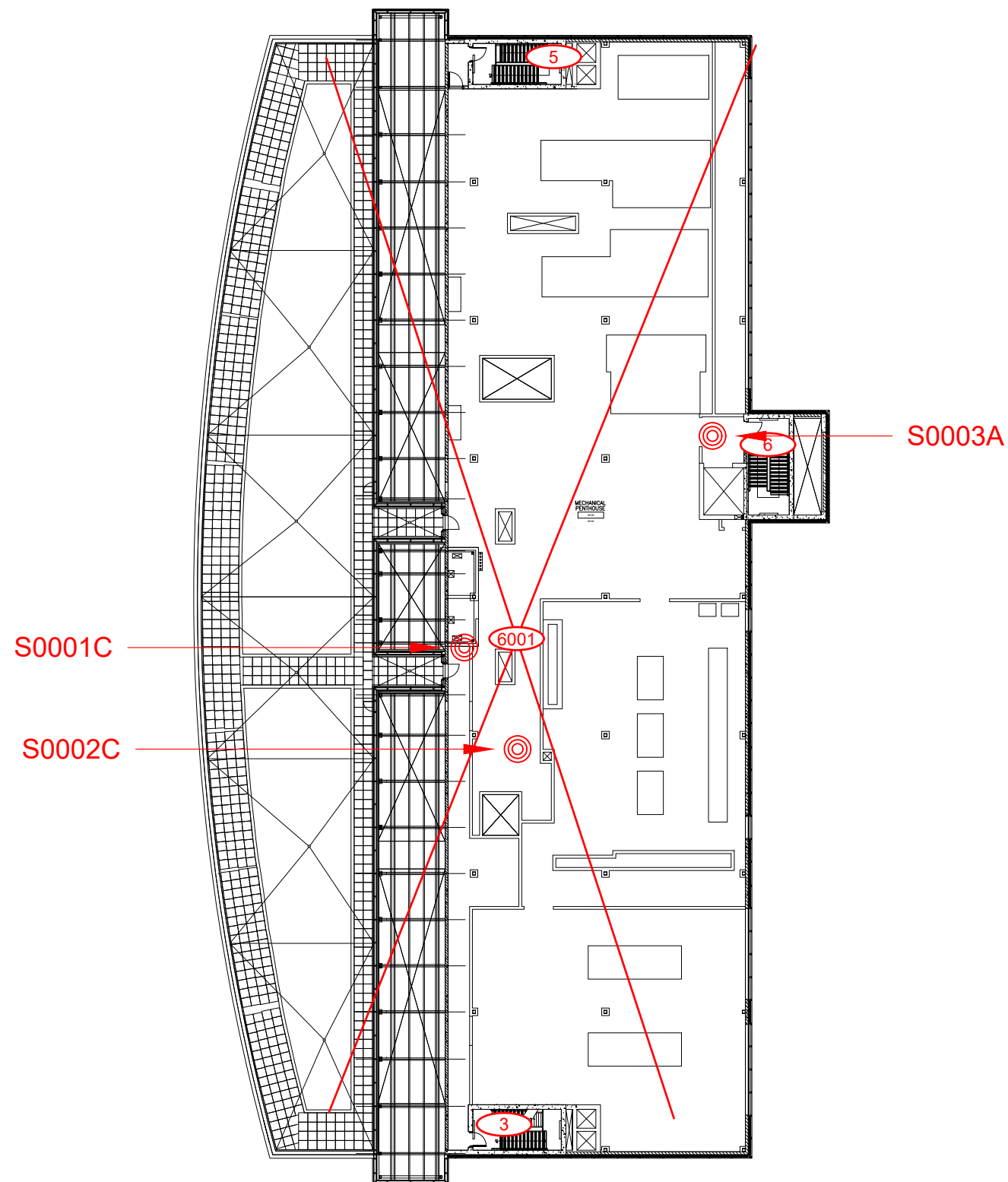
FIGURE NUMBER:

**6 OF 7**



**LEGEND**

- (X) PINCHIN LOCATION NUMBER
- ◎ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE



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237 BARTON STREET EAST  
HAMILTON, ONTARIO**

PROJECT LOCATION:

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HAMILTON, ONTARIO**

FIGURE NAME:

**LEVEL 6 - SIXTH FLOOR**

PROJECT NUMBER:

**269453.021**

SCALE:

**NOT TO SCALE**

DRAWN BY:

**SR**

REVIEWED BY:

**EB**

DATE:

**JANUARY 2021**

FIGURE NUMBER:

**7 OF 7**



**APPENDIX II-A**  
**Asbestos Analytical Certificates**



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E,  
 App.E



**Customer:** Pinchin Ltd.  
 6-875 Main St West  
 Suite 200  
 Hamilton, Ontario L8S 4P9

**Attn:** Emily Balfour  
 Michael Maiorana

**Lab Order ID:** 71956963  
**Analysis ID:** 71956963\_PLM  
**Date Received:** 12/29/2020  
**Date Reported:** 1/5/2021

**Project:** 269453.021, Hamilton Health Sciences, David Braley Research Institute, 20  
 Copeland Avenue, Hamilton, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
S0001A	Duct,Mastic, Grey,Loc:1001,Mechanical Room	<b>None Detected</b>		<b>100% Other</b>	Gray Non Fibrous Homogeneous
71956963PLM_1					Ashed
S0001B	Duct,Mastic, Grey,Loc:1001,Mechanical Room	<b>None Detected</b>		<b>100% Other</b>	Gray Non Fibrous Homogeneous
71956963PLM_2					Ashed
S0001C	Duct,Mastic, Grey,Loc:6001,Mechanical Penthouse	<b>None Detected</b>		<b>100% Other</b>	Gray Non Fibrous Homogeneous
71956963PLM_3					Ashed
S0002A	Piping,Caulking,Over Pvc,Loc:1001,Mechanical Room	<b>None Detected</b>		<b>100% Other</b>	White Non Fibrous Homogeneous
71956963PLM_4					Ashed
S0002B	Piping,Caulking,Over Pvc,Loc:1001,Mechanical Room	<b>None Detected</b>		<b>100% Other</b>	White Non Fibrous Homogeneous
71956963PLM_5					Ashed
S0002C	Piping,Caulking,Over Pvc,Loc:6001,Mechanical Penthouse	<b>None Detected</b>		<b>100% Other</b>	White Non Fibrous Homogeneous
71956963PLM_6					Ashed
S0003A	Duct,Mastic, Red,Loc:6001,Mechanical Penthouse	<b>None Detected</b>	<b>10% Fiber Glass 5% Wollastonite</b>	<b>85% Other</b>	Red, Brown Non Fibrous Homogeneous
71956963PLM_7					Ashed
S0003B	Duct,Mastic, Red,Loc:1,Mechanical Room And Loading Dock	<b>None Detected</b>	<b>10% Fiber Glass 5% Wollastonite</b>	<b>85% Other</b>	Red, Brown Non Fibrous Homogeneous
71956963PLM_8					Ashed

**Disclaimer:** Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Eloisa Blake (21)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
 EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E,  
 App.E



**Customer:** Pinchin Ltd.  
 6-875 Main St West  
 Suite 200  
 Hamilton, Ontario L8S 4P9

**Attn:** Emily Balfour  
 Michael Maiorana

**Lab Order ID:** 71956963  
**Analysis ID:** 71956963\_PLM  
**Date Received:** 12/29/2020  
**Date Reported:** 1/5/2021

**Project:** 269453.021, Hamilton Health Sciences, David Braley Research Institute, 20  
 Copeland Avenue, Hamilton, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
S0003C	Duct,Mastic, Red,Loc:1,Mechanical Room And Loading Dock	None Detected	10% Fiber Glass 5% Wollastonite	85% Other	Red, Brown Non Fibrous Homogeneous
71956963PLM_9					Ashed
S0004A	Wall,Paint,Textured, On Block,Loc:2,Labs	None Detected		100% Other	Cream Non Fibrous Heterogeneous
71956963PLM_10					Ashed, Crushed
S0004B	Wall,Paint,Textured, On Block,Loc:1001,Mechanical Room and Loading Dock	None Detected		100% Other	Cream Non Fibrous Heterogeneous
71956963PLM_11					Ashed, Crushed
S0004C	Wall,Paint,Textured, On Block,Loc:2001,Second Floor	None Detected		100% Other	Cream Non Fibrous Heterogeneous
71956963PLM_12					Ashed, Crushed
S0005A	Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor	None Detected		100% Other	Black Non Fibrous Homogeneous
71956963PLM_13					Ashed
S0005B	Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor	None Detected		100% Other	Black Non Fibrous Homogeneous
71956963PLM_14					Ashed
S0005C	Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor	None Detected		100% Other	Black Non Fibrous Homogeneous
71956963PLM_15					Ashed
S0006A	Caulking,Grey, at wall/floor joint,Loc:3001,Third Floor	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_16					Ashed

**Disclaimer:** Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Eloisa Blake (21)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E,  
App.E



**Customer:** Pinchin Ltd.  
6-875 Main St West  
Suite 200  
Hamilton, Ontario L8S 4P9

**Attn:** Emily Balfour  
Michael Maiorana

**Lab Order ID:** 71956963  
**Analysis ID:** 71956963\_PLM  
**Date Received:** 12/29/2020  
**Date Reported:** 1/5/2021

**Project:** 269453.021, Hamilton Health Sciences, David Braley Research Institute, 20  
Copeland Avenue, Hamilton, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
S0006B	Caulking,Grey, at wall/floor joint,Loc:4001,Fourth Floor	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_17					Ashed
S0006C	Caulking,Grey, at wall/floor joint,Loc:5001,Fifth Floor	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_18					Ashed
S0007A	Floor,Firestopping (mastic),At Conduit Penetration,Loc:3001,Third Fl	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_19					Ashed
S0007B	Floor,Firestopping (mastic),At Conduit Penetration,Loc:4001,Fourth F	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_20					Ashed
S0007C	Floor,Firestopping (mastic),At Conduit Penetration,Loc:5001,Fifth Flo	None Detected		100% Other	Gray Non Fibrous Homogeneous
71956963PLM_21					Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Eloisa Blake (21)

Analyst

Approved Signatory

71956963

Version 1-15-2012

**Client:** Pinchin Ltd.  
**Contact:** Emily Balfour  
 875 Main Street W., Unit 11  
**Address:** Hamilton, ON L8S 4R9  
**Phone:** 905-577-6206  
**Fax:** 905-577-6207  
**Email:** ebalfour@pinchin.com  
 mmaiorana@pinchin.com  
 269453.021, Hamilton Health  
 Sciences, David Braley Research  
 Institute, 20 Copeland Avenue,  
 Hamilton, ON

**Project:**

**Client Notes:**

**P.O. #:** 269453.021

**Date Submitted:** 12/23/2020

**Analysis:** PLM - Stop Positive  
**TurnAroundTime:** 4 days

**\*Instructions:**  
 Use Column "B" for your contact info


To See an Example Click the  
 bottom Example Tab.

Enter samples between "<<" and ">>"

Begin Samples with a "<<" above the first sample  
 and end with a ">>" below the last sample.  
 Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional  
 fields that do not show up on the official  
 report, however they will be included  
 in the electronic data returned to you  
 to facilitate your reintegration of the report data.

**Invoice to:**



**Scientific Analytical Institute**

**4604 Dundas Dr.**  
**Greensboro, NC 27407**  
**Phone: 336.292.3888**  
**Fax: 336.292.3313**  
**Email: lab@sailab.com**

Sample Number    Data 1 (Lab use only)    Sample Description    Data 2 (Lab use only)

Sample Number	Data 1 (Lab use only)	Sample Description	Data 2 (Lab use only)
<<			
S0001A		Duct,Mastic, Grey,Loc:1001,Mechanical Room	
S0001B		Duct,Mastic, Grey,Loc:1001,Mechanical Room	
S0001C		Duct,Mastic, Grey,Loc:6001,Mechanical Penthouse	
S0002A		Piping,Caulking,Over Pvc,Loc:1001,Mechanical Room	
S0002B		Piping,Caulking,Over Pvc,Loc:1001,Mechanical Room	
S0002C		Piping,Caulking,Over Pvc,Loc:6001,Mechanical Penthouse	
S0003A		Duct,Mastic, Red,Loc:6001,Mechanical Penthouse	
S0003B		Duct,Mastic, Red,Loc:1,Mechanical Room And Loading Dock	
S0003C		Duct,Mastic, Red,Loc:1,Mechanical Room And Loading Dock	
S0004A		Wall,Paint,Textured, On Block,Loc:2,Labs	
S0004B		Wall,Paint,Textured, On Block,Loc:1001,Mechanical Room and Loading Dock	
S0004C		Wall,Paint,Textured, On Block,Loc:2001,Second Floor	
S0005A		Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor	

Accepted

Rejected

AKH  
 12-29  
 10:30

72956963

**S0005B**  
**S0005C**  
**S0006A**  
**S0006B**  
**S0006C**  
**S0007A**  
**S0007B**  
**S0007C**

>>

Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor  
Wall,Putty,Black, Firewall Separation,Loc:5001,Fifth Floor  
Caulking,Grey, at wall/floor joint,Loc:3001,Third Floor  
Caulking,Grey, at wall/floor joint,Loc:4001,Fourth Floor  
Caulking,Grey, at wall/floor joint,Loc:5001,Fifth Floor  
Floor,Firestopping (mastic),At Conduit Penetration,Loc:3001,Third Floor  
Floor,Firestopping (mastic),At Conduit Penetration,Loc:4001,Fourth Floor  
Floor,Firestopping (mastic),At Conduit Penetration,Loc:5001,Fifth Floor

**APPENDIX II-B**  
**Lead Analytical Certificates**



# Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy  
EPA SW-846 3050B/6010C/7000B



**Customer:** Pinchin Ltd.  
6-875 Main St West  
Suite 200  
Hamilton, Ontario L8S 4P9

**Attn:** Emily Balfour  
Michael Maiorana

**Lab Order ID:** 71956971  
**Analysis ID:** 71956971\_PBP  
**Date Received:** 12/29/2020  
**Date Reported:** 1/5/2021

**Project:** 269453.021 HBMA David Braley Research Institute 20 Copeland Ave, Hamilton, ON  
HHS

Sample ID	Description	Mass	Concentration	Concentration
Lab Sample ID	Lab Notes	(g)	(ppm)	(% by weight)
L0001	Wall, Masonry, Cream,Loc:3001,Third Floor	0.0562	< 71	< 0.0071%
71956971PBP_1				
L0002	Wall, Drywall And Joint Compound, Cream,Loc:1002,West Atrium	0.0578	< 69	< 0.0069%
71956971PBP_2				
L0003	Wall, Drywall And Joint Compound, Blue/Grey,Loc:1003,First Floor	0.0651	< 61	< 0.0061%
71956971PBP_3				
L0004	Wall, Drywall And Joint Compound, Brown,Loc:1003,First Floor	0.0510	88	0.0088%
71956971PBP_4				
L0005	Wall, Drywall And Joint Compound, Olive,Loc:3001,Third Floor	0.0551	< 73	< 0.0073%
71956971PBP_5				
L0006	Wall, Drywall And Joint Compound, Sea Foam Green,Loc:3001,Third Floor	0.0520	< 77	< 0.0077%
71956971PBP_6				

Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb). Unless indicated, areas and volumes were provided by the customer.

Matthew Caffey (6)

Analyst

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Laboratory Director



71956971

Version 1-15-2012

**Client:** Pinchin Ltd.  
**Contact:** Emily Balfour / Michael Maiorana  
**Address:** 6-875 Main St W, Hamilton, ON  
**Phone:** 365.889.5147  
**Fax:** 905.577.6206  
**Email:** [ebalfour@pinchin.com](mailto:ebalfour@pinchin.com)  
[mmaiorana@pinchin.com](mailto:mmaiorana@pinchin.com)

**Project:** 269453.021 HBMA David Braley  
 Research Institute 20 Copeland  
 Ave, Hamilton, ON HHS

**Client Notes:**

**P.O. #:** 269453.021  
**Date Submitted:** 12/21/2020 0:00

**Analysis:** Paint Chips Flame AA  
**TurnAroundTime:** 5 Day

**\*Instructions:**  
 Use Column "B" for your contact info

To See an Example Click the  
 bottom Example Tab.

6

**Begin Samples with a "<<" above the first sample  
 and end with a ">>" below the last sample.  
 Only Enter your data on the first sheet "Sheet1"**

*Note: Data 1 and Data 2 are optional  
 fields that do not show up on the official  
 report, however they will be included  
 in the electronic data returned to you  
 to facilitate your reintegration of the report data.*

**Scientific  
 Analytical  
 Institute**



**4604 Dundas Dr.  
 Greensboro, NC 27407  
 Phone: 336.292.3888  
 Fax: 336.292.3313  
 Email: lab@sailab.com**

Sample Number	Data 1 (Lab use only)	Sample Description	Data 2 (Lab use only)
---------------	-----------------------	--------------------	-----------------------

<<  
L0001  
L0002  
L0003  
L0004  
L0005  
L0006  
>>

Wall, Masonry, Cream,Loc:3001,Third Floor  
 Wall, Drywall And Joint Compound, Cream,Loc:1002,West Atrium  
 Wall, Drywall And Joint Compound, Blue/Grey,Loc:1003,First Floor  
 Wall, Drywall And Joint Compound, Brown,Loc:1003,First Floor  
 Wall, Drywall And Joint Compound, Olive,Loc:3001,Third Floor  
 Wall, Drywall And Joint Compound, Sea Foam Green,Loc:3001,Third Floor

*Handwritten signature and date: 12-29 PJ-30*

Accepted

Rejected

**APPENDIX III**  
**Methodology**



## **1.0 GENERAL**

Pinchin conducts a room-by-room survey (rooms, corridors, service areas, exterior, etc.) to identify the hazardous building materials as defined by the scope of work. All work is conducted in accordance with our own internal Standard Operating Procedures.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities are recorded. The locations of any samples collected are recorded on small-scale plans.

As-built drawings and previous reports are referenced where provided.

### **1.1 Limitations on Scope**

The assessment excludes the following:

- Articles belonging to the owner, tenant or occupant (e.g. stored items, furniture, appliances, etc.);
- Underground materials or equipment (e.g. vessels, drums, underground storage tanks, pipes, etc.);
- Building envelope, structural components, inaccessible or concealed materials or other items where sampling may cause consequential damage to the property;
- Energized systems (e.g. internal boiler components, elevators, mechanical or electrical components);
- Controlled products (e.g. stored chemicals, operational or process-related substances); and
- Materials not typically associated with construction (e.g. settled dust, spills, residual contamination from prior spills, etc.).

The assessment is limited to non-intrusive testing. Concealed spaces such as those above solid ceilings and within shafts and pipe chases are accessed via existing access panels only. Demolition of walls, solid ceilings, structural items, interior finishes or exterior building finishes, to determine the presence of concealed materials is not conducted.

### **1.2 Asbestos**

An inspection is conducted for the presence of friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.

A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Samples are collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy is also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start / finish date of construction and associated usage of ACM.

Asbestos in drywall joint compound was banned in Canada in 1980. Drywall joint compound that is known to have been installed after 1986 (1980 plus a reasonable non-compliance period based on our experience) is presumed to non-asbestos and is not sampled.

The bulk samples are submitted to a NVLAP accredited laboratory for analysis. The analysis is performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

Analytical results are compared to the following criteria.

<b>Jurisdiction</b>	<b>Friable</b>	<b>Non-Friable</b>
BC	0.5% <sup>1</sup>	0.5%
Alberta	Any Amount <sup>2</sup>	Any Amount <sup>2</sup>
Saskatchewan	>0.5% <sup>1</sup>	>1%
Manitoba	0.1% <sup>1</sup>	1%
Ontario	0.5%	0.5%
Nova Scotia	0.5% <sup>1</sup>	0.5%
New Brunswick, Prince Edward Island, Newfoundland & Labrador	1%	1%
Yukon, Nunavut, Northwest Territories	1%	1%
Federal	1%	1%

The asbestos analysis is completed using a stop positive approach. Only one result meeting the above regulated criteria is required to determine that a material is asbestos-containing, but all samples must be

<sup>1</sup> Or any amount if vermiculite

<sup>2</sup> The Government of Alberta in their guideline document entitled the "Alberta Asbestos Abatement Manual" (August 2019), defines an Asbestos-Containing Material as a product or building material that contains asbestos in any quantity or percentage.

analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material are analyzed if no asbestos is detected. In some cases, all samples are analyzed in the sample set regardless of result.

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible);
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

For a complete description of the Evaluation Criteria and Basis of Recommendations, refer to Annex A.

### **1.3 Lead**

Samples of distinctive paint finishes, and surface coatings present in more than a limited application, where removal of the paint is possible is collected. The samples are collected by scraping the painted finish to include base and covering applications. Drawings included show sample locations.

Analysis for lead in paints or surface coatings is performed at an accredited laboratory in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption.

The Ontario Ministry of Labour (MOL) has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. Pinchin follows the recommendations of the Environmental Abatement Council of Ontario (EACO) Lead Guideline for Construction, Renovation, Maintenance or Repair. The Guideline suggests that 0.1% (1,000 ppm) lead in paint represents a de minimis concentration of lead in paint for construction hygiene purposes, that is a concentration below which the lead content is not the limiting hazard in any disturbance of leaded paint for non-aggressive disturbance of painted finishes, (hand powered demolition, chipping, scraping, light sanding, etc.). The use of aggressive methods such as power grinding, torching, welding, etc. may result in significant lead exposures even with low concentrations of lead in paints (below 0.1%). Exposure from

construction disturbance of paints containing lead less than 0.009% is assumed to be insignificant. Paint and surface coatings are evaluated for condition such as flaking, chipping or spalling.

Other lead building products (e.g. batteries, lead sheeting, flashing) are identified by visual observation only.

#### **1.4 Silica**

Building materials known to contain crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) is identified by visual inspection only. Pinchin does not perform sampling of these materials for laboratory analysis of crystalline silica content.

#### **1.5 Mercury**

Building materials/products/equipment (e.g. thermostats, barometers, pressure gauges, light tubes), suspected to contain mercury are identified by visually inspection only. Dismantling of equipment suspected of containing mercury is not performed. Sampling of these materials for laboratory analysis of mercury content is not performed.

#### **1.6 Polychlorinated Biphenyls**

The potential for light ballast and wet transformers to contain PCBs is based on the age of the building, a review of maintenance records and examination of labels or nameplates on equipment, where present and accessible. The information is compared to known ban dates of PCBs and Environment Canada publications.

Dry type transformers are presumed to be free of dielectric fluids and hence non-PCB.

Fluids (mineral oil, hydraulic, Aroclor or Askarel) in transformers or other equipment are not sampled for PCB content.

Caulking or sealants are sampled for PCBs based on the date of construction or installation. Caulking installed after 1985 (1980 ban date plus a reasonable non-compliance period based on our experience) is presumed to be free of PCBs and hence not sampled. If sampled, analysis for PCBs is performed using an ASTM test method appropriate to the sample matrix at an accredited laboratory. Sample results are compared to the criteria of 50 ppm for solids as stated in the PCB Regulation, SOR/2008-273.

#### **1.7 Visible Mould**

The presence of mould is determined by visual inspection of exposed building surfaces. If any mould growth is concealed within building cavities it is not addressed in this assessment.

**APPENDIX IV**  
**Location Summary Report**

**Client:** Hamilton Health Sciences  
**Building Name:** David Braley Research Institute  
**Surveyor:** Emily Balfour  
**Reassessment Surveyor:**

**Site:** 20 Copeland Avenue, Hamilton, ON

**Survey Date:** 2020-12-18

**Last Re-Assessment:**

Location No.	Name or Description	ft <sup>2</sup>	Floor No.	Notes
1	Mechanical Room And Loading Dock	4160	B	
2	Labs	18650	B	
3	Stairwell 3	80	1	
4	Central Stairs	100	1	
5	Stairwell 1	80	1	
6	Stairwell 2	80	1	
1001	Mechanical Room, room no. C1-219	4160	1	
1002	West Atrium, room no. C1-107	2126	1	
1003	First Floor, room no. C1	18650	1	
2001	Second Floor, room no. C2	16524	2	
3001	Third Floor, room no. C3	16524	3	
4001	Fourth Floor, room no. C4	16524	4	
5001	Fifth Floor, room no. C5	16524	5	
6001	Mechanical Penthouse	16524	6	
7001	Roof	4160	6	NO ACCESS



**APPENDIX V**

**Hazardous Materials Summary Report / Sample Log**

Client: Hamilton Health Sciences

Site: 20 Copeland Avenue, Hamilton, ON

Building Name: David Braley Research Institute

Surveyor: Emily Balfour

Survey Date: 2020-12-18

HAZMAT	Sample No	System/Material/Sample Description	Locations	LF	SF	EA	%	Type	Positive
Asbestos	S0001 ABC	DUCT   MASTIC, GREY	1,1001,1002,1003,2001,3001,4001,5001,6001	0	0	0	100	None Detected	No
Asbestos	S0002 ABC	PIPING   CAULKING   OVER PVC	1001,6001	0	0	0	100	None Detected	No
Asbestos	S0003 ABC	DUCT   MASTIC, RED	1,1002,1003,2001,3001,4001,5001,6001	0	0	0	100	None Detected	No
Asbestos	S0004 ABC	WALL   PAINT   TEXTURED PAINT ON BLOCK	2,1001,2001,3001,4001,5001	0	0	0	100	None Detected	No
Asbestos	S0005 ABC	WALL   PUTTY	5001	0	0	0	100	None Detected	No
Asbestos	S0006 ABC	FLOOR, OTHER   CAULKING   GREY ON WALL/FLOOR JOINT	3001,4001,5001	0	0	0	100	None Detected	No
Asbestos	S0007 ABC	FLOOR   FIRESTOPPING (MASTIC)   AT CONDUIT PENETRATION	3001,4001,5001	0	0	0	100	None Detected	No
Asbestos	V0000	CEILING   CEILING TILES (LAY-IN)   24X48 PINHOLE WITH FLECK (FAUX 24X24), 24X48 PINHOLE WITH FLECK, 24X48 SMOOTH WHITE	2,1002,1003,2001,3001,4001,5001	0	0	0	0	Non Asbestos	No
Asbestos	V0000	CEILING   DRYWALL AND JOINT COMPOUND	2,4,1002,1003,2001,3001,4001,5001,6001	0	0	0	0	Non Asbestos	No
Asbestos	V0000	FLOOR   RUBBER   LINOLEUM SHEET FLOORING	2,1003,2001,3001,4001,5001	0	0	0	0	Non Asbestos	No
Asbestos	V0000	FLOOR   VINYL FLOOR TILE AND MASTIC   12X12 GREY DENSE FLECK, 12X12 GREY DENSE FLECK	1,1003,2001,3001,4001,5001	0	0	0	0	Non Asbestos	No
Asbestos	V0000	WALL   DRYWALL AND JOINT COMPOUND	1,2,1002,1003,2001,3001,4001,5001	0	0	0	0	Non Asbestos	No
Paint	L0001	WALL   MASONRY   CREAM	5,6,1001,6001	0	0	0	100		No
Paint	L0002	WALL   DRYWALL AND JOINT COMPOUND   CREAM	1002,1003,2001,3001,4001,5001	0	0	0	100		No
Paint	L0003	WALL   DRYWALL AND JOINT COMPOUND   BLUE/GREY	1003,2001,3001,4001,5001	0	0	0	100		No
Paint	L0004	WALL   DRYWALL AND JOINT COMPOUND   BROWN	1003,2001,3001,4001,5001	0	0	0	100		No
Paint	L0005	STRUCTURE   DRYWALL AND JOINT COMPOUND   OLIVE	3001,4001,5001	0	0	0	100		No
Paint	L0006	WALL   DRYWALL AND JOINT COMPOUND   SEA FOAM GREEN	3001,4001,5001	0	0	0	100		No
Mould	V9500	CEILING TILES (LAY-IN)	3001	0	4	0	0	Presumed Mould	Yes

## Legend:

Sample number	Units	
S####	SF	Square feet
L####	LF	Linear feet
P####	EA	Each
M####	%	Percentage
V####		Material visually similar to numbered sample collected
V0000		Known non Hazardous Material
V9000		Material is visually identified as Hazardous Material
V9500		Material is presumed to be Hazardous Material

**APPENDIX VI**  
**HMIS Data Report**

**Client:** Hamilton Health Sciences  
**Location:** #1 : Mechanical Room And Loading Dock  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** B  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft):** 4160  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling	Not Found														
Duct		Fibreglass	Insulation	Foil Face	C	Y									
Duct		Mastic, Red			C	Y		100			%	S0003BC	None Detected	N.D.	None
Duct		Not Insulated			C	Y									
Duct		Mastic, Grey			A	Y		100			%	V0001	None Detected	N.D.	None
Floor		Concrete (poured)			A	Y									
Floor		Vinyl Floor Tile and Mastic, 12x12 grey dense fleck			A	Y						V0000	Non-Asbestos		None
Mechanical Equipment		Not Insulated			A	Y									
Piping		Fibreglass	Insulation		C	Y									
Piping		Not Insulated			C	Y									
Structure	Deck	Concrete (poured)			C	Y									
Wall		Concrete (poured)			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #2 : Labs**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: B**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft): 18650**  
**Last Re-Assessment:**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	
Ceiling		Drywall and joint compound			C	Y						V0000	Non-Asbestos		None	
Ceiling	ACOUSTIC TILE	Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None	
Ceiling	ACOUSTIC TILE	Ceiling Tiles (lay-in), 24x48 smooth white			C	Y						V0000	Non-Asbestos		None	
Duct		Fibreglass	Insulation	Foil Face	C	N										
Floor		Ceramic Tiles			A	Y										
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None	
Floor		Epoxy			A	Y										
Mechanical Equipment		Not Insulated			C	N										
Piping		Fibreglass	Insulation	Paper	C	Y										
Piping		Not Insulated			C	N										
Structure	Deck	Concrete (poured)			C	N										
Wall		Concrete (poured)			A	Y										
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None	
Wall		Masonry, Concrete block			A	Y										
Wall		Paint, Textured Paint on Block			A	Y		100				%	S0004A	None Detected	N.D.	None

**Client: Hamilton Health Sciences**  
**Location: #4 : Central Stairs**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft): 100**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct	Not Found														
Floor		Ceramic Tiles			A	Y									
Floor	Stairs	Rubber			A	Y									
Mechanical Equipment	Not Found														
Piping	Not Found														
Structure	Column	Steel			A	Y									
Structure	Stairs	Steel			C	Y									
Wall		Ceramic Tiles			A	Y									

**Client:** Hamilton Health Sciences  
**Location:** #5 : Stairwell 1  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 1  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft):** 80  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		None Found			A	Y									
Duct	Not Found														
Floor		Concrete (poured)			A	Y									
Mechanical Equipment	Not Found														
Piping		Not Insulated			C	Y									
Structure		Concrete (poured)			A	Y									
Structure	Beam, Deck	Steel			C	Y									
Wall		Concrete (poured)			A	Y									

**Client:** Hamilton Health Sciences  
**Location:** #5 : Stairwell 1  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 1  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft):** 80  
**Last Re-Assessment:**

PAINT									
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard	
Wall	Masonry	100		%	V0001	Cream	Pb: <0.0071 %	No	



**Client: Hamilton Health Sciences**  
**Location: #6 : Stairwell 2**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft): 80**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		None Found			A	Y									
Duct	Not Found														
Floor		Concrete (poured)			A	Y									
Mechanical Equipment	Not Found														
Piping		Not Insulated			C	Y									
Structure		Concrete (poured)			A	Y									
Structure	Beam, Deck	Steel			C	Y									
Wall		Concrete (poured)			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #6 : Stairwell 2**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft): 80**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall		100		%	V0001	Cream	Pb: <0.0071 %	No

**Client:** Hamilton Health Sciences  
**Location:** #1001 : Mechanical Room  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 1  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:** C1-219  
**Reassessment Surveyor:**

**Area (sqft):** 4160  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling	Not Found														
Duct		Fibreglass	Insulation	Foil Face	C	Y									
Duct		Not Insulated			C	Y									
Duct		Mastic, Grey			A	Y		100			%	S0001AB	None Detected	N.D.	None
Floor		Concrete (poured)			C	Y					SF				
Mechanical Equipment		Not Insulated			A	Y									
Piping		Fibreglass	Insulation	Polyvinyl chloride (PVC)	C	Y									
Piping		Armaflex	Insulation		C	Y									
Piping		Not Insulated	Insulation		C	Y									
Piping		Caulking, Over pvc			A	Y		100			%	S0002AB	None Detected	N.D.	None
Structure	Deck	Concrete (poured)			C	Y					SF				
Wall		Concrete (poured)			C	Y									
Wall		Masonry			C	Y					%				
Wall		Paint, textured, on block			A	Y		100			%	S0004B	None Detected	N.D.	None

**Client:** Hamilton Health Sciences  
**Location:** #1001 : Mechanical Room  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 1  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:** C1-219  
**Reassessment Surveyor:**

**Area (sqft):** 4160  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Masonry	100		%	L0001	Cream	Pb: <0.0071 %	No

**Client: Hamilton Health Sciences**  
**Location: #1002 : West Atrium**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C1-107**  
**Reassessment Surveyor:**

**Area (sqft): 2126**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck (faux 24x24)			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Ceramic Tiles			A	Y									
Mechanical Equipment		Not Insulated			C	N									
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated	Insulation		C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Glass, Curtain wall			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #1002 : West Atrium**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C1-107**  
**Reassessment Surveyor:**

**Area (sqft): 2126**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	L0002	Cream	Pb: 0.0069 %	No

**Client: Hamilton Health Sciences**  
**Location: #1003 : First Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C1**  
**Reassessment Surveyor:**

**Area (sqft): 18650**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck (faux 24x24)			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Vinyl Floor Tile and Mastic, 12x12 grey dense fleck			A	Y						V0000	Non-Asbestos		None
Floor		Ceramic Tiles			A	Y									
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None
Mechanical Equipment		Not Insulated			C	N									
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated			C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Concrete (poured)			A	Y									
Wall		Wood			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									
Wall		Glass, Curtain wall			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #1003 : First Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 1**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C1**  
**Reassessment Surveyor:**

**Area (sqft): 18650**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0002	Cream	Pb: 0.0069 %	No
Wall	Drywall and joint compound				L0003	Blue/Grey	Pb: 0.0061 %	No
Wall	Drywall and joint compound	100		%	L0004	Brown	Pb: 0.0088 %	No



**Client: Hamilton Health Sciences**  
**Location: #2001 : Second Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 2**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C2**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Vinyl Floor Tile and Mastic, 12x12 grey dense fleck			A	Y						V0000	Non-Asbestos		None
Floor		Ceramic Tiles			A	Y									
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None
Floor		Epoxy			A	Y									
Mechanical Equipment		Not Insulated			C	N									
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated			C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Concrete (poured)			A	Y									
Wall		Wood			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									
Wall		Paint, textured, on block			A	Y		100			%	S0004C	None Detected	N.D.	None
Wall		Glass, Curtain wall			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #2001 : Second Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 2**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C2**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0002	Cream	Pb: 0.0069 %	No
Wall	Drywall and joint compound				V0003	Blue/Grey	Pb: 0.0061 %	No
Wall	Drywall and joint compound	100		%	V0004	Brown	Pb: 0.0088 %	No



**Client: Hamilton Health Sciences**  
**Location: #3001 : Third Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 3**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C3**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Vinyl Floor Tile and Mastic, 12x12 Grey dense fleck			A	Y						V0000	Non-Asbestos		None
Floor		Ceramic Tiles			A	Y									
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None
Floor		Firestopping (mastic), At conduit penetration			A	Y		100			%	S0007A	None Detected	N.D.	None
Floor		Epoxy			A	Y									
Mechanical Equipment		Not Insulated			C	N									
Other		Caulking, Grey, at wall/floor joint			A	Y		100			%	S0006A	None Detected	N.D.	None
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated			C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Concrete (poured)			A	Y									
Wall		Wood			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									
Wall		Paint, Textured, on block			A	Y		100			%	V0004	None Detected	N.D.	None
Wall		Glass, Curtain wall			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #3001 : Third Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 3**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C3**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0002	Cream	Pb: 0.0069 %	No



PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0003	Blue/Grey	Pb: 0.0061 %	No
Wall	Drywall and joint compound	100		%	V0004	Brown	Pb: 0.0088 %	No
Structure	Drywall and joint compound	100		%	L0005	Olive	Pb: 0.0073 %	No
Wall	Drywall and joint compound	100		%	L0006	Sea Foam Green	Pb: 0.0077 %	No

**Client: Hamilton Health Sciences**  
**Location: #3001 : Third Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 3**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C3**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

MOULD								
System	Material	Visible	Quantity	Unit	Sample Type	Sample No	Sample Description	Mould
Ceiling <sup>1</sup>	Ceiling Tiles (lay-in)		4	SF	V	9500	Wall Adjacent to housekeeping room	Presumed

1 - Water damage

**Client: Hamilton Health Sciences**  
**Location: #4001 : Fourth Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 4**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C4**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Vinyl Floor Tile and Mastic, 12x12 Grey dense fleck			A	Y						V0000	Non-Asbestos		None
Floor		Ceramic Tiles			A	Y									
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None
Floor		Caulking, Grey, at wall/floor joint			A	Y		100			%	S0006B	None Detected	N.D.	None
Floor		Firestopping (mastic), At conduit penetration			A	Y		100			%	S0007B	None Detected	N.D.	None
Floor		Epoxy			A	Y									
Mechanical Equipment		Not Insulated			C	N									
Other		Caulking, Grey on Wall/floor joint			A	Y		100			%	V0006	None Detected	N.D.	None
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated			C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Concrete (poured)			A	Y									
Wall		Wood			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									
Wall		Paint, Textured on block			A	Y		100			%	V0004	None Detected	N.D.	None
Wall		Glass, Curtain wall			A	Y									

**Client: Hamilton Health Sciences**  
**Location: #4001 : Fourth Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 4**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C4**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0002	Cream	Pb: 0.0069 %	No
Wall	Drywall and joint compound	100		%	V0003	Blue/Grey	Pb: 0.0061 %	No
Wall	Drywall and joint compound	100		%	V0004	Brown	Pb: 0.0088 %	No
Structure	Drywall and joint compound	100		%	V0005	Olive	Pb: 0.0073 %	No
Wall	Drywall and joint compound	100		%	V0006	Sea Foam Green	Pb: 0.0077 %	No

**Client: Hamilton Health Sciences**  
**Location: #5001 : Fifth Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 5**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C5**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Ceiling Tiles (lay-in), 24x48 pinhole with fleck			C	Y						V0000	Non-Asbestos		None
Ceiling	Bulkhead	Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Duct		Fibreglass	Insulation	Foil Face	C	N									
Duct		Mastic, Red			C	N		100			%	V0003	None Detected	N.D.	None
Duct		Not Insulated			C	N									
Duct		Mastic, Grey			C	N		100			%	V0001	None Detected	N.D.	None
Floor		Vinyl Floor Tile and Mastic, 12x12 Grey dense fleck			A	Y						V0000	Non-Asbestos		None
Floor		Ceramic Tiles			A	Y									
Floor		Rubber, Linoleum sheet flooring			A	Y						V0000	Non-Asbestos		None
Floor		Caulking, Grey, at wall/floor joint			A	Y		100			%	S0006C	None Detected	N.D.	None
Floor		Firestopping (mastic), At conduit penetration			A	Y		100			%	S0007C	None Detected	N.D.	None
Floor		Epoxy			A	Y									
Mechanical Equipment		Not Insulated			C	N									
Piping		Fibreglass	Insulation	Paper	C	N									
Piping		Not Insulated			C	N									
Structure	All	Concrete (poured)			A	Y									
Wall		Concrete (poured)			A	Y									
Wall		Wood			A	Y									
Wall		Drywall and joint compound			A	Y						V0000	Non-Asbestos		None
Wall		Masonry, Concrete block			A	Y									
Wall		Paint, Textured on block			A	Y		100			%	V0004	None Detected	N.D.	None
Wall		Glass, Curtain wall			A	Y									
Wall		Putty, Black, firewall separation			C	N		100			%	S0005ABC	None Detected	N.D.	None

**Client: Hamilton Health Sciences**  
**Location: #5001 : Fifth Floor**  
**Surveyor: Emily Balfour**

**Site: 20 Copeland Avenue, Hamilton, ON**  
**Floor: 5**  
**Survey Date: 2020-12-18**

**Building Name: David Braley Research Institute**  
**Room #: C5**  
**Reassessment Surveyor:**

**Area (sqft): 16524**  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Drywall and joint compound	100		%	V0002	Cream	Pb: 0.0069 %	No
Wall	Drywall and joint compound	100		%	V0003	Blue/Grey	Pb: 0.0061 %	No
Wall	Drywall and joint compound	100		%	V0004	Brown	Pb: 0.0088 %	No
Structure	Drywall and joint compound	100		%	V0005	Olive	Pb: 0.0073 %	No
Wall	Drywall and joint compound	100		%	V0006	Sea Foam Green	Pb: 0.0077 %	No

**Client:** Hamilton Health Sciences  
**Location:** #6001 : Mechanical Penthouse  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 6  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft):** 16524  
**Last Re-Assessment:**

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
Ceiling		Drywall and joint compound			C	Y						V0000	Non-Asbestos		None
Ceiling	Not Found														
Duct		Fibreglass	Insulation	Foil Face	C	Y									
Duct		Mastic, Red			C	Y		100			%	S0003A	None Detected	N.D.	None
Duct		Not Insulated			C	Y									
Duct		Mastic, Grey			A	Y		100			%	S0001C	None Detected	N.D.	None
Floor		Concrete (poured)			C	Y					SF				
Mechanical Equipment		Not Insulated			A	Y									
Piping		Fibreglass	Insulation	Polyvinyl chloride (PVC)	C	Y									
Piping		Armaflex			A	Y									
Piping		Not Insulated	Insulation		C	Y									
Piping		Caulking, Over pvc			A	Y		100			%	S0002C	None Detected	N.D.	None
Piping	Rain Water Leader	Not Insulated			C	Y									
Structure	Beam Deck Joist	Steel			C	Y					SF				
Wall		Concrete (poured)			C	Y									
Wall		Masonry			C	Y					%				

**Client:** Hamilton Health Sciences  
**Location:** #6001 : Mechanical Penthouse  
**Surveyor:** Emily Balfour

**Site:** 20 Copeland Avenue, Hamilton, ON  
**Floor:** 6  
**Survey Date:** 2020-12-18

**Building Name:** David Braley Research Institute  
**Room #:**  
**Reassessment Surveyor:**

**Area (sqft):** 16524  
**Last Re-Assessment:**

PAINT								
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Masonry	100		%	V0001	Cream	Pb: <0.0071 %	No

Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**ASBESTOS - NO ACCESS**

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**PB PRODUCTS - NO ACCESS**

Component	Quantity	Unit
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**MERCURY - NO ACCESS**

Component	Quantity	Unit
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**PCB - NO ACCESS**

Component	Quantity	Unit	Sample	Sample Description	Amount	PCB
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**ODS - NO ACCESS**

Component	Type	Quantity	Unit
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

**MOULD - NO ACCESS**

System	Material	Visible	Quantity	Unit	Sample Type	Sample No	Sample Description	Mould
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Client: Hamilton Health Sciences  
Location: #7001 : Roof  
Surveyor: Emily Balfour

Site: 20 Copeland Avenue, Hamilton, ON  
Floor: 6  
Survey Date: 2020-12-18

Building Name: David Braley Research Institute  
Room #:  
Reassessment Surveyor:

Area (sqft): 4160  
Last Re-Assessment:

TANK - NO ACCESS



## Legend:

Sample number		Units		Other	
S####	Asbestos sample collected	SF	Square feet	A	Access
L####	Paint sample collected	LF	Linear feet	V	Visible
P####	PCB sample collected	EA	Each	AP	Air Plenum
M####	Mould sample collected	%	Percentage	F	Friable material
V####	Material is visually identified to be identical to S####	LF	Linear feet	NF	Non Friable material
V0000	Known non hazardous material				
V9000	Material visually identified as a Hazardous Material			Pb	Lead
V9500	Material is presumed to be a hazardous material			Hg	Mercury
				As	Arsenic
				Cr	Chromium

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material