HAZARDOUS MATERIALS SURVEY AND 2023 REASSESSMENT
200 LEES AVENUE, OTTAWA, ONTARIO

Project No.: Z1920014HZ / CCC-230252-00

Prepared for:

University of Ottawa

Prepared by:

McIntosh Perry Limited (MPL)

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Date:

March 8, 2024

McINTOSH PERRY

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REASSESSMENT SURVEY 2023

McIntosh Perry Limited **(MPL)** was retained by the University of Ottawa, to complete to a hazardous materials survey of Marchand Residence located at 200 Lees Avenue, in Ottawa, Ontario. The original survey was conducted between September 30th to October 3rd, 2019. **The reassessment was completed on August 25th, 2023.**

The purpose of the reassessment was to evaluate the condition and quantity of previously reported asbestos-containing materials (ACM) and develop corrective action plans as required for the purposes of long-term management.

The assessment and reassessment determined the following findings and recommendations.

Summary of the Reassessment Findings:

- ACM Plaster was observed to be in Good Condition in various locations throughout the subject building.
- ACM Vinyl Floor Tiles was observed to be in Good Condition in Room C144 and C110.
- ACM Interior Window Caulking was observed to be in Good Condition in Room A139.
- ACM Parging Cement Insulation was observed to be in Good Condition in Room A104C and E029
- ACM Pipe Straight Insulation was observed in Good Condition in Room A105.
- No mould affected or water damaged materials were observed during the site survey.

Summary of Recommendations:

- Perform a reassessment of asbestos materials on an annual basis.
- Perform a pre-construction assessment and remove all asbestos-containing materials (ACM) prior to alterations or maintenance work if ACM may be disturbed by the work.
- Follow appropriate safe work procedures when handling or disturbing asbestos.

Sample any presumed ACM prior to alteration or maintained work if presumed ACM may be disturbed by the work.

EXECUTIVE SUMMARY

McIntosh Perry Limited **(MPL)** was retained by the University of Ottawa, to complete a hazardous materials survey for the University building located at 200 Lees Avenue, in Ottawa, Ontario. The original survey was conducted between September 30th to October 3rd, 2019. **The reassessment was completed on August 25th, 2023.**

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons and mould.

Based on the assessment conducted by MPL, the following ACMs were prevously identified or suspected to be present in the building:

Table A: Summary of Asbestos-Containing Materials Identified

Material Description	Friable?	Location	Type of Asbestos
Mechanical Pipe Insulation	Yes	Specific Areas Only	Chrysotile
Plaster	Yes	Specific Areas Only	Tremolite
Gaskets	No	Specific Areas Only	Chrysotile
Interior Window Caulking	No	Specific Areas Only	Chrysotile
Vinyl Floor Tiles	No	Specific Areas Only	Chrysotile
Transite	No	Specific Areas Only	Suspected
Fire doors	-	Throughout Building	Suspected
Roofing Materials	-	Building Exterior	Suspected

Note: Please refer to the complete report for specific details and recommendations.

All repairs or removal of asbestos-containing materials must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos containing waste must also be handled and disposed of according to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey, should be assumed to contain asbestos until proven otherwise by analytical testing;

Sub-trades working with or in close proximity asbestos-containing material should be informed of its presence;

Given that asbestos containing materials (ACMs) have been identified and will likely remain in place, an Asbestos Management Plan (AMP) is therefore required and an inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once

in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities.

Based on the assessment conducted by MPL, the following Designated Substances and Hazardous Materials were previously identified or suspected to be present in the building:

Table B: Summary of Designated Substances & Hazardous Materials Identified

Material Description	Location
Lead Paint	Specific Areas Only
Lead Acid Batteries	Throughout Building
Mercury Vapour	Throughout Building
Ozone Depleted Substances	Specific Areas Only
Radioactive Materials	Specific Areas Only
Mould	Specific Areas Only

Note: Please refer to the complete report for specific details and recommendations.

Designated Substances area regulated under Ontario Regulation 490/09 — Designated Substances, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to Ontario Regulation 490/09, the following guidelines must also be adhered to when conducting work activities that that involve disturbance of the above-mentioned materials:

- Guideline: Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour
- Guideline: Silica on Construction Projects issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Environmental Abatement Council of Ontario (EACO) Mould Abatement Guidelines.

Prior to any renovations or demolition activities within building, designated substances and hazardous materials must be decommissioned by a licensed contractor such that they are contained and not released to the environment during decommissioning as per O. Reg. 347/09- made under the Environmental Protection Act.

Any suspect building materials encountered that were not assessed as part of this survey, should be assumed to contain designated substances or hazardous materials until proven otherwise by analytical testing.

This report should be made available to contractors tendering on any renovation or demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

This executive summary is not to be used alone. This report should be reviewed in its entirety.

McINTOSH PERRY

March 8, 2024

University of Ottawa
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via email: martine.bergeron@uottawa.ca

Attention: Martine Bergeron, Senior Specialist, Occupational Health and Safety

Re: 200 Lees Avenue, in Ottawa, Ontario
Hazardous Materials Survey and 2023 Reassessment
McIntosh Perry Limited Reference No. Z1920014HZ / CCC-230252-00

1.0 INTRODUCTION

In accordance with your instructions, McIntosh Perry Limited (MPL) carried out a Hazardous Materials Survey and 2023 Reassessment at the university building located at 200 Lees Avenue, in Ottawa, Ontario. The survey of the building was conducted on September 30th to October 2nd, 2019.

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons and mould.

MPL completed the following,

- Visual review of the building to identify materials which could contain Designated Substances and hazardous materials;
- Review of previously completed Hazardous Materials Survey(s) and historical building record(s); and,
- Recommendations for appropriate action where required.

2.0 PROPERTY DESCRIPTION

The subject building is comprised of five distinct premises (A, B, C, D and E) that are interconnected and range from one to three storeys. The subject building was observed to be constructed with a concrete slab floor; metal roof supported by steel trusses, beams and columns. The interior walls were gypsum wallboard and concrete block, with select areas containing ceramic tiles. Within the subject building, ceilings were observed to be either suspended ceiling tiles, while open ceilings were observed in other areas of the building. The floors were generally concrete throughout the subject building with the exception of select units containing vinyl floor tiles, terrazzo flooring, laminate flooring and carpet. The Buildings A to D were constructed circa 1963 while Building E was constructed circa 1980.

3.0 FINDINGS & RECOMMENDATIONS

Designated Substances

3.1 Asbestos

Findings

A total of one-hundred and fifty (150) bulk samples were previously collected during the survey and sent to an accredited laboratory for analysis. A summary of potential asbestos-containing samples collected along with the sample location, type and friability are presented in Table 1.

The following subsections and tables outlines our findings of asbestos containing materials throughout the subject building. Laboratory certificates of analysis for asbestos are included in Appendix C.

Table 1:

Asbestos Sampling Laboratory Results

Sample ID	Location	Material	Type and Content	Friability
BS 1.1	Room A02	Gasket (Beige)	65% Chrysotile	Non-Friable
BS 1.2	Room A02	Gasket (Beige)	Stop Positive	Non-Friable
BS 1.3	Room A02	Gasket (Beige)	Stop Positive	Non-Friable
BS 2.1	Room 104C	Mechanical Pipe Fitting Insulation (Grey)	60% Chrysotile	Friable
BS 2.2	Room 104C	Mechanical Pipe Fitting Insulation (Grey)	Stop Positive	Friable
BS 2.3	Room 104C	Mechanical Pipe Fitting Insulation (Grey)	Stop Positive	Friable
BS 3.1	Room A105	Mechanical Pipe insulation (Brown)	10% Chrysotile	Friable
BS 3.2	Room A105	Mechanical Pipe insulation (Brown)	Stop positive	Friable
BS 3.3	Room A105	Mechanical Pipe insulation (Brown)	Stop positive	Friable

Sample ID	Location	Material	Type and Content	Friability
BS 4.1	Room A140	Floor levelling compound (Brown/Black)	None Detected	N/A
BS 4.2	Room A140	Floor levelling compound (Brown/Black)	None Detected	N/A
BS 4.3	Room A140	Floor levelling compound (Brown/Black)	None Detected	N/A
BS 5.1	Room A139	Wall Plaster (Gray)	None Detected	N/A
BS 5.2	Room A139	Wall Plaster (Gray)	None Detected	N/A
BS 5.3	Room A139	Wall Plaster (Gray)	None Detected	N/A
BS 6.1	Room A144	High Traffic Floor Coating (Beige)	None Detected	N/A
BS 6.2	Room A144	High Traffic Floor Coating (Beige)	None Detected	N/A
Bs 6.3	Room A144	High Traffic Floor Coating (Beige)	None Detected	N/A
BS 7.1	**Room A139**	**Window Caulking (Black)**	**2% Chrysotile**	**Non-Friable**
BS 7.2	**Room A139**	**Window Caulking (Black)**	**Stop Positive**	**Non-Friable**
BS 7.3	**Room A139**	**Window Caulking (Black)**	**Stop Positive**	**Non-Friable**
BS 8.1	Room A136	VFT(12”x12”- Off white with Gray & Black streak)	None Detected	N/A
BS 8.2	Room A136	VFT(12”x12”- Off white with Gray & Black streak)	None Detected	N/A
BS 8.3	Room A136	VFT(12”x12”- Off white with Gray & Black streak)	None Detected	N/A
BS 9.1	Room A138E	VFT (12”x12”-Beige with Brown & Grey flakes)	None Detected	N/A
BS 9.2	Room A138E	VFT (12”x12”-Beige with Brown & Grey flakes)	None Detected	N/A
BS 9.3	Room A138E	VFT (12”x12”-Beige with Brown & Grey flakes)	None Detected	N/A
BS 10.1	Room A122B	VFT (12”x12”- Olive green with Grey flakes)	None Detected	N/A
BS 10.2	Room A122B	VFT (12”x12”- Olive green with Grey flakes)	None Detected	N/A
BS 10.3	Room A122B	VFT (12”x12”- Olive green with Grey flakes)	None Detected	N/A
BS 11.1	Room A147	VFT (12”x12” – Grey with Blue streaks)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 11.2	Room A147	VFT (12”x12” – Grey with Blue streaks)	None Detected	N/A
		Mastic (Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 11.3	Room A147	VFT (12”x12” – Grey with Blue streaks)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 12.1	Room A122B	VFT(12”x12”– Offwhite with Brown flakes)	None Detected	N/A
BS 12.2	Room A122B	VFT(12”x12”– Offwhite with Brown flakes)	None Detected	N/A
BS 12.3	Room A122B	VFT(12”x12”– Offwhite with Brown flakes)	None Detected	N/A
BS 13.1	Room A142	Concrete Block Mortar (Grey)	None Detected	N/A
BS 13.2	Room A142	Concrete Block Mortar (Grey)	None Detected	N/A
BS 13.3	Room A142	Concrete Block Mortar (Grey)	None Detected	N/A
BS 14.1	Room A106C	Wall Tile Grout (Grey)	None Detected	N/A
Bs 14.2	Room A106C	Wall Tile Grout (Grey)	None Detected	N/A
BS 14.3	Room A106C	Wall Tile Grout (Grey)	None Detected	N/A
BS 15.1	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.2	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.3	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.4	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.5	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.6	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 15.7	Room A139	Wall Texture Coating (Grey)	None Detected	N/A
BS 16.1	Room A36	SCT (2’x4’- Fissures)	None Detected	N/A
BS 16.2	Room A36	SCT (2’x4’- Fissures)	None Detected	N/A
BS 16.3	Room A36	SCT (2’x4’- Fissures)	None Detected	N/A
BS 17.1	Room A106	SCT (2’x4’– Pinholes with Large Fissures)	None Detected	N/A
BS 17.2	Room A106	SCT (2’x4’– Pinholes with Large Fissures)	None Detected	N/A
BS 17.3	Room A106	SCT (2’x4’– Pinholes with Large Fissures)	None Detected	N/A
BS 18.1	Room A106C	VFT (12”x12”-Red with flakes)	None Detected	N/A
BS 18.1	Room A106C	Mastic	None Detected	N/A
BS 18.2	Room A106C	VFT (12”x12”-Red with flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 18.3	Room A106C	VFT (12”x12”-Red with flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 19.1	Room B202B	Carpet Mastic (Brown)	None Detected	N/A
BS 19.2	Room B202B	Carpet Mastic (Brown)	None Detected	N/A
BS 19.3	Room B202B	Carpet Mastic (Brown)	None Detected	N/A
BS.20.1	Room BS215E	VFT (2’X2’ -Off white)	None Detected	N/A
BS.20.2	Room BS215E	VFT (2’X2’ -Off white)	None Detected	N/A
BS.20.3	Room BS215E	VFT (2’X2’ -Off white)	None Detected	N/A
BS 21.1	Room B215N	Wall Plaster (Gray)	None Detected	N/A
BS 21.2	**Room B215N**	**Wall Plaster (Gray)**	**1% Tremolite**	**Friable**
BS 21.3	**Room B215N**	**Wall Plaster (Gray)**	**Stop Positive**	**Friable**
BS 22.1	Room C209	VFT (12”X12”- Off white with Grey & Black flakes)	None Detected	N/A
BS 22.1	Room C209	Mastic (Black)	None Detected	N/A
Bs 22.2	Room C209	VFT (12”X12”- Offwhite with Grey & Black flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
Bs 22.3	Room C209	VFT (12”X12”- Offwhite with Grey & Black flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 23.1	Room C209	VFT (12”X12”- Beige with Multicolor flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 23.2	Room C209	VFT (12”X12”- Beige with Multicolor flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 23.3	Room C209	VFT (12”X12”- Beige with Multicolor flakes)	None Detected	N/A
		Mastic	None Detected	N/A
BS 24.1	C200 Hallway	VFT (12”X12” – Off-white with Grey flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 24.2	C200 Hallway	VFT (12”X12” – Offwhite with Grey flakes)	None Detected	N/A
BS 24.2	C200 Hallway	Mastic (Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 24.3	C200 Hallway	VFT (12”X12” – Offwhite with Grey flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 25.1	Room C115	VFT (12”X12”- Pink with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 25.2	Room C115	VFT (12”X12”- Pink with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 25.3	Room C115	VFT (12”X12”- Pink with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 26.1	Room E041	VFT (12”X12”-Offwhite with Blue streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 26.2	Room E041	VFT (12”X12”-Offwhite with Blue streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 26.3	Room E041	VFT (12”X12”-Offwhite with Blue streaks)	None Detected	N/A
BS 26.3	Room E041	Mastic (Yellow)	None Detected	N/A
BS 27.1	Room E053	VFT (12”X12”-Grey with White & Light Grey streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 27.2	Room E053	VFT (12”X12”-Grey with White & Light Grey streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 27.3	Room E053	VFT (12”X12”-Grey with White & Light Grey streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.1	Room E244	VFT (12”X12”- Offwhite with Grey streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.2	Room E244	VFT (12”X12”- Offwhite with Grey streaks)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.3	Room E244	VFT (12”X12”- Offwhite with Grey streaks)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
		Mastic (Yellow)	None Detected	N/A
BS 29.1	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
BS 29.2	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
BS 29.3	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
BS 30.1	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
		Mastic (Brown)	None Detected	N/A
BS 30.2	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
		Mastic (Brown)	None Detected	N/A
BS 30.3	Room D108	12”x12”- Glued on Acoustic Ceiling Tile(Uniform Holes)	None Detected	N/A
		Mastic (Brown)	None Detected	N/A
BS 31.1	Room D108	Ceiling Plaster (Grey)	None Detected	N/A
BS 31.2	Room D108	Ceiling Plaster (Grey)	None Detected	N/A
BS 31.3	Room D108	Ceiling Plaster (Grey)	None Detected	N/A
BS 32.1	Room B100	Sprayed insulation (Grey)	None Detected	N/A
BS 32.2	Room C141C	Sprayed insulation (Grey)	None Detected	N/A
BS 32.3	Room C141C	Sprayed insulation (Grey)	None Detected	N/A
BS 32.4	Room C201	Sprayed insulation (Grey)	None Detected	N/A
BS 32.5	Room C204	Sprayed insulation (Grey)	None Detected	N/A
BS 33.1	Room A136	Drywall Joint Compound (White)	None Detected	N/A
BS 33.2	Room A139A	Drywall Joint Compound (White)	None Detected	N/A
BS 33.3	Room C115	Drywall Joint Compound (White)	None Detected	N/A
BS 33.4	Room B215	Drywall Joint Compound (White)	None Detected	N/A
BS 33.5	Room C200	Drywall Joint Compound (White)	None Detected	N/A
BS 33.6	Room E146	Drywall Joint Compound (White)	None Detected	N/A
BS 33.7	Room E053	Drywall Joint Compound (White)	None Detected	N/A
BS 34.1	Room E038	Drywall Joint Compound (White)	None Detected	N/A
BS 34.2	Room E038	Drywall Joint Compound (White)	None Detected	N/A
BS 34.3	Room E038	Drywall Joint Compound (White)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 35.1	Room C115	VFT (12”x12”- Offwhite with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 35.2	Room C115	VFT (12”x12”- Off white with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 35.3	Room C115	VFT (12”x12”- Off white with dots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A

N/A – Not Applicable
VFT – Vinyl Floor Tiles
SCT-Suspended Ceiling Tiles
Stop Positive – Material considered being asbestos-containing as per O. Reg. 278/05.

Please refer to Appendix E – Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable), and recommended actions. The following building materials (if present) were investigated for asbestos content:

3.1.1 Fireproofing

Sprayed fireproofing material (Grey) was observed on structural beams and walls within Rooms B100, C141C, and C201. The laboratory analytical results for the samples collected indicate that this material does not contain asbestos .

Fireproofing material was previously observed and sampled from the D-Block crawlspace. The laboratory analytical results for the samples collected indicate that this material does not contain asbestos.

3.1.2 Mechanical Pipe Insulation

3.1.2.1 Mechanical Pipe Straight Insulation

Mechanical pipe straight insulation was observed in between the workbenches in Room A105. The laboratory analytical results collected indicate that this material contains **10% Chrysotile asbestos**. This material is considered friable and was observed to be in poor condition.

3.1.2.2 Mechanical Piping Elbows/Fittings Insulation

Mechanical piping elbows/fitting insulation was observed on mechanical pipe fittings in Room A104C and E029. The laboratory analytical results of samples previously collected indicate that this material **contains 60% Chrysotile asbestos**. This material is considered friable and was observed to be in good condition, with the exception of select areas which were observed in poor condition.

Mechanical piping elbows/fitting insulation was previously observed and sampled from the E-Block Penthouse. The laboratory analytical results for the samples collected indicate that this material does not contain asbestos.

3.1.2.3 Mechanical Piping Hangers Insulation

Mechanical pipe hanger insulation was observed in the in A Block Hallways and was visually identified to be a material not suspected to contain asbestos (i.e. fibreglass) and thus not sampled.

3.1.2.4 HVAC Duct Insulation

HVAC duct insulation observed within the mechanical rooms A02, B151, B205, D201 and E301 within subject building and was visually identified to be a material not suspected to contain asbestos (i.e. fibreglass) and thus not sampled.

3.1.2.5 Other Mechanical Insulation

Mechanical pipe gasket (Beige) was observed in Room A02. The laboratory analysis indicated that this material **contains 65% Chrysotile asbestos**. This material is considered to be friable and was observed to be in poor condition.

3.1.3 Flexible Duct Connector

Suspected asbestos-containing flexible duct connector was observed on an air handling unit in Mechanical Room D201. To avoid possible damage, no bulk samples of the duct connectors were collected. However, this material is known to contain asbestos. This material is considered to be non-friable and was observed in good condition.

Flexible duct connectors were also observed in various mechanical rooms throughout the subject building. This material was visually identified as a non-asbestos containing material (i.e. rubber).

3.1.4 Heat Shield or Heat Shield Insulation

No heat shield insulation was observed in the subject building.

3.1.5 Texture Finishes

Wall texture coating was observed in Room A139. The laboratory analytical results of the samples previously collected indicate that this material does not contain asbestos.

3.1.6 Plaster

Wall plaster (Grey) on diamond mesh lath was observed in Room B215N. The laboratory analytical results of samples previously collected indicate that this material contains **1% Tremolite asbestos**. This material is considered friable and was observed to be in fair condition. MPL identified visually similar ceiling plaster on diamond mesh lath in Rooms C100D and A142 and noted to be in poor condition.

Wall and column plaster was previously sampled from Room A139. The laboratory analytical results of the samples collected indicate that this material does not contain asbestos.

Ceiling plaster (Gray) was observed on a concrete ceiling deck and previously sampled from Room D108. The laboratory analytical results of the samples collected indicate that this material does not contain asbestos.

3.1.7 Drywall Joint Compound

Drywall joint compound was observed throughout the subject building and previously sampled from the following locations: A136, A139A, C115, B215, C200, E146, E053 and E038. The laboratory analytical results of drywall joint compound samples previously collected from these locations indicate that this material does not contain asbestos.

3.1.8 Ceiling Tiles

Ceiling tiles were observed in various locations throughout the subject building.

- Suspended ceiling tiles (2'x4'-Pinhole with Large Fissures*)* were observed in Room A106*.* The laboratory analytical results of the samples previously collected indicate that this material does not contain asbestos.

- Suspended ceiling tiles (2'x4'-Fissures*)* were observed in Room A036*.* The laboratory analytical results of the samples previously collected indicate that this material does not contain asbestos.

- Glued on Acoustic Ceiling Tile (12"x12"-with Uniform Holes) was observed in the Men's Change Room in D108. The laboratory analytical results of the samples previously collected indicate that this material and its associated mastic (Brown) do not contain asbestos.

3.1.9 Vinyl Floor Tiles

Several different types of vinyl floor tiles were observed and previously sampled within the building as follows:

- Vinyl floor tiles (12"x12"-White w/ Beige Spots) was previously identified to **contain 6.5% Chrysotile asbestos** was observed in Room C144 and C110. This material is considered non-friable and was observed to be in poor condition.

- Vinyl floor tiles (12"x12" – Red with flakes) were previously observed in Room A106C. The laboratory analytical results of the vinyl floor tile samples collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (2'x2' – Offwhite) were previously observed in Room B215E. The laboratory analytical results of the vinyl floor tile samples collected indicate that this material does not contain asbestos.

- Vinyl floor tiles (12"x12" – Offwhite with grey and black flakes) were previously observed in Room C209. The laboratory analytical results of the vinyl floor tile samples collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Beige with Multicolour flakes) were observed in Room C209. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Offwhite with grey flakes) were observed in the C200 Hallway. The laboratory analytical results of the vinyl floor tile samples collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Pink with dots) were observed in Room C115. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Off-white with dots) were observed in Room C115. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (black) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Offwhite with blue streaks) were observed in Room E041. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (yellow) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Grey with white and light grey streaks) were observed in Room E053. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (yellow) does not contain asbestos.

- Vinyl floor tiles (12”x12” – Offwhite with grey streaks) were observed in Room E224. The laboratory analytical results of the vinyl floor tile samples previously collected indicate that this material and its associated mastic (black) does not contain asbestos.

3.1.10 Levelling Compound

Floor levelling compound was previously sampled from Room A140. The laboratory analytical results indicate that this material does not contain asbestos.

Floor levelling compound was previously sampled from Room A122. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.11 Concrete Block Mortar

Concrete block mortar was previously sampled from the interior of the building in Room A142. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.12 Ceramic Wall / Floor Tile Grout

Ceramic wall tile (Grey*)* grout was previously sampled from the A106C. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.13 Transite (Asbestos Cement)

Transite materials was observed as segments of conduit pipe in Room A138C. To avoid possible damage, no bulk samples of the transite piping were collected. However, this material is **known to contain asbestos**. This material is considered to be non-friable and was observed in good condition.

3.1.14 Caulking

Interior window caulking (Black) was previously sampled from Room A139. The laboratory analytical results indicate that this material **contains 2% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.

3.1.15 Cementitious Coating

Cementitious floor levelling compound was observed in Room A140. The laboratory analytical results of cementitious coating samples collected indicate that this material does not contain asbestos.

High traffic floor coating was observed in Room A144. The laboratory analytical results of cementitious coating samples previously collected indicate that this material does not contain asbestos.

3.1.16 Mastic

Carpet mastic (Brown) was previously sampled from Room B202B. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.17 Tar

Previously identified roofing tar (Black) was previously sampled from the roof level of the subject building. The laboratory analytical results for the samples collected indicate that the material does not contain asbestos.

3.1.18 Fire Door

Fire doors were observed at various locations throughout the subject building. To avoid possible damage, no bulk samples of the internal door insulation materials were collected. Prior to removal and/or replacement, fire doors should be examined and tested for asbestos content. Fire doors should be considered to contain asbestos until bulk samples and analysis proves otherwise. All fire doors were observed to be in good condition.

3.1.19 Roofing Material

To avoid damage and compromising the integrity of roofing material, no bulk samples of the roofing materials were collected. Prior to removal and/or replacement, roofing materials should be examined and tested for asbestos content. Roofing materials should be considered to contain asbestos until bulk samples and analysis proves otherwise.

Recommendations

- Asbestos-containing materials identified to be in poor condition must be repaired/removed immediately, following Type 1/2/3 asbestos abatement work procedures as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347;

- Asbestos-containing materials that have been identified to be in fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration. Depending on type of material and location, these materials should be scheduled for removal if there is potential risk of exposure to the worker and/or occupants;

- Materials identified to contain asbestos that are in good condition and do not pose a risk to workers or occupants can be managed in place. Prior to renovation/demolition activities that may disturb the ACMs, these materials must be removed following appropriate Type 1/2/3 asbestos abatement work procedures as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347;

- Please refer to Appendix E – Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

- Prior to renovation/demolition of materials which are assumed to be asbestos-containing (suspect materials which were not sampled, i.e., roofing materials, flexible duct connectors, fire doors and suspect transite), these materials must either be tested for asbestos content or removed following appropriate asbestos abatement work procedures (Type 1/2/3) as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347;

- All repairs or removal of asbestos-containing materials must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos containing waste must also be handled and disposed of according to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey, should be assumed to contain asbestos until proven otherwise by analytical testing;

- Sub-trades working with or in close proximity to asbestos-containing material should be informed of its presence; and

- Given that asbestos containing materials (ACMs) have been identified and will likely remain in place, an Asbestos Management Plan (AMP) is therefore required and an inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities

3.2 Lead

Findings

3.2.1 Paint Finishes

A total of eight (8) paint samples from the subject building were previously collected and analyzed for lead content. Results of bulk sampling testing are summarized in Table 2 and the laboratory certificate of analysis can be found in Appendix C.

Table 2:

Lead Sampling Locations and Laboratory Results

Sample I.D.	Location	Material	Colour	Lead Concentration Weight by Conc. (%)
Pb-01	A140 – Above door vent	Paint	Beige	0.0753
Pb-02	A140 – Door	Paint	Blue	0.0008
Pb-03	A144 – Floor	Paint	Beige	0.0173
Pb-04	D109 – Wall	Paint	Maroon	<0.0019
Pb-05	A122 – Wall	Paint	Black	0.0579
Pb-06	D201 – Ducts	Paint	White	0.167
Pb-07	B208B Wall	Paint	Green	0.0006
Pb-08	E254 – Wall	Paint	Off white	0.0020
Previously Sampled Lead Paint Finishes				
Sample I.D.	**Location**	**Material**	**Colour**	**Lead Concentration Weight by Conc. (%)**
060-D-2-LBP-013107-05	D201	Air Handling Unit	White	0.19
060-B-1-LBP-013107-09	B157	Columns	White	0.08
060-B-1-LBP-013107-13	B-Stairwell	Doors	Red	0.06
060-E-B -LBP -013107-15	E010	Walls	White	0.06
060-E-1-LBP-013107-19	Hallway E100	Doors and Frames	Blue	0.11
060-E-2-LBP-013107-22	E218	Doors and Frames	Brown	1.00

Sample I.D.	Location	Material	Colour	Lead Concentration Weight by Conc. (%)
060-A-1-LBP-013107-23	A139	Walls	White	0.09
060-A-1-LBP-013107-28	A131	Doors and Lockers	Blue	1.90
060-A-1-LBP-013107-29	Hallway at A130	Lockers	Yellow	2.90

The paint finishes highlighted in blue in the above table were determined to contain low concentrations of lead which are less than 0.1%. These paint finishes were observed to be in good to poor condition.

The paint finishes highlighted in pink in the above table are considered lead-containing paints or surface coatings with concentrations which are greater than 0.1%. These paint finishes were observed to be in good to poor condition.

All remaining paints tested were below the laboratory limit of detection for lead. The laboratory certificate of analysis for the paint sample is also included in Appendix C.

However, all other paints throughout the subject building that are not mentioned in this report must be considered to be lead-containing unless sampling and analysis proves otherwise.

3.2.2 Battery Packs

MPL identified lead-containing acid battery packs throughout the subject building. These battery packs were observed on walls and above exits throughout the surveyed building.

Lead may also be present in the following materials in the building:

- Solder used on copper domestic water lines;
- Solder used in bell fittings for cast iron pipes;
- Solder used in electrical equipment;
- Ceramic tile glaze; and
- Concrete and mortar products, etc.

3.2.3 Lead Shielding

MPL observed diagnostic equipment suspected to contain radioactive materials within Room E029. Lead shielding material is suspected to be present within the walls of E029.

Recommendations

Paints identified to contain lead that are in poor condition must be immediately repaired and/or stabilized following a minimum Type 1/2 lead abatement procedures as per the OMOL Guideline “Lead on Construction Project” dated April 2011.

Paints identified to contain lead that are in fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration.

Paints identified to contain lead that are in good condition and do not pose a risk to workers or occupants can be managed in place.

Detailed worker protection protocols are outlined in the OMOL Guideline "Lead on Construction Projects" dated April 2011. Generally, the removal of the lead-based paint with the use of a chemical gel or paste, or a power tool equipped with a HEPA filter is considered a Type 1 operation. The removal of lead-based paint by scraping or sanding using non-powered hand tools is considered a Type 2 operation. The removal of lead-based paint using abrasive blasting, or power tools without a HEPA filter, is considered a Type 3 operation, and requires the most stringent worker protection protocols (similar to asbestos); Furthermore, high temperature cutting or welding would also require Type 3 Operations under the Guideline for Lead on Construction Projects. If this type of work is required, it may be prudent to chemically remove the lead paint in selected locations prior to performing any high temperature cutting or welding.

All lead materials that are removed must follow the Ministry of Labour and Environmental Abatement Council of Ontario Lead Guidelines.

Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

Precautions should be taken as required during major renovations and demolition projects to ensure that workers' exposure levels to airborne lead does not exceed 0.05 mg/m3.
This can be achieved by:

- Provide workers with proper training;
- Providing the workers with respiratory protection;
- Wetting the surface of the materials to prevent dust emissions; and,
- Providing workers with hygiene facilities to properly wash prior to exiting the work area.

Sub-trades working with or in close proximity to lead based paint should be informed of its presence.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347/90 as amended – made under the Environmental Protection Act. Lead waste generated may also be subject to Leachate Criteria (Schedule 4) of this regulation.

3.3 Mercury

Findings

3.3.1 Thermostat Switches

MPL did not observe thermostats containing liquid mercury within the subject building.

3.3.2 Fluorescent Light Tubes

MPL identified fluorescent light fixtures throughout the surveyed area containing 2 to 4 fluorescent light tubes per fixture. Mercury is likely to be present in vapor form in the fluorescent light tubes.

3.3.3 Pressure Gauges and Float Switches

MPL identified pressure gauges containing liquid mercury in mechanical rooms throughout the subject building. MPL also identified suspected float switches that may contain liquid mercury within Room A02 and C02. They were observed in good condition.

Recommendations

Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

Precautions must be taken to prevent mercury liquid/vapours from becoming airborne during building demolition. Exposure to mercury is regulated under Ontario Regulation 490/09, Designated Substances - made under the Occupational Health and Safety Act." Prior to renovations to the building, all mercury containing fluorescent light tubes, thermostats, and equipment must be removed and stored in a safe, secure location and/or properly disposed of in accordance with R.R.O. 1990, Regulation 347 General – Waste Management, made under the Environmental Protection Act.

3.4 Silica

Findings

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles located throughout the structures. Free crystalline silica (α-Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

Recommendations

Precautions should be taken as required during major renovations and demolition projects on concrete (i.e. coring through concrete slabs, demolition of masonry, etc.) to ensure that workers' exposure levels to airborne silica does not exceed 0.05 mg/m^3.

This can be achieved by:

- Provide workers with proper training:
- Providing the workers with respiratory protection;
- Wetting the surface of the materials to prevent dust emissions; and,
- Providing workers with facilities to properly wash prior to exiting the work area.

Demolition work that is likely to impact silica-containing materials should be carried out in accordance with the requirement detailed in the Ontario Ministry of Labour document entitled "Guideline: Silica on Construction Projects", dated April 2011.

Other Hazardous Materials

3.5 Polychlorinated Biphenyls (PCBs)

Findings

3.5.1 Light Ballasts

The subject building is illuminated by LED and fluorescent lights. MPL assessed representative ballasts in the building, and these ballasts were identified as non-PCBs content. These light ballasts were observed to be manufactured by Sylvannia.

3.5.2 Transformers

MPL did not observe any PCBs containing electrical transformers within the subject building.

Recommendations

Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

Prior to any renovations, all light ballasts and HID lamps containing or suspected of containing PCBs that will be affected by the work, must be decommissioned by a licensed contractor such that PCBs are contained and not released to the environment during decommissioning and properly disposed of in accordance with R.R.O. 1990, Regulation 347 General – Waste Management, made under the Environmental Protection Act.

3.6 Ozone Depleting Substances (ODSs) and Other Halocarbon

Findings

A visual assessment was conducted to identify equipment potentially containing ODSs and other halocarbons. MPL observed standard refrigeration units within office spaces within the subject building. In addition to standard refrigeration units, MPL also observed various equipment containing ODSs within laboratories and mechanical rooms within the surveyed building.

Recommendations

Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

Under the management of a licensed contractor, equipment containing R4100A, R407, R404 and R134A do not represent a significant threat to human health or the environment however, a licensed contractor must

decommission equipment such that CFCs are contained and not released to the environment during servicing or operation.

3.7 Radioactive Materials

Findings

A visual assessment of the subject building was conducted to determine if any electrical components containing radioactive materials were present. MPL did not observe any electrical components containing radioactive materials.

MPL observed GE-brand Medical Systems diagnostic equipment containing suspected radioactive materials within Room E029. This equipment was observed to be in good condition.

Recommendations

Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.

Under the management of licensed contractor, equipment containing radioactive materials must be decommissioned such that radioactive materials are contained and not released to the environment during decommissioning as per O.Reg. 347/09.

3.8 Underground and Above Ground Storage Tanks (USTs and ASTs)

Findings

A visual survey of the subject building was conducted to determine if any USTs and ASTs were present. No USTs and ASTs were observed within the surveyed area.

Recommendations

Since no underground and/or above ground storage tanks (USTs and ASTs) were observed or suspected to be present during the site survey, no further action is required.

3.9 Mould

Findings

3.9.1 Mould

A visual survey of the subject building was conducted to determine if any mould was present. MPL did not observe any obvious signs of visible mould within the subject building.

3.9.2 Water Damage

A visual survey of the subject building was conducted to determine if any water damaged was present. MPL did not identified any areas throughout the subject building, where materials were affected by water damage.

Recommendations

- Please refer to Appendix F – Hazardous Materials Checklist for material conditions, quantities (where applicable) and recommended actions.
- Water stained/damaged ceiling tiles, floor tiles and drywall were observed throughout the subject building should be replaced as part of regular maintenance and the underlying cause of the water leakage should be identified and repaired.

This report should be made available to contractors tendering on any renovation or demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

4.0 GENERAL CONSIDERATIONS AND LIMITATIONS

The information presented in this report is based on information provided by others, direct visual observation made by personnel with **McIntosh Perry Limited (MPL)**, and the results of laboratory testing as identified herein.

It should be noted that there might be hazardous materials in locations not visible during our investigation. In the event such material is encountered during demolition operations in the building, this material should be tested and dealt with accordingly.

The findings detailed in this report are based upon the information available at the time of preparation of the report. No investigative method eliminates the possibility of obtaining imprecise or incomplete information. Professional judgement was exercised in gathering and analyzing the information obtained and in the formulation of our conclusions and recommendations.

MPL does not certify or warrant the environmental status of the property nor the building on the property.

Please note that the passage of time affects the information provided in the report. Environmental conditions of a site can change. Opinions relating to the site conditions are based upon information that existed at the time that the conclusions were formulated.

The client expressly agrees that it has entered into this agreement with MPL, both on its own behalf and as agent on behalf of its employees and principals.

The client expressly agrees that MPL's employees and principals shall have no personal liability to the client in respect of a claim, whether in contract, tort and/or any other cause of action in law. Accordingly, the client expressly agrees that it will bring no proceedings and take no action in any court of law against any of MPL's employees or principals in their personal capacity.

We trust that we have detailed our findings clearly and that we have satisfactorily addressed the scope of work you require at this time. In the event you wish us to review our findings with you, or require our services further in this regard, please do not hesitate to contact our office.

Yours truly,

MCINTOSH PERRY LIMITED

Pegah Parichehreh, M.Sc.
Project Technician
Hazardous Materials/ Environmental Health & Safety

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APPENDIX A

Regulatory Requirements

REGULATORY REQUIREMENTS

In Ontario, there is a total of eleven Designated Substances. These substances have been regulated under Ontario Regulation 490/09 — *Designated Substances*, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to the Ontario Regulation 490/09 noted above, the following were observed for this survey:

Guideline: Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour

Guideline: Silica on Construction Projects issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

The Occupational Health and Safety Act (OHSA), R.S.O. 1990, c.0.1, s.30 (1) specifies that: "Before beginning a project, the owner shall determine whether any Designated Substances are present at the project site and shall prepare a list of all Designated Substances that are present at the site.

Section 30 of The Act requires that the list of Designated Substances be provided to prospective contractors and subcontractors who may do work on a site and come into contact at the site with Designated Substances.

The Ministry of Labour has designated the following substances:

- Acrylonitrile
- Arsenic
- Asbestos
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl Chloride

Ontario Regulation 278/05 (O. Reg. 278/05), the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations, made under the Occupational Health and Safety Act (OHSA), requires owners of a building to identify Asbestos-containing Materials (ACMs) prior to potential disturbance of the materials.

In addition, an owner of a building is required to have an Asbestos Management Plan (AMP) if ACMs (friable or non-friable) are present in the building and are to remain in place. An inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities. Removal of all asbestos containing materials is required prior to building demolition.

In addition to the Designated Substances, the building was also surveyed for the presence of other hazardous materials such as polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons, and mould.

We understand that this survey has been conducted to comply with the regulatory requirements of Ontario Regulation 278/05.

APPENDIX B

Survey Methodology & Background Information

SURVEY METHODOLOGY

For the purpose of this survey, not all Designated Substances or suspect hazardous material were sampled. Selective sampling was carried out only for substances that were suspected to be present or those deemed to have a likely source of origin in the survey areas.

Materials that were homogeneous in nature and/or similar in appearance to other materials tested were considered to be of similar composition. The likelihood of ACMs being present in inaccessible areas such as above gypsum board ceilings or behind gypsum wallboards was determined by assessing the presence of asbestos-containing systems in adjacent areas. Equipment such as boilers, motors, blowers, electrical panels, fire doors etc., were not de-energized or disassembled to examine internal components or materials. These items should be considered to contain hazardous materials until proven otherwise.

During the survey, representative samples of suspect building materials were collected and sent to AIHA accredited independent laboratory for analysis. Laboratory Certificate of Analysis are attached in Appendix A.

Other potential hazardous materials were identified by visual observation and/or by reviewing Material Safety Data Sheets (MSDS) and/or safety labels where available.

Investigated Areas

The survey included all accessible areas and ceiling space within subject building as required under our scope of work. No destructive investigations were performed as part of this survey. Photographs of the areas investigated can be found in Appendix D.

The assessment was directed on the interior structure and finishes of the building. It did not consider current or past owner or occupant articles within the building (i.e. contents, furniture, etc.) and does not report on possible contaminants in the soil under and surrounding the building, or contents of vessels, drums, etc. that may be concealed.

Sampling and Assessment Methodologies

Sampling was conducted as part of this assessment. Results for asbestos and lead samples can be found in the Findings & Recommendation Section 3.0.

A historical review of previous designated substance survey reports and abatement reports was examined as part of this survey. Due to concerns regarding certain historical analytical results, mainly in 2008 and prior years, confirmatory re-sampling was conducted for selected materials previously identified not to contain asbestos. However, building materials previously identified to be asbestos-containing were not re-sampled. The reports are listed as follows:

- Designated Substance Survey by Conestoga-Rovers & Associates (dated April 2007, reference # 45870(18));
- Asbestos Abatement Letter by Conestoga-Rovers & Associates (dated August 24, 2007, reference#49318);
- Asbestos Sampling – 200 Lees Avenue, E-Block Penthouse by Conestoga-Rovers (dated April 8, 2009, reference # 05659Memo-1);

- Project Specific Asbestos Sampling Report-200 Lees Avenue, Room A122 by EHS Partnerships (dated August 9, 2011, reference#04-0033-11-018);
- Project Specific Lead Testing Report, Room A139 by EHS Partnerships LTD (dated August 16, 2011, reference # 04-0033-11-020);
- Asbestos Abatement & Laboratory Decommissioning, A-Block by EHS Partnerships LTD (dated March 16, 2012, reference # 04-033-11-025);
- Asbestos Sampling Report – Soil, C-Block Crawlspace, 200 Lees Avenue, University of Ottawa by EHS Partnerships LTD (dated May 14, 2012, reference#04-0033-12-012);
- Post Remedial Asbestos Investigation and Sampling Report-Soil Southeast Quadrant of A-Block Crawlspace, 200 Lees Avenue by EHS Partnerships (dated May 28, 2012, reference# 04-0033-12-025);
- Post Remedial Asbestos Investigation and Sampling Report-Soil Northwest Quadrant of A-Block Crawlspace, 200 Lees Avenue by EHS Partnerships (dated June 7, 2012, reference# 04-0033-12-015);
- Asbestos Sampling Report – Soil, B-Block Crawlspace, 200 Lees Avenue, University of Ottawa by EHS Partnerships LTD (dated July 30, 2012, reference#04-0033-12-012);
- Asbestos Abatement – Type 2 Glovebag Operations, 200 Lees Avenue – B Block Crawlspace by EHS Partnerships LTD (dated January 11, 2013, reference #04-0033-12-047);
- Asbestos Sampling Report – Soil, D-Block Crawlspace, 200 Lees Avenue, University of Ottawa by EHS Partnerships LTD (dated March 6, 2013, reference#04-0033-13-011);
- Asbestos Sampling Report – Soil, D-Block Crawlspace, 200 Lees Avenue, University of Ottawa by EHS Partnerships LTD (dated April 23, 2013, reference#04-0033-018);
- Pre-Construction Asbestos Containing Material Assessment, 200 Lees Avenue-Room A142 by EHS Partnerships LTD (dated May 22, 2013, reference #04-0033-13-017);
- Asbestos containing Materials Abatement - 200 Lees Avenue, Ottawa Ontario by EHS Partnerships LTD (dated July 23, 2013, reference # 04-0033-017);
- Project Specific Asbestos Sampling Report – 200 Lees Avenue-Block D Ceiling Tiles by EHS Partnerships LTD (dated February 3, 2014, reference # 04-0033-14-006);
- Project Specific Designated Substance Survey, 200 Lees-Roof Access Project by CM3 Environmental (dated July 7, 2017, reference#TLW-1443);
- As Built Specification-Bicycle COOP(Rental) by University of Ottawa (drawings dated January 5, 2011, Project Reference#089-008-060);
- As Built Specifications-200 Lees Campus-Lecture Rooms A130&A131 Cooling and Ventilation Upgrade by Goodkey Weedmark Consulting Engineers (drawings dated October 2011, Project Reference #112-001-060);
- As Built Specification-Installation of Automatic Door Opener by University of Ottawa (drawings dated January 26, 2012, Project Reference#101-002-060);
- As Built Specification-Retrofit 060-E155D for Linda McLean Research Clinic by University of Ottawa (drawings dated December 8, 2014, Project #145-001-060); and

- As Built Specification- Visual Arts Miscellaneous Renovations in Rooms E020, E050, E244 by University of Ottawa (drawings dated May 2017, Project No. BT15-86206).

Asbestos

Background Information on Asbestos

Asbestos is a generic name that has been given to a group of naturally occurring fibrous minerals. In the past, asbestos was commonly used as a component in building materials such as insulation, fireproofing and acoustic or decorative panels. Although there are many types of asbestos, the three main forms of commercial importance in Ontario are chrysotile, amosite and crocidolite.

An Asbestos-Containing Material (ACM) is defined by O. Reg. 278/05 as a material that contains 0.5% or more asbestos by dry weight. ACMs are placed into two general classes, "friable" and "non-friable" ACMs. Friable ACMs are those materials that when dry can be crumbled, pulverized and reduced to powder by hand pressure. Typical friable ACMs include acoustical or decorative texture coats, fireproofing and thermal insulation. Non-friable ACMs are much more durable as they are held together by a binder such as cement, vinyl or asphalt. Typical non-friable ACMs include floor tiles, fire blankets, roofing materials and cementitious products such as wallboards, pipes or siding.

It has been recognized that hazardous situations may exist in buildings where asbestos-containing materials are found. This is especially true where asbestos fibres may become airborne as a result of material ageing, physical damage, and water damage or air movement.

In contrast, there is little reason for concern if the asbestos is in good condition, has not been damaged and is not in a location where it is likely to be disturbed.

Asbestos Survey Methodology

The asbestos survey included the identification of potential friable and non-friable asbestos-containing materials within the surveyed areas of the subject building.

The likelihood of ACMs being present in inaccessible areas such as above gypsum wallboard ceilings and walls was determined by assessing the presence of asbestos-containing materials in adjacent areas.

Fiberglass insulation was not submitted for analysis as it can be identified visually as non-asbestos material.

Building materials suspected of containing asbestos were identified and representative sampling and laboratory testing of these materials was conducted. The number of bulk material samples collected from a homogeneous area was in accordance with Table 1. O. Reg. 278/05 s. 3 (3) below. Building materials suspected of containing asbestos were collected using wetting techniques and hand sampling tools.

Table 1 - O. Reg. 278/05 s. 3(3): Minimum Asbestos Bulk Material Sample Requirements

Item	Type of material	Size of area of homogeneous material	Minimum number of bulk material samples to be collected
1.		Less than 90 square metres	3

	Surfacing material, including without limitation, material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	90 or more square metres, but less than 450 square metres	5
		450 or more square metres	7
2.	Thermal insulation, except as described in item 3	any size	3
3.	Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
4.	Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993.

All bulk samples were analysed for asbestos content by Paracel Laboratories Ltd., an independent laboratory. Paracel is a fully accredited facility for asbestos analysis and is accredited under National Voluntary Laboratory Accreditation (NVLAP Lab Codes 200812-0 and 200863-0). Paracel is accredited for asbestos bulk analysis in PLM in Ottawa and Mississauga, respectively. For the Scope of Accreditation under the (CALA) Membership Number 1262, Paracel is accredited for asbestos in air samples by PCM.

Vinyl floors tiles were analyzed using the phase light microscopy (PLM) method of analysis. However, given the composition of vinyl floor products, the PLM analysis method may be prone to yielding false negative analytical results. Therefore, prior to removal or replacement, vinyl floor products previously identified to be negative, should undergo additional analysis by Transmission Electron Microscopy (TEM) to confirm asbestos content, if any.

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. *Evaluation of ACMs Based on Condition*

In evaluating an ACM's condition, the following criteria was applied:

- **Good** – Material shows no signs of damage and/or is encapsulated. Asbestos-containing material could remain in place until eventual building demolition or major renovation.
- **Fair** – Material shows signs of minor damage (<5% damage) or otherwise near the end of useful life. This includes minor shrinking, cracking, delamination and/ or other damage. Material should be monitored closely and scheduled to be repaired, encapsulated or removed.
- **Poor** – Damage is greater than 5% to any ACM material and is highly recommended to be removed, repaired or encapsulated.

Note: The above evaluation criteria was also applied to other hazardous materials where applicable. Please refer to the Asbestos and Hazardous Materials Checklist in Appendix E & F for further details.

Lead

Background Information on Lead

Lead was a common additive in exterior and hard-wearing paint applications. Lead was used to prolong shelf life of paint and to increase its flexibility and durability to wear and weather. Acute exposure to lead by inhalation or ingestion may cause headaches, fatigue, nausea, abdominal cramps and joint pain. Chronic exposures can cause reduced haemoglobin production and reduced lifespan. It has also been known to impact the body's central and peripheral nervous systems and brain function and has been linked to learning disabilities in children.

Currently in Ontario, there is no regulatory limit that determines what concentration of lead constitutes a "lead containing material". On October 21, 2010, Health Canada, under the *Hazardous Products Act*, stated that the lead content in surface-coating materials, furniture, toys and other articles for children, should not exceed 90 mg/kg (0.009%, 90 ppm). However, this is intended for the importation or sale of products within Canada. Therefore, this is not to be misconstrued as a limit established to define a lead-containing material or a limit with respect to lead on construction projects.

The Environmental Abatement Council of Canada (EACC) has also developed the "*Lead Guideline for Construction, Renovation, Maintenance or Repair*" dated October 2014, which discusses the classification, handling, disturbance and removal of lead-containing materials. For the purpose of this guideline, paints or surface coatings containing less than or equal to 0.1% lead by weight (1000 mg/kg or 1000 ppm) are considered low-level lead paints or surface coatings. If these materials (and their respective surfaces) are disturbed in a non-aggressive manner and performed using adequate dust control procedures, then worker protection from the inhalation of lead is not required.

Furthermore, paints or surface coatings containing greater than 0.1% lead by weight are considered lead-containing paints or surface coatings. If these materials (and their respective surfaces) are disturbed, appropriate lead abatement procedures must always be followed.

Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, *Designated Substances* - made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the Guideline Lead on Construction Projects, issued in September 2004 (amended in April 2011) by the Occupational Health and Safety branch of the Ministry of Labour (Type 1-3). Similarly, the lead abatement work procedures outlined in the EACC Lead Guideline for Construction, Renovation, Maintenance or Repair (October 2014) may also be implemented (Class 1-3).

Lead is known to have been used in solder on copper plumbing fixtures, in lead conduit pipes, in lead-calcium battery plates, ammunition, and in nuclear and X-ray shielding devices. However, these materials were not sampled during this investigation, but were noted where applicable.

To verify lead content in paints, representative bulk samples of paint and finishes suspected of containing lead were collected. Bulk samples were scraped down to the building base structure, with all possible layer's present, placed in sealed plastic bags and labeled; and then submitted to an independent laboratory for analysis. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was inductively coupled plasma optical emission spectrometry (ICP-OES).

Mercury

Background Information on Mercury

Mercury is known to cause poisoning in humans through the inhalation of vapours, ingestion of contaminated materials or skin absorption through direct contact with the liquid.

Precautions must be taken to prevent mercury vapours from becoming airborne during renovations or demolition of the building. Exposure to airborne mercury is regulated under the Revised O. Reg. 490/09 as amended – Regulation respecting Mercury – made under the Occupational Health and Safety Act; and under O. Reg. 558, which amended O. Reg. 347/90 (General - Waste Management), mercury is classified as a Schedule 2(b) Hazardous Waste Chemical. Its hazardous waste number is U151.

Mercury is found in products such as thermostats, temperature and pressure gauges, fluorescent lamps and batteries. Mercury in products can be released to the environment through breakage, or disposal at the end of a product's useful life. Improper disposal of these mercury products poses a health and environmental risk to everyone. In addition, the disposal of mercury-containing products can create wastes that are often classified as hazardous. Wastes that leach mercury in concentrations exceeding Ontario Regulation 347/90 (General - Waste Management) limits are also considered hazardous.

The mercury in thermostats switch contains approximately 3-4 grams of mercury in a glass ampoule, typically attached to a metal coil. Mercury-containing switches have been used in thermostats for over 40 years.

Mercury is an essential component in fluorescent lamps and HID lamps. The mercury is in a vapour form and in the phosphor coating on the lamp tube. Estimates of the mercury content contained in compact, 4 foot, and 8-foot lamps are 10 mg, 23 mg, and 46 mg respectively.

Most fluorescent lamps qualify as hazardous waste when removed from service and are therefore prohibited from disposal in the solid waste stream. Fluorescent lamps would be classified as 146T on your facility Generator Registration Report under O. Reg. 347/90 - General Waste Management, as amended by O. Reg. 558/00. Under this regulation, if the leachate results exceed 0.1 milligrams of mercury per litre for a given waste, then the facility must treat the waste as hazardous waste. Most fluorescent and HID lamps will exceed the leachate toxicity limit; therefore, these wastes must be registered and treated as hazardous waste or sent for recycling.

Silica

Background Information on Silica

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles located throughout the structures. Free crystalline silica (□-Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* - made under the Occupational Health and Safety Act.

Polychlorinated Biphenyls (PCBs)

Background Information on PCBs

Polychlorinated Biphenyls (PCBs) were commonly used as dielectric insulating fluid in electrical equipment such as transformers and capacitors, and in the fluorescent and HID lamp ballasts. The production of PCBs in the North America started in 1929 and was banned at the beginning of 1979. After 1981, no manufacturers produced fluorescent and HID lamps with PCB-containing ballasts. PCBs are not a designated substance under the Occupational Health and Safety Act.

PCB Regulations (SOR/2008-273)

The *PCB Regulations* (the Regulations) set specific deadlines for ending the use of PCBs in concentrations at or above 50 mg/kg, eliminating all PCBs and equipment containing PCBs currently in storage and limiting the period of time PCBs can be stored before being destroyed. The Regulations also establish sound practices for the better management of the remaining PCBs in use (i.e. those with content of less than 50 mg/kg), until their eventual elimination, to prevent contamination of dielectric fluids and dispersion of PCBs in small quantities into other liquids.

Ozone Depleting Substances (ODSs) and Other Halocarbons

Background Information on ODSs

Within Ontario, the general use of ozone depleting substances (ODSs) and other halocarbons is controlled through Regulation 463/10 of the Environmental Protection Act. Production of ODSs in the form of hydro chlorofluorocarbons (HCFCs) and chlorofluorocarbons (CFCs) ceased in Canada in 1993 as a result of their ozone-depleting characteristics. Importation of CFCs into Canada ceased in 1997 and total ban was placed on their use since 2010. The use of these materials is still permitted in existing equipment, but equipment must be serviced by a licensed contractor such that CFCs are contained and not released to the environment during servicing or operation.

Mould & Water Damage

Mould growth inside buildings is due to excess moisture caused by leakages, condensation or capillary movement of water into the building. Toxic moulds such as Stachybotrys chartarum and some species of Aspergillus spp. are greenish-black, wet and slimy moulds that grow on soaking wet cellulose-based materials. They are often found near water leaks or where drying is very slow and can form after flooding if insufficient cleanup and drying occurred. They will generally not occur if materials are kept dry.

MPL conducted a general visual assessment for any obvious signs of visible mould and/or water damage. Based on our visual observations, the following guidelines were used in providing our recommendations for remedial action where required:

- Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation,
- The Canadian Construction Association (CCA) Mould Guidelines for the Canadian construction industry (CCA document 82-2004)
- Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines.

Radioactive Materials

There are two types of smoke detectors commonly found in building (residential, institutional, commercial, industrial, etc.). Photoelectric-type smoke detectors detect smoke using an optical sensor, whereas ionization-type smoke detectors use an ionization chamber containing radioactive material. The ionization type is cheaper and is particularly common in older buildings. A typical modern detector contains about 1.0 microcurie of the radioactive element americium, a decrease from 3 microcurie in 1978. The use of sealed radioactive material sources in fire detection systems is still permitted and regulated by the Canadian Nuclear Safety Commission (CNSC) and the Canadian Nuclear Safety Act. The radioactive sources in smoke alarms are sealed and contained within a metal case inside the smoke detector and must not be damaged or tampered with.

Other Designated Substances

Select Designated Substances (acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, benzene, or vinyl chloride) are not expected to be present in the building in matrix or sufficient quantities to cause an exceedance of Ministry of Labour exposure guidelines. As such, no sampling was conducted for these materials.

Vinyl Chloride

Vinyl chloride (monomer) is likely to be present in stable form within poly vinyl-chloride (PVC) piping and conduits and as a component of interior finishes. Such building materials are not considered to be hazardous in their current matrix/composition.

Acrylonitrile

Acrylonitrile or ACN (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants. Acrylonitrile was not noted and would not be expected to be present in the project specific area/surveyed area/subject building.

Arsenic

Arsenic is used in metallurgy for hardening copper, lead and alloys, in pigment production, in the manufacture of certain types of glass, in insecticides, fungicides and rodenticides, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing. Arsenic or arsenic compounds were not noted and are not expected to be present in the project specific area/surveyed area/subject building.

Benzene

Benzene or benzol is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, and in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline. Benzene may be present in stable form in roofing materials, paints and adhesives located throughout the subject building. Such building materials are not considered to be hazardous in their current matrix/composition.

Coke Oven Emissions

Coke oven emission is benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens.

Ethylene Oxides

Ethylene oxide is a colourless gas liquefying below 12°C. It is used generally as a fumigant and sterilizing agent for medical equipment. It is used generally as a fumigant and sterilizing agent for medical equipment.

Isocyanates

Isocyanates compounds may be present in stable form in paint finishes, varnishes, and polyurethane plastics, synthetic rubbers, foams and adhesives. Such building materials are not considered to be hazardous in their current matrix/composition.

In order to reduce the potential for exposure to workers or occupants, any suspect hazardous building material(s) that are not detailed within this survey due to inaccessibility and/or are discovered during renovation/demolition activities, must be properly assessed and/or tested prior to their disturbance.

APPENDIX C

Laboratory Analytical Reports

PARACEL LABORATORIES LTD.

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Certificate of Analysis

McIntosh Perry Limited (Concord)

6240 Hwy 7, Suite 200
Woodbridge, ON L4H 0R2
Attn: Atif Mohamed

Client PO:
Project: Z1920014HZ-200 LEES
Custody:

Report Date: 26-Nov-2019
Order Date: 4-Nov-2019

Revised Report

Order #: 1945297

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
1945297-01	BS 1.1 - A02 - Mech. Rm - Unilux Machine Gasket
1945297-02	BS 1.2 - A02 - Mech. Rm - Unilux Machine Gasket
1945297-03	BS 1.3 - A02 - Mech. Rm - Unilux Machine Gasket
1945297-04	BS 2.1 - 104C - Parging Cement
1945297-05	BS 2.2 - 104C - Parging Cement
1945297-06	BS 2.3 - 104C - Parging Cement
1945297-07	BS 3.1 - A105 - Work Bench #2 - Mech. Pipe Insulation
1945297-08	BS 3.2 - A105 - Work Bench #2 - Mech. Pipe Insulation
1945297-09	BS 3.3 - A105 - Work Bench #2 - Mech. Pipe Insulation
1945297-10	BS 4.1 - A140 - Floor Levelling Compound
1945297-11	BS 4.2 - A140 - Floor Levelling Compound
1945297-12	BS 4.3 - A140 - Floor Levelling Compound
1945297-13	BS 5.1 - A139 - Plaster on Columns
1945297-14	BS 5.2 - A139 - Plaster on Columns
1945297-15	BS 5.3 - A139 - Plaster on Columns
1945297-16	BS 6.1 - A144 - High Traffic Coating
1945297-17	BS 6.2 - A144 - High Traffic Coating
1945297-18	BS 6.3 - A144 - High Traffic Coating
1945297-19	BS 7.1 - A139 - Int. Window Caulking
1945297-20	BS 7.2 - A139 - Int. Window Caulking
1945297-21	BS 7.3 - A139 - Int. Window Caulking
1945297-22	BS 8.1 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks
1945297-23.1	BS 8.2 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks
1945297-23.2	BS 8.2 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks
1945297-24.1	BS 8.3 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks
1945297-24.2	BS 8.3 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks

Approved By:

Emma Diaz

Senior Analyst

1945297-25	BS 9.1 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes
1945297-26	BS 9.2 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes
1945297-27.1	BS 9.3 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes
1945297-27.2	BS 9.3 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes
1945297-28	BS 10.1 - A122B - VFT (12x12) - Olive Green w/Grey Flakes
1945297-29	BS 10.2 - A122B - VFT (12x12) - Olive Green w/Grey Flakes
1945297-30	BS 10.3 - A122B - VFT (12x12) - Olive Green w/Grey Flakes
1945297-31.1	BS 11.1 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-31.2	BS 11.1 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-32.1	BS 11.2 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-32.2	BS 11.2 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-33.1	BS 11.3 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-33.2	BS 11.3 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks
1945297-34.1	BS 12.1 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-34.2	BS 12.1 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-35.1	BS 12.2 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-35.2	BS 12.2 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-36.1	BS 12.3 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-36.2	BS 12.3 - A122B - VFT (12x12) - Off White w/Brown Flakes
1945297-37	BS 13.1 - A142 - Concrete Block Mortar
1945297-38	BS 13.2 - A142 - Concrete Block Mortar
1945297-39	BS 13.3 - A142 - Concrete Block Mortar
1945297-40	BS 14.1 - A106C - Wall Tile Grout
1945297-41	BS 14.2 - A106C - Wall Tile Grout
1945297-42	BS 14.3 - A106C - Wall Tile Grout
1945297-43	BS 15.1 - A139 - Wall Texture Coating
1945297-44	BS 15.2 - A139 - Wall Texture Coating
1945297-45	BS 15.3 - A139 - Wall Texture Coating
1945297-46	BS 15.4 - A139 - Wall Texture Coating
1945297-47	BS 15.5 - A140 - Wall Texture Coating
1945297-48	BS 15.6 - A140 - Wall Texture Coating
1945297-49	BS 15.7 - A140 - Wall Texture Coating
1945297-50	BS 16.1 - A136-2x4-SCT-Fissures
1945297-51	BS 16.2 - A136-2x4-SCT-Fissures
1945297-52	BS 16.3 - A136-2x4-SCT-Fissures
1945297-53	BS 17.1 - A106 - 2x4 - SCT - Pinholes with Large Fissures
1945297-54	BS 17.2 - A100B - 2x4 - SCT - Pinholes with Large Fissures
1945297-55	BS 17.3 - A127C - 2x4 - SCT - Pinholes with Large Fissures
1945297-56	BS 18.1 - A106C - 12x12 - Red w/Flakes
1945297-57.1	BS 18.2 - A106C - 12x12 - Red w/Flakes
1945297-57.2	BS 18.2 - A106C - 12x12 - Red w/Flakes
1945297-58.1	BS 18.3 - A106C - 12x12 - Red w/Flakes
1945297-58.2	BS 18.3 - A106C - 12x12 - Red w/Flakes
1945297-59	BS 19.1 - D202B-Carpet Mastic

1945297-60	BS 19.2 - D202B-Carpet Mastic
1945297-61	BS 19.3 - D202B-Carpet Mastic
1945297-62	BS 20.1 - BS215E - VFT 2x2 - Off White w/Blue Streaks
1945297-63	BS 20.2 - BS215E - VFT 2x2 - Off White w/Blue Streaks
1945297-64	BS 20.3 - BS215E - VFT 2x2 - Off White w/Blue Streaks
1945297-65	BS 21.1- B215N - Plaster on Beam
1945297-66	BS 21.2- B215N - Plaster on Beam
1945297-67	BS 21.3- B215N - Plaster on Beam
1945297-68.1	BS 22.1 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-68.2	BS 22.1 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-69.1	BS 22.2 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-69.2	BS 22.2 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-70.1	BS 22.3 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-70.2	BS 22.3 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes
1945297-71.1	BS 23.1 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-71.2	BS 23.1 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-72.1	BS 23.2 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-72.2	BS 23.2 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-73.1	BS 23.3 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-73.2	BS 23.3 - C209 - VFT 12x12 - Beige w/Multicolor Flakes
1945297-74.1	BS 24.1 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-74.2	BS 24.1 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-75.1	BS 24.2 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-75.2	BS 24.2 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-76.1	BS 24.3 - C144 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-76.2	BS 24.3 - C144 Hallway - VFT 12x12 - Off White w/Grey Flakes
1945297-77.1	BS 25.1 - C115 - VFT 12x12 - Pink w/Dots
1945297-77.2	BS 25.1 - C115 - VFT 12x12 - Pink w/Dots
1945297-78.1	BS 25.2 - C115 - VFT 12x12 - Pink w/Dots
1945297-78.2	BS 25.2 - C115 - VFT 12x12 - Pink w/Dots
1945297-79.1	BS 25.3 - C115 - VFT 12x12 - Pink w/Dots
1945297-79.2	BS 25.3 - C115 - VFT 12x12 - Pink w/Dots
1945297-80.1	BS 26.1 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-80.2	BS 26.1 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-81.1	BS 26.2 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-81.2	BS 26.2 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-82.1	BS 26.3 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-82.2	BS 26.3 - E041 - VFT 12x12 - Off White w/Blue Streaks
1945297-83.1	BS 27.1 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks
1945297-83.2	BS 27.1 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks
1945297-84.1	BS 27.2 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks
1945297-84.2	BS 27.2 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks
1945297-85.1	BS 27.3 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks
1945297-85.2	BS 27.3 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks

1945297-86.1	BS 28.1 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-86.2	BS 28.1 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-87.1	BS 28.2 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-87.2	BS 28.2 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-88.1	BS 28.3 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-88.2	BS 28.3 - E244 - VFT 12x12 - Off White w/ Grey Streaks
1945297-89	BS 29.1 - D108 - Men's Change Rm - 12x12 - ACT
1945297-90	BS 29.2 - D108 - Men's Change Rm - 12x12 - ACT
1945297-91	BS 29.3 - D108 - Men's Change Rm - 12x12 - ACT
1945297-92.1	BS 30.1 - D108 - Ceiling Mastic (Pucks)
1945297-92.2	BS 30.1 - D108 - Ceiling Mastic (Pucks)
1945297-93.1	BS 30.2 - D108 - Ceiling Mastic (Pucks)
1945297-93.2	BS 30.2 - D108 - Ceiling Mastic (Pucks)
1945297-94.1	BS 30.3 - D108 - Ceiling Mastic (Pucks)
1945297-94.2	BS 30.3 - D108 - Ceiling Mastic (Pucks)
1945297-95	BS 31.1 - D108 - Ceiling Plaster
1945297-96	BS 31.2 - D108 - Ceiling Plaster
1945297-97	BS 31.3 - D108 - Ceiling Plaster
1945297-98	BS 32.1 - B100 Hallway - Sprayed Insulation
1945297-99	BS 32.2 - C141C - Tele Rm - Sprayed Insulation
1945297-AA	BS 32.3 - C141C - Tele Rm - Sprayed Insulation
1945297-AB	BS 32.4 - C201 - Sprayed Insulation
1945297-AC	BS 32.5 - C204 - Sprayed Insulation
1945297-AD	BS 33.1 - A136 - Drywall Joint Compound DJC
1945297-AE	BS 33.2 - A139A - Drywall Joint Compound DJC
1945297-AF	BS 33.3 - C115 - Drywall Joint Compound DJC
1945297-AG	BS 33.4 - B215 - Drywall Joint Compound DJC
1945297-AH	BS 33.5 - C200 Hallway - Drywall Joint Compound DJC
1945297-AI	BS 33.6 - E126 - Drywall Joint Compound DJC
1945297-AJ	BS 33.7 - E053 - Drywall Joint Compound DJC
1945297-AK	BS 34.1 - E038 - Mech. Rm - DJC
1945297-AL	BS 34.2 - E038 - Mech. Rm - DJC
1945297-AM	BS 34.3 - E038 - Mech. Rm - DJC
1945297-AN.1	BS 35.1- C115 - VFT 12x12 - Off White w/Dots
1945297-AN.2	BS 35.1- C115 - VFT 12x12 - Off White w/Dots
1945297-AO.1	BS 35.2- C115 - VFT 12x12 - Off White w/Dots
1945297-AO.2	BS 35.2- C115 - VFT 12x12 - Off White w/Dots
1945297-AP.1	BS 35.3- C115 - VFT 12x12 - Off White w/Dots
1945297-AP.2	BS 35.3- C115 - VFT 12x12 - Off White w/Dots

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 4-Nov-2019

Client PO:

Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-01	30-Sep-19	Beige	Gasket	**Yes**	**Client ID: BS 1.1 - A02 - Mech. Rm - Unilux Machine Gasket**	
					Chrysotile	65
					Non-Fibers	35
1945297-02	30-Sep-19				**Client ID: BS 1.2 - A02 - Mech. Rm - Unilux Machine Gasket**	
					not analyzed	
1945297-03	30-Sep-19				**Client ID: BS 1.3 - A02 - Mech. Rm - Unilux Machine Gasket**	
					not analyzed	
1945297-04	30-Sep-19	Grey	Parging	**Yes**	**Client ID: BS 2.1 - 104C - Parging Cement**	
					Chrysotile	60
					Non-Fibers	40
1945297-05	30-Sep-19				**Client ID: BS 2.2 - 104C - Parging Cement**	
					not analyzed	
1945297-06	30-Sep-19				**Client ID: BS 2.3 - 104C - Parging Cement**	
					not analyzed	
1945297-07	30-Sep-19	Brown	Pipe Insulation	**Yes**	**Client ID: BS 3.1 - A105 - Work Bench #2 - Mech. Pipe Insulation**	
					Chrysotile	10
					Non-Fibers	90
1945297-08	30-Sep-19				**Client ID: BS 3.2 - A105 - Work Bench #2 - Mech. Pipe Insulation**	
					not analyzed	
1945297-09	30-Sep-19				**Client ID: BS 3.3 - A105 - Work Bench #2 - Mech. Pipe Insulation**	
					not analyzed	
1945297-10	30-Sep-19	Brown/Black	Leveling Compound/Mastic	No	**Client ID: BS 4.1 - A140 - Floor Levelling Compound** [Z-01]	
					Non-Fibers	97
					Other fibers	3

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 4-Nov-2019

Client PO:

Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-11	30-Sep-19	Brown/Black	Leveling Compound/Mastic	No	**Client ID: BS 4.2 - A140 - Floor Levelling Compound** [Z-01]	
					Non-Fibers	97
					Other fibers	3
1945297-12	30-Sep-19	Brown/Black	Leveling Compound/Mastic	No	**Client ID: BS 4.3 - A140 - Floor Levelling Compound** [Z-01]	
					Non-Fibers	97
					Other fibers	3
1945297-13	30-Sep-19	Grey	Plaster	No	**Client ID: BS 5.1 - A139 - Plaster on Columns**	
					Non-Fibers	100
1945297-14	30-Sep-19	Grey	Plaster	No	**Client ID: BS 5.2 - A139 - Plaster on Columns**	
					Non-Fibers	100
1945297-15	30-Sep-19	Grey	Plaster	No	**Client ID: BS 5.3 - A139 - Plaster on Columns**	
					Non-Fibers	100
1945297-16	30-Sep-19	Beige	Coating	No	**Client ID: BS 6.1 - A144 - High Traffic Coating**	
					Non-Fibers	100
1945297-17	30-Sep-19	Beige	Coating	No	**Client ID: BS 6.2 - A144 - High Traffic Coating**	
					Non-Fibers	100
1945297-18	30-Sep-19	Beige	Coating	No	**Client ID: BS 6.3 - A144 - High Traffic Coating**	
					Non-Fibers	100
1945297-19	30-Sep-19	Black	Caulking	**Yes**	**Client ID: BS 7.1 - A139 - Int. Window Caulking**	
					Chrysotile	2
					Non-Fibers	93
					Other fibers	5
1945297-20	30-Sep-19				**Client ID: BS 7.2 - A139 - Int. Window Caulking**	
					not analyzed	

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

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Client PO:

Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-21	30-Sep-19				**Client ID: BS 7.3 - A139 - Int. Window Caulking**	
					not analyzed	
1945297-22	30-Sep-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 8.1 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks** [Z-01c]	
					Non-Fibers	100
1945297-23.1	30-Sep-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 8.2 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks**	
					Non-Fibers	100
1945297-23.2	30-Sep-19				**Client ID: BS 8.2 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks** [Z-01a]	
					not analyzed	
1945297-24.1	30-Sep-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 8.3 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks**	
					Non-Fibers	100
1945297-24.2	30-Sep-19				**Client ID: BS 8.3 - A136 - VFT (12x12) - Off White w/Gray & Black Streaks** [Z-01a]	
					not analyzed	
1945297-25	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 9.1 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes** [Z-01b]	
					Non-Fibers	100
1945297-26	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 9.2 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes** [Z-01b]	
					Non-Fibers	100
1945297-27.1	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 9.3 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes**	
					Non-Fibers	100
1945297-27.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 9.3 - A138E - VFT (12x12) - Beige w/Brown & Grey Flakes**	
					Cellulose	3
					Non-Fibers	97
1945297-28	01-Oct-19	Olive green	Vinyl Floor Tile	No	**Client ID: BS 10.1 - A122B - VFT (12x12) - Olive Green w/Grey Flakes** [Z-01c]	
					Non-Fibers	100
1945297-29	01-Oct-19	Olive green	Vinyl Floor Tile	No	**Client ID: BS 10.2 - A122B - VFT (12x12) - Olive Green w/Grey Flakes** [Z-01c]	
					Non-Fibers	100

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Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-30	01-Oct-19	Olive green	Vinyl Floor Tile	No	**Client ID: BS 10.3 - A122B - VFT (12x12) - Olive Green w/Grey Flakes**	
					Non-Fibers	100
1945297-31.1	01-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 11.1 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks**	
					Non-Fibers	100
1945297-31.2	01-Oct-19				**Client ID: BS 11.1 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks** [Z-01a]	
					not analyzed	
1945297-32.1	01-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 11.2 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks**	
					Non-Fibers	100
1945297-32.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 11.2 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks**	
					Non-Fibers	100
1945297-33.1	01-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 11.3 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks**	
					Non-Fibers	100
1945297-33.2	01-Oct-19				**Client ID: BS 11.3 - A127-Archives RM-VFT(12x12)-Grey w/Blue Streaks** [Z-01a]	
					not analyzed	
1945297-34.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 12.1 - A122B - VFT (12x12) - Off White w/Brown Flakes**	
					Non-Fibers	100
1945297-34.2	01-Oct-19				**Client ID: BS 12.1 - A122B - VFT (12x12) - Off White w/Brown Flakes** [Z-01a]	
					not analyzed	
1945297-35.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 12.2 - A122B - VFT (12x12) - Off White w/Brown Flakes**	
					Non-Fibers	100
1945297-35.2	01-Oct-19				**Client ID: BS 12.2 - A122B - VFT (12x12) - Off White w/Brown Flakes** [Z-01a]	
					not analyzed	
1945297-36.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 12.3 - A122B - VFT (12x12) - Off White w/Brown Flakes**	
					Non-Fibers	100

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-36.2	01-Oct-19				**Client ID: BS 12.3 - A122B - VFT (12x12) - Off White w/Brown Flakes** [Z-01a]	
					not analyzed	
1945297-37	01-Oct-19	Grey	Mortar	No	**Client ID: BS 13.1 - A142 - Concrete Block Mortar**	
					Non-Fibers	100
1945297-38	01-Oct-19	Grey	Mortar	No	**Client ID: BS 13.2 - A142 - Concrete Block Mortar**	
					Non-Fibers	100
1945297-39	01-Oct-19	Grey	Mortar	No	**Client ID: BS 13.3 - A142 - Concrete Block Mortar**	
					Non-Fibers	100
1945297-40	01-Oct-19	Grey	Grout	No	**Client ID: BS 14.1 - A106C - Wall Tile Grout**	
					Non-Fibers	100
1945297-41	01-Oct-19	White	Grout	No	**Client ID: BS 14.2 - A106C - Wall Tile Grout**	
					Non-Fibers	100
1945297-42	01-Oct-19	White	Grout	No	**Client ID: BS 14.3 - A106C - Wall Tile Grout**	
					Non-Fibers	100
1945297-43	01-Oct-19	Grey	Texture Coat	No	**Client ID: BS 15.1 - A139 - Wall Texture Coating**	
					Non-Fibers	100
1945297-44	01-Oct-19	Grey	Texture Coat	No	**Client ID: BS 15.2 - A139 - Wall Texture Coating**	
					Non-Fibers	100
1945297-45	01-Oct-19	Grey	Texture Coat	No	**Client ID: BS 15.3 - A139 - Wall Texture Coating**	
					Non-Fibers	100
1945297-46	01-Oct-19	Grey	Texture Coat	No	**Client ID: BS 15.4 - A139 - Wall Texture Coating**	
					Non-Fibers	100
1945297-47	01-Oct-19	White	Texture Coat	No	**Client ID: BS 15.5 - A140 - Wall Texture Coating**	
					Non-Fibers	100

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-48	01-Oct-19	White	Texture Coat	No	**Client ID: BS 15.6 - A140 - Wall Texture Coating**	
					Non-Fibers	100
1945297-49	01-Oct-19	White	Texture Coat	No	**Client ID: BS 15.7 - A140 - Wall Texture Coating**	
					Non-Fibers	100
1945297-50	01-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 16.1 - A136-2x4-SCT-Fissures**	
					Cellulose	95
					Non-Fibers	5
1945297-51	01-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 16.2 - A136-2x4-SCT-Fissures**	
					Cellulose	95
					Non-Fibers	5
1945297-52	01-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 16.3 - A136-2x4-SCT-Fissures**	
					Cellulose	95
					Non-Fibers	5
1945297-53	01-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 17.1 - A106 - 2x4 - SCT - Pinholes with Large Fissures**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-54	01-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 17.2 - A100B - 2x4 - SCT - Pinholes with Large Fissures**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-55	01-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 17.3 - A127C - 2x4 - SCT - Pinholes with Large Fissures**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-56	01-Oct-19	Red	Vinyl Floor Tile	No	**Client ID: BS 18.1 - A106C - 12x12 - Red w/Flakes** [Z-01c]	
					Non-Fibers	100

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Report Date: 26-Nov-2019

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Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-57.1	01-Oct-19	Red	Vinyl Floor Tile	No	**Client ID: BS 18.2 - A106C - 12x12 - Red w/Flakes**	
					Non-Fibers	100
1945297-57.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 18.2 - A106C - 12x12 - Red w/Flakes** [Z-01a]	
					Non-Fibers	100
1945297-58.1	01-Oct-19	Red	Vinyl Floor Tile	No	**Client ID: BS 18.3 - A106C - 12x12 - Red w/Flakes**	
					Non-Fibers	100
1945297-58.2	01-Oct-19				**Client ID: BS 18.3 - A106C - 12x12 - Red w/Flakes** [Z-01a]	
					not analyzed	
1945297-59	01-Oct-19	Brown	Mastic	No	**Client ID: BS 19.1 - D202B-Carpet Mastic**	
					Non-Fibers	100
1945297-60	01-Oct-19	Brown	Mastic	No	**Client ID: BS 19.2 - D202B-Carpet Mastic**	
					Non-Fibers	100
1945297-61	01-Oct-19	Brown	Mastic	No	**Client ID: BS 19.3 - D202B-Carpet Mastic**	
					Non-Fibers	100
1945297-62	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 20.1 - BS215E - VFT 2x2 - Off White w/Blue Streaks** [Z-01c]	
					Non-Fibers	100
1945297-63	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 20.2 - BS215E - VFT 2x2 - Off White w/Blue Streaks** [Z-01c]	
					Non-Fibers	100
1945297-64	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 20.3 - BS215E - VFT 2x2 - Off White w/Blue Streaks** [Z-01c]	
					Non-Fibers	100
1945297-65	01-Oct-19	Grey	Plaster	No	**Client ID: BS 21.1- B215N - Plaster on Beam** [Z-01f]	
					Non-Fibers	100
1945297-66	01-Oct-19	Grey	Plaster	**Yes**	**Client ID: BS 21.2- B215N - Plaster on Beam** [Z-01f]	
					Tremolite	1
					Non-Fibers	99

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-67	01-Oct-19	Grey	Plaster	No	**Client ID: BS 21.3- B215N - Plaster on Beam** [Z-01f]	
					Non-Fibers	100
1945297-68.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 22.1 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-68.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 22.1 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-69.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 22.2 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-69.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 22.2 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-70.1	01-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 22.3 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-70.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 22.3 - C209 - VFT 12x12 - Off White w/Grey & Black Flakes**	
					Non-Fibers	100
1945297-71.1	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 23.1 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100
1945297-71.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 23.1 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100
1945297-72.1	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 23.2 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100
1945297-72.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 23.2 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100
1945297-73.1	01-Oct-19	Beige	Vinyl Floor Tile	No	**Client ID: BS 23.3 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-73.2	01-Oct-19	Black	Mastic	No	**Client ID: BS 23.3 - C209 - VFT 12x12 - Beige w/Multicolor Flakes**	
					Non-Fibers	100
1945297-74.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 24.1 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-74.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 24.1 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-75.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 24.2 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-75.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 24.2 - C200 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-76.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 24.3 - C144 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-76.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 24.3 - C144 Hallway - VFT 12x12 - Off White w/Grey Flakes**	
					Non-Fibers	100
1945297-77.1	02-Oct-19	Pink	Vinyl Floor Tile	No	**Client ID: BS 25.1 - C115 - VFT 12x12 - Pink w/Dots**	
					Non-Fibers	100
1945297-77.2	02-Oct-19				**Client ID: BS 25.1 - C115 - VFT 12x12 - Pink w/Dots** [Z-01a]	
					not analyzed	
1945297-78.1	02-Oct-19	Pink	Vinyl Floor Tile	No	**Client ID: BS 25.2 - C115 - VFT 12x12 - Pink w/Dots**	
					Non-Fibers	100
1945297-78.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 25.2 - C115 - VFT 12x12 - Pink w/Dots**	
					Non-Fibers	100
1945297-79.1	02-Oct-19	Pink	Vinyl Floor Tile	No	**Client ID: BS 25.3 - C115 - VFT 12x12 - Pink w/Dots**	
					Non-Fibers	100

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-79.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 25.3 - C115 - VFT 12x12 - Pink w/Dots**	
					Non-Fibers	100
1945297-80.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 26.1 - E041 - VFT 12x12 - Off White w/Blue Streaks**	
					Non-Fibers	100
1945297-80.2	02-Oct-19	Yellow	Mastic	No	**Client ID: BS 26.1 - E041 - VFT 12x12 - Off White w/Blue Streaks**	
					Non-Fibers	100
1945297-81.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 26.2 - E041 - VFT 12x12 - Off White w/Blue Streaks**	
					Non-Fibers	100
1945297-81.2	02-Oct-19				**Client ID: BS 26.2 - E041 - VFT 12x12 - Off White w/Blue Streaks** [Z-01a]	
					not analyzed	
1945297-82.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 26.3 - E041 - VFT 12x12 - Off White w/Blue Streaks**	
					Non-Fibers	100
1945297-82.2	02-Oct-19	Yellow	Mastic	No	**Client ID: BS 26.3 - E041 - VFT 12x12 - Off White w/Blue Streaks**	
					Non-Fibers	100
1945297-83.1	02-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 27.1 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100
1945297-83.2	02-Oct-19	Yellow	Mastic	No	**Client ID: BS 27.1 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100
1945297-84.1	02-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 27.2 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100
1945297-84.2	02-Oct-19	Yellow	Mastic	No	**Client ID: BS 27.2 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100
1945297-85.1	02-Oct-19	Grey	Vinyl Floor Tile	No	**Client ID: BS 27.3 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100

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Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-85.2	02-Oct-19	Yellow	Mastic	No	**Client ID: BS 27.3 - E053 - VFT 12x12 - Grey w/White & Light Grey Streaks**	
					Non-Fibers	100
1945297-86.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 28.1 - E244 - VFT 12x12 - Off White w/ Grey Streaks**	
					Non-Fibers	100
1945297-86.2	02-Oct-19				**Client ID: BS 28.1 - E244 - VFT 12x12 - Off White w/ Grey Streaks** [Z-01a]	
					not analyzed	
1945297-87.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 28.2 - E244 - VFT 12x12 - Off White w/ Grey Streaks**	
					Non-Fibers	100
1945297-87.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 28.2 - E244 - VFT 12x12 - Off White w/ Grey Streaks**	
					Non-Fibers	100
1945297-88.1	02-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 28.3 - E244 - VFT 12x12 - Off White w/ Grey Streaks**	
					Non-Fibers	100
1945297-88.2	02-Oct-19	Black	Mastic	No	**Client ID: BS 28.3 - E244 - VFT 12x12 - Off White w/ Grey Streaks**	
					Non-Fibers	100
1945297-89	02-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 29.1 - D108 - Men's Change Rm - 12x12 - ACT**	
					Cellulose	95
					Non-Fibers	5
1945297-90	02-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 29.2 - D108 - Men's Change Rm - 12x12 - ACT**	
					Cellulose	95
					Non-Fibers	5
1945297-91	02-Oct-19	Brown	Ceiling Tile	No	**Client ID: BS 29.3 - D108 - Men's Change Rm - 12x12 - ACT**	
					Cellulose	95
					Non-Fibers	5

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-92.1	02-Oct-19	Brown	Mastic	No	**Client ID: BS 30.1 - D108 - Ceiling Mastic (Pucks)**	
					MMVF	3
					Non-Fibers	97
1945297-92.2	02-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 30.1 - D108 - Ceiling Mastic (Pucks)**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-93.1	02-Oct-19	Brown	Mastic	No	**Client ID: BS 30.2 - D108 - Ceiling Mastic (Pucks)**	
					Non-Fibers	100
1945297-93.2	02-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 30.2 - D108 - Ceiling Mastic (Pucks)**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-94.1	02-Oct-19	Brown	Mastic	No	**Client ID: BS 30.3 - D108 - Ceiling Mastic (Pucks)**	
					Non-Fibers	100
1945297-94.2	02-Oct-19	Grey	Ceiling Tile	No	**Client ID: BS 30.3 - D108 - Ceiling Mastic (Pucks)**	
					Cellulose	40
					MMVF	30
					Non-Fibers	30
1945297-95	02-Oct-19	Grey	Plaster	No	**Client ID: BS 31.1 - D108 - Ceiling Plaster**	
					Non-Fibers	100
1945297-96	02-Oct-19	Grey	Plaster	No	**Client ID: BS 31.2 - D108 - Ceiling Plaster**	
					Non-Fibers	100
1945297-97	02-Oct-19	Grey	Plaster	No	**Client ID: BS 31.3 - D108 - Ceiling Plaster**	
					Non-Fibers	100

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-98	02-Oct-19	Grey	Insulation	No	**Client ID: BS 32.1 - B100 Hallway - Sprayed Insulation**	
					MMVF	90
					Non-Fibers	10
1945297-99	02-Oct-19	Grey	Insulation	No	**Client ID: BS 32.2 - C141C - Tele Rm - Sprayed Insulation**	
					MMVF	90
					Non-Fibers	10
1945297-AA	02-Oct-19	Grey	Insulation	No	**Client ID: BS 32.3 - C141C - Tele Rm - Sprayed Insulation**	
					MMVF	90
					Non-Fibers	10
1945297-AB	02-Oct-19	Grey	Insulation	No	**Client ID: BS 32.4 - C201 - Sprayed Insulation**	
					MMVF	90
					Non-Fibers	10
1945297-AC	02-Oct-19	Grey	Insulation	No	**Client ID: BS 32.5 - C204 - Sprayed Insulation**	
					MMVF	90
					Non-Fibers	10
1945297-AD	30-Sep-19	White	Drywall Joint Compound	No	**Client ID: BS 33.1 - A136 - Drywall Joint Compound DJC**	
					Non-Fibers	100
1945297-AE	01-Oct-19	Grey	Drywall Joint Compound	No	**Client ID: BS 33.2 - A139A - Drywall Joint Compound DJC** [Z-01e]	
					Cellulose	5
					Non-Fibers	95
1945297-AF	02-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 33.3 - C115 - Drywall Joint Compound DJC**	
					Non-Fibers	100
1945297-AG	02-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 33.4 - B215 - Drywall Joint Compound DJC**	
					Non-Fibers	100
1945297-AH	02-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 33.5 - C200 Hallway - Drywall Joint Compound DJC**	
					Non-Fibers	100

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 4-Nov-2019

Client PO:

Project Description: Z1920014HZ-200 LEES

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1945297-AI	02-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 33.6 - E126 - Drywall Joint Compound DJC**	
					Non-Fibers	100
1945297-AJ	02-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 33.7 - E053 - Drywall Joint Compound DJC**	
					Non-Fibers	100
1945297-AK	03-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 34.1 - E038 - Mech. Rm - DJC**	
					Non-Fibers	100
1945297-AL	03-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 34.2 - E038 - Mech. Rm - DJC**	
					Non-Fibers	100
1945297-AM	03-Oct-19	White	Drywall Joint Compound	No	**Client ID: BS 34.3 - E038 - Mech. Rm - DJC**	
					Non-Fibers	100
1945297-AN.1	03-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 35.1- C115 - VFT 12x12 - Off White w/Dots**	
					Non-Fibers	100
1945297-AN.2	03-Oct-19				**Client ID: BS 35.1- C115 - VFT 12x12 - Off White w/Dots**	[Z-01d]
					not analyzed	
1945297-AO.1	03-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 35.2- C115 - VFT 12x12 - Off White w/Dots**	
					Non-Fibers	100
1945297-AO.2	03-Oct-19				**Client ID: BS 35.2- C115 - VFT 12x12 - Off White w/Dots**	[Z-01d]
					not analyzed	
1945297-AP.1	03-Oct-19	Off-white	Vinyl Floor Tile	No	**Client ID: BS 35.3- C115 - VFT 12x12 - Off White w/Dots**	
					Non-Fibers	100
1945297-AP.2	03-Oct-19	Black	Mastic	No	**Client ID: BS 35.3- C115 - VFT 12x12 - Off White w/Dots**	
					Non-Fibers	100

* MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

**** Analytes in bold indicate asbestos mineral content.**

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 4-Nov-2019

Client PO:

Project Description: Z1920014HZ-200 LEES

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	NVLAP Lab Code *	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	1 - Mississauga	200863-0	7-Nov-19

* Reference to the NVLAP term does not permit the user of this report to claim product certification , approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Mississauga Lab: 15 - 6800 Kitimat Rd Mississauga, Ontario, L5N 5M1

Qualifier Notes

Sample Qualifiers :

Z-01: Inseparable layers.

Z-01a: Insufficient sample.

Z-01b: no mastic present

Z-01c: No mastic presents.

Z-01d: No sample present.

Z-01e: Sample appears to be drywall.

Z-01f: Sample contains vermiculite.

Work Order Revisions | Comments

Revision 1: Report has been revised to reflect updated sample IDs per client.

PARACEL LABORATORIES LTD.

Paracel ID: 1945297

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Chain of Custody
(Lab Use Only)

Client Name: MCINTOSH PERRY LTD	Project Reference: Z1920014HZ-200 Lees
Contact Name: ATIF MOHAMED	Quote #:
Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ON, L4H 4G3	PO #:
	Email Address: a.mohamed@mcintoshperry.com
Telephone: 647-226-6738	

Turnaround Time:

☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ☐ 3 Day
☑ Regular

Date Required:

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☑ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☑ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Asbestos - Bulk: Positive Stop?
1	BS 1..1 - A02-MECH.RM-UNILUX MACHINE GASKET	SEPT.30/19				☑
2	BS 1.2- " "	SEPT.30/19				☐
3	BS 1.3 -" "	SEPT.30/19				☐
4	BS 2.1-104C-PARGING CEMENT	SEPT.30/19				☐
5	BS 2.2-" "	SEPT.30/19				☐
6	BS 2.3 - " "	SEPT.30/19				☐
7	BS 3.1-A105-WORKBENCH#2-MECH.PIPE INSULATION	SEPT.30/19				☐
8	BS 3.2 -" "	SEPT.30/19				☐
9	BS 3.3-" "	SEPT.30/19				☐
10	BS 4.1-A140-FLOOR LEVELLING COMPOUND	SEPT.30/19				☐
11	BS 4.2-" "	SEPT.30/19				☐
12	BS 4.3-" "	SEPT.30/19				☐

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Comments:

Method of Delivery: WALK-IN

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print): ATIF MOHAMED			
Date/Time:	Date/Time: 04-Nov-19 16:26	Date/Time: Nov 5/19 1130	Date/Time: Nov 06/19 08:19

PARACEL LABORATORIES LTD.

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Chain of Custody
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Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ON, L4H 4G3	PO #:
	Email Address: a.mohamed@mcintoshperry.com
Telephone: 647-226-6738	

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Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 5.1 - A139-PLASTER ON COLUMNS	SEPT.30/19				☒
2	BS 5.2 -" "	SEPT.30/19				☐
3	BS 5.3- " "	SEPT.30/19				☐
4	BS 6.1-A144-HIGH TRAFFIC COATING	SEPT.30/19				☐
5	BS 6.2-" "	SEPT.30/19				☐
6	BS 6.3-" "	SEPT.30/19				☐
7	BS 7.1-A139-INT. WINDOW CAULKING	SEPT.30/19				☐
8	BS 7.2- " "	SEPT.30/19				☐
9	BS 7.3- " "	SEPT.30/19				☐
10	BS 8.1-A136-VFT(12"X12"-OFFWHITE W/GRAY&BLACK STREAKS	SEPT.30/19				☐
11	BS 8.2-" "	SEPT.30/19				☐
12	BS 8.3-" "	SEPT.30/19				☑

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Contact Name: ATIF MOHAMED	Quote #:
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Date Required: _____

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 9.1 - A138E-VFT(12"X12"-BEIGE WBROWN&GREY FLAKES)	OCT.1/19				☒
2	BS 9.2-" "	OCT.1/19				☐
3	BS 9.3-" "	OCT.1/19				☐
4	BS 10.1-A122B-VFT(12"X12"-OLIVE GREEN W/GRAY FLAKES)	OCT.1/19				☐
5	BS 10.2-" "	OCT.1/19				☐
6	BS 10.3-" "	OCT.1/19				☐
7	BS 11.1-A147-ARCHIVES RM-VFT(12"X12"-GREY W/BLUE STREAKS)	OCT.1/19				☐
8	BS 11.2-" "	OCT.1/19				☐
9	BS 11.3-" "	OCT.1/19				☐
10	BS 12.1-A122B-VFT(12"X12"-OFFWHITE W/BROWN FLAKES)	OCT.1/19				☐
11	BS 12.2-" "	OCT.1/19				☐
12	BS 12.3-" "	OCT.1/19				☑

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Date/Time:	Date/Time: 04-NOV-19 16:26	Date/Time: 7/N/5/19 1120	Date/Time: Nov 06/19 08:19

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Chain of Custody
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Contact Name: ATIF MOHAMED	Quote #:
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ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 13.1- A142-CONCRETE BLOCK MORTAR	OCT.1/19				☒
2	BS 13.2-" "	OCT.1/19				☐
3	BS 13.3-" "	OCT.1/19				☐
4	BS 14.1-A106C-WALL TILE GROUT	OCT.1/19				☐
5	BS 14.2-" "	OCT.1/19				☐
6	BS 14.3-" "	OCT.1/19				☐
7	BS 15.1-A139-WALL TEXTURE COATING	OCT.1/19				☐
8	BS 15.2-" "	OCT.1/19				☐
9	BS 15.3-" "	OCT.1/19				☐
10	BS 15.4-" "	OCT.1/19				☐
11	BS 15.5-A140-" "	OCT.1/19				☐
12	BS 15.6-" "	OCT.1/19				☐

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Chain of Custody
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Client Name: MCINTOSH PERRY LTD	Project Reference: Z1920014HZ-200 Lees
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Telephone: 647-226-6738	Email Address: a.mohamed@mcintoshperry.com

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ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 15.7-" "	OCT.1/19				☒
2	BS 16.1-A36-2'X4'-SCT-FISSURES	OCT.1/19				☐
3	BS 16.2 - " "	OCT.1/19				☐
4	BS 16.3- " "	OCT.1/19				☐
5	BS 17.1-A106-2'X4'-SCT-PINHOLES WITH LARGE FISSURES	OCT.1/19				☐
6	BS 17.2-A100B-" "	OCT.1/19				☐
7	BS 17.3-A127C-" "	OCT.1/19				☐
8	BS 18.1-A106C-VFT(12"x12"-RED W/FLAKES)	OCT.1/19				☐
9	BS 18.2-" "	OCT.1/19				☐
10	BS 18.3-" "	OCT.1/19				☐
11	BS 19.1-B202B-CARPET MASTIC	OCT.1/19				☐
12	BS 19.2-" "	OCT.1/19				☐
						☑

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Date/Time:	Date/Time: 04-Nov-19 16:26	Date/Time: 7/11/5/19 1120	Date/Time: Tue 06/11/19 08:19

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@paracellabs.com

Chain of Custody
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Contact Name: ATIF MOHAMED	Quote #:
Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ON, L4H 4G3	PO #:
Telephone: 647-226-6738	Email Address: a.mohamed@mcintoshperry.com

Turnaround Time:

☐ Immediate ☐ 1 Day
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Date Required:

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Asbestos - Bulk: Positive Stop?
1	BS 19.3-" "	OCT.1/19				☒
2	BS 20.1-BS215E-VFT(2'X2'-OFFWHITE W/BLUE STREAKS)	OCT.1/19				☐
3	BS 20.2-" "	OCT.1/19				☐
4	BS 20.3-" "	OCT.1/19				☐
5	BS 21.1-B215N-PLASTER ON BEAM	OCT.1/19				☐
6	BS 21.2-" "	OCT.1/19				☐
7	BS 21.3-" "	OCT.1/19				☐
8	BS 22.1-C209-VFT(12"X12"-OFFWHITE W/GREY&BLACK FLAKES)	OCT.1/19				☐
9	BS 22.2-" "	OCT.1/19				☐
10	BS 22.3-" "	OCT.1/19				☐
11	BS 23.1-C209-VFT(12"X12"-BEIGE W/MULTICOLOUR FLAKES)	OCT.1/19				☐
12	BS 23.2-" "	OCT.1/19				☒

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ASBESTOS & MOLD ANALYSIS

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Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 23.3-" "	OCT.2/19				☐
2	BS 24.1-C200HALLWAY-VFT(12"X12"-OFFWHITIE W/GRAY FLAKES)	OCT.2/19				☒
3	BS 24.2-" "	OCT.2/19				☐
4	BS 24.3- C144-" "	OCT.2/19				☐
5	BS 25.1-C115-VFT(12"X12"-PINK W/DOTS)	OCT.2/19				☐
6	BS 25.2" "	OCT.2/19				☐
7	BS 25.3-" "	OCT.2/19				☐
8	BS 26.1-E041-VFT(12"X12"-OFFWHITE W/BLUE STREAKS)	OCT.2/19				☐
9	BS 26.2-" "	OCT.2/19				☐
10	BS 26.3-" "	OCT.2/19				☐
11	BS 27.1-E053-VFT(12"X12"-GREY W/WHITE & LIGHT GREY STREAKS)	OCT.2/19				☐
12	BS 27.2-" "	OCT.2/19				☐

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Comments:

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Relinquished By (Print):			
Date/Time:	Date/Time: 04-NOV-19 16:26	Date/Time: 7/05/19 11:20	Date/Time: Mon 04/11/19 08:19

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Turnaround Time:

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ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 27.3-"	OCT.2/19				☐
2	BS 28.1-E244-VFT(12"X12"-OFFWHITE W/GREY FLAKES)	OCT.2/19				☐
3	BS 28.2-"	OCT.2/19				☐
4	BS 28.3-"	OCT.2/19				☐
5	BS 29.1-D108-MEN'S CHANGE RM-12"X12"-ACT	OCT.2/19				☐
6	BS 29.2-"	OCT.2/19				☐
7	BS 29.3-"	OCT.2/19				☐
8	BS 301.-D108-CEILING MASTIC (PUCKS)	OCT.2/19				☐
9	BS 30.2-"	OCT.2/19				☐
10	BS 30.3-"	OCT.2/19				☐
11	BS 31.1-D108-CEILING PLASTER	OCT.2/19				☐
12	BS 31.2-"	OCT.2/19				☐

*** If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.**

Comments:

Method of Delivery: WALK-IN

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):			
Date/Time:	Date/Time: 04-NOV-19 16:26	Date/Time: NOV 5/19 1120	Date/Time: Nov 06/19 08:19

PARACEL LABORATORIES LTD.

Paracel ID: 1945297

ice
St. Laurent Blvd.
Ontario K1G 4J8
749-1947
@paracellabs.com

Chain of Custody
(Lab Use Only)

Client Name: MCINTOSH PERRY LTD	Project Reference: Z1920014HZ-200 Lees
Contact Name: ATIF MOHAMED	Quote #:
Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ON, L4H 4G3	PO #:
Telephone: 647-226-6738	Email Address: a.mohamed@mcintoshperry.com

Turnaround Time:

☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ☐ 3 Day
☐ Regular

Date Required: _____

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	BS 31.3-"	OCT.2/19				☐
2	BS 32.1-B100HALLWAY-SRAYED INSULATION	OCT.2/19				☒
3	BS 32.2-C141C-TELE.RM-"	OCT.2/19				☐
4	BS 32.3-"	OCT.2/19				☐
5	BS 32.4-C201-SPRAYED INSULATION	OCT.2/19				☐
6	BS 32.5-C204"	OCT.2/19				☐
7	BS 33.1-A136-DRYWALL JOINT COMPOUND (DJC)	SEPT.30/19				☐
8	BS 33.2-A139A-DJC	OCT.1/19				☐
9	BS 33.3-C115-DJC	OCT.2/19				☐
10	BS 33.4-B215-DJC	OCT.2/19				☐
11	BS 33.5-C200HALLWAYY-DJC	OCT.2/19				☐
12	BS 33.6-E126-DJC	OCT.2/19				☐

*** If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.**

Comments:

Method of Delivery: WALK-IN

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):			
Date/Time:	Date/Time: 04-NOV-19 16:26	Date/Time: NOV 5/19 11:20	Date/Time: Nov 06/19 08:19

PARACEL LABORATORIES LTD.

Paracel ID: 1945297

Office
9 St. Laurent Blvd.
Ontario K1G 4J8
0-749-1947
cel@paracellabs.com

Chain of Custody
(Lab Use Only)

Client Name: MCINTOSH PERRY LTD	Project Reference: Z1920014HZ-200 Lees
Contact Name: ATIF MOHAMED	Quote #:
Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ON, L4H 4G3	PO #:
	Email Address: a.mohamed@mcintoshperry.com
Telephone: 647-226-6738	

Turnaround Time:

☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ☐ 3 Day
☐ Regular

Date Required: _____

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☐ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☐ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 1945297

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Asbestos - Bulk: Positive Stop?
1	BS 33.7-E053-DJC	OCT.2/19				☒
2	BS 34.1-E038-MECH.RM-DJC	OCT.3/19				☐
3	BS 34.2-" "	OCT.3/19				☐
4	BS 34.3-" "	OCT.3/19				☐
5	BS 35.1-C115-VFT(12"X12"-OFFWHITE W/DOTS)	OCT.3/19				☐
6	BS 35.2-" "	OCT.3/19				☐
7	BS 35.3-" "	OCT.3/19				☐
8						☐
9						☐
10						☐
11						☐
12						☑

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments:

Method of Delivery: WALK-N

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):			
Date/Time:	Date/Time: 04-Nov-19 1626	Date/Time: Nov 5/19 11:20	Date/Time: Nov 06/19 08:19

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Certificate of Analysis

McIntosh Perry Limited (Concord)

6240 Hwy 7, Suite 200
Woodbridge, ON L4H 0R2
Attn: Atif Mohamed

Client PO:
Project: Z1920014HZ-200 LEES
Custody:

Report Date: 8-Nov-2019
Order Date: 4-Nov-2019

Order #: 1945256

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
1945256-01	PB-1-A140-BEIGE, ABOVE DOOR VENT
1945256-02	PB-2-A140-BLUE, DOOR
1945256-03	PB-3-A144-BEIGE, FLOOR
1945256-04	PB-4-D109-MAROON, WALL
1945256-05	PB-5-A122-BLACK, WALL
1945256-06	PB-6-D201-WHITE, ON DUCTS
1945256-07	PB-7-208B-TEAL GREEN, WALL
1945256-08	PB-8-E254-OFF WHITE, WALL
1945256-09	PB-9-A02-MECH. RM-GREY, FLOOR

Approved By: Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis
Client: McIntosh Perry Limited (Concord)
Client PO:

Report Date: 08-Nov-2019
Order Date: 4-Nov-2019
Project Description: Z1920014HZ-200 LEES

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	6-Nov-19	7-Nov-19

Sample and QC Qualifiers Notes

1- GEN01 :Elevated Reporting Limits due to limited sample volume.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

Certificate of Analysis
Client: McIntosh Perry Limited (Concord)
Client PO:

Report Date: 08-Nov-2019
Order Date: 4-Nov-2019
Project Description: Z1920014HZ-200 LEES

Sample Results

Lead

Matrix: Paint
Sample Date: 01-Oct-19

Paracel ID	Client ID	Units	MDL	Result
1945256-04	PB-4-D109-MAROON, WALL	%	0.0005	<0.0019 [1]
1945256-05	PB-5-A122-BLACK, WALL	%	0.0005	0.0579
1945256-06	PB-6-D201-WHITE, ON DUCTS	%	0.0005	0.167
1945256-07	PB-7-208B-TEAL GREEN, WALL	%	0.0005	0.0006
1945256-08	PB-8-E254-OFF WHITE, WALL	%	0.0005	0.0020
1945256-09	PB-9-A02-MECH. RM-GREY, FLOOR	%	0.0005	0.189

Lead

Matrix: Paint
Sample Date: 30-Sep-19

Paracel ID	Client ID	Units	MDL	Result
1945256-01	PB-1-A140-BEIGE, ABOVE DOOR VENT	%	0.0005	0.0753
1945256-02	PB-2-A140-BLUE, DOOR	%	0.0005	0.0008
1945256-03	PB-3-A144-BEIGE, FLOOR	%	0.0005	0.0173

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	**ND**	**0.0005**	**%**						
Matrix Duplicate									
Lead	**ND**	**0.0005**	**%**	**0.00082**			**0.0**	**50**	
Matrix Spike									
Lead	0.129	0.0005	%	0.00082	102	70-130			

PARACEL LABORATORIES LTD.

Paracel ID: 1945256

Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
1945256	

Client Name: MCINTOSH PERRY LIMITED	Project Ref: Z1920014HZ-200 LEES
Contact Name: ATIF MOHAMED	Quote #:
Address: 6240 HIGHWAY 7, SUITE 200, WOODBRIDGE, ONTARIO, L4H 4	PO #:
Telephone: 647-226-6738	E-mail: a.mohamed@mcintoshperry.com

Page 1 of 1

Turnaround Time

☐ 1 day ☐ 3 day
☐ 2 day ☑ Regular
Date Required:

Regulation 153/04

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table ___
For RSC: ☐ Yes ☐ No

Other Regulation

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken Date	Sample Taken Time	Required Analysis: LEAD
1	PB-1-A140-BEIGE , ABOVE DOOR VENT	P			SEPT.30/19		X
2	PB-2-A140- BLUE, DOOR	P			SEPT.30/19		X
3	PB-3-A144-BEIGE, FLOOR	P			SEPT.30/19		X
4	PB-4-D109-MAROON, WALL	P			OCT.1/19		X
5	PB-5-A122-BLACK, WALL	P			OCT.1/19		X
6	PB-6-D201-WHITE, ON DUCTS	P			OCT.1/19		X
7	PB-7-208B-TEAL GREEN, WALL	P			OCT.1/19		X
8	PB-8-E254-OFFWHITE, WALL	P			OCT.1/19		X
9	PB-9-A02-MECH.RM-GREY, FLOOR	P			OCT.1/19		X
10							

Comments:

Method of Delivery: WALK-IN

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab: Kelley Wright	Verified By:
Relinquished By (Print): ATIF M	Date/Time: 04-NOV-19 16:26	Date/Time: 8:30 Nov 6, 2019	Date/Time: Nov 05/19 16:04
Date/Time:	Temperature: °C	Temperature: N/A	pH Verified: ☐ By:

APPENDIX D

Site Photographs

Photo 1: View of asbestos-containing interior window caulking (black) observed to be in good condition in Room 139.

Photo 2: View of asbestos-containing mechanical pipe straight insulation observed to be in poor condition in cabinet 510 in Room A 105.

Photo 3: View of asbestos-containing mechanical pipe straight insulation observed to be in poor condition on the 2nd work bench outside the bike shop office in Room A 105.

Photo 4: View of asbestos-containing mechanical pipe fittings observed to be in poor condition in Room A104.

This damage has bee repaired.

Photo 5: View of asbestos-containing plaster on steel mesh observed in Room B 215N.

Photo 6: View of asbestos-containing pipe gasket observed on the Unilux Boiler in Mechanical Room A02.

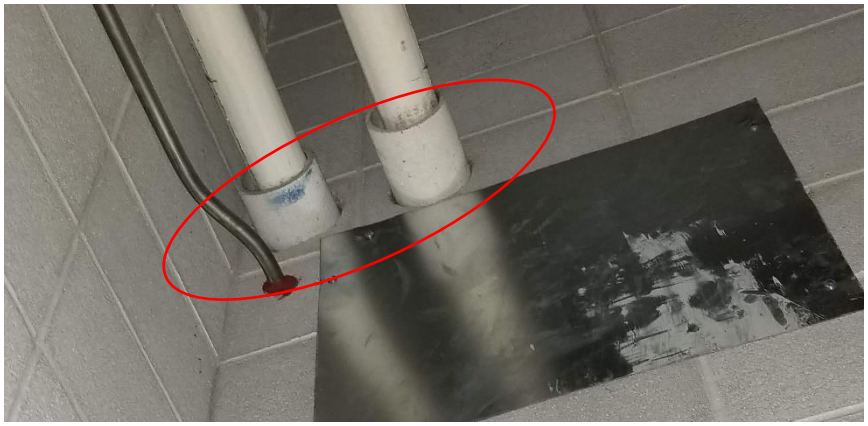


Photo 7: View of asbestos-containing transite pipe (highlighted in red) observed to be in good condition Mechanical Room A138C.

Photo 8: View of asbestos-containing vinyl floor tile (12”x12”-White with beige spots) observed to be in poor condition in Room C144.

This damage has bee repaired.

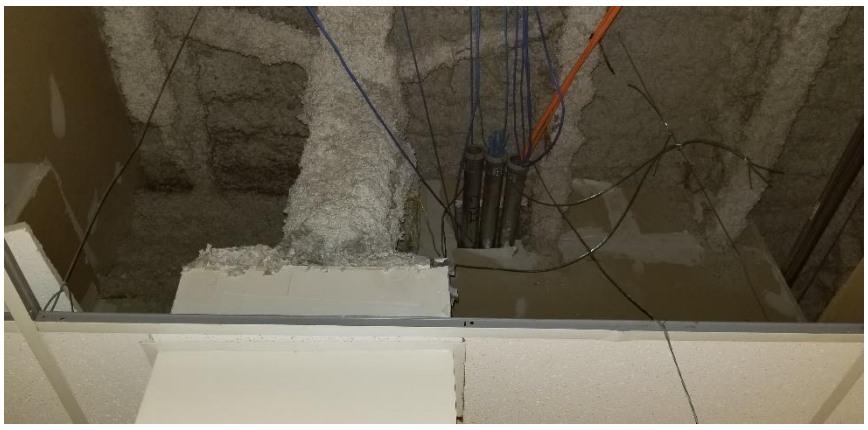


Photo 9: View of non-asbestos containing fireproofing observed above the suspended ceiling tiles in Room C141C.

Photo 10: View of non-asbestos containing vinyl floor tiles (12”x12”-Pink with dots) and vinyl floor tiles (12”x12”-Offwhite with dots) observed in RoomC115.

Photo 11: View of non-asbestos containing glued on acoustic tile (12”x12”-Uniform Holes) and adhesive mastic (brown) observed in the Men’s Change Room in D108.

Photo 12: View of low-level lead paint observed to be in poor condition in Room A144.

Photo 13: View lead containing white paint observed to be in poor condition in Mechanical Room D201.

Photo 14: View of water damage on drywall observed in Room E117.

Photo 15: View of lead acid battery pack observed outside of D201.

Photo 16: View of diagnostic machine suspected to contain radioactive materials observed in Room E029.

Photo 17: Typical view of non-PCB containing light ballast observed throughout the surveyed building.

Photo 18: View of water-stained suspended ceiling tiles in Room A104C.

This damage has bee repaired.

APPENDIX E

Asbestos-Containing Materials Checklists

Floor/Level	Location	Type of ACM	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Quantity #	Unit	Recommended Action	Comments
0	Room A02	Mechanical Gasket Insulation	Confirmed	Friable	Poor Condition	Easy	Moderate	1	SF	Repair or Remove Following Type 1/2 Abatement Procedures	
0	Room E029	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Moderate	~4	C	Manage in Place	
0	Throughout Level	Fire Doors	Suspected	Non-Friable	Good Condition	Easy	Low	N/A	N/A	Manage in Place	
1	Room A139	Window Caulking (Black)	Confirmed	Non-Friable	Good Condition	Easy	Moderate	~300	LF	Manage in Place	
1	Room A105	Mechanical Pipe Straight Insulation	Confirmed	Friable	Poor Condition	Easy	Moderate	5	LF	Remove Following Type 2 (Glovebag) Abatement Procedures	Observed in between workbenches at Cabinet 510.
1	Room A104C	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Poor Condition	Easy	Moderate	10	C	Remove Following Type 2 (Glovebag) Abatement Procedures	
1	Room A138C	Transite	Suspected	Non-Friable	Good Condition	Difficult	Low	1	LF	Manage in Place	
1	Room A142	Ceiling Plaster (Gray)	Confirmed	Friable	Good Condition	Difficult	Moderate	100	SF	Manage in Place	
1	Rooom C100D	Ceiling Plaster (Gray)	Confirmed	Friable	Good Condition	Moderate	Moderate	100	SF	Manage in Place	
1	Room C110	Vinyl Floor Tiles (12"x12"-White with beige spots)	Confirmed	Non-Friable	Fair Condition	Easy	Low	~20	SF	Monitor Condition of Material. Consider Removal or Repair.	Elevator within B100 Hallway
1	Throughout Level	Fire Doors	Suspected	Non-Friable	Good Condition	Easy	Moderate	N/A	N/A	Manage in Place	
2	Room B215N	Wall Plaster (Gray)	Confirmed	Friable	Fair Condition	Moderate	Moderate	~100	SF	Monitor Condition of Material. Consider Removal or Repair.	
2	Throughout Level	Fire Doors	Suspected	-	Good Condition	Easy	Low	-	N/A	Manage in Place	
Roof	Throughout Level	Roofing Materials	Suspected	-	Good Condition	Easy	Low	-	N/A	Manage in Place	

APPENDIX F

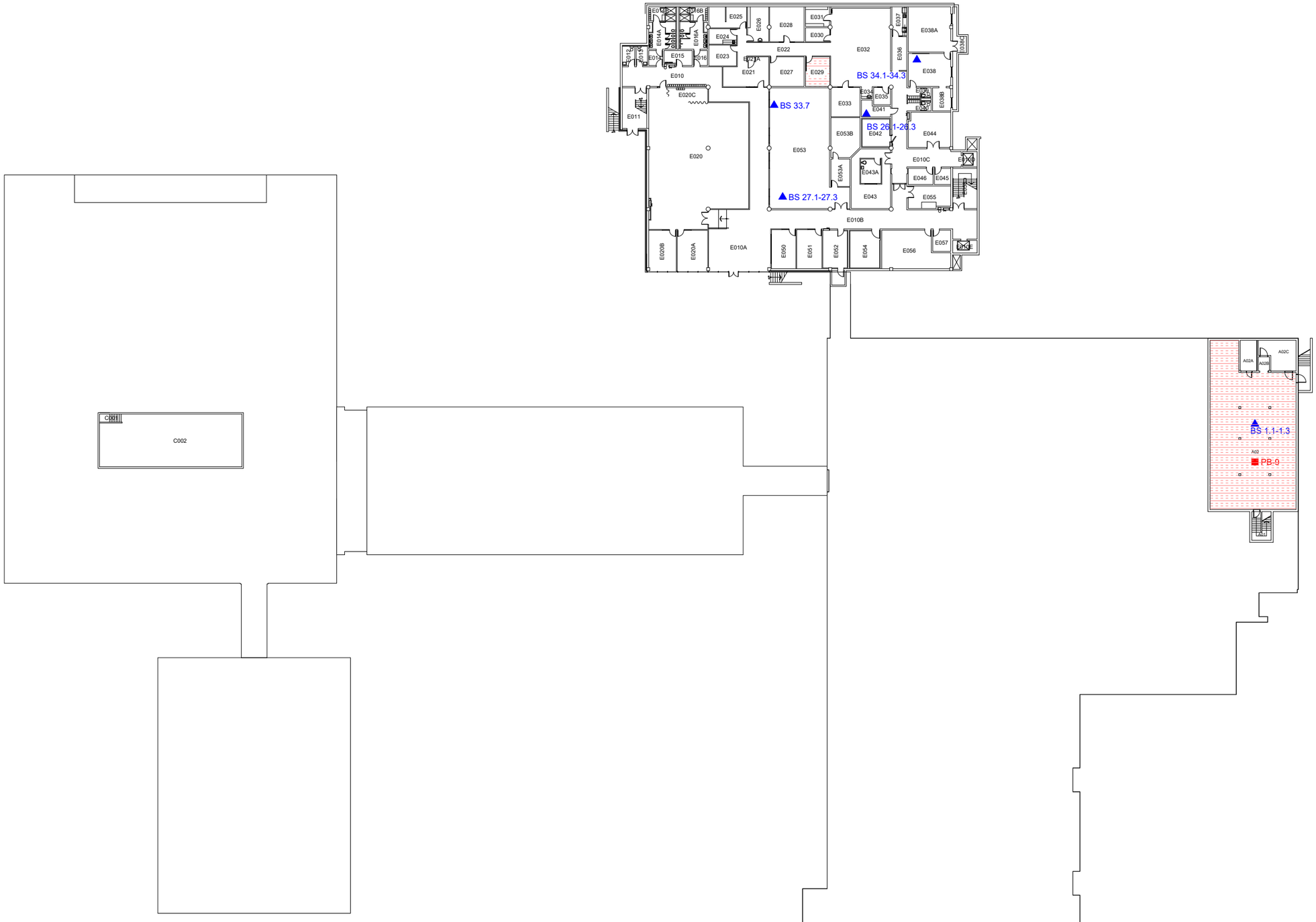
Hazardous Containing Materials Checklists

Floor/Level	Location	Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
0	A02	Lead	Battery Pack	N/A	Good Condition	Various	2	C	Confirmed	Manage In Place	
0	A02	Lead	Battery Pack	N/A	Good Condition	LumaCell	1	C	Confirmed	Manage In Place	
0	A02	Mercury	Pressure Gauges, Float Switch	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
0	C02	Mercury	Pressure Gauges, Float Switch	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
0	E037	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Frigidaire	1	C	Confirmed	Manage In Place	
0	Room E026	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good Condition	Woods	1	C	Confirmed	Manage in Place	
0	Room E043	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good Condition	Woods	1	C	Confirmed	Manage in Place	
0	E010 Hallway	Lead	Paint	White	Good Condition	N/A	-	-	Confirmed	Manage in Place	
0	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
0	Room E029	Lead	Drywall	N/A	Good Condition	N/A	-	-	Suspected	Manage in Place	Potential lead shielding in the vicinity of Room E029
0	Room E029	Radioactive Materials	Diagnostic Equipment	N/A	Good Condition	GE Medical Systems	1	C	Confirmed	Manage in Place	
0	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place	
0	Throughout Level	Lead	Battery Pack	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place	
0	Room E041	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Climate-Master	1	C	Confirmed	Manage in Place	
0	Room E042	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Keep-Rite	1	C	Confirmed	Manage in Place	
0	Room E043	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Norbec	1	C	Confirmed	Manage in Place	
1	A104	Mould/ Water Damage	Ceiling Tiles	N/A	Fair Condition	-	2	C	Confirmed	Must be removed and disposed of as per EACO Guidelines.	
1	A105	Lead	Battery Pack	N/A	Good Condition	LumaCell	1	C	Confirmed	Manage In Place	
1	A133	Lead	Battery Pack	N/A	Good Condition	LumaCell	1	C	Confirmed	Manage In Place	
1	A140	Lead	Paint	Beige	Poor Condition	N/A	3	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Safety Procedures as per EACO Guidelines.	
1	Room A139	Lead	Paint	White	Good Condition	N/A	-	-	Confirmed	Manage in Place	
1	Room B157, Columns	Lead	Paint	White	Good Condition	N/A	-	-	Confirmed	Manage in Place	
1	Throughout Level	Lead	Paint	Beige	Good Condition	N/A	-	-	Confirmed	Manage in Place	
1	Room A129	Ozone Depleting Substances (ODS)	Ice Making Machine	N/A	Good Condition	Manitowoc	1	C	Confirmed	Manage in Place	
1	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
1	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place	
1	Room A129	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place	
1	Room B153A	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Mitsubishi	1	C	Confirmed	Manage in Place	

Floor/Level	Location	Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
1	E103	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Friedrich	1	C	Confirmed	Manage in Place	
2	C200	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Various	1	C	Confirmed	Manage in Place	
2	E255A	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good Condition	Thermo-Scientific	3	C	Confirmed	Manage in Place	
2	E250	Lead	Battery Pack	White	Good Condition	N/A	1	c	Confirmed	Manage in Place	
2	Room B208B	Lead	Paint	White	Poor Condition	N/A	~6	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	
2	Room D201	Lead	Paint	White	Poor Condition	N/A	~12	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	
2	Throughout Level	Lead	Paint	White	Good Condition	N/A	-	-	Confirmed	Manage in Place	
2	B208B	Lead	Paint	Green	Poor Condition	N/A	~1	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	
2	E255	Ozone Depleting Substances (ODS)	Ice Making Machine	N/A	Good Condition	Hoshizaki	1	C	Confirmed	Manage in Place	
2	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
2	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
2	Throughout Level	Lead	Battery Pack	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
2	Throughout Level	Ozone Depleting Substances (ODS)	Ice Making Machine	N/A	Good Condition	Hoshizaki	1	C	Confirmed	Manage in Place	
3	E301	Lead	Battery Pack	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
3	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
3	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	N/A	Confirmed	Manage in Place	
3	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	N/A	Confirmed	Manage in Place	

APPENDIX G

Site Sampling & Location Plans



Legend:

- ▲ Asbestos Bulk Sample
- ■ Lead Paint Sample

- ACM Vinyl floor Tile (VFT)
- ACM Pipe Insulation
- ACM Plaster
- ACM Window Caulking

REV	DATE	DESCRIPTION	BY

McINTOSH PERRY

6240 HIGHWAY 7, SUITE 200
WOODBRIDGE, ON., L4H 4G3

Tel: 905.856.5200
Toll Free: 1.888.348.8991
Fax: 905.695.0221

www.mcintoshperry.com

uOttawa

Immeubles
Facilities

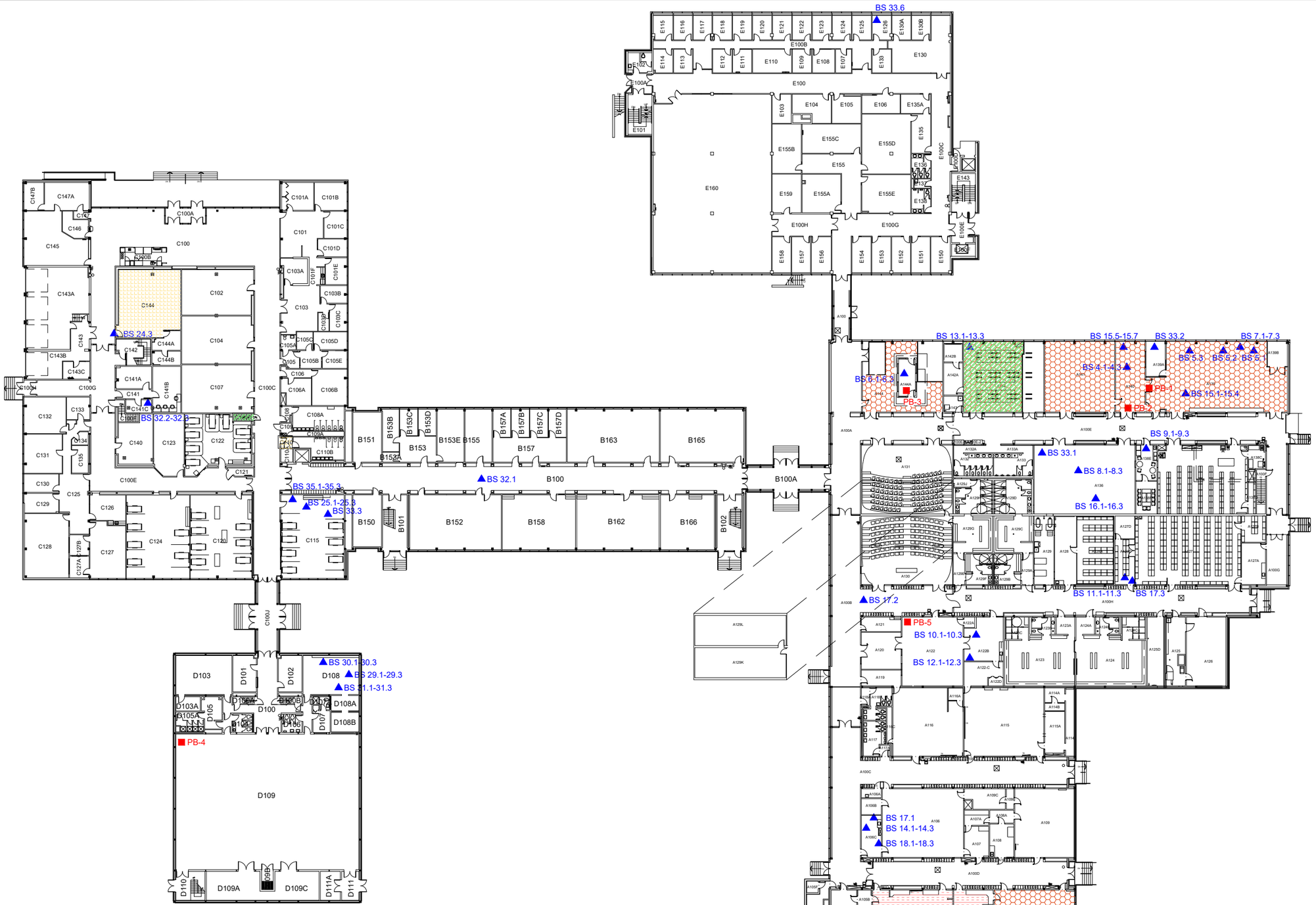
200 LEES
200 LESS
---
200 LESS

BUILDING COMBINED

Dessin / Drawing:
LEVEL 0
BUILDING COMBINATION

Édifice/Bldg			Niveau/Level:
----	060	----	0 ----
----	----	----	Feuille/Sheet: A-0
Échelle/Scale: 1:600	Revision: 1		of/de

JB 08/08/2015



Legend:

- ▲ Asbestos Bulk Sample
- ■ Lead Paint Sample

- ACM Vinyl floor Tile (VFT)
- ACM Pipe Insulation
- ACM Plaster
- ACM Window Caulking

REV	DATE	DESCRIPTION	BY

McINTOSH PERRY
6240 HIGHWAY 7, SUITE 200
WOODBRIDGE, ON., L4H 4G3
Tel: 905.856.5200 Fax: 905.695.0221
Toll Free: 1.888.348.8991
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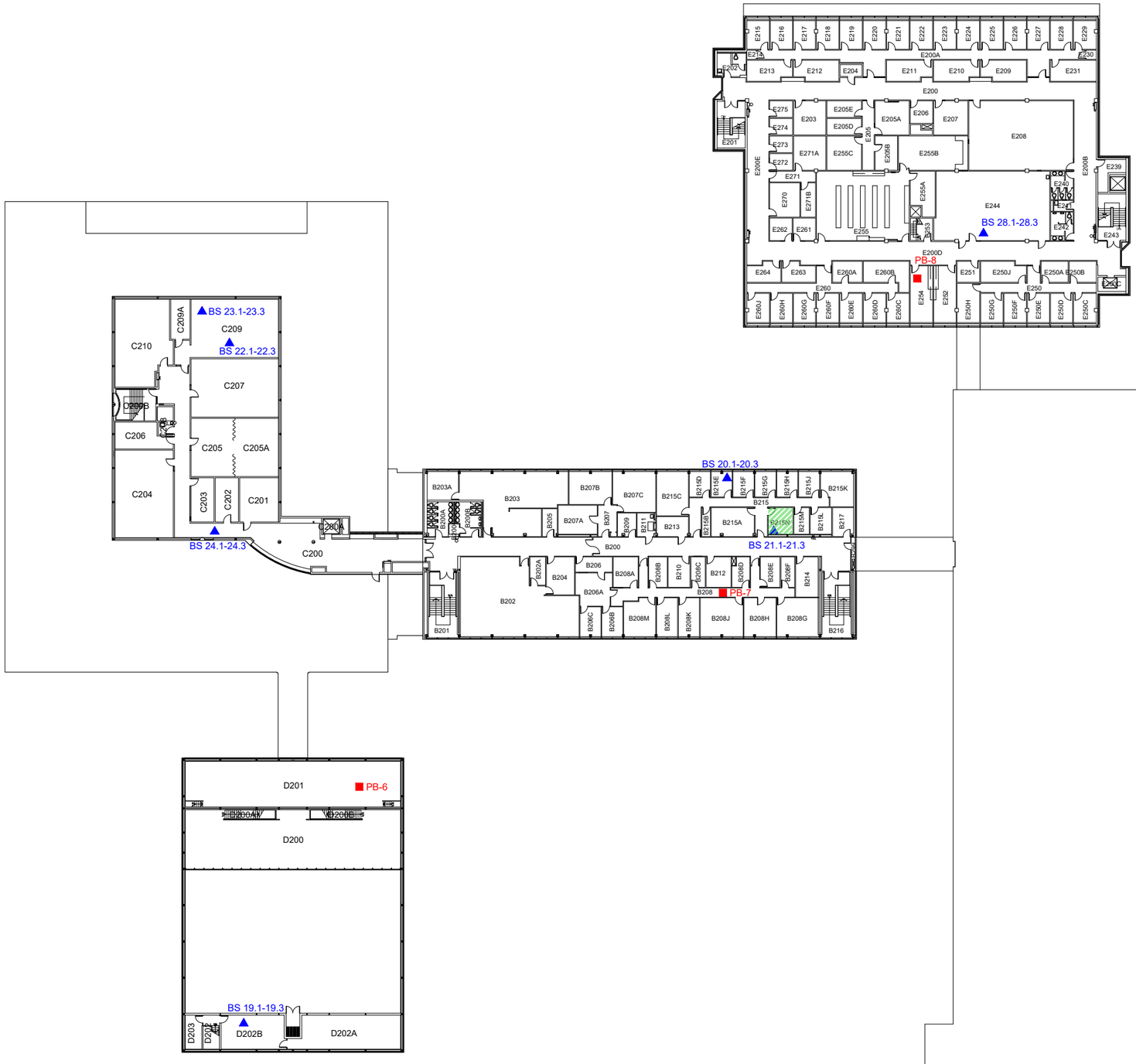
200 LEES
200 LESS
---
200 LESS

Dessin / Drawing:
LEVEL I
BUILDING COMBINATION

Édifice/Bldg	Niveau/Level:
---- 060 ----	0 ----
---- ---- ----	Feuille/Sheet: A-I
Échelle/Scale: 1:600	Revision: 1

BUILDING COMBINED
JB
08/06/2015
of/de



Legend:

- ▲ Asbestos Bulk Sample
- ■ Lead Paint Sample

- ACM Vinyl floor Tile (VFT)
- ACM Pipe Insulation
- ACM Plaster
- ACM Window Caulking

REV	DATE	DESCRIPTION	BY

McINTOSH PERRY
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WOODBRIDGE, ON., L4H 4G3
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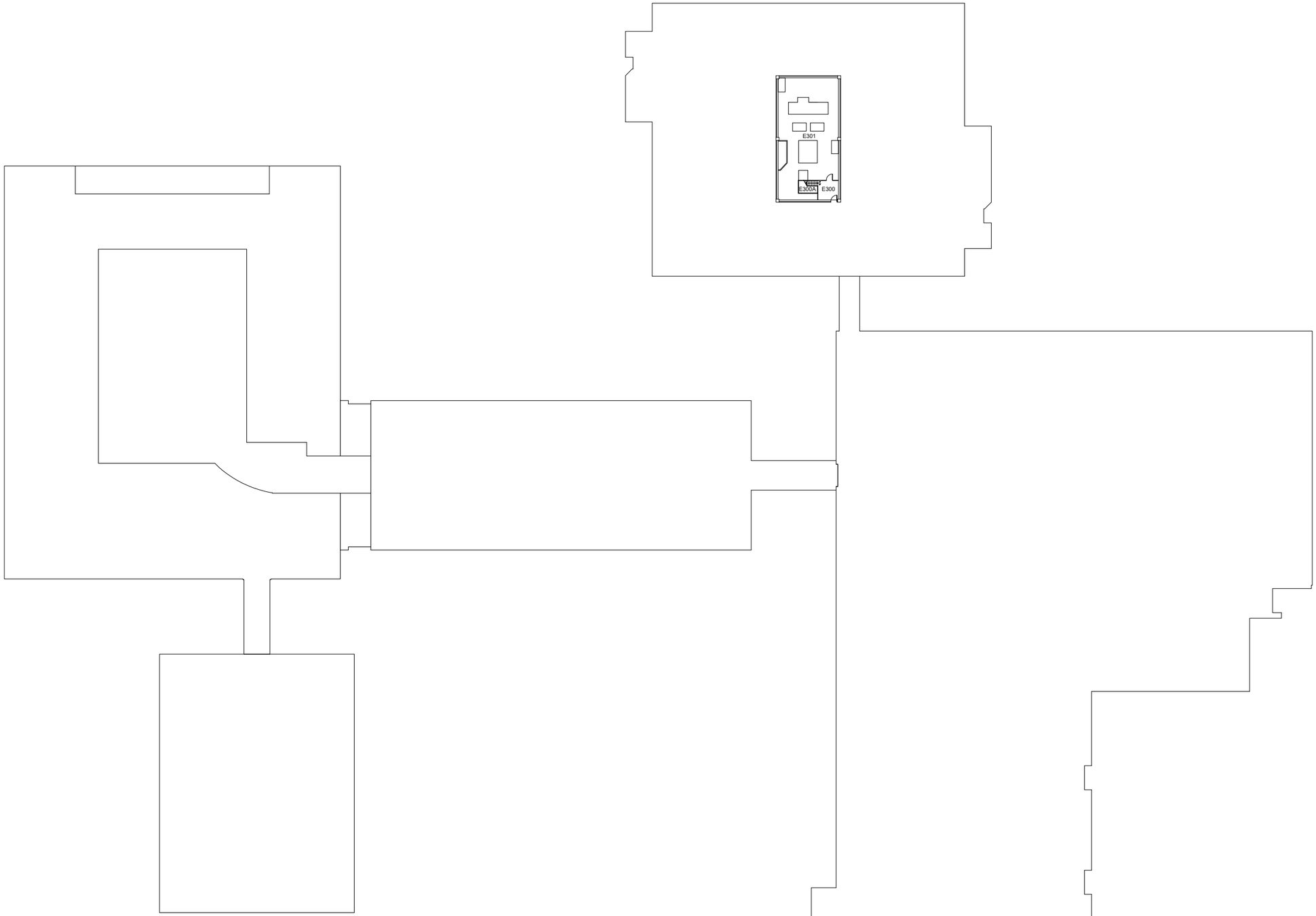
200 LESS

BUILDING COMBINED

Dessin / Drawing:
LEVEL 2
BUILDING COMBINATION

Édifice/Bldg			Niveau/Level:
----	060	----	0 ----
----	----	----	Feuille/Sheet:
Échelle/Scale: 1:600	Revision: 1		A-2 of/de

JB 08/08/2015



Legend:

- ▲ Asbestos Bulk Sample
- ■ Lead Paint Sample

- ACM Vinyl floor Tile (VFT)
- ACM Pipe Insulation
- ACM Plaster
- ACM Window Caulking

REV	DATE	DESCRIPTION	BY

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200 LESS

BUILDING COMBINED

Dessin / Drawing:
LEVEL 3
BUILDING COMBINATION

Édifice/Bldg			Niveau/Level:
----	060	----	0 ----
----	----	----	Feuille/Sheet:
Échelle/Scale: 1:600	Revision: 1		A-3 of/de

JB 08/08/2015