

HAZARDOUS MATERIAL SURVEY AND 2022 REASSESSMENT MONTPETIT HALL - 125 UNIVERSITY PRIVATE, OTTAWA, ON



Project No.: Z2021101HZ / CCC-230252-00

Prepared for:

University of Ottawa

Prepared by:

McIntosh Perry Limited (MPL)

MPL Contact:

John Tufts, Project Manager

Hazardous Materials / Environmental Health & Safety

T: 613-836-2184 E: j.tufts@mcintoshperry.com

Date:

December 20, 2022

McINTOSH PERRY

TABLE OF CONTENTS

REASSESSMENT SURVEY 2022.....	I
EXECUTIVE SUMMARY	III
1.0 INTRODUCTION	1
2.0 PROPERTY DESCRIPTION	2
3.0 FINDINGS & RECOMMENDATIONS.....	2
<i>Designated Substances</i>	2
3.1 <i>Asbestos</i>	2
3.1.1 Fireproofing.....	7
3.1.2 Mechanical Pipe Insulation	7
3.1.3 Flexible Duct Connector	8
3.1.4 Heat Shield or Heat Shield Insulation	8
3.1.5 Texture Finishes.....	8
3.1.6 Plaster	9
3.1.7 Drywall Joint Compound	9
3.1.8 Ceiling Tiles.....	9
3.1.9 Vinyl Floor Tiles.....	9
3.1.10 Vinyl Sheet Flooring.....	12
3.1.11 Brick Mortar.....	12
3.1.12 Concrete Block Mortar	12
3.1.13 Ceramic Wall/Floor Tile Grout.....	12
3.1.14 Mastic.....	13
3.1.15 Transite (Asbestos Cement)	13
3.1.16 Wallpaper	13
3.1.17 Caulking.....	13
3.1.18 Cementitious Coating.....	13
3.1.19 Fire Doors	13
3.1.20 Roofing Material	13
3.2 <i>Lead</i>	14

3.2.1	Paint Finishes.....	15
3.2.2	Battery Packs	16
3.3	Mercury.....	17
3.3.1	Thermostat Switches.....	17
3.3.2	Fluorescent Light Tubes	17
3.3.3	Pressure Gauges and Float Switches.....	17
3.4	Silica.....	17
	<i>Other Hazardous Materials</i>	18
3.5	Polychlorinated Biphenyls (PCBs)	18
3.5.1	Light Ballasts.....	18
3.5.2	Transformers	18
3.6	Ozone Depleting Substances (ODSs) and Other Halocarbons	19
3.7	Radioactive Materials.....	19
3.8	Underground and Above Ground Storage Tanks (USTs and ASTs).....	19
3.9	Mould.....	19
3.9.1	Mould.....	19
3.9.2	Water Damage.....	20
4.0	GENERAL CONSIDERATIONS AND LIMITATIONS.....	21

Appendix A – Regulatory Requirements

Appendix B – Survey Methodology & Background Information

Appendix C – Laboratory Certificate of Analysis

Appendix D– Site Photographs

Appendix E – Asbestos Containing Materials Checklist

Appendix F – Hazardous Materials Checklist

Appendix G – Site Sampling & Location Plans

REASSESSMENT SURVEY 2022

McIntosh Perry Limited (MPL) was retained by the University of Ottawa, to complete a hazardous materials survey of Marchand Residence located at 125 University Private in Ottawa, Ontario. The survey was conducted on March 6th, 9th, and 12th 2020. The reassessment was completed on June 30th, 2022.

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 Drywall Joint Compound (DJC) wall and ceiling finishes was observed to be in Good Condition throughout the subject building.
- ACM Plaster wall and ceiling finishes was observed to be in Good Condition throughout the subject building.
- ACM Texture Coat on ceiling was observed to be in Good Condition in select areas of the subject building.
- ACM Vinyl Floor Tiles (VFTs) were observed to be in Good Condition in select areas of the subject building.
- ACM Ceiling Tiles were observed to be in Good Condition in Room 415, 405 and 405A of the subject building.
- ACM Tar on Aluminium Pipe/Elbow Wrap was observed to be in Good Condition in select areas of the subject building.
- ACM Parging Cement Fittings/Elbows was observed to be in Good and Poor Condition in select areas of the subject building.
- ACM Caulking materials (Tan and Grey) were observed to be in Good and Fair Condition in select areas of the subject building.
- Water damaged materials were observed in select locations during the site survey.
- No mould affected 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 Montpetit Hall located at 125 University Private in Ottawa, Ontario. The survey was conducted on March 6th, 9th, and 12th 2020. The Reassessment Survey was completed on June 30th, 2022.

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 identified or suspected to be present in the building:

Table A: Summary of Asbestos-Containing Materials Identified

Material Description	Friable?	Location	Type of Asbestos
Vinyl Floor Tiles	No	Specific Areas Only	Chrysotile
Ceiling Tiles	-	Specific Areas Only	Amosite
Plaster	Yes	Throughout Building	Chrysotile
Drywall Joint Compound	-	Throughout Building	Chrysotile
Mechanical Pipe Insulation	Yes	Specific Areas Only	Chrysotile
Tar on Aluminium Pipe Wrap	No	Specific Areas Only	Chrysotile
Texture Coat	Yes	Specific Areas Only	Chrysotile
Caulking	No	Specific Areas Only	Chrysotile
Flexible Duct Connector	-	Specific Areas Only	Chrysotile
Concrete Block Mortar	-	Throughout Building	Suspected
Ceramic Wall/Floor Tile Grout	-	Throughout Building	Suspected
Fire Doors	-	Throughout Building	Suspected
Roofing Materials	-	Roof	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 to 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 identified or suspected to be present in the building:

Table B: Summary of Designated Substances & Hazardous Materials Identified

Material Description	Location
Lead Paint	Throughout Building
Lead Acid Batteries	Specific Equipment
Mercury Liquid	Specific Equipment
Mercury Vapour	Specific Equipment
Silica	Throughout Building
Ozone Depleting Substances	Specific Equipment
Mould/Water Damage	Throughout Building

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 Canada (EACC) Lead 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 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

December 20, 2022

University of Ottawa
141 Louis-Pasteur Private
Ottawa, Ontario
K1N 1E3

via email: joel.lajeunesse@uottawa.ca

Attention: Joel Lajeunesse, Project Manager

Re: Montpetit Hall - 125 University Private in Ottawa, Ontario
Hazardous Materials Survey and 2022 Reassessment
McIntosh Perry Limited Reference No. Z2021101HZ / CCC-230252-00

1.0 INTRODUCTION

In accordance with your instructions, McIntosh Perry Limited (MPL) carried out a Hazardous Materials Survey at Montpetit Hall located at 125 University Private in Ottawa, Ontario. The site is situated on the southeast side of University Private, west of Louis Pasteur Private. The survey of the building was conducted on March 6th, 9th, and 12th, 2020. The Reassessment Survey was completed on June 30th, 2022.

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;
- Bulk sampling and analysis of building materials suspected of containing asbestos (if required);
- Bulk sampling and analysis of representative paints and finishes suspected of containing lead (if required);
- 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 a five-storey building originally constructed in 1972 and is approximately 198, 648 square feet in size. 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, plaster and concrete block. Within the subject building, ceilings were observed to be either suspended ceiling tiles or open ceiling with an exposed concrete deck. The flooring was generally observed to be poured concrete, carpet, ceramic tiles and vinyl floor tiles.

3.0 FINDINGS & RECOMMENDATIONS

Designated Substances

3.1 Asbestos

Findings

A total of one-hundred and twenty-one (121) bulk samples were 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.

Laboratory certificates of analysis for asbestos are included in Appendix C.

Table 1:
Asbestos Laboratory Results

Sample ID	Location	Material	Type and Content	Friability
BS 1.1	Room 144	SCT (2'x4' - Pinholes with Medium Fissures)	None Detected	N/A
BS 1.2	Room 144	SCT (2'x4' - Pinholes with Medium Fissures)	None Detected	N/A
BS 1.3	Room 144	SCT (2'x4' - Pinholes with Medium Fissures)	None Detected	N/A
BS 2.1	Room 329	VFT (12"x12" - Beige with White Flakes)	None Detected	N/A
BS 2.2	Room 329	VFT (12"x12" - Beige with White Flakes)	None Detected	N/A
BS 2.3	Room 329	VFT (12"x12" - Beige with White Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 3.1	Room 500	Cardboard Insulation	None Detected	N/A
BS 3.2	Room 500	Cardboard Insulation	None Detected	N/A
		Tar Paper	None Detected	N/A
BS 3.3	Room 500	Cardboard Insulation	None Detected	N/A
		Tar Paper	None Detected	N/A
BS 4.1	Room 016	VFT (12"x12" - Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 4.2	Room 016	VFT (12"x12"- Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 4.3	Room 016	VFT (12"x12"-Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 5.1	Room 016	VFT (12"x12"-Grey w/ Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 5.2	Room 016	VFT (12"x12"-Grey w/ Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
		Leveler (Grey)	None Detected	N/A
BS 5.3	Room 016	Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 6.1	Room 303	VFT (12"x12"-Pink with Brown and White Flakes)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 6.2	Room 303	VFT (12"x12"-Pink with Brown and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 6.3	Room 303	VFT (12"x12"-Pink with Brown and White)	None Detected	N/A
BS 7.1	Room 200A	VFT (12"x12"-Beige)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 7.2	Room 200A	VFT (12"x12"-Beige)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
		Mastic (Beige)	None Detected	N/A
		Leveler (Grey)	None Detected	N/A
BS 7.3	Room 200A	VFT (12"x12"-Beige)	None Detected	N/A
		Mastic/Levelling Compound (Grey/Yellow/Beige)	None Detected	N/A
BS 8.1	Room 108	SCT (2'x4'- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 8.2	Room 108	SCT (2'x4'- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 8.3	Room 108	SCT (2'x4'- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 9.1	Room 141	VFT (12"x12"- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 9.2	Room 141	VFT (12"x12"- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 9.3	Room 141	VFT (12"x12"- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 10.1	Room 232A	SCT (2'x4'- Uniform Pinholes)	None Detected	N/A
BS 10.2	Room 232A	SCT (2'x4'- Uniform Pinholes)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 10.3	Room 232A	SCT (2'x4' - Uniform Pinholes)	None Detected	N/A
BS 11.1	Room 235	VFT (12"x12" - Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 11.2	Room 235	VFT (12"x12" - Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 11.3	Room 235	VFT (12"x12" - Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 12.1	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 12.2	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 12.3	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 13.1	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 13.2	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 13.3	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 14.1	Room 317	VFT (12"x12" - White w/ Brown Flakes)	None Detected	N/A
BS 14.2	Room 317	VFT (12"x12" - White w/ Brown Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 14.3	Room 317	VFT (12"x12" - White w/ Brown Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 15.1	Room 304A	VFT (12"x12" - White w/ Black Dots in a Vertical Line)	2% Chrysotile	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 15.2	Room 304A	VFT (12"x12" - White w/ Black Dots in a Vertical Line)	Stop Positive - Not Analyzed	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 15.3	Room 304A	VFT (12"x12" - White w/ Black Dots in a Vertical Line)	Stop Positive - Not Analyzed	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 16.1	Room 205	SCT (1'x1' -Pinholes with Large Fissures)	None Detected	N/A
BS 16.2	Room N110	SCT (1'x1' -Pinholes with Large Fissures)	None Detected	N/A
BS 16.3	Room N110	SCT (1'x1' -Pinholes with Large Fissures)	None Detected	N/A
BS 17.1	Room 430	Plaster (Stipple)	None Detected	N/A
		Plaster (Drywall)	None Detected	N/A
BS 17.2	Room 431	Plaster (Base)	None Detected	N/A
BS 17.3	Room 500	Plaster (Base)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 17.4	Room 144A	Plaster (Base)	None Detected	N/A
BS 17.5	Room 107	Plaster (Finish)	10% Chrysotile	Friable
BS 17.6	Room 400F	Plaster (Finish)	Stop Positive - Not Analyzed	Friable
BS 17.7	Room 400F	Plaster (Finish)	Stop Positive - Not Analyzed	Friable
BS 18.1	Room 401D	Carpet Mastic (Yellow)	None Detected	N/A
BS 18.2	Room 401D	Carpet Mastic (Yellow)	None Detected	N/A
BS 18.3	Room 200	Carpet Mastic (Yellow)	None Detected	N/A
BS 20.1	Room 415	SCT (2'x4' - Pinholes with Wavy Fissures)	0.5% Amosite	-
BS 20.2	Room 415	SCT (2'x4' - Pinholes with Wavy Fissures)	Stop Positive - Not Analyzed	-
BS 20.3	Room 415	SCT (2'x4' - Pinholes with Wavy Fissures)	Stop Positive - Not Analyzed	-
BS 21.1	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 21.2	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 21.3	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 22.1	Room 424	VFT (12'x12" - Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 22.2	Room 424	VFT (12'x12" - Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 22.3	Room 424	VFT (12'x12" - Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 23.1	Room 204	VFT (12'x12" - Grey with White and Black Swirls)	None Detected	N/A
BS 23.2	Room 204	VFT (12'x12" - Grey with White and Black Swirls)	None Detected	N/A
BS 23.3	Room 204	VFT (12'x12" - Grey with White and Black Swirls)	None Detected	N/A
BS 24.1	Room 422A	VFT (12'x12" - Brown and White Mix)	None Detected	N/A
		Mastic (Beige)	None Detected	N/A
BS 24.2	Room 422A	VFT (12'x12" - Brown and White Mix)	None Detected	N/A
BS 24.3	Room 422A	VFT (12'x12" - Brown and White Mix)	None Detected	N/A
BS 25.1	Room 204	VFT (12'x12" - Green with White Swirls)	None Detected	N/A
BS 25.2	Room 204	VFT (12'x12" - Green with White Swirls)	None Detected	N/A
BS 25.3	Room 204	VFT (12'x12" - Green with White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 26.1	Room 207	VFT (12'x12" - Grey/Black, Brown Granite Pattern)	None Detected	N/A
BS 26.2	Room 207	VFT (12'x12" - Grey/Black, Brown Granite Pattern)	None Detected	N/A
BS 26.3	Room 207	VFT (12'x12" - Grey/Black, Brown Granite Pattern)	None Detected	N/A
BS 27.1	Room 206B	VFT (12'x12" - Grey with Light and Dark Markings)	None Detected	N/A
BS 27.2	Room 206B	VFT (12'x12" - Grey with Light and Dark Markings)	None Detected	N/A
BS 27.3	Room 206B	VFT (12'x12" - Grey with Light and Dark Markings)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 28.1	Room 415	VFT (12'x12" - Brown with White and Grey Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.2	Room 415	VFT (12'x12" - Brown with White and Grey Swirls)	None Detected	N/A
BS 28.3	Room 415	VFT (12'x12" - Brown with White and Grey Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 29.1	Room 201	VFT (12'x12" - Grey with Orange Markings)	None Detected	N/A
BS 29.2	Room 201	VFT (12'x12" - Grey with Orange Markings)	None Detected	N/A
BS 29.3	Room 201	VFT (12'x12" - Grey with Orange Markings)	None Detected	N/A
BS 30.1	Room 0010	Wallpaper	None Detected	N/A
BS 30.2	Room 0010	Wallpaper	None Detected	N/A
BS 30.3	Room 0010	Wallpaper	None Detected	N/A
BS 31.1	Room 405A	VFT (12'x12" - Grey with Brown Light and Dark Markings)	None Detected	N/A
BS 31.2	Room 405A	VFT (12'x12" - Grey with Brown Light and Dark Markings)	None Detected	N/A
BS 31.3	Room 405A	VFT (12'x12" - Grey with Brown Light and Dark Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 32.1	Room 225	VFT (12'x12" - Grey with Brown/White and Green)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 32.2	Room 225	VFT (12'x12" - Grey with Brown/White and Green)	None Detected	N/A
BS 32.3	Room 225	VFT (12'x12" - Grey with Brown/White and Green)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 33.1	Room 420C	VFT (12'x12" - White with Blue and Grey)	None Detected	N/A
BS 33.2	Room 420C	VFT (12'x12" - White with Blue and Grey)	None Detected	N/A
BS 33.3	Room 420C	VFT (12'x12" - White with Blue and Grey)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 34.1	Room 419A	VFT (12'x12" - Grey with Pink)	None Detected	N/A
BS 34.2	Room 419A	VFT (12'x12" - Grey with Pink)	None Detected	N/A
BS 34.3	Room 419A	VFT (12'x12" - Grey with Pink)	None Detected	N/A
BS 35.1	Room 221	VFT (12'x12" - Beige with Light Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 35.2	Room 221	VFT (12'x12" - Beige with Light Markings)	None Detected	N/A
BS 35.3	Room 221	VFT (12'x12" - Beige with Light Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 36.1	Room 207	VFT (12'x12" - Grey/Light Black)	None Detected	N/A
BS 36.2	Room 207	VFT (12'x12" - Grey/Light Black)	None Detected	N/A
		Mastic (Black/Beige)	None Detected	N/A
BS 36.3	Room 207	VFT (12'x12" - Grey/Light Black)	None Detected	N/A
		Mastic/Leveler (Grey/Yellow)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 37.1	Room 422C	Pipe Fitting/Elbow Parging Cement	55% Chrysotile	Friable
BS 37.2	Room 422C	Pipe Fitting/Elbow Parging Cement	Stop Positive - Not Analyzed	Friable
BS 37.3	Room 422C	Pipe Fitting/Elbow Parging Cement	Stop Positive - Not Analyzed	Friable
BS 38.1	Room 409C	VFT (12'x12" - Brown and White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 38.2	Room 409C	VFT (12'x12" - Brown and White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 38.3	Room 409C	VFT (12'x12" - Brown and White Swirls)	None Detected	N/A
BS 39.1	Room 415	VFT (12'x12" - Brown with Black Dots)	None Detected	N/A
BS 39.2	Room 415	VFT (12'x12" - Brown with Black Dots)	None Detected	N/A
BS 39.3	Room 415	VFT (12'x12" - Brown with Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 40.1	Room 0024	Wall Caulking (Tan)	6% Chrysotile	Non- Friable
BS 40.2	Room 0024	Wall Caulking (Tan)	Stop Positive - Not Analyzed	Non- Friable
BS 40.3	Room 0024	Wall Caulking (Tan)	Stop Positive - Not Analyzed	Non- Friable

N/A – Not Applicable

SCT – Suspended Ceiling Tile

VFT – Vinyl Floor 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

No fireproofing was observed in the subject building.

3.1.2 Mechanical Pipe Insulation

3.1.2.1 Mechanical Pipe Straight Insulation

Mechanical pipe straight insulation (cardboard insulation) was observed and sampled in Room 500. The laboratory analytical results of the samples collected indicate that this material does not contain asbestos.

Mechanical pipe straight insulation was observed in the basement level. MPL made several incisions throughout to investigate its composition, and it was visually identified as fiberglass, and therefore not suspected of containing asbestos.

3.1.2.2 Mechanical Piping Elbows/Fittings Insulation

Parging cement pipe elbow/fitting insulation was observed throughout the subject building and sampled in Room 422C. The laboratory analytical results of the samples collected indicate that this material contains 55% Chrysotile asbestos. This material is considered to be friable and was observed to be in poor condition. This material was observed to have been removed during the 2022 Reassessment.

Previously identified asbestos-containing parging cement mechanical insulation on pipe elbows/fittings were observed in Rooms 0012, 002, 003B, 002A, 007B, 007A, 009, 0012, 011, 02C, 022, 023, 024, 050, 051, 213, 200, 205A, 216, 306B, 311D, 316A. This material was previously sampled was determined to contain between 5-60% Chrysotile asbestos and is considered to be friable. This material was observed to be in good condition with the exception of select areas observed to be in poor condition.

3.1.2.3 Mechanical Piping Hangers Insulation

No mechanical pipe hanger insulation was observed in the subject building.

3.1.2.4 HVAC Duct Insulation

No HVAC duct insulation was not observed in the subject building.

3.1.2.5 Other Mechanical Insulation

Previously identified tar on aluminum wrap was observed on pipe straight and fittings in Rooms 200 and 02C. This material was previously sampled was determined to contain 5% Chrysotile asbestos and is considered to be non-friable. This material was observed to be in good condition.

3.1.3 Flexible Duct Connector

To avoid damage and compromising the integrity of the structure, no bulk samples of the flexible duct connector in Room 020C were collected. Prior to renovation/demolition, flexible duct connector should be examined and tested for asbestos content. Flexible duct connector should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.4 Heat Shield or Heat Shield Insulation

No potential asbestos-containing heat shield insulation were observed in the subject building.

3.1.5 Texture Finishes

Ceiling texture coat was observed and sampled in Room 432. The laboratory analytical results indicate that this material does not contain asbestos.

Previously identified asbestos-containing texture coat on ceiling plaster was observed in Room 107 and Room 424B. This material contains 2% Chrysotile asbestos and is considered friable. Since texture is a homogeneous material, all areas must be treated as asbestos-containing unless additional testing confirms otherwise. This material was observed in good condition.

3.1.6 Plaster

Plaster was observed throughout the building and sampled in Room 430, 431, 500, 144A, 107 400F. The laboratory analytical results indicate that this material contains 10% Chrysotile asbestos. Since plaster is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis proves otherwise. This material is considered to be friable was observed to be in good condition.

3.1.7 Drywall Joint Compound

Previously identified asbestos-containing drywall joint compound was observed in Room 404. This material contains 2% Chrysotile asbestos. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional testing confirms otherwise. This material was observed in good condition.

3.1.8 Ceiling Tiles

Several different ceiling tiles were observed and sampled within the subject building as follows:

- Suspended ceiling tiles (2'x4' – Pinholes with Wavy Fissures) were observed and sampled in Room 415, 405 and 405A. The laboratory analytical results indicate that this material contains 0.5% Amosite asbestos. This material was observed to be in good condition.
- Suspended ceiling tiles (2'x4' – Pinholes with Medium Fissures) were observed and sampled in Room 144. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (2'x4' – Uniform Pinholes with Small Fissures) were observed and sampled in Room 108. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (2'x4' - Uniform Pinholes) were observed and sampled in Room 232A. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (1'x1' – Pinholes with Large Fissures) were observed and sampled in Rooms 205 and N110. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.

3.1.9 Vinyl Floor Tiles

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

- Previously identified asbestos-containing vinyl floor tiles (12" x 12" – White with Black Dots) were observed in Room 300, 301C, 302, 304A 428 and 400. This material contains 39% Chrysotile asbestos and is considered to be non- friable. This material was observed to be in good condition.
- Previously identified asbestos-containing vinyl floor tiles (12" x 12" – Brown with Spots) were observed in 415A and 300D. This material contains 10% Chrysotile asbestos and is considered non-friable. This material was observed to be in good condition.
- Vinyl floor tiles (12" x 12" – White with Black Dots in Vertical Line) were observed and sampled in Room 304A. The laboratory analytical results indicate that this material contains 2% Chrysotile asbestos. This material is considered to be non-friable and was observed to be in good condition. The associated mastic (Black) was determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige with White Flakes) were observed and sampled in Room 329. The laboratory analytical results indicate that this material does not contain asbestos. The associated mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Red) were observed and sampled in Room 016. The laboratory analytical results indicate that this material does not contain asbestos. The associated mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Grey and White Flakes) were observed and sampled in Room 016. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) and levelling compound (Grey) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Pink with Brown and White Flakes) were observed and sampled in Room 303. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige) were observed and sampled in Room 200A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow/Beige) and levelling compound (Grey) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Light Green) were observed and sampled in Room 141. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige) were observed and sampled in Room 235. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Dark Green) were observed and sampled in Room 140. The laboratory analytical results indicate that this material does not contain asbestos.

- Vinyl floor tiles (12" x 12" –Beige with Black Dots) were observed and sampled in Room 300. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –White with Brown Flakes) were observed and sampled in Room E317. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Grey with Yellow, Red, Black and White) were observed and sampled in Room 424. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" –Grey with White and Black Swirls) were observed and sampled in Room 204. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown and White Mix) were observed and sampled in Room 422A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Beige) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Green with White Swirls) were observed and sampled in Room 204. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey/Black, Brown Granite Pattern) were observed and sampled in Room 207. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Light and Dark Markings) were observed and sampled in Room 206B. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown with White and Grey Swirls) were observed and sampled in Room 415. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Orange Markings) were observed and sampled in Room 201. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Brown Light and Dark Markings) were observed and sampled in Room 405A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Brown/White and Green) were observed and sampled in Room 225. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (yellow) was also determined not to contain asbestos.

- Vinyl floor tiles (12" x 12" – White with Blue and Grey) were observed and sampled in Room 420C. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Pink) were observed and sampled in Room 419A. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige with Light Markings) were observed and sampled in Room 221. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey/Light Black) were observed and sampled in Room 207. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Beige/Yellow) and levelling compound (Grey) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown and White Swirls) were observed and sampled in Room 409C. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown with Black Dots) were observed and sampled in Room 415. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.

3.1.10 Vinyl Sheet Flooring

No vinyl sheet flooring was observed in the subject building.

3.1.11 Brick Mortar

No brick mortar was observed in the subject building.

3.1.12 Concrete Block Mortar

To avoid damage and compromising the integrity of the structure, no bulk samples of the concrete block mortar were collected. Prior to renovation/demolition, concrete block mortar should be examined and tested for asbestos content. Concrete block mortar should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.13 Ceramic Wall/Floor Tile Grout

To avoid damage and compromising the integrity of the structure, no bulk samples of the ceramic wall/floor tile grout were collected. Prior to renovation/demolition, ceramic wall/floor tile grout should be examined and tested for asbestos content. Ceramic wall/floor tile grout should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.14 Mastic

Carpet Mastic (Yellow) was observed and sampled in Rooms 401D and 200. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.15 Transite (Asbestos Cement)

No transite materials were observed in the subject building.

3.1.16 Wallpaper

Wallpaper (Brown/White) was observed and sampled in Room 0010. The laboratory analytical results of the wallpaper samples collected from Room 0010 indicate that this material does not contain asbestos.

3.1.17 Caulking

Several different types of caulking were observed and sampled within the subject building as follows:

- Wall Caulking (Tan) was observed and sampled in Room 0024. The laboratory analytical results indicate that this material contains 6% Chrysotile. This material is considered to be non-friable and was observed to be in fair condition.
- Previously identified asbestos-containing caulking (Grey) was observed in the basement corridor. This material contains 4% Chrysotile asbestos and is considered to be non-friable. This material was observed to be in good condition.

3.1.18 Cementitious Coating

No cementitious coating finishes were observed in the subject building.

3.1.19 Fire Doors

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.

3.1.20 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 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, concrete block mortar, ceramic tile grout and fire doors), 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 four (4) paint samples from the subject building were 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 1	Room 316	Door Paint	Orange	1.4%
Pb 2	Room 315	Wall Paint	Light Blue	<0.061%
Pb 3	Room 200	Wall Paint	Purple	<0.013%
Pb 4	Room 203	Floor Paint	Blue	<0.087
Previously Sampled Paints				
LBP-120106-01	Room 428	Base of Window Paint	Red	0.91%
LBP-120106-02	Room 400	Door Frame Paint	Blue	<0.05%
LBP-120106-03	Room 200	Wall Paint	Yellow	0.22%
LBP-120106-04	Room 221	Door Frame Paint	Green	<0.02%
LBP-120106-05	Room 024	Wall Paint	Grey	0.05%
LBP-120106-06	Room 025	Ceiling Paint	Grey	<0.01%
LBP-120106-07	Room 0023	Wall Paint	White	<0.01%
P-01	Squash Court 4	Wall Paint	White	<0.002
P-02	Squash Court 4	Door Paint	Brown	0.059%
P-03	Basement Corridor	Wall Paint	Beige	0.0468%
P-04	Basement Corridor	Stair Paint	Grey	0.0785%
P-05	Basement Corridor	Fire Hose Cabinet Paint	Black	0.614%
P-06	Basement Corridor	Floor Paint	Grey	0.0169%

The paint finish highlighted in blue in the above table was determined to contain low concentrations of lead which are less than or equal to 0.1%. These paint finishes were observed to be in good condition with the exception of select areas that were observed in poor condition.

The paint finish highlighted in pink in the above table is considered a lead-containing paint or surface coating with concentrations greater than 0.1% lead by weight. These paint finishes were observed to be in good condition with the exception of select areas that were observed in poor condition.

All remaining paints tested were below the laboratory limit of detection for lead. 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.

Laboratory certificate of analysis for the paint samples are also included in Appendix C.

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 subject 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.

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 OMOL "Lead on Construction Project" dated April 2011.

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 – Designated Substance Materials Checklist for equipment 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:

- providing 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 observed thermostats containing liquid mercury throughout the subject building.

3.3.2 Fluorescent Light Tubes

MPL identified fluorescent light fixtures throughout the subject building 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 did not identify pressure gauges or float switches within the subject building.

Recommendations

Please refer to Appendix F – Hazardous Materials Checklist for equipment 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

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

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/m³.

This can be achieved by:

- providing 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.

3.5.2 *Transformers*

MPL did not observe any PCBs containing electrical transformers within the subject building. Transformers that could be assessed were observed to be dry-type.

Recommendations

Since no PCB-containing equipment was observed or suspected to be present during the site survey, no further action is required.

3.6 Ozone Depleting Substances (ODSs) and Other Halocarbons

Findings

A visual assessment for equipment potentially containing ODSs and other halocarbons was conducted. Equipment containing ODSs or other halocarbons was observed in the subject building.

Recommendations

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

Under the management of a licensed contractor, equipment containing R-134a does 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

MPL did not observe any electrical components containing radioactive materials.

Recommendations

Since no radioactive materials were observed or suspected to be present during the site survey, no further action is required.

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 present within the subject building.

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 identify any areas with mould growth.

3.9.2 *Water Damage*

A visual survey of the subject building was conducted to determine if any water damaged was present. MPL identified select areas throughout the subject building, where materials were affected by water damage.

Recommendations

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

Water stained/damaged materials that are also determined to contain asbestos must be replaced following appropriate asbestos abatement procedures as outlined in O.Reg. 278/05.

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



Lauren Hamilton, B.Eng.
Project Technician
Hazardous Materials/ Environmental Health & Safety



John Tufts, B.Sc.
Project Manager
Hazardous Materials/ Environmental Health & Safety

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 CAELA accredited independent laboratory for analysis. Laboratory Certificate of Analysis are attached in Appendix C.

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 Montpetit Hall 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 Inventory by Conestoga-Rovers & Associates (dated December 2007, reference # 45870(13));
- Designated Substances Survey-Weight Room & Squash Court by EHS (dated October 2015, EHS project number 04-0033-15-033);
- Project Specific Asbestos Analysis Report by EHS (dated June 22, 2011, EHS Project No.: 04-0033-11-013);

- Potential Asbestos Material Analytical Report by EHS (dated November 28, 2013, EHS Project No. 04-0033-13-065);
- Potential Asbestos Sampling Report by EHS (dated March 23, 2012, EHS Project No. 04-0033-12-011);
- Potential Asbestos Sampling Report by EHS (dated January 29, 2013, EHS Project No. 04-0033-13-003);
- Asbestos Sampling Report (dated June 22, 2015, EHS Project No. 04-0033-15-018);
- Project Specific Asbestos Sampling Report by EHS (dated October 30 , 2015, EHS Project No. 04-0033-15-035);
- Asbestos Sampling- Pipe Insulation Report by CM3 Environmental (dated July 29, 2016, CM3 Project No. TLW-1097B);
- Potential Asbestos Sampling Report by EHS (report dated January 29, 2013, EHS Project No. 04-0033-13-003);
- Asbestos Sampling- Roofing Report by CM3 (dated March 20, 2018, CM3 project number TLW-1710);
- Asbestos Abatement Inspection Report by CM3 (report dated June 6th, 2017, CM3 Project No. TLW-1136);
- Asbestos Abatement- Drywall with Asbestos Joint Compound Report by EHS (report dated November 27, 2012, EHS Project No. 04-0033-12-036);
- Asbestos Abatement- Drywall Compound and Insulation Report by EHS (report dated June 5, 2013, EHS Project No. 04-0033-13-010);
- Asbestos Abatement Project Summary Report by EHS (report dated October 23, 2013, EHS Project No. 04-0033-13-051);
- Asbestos Abatement Project Summary Report by EHS (report dated July 27, 2015, EHS Project No. 04-0033-15-022);
- Asbestos and Mould Abatement Summary Report by CM3 (dated May 19, 2017, CM3 project number TLW-1360).

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.	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	Less than 90 square metres	3
		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 EMSL Canada Inc. (EMSL), an independent laboratory. EMSL is an independent laboratory accredited by National Institute of Standards and Technology/National Voluntary Laboratory Accreditation (NIST/NVLAP) (Lab Code #200877-0).

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 (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.

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 hydrochlorofluorocarbons (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.

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.

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.

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



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Attn: Stefan Holik Phone: (613) 836-2184
 McIntosh Perry Consulting Engineers Ltd Fax:
 115 Walgreen Rd RR 3 Collected: 3/10/2020
 Carp, ON K0A 1L0 Received: 3/25/2020
 Analyzed: 4/02/2020

Proj: University of Ottawa 0Z2-021101 (MNT) (Ottawa DSS)

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 1.1 **Lab Sample ID:** 672000613-0001

Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 1.2 **Lab Sample ID:** 672000613-0002

Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 1.3 **Lab Sample ID:** 672000613-0003

Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 2.1 **Lab Sample ID:** 672000613-0004

Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 2.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0005

Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 2.2-Mastic **Lab Sample ID:** 672000613-0005A

Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 2.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0006

Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 2.3-Mastic **Lab Sample ID:** 672000613-0006A
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 3.1 **Lab Sample ID:** 672000613-0007
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Black	96.0%	4.0%	None Detected	Small amount of tar included

Client Sample ID: 3.2-Cardboard **Lab Sample ID:** 672000613-0008
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown	96.0%	4.0%	None Detected	

Client Sample ID: 3.2-Tar Paper **Lab Sample ID:** 672000613-0008A
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 3.3-Cardboard **Lab Sample ID:** 672000613-0009
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown	98.0%	2.0%	None Detected	

Client Sample ID: 3.3-Tar Paper **Lab Sample ID:** 672000613-0009A
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 4.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0010
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.1-Mastic **Lab Sample ID:** 672000613-0010A
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 4.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0011
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.2-Mastic **Lab Sample ID:** 672000613-0011A
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 4.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0012
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.3-Mastic **Lab Sample ID:** 672000613-0012A
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 5.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0013
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 5.1-Mastic **Lab Sample ID:** 672000613-0013A
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 5.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0014
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 5.2-Mastic **Lab Sample ID:** 672000613-0014A
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 5.2-Leveler **Lab Sample ID:** 672000613-0014B

Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	5.0%	95.0%	None Detected	

Client Sample ID: 5.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0015

Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 5.3-Mastic **Lab Sample ID:** 672000613-0015A

Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 6.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0016

Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 6.1-Mastic **Lab Sample ID:** 672000613-0016A

Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 6.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0017

Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 6.2-Mastic **Lab Sample ID:** 672000613-0017A

Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 6.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0018

Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 6.3-Mastic **Lab Sample ID:** 672000613-0018A
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020				Insufficient Material	

Client Sample ID: 7.1-Vinyl Sheet Flooring **Lab Sample ID:** 672000613-0019
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	

Client Sample ID: 7.1-Mastic **Lab Sample ID:** 672000613-0019A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow/Beige	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 7.2-Vinyl Sheet Flooring **Lab Sample ID:** 672000613-0020
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	

Client Sample ID: 7.2-Mastic **Lab Sample ID:** 672000613-0020A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 7.2-Mastic 2 **Lab Sample ID:** 672000613-0020B
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 7.2-Leveler **Lab Sample ID:** 672000613-0020C
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	5.0%	95.0%	None Detected	

Client Sample ID: 7.3-Vinyl Sheet Flooring **Lab Sample ID:** 672000613-0021
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 7.3-Mastic/Leveler **Lab Sample ID:** 672000613-0021A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/Yellow/Beige	20.0%	80.0%	None Detected	Inseparable layers

Client Sample ID: 8.1 **Lab Sample ID:** 672000613-0022
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 8.2 **Lab Sample ID:** 672000613-0023
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 8.3 **Lab Sample ID:** 672000613-0024
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 9.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0025
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.1-Mastic **Lab Sample ID:** 672000613-0025A
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 9.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0026
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.2-Mastic **Lab Sample ID:** 672000613-0026A
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 9.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0027
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.3-Mastic **Lab Sample ID:** 672000613-0027A
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 10.1 **Lab Sample ID:** 672000613-0028
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 10.2 **Lab Sample ID:** 672000613-0029
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 10.3 **Lab Sample ID:** 672000613-0030
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 11.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0031
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 11.1-Mastic **Lab Sample ID:** 672000613-0031A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	5.0%	95.0%	None Detected	

Client Sample ID: 11.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0032
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 11.2-Mastic **Lab Sample ID:** 672000613-0032A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	5.0%	95.0%	None Detected	

Client Sample ID: 11.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0033
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 11.3-Mastic **Lab Sample ID:** 672000613-0033A
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 12.1 **Lab Sample ID:** 672000613-0034
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 12.2 **Lab Sample ID:** 672000613-0035
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 12.3 **Lab Sample ID:** 672000613-0036
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 13.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0037
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.1-Mastic **Lab Sample ID:** 672000613-0037A
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 13.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0038
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.2-Mastic **Lab Sample ID:** 672000613-0038A
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 13.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0039
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.3-Mastic **Lab Sample ID:** 672000613-0039A
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 14.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0040
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 14.1-Mastic **Lab Sample ID:** 672000613-0040A
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 14.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0041
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 14.2-Mastic **Lab Sample ID:** 672000613-0041A
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 14.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0042
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 14.3-Mastic **Lab Sample ID:** 672000613-0042A
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0043
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White/Black	0.0%	98.0%	2% Chrysotile	

Client Sample ID: 15.1-Mastic **Lab Sample ID:** 672000613-0043A
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0044
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020					Positive Stop (Not Analyzed)

Client Sample ID: 15.2-Mastic **Lab Sample ID:** 672000613-0044A
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0045
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020					Positive Stop (Not Analyzed)

Client Sample ID: 15.3-Mastic **Lab Sample ID:** 672000613-0045A
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0ZZ-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 16.1

Lab Sample ID: 672000613-0046

Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 16.2

Lab Sample ID: 672000613-0047

Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 16.3

Lab Sample ID: 672000613-0048

Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 17.1-Stipple

Lab Sample ID: 672000613-0049

Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 17.1-Drywall

Lab Sample ID: 672000613-0049A

Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	20.0%	80.0%	None Detected	

Client Sample ID: 17.2

Lab Sample ID: 672000613-0050

Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	15.0%	85.0%	None Detected	

Client Sample ID: 17.3

Lab Sample ID: 672000613-0051

Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	10.0%	90.0%	None Detected	

Client Sample ID: 17.4

Lab Sample ID: 672000613-0052

Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	5.0%	95.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 17.5 **Lab Sample ID:** 672000613-0053
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White	0.0%	90.0%	10% Chrysotile	

Client Sample ID: 17.6 **Lab Sample ID:** 672000613-0054
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020		Positive Stop (Not Analyzed)			

Client Sample ID: 17.7 **Lab Sample ID:** 672000613-0055
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020		Positive Stop (Not Analyzed)			

Client Sample ID: 18.1-Mastic **Lab Sample ID:** 672000613-0056
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 18.1-Plaster **Lab Sample ID:** 672000613-0056A
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 18.2 **Lab Sample ID:** 672000613-0057
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 18.3 **Lab Sample ID:** 672000613-0058
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 19.1-Vinyl Sheet Flooring **Lab Sample ID:** 672000613-0063
Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	40.0%	60.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 19.1-Mastic **Lab Sample ID:** 672000613-0063A

Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 19.2 **Lab Sample ID:** 672000613-0064

Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	40.0%	60.0%	None Detected	

Client Sample ID: 20.1 **Lab Sample ID:** 672000613-0066

Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	80.0%	20.0%	<1% Amosite	
400 PLM Pt Ct	4/01/2020	Gray	0.00%	99.50%	0.50% Amosite	

Client Sample ID: 20.2 **Lab Sample ID:** 672000613-0067

Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 20.3 **Lab Sample ID:** 672000613-0068

Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 21.1 **Lab Sample ID:** 672000613-0069

Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 21.2 **Lab Sample ID:** 672000613-0070

Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 21.3 **Lab Sample ID:** 672000613-0071

Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	White	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 22.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0072
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 22.1-Mastic **Lab Sample ID:** 672000613-0072A
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 22.2 **Lab Sample ID:** 672000613-0073
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Red/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 22.3 **Lab Sample ID:** 672000613-0074
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Red/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 23.1 **Lab Sample ID:** 672000613-0075
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 23.2 **Lab Sample ID:** 672000613-0076
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 23.3 **Lab Sample ID:** 672000613-0077
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 24.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0078
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 24.1-Mastic **Lab Sample ID:** 672000613-0078A
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 24.2 **Lab Sample ID:** 672000613-0079
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 24.3 **Lab Sample ID:** 672000613-0080
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 25.1 **Lab Sample ID:** 672000613-0081
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.2 **Lab Sample ID:** 672000613-0082
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0083
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.3-Mastic **Lab Sample ID:** 672000613-0083A
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 26.1 **Lab Sample ID:** 672000613-0084
Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 26.2

Lab Sample ID: 672000613-0085

Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 26.3

Lab Sample ID: 672000613-0086

Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 27.1

Lab Sample ID: 672000613-0087

Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27.2

Lab Sample ID: 672000613-0088

Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27.3

Lab Sample ID: 672000613-0089

Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 28.1-Vinyl Floor Tile

Lab Sample ID: 672000613-0090

Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 28.1-Mastic

Lab Sample ID: 672000613-0090A

Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 28.2

Lab Sample ID: 672000613-0091

Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 28.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0092
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 28.3-Mastic **Lab Sample ID:** 672000613-0092A
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 29.1 **Lab Sample ID:** 672000613-0093
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 29.2 **Lab Sample ID:** 672000613-0094
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 29.3 **Lab Sample ID:** 672000613-0095
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 30.1 **Lab Sample ID:** 672000613-0096
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown	95.0%	5.0%	None Detected	

Client Sample ID: 30.2 **Lab Sample ID:** 672000613-0097
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/White	95.0%	5.0%	None Detected	

Client Sample ID: 30.3 **Lab Sample ID:** 672000613-0098
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White	95.0%	5.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 31.1 **Lab Sample ID:** 672000613-0099

Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0100

Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.2-Mastic **Lab Sample ID:** 672000613-0100A

Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 31.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0101

Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.3-Mastic **Lab Sample ID:** 672000613-0101A

Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 32.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0102

Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 32.1-Mastic **Lab Sample ID:** 672000613-0102A

Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 32.2 **Lab Sample ID:** 672000613-0103

Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Brown/Gray/Green	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 32.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0104
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/Gray/Green	0.0%	100.0%	None Detected	

Client Sample ID: 32.3-Mastic **Lab Sample ID:** 672000613-0104A
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 33.1 **Lab Sample ID:** 672000613-0105
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.2 **Lab Sample ID:** 672000613-0106
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0107
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.3-Mastic **Lab Sample ID:** 672000613-0107A
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 34.1 **Lab Sample ID:** 672000613-0110
Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 34.2 **Lab Sample ID:** 672000613-0111
Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Gray/Pink	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 34.3

Lab Sample ID: 672000613-0112

Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 35.1-Vinyl Floor Tile

Lab Sample ID: 672000613-0113

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.1-Mastic

Lab Sample ID: 672000613-0113A

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 35.2-Vinyl Floor Tile

Lab Sample ID: 672000613-0114

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.2-Mastic

Lab Sample ID: 672000613-0114A

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 35.3-Vinyl Floor Tile

Lab Sample ID: 672000613-0115

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.3-Mastic

Lab Sample ID: 672000613-0115A

Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 36.1

Lab Sample ID: 672000613-0116

Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Green	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
 Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
 Customer ID: 55CTCS25B
 Customer PO: 0Z2-021101
 Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 36.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0117
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Green	0.0%	100.0%	None Detected	

Client Sample ID: 36.2-Mastic **Lab Sample ID:** 672000613-0117A
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 36.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0118
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 36.3-Mastic/Leveler **Lab Sample ID:** 672000613-0118A
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray/Yellow	5.0%	95.0%	None Detected	Inseparable layers

Client Sample ID: 37.1 **Lab Sample ID:** 672000613-0119
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Gray	0.0%	45.0%	55% Chrysotile	

Client Sample ID: 37.2 **Lab Sample ID:** 672000613-0120
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020					Positive Stop (Not Analyzed)

Client Sample ID: 37.3 **Lab Sample ID:** 672000613-0121
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020					Positive Stop (Not Analyzed)

Client Sample ID: 38.1-Vinyl Floor Tile **Lab Sample ID:** 672000613-0122
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 38.1-Mastic **Lab Sample ID:** 672000613-0122A
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38.2-Vinyl Floor Tile **Lab Sample ID:** 672000613-0123
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 38.2-Mastic **Lab Sample ID:** 672000613-0123A
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0124
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 38.3-Mastic **Lab Sample ID:** 672000613-0124A
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020				Insufficient Material	

Client Sample ID: 39.1 **Lab Sample ID:** 672000613-0125
Sample Description: MNT/VFT - Brown w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	

Client Sample ID: 39.2 **Lab Sample ID:** 672000613-0126
Sample Description: MNT/VFT - Brown w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	

Client Sample ID: 39.3-Vinyl Floor Tile **Lab Sample ID:** 672000613-0127
Sample Description: MNT/VFT - Brown w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
<http://www.EMSL.com> / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 39.3-Mastic **Lab Sample ID:** 672000613-0127A
Sample Description: MNT/VFT- Brownn w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 40.1 **Lab Sample ID:** 672000613-0128
Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020	Tan	0.0%	94.0%	6% Chrysotile	

Client Sample ID: 40.2 **Lab Sample ID:** 672000613-0129
Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 40.3 **Lab Sample ID:** 672000613-0130
Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Analyst(s):
Ewa Krupinska PLM (105)
400 PLM Pt Ct (1)
Simon Parent PLM (58)

Reviewed and approved by: 
Simon Parent, Laboratory Manager
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP of any agency or the U.S. Government

Samples analyzed by EMSL Canada Inc. Ottawa, ON

Report amended: 04/02/2020 12:48:29 Replaces initial report from: 04/02/2020 12:09:00 Reason Code: Data Entry-Results Changed



EMSL Canada Inc.

2756 Slough Street, Mississauga, ON L4T 1G3

Phone/Fax: (289) 997-4602 / (289) 997-4607

<http://www.EMSL.com>

torontolab@emsl.com

EMSL Canada Or	552003642
CustomerID:	55CTCS25B
CustomerPO:	0Z2-021101
ProjectID:	

Attn: **John Tufts**
McIntosh Perry Consulting Engineers Ltd
115 Walgreen Rd RR 3
Carp, ON K0A 1L0

Phone: (613) 836-2184
 Fax:
 Received: 03/30/20 11:10 PM
 Collected: 3/10/2020

Project: **UofIO Ottawa DSS**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>RDL</i>	<i>Lead Concentration</i>
PB1 552003642-0001	3/10/2020	3/31/2020	0.0417 g	0.048 % wt	1.4 % wt
	Site: Orange paint				
PB2 552003642-0002	3/10/2020	3/31/2020	0.0326 g	0.061 % wt	<0.061 % wt
	Site: Light blue paint Insufficient sample to reach reporting limit.				
PB3 552003642-0003	3/10/2020	3/31/2020	0.1512 g	0.013 % wt	<0.013 % wt
	Site: Purple paint Insufficient sample to reach reporting limit.				
PB4 552003642-0004	3/10/2020	3/31/2020	0.0230 g	0.087 % wt	<0.087 % wt
	Site: Blue floor paint Insufficient sample to reach reporting limit.				

Rowena Fanto, Lead Supervisor
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the results, it will be noted on the report. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 04/06/2020 09:22:04

APPENDIX D
Site Photographs



Photo 1: View of asbestos-containing pipe fitting insulation observed in Room 306B.



Photo 2: View of asbestos-containing vinyl floor tiles observed in Room 428.



Photo 3: Typical view of asbestos-containing drywall observed throughout the subject building.



Photo 4: View of asbestos-containing suspended ceiling tiles observed in Room 415.



Photo 5: View of asbestos-containing wall caulking (tan) observed in Room 0024.



Photo 6: View of flexible duct connector observed in Room 020C suspected to contain asbestos.

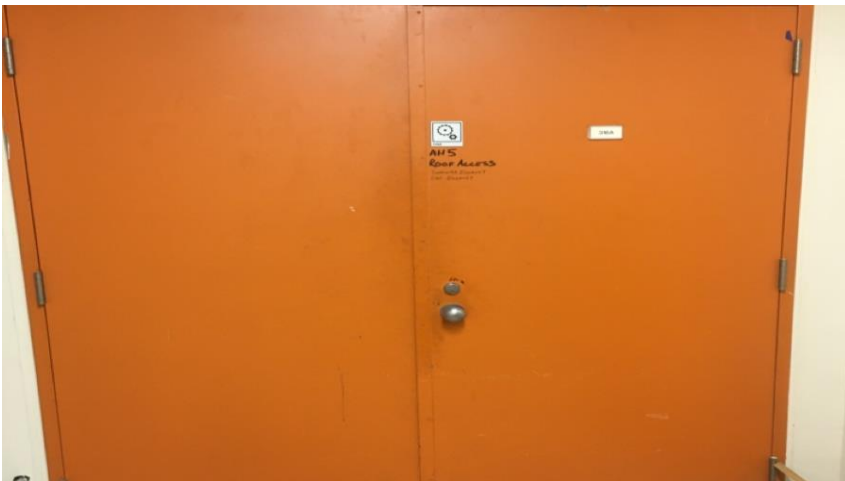


Photo 7: View of orange lead-containing paint observed on the door of Room 316.

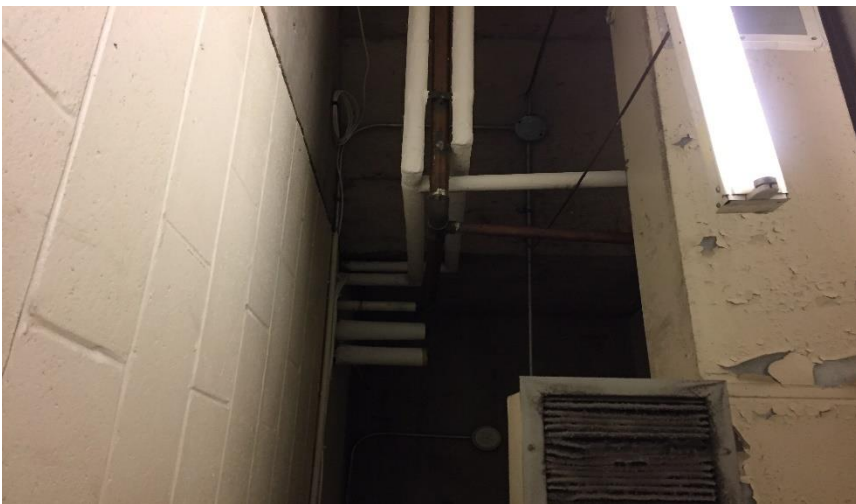


Photo 8: View of lead containing beige paint observed to be in poor condition in Room 023A.



Photo 9: View of typical finishes observed within the subject building.

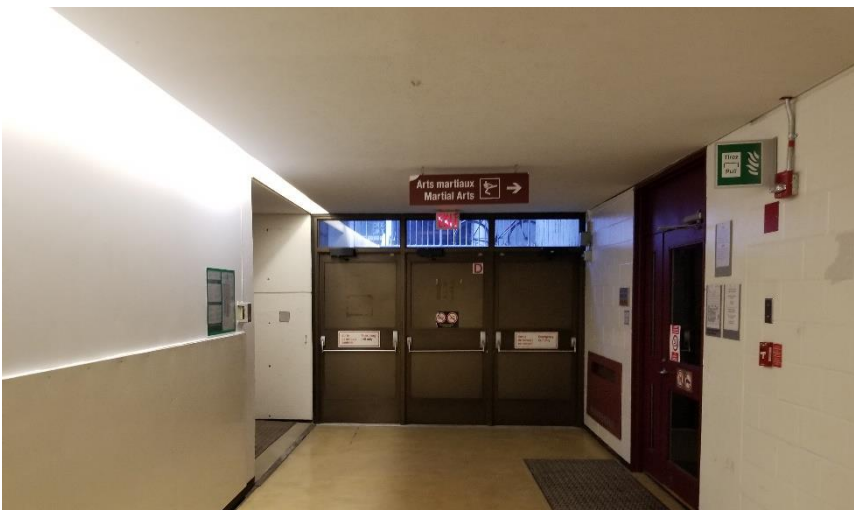


Photo 10: View of typical finishes observed within the subject building.



Photo 11: View of ceramic floor tiles grout observed throughout the subject building suspect to contain asbestos.



Photo 12: Typical view ODS containing water fountains observed throughout the subject building.



Photo 13: View of water damaged suspended ceiling tile observed in Room 039B.

APPENDIX E

Asbestos-Containing Materials Checklists

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Estimated Abatement Cost	Comments
00	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
00	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
00	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
00	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
00	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
00	Room	007A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	5	C	Manage in Place		
00	Room	009	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	8	C	Manage in Place		
00	Room	0024	Caulking	Wall	Confirmed	Non- Friable	Fair Condition	Moderate	Low	-	-	Monitor Condition of Material. Consider Removal or Repair.		
00	Corridor	-	Caulking	Wall	Confirmed	Non-	Good Condition	Moderate	Low	50	LF	Manage in Place		
00	Room	0012	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	1	C	Manage in Place		
00	Room	002	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	65	C	Manage in Place		
00	Room	003B	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	12	C	Manage in Place		
00	Room	002A	Pipe	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	10	C	Manage in Place		
00	Room	007B	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	12	C	Manage in Place		
0	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
0	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
0	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
0	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
0	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
0	Room	02C	Pipe	Tar (Black)	Confirmed	Non-	Good Condition	Moderate	Low	8	C	Manage in Place		
0	Room	050	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	2	C	Manage in Place		
0	Room	050	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Poor Condition	Moderate	Low	1	C	Remove Following Type 2 (Glovebag) Abatement Procedures	\$1,200.00	
0	Room	051	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	2	C	Manage in Place		
0	Room	011	Pipe	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	20	C	Manage in Place		

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Estimated Abatement Cost	Comments
0	Room	011	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Poor Condition	Moderate	Low	1	C	Remove Following Type 2 (Glovebag) Abatement Procedures	\$1,200.00	
0	Room	011A	Pipe	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	12	C	Manage in Place		
0	Room	020C	Flexible Duct Connector	-	Suspected	-	Good Condition	Easy	Low	4	C	Manage in Place		
0	Room	022	Pipe	Parging Cement	Suspected	Friable	Good Condition	Difficult	Low	6	C	Manage in Place		
0	Room	023	Pipe	Parging Cement	Suspected	Friable	Good Condition	Difficult	Low	7	C	Manage in Place		
0	Room	024	Pipe	Parging Cement	Suspected	Friable	Good Condition	Difficult	Low	6	C	Manage in Place		
1	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
1	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
1	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
1	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
1	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
1	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
1	Room	107	Texture Coat	Ceiling	Confirmed	Friable	Good Condition	Easy	Low	1420	SF	Manage in Place		
2	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
2	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
2	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
2	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
2	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
2	Room	200	Mechanical Pipe Straight Insulation	Tar (Black)	Confirmed	Non-Friable	Good Condition	Easy	Low	5	LF	Manage in Place		
2	Room	213	Pipe	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	1	-	Manage in Place		
2	Room	216	Pipe	Parging Cement	Confirmed	Friable	Good Condition	Moderate	Low	2	C	Manage in Place		
3	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
3	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
3	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
3	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
3	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
3	Room	300D	12" x 12" Vinyl Floor Tile	Brown with Spots	Confirmed	Non-Friable	Good Condition	Easy	Low	800	SF	Manage in Place		
3	Room	300	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good Condition	Easy	Low	1000	SF	Manage in Place		
3	Room	301C	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good Condition	Easy	Low	285	SF	Manage in Place		

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Estimated Abatement Cost	Comments
3	Room	302	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non- Friable	Good Condition	Easy	Low	430	SF	Manage in Place		
3	Room	304A	12" x 12" Vinyl Floor Tile	White with Black Dots in Verticle Line	Confirmed	Non- Friable	Good Condition	Easy	Low	275	SF	Manage in Place		
3	Room	306B	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Easy	Low	10	C	Manage in Place		
3	Room	311D	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Easy	Low	3	C	Manage in Place		
3	Room	316A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good Condition	Easy	Low	27	C	Manage in Place		
4	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
4	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Estimated Abatement Cost	Comments
4	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
4	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
4	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
4	Room	400	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non- Friable	Good Condition	Easy	Low	1025	SF	Manage in Place		
4	Room	405	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good Condition	Easy	Low	150	SF	Manage in Place		
4	Room	405A	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good Condition	Easy	Low	100	SF	Manage in Place		
4	Room	415	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good Condition	Easy	Low	220	SF	Manage in Place		
4	Room	415A	12" x 12" Vinyl Floor Tile	Brown with Spots	Confirmed	Non- Friable	Good Condition	Easy	Low	100	SF	Manage in Place		
4	Room	428	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non- Friable	Good Condition	Easy	Low	350	SF	Manage in Place		
5	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
5	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
5	Throughout Level	-	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		
5	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place		
5	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good Condition	Easy	Low	-	-	Manage in Place		
5	Roof Level	-	Roofing Materials	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place		

APPENDIX F

Hazardous Containing Materials Checklists

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
0	Room	024	Lead	Wall Paint	Grey	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Squash Court	04	Lead	Door Frame Paint	Brown	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Room	031	Lead	Wall Paint	Beige	Poor Condition	-	5	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACC	\$1,200.00	
0	Room	023A	Lead	Wall Paint	Beige	Poor Condition	-	4	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACC	\$1,200.00	
0	Corridor	-	Lead	Wall Paint	Beige	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Corridor	-	Lead	Stair Paint	Grey	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Corridor	-	Lead	Cabinet Paint	Black	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Room	020A	Lead	Floor Paint	Grey	Poor Condition	-	30	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACC	\$1,200.00	
0	Corridor	-	Lead	Floor Paint	Grey	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Room	02	Ozone Depleting Substances (ODS)	Vending Machine	N/A	Good Condition	Gatorade	-	-	Confirmed	Manage in Place		R134a

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
0	Room	02	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good Condition	Elkay	-	-	Confirmed	Manage in Place		R134a
0	Room	019A	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good Condition	Elkay	-	-	Confirmed	Manage in Place		R134a
0	Room	020	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good Condition	Elkay	-	-	Confirmed	Manage in Place		R134a
0	Room	023A	Ozone Depleting Substances (ODS)	Vending Machine	N/A	Good Condition	True	-	-	Confirmed	Manage in Place		R134a
0	Room	045	Ozone Depleting Substances (ODS)	Ice Making Machine	N/A	Good Condition	Manitowac	-	-	Confirmed	Manage in Place		R134a
0	Room	047	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good Condition	Elkay	1	C	Confirmed	Manage in Place		R134a
0	Room	020	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
1	Room	114	Mercury	Thermostat	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		
1	Room	115	Mercury	Thermostat	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		
1	Room	116	Mercury	Thermostat	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
1	Room	108	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
2	Room	200	Lead	Wall Paint	Yellow	Good Condition	-	-	-	Confirmed	Manage in Place		
2	Room	200D	Mercury	Thermostat	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		
2	Room	216	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
2	Room	213	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	Galaxy	1	C	Confirmed	Manage in Place		R134a
2	Room	221	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
2	Room	221	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
3	Room	316	Lead	Door Frame Paint	Orange	Good Condition	-	-	-	Confirmed	Manage in Place		
3	Room	304A	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
3	Room	306	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	Thermo Fisher	3	C	Confirmed	Manage in Place		R134a, R404a, R290
3	Room	309	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	Kenmore	1	C	Confirmed	Manage in Place		R134a
3	Room	325	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
3	Room	301C	Ozone Depleting Substances	Drinking Water Fountain	N/A	Good Condition	Elkay	1	C	Confirmed	Manage in Place		R134a

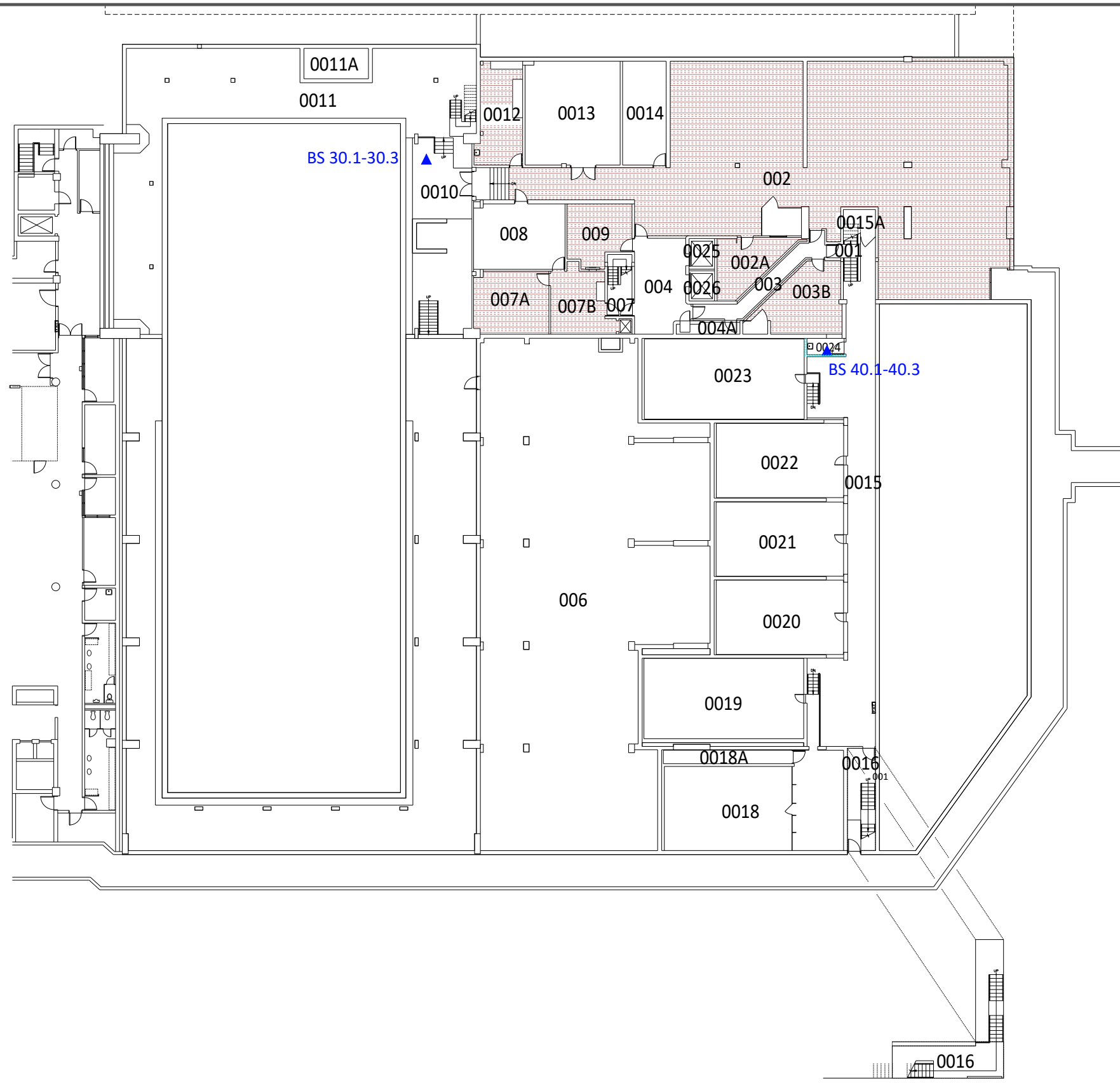
Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
3	Room	304a	Ozone Depleting Substances	Drinking Water Fountain	N/A	Good Condition	Elkay	1	C	Confirmed	Manage in Place		R134a
3	Room	306	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
3	Room	307	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
4	Room	428	Lead	Window Paint	Red	Good Condition	-	-	-	Confirmed	Manage in Place		
4	Room	400E	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
4	Room	424	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
4	Room	401	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
0	Room	019	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
0	Room	039B	Water Damage	Ceiling Tiles	N/A	Poor Condition	N/A	1	C	Confirmed	Should be replaced as part of regular		
0	Room	015	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
00	Room	007B	Ozone Depleting Substances	Refrigerator	N/A	Good Condition	N/A	1	C	Confirmed	Manage in Place		Unknown Refrigerant
Throughout Building	-	-	Lead	Battery Pack	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
Throughout Building	-	-	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		
Throughout Building	-	-	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		

APPENDIX G

Site Sampling & Location Plans

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING.DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



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 www.mcintoshperry.com

- Legend:**
- ▲ Asbestos Bulk Sample
 - Lead Paint Sample <LOD
 - Lead Paint Sample >LOD
 - Note:**
ACM plaster and drywall with ACM joint compound is present throughout
 - ACM Ceiling Tile
 - ACM Vinyl Floor Tile (VFT)
 - ACM Caulking & Mastic
 - ACM Pipe Insulation
 - ACM Texture Coat

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA

TITLE: MASTER DRAWING
LEVEL 00
SAMPLE LOCATION

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

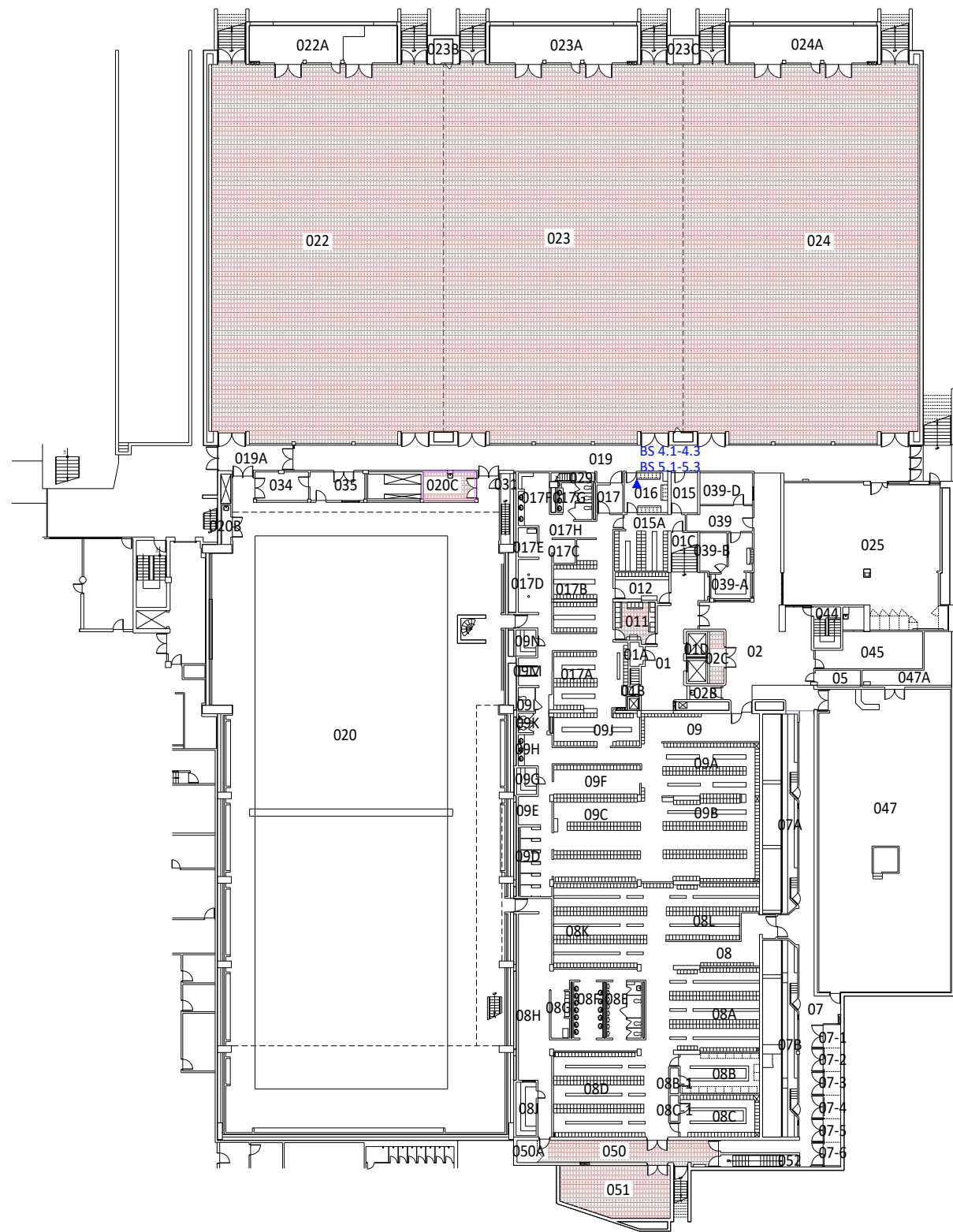
SCALE: 1:100 DATE: JUNE 15, 2020

DRAWN: D.B. CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-00

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING\DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



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 www.mcintoshperry.com

- Legend:**
- ▲ Asbestos Bulk Sample
 - Lead Paint Sample <LOD
 - Lead Paint Sample >LOD
 - Note:
ACM plaster and drywall with ACM joint compound is present throughout
 - ACM Ceiling Tile
 - ACM Vinyl Floor Tile (VFT)
 - ACM Caulking & Mastic
 - ACM Pipe Insulation
 - ACM Texture Coat

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA

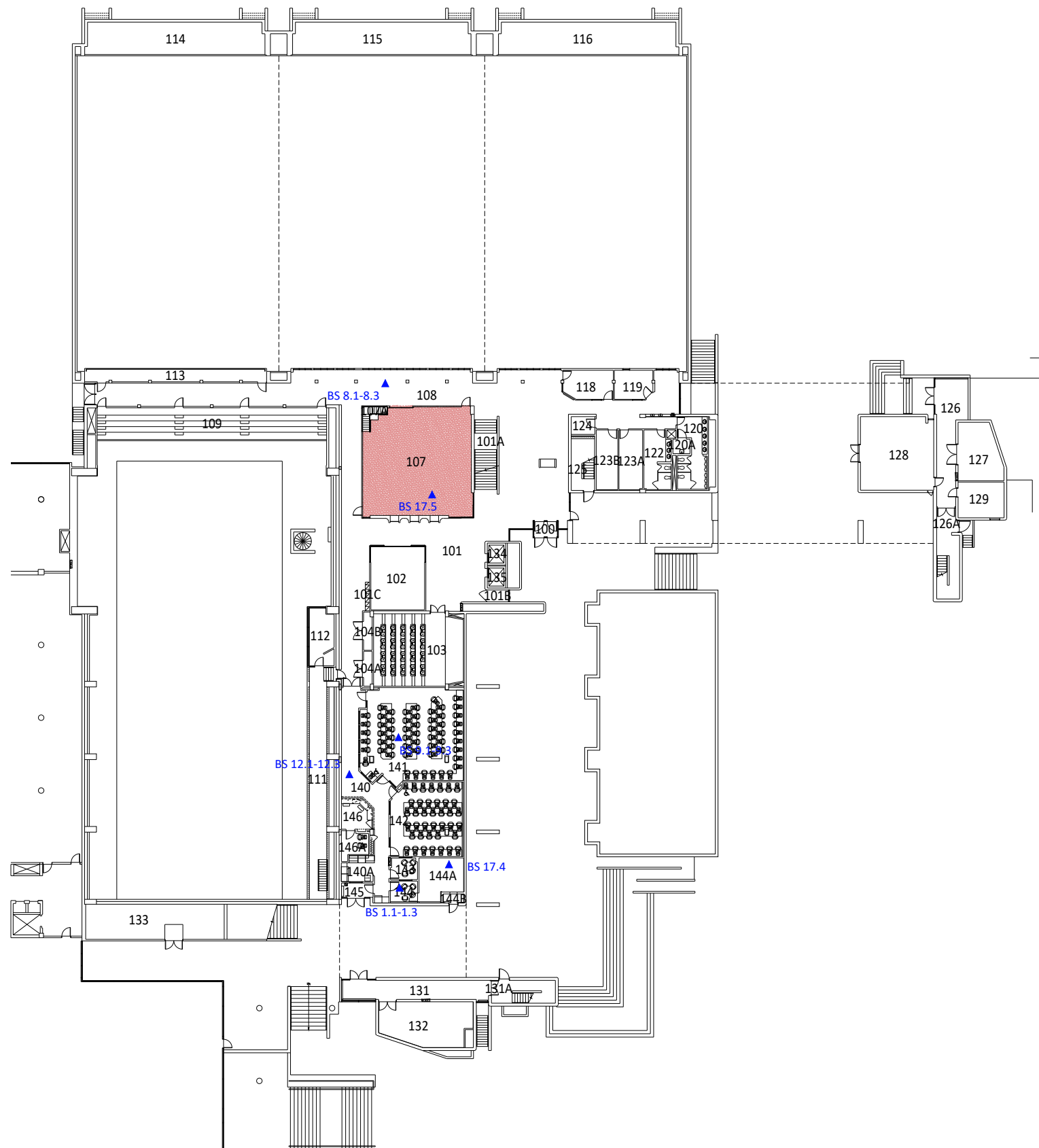
TITLE: MASTER DRAWING
LEVEL 0
SAMPLE LOCATION

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

SCALE: I:150
DATE: JUNE 15, 2020
DRAWN: D.B.
CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-0



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample <LOD
- Lead Paint Sample >LOD

Note:
 ACM plaster and drywall with
 ACM joint compound is present
 throughout

- ACM Ceiling Tile
- ACM Texture Coat
- ACM Vinyl Floor Tile (VFT)
- ACM Caulking & Mastic
- ACM Pipe Insulation

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 www.mcintoshperry.com

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS,
 REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR
 TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA

PROJECT: HAZARDOUS MATERIALS SURVEY
 125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
 LEVEL I
 SAMPLE LOCATION

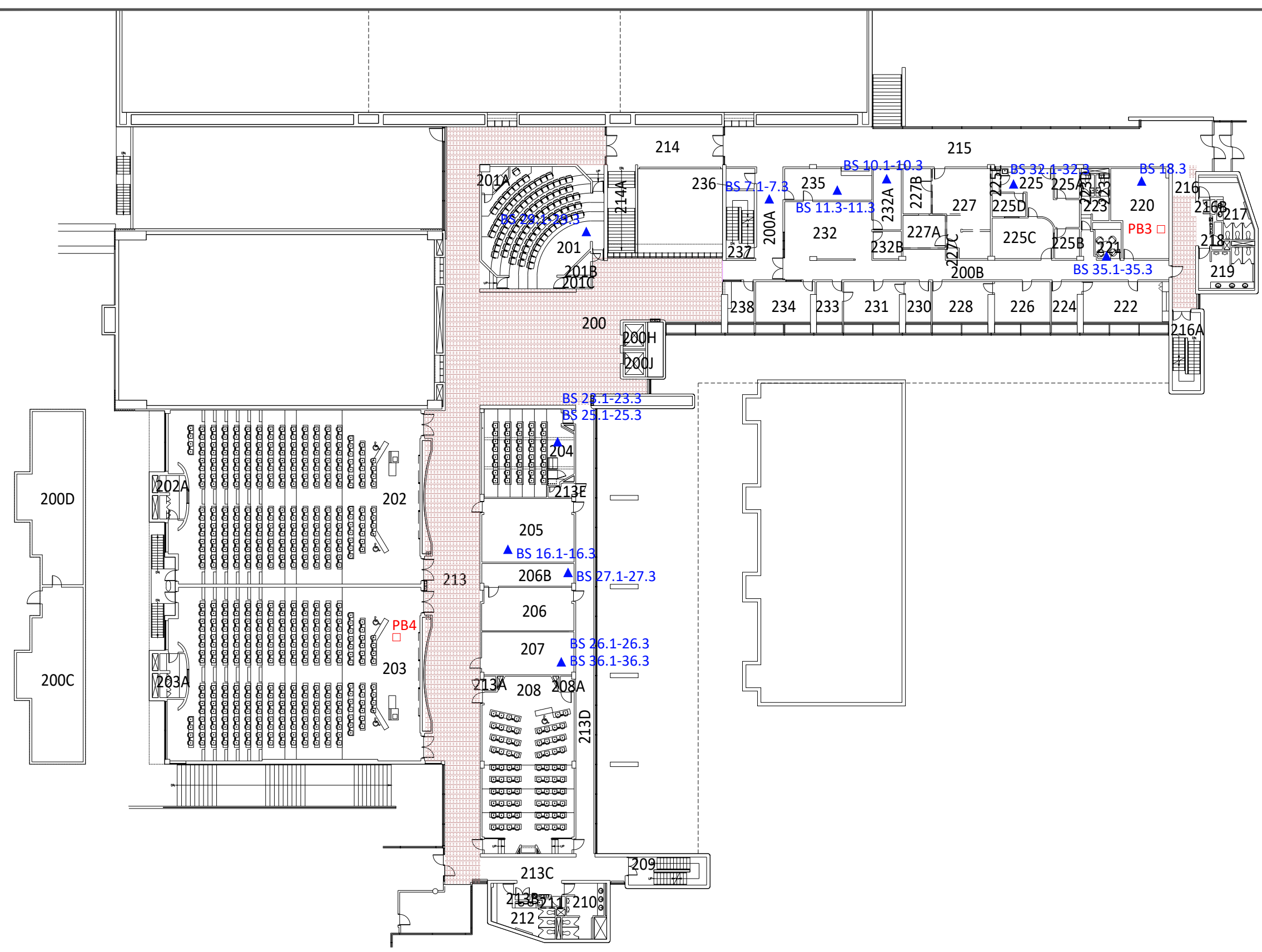
SCALE: I:150 DATE: JUNE 15, 2020
 DRAWN: D.B. CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-1

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE I\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING\DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING\DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



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 www.mcintoshperry.com

- Legend:**
- ▲ Asbestos Bulk Sample
 - Lead Paint Sample <LOD
 - Lead Paint Sample >LOD
 - ACM Ceiling Tile
 - ACM Vinyl Floor Tile (VFT)
 - ACM Caulking & Mastic
 - ACM Pipe Insulation
 - ACM Texture Coat
- Note:**
 ACM plaster and drywall with ACM joint compound is present throughout

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA
 PROJECT: HAZARDOUS MATERIALS SURVEY
 125 UNIVERSITY, OTTAWA, ON

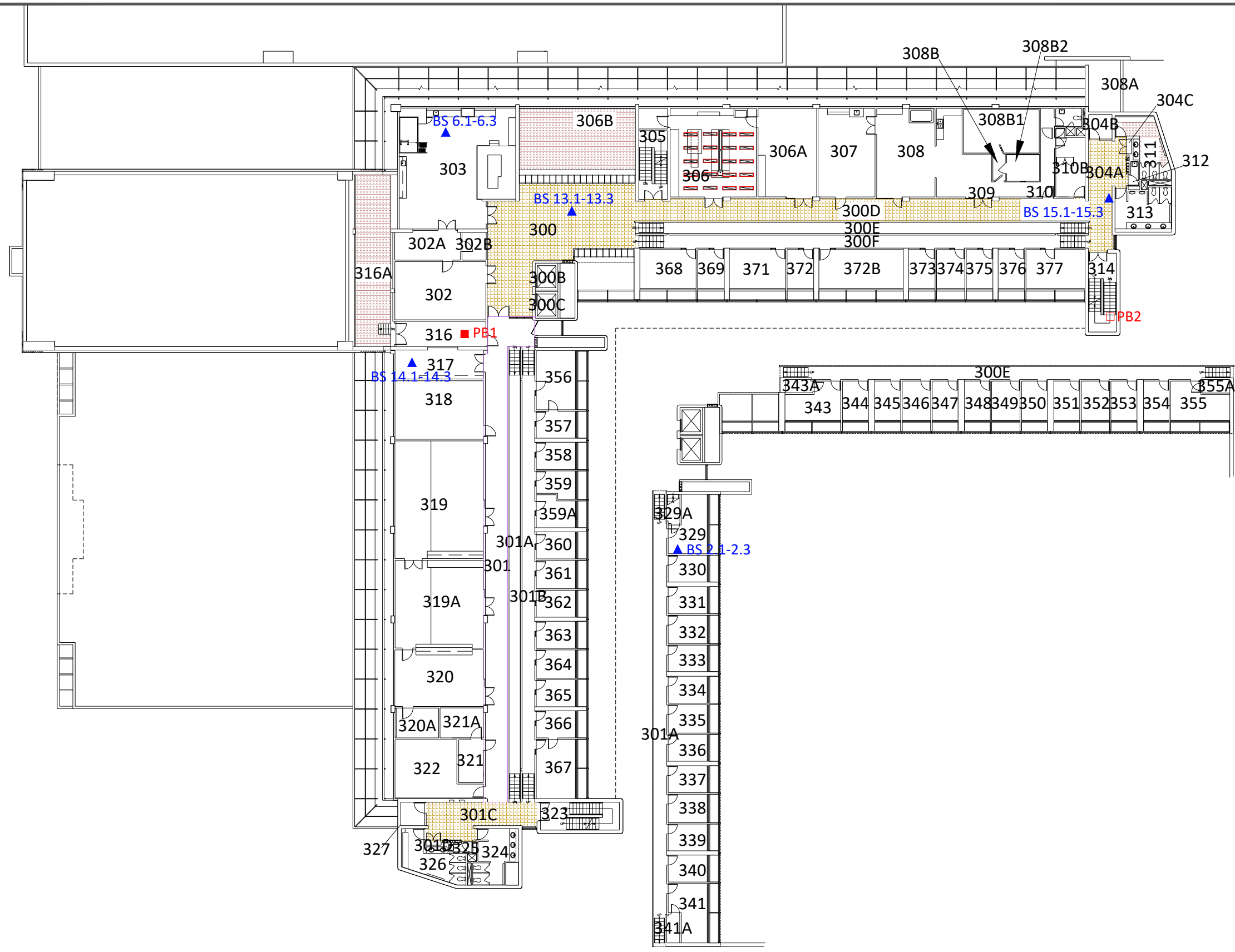
TITLE: MASTER DRAWING
 LEVEL 2
 SAMPLE LOCATION

SCALE: 1:100
 DATE: JUNE 15, 2020
 DRAWN: D.B
 CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-2

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING\DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



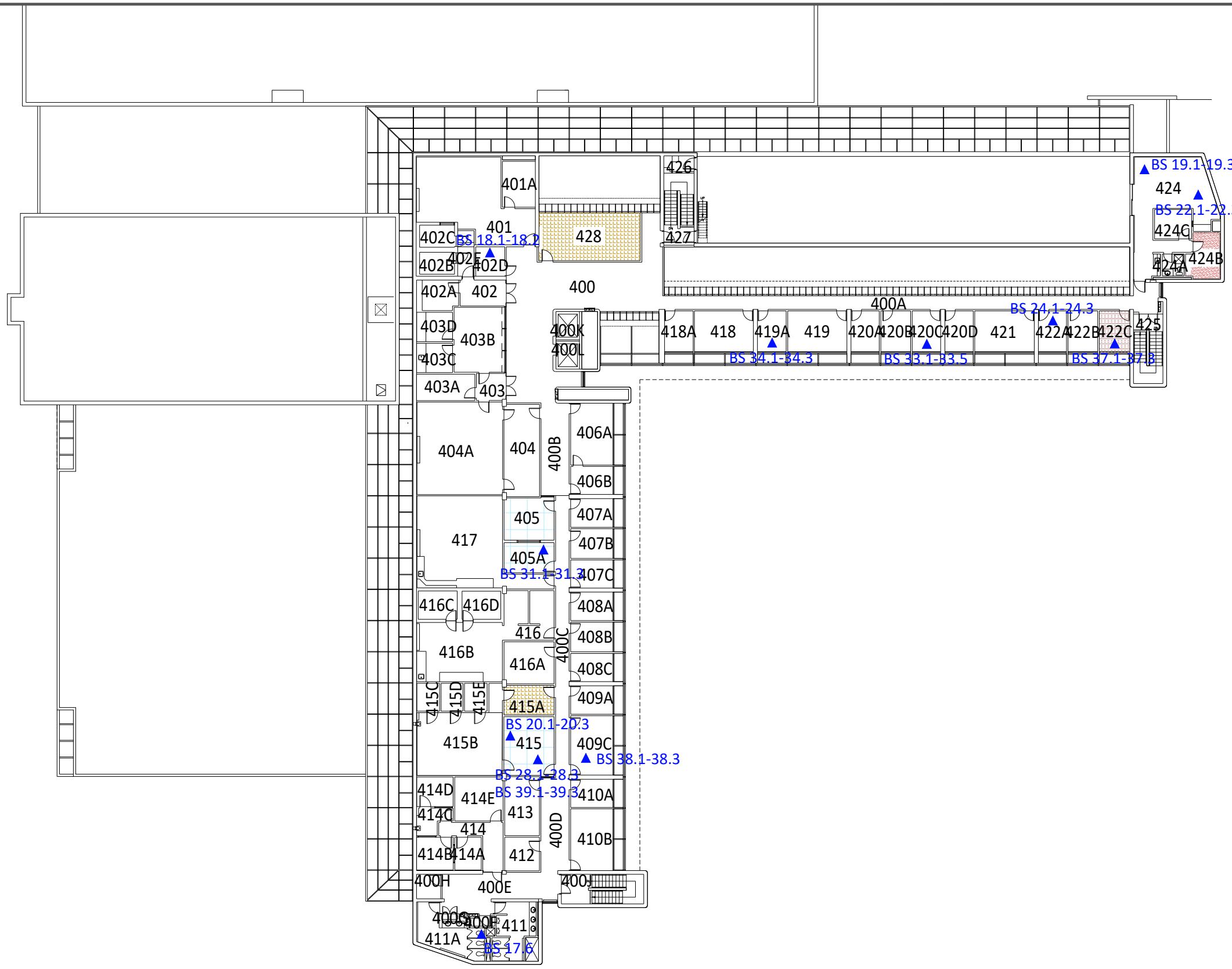
McINTOSH PERRY
 6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3
 Tel: 905.856.5200 Fax: 905.695.0221
 Toll Free: 1.888.348.8991 www.mcintoshperry.com

- Legend:**
- ▲ Asbestos Bulk Sample
 - Lead Paint Sample <LOD
 - Lead Paint Sample >LOD
 - Note:
ACM plaster and drywall with ACM joint compound is present throughout
 - ACM Ceiling Tile
 - ACM Vinyl Floor Tile (VFT)
 - ACM Caulking & Mastic
 - ACM Pipe Insulation
 - ACM Texture Coat

CLIENT:	UNIVERSITY OF OTTAWA	TITLE:	MASTER DRAWING LEVEL 3 SAMPLE LOCATION		
PROJECT:	HAZARDOUS MATERIALS SURVEY 125 UNIVERSITY, OTTAWA, ON	SCALE:	I:100	DATE:	JUNE 15, 2020
		DRAWN:	D.B	CHECKED:	M.M.
				DRAWING NUMBER:	A-3
				REV. NO.	DESCRIPTION
				DATE	BY
				APPD.	REV.:

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING\DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



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 www.mcintoshperry.com

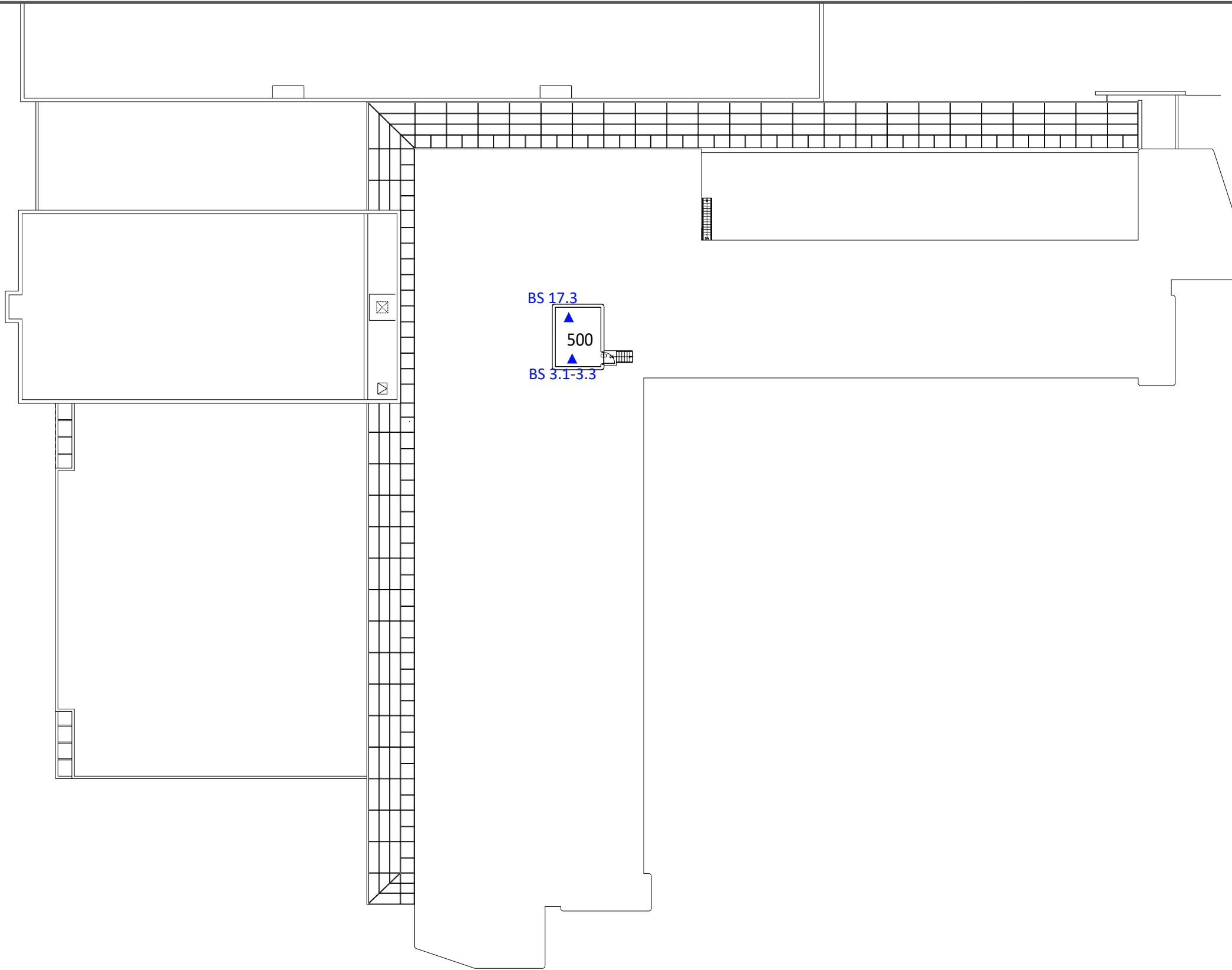
Legend:
 ▲ Asbestos Bulk Sample
 ■ Lead Paint Sample <LOD
 ■ Lead Paint Sample >LOD
Note:
 ACM plaster and drywall with ACM joint compound is present throughout

ACM Ceiling Tile
 ACM Vinyl Floor Tile (VFT)
 ACM Caulking & Mastic
 ACM Pipe Insulation
 ACM Texture Coat

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA	TITLE: MASTER DRAWING LEVEL 4 SAMPLE LOCATION				
PROJECT: HAZARDOUS MATERIALS SURVEY 125 UNIVERSITY, OTTAWA, ON	SCALE: 1:100	DATE: JUNE 15, 2020			
	DRAWN: D.B	CHECKED: M.M.			
			REV. NO. DESCRIPTION DATE BY APPD.		
			DRAWING NUMBER: A-4		

W:\PROJECTS\OTTAWA\2020\HAZARDOUS - DESIGNATED SUBSTANCES\02Z-02101-HZ PHASE 1\PROJECTS\15 125 UNIVERSITY (MONTPETIT HALL)\DRAWING.DWG - SAMPLE LOCATIONS - 125 UNIVERSITY.DWG



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 www.mcintoshperry.com

Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample <LOD
- Lead Paint Sample >LOD
- Note:
ACM plaster and drywall with ACM joint compound is present throughout
- ◻ ACM Ceiling Tile
- ◻ ACM Vinyl Floor Tile (VFT)
- ◻ ACM Caulking & Mastic
- ◻ ACM Pipe Insulation
- ◻ ACM Texture Coat

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

CLIENT: UNIVERSITY OF OTTAWA

TITLE: MASTER DRAWING
LEVEL 5
SAMPLE LOCATION

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

SCALE: 1:100
DATE: JUNE 15, 2020
DRAWN: D.B
CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-5