ECOH
Environmental Consulting
Occupational Health

ASSESSMENT OF DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS

Mulock Estate
16780 Yonge Street
Newmarket, Ontario (1878)

Submitted to:
The Town of Newmarket
Public Works Services, Operation Centre,
1275 Maple Hill Court,
Newmarket, Ontario, L3Y 9E8

Attention: Andrea Cafissi, Facility Maintenance Supervisor

Prepared by:
ECOH.

ECOH Project No.: 27050-05
April 22, 2022

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1.0 INTRODUCTION

ECOH Management Inc. (ECOH) was retained by the Town of Newmarket (the "Client") to conduct a designated substances and hazardous materials survey of the Mulock Estate located at 16780 Yonge Street, Newmarket, Ontario (hereby referred to as the "facility" or "Project Area"). The assessment was performed to establish the location and type of hazardous building materials incorporated in the facility's structure(s) and its finishes, and to provide recommendations as necessary to fulfil requirements set forth under the Ontario Occupational Health and Safety Act and associated regulations.

Mr. Austin Gomes of ECOH performed the fieldwork on April 4, 2022.

This designated substance assessment was performed for the purposes of long-term management of designated substances and hazardous materials contained within building materials, and not for construction or renovation purposes. **An additional pre-renovation/pre-demolition assessment for designated substances and hazardous materials should be conducted prior to any future demolition, renovation or maintenance activities that may disturb building materials that potentially contain designated materials or hazardous substances.**

2.0 METHODOLOGY AND SCOPE

The methodology and scope of the assessment completed at this site are detailed in the overview document titled "Designated Substances & Hazardous Materials Assessment Scope of Work and Methodology Report", dated March 2022, prepared by ECOH.

For the purpose of this assessment ECOH reviewed the following:

- *"Designated Substances and Hazardous Materials Survey", Mulock Estate – 16780 Yonge Street, Newmarket, ON, ECOH Project No. 26372-06, dated: April 16, 2021.*

Evaluation Criteria and Abatement Priority Matrix

The recommendations for remediation are based on the evaluation criteria and Abatement Priority Matrix Table provided in Appendix I of the aforementioned, "Designated Substances & Hazardous Materials Assessment Scope of Work and Methodology Report", dated March 2022. The following is a prioritized list of typical short-term actions.

PRIOIRTY 1	**Immediate Abatement Required**
PRIORITY 2	**Abatement Required Prior to Disturbance**
PRIORITY 3	**Abatement Required if Material is Affected Either Through Renovation or Disturbance. Inspect Materials at Regular Intervals.**

3.0 FINDINGS

Material	Findings
Asbestos	Confirmed ACM was identified in the facility as follow: • Texture Plaster on Walls present in Location 23 (Main Floor Office) − (**1% Chrysotile)** • Aircell pipe Insulation present in Locations 39 & 34 (Boiler Room & Laundry Room) − **(80% Chrysotile)** • Parging Cement on pipe fittings present in Location 39 & 34 (Boiler Room & Laundry Room) − **(60% Chrysotile)** • Parging Cement on Boiler Tank present in Location 39 (Boiler Room) − **(60% Chrysotile)** • Vinyl Floor Tile (VFT2, 9”x9” Light grey with white streaks) present in Location 46 (Bar) − **(4% Chrysotile)** • VFT2 Black Mastic − **(1% Chrysotile)** • Vinyl Floor Tile (VFT3, 9”x9” Black with white streaks) present in Location 07a (Porch 2nd Floor) − **(2% Chrysotile)** • Vinyl Floor Tile (VFT4, 9”x9” White with black streaks) present in Location 07a (Porch 2nd Floor) − **(2% Chrysotile)** • Vinyl Floor Tile (VFT5, 9”x9” Brown with white and red streaks) present in Location 46 (Bar) − **(3% Chrysotile)** • VFT5 Black Mastic − **(3% Chrysotile)** • VFT6 (VFT6- 9” X 9” Black with brown and white streaks) present in Locations 10 & 11. This material was previously sampled and confirmed to be **asbestos-containing − (8% Chrysotile)** • VFT6 Black Mastic. This material was previously sampled and confirmed to be **asbestos-containing − (2% Chrysotile)** • Vinyl Sheet Floor (VSF2 Beige with brick pattern) present in Locations 28, 29, 31, 32 & 33 (Kitchens) This material was previously sampled and confirmed to be **asbestos-containing − (20% Chrysotile)** Assumed ACM were identified in the facility as follows: Window/door caulking, roofing materials, mechanical gaskets, internal components of boilers/water heaters or other mechanical systems were not sampled and should

Material	Findings
	be assumed to be asbestos-containing if present. All assumed ACM materials observed were found to be in GOOD condition at the time of the survey.
Lead	Lead-based and Lead-containing materials were identified in the facility as follows: • Beige Paint on Doors (throughout the facility) – **38000 ppm** • Exterior Brick Mortar- Location 00 – **31000 ppm** • White Paint on Baseboard Trim was previously sampled − Location 01 – **60000 ppm** • Green Paint on Porch Base/Siding was previously sampled – **24000 ppm** • White Paint on Skirting of Porch was previously sampled – **28000 ppm** • White Paint on Window Sills was previously sampled – **200,000 ppm** • Green Paint on Foundation Walls was previously sampled – **7400 ppm** • Turquoise Blue Paint on Walls in Location 29 (Kitchen 2) – **3800 ppm** • Dark Blue Paint on Walls in Location 14 (Corridor) – **3400 ppm** • White Paint on Exterior Brick Walls was previously sampled – Location 00 – **2400 ppm** • Paint on Hallway Walls Along Back Stairs was previously sampled – **4700 ppm** • White Paint on Basement Hallway Walls was previously sampled – **1300 ppm** No other major sources of lead or lead-containing products were identified during the survey; however, lead may be present in: • Less prominent painted surfaces (i.e. handrails, windows, etc.), • Wiring connectors and electric cable sheathing, and • Piping and solder joints/bell-and-spigot joints on piping.
Mould	No mould affected materials were observed within the facility.
Mercury	Minor quantities are present as a vapour within fluorescent tubes lights and as a possible constituent of paints and adhesives.

Material	Findings
Silica	Present in all concrete and masonry products.
Polychlorinated Biphenyls (PCBs)	Not likely to be present as a component of ballasts for fluorescent lights/ high-intensity discharge (HID) lights.
Benzene	No potential sources of Benzene were identified.
Other Designated Substances and Hazardous Materials	Acrylonitrile, Arsenic, Coke Oven Emissions, Ethylene Oxide, Isocyanates, and Vinyl Chloride Monomer were not noted in significant quantities or forms, if at all.

Further findings are presented in attached Appendices:

- Appendix I – Survey Drawing, depicting the location of presumed and assumed asbestos-containing materials and room location numbers referenced throughout the report.
- Appendix II – Inventory of Hazardous Materials, providing a general description of the quantity or nature of the designated substance identified in each location within the facility.
- Appendix III – Observation Report, documenting instances of damaged hazardous materials and/or mould growth.
- Appendix IV – Results of Bulk Sample Analysis, providing a summary of all bulk sampled collected as well as laboratory chain of custodies and certificates of analyses.
- Appendix V – Scope of Work Methodology. General recommendations for compliance with applicable regulations have been provided in overview document titled “Designated Substances Survey Scope of Work and Methodology Report”, dated March 2022, prepared by ECOH.

4.0 RECOMMENDATIONS

General recommendations for compliance with applicable regulations have been provided in Appendix V overview document, “Designated Substances Survey Scope of Work and Methodology Report”, dated March 2022 prepared by ECOH. The following details are specific recommendations for the facility.

- As asbestos is confirmed to be present within facility, an Asbestos Management Plan (AMP) must be implemented (refer to the overview document for more details).
- All Designated Substances & Hazardous Materials identified on-site are present in good condition with no immediate remedial action required.
- General recommendations for compliance with applicable regulations have been provided in Appendix V – Scope of Work Methodology.
- Prior to future construction or renovation projects, additional assessments will be required to confirm the presence of Designated Substances that have been assumed

to be on-site and/or that may be present in concealed areas (such as above solid ceilings). The impact to Designated Substances during future construction or renovation work should be assessed on a project-by-project basis.

5.0 LIMITATIONS OF ASSESSMENT

Due to the nature of building construction and on-going building activities, some limitations exist as to the possible thoroughness of a building survey. The field observations, measurements and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings and conclusions presented in this report. The findings and conclusions drawn by ECOH Management Inc. (ECOH) are limited to the specific scope of work for which ECOH was retained and are based solely on information generated as a result of the specific scope of work authorized by the Town of Newmarket (the "Client"). The results of the assessment are limited to visual inspection of areas made accessible to ECOH personnel and information obtained from facility personnel, when obtained.

ECOH warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment. However, there is no warranty, expressed or implied, that this assessment has uncovered all environmental concerns on the subject site. In addition, ECOH cannot guarantee the completeness or accuracy of information supplied by a third party.

This report was prepared by ECOH for the Town of Newmarket. The material in it reflects ECOH's professional interpretation of information available at the time of report preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. ECOH accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. Should additional information become available that suggests other environmental issues of concern beyond that described in this report, ECOH retains the right to review this information and modify conclusions and recommendations presented in this report accordingly.

6.0 CLOSURE

Should there be any questions regarding the contents of this report, please contact the undersigned at 905-795-2800.

ECOH
Environmental Consulting
Occupational Health

Prepared by:

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Reviewed by:

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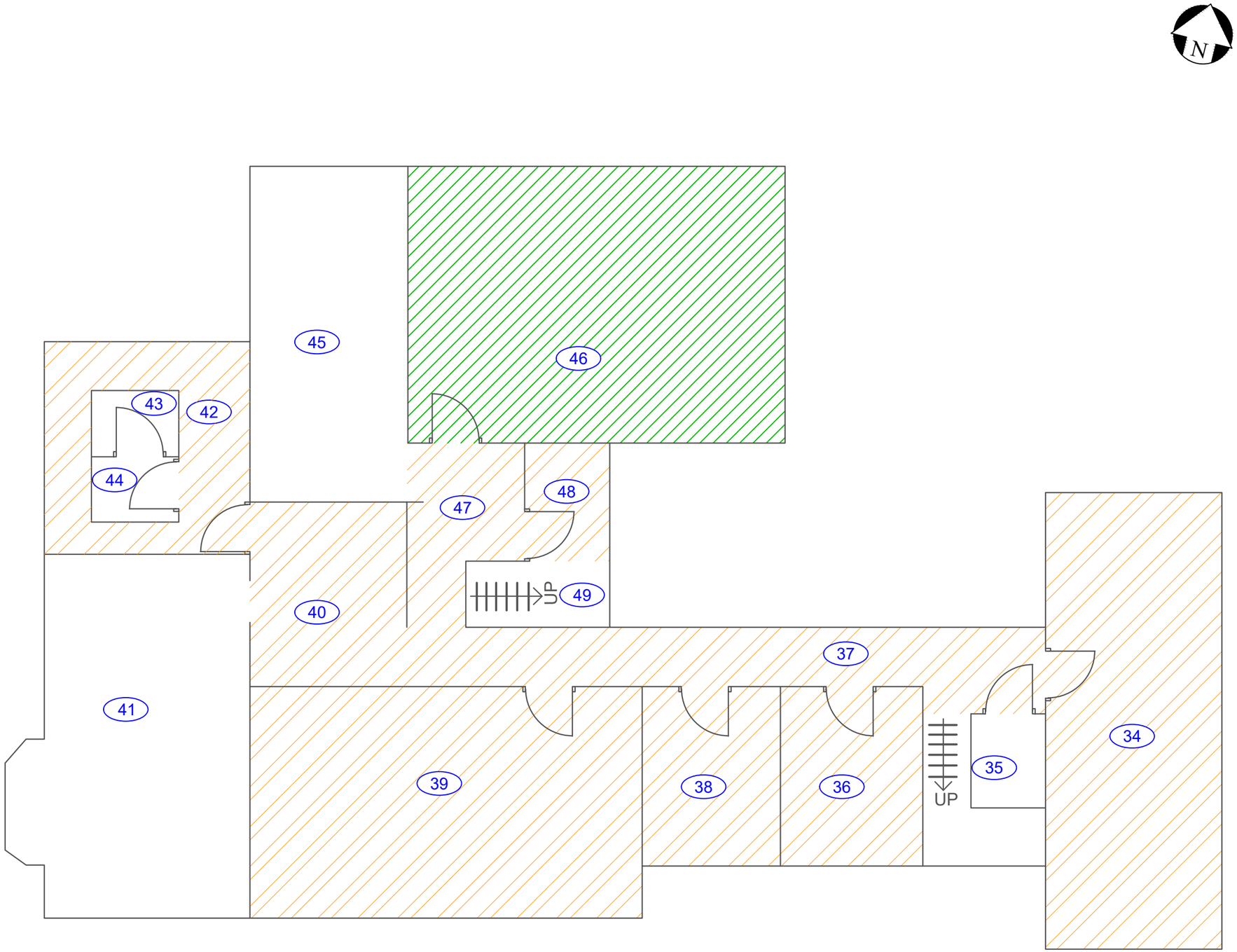
Project Manager

APPENDIX I

SURVEY DRAWING



Legend

01	Location Numbers
	Friable Asbestos-Containing Material (Pipe Insulation & Fittings)
	Non-Friable Asbestos-Containing Vinyl Floor Tiles

Note:
Roofing materials, mechanical systems are presumed asbestos-containing if present

All information relating to room size and location is approximate and for visual aid only. ECOH does not guarantee the drawing to be complete, absolute, accurate or current. The drawing should not be used by any party in lieu of obtaining architectural drawings.

Figure 1

Basement Floor Plan

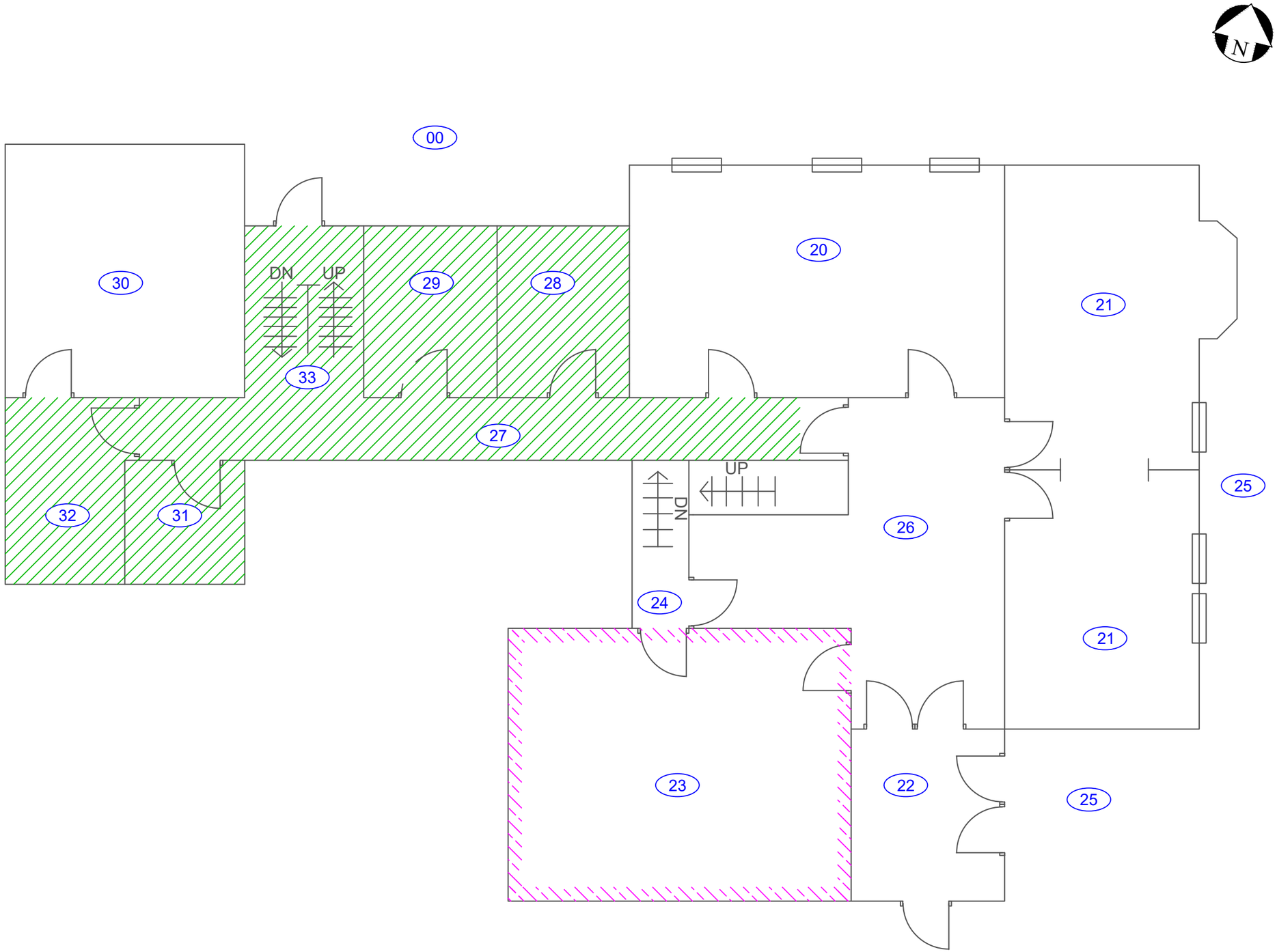
LOCATION:

16780 Yonge Street,
Newmarket, Ontario

PROJECT:

Assessment of Designated Substances and Hazardous Materials

CLIENT:	Town of Newmarket		
PROJECT NUMBER: 27050-05	DATE: May 2022	DRW BY: AN	
CAD FILE: FIG1-3 P27050-05 DSS Town of Newmarket	SCALE: Not to Scale	CHK BY: AM	



Legend

01 Location Numbers

Friable Asbestos-Containing Texture Coat on Walls

Non-Friable Asbestos-Containing Vinyl Floor Tiles

Note:
Roofing materials, mechanical systems are presumed asbestos-containing if present

All information relating to room size and location is approximate and for visual aid only. ECOH does not guarantee the drawing to be complete, absolute, accurate or current. The drawing should not be used by any party in lieu of obtaining architectural drawings.

Figure 2

Main Floor Plan

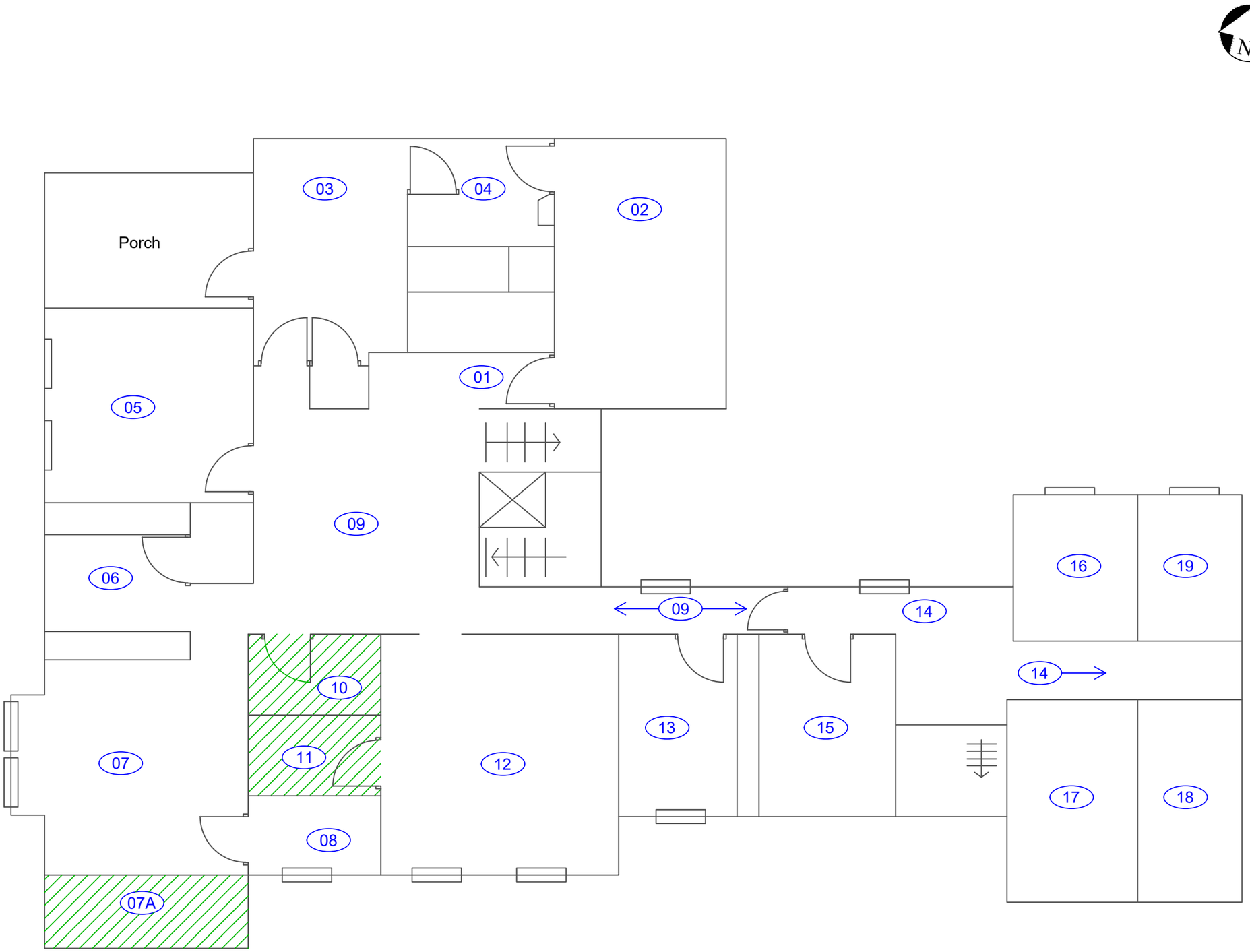
LOCATION:

16780 Yonge Street,
Newmarket, Ontario

PROJECT:

Assessment of Designated Substances and Hazardous Materials

CLIENT:	Town of Newmarket		
PROJECT NUMBER: 27050-05	DATE: May 2022	DRW BY: AN	
CAD FILE: FIG1-3 P27050-05 DSS Town of Newmarket	SCALE: Not to Scale	CHK BY: AM	



Legend

01 Location Numbers

Friable Asbestos-Containing Texture Coat

Non-Friable Asbestos-Containing Vinyl Floor Tiles

Note:
Roofing materials, mechanical systems are presumed asbestos-containing if present

All information relating to room size and location is approximate and for visual aid only. ECOH does not guarantee the drawing to be complete, absolute, accurate or current. The drawing should not be used by any party in lieu of obtaining architectural drawings.

Figure 3

Second Floor Plan

LOCATION:
16780 Yonge Street,
Newmarket, Ontario

PROJECT:
Assessment of Designated Substances and Hazardous Materials

CLIENT:	Town of Newmarket		
PROJECT NUMBER: 27050-05	DATE: May 2022	DRW BY: AN	
CAD FILE: FIG1-3 P27050-05 DSS Town of Newmarket	SCALE: Not to Scale	CHK BY: AM	

APPENDIX II

INVENTORY OF IDENTIFIED HAZARDOUS MATERIALS

Town of Newmarket
Survey Summary Table

Project Number:	27050-05	Date(s) of Current Survey:	April 04, 2022
Building Name:	Mulock Estate	Organization Completing Survey:	ECOH Management Inc.
Building Address:	16780 Yonge Street, Newmarket, ON	Facilty Coordinator:	Andrea Cafissi

Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
00	Exterior	Roof	Roofing Material	Asbestos	Not sampled	ACM Assumed	N/A	Good	C	N/A	
00	Exterior	Walls	Brick Mortar	Lead	**26372-06-Pb01**	**31000 mg/Kg**	N/A	Good	A & C	N/A	
00	Exterior	Walls	Brick Mortar	Asbestos	26372-06-ASB-03B	None Detected	N/A	Good	A & C	N/A	
00	Exterior	Walls	White Paint	Lead	L12	**2400 ppm**	N/A	Good	A	N/A	Previousely sampled by R.J. Burnside & Accosiates Ltd.
01	Bedroom Corridor (2nd Floor)	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
01	Bedroom Corridor (2nd Floor)	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
01	Bedroom Corridor (2nd Floor)	Walla	White Paint	Lead	L26	**60000 ppm**	N/A	N/A	N/A	N/A	Paint on baseboard trim.Previousely sampled by R.J. Burnside & Accosiates Ltd.
01	Bedroom Corridor (2nd Floor)	Ceiling	Plaster	Asbestos	26372-06-ASB-02A	None Detected	N/A	N/A	N/A	N/A	
02	Bedroom 1	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
02	Bedroom 1	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
02	Bedroom 1	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	Too high to reach with 6' ladder.
03	Bedroom 2	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
03	Bedroom 2	Walls	Plaster	Asbestos	26372-06-ASB-02G	None Detected	N/A	N/A	N/A	N/A	
03	Bedroom 2	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	Too high to reach with 6' ladder.
04	Washroom between Bedroom 1& 2	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
04	Washroom between Bedroom 1& 2	Floor	Vinyl Floor Tile 1	Asbestos	26372-06-ASB-06A-C	None Detected	50 SF	N/A	N/A	N/A	VFT1- 9" X 9" Dark Blue (Under the carpet).
04	Washroom between Bedroom 1& 2	Walls	Ceramic Tiles	None	N/A	N/A	N/A	N/A	N/A	N/A	
04	Washroom between Bedroom 1& 2	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
04	Washroom between Bedroom 1& 2	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
05	Bedroom 3	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
05	Bedroom 3	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
05	Bedroom 3	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
06	Walking Closet	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
06	Walking Closet	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
06	Walking Closet	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
07	Bedroom 4	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	

Project Number:	27050-05	Date(s) of Current Survey:	April 04, 2022
Building Name:	Mulock Estate	Organization Completing Survey:	ECOH Management Inc.
Building Address:	16780 Yonge Street, Newmarket, ON	Facilty Coordinator:	Andrea Cafissi

Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
07	Bedroom 4	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
07	Bedroom 4	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
07a	Porch	Floor	Vinyl Floor Tile 3	Asbestos	**26372-06-ASB-10A-C**	**2% Chrysotile**	150 SF	Good	A	3	VFT3 9" X 9" Black with white streaks
07a	Porch	Floor	Mastic	Asbestos	26372-06-ASB-10A-C	None Detected	150 SF	N/A	N/A	N/A	VFT3 Black Mastic
07a	Porch	Floor	Vinyl Floor Tile 4	Asbestos	**26372-06-ASB-11A-C**	**2% Chrysotile**	150 SF	Good	A	3	VFT4 9" X 9" White with black streaks
07a	Porch	Floor	Mastic	Asbestos	26372-06-ASB-11A-C	None Detected	150 SF	N/A	N/A	N/A	VFT4 Black Mastic
07a	Porch	Walls	Wood	None	N/A	N/A	N/A	N/A	N/A	N/A	
07a	Porch	Ceiling	White Paint	Lead	26372-06-Pb-06	<750 ppm	N/A	N/A	N/A	N/A	
07a	Porch	Ceiling	Wood	None	N/A	N/A	N/A	N/A	N/A	N/A	
08	Washroom	Floor	Vinyl Sheet Floor 1	Asbestos	26372-06-ASB-05A-C	None Detected	60 SF	N/A	N/A	N/A	VSF1- :White with Light Gray Marks
08	Washroom	Floor	Mastic	Asbestos	26372-06-ASB-05A-C	None Detected	60 SF	N/A	N/A	N/A	VSF1 Black Msstic
08	Washroom	Walls	Ceramic Tile	None	N/A	N/A	N/A	N/A	N/A	N/A	
08	Washroom	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
08	Washroom	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
09	Corridor	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
09	Corridor	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
09	Corridor	Ceiling	Plaster	Asbestos	26372-06-ASB-02B	None Detected	N/A	N/A	N/A	N/A	
10	Washroom (2nd Floor near Foyer)	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
10	Washroom (2nd Floor near Foyer)	Floor	Vinyl Floor Tile 6	Asbestos	A10-A	**8% Chrysotile**	75 SF	Good	A	3	VFT6- 9" X 9" Black with brown and white streaks (Under the carpet) Previousely sampled by Burnside and Associates Ltd)
10	Washroom (2nd Floor near Foyer)	Floor	Mastic	Asbestos	A10-A	**2% Chrysotile**	75 SF	Good	A	3	
10	Washroom (2nd Floor near Foyer)	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
10	Washroom (2nd Floor near Foyer)	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
11	Washroom	Floor	Vinyl Floor Tile 6	Asbestos	A10-A	**8% Chrysotile**	70 SF	Good	A	3	VFT6- 9" X 9" Black with brown and white streaks
11	Washroom	Floor	Mastic	Asbestos	A10-A	**2% Chrysotile**	70 SF	Good	A	3	
11	Washroom	Walls	Ceramic Tile	None	N/A	N/A	N/A	N/A	N/A	N/A	
11	Washroom	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
11	Washroom	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
12	Bedroom 5	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	

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Building Name:	Mulock Estate	Organization Completing Survey:	ECOH Management Inc.
Building Address:	16780 Yonge Street, Newmarket, ON	Facilty Coordinator:	Andrea Cafissi

Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Access	Abatement Priority	Notes or Other Observations
12	Bedroom 5	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
12	Bedroom 5	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
13	Walking Closet	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
13	Walking Closet	Walls	Plaster	Asbestos	26372-06-ASB-02F	None Detected	N/A	N/A	N/A	N/A	
13	Walking Closet	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
14	Corridor	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
14	Corridor	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
14	Corridor	Wall	Dark Blue paint	Lead	**26372-06-Pb-05**	**3400 ppm**	N/A	N/A	N/A	N/A	
14	Corridor	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
15	Wshroom	Floor	Vinyl Sheet Floor 1	Asbestos	Visually Consistent with 26372-06-ASB-05	None Detected	70 SF	N/A	N/A	N/A	VSF1- :White with Light Gray Marks
15	Wshroom	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
15	Wshroom	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
16	Bedroom 6	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
16	Bedroom 6	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
16	Bedroom 6	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
17	Bedroom 7	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
17	Bedroom 7	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
17	Bedroom 7	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	1510 SF	N/A	N/A	N/A	
18	Bedroom 8	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
18	Bedroom 8	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
18	Bedroom 8	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
19	Bedroom 9	Floor	Hard Wood	None	N/A	N/A	N/A	N/A	N/A	N/A	
19	Bedroom 9	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
19	Bedroom 9	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
Main Floor											
20	Dinning Room	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
20	Dinning Room	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
20	Dinning Room	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	220 SF	N/A	N/A	N/A	

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Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
20	Dinning Room	Walls	Wood Pannel	None	N/A	N/A	N/A	N/A	N/A	N/A	
20	Dinning Room	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
21	Ball Room	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
21	Ball Room	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
21	Ball Room	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
22	Vestibule	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
22	Vestibule	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
22	Vestibule	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
23	Office	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
23	Office	Walls	Texture Plaster	Asbestos	**26372-06-ASB-01C-E**	**1% Chrysotile**	285 SF	Good	C	3	
23	Office	Walls	Wood Pannel	None	N/A	N/A	N/A	N/A	N/A	N/A	
23	Office	Walls	Beige paint	Lead	**26372-06-Pb-04**	**38000 ppm**	N/A	N/A	N/A	N/A	
23	Office	Ceiling	Texture Plaster	Asbestos	Visually Consistent with 26372-06-ASB-01A-B	None Detected	N/A	N/A	N/A	N/A	
24	Corridor to downstairs	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	
24	Corridor to downstairs	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
24	Corridor to downstairs	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
25	Porch	Floor	Wood	None	N/A	N/A	N/A	N/A	N/A	N/A	No Access to the Porch during the survey 2021.
25	Porch	Wall	Green Paint	Lead	L14	**24000 ppm**	N/A	N/A	N/A	N/A	Green paint on Porch Base/Siding Previously sampled by R.J. Burnside & Accosiates Ltd. On September 2017
25	Porch	Walls	Wood	None	N/A	N/A	N/A	N/A	N/A	N/A	No Access to the Porch during the survey 2021.
25	Porch	Ceiling	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	No Access to the Porch during the survey 2021.
25	Porch	Other	White Paint	Lead	L15	**28000 ppm**	N/A	N/A	N/A	N/A	White paint on Skirting of Porch Previously sampled by R.J. Burnside & Accosiates Ltd. On September 2017
26	Lobby	Floor	Hardwood	None	N/A	N/A	N/A	N/A	N/A	N/A	

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Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
26	Lobby	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
26	Lobby	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
27	Corridor Main Floor	Floor	Vinyl Sheet Floor 2	Asbestos	Visually Consistent with A8-A	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
27	Corridor Main Floor	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
27	Corridor Main Floor	Walls	Light Blue Paint	Lead	L19	**4700 ppm**	N/A	N/A	N/A	N/A	Paint on Hallway walls along back stairs.Previously sampled by R.J.
27	Corridor Main Floor	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
28	Kitchen 1	Floor	Vinyl Sheet Floor 2	Asbestos	Visually consistent with A8-A	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
28	Kitchen 1	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
28	Kitchen 1	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
29	Kitchen 2	Floor	Vinyl Sheet Floor 2	Asbestos	Visually consistent with A8-A	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
29	Kitchen 2	Walls	Plaster	Asbestos	26372-06-ASB-02E	None Detected	N/A	N/A	N/A	N/A	
29	Kitchen 2	Walls	Turquiose blue paint	Lead	**26372-06-ASB-Pb03**	**3800 ppm**	N/A	N/A	N/A	N/A	
29	Kitchen 2	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
30	Bedroom 10	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
30	Bedroom 10	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
30	Bedroom 10	Walls	Wood pannel	None	N/A	N/A	N/A	N/A	N/A	N/A	
30	Bedroom 10	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
31	Back Kitchen	Floor	Vinyl Sheet Floor 2	Asbestos	**A8-A**	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
31	Back Kitchen	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
31	Back Kitchen	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
31	Back Kitchen	Other	White Paint	Lead	L20	**200,000 ppm**	N/A	N/A	N/A	N/A	White paint on window sill. Previously sampled by Burnside & Associates Ltd.

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Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Access	Abatement Priority	Notes or Other Observations
32	Kitchen 3	Floor	Vinyl Sheet Floor 2	Asbestos	Visually consistent with A8-A	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
32	Kitchen 3	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
32	Kitchen 3	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
33	Entrance Corridor	Floor	Vinyl Sheet Floor 2	Asbestos	Visually consistent with A8-A	**20% Chrysotile**	100%	Good	A	3	VSF 2 , Beige with brick pattern. Previously sampled by Burnside & Associates Ltd.
33	Entrance Corridor	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
33	Entrance Corridor	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
Basement											
34	Laundry Room	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
34	Laundry Room	Walls	Brick	Asbestos	Visually consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
34	Laundry Room	Walls	Green Paint	Lead	L17	**7400 ppm**	N/A	N/A	N/A	N/A	Green paint on foundation walls. Previously sampled by R.J. Burnside & Accosiates Ltd.
34	Laundry Room	Ceiling	Plaster	Asbestos	26372-06-ASB-02C	None Detected	N/A	N/A	N/A	N/A	
34	Laundry Room	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	55	N/A	A&C	3	Fitting
34	Laundry Room	Pipe	Aircell Pipe Insulation	Asbestos	**26372-06-ASB-04C**	**80% Chrysotile**	180 LF	Good	A	3	
34	Laundry Room	Pipe	Aircell Pipe Insulation	Asbestos	**26372-06-ASB-04C**	**80% Chrysotile**	20 LF	Poor	A	1	20 LF Poor Condition near radiator.
35	Crawlspace (Under Stair)	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
35	Crawlspace (Under Stair)	Walls	Brick Mortar	Asbestos	26372-06-ASB-03A	None Detected	N/A	N/A	N/A	N/A	
35	Crawlspace (Under Stair)	Ceiling	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	
36	Storage Room	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
36	Storage Room	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
36	Storage Room	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
36	Storage Room	Foundation Wall	Concrete	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
36	Storage Room	Ceiling	Texture Plaster	Asbestos	26372-06-ASB-01B	None Detected	N/A	N/A	N/A	N/A	

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Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
36	Storage Room	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	46 LF	Good	A	3	
36	Storage Room	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	4 LF	Poor	A	1	4 Linear feet of Poor condition Aircell
36	Storage Room	Fittng	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	8	Good	A	3	8 Fittings
37	Basement Corridor	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
37	Basement Corridor	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
37	Basement Corridor	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
37	Basement Corridor	Walls	White Paint	Lead	L16	**1300 ppm**	N/A	N/A	N/A	N/A	White paint Hallway in Basement
37	Basement Corridor	Ceiling	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
37	Basement Corridor	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	16 LF	Good	A	3	
37	Basement Corridor	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	4	Good	A	3	
38	Electrical Room	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
38	Electrical Room	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
38	Electrical Room	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
38	Electrical Room	Ceiling	Open Ceiling	None	N/A	N/A	N/A	N/A	N/A	N/A	
38	Electrical Room	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	6	Good	A	3	
38	Electrical Room	Deck/Beam	Wood/Brick	None	N/A	N/A	N/A	N/A	N/A	N/A	
38	Electrical Room	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	45 LF	Good	A	3	
39	Boiler Room	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
39	Boiler Room	Walls	Brick	Asbestos	26372-06-ASB-03C	None Detected	N/A	N/A	N/A	N/A	
39	Boiler Room	Ceiling	Texture Plaster	Asbestos	26372-06-ASB-01A	None Detected	N/A	N/A	N/A	N/A	
39	Boiler Room	Pipe	Aircell Pipe Insulation	Asbestos	**26372-06-ASB-04A-B**	**80% Chrysotile**	200 LF	Good	A	3	
39	Boiler Room	Pipe	Aircell Pipe Insulation	Asbestos	**26372-06-ASB-04A-B**	**80% Chrysotile**	3 LF	Poor	A	1	3 Linear feet of Poor Consition Airell.
39	Boiler Room	Fitting	Parging Cement	Asbestos	**26372-06-ASB-08A-C**	**60% Chrysotile**	42	Good	A	3	
39	Boiler Room	Fitting	Parging Cement	Asbestos	**26372-06-ASB-08A-C**	**60% Chrysotile**	7	Poor	A	1	7 Poor Condition Parging Cement Fittings.
39	Boiler Room	Other	Parging Cement	Asbestos	**26372-06-ASB-09A-C**	**60% Chrysotile**	100 SF	Good	A	3	Grey Parging Cement on Boiler Tank
40	Back Lobby	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
40	Back Lobby	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
40	Back Lobby	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
40	Back Lobby	Ceiling	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
40	Back Lobby	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	50 LF	Good	A	3	

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40	Back Lobby	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	1	Good	A	3	
41	Circuit	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
41	Circuit	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
41	Circuit	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
41	Circuit	Ceiling	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
41	Circuit	Structure	Wooden Beam	None	N/A	N/A	N/A	N/A	N/A	N/A	
42	Storage	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
42	Storage	Walls	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
42	Storage	Walls	Brick Mortar	Lead	Visually Consistent with 26372-06-Pb-01	**31000 mg/Kg**	N/A	N/A	N/A	N/A	
42	Storage	Walls	Brick Mortar	Asbestos	Visually Consistent with 26372-06-ASB-03	None Detected	N/A	N/A	N/A	N/A	
42	Storage	Ceiling	Open Ceiling	None	N/A	N/A	N/A	N/A	N/A	N/A	
42	Storage	Structure	Wooden Beam	None	N/A	N/A	N/A	N/A	N/A	N/A	
42	Storage	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	15 LF	Good	A	3	
42	Storage	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-08	**60% Chrysotile**	2	Good	A	3	
43	Fridge	Floor	Concrete	Asbestos	N/A	N/A	N/A	N/A	N/A	N/A	
43	Fridge	Walls	Concrete	Asbestos	N/A	N/A	N/A	N/A	N/A	N/A	
43	Fridge	Ceiling	Concrete	Asbestos	N/A	N/A	N/A	N/A	N/A	N/A	
44	Storage	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
44	Storage	Walls	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
44	Storage	Ceiling	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
45	Wine Cellar	Floor	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
45	Wine Cellar	Walls	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
45	Wine Cellar	Ceiling	Concrete	None	N/A	N/A	N/A	N/A	N/A	N/A	
46	Bar	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
46	Bar	Floor	Vinyl Floor Tile 2	Asbestos	**26372-06-ASB-07A-C**	**4% Chrysotile**	145 SF	Good	A	3	VFT2 9" X 9" Light grey with white streaks (Under Carpet)
46	Bar	Floor	VFT2 Mastic	Asbestos	**26372-06-ASB-07A-C**	**1% Chrysotile**	145 SF	Good	A	3	VFT2 Black Mastic
46	Bar	Floor	Vinyl Floor Tile 5	Asbestos	**26372-06-ASB-12A-C**	**3% Chrysotile**	145 SF	Good	A	3	VFT5 9" X 9"" Brown with white & red streaks (Under Carpet)
46	Bar	Floor	Mastic	Asbestos	**26372-06-ASB-12A-C**	**3% Chrysotile**	145 SF	Good	A	3	VFT5 Black Mastic
46	Bar	Walls	Panel	None	N/A	N/A	N/A	N/A	N/A	N/A	
46	Bar	Ceiling	Texture Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
47	Hallway	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
47	Hallway	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
47	Hallway	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
47	Hallway	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	50 LF	Good	A	3	
47	Hallway	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-09	**60% Chrysotile**	1	Good	A	3	

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Location Number	*Location Name*	*Building System*	*Material Observed*	*Potential Hazardous Material*	*Sample ID*	*Analytical Result*	*Quantity*	*Condition*	*Access*	*Abatement Priority*	*Notes or Other Observations*
48	Washroom	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
48	Washroom	Walls	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
48	Washroom	Ceiling	Plaster	Asbestos	Visually Consistent with 26372-06-ASB-02	None Detected	N/A	N/A	N/A	N/A	
48	Washroom	Pipe	Aircell Pipe Insulation	Asbestos	Visually Consistent with 26372-06-ASB-04	**80% Chrysotile**	20 LF	Good	A	3	
48	Washroom	Fitting	Parging Cement	Asbestos	Visually Consistent with 26372-06-ASB-09	**60% Chrysotile**	2	Good	A	3	
49	Staiways	Floor	Carpet	None	N/A	N/A	N/A	N/A	N/A	N/A	
49	Staiways	Walls	Drywall Joint Compound	Asbestos	26372-06-ASB-13A-C	None Detected	N/A	N/A	N/A	N/A	
49	Staiways	Ceiling	Drywall Joint Compound	Asbestos	Visually Consistent with 26372-06-ASB-13	None Detected	N/A	N/A	N/A	N/A	

APPENDIX III

OBSERVATION REPORT

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 1.

Date:
April 4, 2022

Location:
Office, Main Floor (Location 23)

Description:

Texture Plaster on Wall

This material was confirmed to be **asbestos-containing** by laboratory analysis **(1% Chrysotile)**

Photo No. 2.

Date:
April 4, 2022

Location:
Boiler Room & Laundry Room (Location 39& 34)

Description:

Parging Cement on fittings and Boiler Tank.

This material was confirmed to be **asbestos-containing** by laboratory analysis **(60% Chrysotile)**

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 3.

Date:
April 4, 2022

Location:
Laundry Room in Basement (Location 34)

Description:

20 LF Poor Condition of Aircell Insulation on straight Pipes near radiator

This material was confirmed to be **asbestos-containing** by laboratory analysis **(80% Chrysotile)**.

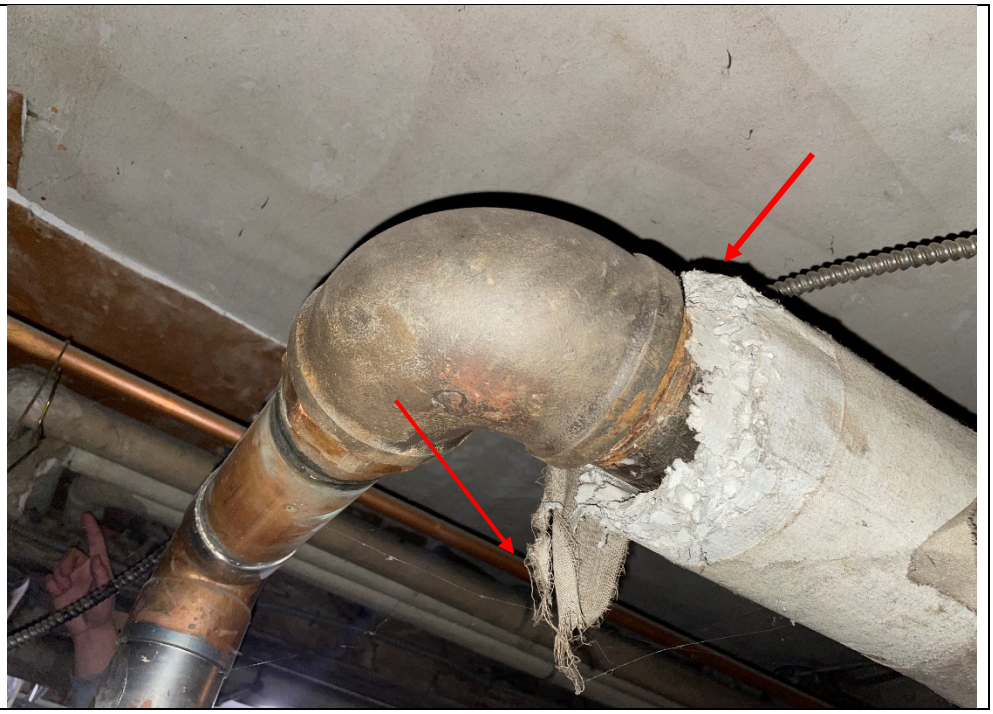

Photo No. 4.

Date:
April 4, 2022

Location:
Storage Room in Basement (Location 36)

Description:

4 LF Poor Condition of Aircell Insulation on straight Pipes on the foundation wall.

This material was confirmed to be **asbestos-containing** by laboratory analysis **(80% Chrysotile)**.

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 5.

Date:
April 4, 2022

Location:
Boiler Room in Basement (Location 39)

Description:

3 LF Poor Condition of Aircell Insulation on straight Pipes near Boiler Tank.

This material was confirmed to be **asbestos-containing** by laboratory analysis **(80% Chrysotile)**.

Photo No. 6.

Date:
April 4, 2022

Location:
Boiler Room in Basement (Location 39)

Description:

7 parging Cement fittings in Poor Condition. On the left-hand side from entrance.

This material was confirmed to be **asbestos-containing** by laboratory analysis **(60% Chrysotile)**.

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 7.	
Date: April 4, 2022	
Location: 2nd Floor Porch (Location 07a)	
Description: Vinyl Floor Tile (VFT 3, 9”x9” Black with white streaks) and (VFT4, 9”x9” White with black streaks) This material was confirmed to be **asbestos-containing** by laboratory analysis **(2% Chrysotile)**	

Photo No. 8.	
Date: April 4, 2022	
Location: Bar (Location 46)	
Description: Vinyl Floor Tile (VFT 5, 9”x9” Brown with red and white streaks. This material was confirmed to be **asbestos-containing** by laboratory analysis **(3% Chrysotile)**	

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 9.

Date:
April 4, 2022

Location:
Bar (Location 46)

Description:
Vinyl Floor Tile
(VFT 2, 9”x9” Light grey with white streaks)

This material was confirmed to be **asbestos-containing** by laboratory analysis **(4% Chrysotile)**

Photo No. 10.

Date:
April 4, 2022

Location:
Washroom (Locations 10 & 11)

Description:

Vinyl Floor Tile
(VFT 6, 9”x9” Black with brown and white streaks)

This material was previously sampled and confirmed to be **asbestos-containing (8% Chrysotile.**

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 11	
Date: April 4, 2022	
Location: Washroom (Locations 10 & 11)	
Description: Vinyl Sheet Floor (VSF 2, Beige with brick pattern) This material was previously sampled and confirmed to be **asbestos-containing (20% Chrysotile.**	

Photo No. 12	
Date: April 4, 2022	
Location: Office (Locations 23)	
Description: Beige paint on wood panels and door This material is confirmed to be **Lead-based** by laboratory analysis **(38000 ppm)**	

Client Name:	**Site Location:**	**Project No.**
The Town of Newmarket	Mulock Estate 16780 Yonge Street, Newmarket, ON	27050-05

Photo No. 13	
Date: April 4, 2022	
Location: Exterior (Location 00)	
Description: Brick Mortar This material is confirmed to be **Lead-based** by laboratory analysis **(31000 mg/Kg)**	

Photo No. 14		
Date: April 4, 2022		
Location: 2nd Floor Bedrooms (Location 01)		
Description: White paint on window sills and Baseboard trim was previously sampled. This material is confirmed to be **Lead-based** by laboratory analysis **(200,000 ppm & 60,000 ppm** respectively).		

APPENDIX IV

RESULTS OF BULK SAMPLE ANALYSIS

(NO SAMPLES COLLECTED 2022)

APPENDIX V

SCOPE OF WORK AND METHODOLOGY

Designated Substance Survey
Scope of Work and Methodology Report

Prepared for:

The Town of Newmarket
Public Works Services, Operation Centre,
1275 Maple Hill Court,
Newmarket, Ontario
L3Y 9E8

Prepared by:

ECOH Management Inc.
75 Courtneypark Drive West, Unit 1
Mississauga, Ontario
L5W 0E3

ECOH Project Number 27050

March 2022

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APPENDIX I ASBESTOS ASSESSMENT MATRIX

1.0 INTRODUCTION

ECOH Management Inc. (ECOH) was retained by the Town of Newmarket (the "Client") to conduct designated substance surveys of multiple buildings within the Town of Newmarket building portfolio. The purpose of this project is to ensure that each building has a current designated substance survey to ensure conformance with the Occupational Health & safety Act, including Ontario Regulation 278/05 "*Designated Substance – Asbestos on Construction Projects and in Building and Repair Operations*".

This report provides details related to the project scope of work, assessment methodology, general recommendations and limitations. Specific findings of each assessment are summarized in individual reports for each facility. The site-specific reports prepared for each facility may be obtained through the Town of Newmarket.

This designated substance assessment was performed for the purposes of long-term management of designated substances and hazardous materials contained within building materials, <u>and not for construction or renovation purposes</u>. **An additional pre-renovation/pre-demolition assessment for designated substances and hazardous materials should be conducted prior to any future demolition, renovation or maintenance activities that may disturb building materials that potentially contain designated materials or hazardous substances**.

1.1 Scope of Assessment

The "assessment area" consists of all accessible areas of the building. The assessment was performed to establish the location and type of hazardous building materials incorporated in the building structure, systems and finishes. For the purpose of this assessment and reporting, designated substances shall include the following;

- Acrylonitrile
- Arsenic
- Asbestos
- Benzene
- Coke-oven emissions
- Ethylene oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl chloride

In addition to the designated substances listed above, this assessment included a visual inspection for the following materials.

- Polychlorinated Biphenyls (PCBs)
- Ozone Depleting Substances (ODS)
- Urea Formaldehyde Foam Insulation (UFFI)
- Underground and Aboveground Storage Tanks (UST/AST)
- Man-made mineral fibres, and
- Mould or microbial contamination

Assessment of building site conditions related to processes, articles within the building(s) (such as stored items, furniture, etc.), subsurface materials or equipment (such as vessels, drums, pipes, etc.), possible contaminants in the soil and groundwater on the site, and sampling of materials that could result in a hazard to the surveyor and/or damage to the building systems or finishes, were not included in this assessment.

1.2 Regulatory Requirements

Regulatory requirements and guidelines applicable to the designated substances and hazardous materials noted above include, but are not limited, to the following:

- Ontario Occupational Health and Safety Act and applicable Regulations including;
  - Control of Exposure to Biological or Chemical Agents – Ontario Regulation 833, as amended
  - Designated Substances – Ontario Regulation 490/09, as amended,
  - Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations – Ontario Regulation 278/05, as amended,
- Ontario Environmental Protection Act and Regulations, including;
  - General – Waste Management – Ontario Regulation 347, as amended,
  - Waste Management – PCBs – Ontario Regulation 362, as amended,
  - Ozone Depleting Substances and Other Halocarbons – Ontario Regulation 463/10, as amended,
- Canadian Environmental Protection Act and applicable Regulations,
- Ontario Installation Code for Oil-Burning Equipment (Based on CSA B139, as amended) 1st edition / 2006, published by the Canadian Standards Association, as adopted by Technical Standards and Safety Authority (TSSA),
- Ontario Regulation 213/01 "Fuel Oil" and Ontario Regulation 213/07 "Fire Code "as implemented by the Technical Standards and Safety Authority (TSSA),
- Ontario Environmental Protection Act, R.S.O. 1990, Chapter E.19 ("EPA") – Part X (Spills),
- Ministry of Labour "*Guideline – Silica on Construction Projects*", dated April 2011,
- Ministry of Labour "*Guideline – Lead on Construction Projects*", dated April 2011,
- Environmental Abatement Council of Ontario (EACO) 2014 document, "*Lead Guideline For Construction, Renovation, Maintenance or Repair*",
- Canadian Construction Association, Standard Construction Document CCA 82, 2004; "*mould guidelines for the Canadian construction industry*",
- American Society for Testing and Materials (ASTM) D7338–10; "*Standard Guide for Assessment of Fungal Growth in Buildings*",
- New York City Department of Health and Mental Hygiene: Bureau of Environmental & Occupational Disease Epidemiology; "*Guidelines on Assessment and Remediation of Fungi in Indoor Environments*",
- Institute of Inspection Cleaning and Restoration (IICRC): S520, "*Standard and Reference Guide for Professional Mould Remediation*",

- Environmental Abatement Council of Ontario (EACO) document, "*Mould Abatement Guidelines*", Edition 2 (2010),
- Environment Canada Document, "*Handbook on PCBs in Electrical Equipment*", dated April 1988.
- Environment Canada Document, "*Identification of Lamp Ballasts Containing PCBs*", dated August 1991.

2.0 ASSESSMENT METHODOLOGY

2.1 General Methodology

Prior to going on-site, the surveyor reviewed any historical documentation and floor plan drawings available for the building(s). The surveyor entered each room, corridor, service area, etc., where access was possible within the extent of the assessed area, and completed a visual inspection for the presence of hazardous building materials. Relevant information was recorded where hazardous building materials were observed, including approximate quantities, locations, condition, sample information and sample locations. Quantities reported are an approximate visual estimate.

The investigation was limited to non-intrusive visual inspections and testing. Concealed locations such as spaces above solid ceilings, and within shafts and pipe chases, were accessed via existing access panels where available. This investigation does not include the removal or demolition of walls, solid ceilings, flooring, structural items, building finishes or building systems to inspect for concealed materials.

2.2 Asbestos

The surveyor completed a visual inspection, based upon historical information related to the use of asbestos in building materials, to identify materials that may potentially contain asbestos. For each potential asbestos-containing material (ACM) identified, notes were made regarding the location, accessibility, covering/jacketing, condition, and approximate quantities of materials.

Sample locations were recorded on floor plan drawings. The number of samples collected from each potentially ACM (that is considered a homogenous material) will be in compliance with the requirements of Ontario Regulation 278/05, which provides a minimum number of samples (3, 5, or 7 depending on quantity and type of material) for a material to be considered non-asbestos as depicted in the following table (Ontario Regulation 278/03, Table 1, Bulk Material Samples).

Type of Material	Size of Homogeneous Material	Minimum Number of Bulk Samples
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
Thermal insulation, except as described below	Any size	3
Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
Other material	Any size	3

The surveyor inspected for the presence of friable asbestos materials (e.g. sprayed insulation, acoustic/texture plaster, mechanical insulation, etc.) and non-friable asbestos materials (e.g. asbestos cement (transite) ceiling tiles or piping, acoustic ceiling tiles, vinyl floor tiles, vinyl sheet flooring, asbestos textiles (curtains, vibration dampers), plaster, drywall joint compound, etc.). Representative bulk samples of these friable and non-friable materials were collected to confirm asbestos content.

The collected bulk samples were placed in plastic bags, sealed, and shipped to an independent laboratory. A formal chain of custody procedure is maintained between ECOH and the sub-contracted laboratory during sample transport. Samples were then analysed following the analytical procedure prescribed by Ontario Regulation 278/05, which is, U.S. Environmental Protection Agency Test Method EPA/600/R-93/116: "*Method for the Determination of Asbestos in Bulk Building Materials*". June 1993.

Although not required by provincial regulation, all laboratories used by ECOH are accredited under the U.S. National Voluntary Laboratory Accreditation Program (NVLAP) to ensure consistent, accurate and defensible results. The Chain of Custody and the Certificate of Analysis for all bulk sampling are included in site-specific reports.

The collection of samples was performed with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire facility. It is important to note that without sampling every wall, pipe section, ceiling tile, etc., it is not possible to identify the asbestos content in every section of material (that is considered a homogenous material) present in the building. For this reason, similar materials to those already sampled elsewhere in the building were visually identified as being the same (i.e. a homogenous material) as those samples without additional analysis.

There are a number of non-friable materials, which may contain asbestos, that were not included in this assessment. It is more ideal to determine the presence of asbestos in these materials immediately prior to a demolition, renovation or maintenance project. Examples of these suspect non-friable materials are listed below. Sampling of these materials was not completed because sampling may cause significant damage to the material, building systems or building envelope.

- vermiculite inside concrete block walls, above solid ceilings and in manufactured components,
- elevator and lift brakes,
- components or wiring within motors or lights,
- high voltage wiring,
- mechanical packing, ropes and gaskets,
- fire-doors,
- window caulking,
- demountable fire-resistant walls,
- roofing, roofing felt and building paper,
- caulking, mastics, adhesives, and
- refractory materials within incinerators or boilers.

Concealed locations such as spaces above solid ceilings, and within shafts and pipe chases, were accessed via existing access panels where available. This investigation does not include the removal or demolition of walls, solid ceilings, flooring, structural items, building finishes or building systems to inspect for conceal materials.

Sampling was performed in discrete locations with minimal damage to building finishes. Sample locations are repaired to the extent practical and the area is cleaned. Vinyl flooring materials, which cannot be repaired, are sampled at baseboards, door frames, areas of existing damage, etc. Sample locations of mechanical insulations or jacketing, such as pipes, ductwork and equipment, are sealed with tape when necessary.

2.3 Lead

Lead in the type of buildings being investigated may be contained in paints, soldered materials (wires, pipes etc.), glazes and plumbing fixtures. Of the likely lead-containing

materials the lead-in-paint is the only one that has potential for exposure and hence this assessment was limited to assessment of lead-in-paint.

Based on the building, the renovation history, and experience of ECOH surveyors, suspect painted surfaces (walls, window frames etc.) were visually observed with particular attention paid to the damaged or flaking painted surfaces. An appropriate number of small paint chips (bulk samples) from suspect painted surfaces were collected for laboratory analysis. The collected bulk samples were placed in plastic bags, sealed, and shipped to an accredited independent laboratory. A formal chain of custody procedure was maintained between ECOH and the laboratory. A copy of the Chain of Custody and the Certificate of Analysis for all bulk sampling are included in site-specific reports.

Samples were analyzed following approved analytical procedures that correspond to the sample matrix (e.g. paint chip). The laboratory used by ECOH is accredited under the U.S. EPA National Environmental Lead Laboratory Accreditation Program (NLLAP) and American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) to ensure consistent, accurate and defensible results.

O. Reg. 490/09 does not define a lead-in-paint concentration that determines whether the paint is deemed to be lead-containing. However, by industry consensus paints and surface coatings that contain 0.5% lead concentration by dry weight (i.e. concentrations of lead at or above 0.5%, or 5000 parts per million (ppm), which is comparable to 1 milligram per square centimetre (mg/cm^2) when using an XRF analyzer) is considered to be a "lead-based paint or surface coating". Paints or surface coatings that contain concentrations of lead greater than 0.1% by dry weight (1000 ppm), and less than 0.5% by dry weight (5000 ppm), is considered to be a "lead-containing paint or surface coating". Paints or surface coatings that contain concentrations of lead at, or below, 0.1% by dry weight (1000 ppm) is considered to be a "low-level lead paint or surface coating**".**

2.4 Visible Mould

Visual mould assessment of the assessed area was conducted in accordance with the following industry-accepted protocols.

- Canadian Construction Association, Standard Construction Document CCA 82, 2004; "m*ould guidelines for the Canadian construction industry*".
- ASTM D7338 – 10; "*Standard Guide for Assessment of Fungal Growth in Buildings*".
- New York City Department of Health and Mental Hygiene: Bureau of Environmental & Occupational Disease Epidemiology; "*Guidelines on Assessment and Remediation of Fungi in Indoor Environments*".
- Institute of Inspection Cleaning and Restoration (IICRC): S520, "*Standard and Reference Guide for Professional Mould Remediation*".

Although there are no regulatory requirements or guidelines in Ontario for such an assessment, the preceding protocols have become accepted as industry standards by most experts, consultants, and the Ontario Ministry of Labour.

2.5 Polychlorinated Biphenyls (PCBs)

Information labels on electrical equipment, such as transformers and capacitors for motors, were examined where available. Information on labels are compared to information contained in the Environment Canada document "*Handbook on PCBs in Electrical Equipment*", to determine PCB content. Bulk sampling was not performed on live cables, or of dielectric fluids or materials in transformers or capacitors.

Lamp ballasts or capacitors are present in fluorescent and high intensity discharge (HID) light fixtures. Light fixtures were not disassembled to examine ballasts or capacitors during this assessment (due to the inherent electrical hazard). It is assumed in any building constructed prior to 1981 that lamp ballasts or capacitors in fluorescent and HID light fixtures may contain PCBs (unless a comprehensive lighting retrofit was completed in 1981, or afterwards).

Bulk samples of caulking and sealants were not collected to determine PCB content.

2.6 Other Designated Substances and Hazardous Materials

Building materials suspected of containing other designated substances or hazardous materials (i.e. Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxide, Isocyanates, Mercury, Silica, Vinyl Chloride (monomer), Ozone Depleting Substances (ODS), Urea Formaldehyde Foam Insulation (UFFI) and Man-Made Mineral Fibers), if present, were identified by appearance, age, and knowledge of historic applications.

2.7 Site-Specific Reporting

Specific findings of each assessment are summarized in individual reports for each facility. The site-specific reports prepared for each facility may be obtained through the Town of Newmarket. Each site-specific report shall include the following information.

1. Introduction
2. Scope of Work and Methodology (reference to this report)
3. Findings (summary table)
4. Recommendations
5. Limitations of Assessment
6. Appendices
    - I. Survey Drawings
    - II. Inventory of Identified Hazardous Materials (Room-by-Room Data)
    - III. Observation Report (Photographs)
    - IV. Results of Bulk Sample Analysis

3.0 RECOMMENDATIONS

1. Prior to future construction or renovation projects, additional assessments will be required to confirm the presence of designated substances and hazardous materials that have been assumed to be on-site and/or that may be present in concealed areas (such as above solid ceilings, within bulkheads, pipe chases, etc.). The impact to designated substances and hazardous materials during future demolition, renovation or maintenance activities should be assessed on a project-by-project basis.
2. Recommendations for remedial action are provided within site-specific reports.
3. Disposal of any designated substances or hazardous materials, if required, must be completed in compliance with applicable federal and provincial Acts and Regulations.

3.1 Asbestos

3.1.1 Administrative Recommendations

Where asbestos materials are confirmed to be present in a building, an Asbestos Management Plan is required to comply with Ontario Regulation 278/05: Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations. The following are typical components of a comprehensive Asbestos Management Plan.

1. Prepare and keep on the premises a record of all confirmed and assumed asbestos-containing materials (ACM), including details of location, accessibility, friability and condition.
2. Give any other person who is an occupier of the building written notice of any information in the record that relates to the area occupied by the person.
3. Give any employer with whom the owner arranges or contracts for work (directly or indirectly) written notice of the information in the record, if the work,
    a. may involve material mentioned in the record, or
    b. may be carried on in close proximity to such material and may disturb it.
4. Advise the workers employed by the owner who work in the building of the information in the record, if the workers may do work that,
    a. involves material mentioned in the record, or
    b. is to be carried on in close proximity to such material and may disturb it.
5. Establish and maintain, for the training and instruction of every worker employed by the owner who works in the building (and who may do work that may disturb asbestos) a program dealing with,
    a. the hazards of asbestos exposure,
    b. the use, care and disposal of protective equipment and clothing to be used and worn when doing the work,
    c. personal hygiene to be observed when doing the work, and
    d. the measures and procedures prescribed by Regulation 278/05.

6. Inspect the material mentioned in the record at reasonable intervals in order to determine its condition.
7. The record of ACM shall be updated once every 12-month period or whenever information changes.
8. Repair or remove all damaged ACM where it may be disturbed and become airborne (refer to site-specific report recommendations).
9. Annually submit copies of Asbestos Work Reports to the Ministry of Labour for workers performing Type 2 or 3 asbestos operations and upon termination of the worker.
10. In addition to the minimum regulatory requirements above, an Asbestos Management Plan should include other items to ensure good compliance (e.g. allocation of internal responsibilities, written asbestos work practices for specific operations, standard forms, provisions for inspection and air monitoring, etc.).

3.1.2 Recommendations for Corrective Actions

The materials requiring remedial action for regulatory compliance are detailed in the site-specific reports. The following is a prioritized list of typical short-term actions. Recommendations for remediation are based on the evaluation criteria and Abatement Priority Matrix Table in Appendix I of this report.

PRIOIRTY 1	**Immediate Abatement Required**
PRIORITY 2	**Abatement Required Prior to Disturbance**
PRIORITY 3	**Abatement Required if Material is Affected Either Through Renovation or Disturbance. Inspect Materials at Regular Intervals.**

3.2 Lead

Cutting, grinding, drilling, removing, stripping or demolition of materials containing or coated with lead should be completed only with proper respiratory protection and other worker safety precautions as outlined in the Ministry of Labour document, *"Guideline – Lead on Construction Projects"*, dated April 2011, or the Environmental Abatement Council of Canada (EACC) 2014 document, "*Lead Guideline For Construction, Renovation, Maintenance or Repair*".

The Ministry of Labour has not established a lower limit for concentrations of lead in paint (or other materials) below which precautions do not need to be considered. Therefore, the level of lead safety precautions should be assessed on a project-by-project basis.

3.3 Visible Mould

Remove mould and mould-contaminated building materials using appropriate Mould Remediation Procedures as outlined in the Environmental Abatement Council of Canada (EACC) document, "*Mould Abatement Guidelines*", Edition 3 (2015).

3.4 Polychlorinated Biphenyls (PCBs)

Some types of equipment that contain polychlorinated biphenyls (PCBs) may legally remain in use until December 31, 2025, if they were already in use in the facility on September 5, 2008. Equipment with PCBs that stay in operation must comply with federal and provincial Acts and Regulations (e.g. registration, labeling, management programs, etc.).

To determine if lamp ballasts and capacitors in fluorescent and high intensity discharge (HID) light fixtures contain PCBs, the fixtures can be disassembled to observe serial codes. Serial codes can then be compared to standard PCB Identifier Code literature (e.g. Environment Canada Document "*Identification of Lamp Ballasts Containing PCBs*"). Ballasts and capacitors with unidentifiable serial codes, or from manufacturers who are not included in the standard PCB Identifier Code literature, or which are not clearly labelled as "PCB Free", or for which no date is clearly visible (ballasts dated 1981 or later do not contain PCBs), must be assumed to contain PCBs.

3.5 Mercury

The presence of mercury as a possible constituent of paints and adhesives and within assembled units (e.g. as a vapour in fluorescent light bulbs and as a liquid in termostats, mechanical switch gears, etc.) should not be considered a hazard provided that the assembled units remain sealed and intact. Avoid direct skin contact with mercury and avoid inhalation of mercury vapour.

3.6 Silica

Any work involving the disturbance of materials that may contain silica (e.g. concrete, bricks, mortar, etc.) should be conducted following recommendations detailed in the Ministry of Labour document "*Guideline – Silica on Construction Projects*", dated April 2011.

3.7 Ozone Depleting Substances

Consideration should be given to confirming the presence or absence of Ozone Depleting Substances (ODS) in any building refrigeration system present on-site. If ODS are confirmed to be present, an ODS management program is recommended to ensure that all refrigeration equipment is maintained in compliance with the Halocarbon Regulations. This program typically includes; creating an inventory, prescribing and maintaining appropriate documentation in accordance with Regulations (i.e. service log, phase-out

dates, leak test and decommissioning tags), ensuring certified personal complete servicing requirements, and a spill response action plan that includes notification and reporting requirements.

An Ozone Depletion Prevention (ODP) card is required to purchase and handle refrigerants in Ontario. An ODP card is a certificate indicating that the holder has successfully completed an environmental awareness training course to the satisfaction of the Ministry of Environment and Climate Change. Any removal of ODS must be completed by a certified worker.

3.8 Other Designated Substances and Hazardous Materials

Other designated substances or hazardous materials (i.e. Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxides, Isocyanates, Vinyl Chloride (monomer), Urea Formaldehyde Foam Insulation (UFFI) and Man-Made Mineral Fibers), if present, would not be expected to be a source of concern during normal day-to-day facility operations. During normal construction, renovation or maintenance activities, these designated substances or hazardous materials should be adequately addressed using general health and safety precautions including, in part, the use of dust suppression techniques and appropriate respiratory protection.

4.0 LIMITATIONS OF ASSESSMENT

Due to the nature of building construction, and on-going building activities, some limitations exist to the thoroughness of a building assessment. The field observations, measurements and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings and conclusions presented in this report. The observations, results and conclusions drawn by ECOH Management Inc. (ECOH) are limited to the specific scope of work for which ECOH was retained, and are based solely on information generated as a result of the specific scope of work authorized by the Town of Newmarket . Only those items that are capable of being observed and are reasonably obvious to ECOH personnel or have been identified to ECOH by other parties, can be reported. ECOH has exercised a degree of thoroughness and competence that is consistent with the profession during the execution of this assessment. ECOH considers the opinions and information as they are presented in this report to be factual at the time of the assessment. The conclusions are limited to the specific locations of where testing and/or observations were completed during the course of the assessment.

It is important to note that work was completed with the utmost care and our extensive expertise in carrying out assessments. ECOH believes that the information collected during the assessment concerning the Work Area is reliable. No other warranties are implied or expressed. ECOH, to the best of its knowledge, believes this report to be accurate, however, ECOH cannot guarantee the completeness or accuracy of information supplied to ECOH by third parties. It should also be noted that any investigation regarding the presence of hazardous materials in the work area is based on interpretation of

conditions determined at specific sampling locations, and conditions may vary between sampling locations.

ECOH is an Environmental Consulting Company and as such any results or conclusions presented in this report should not be construed as legal advice. The material in this report reflects ECOH's professional interpretation of information available at the time of report preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. ECOH accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. Should additional information become available that suggests other environmental issues of concern beyond that described in this report, ECOH retains the right to review this information and modify conclusions and recommendations presented in this report accordingly.

5.0 CLOSURE

Should there be any questions regarding the contents of this report, please contact the undersigned at 905-795-2800.

ECOH
Environmental Consulting
Occupational Health

Elliot Dametto, B.Sc.
Project Manager

APPENDIX I

ASBESTOS ASSESSMENT MATRIX

ASBESTOS EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS

The detailed asbestos assessment provides information regarding the location, condition and accessibility of asbestos-containing materials (ACM) used in the construction of the building. In order to make recommendations for compliance with current regulations the following ACM evaluation criteria based was implemented.

EVALUATION OF CONDITION

Spray Applied Fireproofing, Insulation and Texture Finishes

To evaluate the condition of asbestos-containing sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, the following criteria is applied:

Good Surface of material shows no significant signs of damage, deterioration or delamination. Evaluation of sprayed materials requires the surveyor to be familiar with the typical irregular surface texture as installed. "Good" condition includes unencapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, or encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

Poor Surface of material shows signs of significant damage, is delaminating or deteriorating. Significant delamination to surface of ACM spray. Debris from the fireproofing is present or has been reported.

Where damage exists in isolated locations, both "Good" and "Poor" condition may be applicable. The extent or percentage of each condition will be recorded in the Inventory of Identified Hazardous Materials included in Appendix II of each site-specific report. "Fair" condition is not utilized in the evaluation of asbestos-containing sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes.

The evaluation of asbestos-containing sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, which are present above ceilings, may be limited by the number of observations made and by building components such as ducts or full height walls that may obstruct observations. Persons entering the ceiling space are advised to be watchful for asbestos-containing debris prior to accessing or working above ceilings in areas of buildings with this type of ACM regardless of the reported condition.

Mechanical Insulation

To evaluate the condition of mechanical insulation, such as on vessels, boilers, breeching, ducts, pipes, fan units, equipment, etc., the following criteria was applied.

Good	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (i.e. scuffs or stains), but the jacketing is not penetrated.
Fair	Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that was never jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired.
Poor	Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired.

The evaluation of mechanical insulation may be limited by the number of observations made and by building components such as ducts or full height walls that may obstruct observations. It is not possible to observe each foot of mechanical insulation from all angles. Persons working in proximity to asbestos-containing mechanical insulation or entering ceilings with asbestos-containing mechanical insulation are advised to be watchful of asbestos-containing debris regardless of the reported condition.

Non-friable Materials

Non-friable materials include materials such vinyl floor tiles, vinyl sheet flooring, transite, etc. To evaluate the condition of non-friable materials, which have the potential to become friable (e.g. due to unplanned disturbances, long-term friction, exposure to weather, construction activities, etc.), the following criteria was applied.

Good	No significant damage. Material may be cracked or broken but is stable and not likely to become friable upon casual contact. If there is no friable debris present, the condition is rated as “Good”
Poor	Material is severely damaged. Loose debris is present or the material binding element has disintegrated to the point where the material has become friable.

The evaluation of the condition of non-friable materials does not use a “Fair” condition.

Evaluation of Asbestos-Containing Debris

The identification of the exact location or presence of debris on the top of ceiling tiles maybe limited by the number of observations made and by building components such as ducts or full height walls that may obstruct observations. Workers are advised to be watchful for the presence of debris prior to accessing areas, or working in proximity to, any type of ACM regardless of the reported presence or absence of debris.

Debris from Friable ACM

The presence of fallen ACM is noted separately from the presumed friable ACM source and is referred to as debris. Debris is noted in “Poor” condition only.

Debris from Non-Friable ACM

The presence of damaged ACM from non-friable material is also noted separately from the non-friable ACM source. Only non-friable ACM that has become friable is reported as debris. Debris is noted in “Poor” condition only.

EVALUATION OF ACCESSIBILITY

The potential for damage (i.e. accessibility) of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)	Common areas of the building within reach of all building users (approximately 8'-9' from floor level). Includes areas where occupant activities may result in disturbance of the material that is not normally within reach from floor level, but may be easily disturbed by common activities (e.g. gymnasiums, workshops, warehouses). Access A describes materials that could be readily disturbed.
Access (B)	Areas of the building accessed primarily by Maintenance/Caretaking/Janitorial Staff and materials within reach without use of a ladder. Includes areas within reach in Boiler Rooms, Electrical Rooms, Janitors Closets, Elevator Rooms, Mechanical Rooms, etc. Includes materials within reach from fixed ladders or catwalks, mezzanines and accessible pipe chases.
Access (C)	Areas of the building above 8'-9' from floor level where use of a ladder is required to reach the material. Includes materials that are not visible and require the removal of a building component to access and view, such as ceilings tiles, access panels and hatches. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls or equipment etc., where demolition of the ceiling, wall or equipment etc., is required to view the material. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials.

ABATEMENT PRIOIRTY MATRIX AND DEFINITIONS

ECOH's evaluation of the viability of a specific asbestos control option is based on the consideration of the condition, accessibility and visibility of the ACM. The logic used is that damaged ACM located in an area frequently accessed by all building occupants is of a higher priority than damaged ACM located in an infrequently accessed service area.

In any building with asbestos, current regulations require an Asbestos Management Plan to be implemented. Depending on the condition and the accessibility, more active measures such as repair or removal may be required. In the event of a building alteration, it will be necessary to remove ACM, regardless of condition, if it is likely to be disturbed by planned demolition, renovation or maintenance project activities.

ACM in "Good" condition is subject to surveillance at reasonable intervals, at a minimum, as long as it is not disturbed during planned demolition, renovation or maintenance project activities.

The following Abatement Priority Matrix Table establishes the recommended asbestos control action. Note that factors not included in the above discussion, such as an upcoming renovation, an owner's policy to remove material, knowledge of upcoming maintenance, etc., may result in a recommendation that is different from the table.

ABATEMENT PRIORITY MATRIX TABLE

The following table outlines the **abatement priority** decisions based on the relationship of **access** and **condition**:

Access	**Condition**			**Debris**
	Good	**Fair**	**Poor**	
(A)	Priority 3	Priority 1/2	Priority 1	Priority 1
(B)	Priority 3	Priority 2	Priority 1	Priority 1
(C)	Priority 3	Priority 3	Priority 2	Priority 1
(D)	Priority 3	Priority 3	Priority 3	Priority 2/3

Abatement Priority Definitions

The following definitions relate to the Abatement Priority Matrix Table presented above:

PRIORITY DEFINITIONS	
Priority 1	**Immediate Clean-Up of Debris or Repair of Damaged ACM Likely to Be Disturbed** Restrict access that is likely to cause a disturbance of the damaged ACM or debris and repair ACM or clean-up debris immediately. Utilize appropriate asbestos precautions. This action is recommended for compliance with regulatory requirements. The surveyor will immediately notify the Town of Newmarket within 24 hours of this condition.
Priority 2	**Abatement Required Prior to Disturbance** At locations where damaged ACM is less likely to be disturbed, abatement can be performed on a lower priority basis (i.e. prior to any future disturbance).
Priority 3	**Abatement Required if Material is Affected Either through Renovation or Disturbance. Inspect Materials at Regular Intervals.** Remove ACM prior to planned demolition, renovation or maintenance projects utilizing appropriate asbestos precautions.