

## LIMITED DESIGNATED SUBSTANCE SURVEY REPORT RV. 1

(FLOORING, WINDOWS, & INTERIOR DOOR REPLACEMENT)



## Holy Family Catholic Elementary School 1420 Grosvenor Street Oakville, Ontario

#### Presented to:

**Halton Catholic District School Board** 

802 Drury Lane Burlington, Ontario L7R 2Y2

**Attention: Josh Duffield**DuffieldJ@hcdsb.org

January 29, 2024

Maple Project No. 21384

#### **EXECUTIVE SUMMARY**

Maple Environmental Inc. ('Maple') was retained by the Halton Catholic District School Board ('HCDSB') to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Holy Family Catholic Elementary School located at 1420 Grosvenor Street, Oakville, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed renovations of the specified areas.

The survey was limited to classrooms known to contain asbestos-containing vinyl floor tiles, the Boy's and Girls Washrooms, the Boy's and Girls Change Rooms, ACAD Storage Room, Gym Storage Room, Stage, Storage Room's 58 and 59, and all Corridors and Vestibules. Additionally, the survey encompassed areas where the proposed window replacement would occur which essentially entailed the entire building with the exception to the 1994 addition.

The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

#### **Asbestos**

Asbestos-containing materials (ACM's) identified within the surveyed area at the time of the assessment are as follows:

- Vinyl Floor Tiles
- Ceramic Tile Mortar Base
- Window Putty (Interior and Exterior)

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

#### Lead

Based on the findings, the following general conclusions are made:

- Representative bulk samples of the ceramic tile mortar base and grout were collected which indicated the presence of low-level lead mortar/grout (i.e. "virtually safe") in the surveyed area.
- It should be noted that lead may also be present in wiring connectors, electric cable sheathing, solder joints on copper piping, ceramic glazes, lead sheeting, masonry mortar, and as sub-surface layers to the most recent paint layers currently applied, where present at the Site.

#### **Mercury**

• Mercury vapour is present in all fluorescent light tubes.

#### Silica

• Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present within the surveyed areas.

#### Mould

• No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

#### **Polychlorinated Biphenyls (PCBs)**

The fluorescent lamp fixtures observed contained a combination of T8 and T12 fluorescent light tubes. T12 fixtures are older fixtures and have the potential of using PCB-containing ballast. T8 fixtures have electronic ballast and are considered as not containing PCB.

#### **Recommendations**

Based on the Laboratory Analytical Results and observations made on Site, Maple provides the following recommendations.

- Remove all asbestos-containing materials that may be disturbed during the planned renovation using the appropriate asbestos abatement procedures as outlined in Section 5.0 of the Report.
- Low Level Lead ceramic tile mortar/grout (1000 mg/Kg or less) are considered virtually safe provided that;
  - airborne lead concentrations are kept below 0.05 mg/m<sup>3</sup>
  - general dust suppression and worker hygiene procedures are utilized
  - torching or other activities that create fumes are not completed
- Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.
- Proper dust suppression techniques and other safety precautions to control
  possible generation of silica dust from the demolition of concrete and masonry
  products present in the surveyed area should follow those outlined in the
  Ministry of Labour Guideline- Silica on Construction Projects, 2004.
- Should light fixtures containing ballasts be removed as part of the project, all ballasts not clearly marked as "non-PCB" on the label should separated, handled and disposed of as PCB-containing or inspected by competent persons to ascertain PCB content.

Appropriate procedures for asbestos, lead, mercury, silica, and PCBs must be utilized if these materials are likely to be disturbed by scheduled renovations. Please refer to Section 5.0 of the report to review the required procedures.

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#### 1.0 INTRODUCTION

Maple Environmental Inc. ('Maple') was retained by the Halton Catholic District School Board ('HCDSB')to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Holy Family Catholic Elementary School located at 1420 Grosvenor Street, Oakville, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed renovations of the specified areas.

The survey was limited to classrooms known to contain asbestos-containing vinyl floor tiles, the Boy's and Girls Washrooms, the Boy's and Girl's Change Rooms, ACAD Storage Room, Gym Storage Room, Stage, Storage Room's 58 and 59, and all Corridors and Vestibules. Additionally, the survey encompassed areas where the proposed window replacement would occur which essentially entailed the entire building with the exception to the 1994 addition.

Section 30 of the Ontario Occupational Health and Safety Act requires that the following Designated Substances be included in a Designated Substance Survey:

Asbestos Benzene Lead Acrylonitrile

Mercury Coke Oven Emissions

Silica Arsenic

Isocyanates Ethylene Oxide

Vinyl Chloride Monomer

Additional detailed information with respect to asbestos was collected at the time of the survey to ensure compliance with Ontario Regulation 278/05.

The assessment was performed by Josh Prosser of Maple on October 26, 2023. A supplementary assessment was completed by Tosh Ogawa of Maple on January 25, 2024.

#### 2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

#### 2.1 Designated Substances and Other Hazardous Materials

Section 30 of the Occupational Health and Safety Act requires building owners or their agents (architects, general contractors, etc.) to prepare or have prepared a Designated Substance report for specified potentially hazardous materials possibly present in a facility. The owner must ensure that a prospective constructor has received a Designated Substance report before entering into a binding contract with the contractor. The owner is liable to the contractor for damages and costs arising from unreported materials (of which the owner should reasonably have been aware), and could also be subject to orders and fines from the Ministry of Labour.

In addition to the requirements under the Occupational Health and Safety Act, Section 6 of the Ministry of Labour Regulations for Construction Projects requires the contractor, when submitting the Notice of Project form, report any Designated Substances likely to be used, handled or disturbed during the project.

The disturbance of asbestos materials on construction projects is controlled by Ministry of Labour Regulation R.R.O. 2005/278. The disposal of asbestos waste is controlled by Ministry of Environment Regulation, R.R.O. 1990/347.

There are no specific Ministry of Labour regulations for control of the other Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Health and Safety Act which protects workers and provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc. for all Designated Substances.

Although Regulations exist for many of the Designated Substances, they apply to industry settings using Designated Substances in manufacturing processes, and do not apply to general property management, renovation or maintenance of buildings.

Polychlorinated Biphenyls ("PCBs") and mould were also included in the investigation, which are not specifically named as Designated Substances. No specific regulations are attached to these materials, but are generally governed by the due diligence section of the Health and Safety Act for employers to protect their workers.

#### 2.2 Ontario Regulation 278/05 (Asbestos)

Ontario Regulation 278/05 applies to buildings with regards to maintenance, renovations or demolition work where asbestos-containing materials (ACM) is present and may be disturbed. The Regulation requires that a detailed asbestos inventory be performed in all buildings where friable and non-friable asbestos materials are present. The inventory must be available at the work place and must identify the type of asbestos, and location of asbestos on a room-by-room basis. The following report does not necessarily meet the requirements for an asbestos survey under Ontario Regulation 278/05.

#### 2.3 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

#### 2.4 Ontario Regulation 362

Ontario Regulation 362, made under the Ontario Environmental Protection Act applies to the waste management and transport of PCB waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

#### 3.0 SURVEY SCOPE AND METHODOLOGY

The methodology for the assessment for hazardous materials is outlined below.

In order to determine the location of materials included in the assessment, the project technologist entered the room where practical (i.e. where access was possible without the demolition of walls, roof or ceilings or destruction of flooring). Representative views were made above accessible suspended ceiling systems. Cavities within solid ceiling and wall systems were accessed via existing access panels only. The inventory did not include demolition of building systems or finishes to check on possible hidden conditions.

#### 3.1 Asbestos-Containing Building Materials (ACM)

The scope of the survey included all friable asbestos products and all major non-friable asbestos materials. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include: sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles, drywall joint compounds and vinyl sheet flooring are classified as non-friable, but because of their ability to release dust when disturbed are considered as "potentially friable" for the purpose of this report.

Bulk samples of materials suspected to contain asbestos were collected for analysis during the survey. Specifically, a small volume of material was removed either from a damaged section of suspect material, or taken from intact material. In these latter cases, the material from which the sample was collected was sealed with tape to temporarily prevent fibre release. Samples were placed in plastic bags and sealed until receipt by an independent laboratory. To ensure quality results, the independent laboratory chosen successfully participates in an "Asbestos Proficiency Analytical Testing Program". As such, these independent laboratories are responsible for their findings.

Bulk samples were collected in accordance with regulatory sampling requirements and 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 Site. It is important to note that without sampling each individual wall, pipe section, ceiling tile etc. it is not possible to identify the asbestos content of every material present in the selected areas.

For this reason, visually similar materials are considered to be homogenous with those already sampled elsewhere in the building without additional analysis.

O. Reg. 278/05 prescribes that a minimum number of samples be collected of materials suspected to contain asbestos. These minimum sampling requirements are summarized in Table 1, below.

Table 1- Suspect ACM Bulk Sampling Requirements					
Type of Material	Quantity of Material Present	Minimum # of Bulk Samples Required			
	Up to 90 sq/m (1000 sq/ft)	3			
Surfacing Materials (i.e. sprayed fireproofing, drywall joint compound, texture coat, and	From 90 sq/m (1000 sq/ft) to 450 sq/m (5000 sqft)	5			
plaster)	Greater than 450 sq/m (5000 sq/ft)	7			
All other potential ACM	Any	3			

Excluding surfacing materials, the laboratory was instructed to cease analysis within Sample Groups of homogenous materials when one of the samples in the group is found to contain asbestos. For example, if three samples of a type of vinyl floor tile are collected (as required by O. Reg. 278/05) and submitted for analysis and the first sample is positively identified as containing asbestos, the balance of the sample group is not analysed.

EMC Scientific ("EMC"), an independent laboratory, was selected to analyse the collected bulk suspect asbestos samples. EMC successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, is responsible for its findings. EMC followed the Code of Practice for the identification of asbestos in bulk material, as detailed in O. Reg. 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

The recommendations made as part of this report with respect to asbestos have taken into consideration: the condition and accessibility of the material, vibration, air movement, and general activities likely to occur within the vicinity of the ACM.

In each area or room inventoried, the technician recorded the quantity, condition (GOOD, FAIR, or POOR) of each suspect asbestos-containing material.

The definitions for condition and accessibility of the asbestos-containing items are as follows:

**GOOD** Material is intact with no visible signs of damage. **FAIR** Material is visibly damaged but can be repaired.

**POOR** Material is damaged beyond repair and likely needs to be

removed.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation would be to re-evaluate the condition of the material on an annual basis (required by O. Reg. 278/05). This recommendation can be subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where ACM is found to be damaged (i.e. FAIR or POOR condition), a recommendation to have the material cleaned-up, repaired, removed, enclosed, or encapsulated is offered. The recommendation will also indicate which asbestos procedure should be used to perform the remedial work (i.e. Type 1, Type 2, Type 3, or Glove Bag Removal Methods).

#### 3.2 Lead

The investigation included the collection and analysis of all major paint colour applications for the presence of lead in the paint. Other materials that possibly contain lead were identified by known historic use, where relevant. For the purpose of this report, sampling for lead in mortar was also performed. The lead samples were analysed by EMSL Canada ("EMSL"), using atomic absorption spectrophotometry. EMSL is AIHA (American Industrial Hygiene Association) and NIOSH (National Institute of Occupational Safety and Health) accredited for this type of analysis. The Laboratory Analysis Report for lead in paint samples is included with this Report as Appendix II.

#### 3.3 Mercury

The assessment included a visual identification of fluorescent light tubes, switches, electrical controls, heating system thermostats, thermometers, and other components historically known to contain mercury.

#### 3.4 Other Designated Substances

Other materials listed in Section 1.0 of this Report were identified on a visual basis where present, as part of the current assessment. It should be noted that no manufacturing or heavy industrial activities are known by Maple to occur at the Site. Therefore, Designated Substances associated with these activities (i.e. those other than Asbestos, Lead, Mercury, and Silica) would not be expected to be present in the selected areas.

#### 3.5 Mould

The assessment for mould was conducted in accordance with standard industry practice as set out in the Canadian Construction Association (CCA) "Mould Guidelines for the Canadian Construction Industry" for a visual assessment. Although there are no regulatory requirements in Ontario for such an assessment, the CCA Guidelines, and similar guidelines from other agencies have been accepted as the industry standard by most experts, consultants, the Ontario Ministry of Labour, and the Canadian Construction Association.

All guidelines and protocols for mould investigations indicate that investigations should be performed largely on a visual basis with limited collection of bulk and/or air samples. The Ontario Ministry of Labour has consistently enforced the removal of all mould from buildings regardless of mould genus or species, and therefore bulk samples or air samples for confirmation of mould are not typically collected for investigative purposes where mould is visible.

#### 3.6 Polychlorinated Biphenyls

Manufacturers labels/codes collected from fluorescent lamp ballasts suspected of containing Polychlorinated Biphenyls ("PCBs") are compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs", which identifies PCB-containing ballasts.

#### 3.7 Limitations and Omissions from Scope

Due to the nature of building construction some limitations exist as to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple 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 inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the Site investigation. Maple believes that the information collected during the investigation concerning the property is reliable. No other warranties are implied or expressed.

During a standard ACM inventory performed for the purposes of regulatory compliance, it is industry practice to exclude certain suspect asbestos-containing materials from sampling. These materials are often excluded from sampling due to the risk of compromising the health and safety of the technician, other building occupants, or the integrity of the systems with which these materials are associated. Examples of such materials include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking and levelling compound. Where observed, these materials were presumed to be ACM.

#### 3.8 Drawings

Drawings included in Appendix III will indicate the locations of any major applications of an asbestos-containing material with the exception of mechanical insulations, drywall, plaster finishes and transite (which cannot be accurately depicted on drawings). The information depicted on the drawings is not to scale and is only meant to provide a general representation of the locations of asbestos-containing materials.

#### 3.9 Previous Reports

Where possible, Maple utilized the observations and representative bulk sampling results from previous Survey Reports that were made available at the time of the survey. Maple utilized sampling data from the following sources:

 March 2023 – Halton Catholic District School Board – Holy Family CES Asbestos Summary Report

#### 4.0 INVENTORY FINDINGS

The findings of the survey are presented separately below for each of the eleven Designated Substances as well as microbial growth (mould), and polychlorinated biphenyls. Asbestos is further detailed by typical applications of asbestos.

#### 4.1 Asbestos

The following is a brief discussion of the extent to which ACM was identified in the surveyed area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. The sample numbers refer to the laboratory analysis report presented as Appendix I and summarised in Table 2 below. Forty (40) bulk samples were collected for the determination of asbestos content and submitted to the lab to be analysed. Due to the presence of more than one phase of material in some of the original samples the laboratory may have performed multiple analyses for some samples. As a result, a total of forty (40) samples were analyzed.

	Table 2- Analysis S	Summary of Asbestos Bulk Sample	<u>es</u>
Sample No.	Room Name	Sample Description	Result
S-01A	Corridor 01	2"x2" Ceramic Tile Mortar Base – Brown Cementitious Material	<0.5% Chrysotile
		Grey Cementitious Material	None Detected
S-01B	Corridor 02	2"x2" Ceramic Tile Mortar Base - Grey Cementitious Material	0.5% Chrysotile
S-01C	Corridor 03	2"x2" Ceramic Tile Mortar Base – Brown Cementitious Material	<0.5% Chrysotile
		Grey Cementitious Material	None Detected
S-01D	Corridor 04	2"x2" Ceramic Tile Mortar Base - Grey Cementitious Material	<0.5% Chrysotile
S-01E	Lobby	2"x2" Ceramic Tile Mortar Base – Brown Cementitious Material	<0.5% Chrysotile
		Grey Cementitious Material	None Detected
S-02A	Corridor 01	2"x2" Ceramic Tile Grout	None Detected
S-02B	Corridor 02	2"x2" Ceramic Tile Grout	None Detected
S-02C	Corridor 03	2"x2" Ceramic Tile Grout	None Detected
C 03D	Corridor 04	2"x2" Ceramic Tile Grout	None Detected
S-02D	Corridor 04	Grey Cementitious Material	None Detected
S-02E	Lobby	2"x2" Ceramic Tile Grout	None Detected
S-03A	Corridor 05	Large Ceramic Tile Mortar Base	None Detected
S-03B	Corridor 05	Large Ceramic Tile Mortar Base	None Detected
S-03C	Corridor 05	Large Ceramic Tile Mortar Base	None Detected
S-04A	Corridor 05	Large Ceramic Tile Grout	None Detected
S-04B	Corridor 05	Large Ceramic Tile Grout	None Detected
S-04C	Corridor 05	Large Ceramic Tile Grout	None Detected

	Table 2- Analysis Summary of Asbestos Bulk Samples						
Sample No.	Room Name	Sample Description	Result				
S-05A	Classroom 11	Black Mastic – Vinyl Floor Tile 1'x1' White with Brown Streaks (mastic only)	None Detected				
S-05B	Classroom 05	Black Mastic – Vinyl Floor Tile 1'x1' White with Brown Streaks (mastic only)	None Detected				
S-05C	Gym Storage Room	Black Mastic – Vinyl Floor Tile 1'x1' White with Brown Streaks (mastic only)	None Detected				
S-06A	Girl's Change Room	Black Mastic – Vinyl Floor Tile 1'x1' Tan with White and Brown Streaks (mastic only)	None Detected				
S-06B	Girl's Change Room	Black Mastic – Vinyl Floor Tile 1'x1' Tan with White and Brown Streaks (mastic only)	None Detected				
S-06C	Boy's Change Room	Black Mastic – Vinyl Floor Tile 1'x1' Tan with White and Brown Streaks (mastic only)	None Detected				
S-07A	Classroom 01	Interior Door Frame Caulking (Grey)	None Detected				
S-07B	Classroom 05	Interior Door Frame Caulking (Grey)	None Detected				
S-07C	Gym Storage	Interior Door Frame Caulking (Grey)	None Detected				
	Additional Bulk Sam	ples Collected on January 25, 20	24				
Sample No.	Room Name	Sample Description	Result				
S-01A	Room 9	Interior Brown Window Frame Caulking	None Detected				
S-01B	Room 14	Interior Brown Window Frame Caulking	None Detected				
S-01C	Room 2	Interior Brown Window Frame Caulking	None Detected				
S-02A	Room 9	Interior Brown Window Glazing Caulking	None Detected				
S-02B	Room 14	Interior Brown Window Glazing Caulking	None Detected				
S-02C	Room 2	Interior Brown Window Glazing Caulking	None Detected				
S-03A	Room 10	Black Window Putty	10% Chrysotile				
S-03B	Room 2	Black Window Putty	Sample Not Analyzed				
S-03C	Room 3	Black Window Putty	Sample Not Analyzed				
S-04A	Exterior	Exterior Brown Window Frame Caulking	None Detected				

Table 2- Analysis Summary of Asbestos Bulk Samples							
Sample No. Room Name Sample Description		Room Name Sample Description					
S-04B	Exterior	Exterior Brown Window Frame Caulking	None Detected				
S-04C	Exterior	Exterior Brown Window Frame Caulking	None Detected				
S-05A	Exterior	Exterior Black Window Putty	3% Chrysotile				
S-05B	Exterior	Exterior Black Window Putty	Sample Not Analyzed				
S-05C	Exterior	Exterior Black Window Putty	Sample Not Analyzed				

Asbestos-containing materials (ACM) are present in the form of vinyl floor tiles, window putty (interior and exterior), and ceramic tile mortar base. Suspect asbestos-containing materials are present in the form of insulation within interior wood doors. Details for all confirmed and suspect asbestos-containing materials are presented below under the headings of the most typical asbestos applications in buildings.

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

#### **4.1.1** Sprayed Fireproofing (Friable)

No sprayed fireproofing was identified within the surveyed area at the time of the assessment.

#### **4.1.2** Thermal Mechanical Insulation (Friable)

No asbestos mechanical insulations were identified in the surveyed area. The various types of mechanical insulations and the system to which they are applied are summarised below.

#### Piping Systems:

No asbestos-containing pipe insulations were identified within the surveyed area at the time of the assessment.

Pipe systems observed within the surveyed area were either not insulated or were insulated with fibreglass, which is not suspected to contain asbestos.

#### **Duct Systems:**

Duct systems observed throughout the surveyed area were observed to be either un-insulated or were insulated with foil-face fibreglass insulation which is not suspected to contain asbestos.

#### **4.1.3** Texture Finish (Friable)

No textured finishes were identified within the surveyed area at the time of the assessment.

#### **4.1.4** Acoustic Ceiling Tiles (Potentially Friable)

Acoustic ceiling tiles were not sampled as part of the current assessment as ceiling tiles are not expected to be impacted by the floor replacement project.

Previous sampling conducted by Others confirmed that no asbestos-containing acoustic ceiling tiles are present in the building.

#### **4.1.5** Vinyl Sheet Flooring (Potentially Friable)

No vinyl sheet flooring finishes were identified within the surveyed area at the time of the assessment.

#### **4.1.6** Vinyl Floor Tile (Non-Friable)

Asbestos-containing vinyl floor tile systems were identified within the surveyed area at the time of the assessment.

Two (2) visually distinct types of vinyl floor tiles systems were observed in the surveyed area. A brief description of each type of vinyl floor tile is outlined below.

#### • VFT-01 (1'x1' White with Brown Streaks):

VFT-01 was observed to be present in the majority of the surveyed area.

No bulk samples were collected of VFT-01 as the existing asbestos survey report indicates the materials contains **Chrysotile asbestos**.

Three (3) representative samples (Sample Set S-05A-C) of black mastic associated with VFT-01 were collected and analyzed for asbestos content. Analysis of Sample Set S-05 found that the material does not contain asbestos.

#### • VFT-02 (1'x1' Tan with White and Brown Streaks):

VFT-02 was observed to be present in the Boy's and Girl's Change Rooms.

No bulk samples were collected of VFT-02 as the existing asbestos survey report indicates the materials contains **Chrysotile asbestos**.

Three (3) representative samples (Sample Set S-06A-C) of black mastic associated with VFT-02 were collected and analyzed for asbestos content. Analysis of Sample Set S-06 found that the material does not contain asbestos.

#### 4.1.7 Asbestos Cement Products "Transite" (Non-Friable)

No transite cement products were observed to be present in the surveyed area at the time of the assessment.

It should be noted that asbestos-containing transite cement rain water leaders are present in the building (outside of the project area) but are not anticipated to be disturbed by the proposed renovations.

#### 4.1.8 Drywall Joint Compound (DJC) (Potentially Friable)

Drywall joint compound was not sampled as part of the current assessment as drywall finishes are not expected to be impacted by the floor replacement project.

Previous sampling conducted by Others confirmed that no asbestos-containing drywall joint compound is present in the building.

#### **4.1.9** Plaster (Potentially Friable)

No plaster finishes were observed within the surveyed areas at the time of the assessment.

#### 4.1.10 Vermiculite (Friable)

No vermiculite insulation was observed to be present within the surveyed area at the time of the assessment. It should be noted that loose fill vermiculite insulation can often be present within voids of masonry and possibly some pre-manufactured surveyed area components that would not be identified during the course of this assessment.

#### 4.1.11 Ceramic Tiles

#### • 2"x2" Ceramic Tile Mortar Base:

Five (5) representative samples (Sample Set S-01A-E) of mortar base associated with the 2"x2" ceramic tiles were collected and analyzed for asbestos. Analysis of Sample S-01B found that the material contains 0.5% Chrysotile Asbestos. The remaining samples were found to contain <0.5% Chrysotile asbestos. The subject mortar base is present throughout the majority of the ceramic tile flooring within the surveyed area.

For the purpose of this project, all ceramic tile mortar base associated with 2"x2" ceramic tiles should be considered as "asbestos-containing".

#### • 2"x2" Ceramic Tile Grout:

Five (5) representative samples (Sample Set S-02A-E) of grout associated with the 2"x2" ceramic tiles were collected and analyzed for asbestos content. Analysis of Sample Set S-02 found that the material does not contain asbestos.

#### • Large Ceramic Tile Mortar Base:

Three (3) representative samples (Sample Set S-03A-C) of mortar base associated with the large ceramic tiles were collected and analyzed for asbestos content. Analysis of Sample Set S-03 found that the material does not contain asbestos. The large ceramic tiles are limited to Corridor 05.

#### • Large Ceramic Tile Grout:

Three (3) representative samples (Sample Set S-04A-C) of grout associated with the large ceramic tiles were collected and analyzed for asbestos content. Analysis of Sample Set S-04 found that the material does not contain asbestos. The large ceramic tiles are limited to Corridor 05.

#### 4.1.12 Interior Wood Doors

Interior Door Frame Caulking (Grey):

Three (3) representative samples (Sample Set S-07A-C) of interior door frame caulking were collected and analyzed for asbestos content. Analysis of Sample Set S-07 found that the material does not contain asbestos.

#### Interior Wood Doors:

Interior wood doors are present throughout the project area and are scheduled to be replaced as part of the proposed renovations.

Limited intrusive investigations into representative wood doors were made by Maple in an attempt to check for possible concealed materials. Findings of the investigations confirmed that the doors consist of wood and do not contain materials suspected of containing asbestos. Refer to Figures 1 and 2 below for representative views within wood doors.



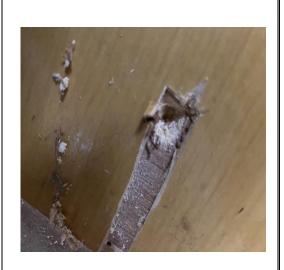


Figure 1: View within interior wood door.

Figure 2: View within interior wood door.

#### 4.1.13 Window Caulking

Asbestos and non-asbestos window caulking/putty was identified within the building at the time of the assessment. A brief description of each type of caulking/putty application is described below.

- Interior Brown Window Frame Caulking:
  - Three (3) representative samples (Sample Set S-01A-C) of interior brown window frame caulking were collected and analyzed for asbestos content. Analysis of Sample Set S-01 found that the material does not contain asbestos.
- Interior Brown Window Frame/Glazing Caulking:
  - Three (3) representative samples (Sample Set S-02A-C) of interior brown window frame/glazing caulking were collected and analyzed for asbestos content. Analysis of Sample Set S-02 found that the material does not contain asbestos.

#### Interior Black Putty:

Interior black putty was identified to be present within internal components of window frames throughout the project area.

Three (3) representative samples (Sample Set S-03A-C) of interior black putty were collected and analyzed for asbestos content. Analysis of Sample S-03A found that the material contains **10% Chrysotile asbestos.** 

#### • Exterior Brown Window Frame Caulking:

Three (3) representative samples (Sample Set S-04A-C) of exterior brown window frame caulking were collected and analyzed for asbestos content. Analysis of Sample Set S-04 found that the material does not contain asbestos.

#### • Exterior Black Putty:

Exterior black putty was identified to be present between the glass and window frame throughout the project area.

Three (3) representative samples (Sample Set S-05A-C) of exterior black putty were collected and analyzed for asbestos content. Analysis of Sample S-05A found that the material contains **3% Chrysotile asbestos**.

#### 4.2 Lead

Four (4) bulk samples of ceramic tile mortar base and ceramic tile grout were collected for determination of lead content and submitted to EMSL for analysis during the assessment. The sample number refers to the Certificate of Analysis Report presented as Appendix II and summarised in Table 3 below.

Table 3- Analysis Summary of Lead Samples						
Sample No. Locations Sample Description Result						
L-01	Corridor 03	2"x2" Ceramic Tile Grout	<40 mg/Kg			
L-02	Corridor 03	2"x2" Ceramic Tile Mortar Base	<40 mg/Kg			
L-03	Corridor 05	Large Ceramic Tile Grout	<40 mg/Kg			
L-04	Corridor 05	Large Ceramic Tile Mortar Base	<89 mg/Kg			

No regulations currently exist in Ontario defining the lower limit of lead-containing material. The Ontario Ministry of Labour (MOL) has issued a guideline for lead abatement, entitled <u>Guideline – Lead on Construction Projects</u> (2004) which is considered enforceable. The Guideline does not specify what constitutes a material as "lead-containing". Instead, it outlines procedures based on the concentration of airborne lead encountered during removal, as well as provides procedures and/or specific operations for lead-containing material removal. However, the Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair document classifies paint as either Low-Level, Lead-Containing, or Lead-Based as follows:

Table 4- EACC Classification of Lead				
Concentration of Lead	Definition			
0.1% or less <u>OR</u> 1000 mg/Kg or less	Low Level Lead ("Virtually Safe")			
Greater than 0.1% but less than 0.5% <u>OR</u>	Load Containing			
Greater than 1000 mg/Kg but less than 5000 mg/Kg	Lead-Containing			
Greater than 0.5% <u>OR</u> Greater than 5000 mg/Kg	Lead-Based			

Based on these criteria and the results of the sample analysis, the mortar and grout sampled are considered to be Low-Level Lead ("virtually safe").

#### 4.3 Mercury

Mercury vapour is present in all fluorescent light tubes.

#### 4.4 Silica

Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present in the Select areas surveyed.

#### 4.5 Isocyanates

Free isocyanate compounds would not be expected to be found in a non-manufacturing facility.

#### 4.6 Vinyl Chloride Monomer

Vinyl chloride monomer would not be expected to be found in a non-manufacturing facility.

#### 4.7 Benzene

Benzene would not be expected to be found in a non-manufacturing facility.

#### 4.8 Acrylonitrile

Acrylonitrile would not be expected to be found in a non-manufacturing facility.

#### 4.9 Coke Oven Emissions

Coke oven emissions would not be expected to be found in a non-manufacturing facility.

#### 4.10 Arsenic

Arsenic would not be expected to be found in a non-manufacturing facility.

#### 4.11 Ethylene Oxide

Ethylene oxide would not be expected to be found in a non-manufacturing facility.

#### **4.12** Mould

No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

#### 4.13 Polychlorinated Biphenyls (PCBs)

The fluorescent lamp fixtures observed contained a combination of T8 and T12 fluorescent light tubes. T12 fixtures are older fixtures and have the potential of using PCB-containing ballast. T8 fixtures have electronic ballast and are considered as not containing PCB.

#### **5.0 RECOMMENDATIONS**

#### 5.1 Asbestos

Asbestos-containing materials identified within the surveyed areas include the following:

- 1'x1' Vinyl Floor Tiles
- 2"x2" Ceramic Tile Mortar Base
- Window Putty (Interior and Exterior)

General recommendations for each of the confirmed asbestos-containing materials are as follows:

- Removal or disturbance of vinyl floor tiles and window putty requires the use
  of Type 1 Asbestos Procedures provided that no power tools are utilized. In
  the event that power tools are needed, the use of Type 3 Asbestos Procedures
  are required.
- Removal or disturbance of ceramic tile mortar base requires the use of Type 3
   Asbestos Abatement procedures.

It is important to note that due to the presence of solid wall and ceiling systems, the assessment was not able to confirm or deny the presence of ACM within wall and ceiling cavities. The presence of concealed ACM should be assumed. It is possible that ACM is present that was not identified in this report.

This report should not be read or interpreted as a "scope of work". Detailed abatement specifications should be prepared for asbestos removal that will impact the scope of any future renovations.

#### **5.2** Lead

Mortar and grout (1000 mg/Kg or less) sampled were found to be low level lead ("virtually safe").

Low Level Lead mortar and grout are considered virtually safe provided that;

airborne lead concentrations are kept below 0.05 mg/m<sup>3</sup>

- general dust suppression and worker hygiene procedures are utilized
- torching or other activities that create fumes are not completed

#### 5.3 Mercury

Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

#### 5.4 Silica

Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the building should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

#### 5.5 Polychlorinated Biphenyls

Prior to disposal, all fluorescent lamp ballasts should be inspected and compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs" for the presence of PCB's.

#### **6.0 LIMITATIONS**

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple 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.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. Maple believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

Information provided by Maple is intended for Client use ONLY. Any use by a third party, of reports or documents authored by Maple, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Maple accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

The liability of Maple or its staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Maple will not be responsible for any consequential or indirect damages. Maple will only be liable for damages resulting from negligence of Maple; all claims by the Client shall be deemed relinquished if not made within two years after last date of services provided.

Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

**End of Report** 

Sincerely,

MAPLE ENVIRONMENTAL INC.

**Environment, Health and Safety Consultants** 

**Prepared By:** 

**Reviewed By:** 

Josh Prosser Project Technologist Jason De Sousa Operations Manager

lason De Sousa

# **APPENDIX I**LABORATORY ANALYSIS REPORT - ASBESTOS



To:

Josh Prosser

Maple Environmental Inc. 482 South Service Road East, Suite 116

Oakville, Ontario

L6J 2X6

**EMC LAB REPORT NUMBER:** <u>A97322</u>

Job/Project Name: 1420 Grosvenor Street Job No: 21384

Analysis Method: Polarized Light Microscopy – EPA 600 Number of Samples: 25

Date Received: Oct 27/23 Date Analyzed: Nov 3 & 6/23 Date Reported: Nov 6/23

**Analyst:** Matthew Phillip and John Paul/Cantillon

Reviewed By: Malgorzata Sybydlo

	Lab			SAMPLE COMPONENTS (%)			
Client's Sample ID	Sample No.	Description/Location	Sample Appearance	Asbestos Fibres		Non- asbestos Fibres	Non- fibrous Material
S-01A	A97322-1	2x2 Ceramic Mortar Base – Corridor 01	2 Phases: <ul><li>a) Brown, cementitious material</li><li>b) Grey, cementitious material</li></ul>	Chrysotile ND	<0.5		100 100
S-01B	A97322-2	2x2 Ceramic Mortar Base – Corridor 02	Grey, cementitious material	Chrysotile	0.5		99.5
S-01C	A97322-3	2x2 Ceramic Mortar Base – Corridor 03	2 Phases: <ul><li>a) Brown, cementitious material</li><li>b) Grey, cementitious material</li></ul>	Chrysotile ND	<0.5		100 100
S-01D	A97322-4	2x2 Ceramic Mortar Base – Corridor 04	Grey, cementitious material	Chrysotile	<0.5		100
S-01E	A97322-5	2x2 Ceramic Mortar Base – Lobby	2 Phases: <ul><li>a) Brown, cementitious material</li><li>b) Grey, cementitious material</li></ul>	Chrysotile ND	<0.5		100 100
S-02A	A97322-6	2x2 Ceramic Grout – Corridor 01	Dark red, cementitious material	ND		1	99
S-02B	A97322-7	2x2 Ceramic Grout – Corridor 02	Dark red, cementitious material	ND		1	99
S-02C	A97322-8 <sup>5</sup>	2x2 Ceramic Grout – Corridor 03	Dark red, cementitious material	ND		1	99
S-02D	A97322-9	2x2 Ceramic Grout – Corridor 04	2 Phases:  a) Dark red, cementitious material b) Grey, cementitious material	ND ND		1	99 100
S-02E	A97322-10	2x2 Ceramic Grout – Lobby	Dark red, cementitious material	ND		1	99





EMC LAB REPORT NUMBER: <u>A97322</u> Client's Job/Project Name/No.: 21384 Analysts: Matthew Phillip / John Paul Cantillon

	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
Client's Sample ID				Asbestos Fibres	Non- asbestos Fibres	Non- fibrous Material	
S-03A	A97322-11	Large Ceramic Tiles – Mortar Base – Corridor 05	Light brown and red, cementitious material	ND		100	
S-03B	A97322-12	Large Ceramic Tiles – Mortar Base – Corridor 05	Light brown and red, cementitious material	ND		100	
S-03C	A97322-13	Large Ceramic Tiles – Mortar Base – Corridor 05	Light brown, cementitious material	ND		100	
S-04A	A97322-14	Large Ceramic Tiles – Grout – Corridor 05	Brown, cementitious material	ND		100	
S-04B	A97322-15	Large Ceramic Tiles – Grout – Corridor 05	Brown, cementitious material	ND		100	
S-04C	A97322-16	Large Ceramic Tiles – Grout – Corridor 05	Brown, cementitious material	ND		100	
S-05A	A97322-17	Mastic - Vinyl Floor Tile 1x1 White with Brown Streaks – Analyze Mastic Only – Room 11	Black, mastic	ND		100	
S-05B	A97322-18	Mastic - Vinyl Floor Tile 1x1 White with Brown Streaks – Analyze Mastic Only – Room 05	Black, mastic	ND		100	
S-05C	A97322-19	Mastic - Vinyl Floor Tile 1x1 White with Brown Streaks – Analyze Mastic Only – Gym Storage	Black, mastic	ND		100	
S-06A	A97322-20	Mastic - Vinyl Floor Tile 1x1 Tan with Brown and White Streaks – Analyze Mastic Only – Girls Change Room	Black, mastic	ND		100	
S-06B	A97322-21	Mastic - Vinyl Floor Tile 1x1 Tan	Black, mastic	ND		100	



EMC LAB REPORT NUMBER: <u>A97322</u> Client's Job/Project Name/No.: 21384 Analysts: Matthew Phillip / John Paul Cantillon

	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
Client's Sample ID				Asbestos Fib	ores	Non- asbestos Fibres	Non- fibrous Material
		with Brown and White Streaks – Analyze Mastic Only - Girls Change Room					
S-06C	A97322-22	Mastic - Vinyl Floor Tile 1x1 Tan with Brown and White Streaks – Analyze Mastic Only - Boys Change Room	Black, mastic	ND			100
S-07A	A97322-23	Interior Door Frame Caulking (Grey) – Room 01	Dark grey, caulking	ND			100
S-07B	A97322-24	Interior Door Frame Caulking (Grey) – Room 05	Dark grey, caulking	ND			100
S-07C	A97322-25	Interior Door Frame Caulking (Grey)  – Gym Storage	Dark grey, caulking	ND			100

#### Note:

- 1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
- 2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).

- 4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
- 5. Another phase is present but is too small to analyze.

<sup>3.</sup> This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.



To:

Toshio Ogawa

Maple Environmental Inc. 482 South Service Road East, Suite 116 Oakville, Ontario

L6J 2X6

**EMC LAB REPORT NUMBER:** A100083

Job/Project Name: Holy Family CS

Job No: 21384-1

Analysis Method: Polarized Light Microscopy – EPA 600 Number of Samples: 15

Date Received: Jan 26/24 Date Analyzed: Jan 29/24 Date Reported: Jan 29/24

Analyst: Elizabeth Mierzynski

Reviewed By: Malgorzata Sybydlo

	Lab	ah	///	SAMPLE COMPONENTS (%)			
Client's Sample ID	Sample No.	Description/Location	Sample Appearance	Asbestos Fibres	Non- asbestos Fibres	Non- fibrous Material	
S0-1A	A100083-1	Interior window frame caulking/ Room 9(science room)	Brown, caulking	ND	2	98	
S0-1B	A100083-2	Interior window frame caulking/room 14	Brown, caulking	ND	2	98	
S0-1C	A100083-3	Interior window frame caulking/room 2	Brown, caulking	ND	2	98	
S0-2A	A100083-4	Interior window glazing/ room 9	Brown, caulking	ND	2	98	
S0-2B	A100083-5	Interior window glazing/ room 14	Brown, caulking	ND	2	98	
S0-2C	A100083-6	Interior window glazing/ room 2	Brown, caulking	ND	2	98	
S0-3A	A100083-7	Black putty/ room 10	Black, caulking	Chrysotile 10		90	
S0-3B	A100083-8	Black putty/ room 2	NA	NA			
S0-3C	A100083-9	Black putty/ room 3	NA	NA			
S0-4A	A100083- 10	Exterior window frame caulking/ north elevation exterior	Brown, caulking	ND	2	98	
S0-4B	A100083- 11	Exterior window frame caulking/ north elevation exterior	Brown, caulking	ND	2	98	
S0-4C	A100083- 12	Exterior window frame caulking/ north elevation exterior	Brown, caulking	ND	2	98	
S0-5A	A100083- 13	Exterior window putty/ north elevation exterior	Black and brown, caulking	Chrysotile 3		97	
S0-5B	A100083-	Exterior window putty/ north	NA	NA			



EMC LAB REPORT NUMBER: <u>A100083</u> Client's Job/Project Name/No.: 21384-1

Analyst: Elizabeth Mierzynski

	Lab			SAMPLE COMPONENTS (%)			
Client's Sample ID	Sample No.	Description/Location	Sample Appearance	Asbestos Fibres		Non- asbestos Fibres	Non- fibrous Material
	14	elevation exterior					
S0-5C	A100083- 15	Exterior window putty/ north elevation exterior	NA	NA			

#### Note:

- 1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
- 2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).

<sup>3.</sup> This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

<sup>4.</sup> The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.

## **APPENDIX II**

LABORATORY ANALYSIS REPORT - LEAD



#### 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 CustomerPO: ProjectID:

55MAPL78 21384

552316722

CustomerID:

EMSL Canada Or

**Josh Prosser** Maple Environmental, Inc. **482 South Service Road East Suite 116** Oakville, ON L6J 2X6

Phone: (905) 257-4408 Fax: (905) 257-8865 Received: 10/30/2023 01:07 PM

Collected: 10/26/2023

Project: 21384 - 1420 Grosvenor

#### Test Report: Lead by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight (g)	RDL	Lead Concentration
L01 552316722-0001	10/26/2023 11/3/2023 Desc: 2x2 Ceramic Grout - COR 03	0.5074 g	40 mg/Kg	<40 mg/Kg
L02 552316722-0002	10/26/2023 11/3/2023 Desc: 2x2 Ceramic Mortar Base - COR 03	0.5076 g	40 mg/Kg	<40 mg/Kg
L03 552316722-0003	10/26/2023 11/3/2023 Desc: Large Ceramic Grout - COR 05	0.5112 g	40 mg/Kg	<40 mg/Kg
L04 552316722-0004	10/26/2023 11/3/2023  Desc: Large Ceramic Mortar Beige - COR 05 Insufficient sample to reach reporting limit	0.2242 g	89 mg/Kg	<89 mg/Kg

Rowena Fanto, Lead Supervisor or other approved signatory

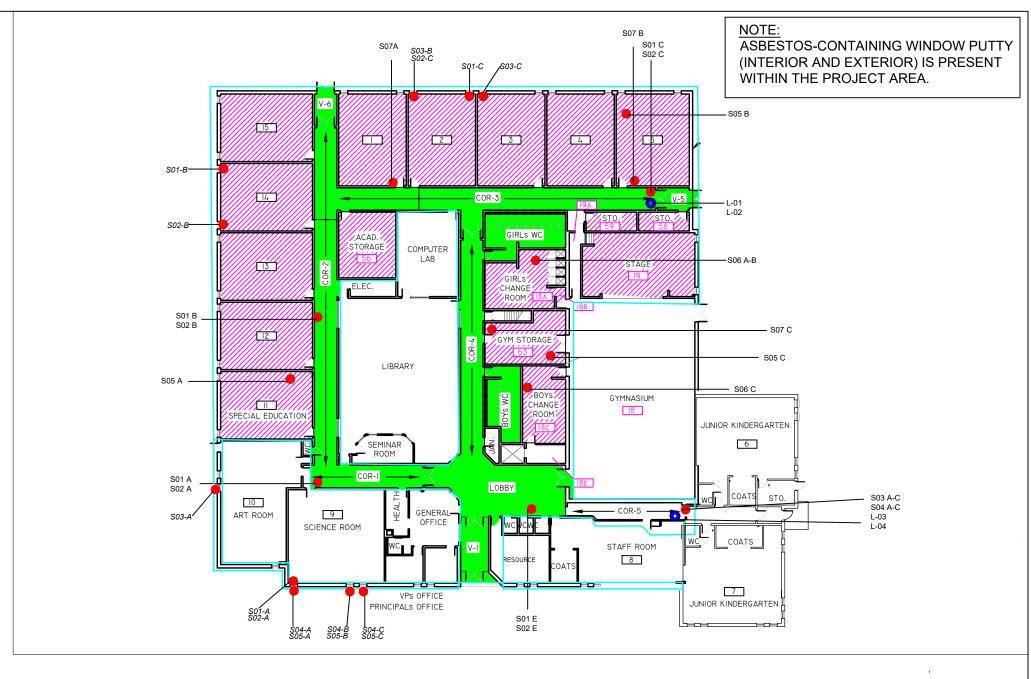
EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON

## **APPENDIX III**

DRAWINGS





www.MapleEnvironmental.com

PROJECT NO.:	SAMPLE LOCATIONS		CONFIRMED ACM		Г
	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
21384		ASBESTOS BULK SAMPLE: S##		ACM CERAMIC TILE MORTAR BASE	
W.Davidson	0	LEAD BULK SAMPLE: L-##		ACM VINYL FLOOR TILE	
Checked By:				OUTLINE OF SURVEYED AREA	
J. De Sousa			NOTE	WINDOW PUTTY (INTERIOR AND EXTERIOR)	

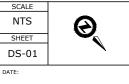
Designated Substance Survey

Halton Catholic District School Board

Holy Family Catholic School

1420 Grosvenor Street, Oakville

First Floor Plan



January 2024