S2S Environmental Inc.

Limited Designated Substances Survey

Room Nos. 108, 109, 110, 122, 123, 136, 137, 138, 150 and 156

25 Laurelcrest Street, Brampton, Ontario

Prepared for:
Conseil Scolaire Catholique MonAvenir.

Attn: Mr. Hugues St-Louis

Prepared by:
S2S Environmental Inc.

S2S PN: 9379

June 3, 2020

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APPENDICES

1.0 INTRODUCTION

S2S Environmental Inc. (S2S) was retained by Conseil Scoliare MonAvenir (CSC MonAvenir) (Client) to conduct a limited Designated Substances Survey (DSS) of Rooms 108, 109, 110, 122, 123, 136, 137, 138, 150 and 156 (Subject Areas) of the building located at 25 Laurelcrest Street in Brampton, Ontario (Subject Building).

The DSS was required to fulfil CSC MonAvenir's requirements under Section 30 of the Ontario Occupational Health and Safety Act (OSHA), Revised Statutes of Ontario 1990, as amended and for due diligence purposes prior to renovation work.

The DSS included a visual examination and evaluation of the presence and condition of substances designated under OHSA (R.S.O. 1990). These substances include: acrylonitrile, arsenic, asbestos, benzene, coke oven emissions, ethylene oxide, isocyanates, lead, mercury, silica and vinyl chloride. In addition to these substances, S2S also surveyed for visible suspect mould growth.

Date of Inspection:		April 3, 2020
S2S Site Assessor:		Mr. Patrick Moullas
Property Use:		Institutional
Description of Subject Building:		Single Story with one Mechanical Mezzanine
Construction Date:		Reportedly 1982
Major Renovations		Additions built in approximately 2013
Footprint Areas:		Approximately 3,799 m^2 (40, 892 ft^2)
Interior Finishes	Walls:	Drywall, concrete block, brick, stone and wood panels
	Ceilings:	Drywall, concrete and acoustic ceiling tiles
	Floors:	Hardwood and laminate wood, ceramic tiles, vinyl sheet, vinyl tiles, carpet and concrete slab

2.0 SCOPE OF WORK

2.1 Scope of Work

S2S assessed building systems, structures and finishes in the Subject Areas of the Subject Building to determine the presence and extent of Designated Substances.

The limited DSS conducted by S2S consisted of the following:

- Records review; including previous reports;
- Inquiry with site personnel and/or visual inspection as to the possible presence of suspected designated substances. This included site observations for evident usage

and/or storage of chemicals and materials that may contain the designated substances and confirmation of content by review of available background information or testing (i.e. for asbestos and lead);
- Identification, quantification and recording of such substances;
- Interview with site representative(s);
- Development of a sampling strategy (for asbestos and lead containing paints);
- Collection and submission of suspected asbestos-containing materials (ACMs) and lead containing paints for laboratory analyses (where applicable);
- Visual assessment for visible suspect mould growth;
- Photography of site conditions; and
- Preparation of this report with methodology, findings, photographs, conclusions and recommendations.

2.1.1 Records Review

As part of the limited DSS, S2S reviewed the following reports made available:

- *"*Reassessment of Hazardous Building Materials Survey Report – École élémentaire catholique Sainte Jean d'Arc –25 Laurelcrest Street, Brampton, Ontario" report, prepared by Maple Environmental Inc., dated December 10, 2007; and
- "2019 Annual Hazardous Building Materials Reassessment - École élémentaire catholique Sainte Jean d'Arc –25 Laurelcrest Street, Brampton, Ontario" report, prepared by S2S Environmental Inc., dated February 27, 2020.

As noted in the above reports, ACMs, lead, mercury, PCBs, radioactive sources, silica, and apparent water damage were previously identified/suspected to be present within the Subject Building. Previous sample results and findings for existing asbestos and lead containing materials have been assumed to be accurate and have been incorporated into this report, where applicable.

3.0 REGULATIONS AND GUIDELINES

3.1 Designated Substances

The Ontario Ministry of Labour (MOL) has issued specific regulations under the OHSA for a number of substances, as listed above. This report is made to fulfill the Owner's requirements under Section 30 of the OHSA, revised statutes of Ontario 1990, as amended. Prior to tendering applicable project work (i.e. construction, renovation, demolition, etc.), the owner must provide this report to the contractors tendering the work. In turn, all contractors must furnish this report to subcontractors.

As of July 1, 2010, the majority of the regulations controlling the exposure limits, waste management and transfer of the above noted designated substances were consolidated into one regulation, OHSA Ontario Regulation (O. Reg.) 490/09 (as amended by O. Reg. 148/12). The regulation does not apply to construction projects.

The disturbance of asbestos materials during project work is also controlled by the MOL Regulation, O. Reg 278/05 – Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations (as amended by O. Reg. 479/10). The regulation classifies all disturbances as Type 1, Type 2, or Type 3, each of which has defined work practices. All asbestos-containing materials (if they are to be disturbed) are subject to special handling and disposal requirements and must be removed before partial or full demolition. The MOL must be notified in writing of any project involving the removal of more than a minor amount of friable asbestos material.

The disturbance of lead containing materials during project work is controlled by the MOL document, "Guideline: Lead on Construction Projects", issued by the Occupational Health and Safety Branch of the Ontario MOL, published in September 2004 and revised in April 2011. This guideline provides classifications for types of lead disturbance activities and assigns different levels of respiratory protection and work procedures for anticipated worker exposure to airborne lead. The concentration of total lead present in a surface coating material is regulated by the federal Surface Coating Materials Regulation (SOR/2005-109) made under the Canada Consumer Product Safety Act. This regulation limits total lead levels in new surface coating materials and products with surface coatings applied to them to 90 mg/kg (or 0.009% by weight). Despite this threshold limit, the level of airborne lead expected to be present in a work area is dependent on the likelihood of producing airborne lead dust or fumes (i.e. hand scraping, sanding, welding, torch cutting, and sandblasting) and is not related to the percentage of lead within the coating. Therefore, for the purpose of this survey, paints with detectable lead concentrations should be considered to be lead containing.

The disposal of common mercury wastes (i.e. thermostats or fluorescent light tubes) is controlled by the Ontario Ministry of Environment, Conservation and Parks (MECP) Regulation, O. Reg. 347, R.R.O. 1990 (as amended by O. Reg. 334/13).

The disturbance of silica containing materials is controlled by the MOL document "Guideline: Silica on Construction Projects", issued by the Occupational Health and Safety Branch of the Ontario MOL, published in September 2004 and revised in April 2011. Appropriate worker precautions should be employed when conducting demolition or renovation work that will create silica dust.

3.2 Mould and Water Damage

Procedures for remediation and waste management of mould are outlined by the Environmental Abatement Council of Ontario (EACO) *"Mould Abatement Guidelines"* Edition 3, dated 2015 and the Canadian Construction Association's (CCA) *"Mould Guidelines for the Canadian Construction Industry,"* dated 2004.

4.0 METHODOLOGY

The DSS was performed by Mr. Patrick Moullas of S2S on April 3, 2020. Site access was provided by a representative of CSC MonAvenir.

Additional information was obtained through review of design drawings, system schematic drawings and discussions about the building history with maintenance and service staff, where available.

The presence or absence of the following designated substances: acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates, mercury, silica and vinyl chloride has been inferred based on the historical building usage (reportedly a purpose-built school) and site observations. Further, no confirmatory sampling for these designated substances or visual suspect mould growth (if observed) was conducted.

Representative samples and locations for possible ACMs and lead containing paints were identified based on determining the age and renovation time periods of the Subject Building and associated components.

In general, samples of suspect ACMs were obtained in compliance with the requirements of O. Reg. 278/05, which states a minimum number of samples are to be obtained and analyzed (3, 5, or 7 depending on quantity, application and friability) from each area of homogeneous material for the material to be considered non-asbestos containing. This protocol is further outlined in Table 1 below. A homogeneous sampling area is defined by the United States Environmental Protection Agency (USEPA) as containing material that is uniform in texture and appearance, was installed at one time and is unlikely to consist of more than one type or formulation of material. The surveyor used information obtained on site by visual examination, available information on the phases of the construction and information on renovations obtained from the client/site representative to determine the extent of each homogeneous area and the number of samples required.

Table 1 – Protocol for Determining the Number of Samples for Suspect ACMs

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, fireproofing materials on structural members and plaster	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 materials	Any size	3

Asbestos-cement products such as piping for rainwater leaders and flat panels for exterior siding are commonly referred to as Transite materials; thereby indicating the material to be an asbestos-cement product. This type of material is readily identifiable through visual observation by a trained professional. Transite products are generally difficult to sample due to the tendency to break into fragments when sampling or damaging the product, and therefore sampling and analyses of visually observed Transite materials were not undertaken as part of this survey.

Suspect samples of lead containing paint were collected from representative areas of distinctive painted walls and interior/exterior finishes if more than a very limited application was present.

The suspect ACMs and suspect lead containing paint samples were collected using appropriate sampling techniques (as applicable) and sampling tools, placed in labelled sealable plastic bags and submitted for laboratory analysis of type and percentage of asbestos or percentage of lead.

A site plan showing the approximate sample locations of suspect ACMs is provided in Appendix A as Drawing No. 1. Selected photographs of building materials submitted for laboratory analysis and confirmed designated substances are included in Appendix B. A Copy of the Laboratory Certificate of Analysis is included in Appendix C.

4.1 ACMs Survey Exclusions

The materials listed below are generally excluded during an assessment due to the potential for irreparable damage to the building components from sampling and due to accessibility issues. The presence of asbestos is presumed in the materials noted below.

- components or wiring within motors or lights;
- high voltage wiring;
- mechanical packing, ropes and gaskets;
- exterior cladding, soffit and fascia boards on building;
- fire-door cores;
- underground services or piping;
- concrete levelling compound (for floors);
- refractory brick in boilers or incinerators; and
- dust in ductwork.

4.2 Evaluation Criteria of ACMs

The condition of identified and presumed ACMs as well as the potential of disturbance was evaluated. These evaluations were based on the conclusions of published studies, existing Ontario regulations, and S2S's experience involving buildings that contain friable ACMs. Examples of damaged ACMs include, but not limited to, delamination on sprayed material, mechanical insulation with damaged/missing insulation or jacketing, exposed under-pad on vinyl sheet flooring, or a non-friable material that has been pulverized which causes it to

become friable. The precedence for remedial action is based not solely on the evaluation of condition but is also based on several other factors which include:

- Accessibility or potential for direct contact and disturbance which can cause release of asbestos to the air;

- Practicality of repair (e.g. if damage to the ACMs will continue even if they are repaired); and

- Efficiency of the work (e.g. if damaged ACMs are being removed in a given area, it may be most practical to remove all ACMs in the area even if they are in good condition).

For the purposes of this assessment, Good, Fair and Poor were utilized to describe the condition of the known or suspect ACMs present in the Subject Building.

Known ACMs are further classified into two categories based on their friability properties. Friable material is material that (a) when dry, can be crumbled, pulverized or powered by hand pressure, or (b) is crumbled, pulverized or powdered. ACMs that are friable have a much greater potential than non-friable ACMs to release airborne asbestos fibres when disturbed. Typical friable ACMs include surfacing materials (e.g. sprayed fireproofing, texture, decorative or acoustic plaster) and thermal insulations (e.g. parging cement) on mechanical systems. Asbestos-containing manufactured materials include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement pipe or board, and asbestos textiles. Depending on the formulation, these materials may be friable or non-friable. Note that though a product may be considered non-friable when new, if the product releases fine dust due to deterioration or during removal, the free dust is considered friable. For example, lay-in acoustic ceiling tiles or plaster may release significant dust at the time of removal, and therefore are considered friable.

S2S utilizes each of the above noted hazard ratings (i.e. condition, accessibility and friability) during our site assessments to determine the risk level of exposure. Detailed notations are obtained on a room by room basis, where accessible during each of our surveys.

S2S utilizes this hazard rating protocol to evaluate ACMs present within a building that may require repair or removal procedures. The information obtained from site assessments is utilized to draft detailed specifications on the procedures to remove and or repair the ACMs (if required).

4.3 Accessible Areas

S2S was reliant on CSC MonAvenir to provide access to locked or limited-access areas of the Subject Areas on the date of the site visit. During the limited DSS, all areas of the Subject Areas were generally accessible for visual observation and completion of the survey.

As destructive testing was not part of the approved scope of work, the following areas were generally inaccessible:

- Behind drywall and plaster, behind baseboards, columns or bulkheads; and
- Within enclosed pipe chases.

The ACM survey included an intrusive investigation for vermiculite insulation into concrete blocks within the Subject Area.

5.0 RESULTS AND DISCUSSION

5.1 Designated Substances Survey

A total of 15 representative suspect asbestos bulk samples (including layers) were submitted to EMC Scientific Incorporated (EMC) in Mississauga, Ontario for analysis of asbestos content by Polarized Light Microscopy EPA Analysis Method 600.

Designated Substances identified within the Subject Building by visual observations and/or bulk sampling during the DSS are outlined below:

Table 2 – Designated Substances or Hazardous Materials Identified

Designated Substances/ Hazardous Materials	Findings
Asbestos	12”x12” light brown vinyl floor tiles observed in Rooms 136, 137, 138, 150 and 156 were previously determined to contain **2.4% Chrysotile** asbestos (Maple, 2007). The mastic associated with these vinyl floor tiles is also considered to be asbestos containing. At the time of the site visit, a total of approximately 1,600 ft^2 of the presumed asbestos containing vinyl floor tiles were observed to be in good condition within the Subject Areas.
	ACMs may be present behind or within materials in inaccessible areas as noted above within Sections 4.1 and 4.3 of this report.
Lead	Lead may be present in paints not sampled, electronic components (e.g., wiring connections, wire bundles, etc.), plumbing solder, roof flashing, noise baffles, emergency lighting batteries, and cast-iron piping gaskets (i.e., bell & spigots). Where present within the Subject Areas, they are presumed to be lead-containing.
Mercury	Mercury in the form of vapour may be present within the fluorescent light tubes or thermostat ampules. At the time of the site visit, all visually observed fluorescent light tubes, where accessible, were noted to be intact in the Subject Area.

Designated Substances/ Hazardous Materials	Findings
Silica	The concrete, cinder block, drywall, ceiling tiles, mortar and any other aggregates used throughout the Subject Area may contain free crystalline silica. Conditions for silica to become airborne (i.e. due to extensive concrete damage or crushing/grinding of concrete) during regular activities within the Subject Building were not observed
Other Designated Substances	No other designated substances were observed or are suspected to be present in the Subject Building.
Mould/Water Damage	No visual suspect mould growth or apparent water staining/damage to accessible building finishes was observed within the Subject Area.

All other bulk samples (for suspect ACMs) not outlined in Table 2 above, were identified to be non-asbestos containing. This includes the following materials sampled by S2S at the time of the site visit:

i. Concrete block (Sample Nos. CON-01a to CON-01c) collected from Room 138;

ii. Baseboard mastic (Sample Nos. MAS-01a to MAS-01c) collected from Room 108;

iii. Concrete block mortar (Sample Nos. MOR-01a to MOR-01c) collected from Room 108;

iv. Mortar (Sample Nos. MOR-02a to MOR-02c) collected from beige tiles within Room 122; and

v. Pink/orange mortar/grout (Sample Nos. MOR-03a to MOR-03c) collected from Terracotta tiles within Room 122.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this DSS, S2S concludes the following:

1) S2S recommends that the following asbestos containing materials identified in Table 2 be managed in place or removed following Type 1 asbestos abatement procedures in accordance with O. Reg 278/05:

   - Vinyl floor tiles and associated mastic (if removed without power tools/powered equipment)

It should be noted that ACMs may be present behind or within materials in inaccessible areas as noted above within Sections 4.1 and 4.3 of this report.

2) Lead may be present in electronic components (e.g., wiring connections, wire bundles, etc.), plumbing solder, batteries, and cast-iron piping gaskets (i.e., bell & spigots) and paints not sampled. Where present, S2S presumes that they are lead-containing. Appropriate worker protection (i.e. respiratory protection), as outlined in the Ontario MOL "Guideline – Lead on Construction Projects", published in September 2004 and revised in April 2011 by the Occupational Health and Safety branch of the Ontario MOL, should be employed when conducting demolition or renovation work that will create lead dust.

3) Mercury in the form of vapor may be present within the fluorescent light tubes observed throughout the Subject Area. At the time of the site visit, all visually observed fluorescent light tubes, where accessible, were noted to be intact. It is recommended that disposal of out-of-service fluorescent light tubes, or any other mercury containing materials or equipment be completed in accordance with O. Reg. 490/09 and O. Reg. 347.

4) Suspect silica-containing materials were observed throughout the Subject Building. Free crystalline silica has been linked to respiratory illnesses when inhalation of silica dust occurs. At the time of the site visit, suspect silica containing materials were generally observed to be in good condition. Conditions for silica to become airborne (i.e. due to extensive damage or crushing/grinding of building materials) during regular activities within the Subject Area was not observed. Suspect silica containing materials are to be managed in place or removed following appropriate dust control measures and worker precautions (i.e. respiratory protection), as outlined in the Ontario MOL "Guideline – Silica on Construction Projects", April 2011, when conducting demolition or renovation work that will create silica dust.

5) No evidence of visual suspect mould growth or apparent water staining was observed.

It is recommended that the appropriate precautions and/or worker protection be used when dealing with any of the identified/presumed designated substances and other hazardous materials.

7.0 CLOSURE

This report has been prepared for the sole benefit of the Conseil Scolaire Catholique MonAvenir (CSC MonAvenir). S2S Environmental Inc. (S2S) understands that this report may be provided to and relied upon by contractors as background information on the location and condition of designated substances within the specified areas. Any other person or entity without the express written consent of S2S and CSC MonAvenir may not rely upon the report. Any use that a party makes of this report, or any reliance on decisions made based on it, is the responsibility of such parties. S2S accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed.

S2S has not evaluated health risks associated with building occupant exposure to hazardous materials (i.e. designated substances, mould) which may be identified in this report. Evaluation of health risks on an individual should only be made by a licensed medical practitioner who has knowledge of the individual's medical history.

Mould is a naturally occurring organism and regardless of the findings of an assessment or effectiveness of a remediation, it could occur/reoccur when conditions are favourable. Therefore, buildings and surfaces should be maintained to prevent conditions that are favourable for mould growth. The scope of services did not include a detailed evaluation of the thermal and moisture characteristics of the exterior wall assembly, or a detailed building envelope investigation to assess all potential cause of the water infiltration that created an environment favourable to mould proliferation.

All standards, regulations and guidelines referenced in this report are subject to change with time and may no longer be applicable at a later date.

S2S makes no other representation whatsoever, including those concerning the legal significance of its findings, or as to the other legal matters addressed incidentally in this report, including but not limited to the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time, thus CSC MonAvenir should review such issues with appropriate legal counsel. The designated substance locations and conclusions provided are based on information obtained from visual inspection and limited sampling carried out, at the specific test locations, and information obtained from building management personnel. The results can only be extrapolated to an undefined area around the test locations. It is possible that additional, concealed designated substances may become evident during demolition/renovation activities.

The quantities provided in this report are order-of-magnitude values and are not considered exact quantities. Contractors are not to use these quantities for providing quotations and will

need to inspect the areas to verify the quantity of materials and site conditions that may affect the cost of any abatement work (if required).

We trust that the above meets your current requirements. If you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted,

S2S ENVIRONMENTAL INC.

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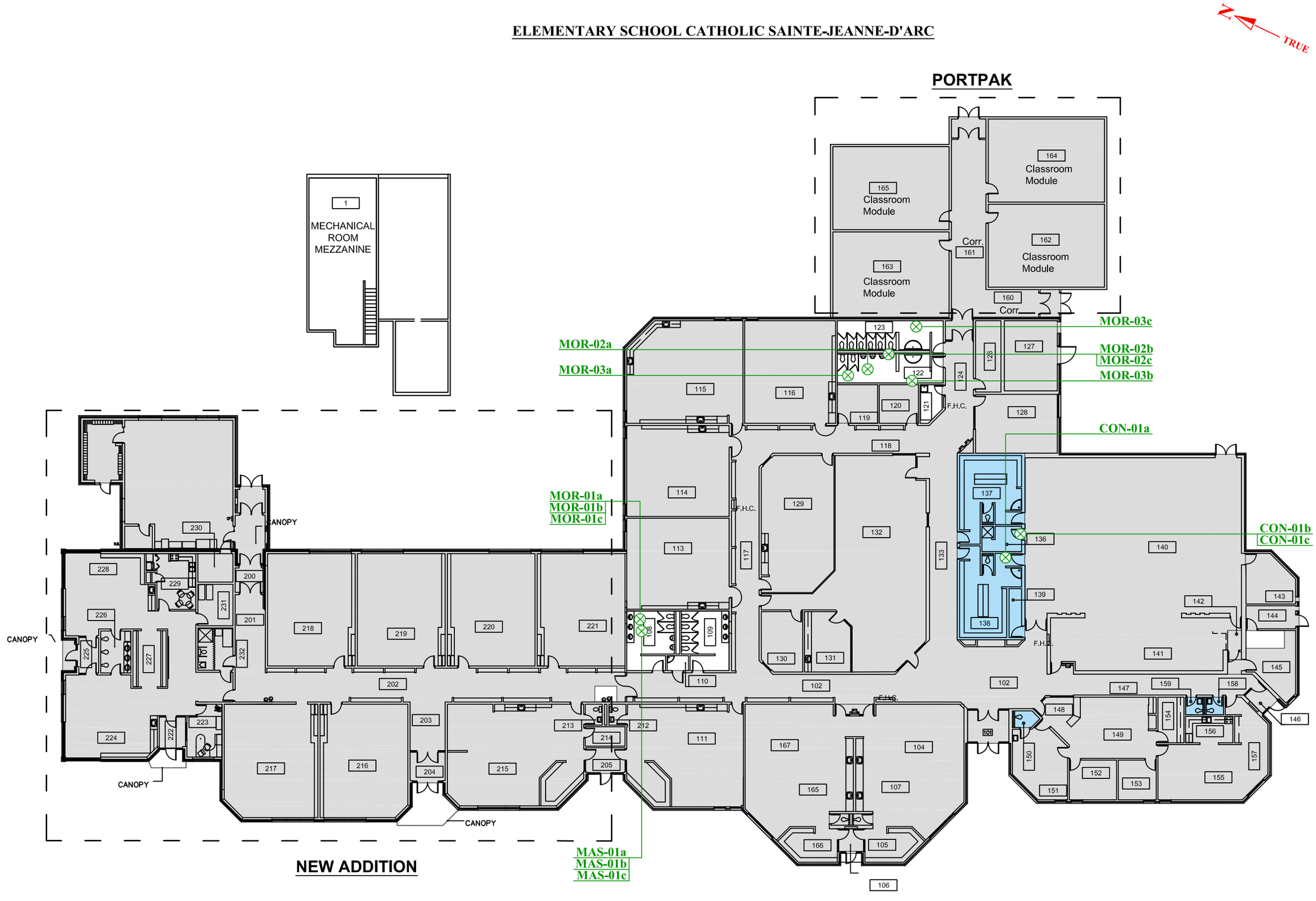
Distribution: (1 PDF Copy) Mr. Hugue St-Louis (CSC MonAvenir)

APPENDIX A

SITE DRAWING

ELEMENTARY SCHOOL CATHOLIC SAINTE-JEANNE-D'ARC



S2S Environmental Inc.

LEGEND:

- ⊗ ASBESTOS BULK SAMPLE
- AREA NOT ASSESSED

ASBESTOS CONTAINING MATERIALS:

- VINYL FLOOR TILES

NOTE:

ALL HAZARDOUS MATERIALS MAY NOT BE DEPICTED ON THE DRAWING. REFER TO THE CORRESPONDING REPORT FOR ADDITIONAL INFORMATION.

LEGEND ITEMS ARE DEPENDENT ON COLOR, PRINTING IN GREY-SCALE MAY CHANGE DRAWING INTERPRETATION

BASE DRAWING PROVIDED BY CLIENT.

LIMITED DESIGNATED SUBSTANCES SURVEY

SITE LOCATION:
25 LAURELCREST STREET
BRAMPTON, ONTARIO

FLOOR/AREA:
GROUND FLOOR

DATE:	PROJECT #:
MAY 12, 2020	9379
DRAWN BY: MS	**DRAWING #:** 1
SCALE: NOT TO SCALE	

APPENDIX B

SELECTED PHOTOGRAPHS

	
Photo 1: View of the asbestos containing 12”x12” light brown vinyl floor tiles (see arrow) observed in Room 138.	**Photo 2: View of the non-asbestos containing concrete block mortar (see arrow) observed in Room 138.**
	
Photo 3: View of the non-asbestos containing mortar (see arrow) observed on beige tiles within Room 122.	**Photo 4: View of the non-asbestos containing mortar (see arrow) observed on terracotta tiles within Room 122.**

APPENDIX C

LABORATORY CERTIFICATE OF ANALYSIS

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Patrick Moullas
S2S Environmental Inc.
1099 Kingston Road, Suite 260
Pickering, Ontario
L1V 1B5

EMC LAB REPORT NUMBER: A57889
Job/Project Name: DSS ÉEC Sainte Jeanne d'Arc
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Apr 3/20 **Date Analyzed:** Apr 8/20
Analyst: Jon Delos Santos, *Laboratory Supervisor*

Job No: PN20-9379.02.01
Number of Samples: 15
Date Reported: Apr 9/20

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
CON-01a	A57889-1	Concrete block (masonry unit)	Grey, cementitious material	**ND**			100
CON-01b	A57889-2	Concrete block (masonry unit)	Grey, cementitious material	**ND**			100
CON-01c	A57889-3	Concrete block (masonry unit)	Grey, cementitious material	**ND**			100
MAS-01a	A57889-4	Baseboard mastic	Yellow, mastic	**ND**			100
MAS-01b	A57889-5	Baseboard mastic	Yellow, mastic	**ND**			100
MAS-01c	A57889-6	Baseboard mastic	Yellow, mastic	**ND**			100
MOR-01a	A57889-7	Mortar associated with CMM	Grey, cementitious material	**ND**			100
MOR-01b	A57889-8	Mortar associated with CMM	Grey, cementitious material	**ND**			100
MOR-01c	A57889-9	Mortar associated with CMM	Grey, cementitious material	**ND**			100
MOR-02a	A57889-10	White mortar/grout associated with urinal ceramic tiles	Grey, cementitious material	**ND**			100
MOR-02b	A57889-11	White mortar/grout associated with urinal ceramic tiles	Grey, cementitious material	**ND**			100
MOR-02c	A57889-12	White mortar/grout associated with urinal ceramic tiles	Grey, cementitious material	**ND**			100
MOR-03a	A57889-13	Pink/orange mortar/grout associated with terracotta	Grey, cementitious material	**ND**			100

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A57889
Client's Job/Project Name/No.: PN20-9379.02.01
Analyst: Jon Delos Santos, *Laboratory Supervisor*

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
MOR-03b	A57889-14	Pink/orange mortar/grout associated with terracotta	Grey, cementitious material	**ND**			100
MOR-03c	A57889-15	Pink/orange mortar/grout associated with terracotta	Grey, cementitious material	**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).
3. 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.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.