



**2022 RE-ASSESSMENT SURVEY
FOR ASBESTOS - CONTAINING MATERIALS**

**THE STERLING HALL SCHOOL
99 CARTWRIGHT AVENUE
TORONTO, ONTARIO**



Prepared for:

Mr. Stephen Hardy
Director of Finance

The Sterling Hall School
99 Cartwright Avenue
Toronto, Ontario
M6A 1V4

Prepared by:

Danson Environmental Inc.
415 The Westway, P.O. Box 12506
Toronto, Ontario
M9R 4C7

Date Issued: February 20, 2022

DEI Project Number: 21311

Danson Environmental Inc.
Environmental Consulting Services
415 The Westway, P.O. Box 12506, Toronto, Ontario, M9R 4C7
Tel. (647) 500-6051 E-mail: info@dansonenv.com Web: dansonenv.com



CONTENTS

1.0 INTRODUCTION	1
2.0 BACKGROUND.....	2
3.0 ONTARIO REGULATIONS FOR ASBESTOS IN BUILDING MATERIALS	2
4.0 METHODOLOGY	2
5.0 ASSESSMENT OF ASBESTOS-CONTAINING MATERIALS	3
6.0 FINDINGS	4
THERMAL SYSTEMS INSULATION (TSI).....	4
<i>Pipe Insulation</i>	4
CEILING TILES	4
VINYL FLOOR TILES	4
VINYL SHEET FLOORING	5
DRYWALL JOINT COMPOUND.....	5
OTHER.....	5
7.0 CONCLUSION AND RECOMMENDATIONS	6
8.0 LIMITATIONS	8

Appendix I – Site Photographs

Appendix II – Floor Plans



February 20, 2022

The Sterling Hall School

99 Cartwright Avenue
Toronto, Ontario
M6A 1V4

Attention: Mr. Stephen Hardy
Director of Finance

RE: Asbestos Reassessment Survey - 2022
99 Cartwright Avenue, Toronto, Ontario

1.0 INTRODUCTION

At the request of Mr. Stephen Hardy, Director of Finance with The Sterling Hall School, Danson Environmental Inc. (DEI) conducted an asbestos reassessment survey within the The Sterling Hall School located at 99 Cartwright Avenue, Toronto, Ontario, based on the previous asbestos assessment report titled "*Asbestos Survey, Central Services Region Toronto District School Board, 99 Cartwright Avenue, Toronto, Ontario*" conducted by ECOH Environmental, dated July 2012. The re-assessment survey was conducted on February 18th, 2022. Mr. Stephen Hardy was present during the survey to provide assistance and direction.

The objective of this study is to assess the condition of building materials known to contain asbestos, a Designated Substance as defined under the Ontario Occupational Health and Safety Act. The survey included a review of all accessible areas for the condition of known asbestos containing materials (ACM). Asbestos materials re-assessed were assigned a Priority rating. Materials assigned a Priority 1 are highly recommended to be removed, repaired or encapsulated. Materials identified as Priority 2 are materials that may remain in place until system upgrading, renovations or activities that may disturb ACM and, materials assigned a Priority 3 are materials that may remain in place until the building is demolished. Additionally, confirmatory asbestos bulk sampling of various building materials was also collected during the survey, as requested by the client.

The subject educational property comprises of; structural steel and concrete, exterior brick cladding, gas boilers, built-up roof, with vinyl flooring, ceramic and carpeting floor finishes, drywall, plaster and concrete block interior wall and ceiling finishes, and lay-in ceiling tiles.

2.0 BACKGROUND

Asbestos is a general name for several varieties of highly fibrous silicate minerals. Commercially significant types include *Chrysotile*, *Amosite* and *Crocidolite*. The fibres are valued for their heat- and chemical-resistant properties. The combination of fibrous structures, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and its effectiveness as a reinforcing or binding agent when combined with cement or plastic, made it popular for wide industrial use.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of an asbestos-containing material is a measure of the ease with which the material can be ground or pulverized. Knowledge of the friability of an ACM may theoretically measure the ease with which fibres can be released into the air.

This report briefly explains the survey methodology and summarizes its findings. Areas of concern are identified in the building. The physical condition of asbestos-containing material was noted to determine, if any, hazard is present. This survey satisfies requirements of Ontario Regulation 278/05 - Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations.

3.0 ONTARIO REGULATIONS FOR ASBESTOS IN BUILDING MATERIALS

Asbestos is a Designated Substance and, as such, exposure to airborne asbestos is regulated by Ontario Regulation 278/05 – *Asbestos on Construction Projects and in Buildings and Repair Operations* and, Ontario Regulation 279/05 – *Designated Substance – Asbestos* – both made under the Occupational Health and Safety Act.

Waste management of materials that contain asbestos is regulated by Ontario Regulation 347/90 as amended, made under the Environmental Protection Act. Section 17 of this regulation outlines the requirements for proper handling, transportation and disposal of materials that contain asbestos.

4.0 METHODOLOGY

The re-assessment survey was a visual inspection to assess the condition of the known asbestos containing materials previously identified within report titled “*Asbestos Assessment, Starlight Investments, 99 Cartwright Avenue, Toronto, Ontario*” conducted by Pinchin Environmental, dated February 1, 2013. No destructive testing was performed. Inaccessible spaces within the building were not inspected.

Additional confirmatory bulk sampling of suspected materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05 – made under the Occupational Health and Safety Act.

NOTES:

This investigation was conducted in accordance with of Ontario Regulation 278/05, *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations*.

It should be noted that the following materials may have not been sampled (if present on site) as destructive sampling would be required to access them: internal components of boilers, fire doors, elevator brakes, caulking, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, and underground services or piping. All of these materials should be considered to contain asbestos until proven otherwise.

5.0 ASSESSMENT OF ASBESTOS-CONTAINING MATERIALS

An assessment of the asbestos containing materials was made of the relative possibility of fibre release into the air because of a combination of condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

Priority 1 (One)

- Asbestos-containing material recommended to be removed, repaired or encapsulated.

Priority 2 (Two)

- Asbestos-containing materials could remain in place until system upgrading, renovations or activities that may disturb the ACM.

Priority 3 (Three)

- Asbestos-containing material could remain in place until eventual building demolition.

6.0 FINDINGS

The following previously identified asbestos-containing building materials were assessed based on their presence and condition.

Thermal Systems Insulation (TSI)

Pipe Insulation

As indicated in the previous survey report, mechanical pipe straight insulation identified within the entrance to the Basement Boiler Room was sampled and found to contain **60% Chrysotile** asbestos. The pipe insulation identified was observed in Good condition and thus assigned as **Priority 2**.

As indicated in the previous survey report, mechanical pipe fitting insulation identified within the entrance to the Basement Boiler Room was sampled and found to contain **70% Chrysotile** asbestos. The pipe fitting insulation identified was observed in Good condition and thus assigned as **Priority 2**.

Please note, asbestos-containing mechanical insulations may exist within closed wall and ceiling cavities not accessible at the time of the assessment.

Ceiling Tiles

As indicated in the previous survey report, 2x4 random large horizontal fissure w/ pinhole ceiling tiles identified within the Main Office area were sampled and found to contain **3% Chrysotile** asbestos. The ceiling tiles identified were observed in Good condition and thus assigned as **Priority 2**.

Please note, 2x4 random large horizontal fissure w/ pinhole ceiling tiles were removed from Office Room (68927) and Washroom (119671) and replaced with new non-asbestos ceiling tiles.

Vinyl Floor Tiles

As indicated in the previous survey report, vinyl floor tiles identified within select locations of the school are deemed “presumed” to contain asbestos until sampling proves otherwise. The vinyl floor tiles identified were observed in Good condition and thus assigned as **Priority 2**.

As indicated in the previous DEI Asbestos Bulk Sample Report dated March 2013, 12x12 beige vinyl floor tiles identified within the Gym Equipment Room were sampled and found to contain **2% Chrysotile** asbestos. The vinyl floor tiles identified were observed in Good condition and thus assigned as **Priority 2**.

Additional bulk samples of suspect 12x12 white vinyl floor tiles observed within the Main Level Corridor (119672) were collected during the November 2018 re-assessment and analyzed for asbestos content using the PLM method of detection. The samples were found “None Detected” for asbestos.

Vinyl Sheet Flooring

As indicated in the previous survey report, vinyl sheet flooring identified within select locations of the school is deemed “presumed” to contain asbestos until sampling proves otherwise. The vinyl sheet flooring identified were observed in Good condition and thus assigned as **Priority 2**.

Drywall Joint Compound

As indicated in the previous survey report, drywall joint compound to drywall finishes identified within select locations of the school is deemed “presumed” to contain asbestos until sampling proves otherwise. The drywall joint compound to drywall finishes identified were observed in Good condition and thus assigned as **Priority 2**.

As indicated in the previous DEI Asbestos Bulk Sample Report dated March 2013, drywall joint compound to drywall finishes identified within the Gymnasium and Gym Equipment Room was sampled and found “None Detected” for asbestos.

Other

As indicated in the previous survey report, firedoor core insulation identified within the Basement Boiler Room is deemed “presumed” to contain asbestos until sampling proves otherwise. The firedoor identified was observed in Good condition and thus assigned as **Priority 2**.

As indicated in the previous survey report, Bell & Spigot joints identified to drain lines within the Basement area is deemed “presumed” to contain asbestos until sampling proves otherwise. The Bell & Spigot joints identified were observed in Good condition and thus assigned as **Priority 2**.

As indicated in the previous survey report, interior/exterior window glazing identified within the Main Office area is deemed “presumed” to contain asbestos until sampling proves otherwise. The window glazing identified was observed in Good condition and thus assigned as **Priority 2**.

Building material(s), not accessible during the time of the survey, that are uncovered during renovation/demolition activities and suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

7.0 CONCLUSION AND RECOMMENDATIONS

Based on the investigation conducted by DEI, through available records, interviews and a site review, the following Table indicates all asbestos containing materials that were identified and the associated Priority number assigned to each:

TABLE II
Summary of Asbestos Containing Materials
The Sterling Hall School
99 Cartwright Ave., Toronto, Ontario

Location Description	Material	Quantity	Priority	Type(s) of Asbestos	Friable (Y/N)	Photograph
Basement Area (Boiler Room and Entrance area)	Pipe Straight Insulation	35 Lnft	2	<i>Chrysotile</i>	Y	1
	Pipe Fitting Insulation	10 units	2	<i>Chrysotile</i>	Y	2
	Firedoor (Internal insulation)	1 unit	2	<i>Presumed</i>	Semi	-
	Bell & Spigot Joints	10 units	2	<i>Presumed</i>	Semi	-
Gymnasium Storage Room	12x12 Beige Vinyl Floor Tile	85 sqft	2	<i>Chrysotile</i>	N	3
Main Office Area	2x4 Random Large Horizontal Fissure w/ Pinhole Ceiling Tiles	550 sqft	2	<i>Chrysotile</i>	Semi	4
	Interior/Exterior Window Glazing	8 units	2	<i>Chrysotile</i>	N	-
Throughout (select locations)	Drywall Joint Compound to Drywall Finishes	~30,000 sqft	2	<i>Presumed</i>	Semi	-
	Vinyl Floor Tile	~8,000 sqft	2	<i>Presumed</i>	N	-
	Vinyl Sheet Flooring	~3,000 sqft	2	<i>Presumed</i>	Y	-
Exterior Roof	Roofing Membrane and Shingles	~48,000 sqft	2	<i>Presumed</i>	Semi	-

Notes: N/D=Not Determined

Asbestos-containing materials in Poor condition (Priority 1) must be removed and/or repaired immediately following applicable asbestos abatement procedures. Asbestos-containing materials in Good condition (Priority 2) can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material.

In the event friable asbestos containing materials are removed, Type 3 operations apply as outlined in Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations – made under the Ontario Occupational Health and Safety Act. Type 2 operations can be applied for the repair of friable materials or, removal of less than 1 square metre of friable asbestos containing materials. In addition, Type 2 Glove Bag operations can be applied for the removal of asbestos containing mechanical pipe insulation fittings as outlined in Ontario Regulation 278/05.

In the event non-friable asbestos containing materials are removed, Type 1 operations apply (provided that the material is wetted down and removed using non-powered hand held tools) as outlined in Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations – made under the Ontario Occupational Health and Safety Act.

Removal of asbestos-containing drywall joint compound on drywall below 1 square metre in size, Type 1 operations apply. Removal of asbestos-containing drywall joint compound on drywall above 1 square metre in size must be conducted following Type 2 operations as outlined in Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations – made under the Ontario Occupational Health and Safety Act.

Removal of asbestos-containing suspended ceiling tiles below 7.5 square metres, Type 1 operations apply. Removal of asbestos-containing suspended ceiling tiles above 7.5 square metres must be conducted following Type 2 operations as outlined in Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations – made under the Ontario Occupational Health and Safety Act.

Asbestos removal work should be performed by a competent and qualified asbestos abatement contractor. It is recommended that all asbestos related work be subjected to inspection and air monitoring to ensure building occupants are safe from exposure.

Asbestos abatement work must be performed as outlined in Ontario Regulation 278/05. Asbestos-containing waste must be handled and disposed of according to Ontario Regulation 347, amended to O. Reg. 217/08 - General - Waste Management.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities that are suspected to contain asbestos should be properly assessed by qualified person prior to their disturbance, otherwise should be assumed to contain asbestos.

Regulation 278/05 requires regular inspections, at least annually, of all areas identified as having asbestos-containing materials. Any damaged or exposed items noted should be repaired or removed under the Operations and Maintenance program of the building's Asbestos Management Plan.

8.0 LIMITATIONS

The investigations, assessments and recommendations detailed in this report were carried out in a manner consistent with the level of care and skill normally exercised by reasonable members of the environmental and industrial hygiene consulting profession currently practicing under similar conditions in the area. There are no other warranties, expressed or implied, that apply to the professional services provided under the terms of our assignment and included in this report.

In preparing this report, Danson Environmental Inc. (DEI) may have relied on information supplied by others, including test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly set out in this report, we have not made any independent verification of such information.

The investigation, assessments and recommendations in this report have been made in the context of existing industry accepted guidelines which were in place at the date of this report. The investigation did not take into account any government regulations not in effect or not generally promulgated at the date of this report.

The collection of samples at the Site was consistent with the scope of work agreed-upon with the person or entity to whom this report is addressed and the information obtained concerning prior site investigations. As conditions between samples may vary, the potential remains for the presence of unknown additional contaminants for which there were no indicators.

This report is for the sole use of the person or entity to whom it is addressed. No other person or entity is entitled to use or rely upon this report without the express written consent of DEI and the person or entity to who it is addressed.

If you have any queries concerning this report or require further information, please feel free to contact the undersigned at any time

Sincerely,

DANSON ENVIRONMENTAL INC.



Daniel D'Aloisio, B.Sc., A.M.R.T
Senior Project Manager

APPENDIX I
SITE PHOTOGRAPHS



Photograph 01: View of mechanical pipe straight insulation identified within the entrance to the Basement Boiler Room found to contain **60% Chrysotile** asbestos. The pipe insulation identified was observed in Good condition and thus assigned as **Priority 2**.



Photograph 02: View of mechanical pipe fitting insulation identified within the entrance to the Basement Boiler Room found to contain **70% Chrysotile** asbestos. The pipe fitting insulation identified was observed in Good condition and thus assigned as **Priority 2**.

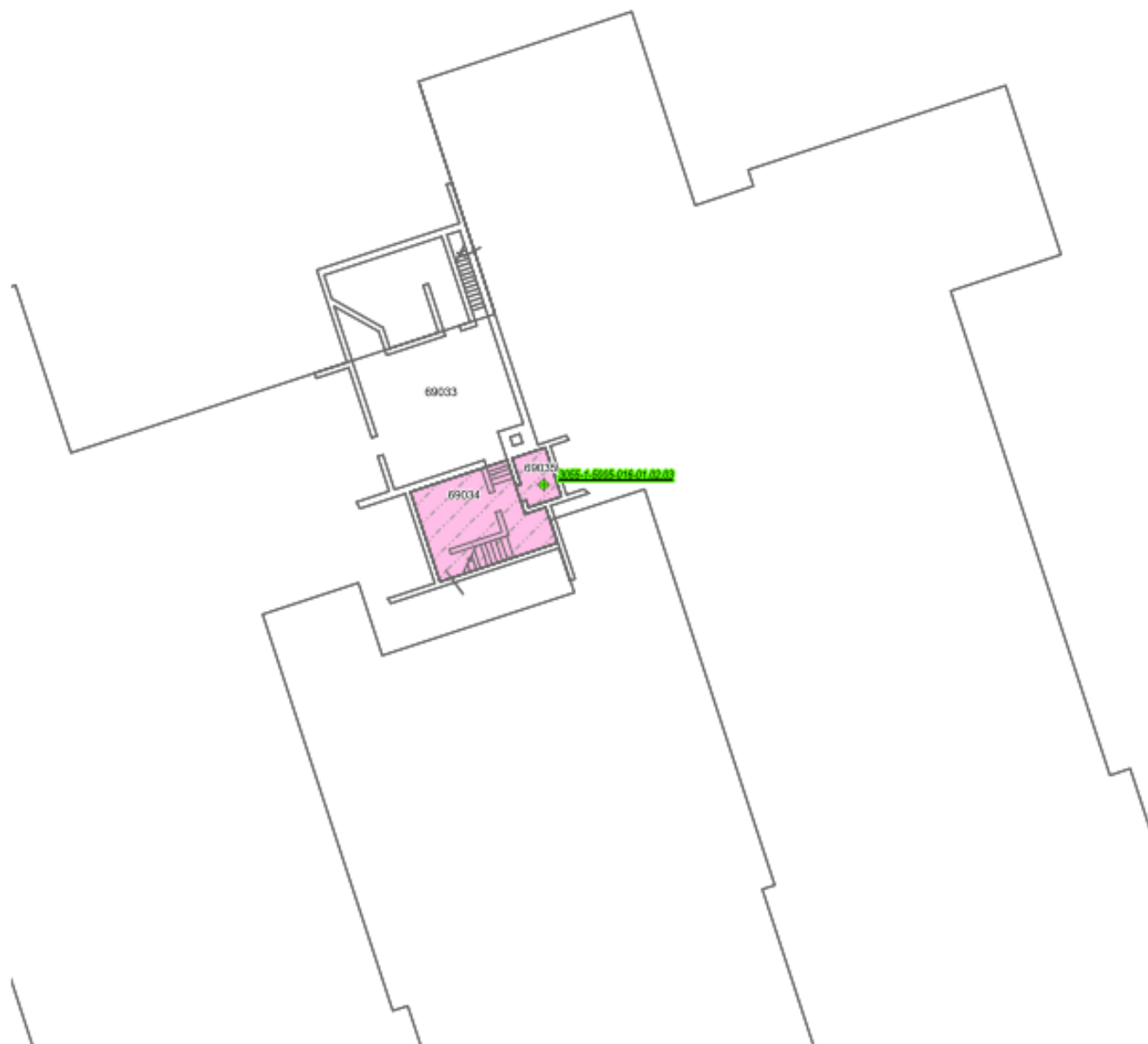


Photograph 03: View of 12x12 beige vinyl floor tiles identified within the Gym Equipment Room found to contain **2% *Chrysotile*** asbestos. The vinyl floor tiles identified were observed in Good condition and thus assigned as **Priority 2**.



Photograph 04: View of 2x4 random large horizontal fissure w/ pinhole ceiling tiles identified within the Main Office area found to contain **3% *Chrysotile*** asbestos. The ceiling tiles identified were observed in Good condition and thus assigned as **Priority 2**.

**APPENDIX II
FLOOR PLANS**



Legend



Pipe Insulation

Project:
Asbestos Reassessment
Project

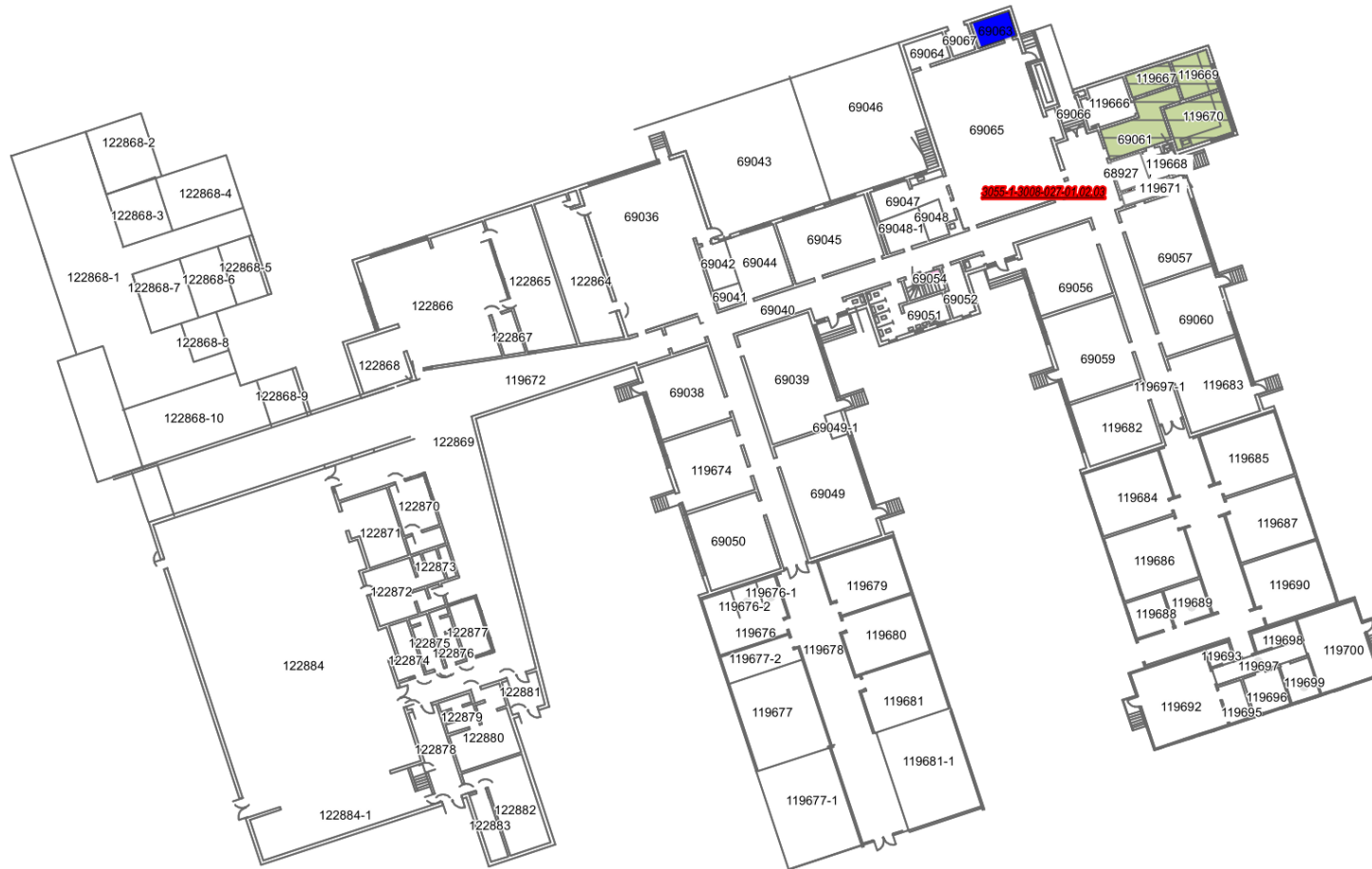
Location:
The Sterling Hall School
99 Cartwright Avenue
Toronto, Ontario

Floor:
Basement

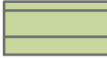
Project No.: 21311
Date: February 20, 2022



415 The Westway
P.O. Box 12506
Toronto, Ontario, M9R 4C7
Web: dansonenv.com



Legend

-  Ceiling Tiles
-  Pipe Insulation
-  Confirmed ACM Vinyl Floor Tile

Project:
Asbestos Reassessment
Project

Location:
The Sterling Hall School
99 Cartwright Avenue
Toronto, Ontario

Floor:
Ground Floor

Project No.: 21311
Date: February 20, 2022



415 The Westway
P.O. Box 12506
Toronto, Ontario, M9R 4C7
Web: dansonenv.com