



ENGINEERING



LABORATORY



DESIGNATED SUBSTANCES SURVEY



**GORD AND IRENE RISK
COMMUNITY CENTRE
2650 FINCH AVENUE WEST
TORONTO, ONTARIO**

400 Esna Park Drive, Unit 15
Markham, ON
L3R 3K2

Tel: (905) 475-7755
Fax: (905) 475-7718
www.fisherenvironmental.com

Project No. FE-P 21-11201

June 2, 2021

Table of Contents

1.0. EXECUTIVE SUMMARY	1
2.0. INTRODUCTION	3
3.0. REGULATIONS	3
4.0. METHODOLOGY	3
5.0. REVIEW OF PREVIOUS REPORTS	5
6.0. FINDINGS AND RECOMMENDATIONS	5
6.1. ACRYLONITRILE	5
6.2. ARSENIC	5
6.3. ASBESTOS	5
6.3.1. <i>General Information</i>	5
6.3.2. <i>Friable vs. Non-Friable ACM</i>	6
6.3.3. <i>Regulations</i>	6
6.3.4. <i>Findings</i>	7
6.3.4.1. <i>Sprayed or Troweled Fireproofing and Thermal Insulation</i>	7
6.3.4.2. <i>Mechanical Insulation</i>	8
6.3.4.3. <i>Plaster</i>	8
6.3.4.4. <i>Drywall Joint Compound</i>	8
6.3.4.5. <i>Texture Finishes</i>	8
6.3.4.6. <i>Acoustic Ceiling Tile</i>	8
6.3.4.7. <i>Asbestos Cement Products</i>	8
6.3.4.8. <i>Vinyl Tile or Vinyl Sheet Flooring</i>	8
6.3.4.9. <i>Other ACMs</i>	8
6.3.5. <i>Recommendations</i>	10
6.4. BENZENE	11
6.5. COKE OVEN EMISSIONS	11
6.6. ETHYLENE OXIDES	11
6.7. ISOCYANATES.....	11
6.8. LEAD	11
6.8.1. <i>General Information</i>	11
6.8.2. <i>Regulations and Guidelines</i>	12
6.8.3. <i>Findings</i>	12



6.8.4. Recommendations.....	12
6.9. MERCURY	13
6.10. SILICA	13
6.10.1. General Information	13
6.10.2. Regulations.....	13
6.10.3. Findings.....	14
6.10.4. Recommendations.....	14
6.11. VINYL CHLORIDE	14
6.12. MOULD.....	14
7.0. LIMITATIONS	15
APPENDIX A – RESULTS OF SAMPLING AND ANALYSIS.....	A
APPENDIX B – SITE PLANS	B
APPENDIX C – CERTIFICATE OF ANALYSIS	C
APPENDIX D – SITE PHOTOGRAPH.....	D



1.0. EXECUTIVE SUMMARY

Fisher Environmental Ltd. ('Fisher') was retained by the City of Toronto Parks, Forestry and Recreation Division to carry out a Pre-Construction Designated Substances Survey (DSS) including Mould Assessment, for the Gord and Irene Risk Community Centre located at 2650 Finch Avenue West, Toronto, Ontario (herein after referred to as the "Site").

The planned scope of work and construction activity locations were outlined on drawings provided by the City of Toronto Parks and Recreation Request for Quotation 20087740 document, provided on April 9, 2021. The scope of the DSS was to identify locations and types of designated substances within the building, and to provide recommendations for the safe handling or abatement of these materials prior to construction. The site inspection and sampling works were conducted on May 18, 2021.

The survey consisted of a review of existing environmental reports (where available), visual inspection for designated substances, sampling of materials suspected to contain designated substances, particularly asbestos and lead, for analysis, and preparation of a report.

A summary of the findings from the survey and assessment is presented below:

Asbestos

Seventy five (75) bulk samples were collected for asbestos analysis. Based on the results of analysis, all materials sampled were not asbestos containing, except for asbestos-containing black putty along the joints of the glass and the skylight frames in Construction Area 5. At the time of the survey, this material was observed to be in good condition. If the planned construction activities require the disturbance or removal of the asbestos-containing black putty, Type 1 asbestos abatement procedures, as outlined in O. Reg. 278/05, must be followed.

Lead

Nine (9) bulk paint samples were collected for lead analysis. Based on the results of analysis, concentrations of lead are either below the reporting limit or well below the action limit. Therefore, there is no need for any lead abatement procedures.

Silica

Crystalline silica is a constituent of all concrete and masonry products. Since the scope of work includes the removal of block walls, silica precautions must be taken during these construction activities. Construction activities that will generate silica-containing dust shall be carried out in accordance with the following: MOL *Guideline: Silica on Construction Projects, 2011*; Designated Substances, O. Reg. 490/09; and Construction Projects, O. Reg. 213/91.



Other Designated Substances

The other designated substances (acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates, mercury and vinyl chloride) would not be expected to be present at the Site and were not observed during the current survey. No recommendations are warranted with regard to these other designated substances.

Mould

During the current assessment, no visible mould or favourable conditions for mould growth were observed within the scope of work areas. No action is recommended with regard to mould.



2.0. INTRODUCTION

Fisher Environmental Ltd. ('Fisher') was retained by the City of Toronto Parks, Forestry and Recreation Division to carry out a Pre-Construction Designated Substances Survey (DSS) including Mould Assessment, for the Gord and Irene Risk Community Centre located at 2650 Finch Avenue West, Toronto, Ontario (herein after referred to as the "Site").

The planned scope of work and construction activity locations were outlined on drawings provided by the City of Toronto Parks and Recreation Request for Quotation 20087740 document, provided on April 9, 2021. The scope of the DSS was to identify locations and types of designated substances within the building, and to provide recommendations for the safe handling or abatement of these materials prior to construction. The site inspection and sampling works were conducted on May 18, 2021.

3.0. REGULATIONS

The survey was conducted in compliance with the Ontario Ministry of Labour (MOL) regulations for Designated Substances; Ontario Regulation 490/09 - *Designated Substances* (O. Reg. 490/09) and Ontario Regulation 278/05 - *Asbestos on Construction Projects and in Buildings and Repair Operations* (O. Reg. 278/05) made under the Occupational Health and Safety Act (OHSA), R.S.O. 1990.

In addition to the OHSA and regulations regarding designated substances, the following regulations, guidelines and standards were also taken into account or referenced:

- O. Reg. 213/91 - *Construction Projects* regulated under the OHSA and last amended by O. Reg. 443/09;
- O. Reg. 558/00 made under the Ministry of Environment - Environmental Protection Act, amending O. Reg. 347 - *General Waste Management*;
- The Transport of Dangerous Goods Act provides regulations for the transport of asbestos-containing materials and wastes;
- MOL *Guideline: Lead on Construction Projects*, 2011; and,
- MOL *Guideline: Silica on Construction Projects*, 2011.

4.0. METHODOLOGY

Fisher followed the protocols outlined in O. Reg. 278/05 for collecting and analyzing bulk samples of materials suspected to contain asbestos. Visual assessment of the material was the primary method of identification with occasional physical contact for the purpose of collecting bulk samples or examining for underlying layers.



Representative bulk samples were collected of materials suspected of containing asbestos or lead. The tools used to collect the bulk samples were cleaned after each sample was collected to avoid cross contamination. Samples were placed in plastic sealable containers, marked with a unique sample number and transported to an independent accredited laboratory for analysis.

Where applicable, samples of suspect materials were collected in order to establish asbestos or lead content. Samples were grouped according to similarity of appearance (“homogeneous” materials). The frequency at which the samples were collected was sufficient to obtain a general representation of the presence of these materials at the Site. Samples collected are presumed to be representative of respective building materials in-place at the Site. However, due to potential past renovations, alterations, repairs, or phases of construction, it is possible that individual materials may not be representative of samples collected.

Fisher retained the service of “2626371 Ontario Inc.” company to perform intrusive assessments of the roofing materials. The assessment was conducted by performing test cutting of the roof using non-powered hand tools. Approximately 6”x 6” openings were made using utility knives, chisels, and hammers. Following the removal of the roof core, an assessment was conducted of each layer that constitutes the roof system.

Representative bulk samples were collected of materials suspected of containing asbestos. A composite sample was collected at each sample location. The tools used to collect the bulk samples were cleaned after each sample was collected to avoid cross contamination. Samples were placed in plastic sealable containers, marked with a unique sample number and transported to an independent accredited laboratory for analysis.

Sampling of materials found within operating equipment, portable building articles, or generally non-accessible components such as insulation within electrical switch gears, wiring, motors, light fixtures, gaskets, fire door cores, etc. was not performed as part of the current survey.

Samples collected during the assessment were placed in plastic zip-lock bags which were labeled and submitted for laboratory analysis. Fisher Environmental Laboratories analyzed bulk samples for asbestos type and approximate percent content by performing polarized light microscopy (PLM), as outlined in NIOSH Method 9002. Lead content analysis was performed by Fisher Laboratories by performing acid digestion of samples followed by inductively coupled plasma (ICP) analysis, as outlined in NIOSH Method 7303.

The summary of the bulk sample results for asbestos and lead is presented in Appendix A. Site Plans showing locations of bulk sampling are included in Appendix B. The laboratory analysis reports are included in Appendix C; and site photographs are included in Appendix D.



5.0. REVIEW OF PREVIOUS REPORTS

As part of the recent assessment, Fisher also reviewed the following reports for this Site.

- Designated Substance Survey, 2650 Finch Avenue West, Toronto, completed by CCI Group Inc., Project No. 135121, dated April 28, 2014;
- Reassessment Survey of Asbestos-Containing Building Materials, 2650 Finch Avenue West, completed by City of Toronto, PF & R Management Services, dated May 2019
- Asbestos Bulk Sampling Results, 2650 Finch Avenue West, Toronto, completed by Pinchin Ltd., File: 291815.000, dated April 16, 2021 (included in Appendix C).

The findings from the previous report were discussed in Section 6.0 of this report.

6.0. FINDINGS AND RECOMMENDATIONS

6.1. *Acrylonitrile*

Acrylonitrile would not be expected to be present at the Site and was not observed during the current survey. No recommendations for acrylonitrile are warranted at this time.

6.2. *Arsenic*

Arsenic would not be expected to be present at the Site and was not observed during the current survey. No recommendations for arsenic are warranted at this time.

6.3. *Asbestos*

6.3.1. General Information

Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of *tremolite*, *actinolite* and *anthophyllite*) that occur naturally in the environment. Asbestos minerals have separable long fibres that are strong and flexible enough to be spun and woven and are heat resistant.

Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings. Some vermiculite or talc products may also contain asbestos.

Asbestos fibres may be released into the air by the disturbance of asbestos-containing material (ACM) during product use, demolition work, building or home maintenance, repair and remodeling. In general, exposure may occur only when the ACM is disturbed in some way to release particles and fibres into the air.



6.3.2. Friable vs. Non-Friable ACM

Based on the requirements of O. Reg. 278/05 and due diligence, an asbestos survey and report must be available at any workplace where asbestos exists identifying locations and types of ACM in the building. The survey must include both friable and non-friable materials confirmed to contain asbestos, as well as any other materials which were not sampled but are suspected (presumed) ACM. The term friable refers to material(s) that could be readily reduced to dust or powder when crushed by hand or moderate pressure. Friable materials have a much greater chance of releasing airborne asbestos fibres when disturbed.

In the past, the most commonly used friable asbestos-containing building materials were surfacing materials (e.g. sprayed on fireproofing, texture, decorative or acoustic plaster) as well as thermal insulation. Examples of manufactured ACM include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement (transite) pipes or boards, and asbestos textiles. Depending on the above noted formulation, these materials range from non-friable to friable. Although some products are considered non-friable when in Good condition, severe damage or deterioration may cause non-friable materials to generate airborne dust more readily. Severely damaged non-friable materials, or those to be worked on with powered tools, may be considered as friable ACM for abatement purposes. Examples of common types of ACM by friability include:

- Friable ACM
 - Sprayed Materials (or materials installed by roller or trowel), such as fireproofing, thermal insulation, texture finishes, etc.
 - Mechanical Insulation such as boiler and breeching, ductwork, piping, tanks and associated equipment.
 - Plaster
- Potentially Friable ACM
 - Acoustic Ceiling Tiles
 - Vinyl Sheet Flooring
- Non-Friable ACM
 - Vinyl Floor Tiles
 - Asbestos cement (“transite”) piping or paneling
 - Window Caulking.

6.3.3. Regulations

Exposure to asbestos is controlled by regulations passed under Ontario’s OHS, R.R.O. 1990.

- O. Reg. 490/09 – *Designated Substances* regarding asbestos applies to:



- every employer operating a mine for the purpose of mining, crushing, grinding or sifting asbestos;
- every employer processing, adapting or using asbestos in connection with manufacturing or assembling of goods or products;
- every employer engaged in the repair, alteration or maintenance of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles;
- every employer engaged in work on a building that is necessarily incidental to the repair, alteration or maintenance of machinery or equipment; and,
- to those workers of such employers who are likely to be exposed to asbestos.

Exposure limits for this substance are set at 0.1 f/cc (TWA) for all types of asbestos.

- O. Reg. 278/05 - *Asbestos on Construction Projects and in Buildings and Repair Operations* applies to buildings that contain friable and non-friable ACM and to the repair, alteration and / or maintenance of these buildings.

In addition to regulations for controlling work around asbestos-containing building materials there are regulations for packaging, transportation and disposal of asbestos-containing waste:

- O. Reg. 558/00 made under the Ministry of Environment - Environmental Protection Act, amending O. Reg. 347 - *General Waste Management*; and,
- The Transport of Dangerous Goods Act provides regulations for the transport of asbestos-containing materials and wastes.

6.3.4. Findings

During the investigation, seventy five (75) bulk samples were collected within the scope of work areas. Note that Constuction Area 7 was inspected during the survey, however no building materials suspected to contain asbestos was observed. ACM evaluated by the survey were represented by the items and materials listed in Sections 6.3.4.1. through 6.3.4.9.

6.3.4.1. Sprayed or Troweled Fireproofing and Thermal Insulation

Sprayed or troweled fireproofing insulation was not observed within the scope of work areas.

Vermiculite as Thermal Insulation

Pinchin Ltd. attended the site on April 13, when is was reported that a suspect material was observed to be coming from cracks in the wall of Construction Area 6. Three (3) samples of the Vermiculite material were collected from the floor in this area (S0001A-C) and submitted for analysis. The results of analysis determined that this material does not contain asbestos.

Upon request from the Client, during the current survey, additional holes were drilled into the Construction Area 6 wall cavity to collect additional Vermiculite samples. Three (3) samples (21-6558-61 to 63) of the vermiculite material, was collected and submitted for analysis. The results of analysis revealed that the vermiculite does not contain asbestos.



6.3.4.2. Mechanical Insulation

Mechanical insulation observed within the scope of work areas are either not insulated or are insulated with fibreglass, which is not suspected to contain asbestos.

6.3.4.3. Plaster

Plaster was not observed within the scope of work areas.

6.3.4.4. Drywall Joint Compound

Drywall Joint Compound (DJC) was observed on the walls, bulkheads, and ceilings within the scope of work areas. Five (5) sample sets, Construction Area 1 (21-6558-4 to 6), Construction Area 3 (21-6558-25 to 27), Construction Area 5 (21-6558-34 to 36), Construction Area 6 (21-6558-58 to 60), and Construction Area 8 (21-6558-70 to 72), were collected and submitted for analysis. The results of analysis revealed that DJC does not contain asbestos.

6.3.4.5. Texture Finishes

Texture finish was observed on the soffit in Construction Area 4. Three (3) samples (21-6558-28 to 30) of the texture finish, was collected and submitted for analysis. The results of analysis revealed that texture finish does not contain asbestos.

6.3.4.6. Acoustic Ceiling Tile

Two (2) distinct styles of acoustic ceiling tiles were observed within the scope of work areas.

Ceiling Tile 3 (2'x4' Pinhole, Round Fissure) was observed in the Tiny Tots Room of Construction Area 6. This material was sampled during the previous survey (P & R, May 2019). The previous report confirmed that Ceiling Tile 3 does not contain asbestos.

Ceiling Tile 2 (2'x4', with Embossed Squares) was observed in the Bocce Lounge of Construction Area 1. Three (3) samples (21-6558-1 to 3) were collected and submitted for analysis. The results of analysis revealed that Ceiling Tile 2 does not contain asbestos.

6.3.4.7. Asbestos Cement Products

Asbestos cement products were not observed within the scope of work areas.

6.3.4.8. Vinyl Tile or Vinyl Sheet Flooring

Vinyl tile and vinyl sheet flooring were not observed within the scope of work areas.

6.3.4.9. Other ACMs

Roofing Materials

Flat roofs were observed within the scope of work areas. Three (3) sample sets, Construction Area 1 (21-6558-13 to 15), Construction Area 6 (21-6558-43 to 45), and Construction Area 8 (21-6558-64 to 66), of the roofing materials were collected and submitted for analysis. The results of analysis revealed that the roofing materials do not contain asbestos.



Black Sealant

Black sealant was observed on the screws of the skylight frames on the roof of Construction Area 1. Three (3) samples (21-6558-7 to 9), of the black sealant were collected and submitted for analysis. The results of analysis revealed that this black sealant does not contain asbestos.

Off-White Sealant

Off-white sealant was observed on the frame of the skylight on the roof of Construction Area 1. Three (3) samples (21-6558-10 to 12) of the off-white sealant were collected and submitted for analysis. The results of analysis revealed that this off-white sealant does not contain asbestos.

Black Putty

Black putty was observed along the joints of the glass and the window frames in Construction Area 2. Three (3) samples (21-6558-19 to 21), of the black putty were collected and submitted for analysis. The results of analysis revealed that this black putty does not contain asbestos.

Black putty was observed along the joints of the glass and the skylight frames in Construction Area 5. Three (3) samples (21-6558-37 to 39), of the black putty were collected and submitted for analysis. The results of analysis revealed that this **black putty contains 0.5-5% Chrysotile asbestos**. At the time of the survey, this material was observed to be in good condition.

Black Caulking

Black caulking was observed along the joints of the roof window frame and the block walls in Construction Area 2. Three (3) samples (21-6558-16 to 18), of the black caulking were collected and submitted for analysis. The results of analysis revealed that this black caulking does not contain asbestos.

Black caulking was observed around the skylight frames on the roof of Construction Area 5. Three (3) samples (21-6558-40 to 42), of the black caulking were collected and submitted for analysis. The results of analysis revealed that this black caulking does not contain asbestos.

Brown Caulking

Brown caulking was observed along the joint of the window frame and metal wall in Construction Area 2 and along the joint of the soffit and metal wall in Construction Area 4. Three (3) samples (21-6558-22 to 24), of the brown caulking were collected and submitted for analysis. The results of analysis revealed that the brown caulking does not contain asbestos.

White and Black Caulking

White and Black caulking was observed along flashing joint on the roof of Construction Area 4. Three (3) samples (21-6558-31 to 33), of the white and black caulking were collected and submitted for analysis. The results of analysis revealed that the white and black caulking does not contain asbestos.



Tan Caulking

Tan caulking was observed along the joint of the door frame and the block wall in Construction Area 6. Three (3) samples (21-6558-46 to 48), of the tan caulking were collected and submitted for analysis. The results of analysis revealed that the tan caulking does not contain asbestos.

Light Grey Caulking

Light grey caulking was observed along the joints of the concrete floor in Construction Area 6. Three (3) samples (21-6558-49 to 51), of the light grey caulking were collected and submitted for analysis. The results of analysis revealed that the light grey caulking does not contain asbestos.

White Caulking

White caulking was observed along the joints of the block walls in Construction Area 6. Three (3) samples (21-6558-52 to 54), of the white caulking were collected and submitted for analysis. The results of analysis revealed that this white caulking does not contain asbestos.

White caulking was observed around the duct penetration on the wall of Dressing Room 5 in Construction Area 8. Three (3) samples (21-6558-67 to 69), of the white caulking were collected and submitted for analysis. The results of analysis revealed that this white caulking does not contain asbestos.

White caulking was observed along the roof flashing joints and around the base of vent pipes on the roof of Construction Area 8. Three (3) samples (21-6558-73 to 75), of the white caulking were collected and submitted for analysis. The results of analysis revealed that this white caulking does not contain asbestos.

Cream Mastic

Cream mastic was observed behind the baseboard in Construction Area 6. Three (3) samples (21-6558-55 to 57), of the cream mastic were collected and submitted for analysis. The results of analysis revealed that the cream mastic does not contain asbestos.

6.3.5. Recommendations

Asbestos-containing black putty was revealed along the joints of the glass and the skylight frames in Construction Area 5. At the time of the survey, this material was observed to be in good condition. If the planned construction activities require the disturbance or removal of the asbestos-containing black putty, Type 1 asbestos abatement procedures, as outlined in O. Reg. 278/05, must be followed.

Due to the presence of solid building finishes (i.e., drywall walls and ceilings etc.) in many locations throughout the Site, the full extent of ACM may not be confirmed. Precautions should be taken when dismantling solid wall or ceiling finishes or any other building surfaces which may



conceal potential ACM. Such precautions include, but are not limited to isolation measures and appropriate personal protective equipment.

The presence of ACM should be presumed in locations not accessed during the assessment. Sampling of materials found within operating equipment, roof structure, portable building articles, confined spaces, or generally non-accessible components such as insulation within electrical switch gears, wiring, motors, light fixtures, elevator brakes, fire door cores, and other materials outside of project scope was not performed. Location specific sampling of these materials is recommended prior to disturbance. It is possible that ACM is present at the Site that is not identified in this report. Should additional suspected ACM not outlined in this report be discovered, it should be presumed as ACM until sample analysis determines asbestos content.

6.4. Benzene

Benzene would not be expected to be present at the Site and was not observed during the current survey. No recommendations for benzene are warranted at this time.

6.5. Coke Oven Emissions

Coke oven emissions would not be expected to be present at the Site and were not observed during the current survey. No recommendations for coke oven emissions are warranted at this time.

6.6. Ethylene Oxides

Ethylene oxides would not be expected to be present at the Site and were not observed during the current survey. No recommendations for ethylene oxides are warranted at this time.

6.7. Isocyanates

Isocyanates would not be expected to be present at the Site and were not observed during the current survey. No recommendations for isocyanates are warranted at this time.

6.8. Lead

6.8.1. General Information

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Most lead in the environment comes from human activities such as burning fossil fuels, mining, and manufacturing. Lead is used to produce batteries, ammunition, metal products (solder and pipes), and X-ray devices.

Lead does not break down, but lead compounds are changed by sunlight, air, and water. Exposure occurs when eating food or drinking water that contains lead. Deteriorated lead paint can contribute to lead dust. The main target for lead toxicity is the nervous system.



6.8.2. Regulations and Guidelines

The MOL has not prescribed criteria defining an analyzed sample of bulk material as “lead-containing.” Further, the MOL has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. However, except for very aggressive disturbance of painted finishes (e.g., abrasive blasting, torch cutting, or grinding), Fisher believes that a lead content below 0.1% by weight (1,000 µg/g or 1000 ppm) represents a concentration in which the lead content is not the limiting hazard for construction hygiene purposes. Regular construction dust suppression techniques and worker hygiene practices are sufficient for disturbance of paint finishes determined to contain less than 0.1% lead by weight, provided that work is limited to non-aggressive operations.

The regulation for the designated substance lead applies to every employer and worker at a workplace where lead is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to lead. Exposure limits for this substance are set at 0.05 – 0.10 mg/m³ (TWA) depending on the type of lead, and for tetraethyl lead 0.30 mg/m³ (STEL).

Additionally, in 2011 the MOL revised *Guideline: Lead on Construction Projects* outlining practices that should be followed during construction projects to protect workers from exposure to lead. This includes the methods and equipment employed in the removal of lead-containing coatings that reduce the creation of dust, providing appropriate facilities for workers to wash after each shift, and providing protective clothing and respirators where necessary.

6.8.3. Findings

Bulk paint samples were collected, within the scope of work areas, of each major visually distinct painted finish, suspected to contain lead. A total of nine (9) paint samples (21-6558-76 to 84) were collected and submitted for analysis. The results of analysis revealed the following:

- No elevated concentrations of lead (greater than 0.1%) were identified in any of samples.
- Measurable lead concentrations were identified in the four of the collected samples, however below the action limit. The lead concentration in the remaining five samples, were below the reporting limit for the method used by the laboratory.

A detailed description of the paint colours and sample locations is presented in in Appendix A.

6.8.4. Recommendations

Based on the results of analysis, concentrations of lead are either below the reporting limit or well below the action limit. Therefore, there is no need for any lead abatement procedures.

If any other lead-containing materials will be disturbed or removed during the construction activities, Fisher recommends that appropriate lead abatement procedures be used. The lead abatement procedures to be used are determined by the method(s) of disturbance employed. Regular construction dust suppression techniques and worker hygiene practices are sufficient



for disturbance of paint finish determined to contain less than 0.1% lead by weight, provided that work is limited to non-aggressive operations. Refer to *MOL Guideline: Lead on Construction Projects, 2011*, for details of the Ministry's health and safety guidelines regarding lead.

6.9. Mercury

Mercury may be present in thermostats or as a vapour in fluorescent light bulbs throughout the building, however thermostats and fluorescent lights are not expected to be disturbed during the planned construction activities. No recommendations for mercury are warranted at this time.

If any mercury-containing components will be disturbed or removed during the construction activities, removal of mercury-containing components shall be carried out in a manner to minimize the potential for spills.

6.10. Silica

6.10.1. General Information

Silica is a crystalline compound occurring abundantly as quartz, sand, and many other minerals, and used to manufacture a variety of materials, especially glass and concrete. When mining this substance, silica can be deadly when it becomes airborne. If inhaled, silica dust can cause silicosis which can be fatal.

Some of the following industries have a high potential for risk to workers: construction (sandblasting, rock drilling, masonry work, jack hammering, tunneling), mining (cutting or drilling through sandstone or granite), foundry work (grinding, mouldings, shakeout, core room), stone cutting (sawing, abrasive blasting, chipping, grinding), manufacturing and use of abrasives, etc.

6.10.2. Regulations

MOL revised *Guideline: Silica on Construction Projects, 2011* outlining practices that should be followed during construction projects to protect workers from exposure to silica. This includes the methods and equipment employed in the removal of silica-containing materials that reduce the creation of dust, providing appropriate facilities for workers to wash after each shift, and providing protective clothing and respirators where necessary.

O. Reg. 490/09 and the occupational exposure limits for silica do not apply to an employer on a construction project, or to their workers at the project, employers still have a responsibility to protect the health of their workers and to comply with the OHS Act and other applicable regulations. Section 25(2)(h) of the OHS Act requires that employers take "every precaution reasonable in the circumstances for the protection of a worker".

In order for silica to be a hazard, silica-containing dust particles that are small enough to be inhaled (i.e., respirable) must get into the air. The strategy for controlling the silica hazard can therefore be broken down into three basic approaches:



- Prevent silica dust from getting into the workplace air
- Remove silica dust from the air, and if present, prevent workers from inhaling the dust.

To avoid the inhalation of silica, it is essential to have the following control methods in place:

- Engineering controls and work practices and hygiene practices
- Respirators and personal protective equipment, and staff training.

Type 1, Type 2, and Type 3 operations, and can be thought of as being of low, medium and high risk. From Type 1 to Type 3 operations, the corresponding respirator, and measures and procedures become increasingly stringent.

Renovation works that are likely to generate silica-containing dust shall be carried out in accordance with the following regulations and guidelines:

- MOL Guideline: Silica on Construction Projects;
- Designated Substances, O. Reg. 490/09; and
- Construction Projects, O. Reg. 213/91.

6.10.3. Findings

Crystalline silica is a constituent of all concrete and masonry products present at the Site. Since the scope of work includes the removal of block walls, silica precautions must be taken during these construction activities.

6.10.4. Recommendations

Construction activities that will generate silica-containing dust shall be carried out in accordance with the following: MOL *Guideline: Silica on Construction Projects, 2011*; Designated Substances, O. Reg. 490/09; and Construction Projects, O. Reg. 213/91.

6.11. Vinyl Chloride

Vinyl chloride would not be expected to be present at the Site and was not observed during the current survey. No recommendations for vinyl chloride are warranted at this time.

6.12. Mould

During the current assessment, no visible mould or favourable conditions for mould growth were observed within the scope of work areas. No action is recommended with regard to mould.



7.0. LIMITATIONS

Fisher Environmental Ltd. accepts responsibility for the competent performance of its duties in executing this assignment within the normal standards of the profession, but disclaims responsibility for consequential damages, if any.

The extent of the building survey of ACM and other designated substances is based on prior agreement of the scope of work with the client, and the rationale given in this report. The building survey findings rely on professional interpretation of selective sampling and analysis. Sample analysis results have been applied to homogenous materials in unsampled locations. During the survey two of the units were not accessible. For non-accessible building spaces, the likelihood of the presence or absence of asbestos and other designated substances has been described, but such assessment is not a definitive statement of presence or absence.

This report was prepared for the City of Toronto Parks, Forestry and Recreation Division. The scope of services performed may not be appropriate for the purposes of other users, and any use or reuse of this document or its findings or recommendations represented herein is at the sole risk of any other user.

We trust that the information provided in the report meets your current requirements. If you have any questions or concerns, please do not hesitate to contact the undersigned.

Respectfully submitted,

Prepared by:

Reviewed by:



Iqbal Fattah, M.Sc.
Project Manager



David Fisher, P. Eng., C. Chem.
Principal



APPENDIX A – RESULTS OF SAMPLING AND ANALYSIS



Table 1

Summary of Bulk Sample Analysis Results for ACM
Collected on May 18, 2021

Sample No.	Sample Description	Sample Location	Analysis Results (% and Type of Asbestos)
21-6558-01 to 03	Ceiling Tile 2, 2'x4' with embossed squares	Area 1, Bocce Lounge, Ceiling	None Detected
21-6558-04 to 06	Drywall Joint Compound	Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	None Detected
21-6558-07 to 09	Black Sealant	Area 1, Bocce Lounge, Roof, Skylight, On Screw	None Detected
21-6558-10 to 12	Off-White Sealant	Area 1, Bocce Lounge, Roof, Skylight Frame Along the Roof Flashing	None Detected
21-6558-13 to 15	Roofing Material	Area 1, Bocce Lounge, Roof	None Detected
21-6558-16	Black Caulking	Area 2, Along the Joint of Window Frame and Block Wall, Interior	None Detected
21-6558-17 and 18	Black Caulking	Area 2, Along the Joint of Window Frame and Block Wall, Exterior	None Detected
21-6558-19 to 21	Black Putty	Area 2, Window, Around the Glass and the Frame	None Detected
21-6558-22 and 23	Brown Caulking	Area 2, Window, Exterior, Along the Joint of the Window Frame and Metal Wall	None Detected
21-6558-24	Brown Caulking	Area 4, Exterior, Along the Joint of the Soffit and the Metal Wall	None Detected
21-6558-25 to 27	Drywall Joint Compound	Area 3, Exterior, Soffit	None Detected
21-6558-28	Texture Finish	Area 4, Main Entrance, Soffit	None Detected
21-6558-29	Texture Finish	Area 4, Northeast corner	None Detected
21-6558-30	Texture Finish	Area 4, West Side, Soffit	None Detected
21-6558-31 to 33	White and Black Caulking	Area 4, Roof, Along Flashing Joint	None Detected
21-6558-34 to 36	Drywall Joint Compound	Area 5, Viewing Area, Wall	None Detected
21-6558-37 to 39	Black Putty	Area 5, Exterior, Around the glass frame	0.5 to 5% Chrysotile
21-6558-40 to 42	Black Caulking	Area 5, Exterior, Around the Skylight Frame	None Detected



Table 1 (Continued)

Summary of Bulk Sample Analysis Results for ACM
Collected on May 18, 2021

Sample ID	Sample Description	Sample Location	Analysis Results (% and Type of Asbestos)
21-6558-43 to 45	Roofing Material	Area 6, Roof	None Detected
21-6558-46 to 48	Tan Caulking	Area 6, Around the Door Frame	None Detected
21-6558-49 to 51	Light Grey Caulking	Area 6, Along the Joint of the Concrete Floor	None Detected
21-6558-52 to 54	White Caulking	Area 6, Washroom, Along the Joint of the Block Wall	None Detected
21-6558-55 to 57	Cream Mastic	Area 6, Behind the Baseboard	None Detected
21-6558-58, 59	Drywall Joint Compound	Area 6, Washroom, Ceiling	None Detected
21-6558-60	Drywall Joint Compound	Area 6, Vestibule Ceiling	None Detected
21-6558-61 to 63	Vermiculite	Area 6, Washroom, Wall Cavity	None Detected
21-6558-64 to 66	Roofing Material	Area 8, Roof	None Detected
21-6558-67 to 69	White Caulking	Area 8, Loc. 1-16 Dressing Room 5, Around the Duct	None Detected
21-6558-70	Drywall Joint Compound	Area 8, Referee Room, ceiling	None Detected
21-6558-71 and 72	Drywall Joint Compound	Area 8, Referee Washroom, wall	None Detected
21-6558-73 and 74	White Caulking	Area 8, Roof, Along the Flashing Joint	None Detected
21-6558-75	White Caulking	Area 8, Roof, Around the base of the vent pipe	None Detected



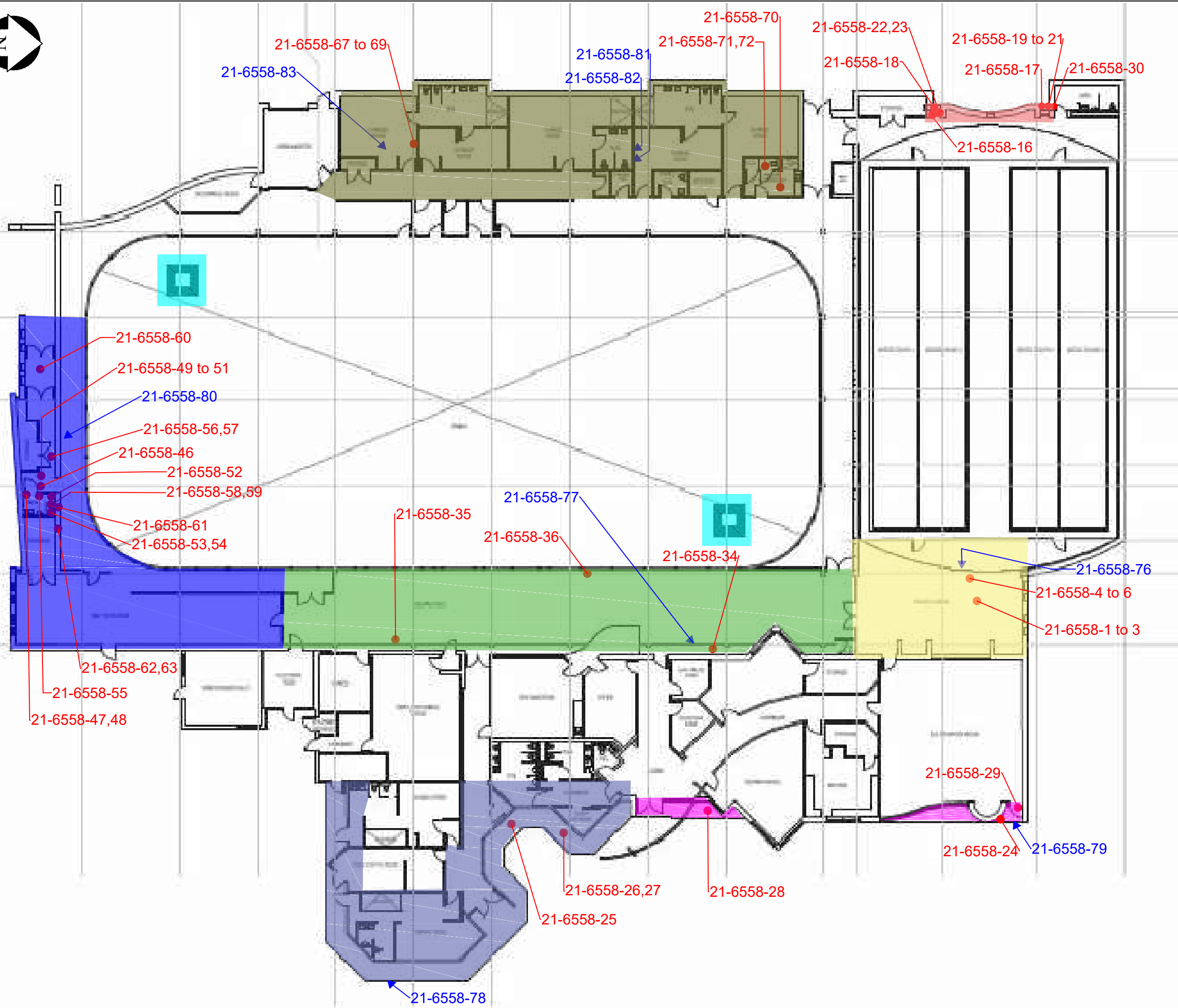
Table 2
 Summary of Bulk Sample Analysis Results for Lead
 Collected on May 18, 2021

Sample No./ Sample ID	Sample Description	Sample Location	Lead Content (ppm and % by weight)
21-6558-76	Off-White Paint	Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	<10 ppm (<0.001%)
21-6558-77	Cream Paint	Area 5, Viewing Area, Skylight Frame	<10 ppm (<0.001%)
21-6558-78	Dark Grey Paint	Area 3, Exterior, Fascia	61 ppm (0.006%)
21-6558-79	Light Grey Paint	Area 4, Exterior, Metal Beam	54 ppm (0.005%)
21-6558-80	Grey Paint	Area 6, Concrete Floor	32 ppm (0.003%)
21-6558-81	Blue Paint	Area 8, Change Room, Lower portion of the Wall	<10 ppm (<0.001%)
21-6558-82	Light Grey Paint	Area 8, Change Room, Upper portion of the Wall	<10 ppm (<0.001%)
21-6558-83	Light Cream Paint	Area 8, Change Room, Metal Beam	<10 ppm (<0.001%)
21-6558-84	Black Paint	Area 10, Sign Frame	73 ppm (0.007%)



APPENDIX B – SITE PLANS





Legend

- Asbestos Sample Location
- ▲ Lead Sample Location
- Construction Area 1
- Construction Area 2
- Construction Area 3
- Construction Area 4
- Construction Area 5
- Construction Area 6
- Construction Area 7
- Construction Area 8

Figure 1

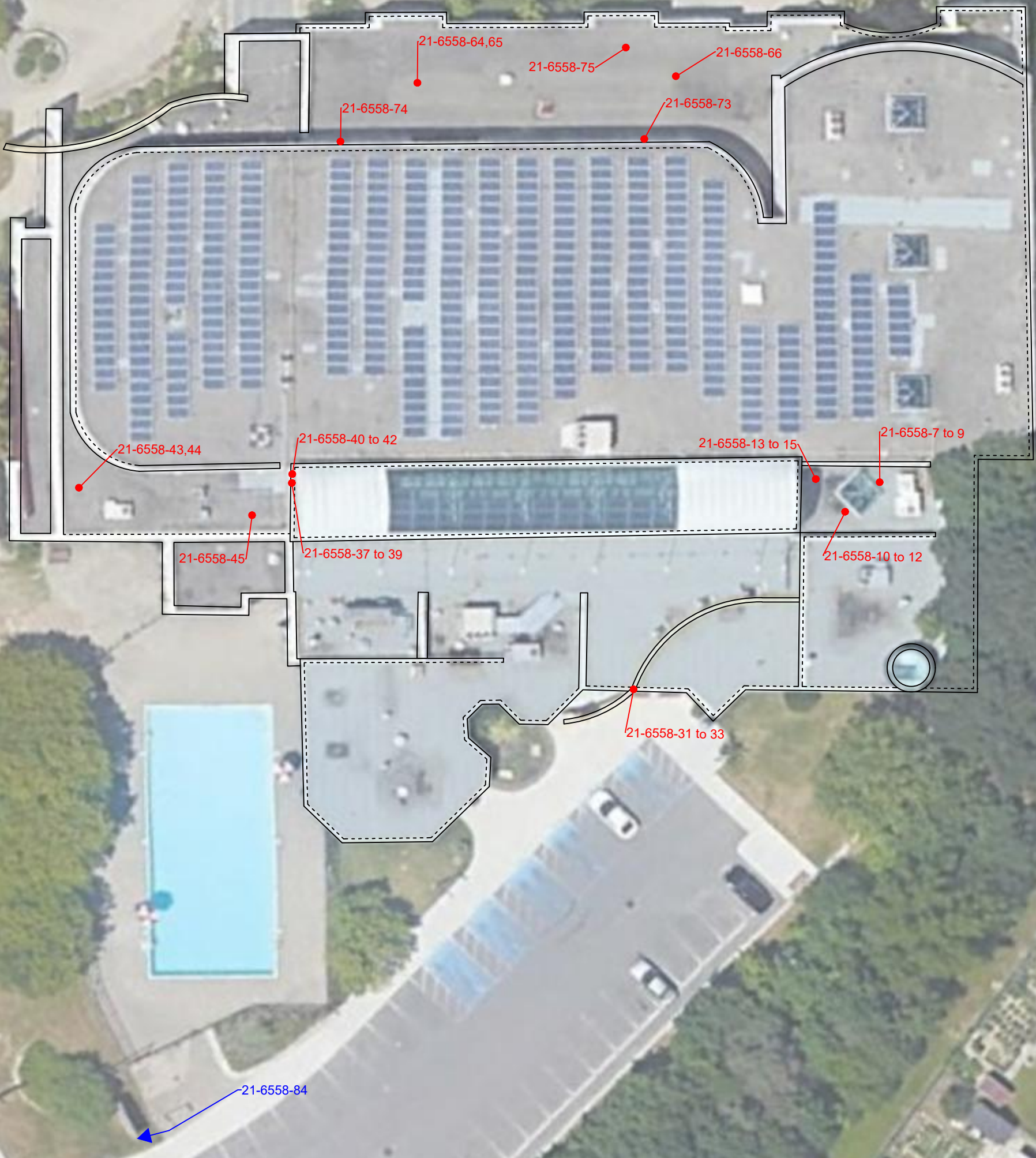
LOCATION:
2650 Finch Avenue West
Toronto, Ontario

BUILDING NAME:
Gord and Irene Risk Community Centre

Site Plan Asbestos and Lead Sample Locations

CLIENT: City of Toronto		
PROJECT NUMBER: FE-P 21-11201	DATE: May 2021	DRW BY: ZA
CAD FILE: FIG1	SCALE: Not to Scale	CHK BY: IF





Legend

- Asbestos Sample Location
- ▲ Lead Sample Location

Figure 2

LOCATION:
2650 Finch Avenue West
Toronto, Ontario

BUILDING NAME:
Gord and Irene Risk Community Centre

Roof Plan Asbestos and Lead Sample Locations

CLIENT: City of Toronto		
PROJECT NUMBER: FE-P 21-11201	DATE: May 2021	DRW BY: ZA
CAD FILE: FIG2	SCALE: Not to Scale	CHK BY: IF



APPENDIX C – CERTIFICATE OF ANALYSIS





FISHER ENVIRONMENTAL LABORATORIES

FULL RANGE ANALYTICAL SERVICES • SOIL/WATER/AIR TESTING • ENVIRONMENTAL COMPLIANCE PACKAGES • 24 HOUR EMERGENCY RESPONSE • CALA ACCREDITED

400 ESNA PARK DRIVE #15
MARKHAM, ONT. L3R 3K2
TEL: 905 475-7755
FAX: 905 475-7718
www.fisherenvironmental.com

Client: City of Toronto
Parks and Recreation Department
Address: 399 The West Mall
Toronto, ON
M9C 2Y2
Tel.: 416-392-8154
Attn: Ed Hanna

F.E. Job #: 21-6558
Project Name: Pre Construction DSS
Project ID: FE-P 21-11201
Date Sampled: 18-May-2021
Date Received: 21-May-2021
Date Reported: 31-May-2021
Location: 2650 Finch Avenue West
Toronto, ON

Certificate of Analysis

Analysis Requested:	Asbestos, Lead		
Sample Description:	84 Bulk Sample(s)		
Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
1A - Ceiling Tile 2, 2'x4' with embossed squares	Construction Area 1, Bocce Lounge, Ceiling	21-6558-1	Not Detected
1B - Ceiling Tile 2, 2'x2' with embossed squares	Construction Area 1, Bocce Lounge, Ceiling	21-6558-2	Not Detected
1C - Ceiling Tile 2, 2'x4' with embossed squares	Construction Area 1, Bocce Lounge, Ceiling	21-6558-3	Not Detected
2A - Drywall Joint Compound	Construction Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	21-6558-4	Not Detected
2B - Drywall joint Compound	Construction Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	21-6558-5	Not Detected
2C - Drywall Joint Compound	Construction Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	21-6558-6	Not Detected
3A - Black Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight, On Screw	21-6558-7	Not Detected
3B - Black Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight, On Screw	21-6558-8	Not Detected
3C - Black Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight, On Screw	21-6558-9	Not Detected
4A - Off-White Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight Frame Along the Roof Flashing	21-6558-10	Not Detected
4B - Off-White Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight Frame Along the Roof Flashing	21-6558-11	Not Detected
4C - Off-White Sealant	Construction Area 1, Bocce Lounge, Roof, Skylight Frame Along the Roof Flashing	21-6558-12	Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
5A - Roofing Material	Construction Area 1, Bocce Lounge, Roof	21-6558-13	Not Detected
5B - Roofing Material	Construction Area 1, Bocce Lounge, Roof	21-6558-14	Not Detected
5C - Roofing Material	Construction Area 1, Bocce Lounge, Roof	21-6558-15	Not Detected
6A - Black Caulking	Construction Area 2, Along the Joint of Window Frame and Block Wall, Interior	21-6558-16	Not Detected
6B - Black Caulking	Construction Area 2, Along the Joint of Window Frame and Block Wall, Exterior	21-6558-17	Not Detected
6C - Black Caulking	Construction Area 2, Along the Joint of Window Frame and Block Wall, Exterior	21-6558-18	Not Detected
7A - Black Putty	Construction Area 2, Window, Around the Glass and the Frame	21-6558-19	Not Detected
7B - Black Putty	Construction Area 2, Window, Around the Glass and the Frame	21-6558-20	Not Detected
7C - Black Putty	Construction Area 2, Window, Around the Glass and the Frame	21-6558-21	Not Detected
8A - Brown Caulking	Construction Area 2, Window, Exterior, Along the Joint of the Window Frame and Metal Wall	21-6558-22	Not Detected
8B - Brown Caulking	Construction Area 2, Window, Exterior, Along the Joint of the Window Frame and Metal Wall	21-6558-23	Not Detected
8C - Brown Caulking	Construction Area 4, Exterior, Along the Joint of the Soffit and the Metal Wall	21-6558-24	Not Detected
9A - Drywall Joint Compound	Construction Area 3, Exterior, Soffit	21-6558-25	Not Detected
9B - Drywall Joint Compound	Construction Area 3, Exterior, Soffit	21-6558-26	Not Detected
9C - Drywall Joint Compound	Construction Area 3, Exterior, Soffit	21-6558-27	Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
10A - Texture Finish	Construction Area 4, Main Entrance, Soffit	21-6558-28	Not Detected
10B - Texture Finish	Construction Area 4, Northeast corner	21-6558-29	Not Detected
10C - Texture Finish	Construction Area 4, West Side, Soffit	21-6558-30	Not Detected
11A - White and Black Caulking	Construction Area 4, Roof, Along the Flashing Joint	21-6558-31	Not Detected
11B - White and Black Caulking	Construction Area 4, Roof, Along the Flashing Joint	21-6558-32	Not Detected
11C - White and Black Caulking	Construction Area 4, Roof, Along the Flashing Joint	21-6558-33	Not Detected
12A - Drywall Joint Compound	Construction Area 5, Viewing Area, Wall	21-6558-34	Not Detected
12B - Drywall Joint Compound	Construction Area 5, Viewing Area, Wall	21-6558-35	Not Detected
12C - Drywall Joint Compound	Construction Area 5, Viewing Area, Wall	21-6558-36	Not Detected
13A - Black Putty	Construction Area 5, Exterior, Around the glass frame	21-6558-37	0.5-5%, Chrysotile
13B - Black Putty	Construction Area 5, Exterior, Around the glass frame	21-6558-38	0.5-5%, Chrysotile
13C - Black Putty	Construction Area 5, Exterior, Around the glass frame	21-6558-39	0.5-5%, Chrysotile
14A - Black Caulking	Construction Area 5, Exterior, Around the Skylight Frame	21-6558-40	Not Detected
14B - Black Caulking	Construction Area 5, Exterior, Around the Skylight Frame	21-6558-41	Not Detected
14C - Black Caulking	Construction Area 5, Exterior, Around the Skylight Frame	21-6558-42	Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
15A - Roofing Material	Construction Area 6, Roof	21-6558-43	Not Detected
15B - Roofing Material	Construction Area 6, Roof	21-6558-44	Not Detected
15C - Roofing Material	Construction Area 6, Roof	21-6558-45	Not Detected
16A - Tan Caulking	Construction Area 6, Along the Door Frame	21-6558-46	Not Detected
16B - Tan Caulking	Construction Area 6, Along the Door Frame	21-6558-47	Not Detected
16C - Tan Caulking	Construction Area 6, Along the Door Frame	21-6558-48	Not Detected
17A - Light Grey Caulking	Construction Area 6, Along the Joint of the Concrete Floor	21-6558-49	Not Detected
17B - Light Grey Caulking	Construction Area 6, Along the Joint of the Concrete Floor	21-6558-50	Not Detected
17C - Light Grey Caulking	Construction Area 6, Along the Joint of the Concrete Floor	21-6558-51	Not Detected
18A - White Caulking	Construction Area 6, Washroom, Along the Joint of the Block Wall	21-6558-52	Not Detected
18B - White Caulking	Construction Area 6, Washroom, Along the Joint of the Block Wall	21-6558-53	Not Detected
18C - White Caulking	Construction Area 6, Washroom, Along the Joint of the Block Wall	21-6558-54	Not Detected
19A - Cream Mastic	Construction Area 6, Behind the Baseboard	21-6558-55	Not Detected
19B - Cream Mastic	Construction Area 6, Behind the Baseboard	21-6558-56	Not Detected
19C - Cream Mastic	Construction Area 6, Behind the Baseboard	21-6558-57	Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
20A - Drywall Joint Compound	Construction Area 6, Washroom, Ceiling	21-6558-58	Not Detected
20B - Drywall Joint Compound	Construction Area 6, Washroom, Ceiling	21-6558-59	Not Detected
20C - Drywall Joint Compound	Construction Area 6, Vestibule Ceiling	21-6558-60	Not Detected
21A - Vermiculite	Construction Area 6, Washroom, Wall Cavity	21-6558-61	Not Detected
21B - Vermiculite	Construction Area 6, Washroom, Wall Cavity	21-6558-62	Not Detected
21C - Vermiculite	Construction Area 6, Washroom, Wall Cavity	21-6558-63	Not Detected
22A - Roofing Material	Construction Area 8, Roof	21-6558-64	Not Detected
22B - Roofing Material	Construction Area 8, Roof	21-6558-65	Not Detected
22C - Roofing Material	Construction Area 8, Roof	21-6558-66	Not Detected
23A - White Caulking	Construction Area 8, Loc. 1-16 Dressing Room 5, Around the Duct	21-6558-67	Not Detected
23B - White Caulking	Construction Area 8, Loc. 1-16 Dressing Room 5, Around the Duct	21-6558-68	Not Detected
23C - White Caulking	Construction Area 8, Loc. 1-16 Dressing Room 5, Around the Duct	21-6558-69	Not Detected
24A - Drywall Joint Compound	Construction Area 8, Referee Room, Loc. 1-02, Ceiling	21-6558-70	Not Detected
24B - Drywall Joint Compound	Construction Area 8, Referee Washroom, Loc. 1-62, Wall	21-6558-71	Not Detected
24C - Drywall Joint Compound	Construction Area 8, Referee Washroom, Loc. 1-62, Wall	21-6558-72	Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
25A - White Caulking	Construction Area 8, Roof, Along the Flashing Joint	21-6558-73	Not Detected
25B - White Caulking	Construction Area 8, Roof, Along the Flashing Joint	21-6558-74	Not Detected
25C - White Caulking	Construction Area 8, Roof, Around the base of the vent pipe**	21-6558-75	Not Detected

Fisher Environmental Laboratories (Lab ID #: 2745) is accredited by CALA (Canadian Association for Laboratory Accreditation Inc.) for asbestos analysis by PLM.

ANALYTICAL METHOD:

Asbestos has been done in accordance with normal professional standard using the following Fisher Environmental Lab Method: Asbestos by PLM (Polarized Light Microscope) F-26, Rev.2.2.

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	84 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Lead (ppm)
L1 - Off-White Paint	Construction Area 1, Bocce Lounge, Ceiling Bulkhead for Skylight	21-6558-76	<10
L2 - Cream Paint	Construction Area 5, Viewing Area, Skylight Frame	21-6558-77	<10
L3 - Dark Grey Paint	Construction Area 3, Exterior, Fascia	21-6558-78	61
L4 - Light Grey Paint	Construction Area 4, Exterior, Metal Beam	21-6558-79	54
L5 - Grey Paint	Construction Area 6, Concrete Floor	21-6558-80	32
L6 - Blue Paint	Construction Area 8, Change Room, Lower portion of the Wall	21-6558-81	<10
L7 - Light Grey Paint	Construction Area 8, Change Room, Upper portion of the Wall	21-6558-82	<10
L8 - Light Cream Paint	Construction Area 8, Change Room, Metal Beam	21-6558-83	<10
L9 - Black Paint	Construction Area 10, Sign Frame	21-6558-84	73

< result obtained was below RL (Reporting Limit).

QA/QC Report

Parameter	Blank (ppm)		LCS (%)		CRM/MS (%)	
	Result	RL	Recovery	AR	Recovery	AR
Lead	<10	10	90	80-120	133	70-130


Parameter	Duplicate (%)					
	RPD	AR				
Lead	0.0	0-30				

LEGEND:

- RL - Reporting Limit
- LCS - Laboratory Control Sample
- MS - Matrix Spike
- AR - Acceptable Range
- RPD - Relative Percent Difference

ANALYTICAL METHODS:

Metals (Lead) - Method # F-1, Rev. 4.5, Standard Operation Procedure for determination of Metals by the Inductively Coupled Plasma- Optical. Method used by Fisher Environmental Lab complies with the Standard Methods for the Examination of Water and Wastewater, 20th Ed 3120-B.

Authorized by: 
 Roger Lin, Ph. D., C. Chem.
 Laboratory Manager





April 16, 2021

City of Toronto
55 John Street, 2nd Floor
Toronto, Ontario, M5V 3C6

Re: Asbestos Bulk Sampling Results
2650 Finch Avenue West, Toronto, Ontario
Pinchin File: 291815.000

Pinchin Ltd. (Pinchin) was retained by the City of Toronto to collect bulk samples of suspect asbestos within the Gord and Irene Community Centre located at 2650 Finch Avenue West, Toronto, Ontario. Sample collection was performed by Pinchin on April 13, 2021.

The Client advised Pinchin via email on April 13, 2021 that a suspect material was observed to be coming from cracks present in the wall of select locations. As such, Pinchin met with the Client on site on April 13, 2021 to assess the affected area, collect bulk samples of the material to be analyzed for asbestos content and provide recommendations as required. No other materials were assessed as part of this work.

1.0 METHODOLOGY

An inspection for asbestos-containing materials (ACM) was conducted. A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogeneous sampling area is defined by the U.S. Environmental Protection Agency (EPA) 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.

Samples of materials were analyzed using polarised light microscopy (PLM) methods in accordance with EPA Test Method 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

2.0 RESULTS AND CONCLUSIONS

Pinchin observed a suspect material spilling from the concrete block wall in the Washroom (Location 1-22) (adjacent to the Tiny Tots Room) and Hallway around the Ice Rink (Location 1-25) in the Gore and Irene Community Centre. Approximately 8 square feet of suspect material was observed present at the time of the site visit.

Three samples of this material were collected (S0001A-C) and the laboratory determined that the material is vermiculite visually consistent with that of which is from South Africa and thus concluded not to be contaminated with asbestos. This material is not considered an asbestos-containing material.



3.0 RECOMMENDATIONS

Provide this report to the contractor prior to bidding or commencing work.

Do not disturb suspected hazardous building materials discovered during the work, which have not been identified in this report and arrange for further testing.

4.0 TERMS AND LIMITATIONS

All work was performed in accordance with the City of Toronto, Blanket Contract #47020968.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin 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. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

5.0 CLOSURE

If you have any questions regarding this report, please contact the undersigned.

Sincerely,

Pinchin Ltd.

Prepared by:

Reviewed by:

Charlotte Spelt
Project Technologist
416.456.1697
cspelt@pinchin.com

Tanya Stanisic, B.Sc. Hons.
Senior Project Manager
647.502.6665
tstanisic@pinchin.com

Encl.: Appendix I - Laboratory Report
Appendix II - Photographs

\\pinchin.com\Miss\Job\291000s\0291815.000 CoT,2650FinchW\Toronto,HAZ,ASB,BULK\Deliverables\291815 Asbestos Bulk Sampling Report, 2650 Finch W Toronto, CoT, Apr 16 2021.docx

Template: Master Asbestos Bulk Sample Results Letter, HAZ, February 19, 2020

APPENDIX I
Laboratory Report



Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

Project Name: City of Toronto, Gord and Irene Risk Community Centre
2650 Finch Avenue West, Toronto, Ontario

Project No.: 0291815.000

Prepared For: C. Spelt / T. Stanisic

Lab Reference No.: b248661

Analyst(s): A. Di Giulio

Date Received: April 14, 2021 **# Samples submitted:** 3

Date Analyzed: April 14, 2021 **# Phases analyzed:** 3

Method of Analysis:

EPA 600/R-93/116 - Method for the Determination of Asbestos in Bulk Building Materials dated July, 1993

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

The Pinchin Ltd. Mississauga asbestos laboratory is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 101270-0) for the 'EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples,' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2017.

This report relates only to the items tested.

NOTE: *This test report may not be reproduced, except in full, without the written approval of the laboratory. The client may not use this report to claim product endorsement by NVLAP or any agency of the U.S. Government. This report is valid only when signed in blue ink by the analyst. Vinyl asbestos floor tiles contain very fine fibres of asbestos and may be missed by some laboratories using the PLM method. Internal verification studies performed by Pinchin indicate that the chance of missing asbestos in floor tiles is no higher than about 2%. The vinyl tile study and laboratory documentation on measurement uncertainty is available upon request. The analysis of dust samples by PLM cannot be used as an indicator of past or present airborne asbestos fibre levels.*



Pinchin Ltd. Asbestos Laboratory Certificate of Analysis


Project Name: City of Toronto, Gord and Irene Risk Community Centre
 2650 Finch Avenue West, Toronto, Ontario
Project No.: 0291815.000
Prepared For: C. Spelt / T. Stanisic

Lab Reference No.: b248661
Date Analyzed: April 14, 2021


BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0001A Vermiculite debris, Washroom (Location 1-22), From concrete block wall	Non-homogeneous, blonde and black, loose particulate, micaceous material.	None Detected	Tar material 0.5-5% Vermiculite > 75% Other Non-Fibrous 0.5-5%
Comments:	This sample is consistent in analysis and visual appearance with vermiculite produced in South Africa which is known to not contain naturally occurring asbestos fibres.		
S0001B Vermiculite debris, Hallway around Ice Rink (Location 1-25) wall shared with Washroom (Location 1-22), From concrete block wall	Non-homogeneous, blonde and black, loose particulate, micaceous material.	None Detected	Tar material 0.5-5% Vermiculite > 75% Other Non-Fibrous 0.5-5%
Comments:	This sample is consistent in analysis and visual appearance with vermiculite produced in South Africa which is known to not contain naturally occurring asbestos fibres.		
S0001C Vermiculite debris, Hallway around Ice Rink (Location 1-25) wall shared with Tiny Tots Room (Location 1-23), From concrete block wall	Non-homogeneous, blonde and black, loose particulate, micaceous material.	None Detected	Tar material 0.5-5% Vermiculite > 75% Other Non-Fibrous 0.5-5%
Comments:	This sample is consistent in analysis and visual appearance with vermiculite produced in South Africa which is known to not contain naturally occurring asbestos fibres.		

Reviewed by:


 Digitally signed by
 Julieth Oran
 Date: 2021.04.14
 11:33:30 -04'00'

Reporting Analyst:


 Digitally signed by
 Julieth Oran
 Date: 2021.04.14
 11:33:18 -04'00'



Analyzed by: AD
 Reviewed by: JRB
 Report Sent by: JR

Special Instructions:

**Pinchin Ltd. - Asbestos Laboratory
 Internal Asbestos Bulk Sample Chain of Custody**

Client Name:	City of Toronto	Project Address:	2650 Finch Avenue West, Toronto, Ontario
Portfolio/Building No:	Gord and Irene Risk Community Centre	Pinchin File:	291815
Submitted by:	Charlotte Spelt	Email:	cspelt@pinchin.com
CC Results to:	Tanya Stanisc	CC Email:	tstanisc@pinchin.com
Invoice to:	Tanya Stanisc	Invoice Email:	tstanisc@pinchin.com
Date Submitted:	April 13 2021	Required by:	April 14 2021
# of Samples:	3	Priority:	Rush Turnaround
Year of Building Construction (Mandatory Field):		1991	
Do NOT Stop on Positive (Sample Numbers):			
Pinchin Group Company (Mandatory Field):		Pinchin	

To be Completed by Lab Personnel Only:

Lab Reference #:	b278661		Time:	24 hour clock		
Received by:	APR 14 2021		Date:	Month	Day	2021
Name(s) of Analyst(s):			nullu/21			
Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)			
S	0001	A	Vermiculite debris, Washroom (Location 1-22), From concrete block wall ND			
S	0001	B	Vermiculite debris, Hallway around Ice Rink (Location 1-25) wall shared with Washroom (Location 1-22), From concrete block wall ND			
S	0001	C	Vermiculite debris, Hallway around Ice Rink (Location 1-25) wall shared with Tiny Tots Room (Location 1-23), From concrete block wall ND			

APPENDIX II
Photographs



Photo 1 - Non-asbestos vermiculite in the Washroom (Location 1-22).



Photo 2 - Sample collected, of non-asbestos vermiculite, from the Washroom (Location 1-22).



Photo 3 - . Non-asbestos vermiculite in the Hallway around the Ice Rink (Location 1-25).



Photo 4 - Non-asbestos vermiculite in from the Hallway around the Ice Rink (Location 1-25).



Photo 5 - Non-asbestos vermiculite in from the Hallway around the Ice Rink (Location 1-25).



Photo 6 - Non-asbestos vermiculite is coming out of cracks in the concrete block wall.

APPENDIX D – SITE PHOTOGRAPH





Photo 1: Asbestos-containing black putty along the joints of the interior and exterior glass and the skylight frames, in Construction Area 5.