

Asbestos Building Materials Assessment

Multi-Residential Building
56 Bedford Street
Westport ON



Prepared for:
United Counties of Leeds & Grenville
100-25 Central Avenue West
Brockville ON K6V 4N6

Prepared by:
Stantec Consulting Ltd.
400-1331 Clyde Avenue
Ottawa ON K2C 3G4

Project No.: 122150275

February 17, 2017

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Executive Summary

Stantec Consulting Ltd. (Stantec) was commissioned by the United Counties of Leeds & Grenville (Leeds Grenville) to conduct an Asbestos Building Materials Assessment of the multi-residential building (subject building), located at 56 Bedford Street in Westport, Ontario.

The purpose of the assessment was to assist Leeds Grenville to meet the requirements of *Ontario Regulation 278/05 Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*, as amended (O. Reg. 278/05), made under the *Occupational Health and Safety Act* (OHSA). The assessment includes the identification of building materials suspected to be asbestos-containing materials (ACMs) that may require special attention during the operation of the building.

The assessment is intended for the long-term management of asbestos-containing building materials to be included as part of an overall Asbestos Management Program (AMP) and not for construction or renovations purposes. Intrusive inspections and additional testing of suspect ACMs and presumed asbestos-containing materials (PACMs) may be required to complement the information provided in this report if any work activities are planned which may disturb ACMs and PACMs.

The work was carried out in accordance with the requirements of the OHSA. The site work was conducted by Will Madden-Macavelia on January 13, 2017.

Based on the visual assessment and laboratory analysis, ACMs were identified to be present in the form of:

- Stucco (friable);
- 12"x12" vinyl floor tile – beige with grey specks (non-friable);
- Drywall joint-fill compound (non-friable); and,
- Mastic puck – brown (non-friable).

These materials were observed to be in good condition.

The following building materials were observed to be present but not sampled, and are listed as PACMs:

- Ceramic tile grout and mortar/adhesive;
- Brick mortar;
- Fire rated doors;
- Exterior window caulking – white;
- Exterior door caulking – white;
- Roof caulking; and,
- Roof Shingles.

ASBESTOS BUILDING MATERIALS ASSESSMENT

These materials were observed to be in good condition. These materials were not sampled to preserve their integrity and these materials were not sampled as they are not part of the scope of work as determined by Stantec's understanding of the project. As these materials are known to have been manufactured with asbestos, they should be presumed to be asbestos-containing unless proven otherwise by laboratory analysis.

The statements made in this Executive Summary text are subject to the same limitations included in this report, and are to be read in conjunction with the remainder of this report.

Recommendations pertaining to the handling, removal, disposal, and management of identified asbestos-containing materials are provided within this report.

ASBESTOS BUILDING MATERIALS ASSESSMENT

February 17, 2017

1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was commissioned by the United Counties of Leeds & Grenville (Leeds Grenville) to conduct an Asbestos Building Materials Assessment of the multi-residential building (subject building), located at 56 Bedford Street in Westport, Ontario.

The purpose of the assessment was to assist Leeds Grenville to meet the requirements of *Ontario Regulation 278/05 Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*, as amended (O. Reg. 278/05), made under the *Occupational Health and Safety Act (OHS)*. The assessment includes the identification of building materials suspected to be asbestos-containing materials (ACMs) that may require special attention during the operation of the building.

The assessment is intended for the long-term management of asbestos-containing building materials to be included as part of an overall Asbestos Management Program (AMP) and not for construction or renovations purposes. Intrusive inspections and additional testing of suspect ACMs and presumed asbestos-containing materials (PACMs) may be required to complement the information provided in this report if any work activities are planned which may disturb ACMs and PACMs.

The work was carried out in accordance with the requirements of the OHS. The site work was conducted by Will Madden-Macavelia on January 13, 2017.

2.0 SCOPE

The scope of work for this assessment involved the following:

- A review of existing information, including site drawings, previous assessment and/or abatement documentation and discussions with site personnel, where available;
- A visual assessment of readily accessible areas for the presence of asbestos-containing building materials. The assessment generally included common areas, mechanical rooms, and a representative number of residential units;
- The collection of representative bulk samples from building materials suspected of containing asbestos fibres;
- Submission of samples collected for laboratory analysis; and,
- Evaluation and interpretation of field findings and laboratory analytical results to develop conclusions and recommendations pertaining to the management of ACMs and PACMs identified within the building.

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2.1 LIMITATIONS

This report reflects the observations made within accessed areas and the results of analyses performed on specific materials sampled during the assessment. Analytical results reflect the sampled materials at the specific sample locations.

Concealed spaces were assessed via existing access panels, where present. Interior and exterior finishes, solid ceilings, walls, flooring and structural elements were not removed to access concealed areas. An inaccessible area, where ACMs may be present includes, but is not limited to: ceiling spaces, wall cavities, crawlspaces, and buried materials.

Due to limitations on the agreed to scope of work for this project as well as physical limitations in accessing concealed areas and limitations associated with working in occupied/operational spaces, there are specific limitations to the information that can be provided for each suspect ACM or PACM considered in this assessment. The presence and asbestos content of some building materials could not be confirmed.

Building materials that may contain asbestos but were not accessible for sampling include, but are not limited to the following:

- Roofing materials;
- Sub-grade materials (e.g., asbestos cement drainage pipe);
- Flooring material concealed beneath carpeting, ceramic tile, brickwork, hardwood flooring, and/or concealed beneath existing sub-floors;
- Insulation material present inside walls (e.g., suspected asbestos-containing vermiculite insulation inside concrete block and/or brick walls);
- Drywall and/or wall plaster and associated finish materials concealed behind new and/or additional walls;
- Woven tape inside duct connection joints;
- Mechanical (e.g., piping and ducting) insulation within wall cavities, crawlspaces tunnels or other concealed spaces;
- Insulation materials inside fire doors;
- Heating, ventilation and air conditioning (HVAC) units mechanical inner linings and/or inner ducting insulation;
- Heat protection materials inside mechanical installations and light fixtures; and,
- Ceramic tile grout and mortar/adhesive concealed behind ceramic tiles.

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2.1.1 Project-Specific Limitations

The roof and vinyl sheet flooring in the stairwells was reported by Leeds Grenville to have been replaced within the past five (5) years; as such, the materials are not expected to be asbestos-containing.

The areas included in this assessment were limited to the following:

- Units 101 and 210;
- Common areas (washrooms, janitor's room, storage room, garbage room, common room, entrance lobby, stairwells, hallways, and laundry room);
- Exterior garage;
- Exterior; and,
- Roof.

2.1.2 Information from Previous Reports

Stantec was not provided with previous reports for review.

3.0 REGULATORY FRAMEWORK

Asbestos is included in the *Ontario Regulation, 490/09 Designated Substances*, as amended (O. Reg. 490/09) made under Ontario's OHS Act, which primarily regulates worker exposure to asbestos during manufacturing of asbestos-containing products, but also includes requirements related to respiratory equipment, measurement of airborne fibres, and medical surveillance of exposed workers.

Ontario Regulation 278/05 clearly defines ACM as a material that contains 0.5 per cent or more asbestos by dry weight. Additionally, the regulation requires that the "record" (i.e., the Asbestos Building Materials Assessment) be updated at least once in each 12 month period or whenever the owner of the facility becomes aware of new information relating to the suspect and confirmed ACMs.

The general waste management regulation for the province of Ontario is *R.R.O. 1990, Regulation 347 General - Waste Management*, as amended (R.R.O. 1990, 347), under the *Environmental Protection Act* (EPA) of Ontario, sets out the requirements for the proper disposal of asbestos waste in Ontario. The waste must be placed in a double sealed container, properly labeled, free of cuts, tears or punctures and disposed of at a licensed waste station which has been properly notified of the presence of asbestos waste.

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4.0 ASSESSMENT METHODOLOGY

Asbestos-containing materials are grouped into two classifications, friable and non-friable materials. Friable ACMs are those that can easily be crumbled or broken apart by mere hand pressure. When these materials break apart asbestos fibres are then released into the atmosphere. Non-friable ACMs or "manufactured products" are materials that by the nature of their manufacturing/construction do not readily allow the release of asbestos fibres. These materials should not be cut or shaped with power tools, since this procedure may allow for the release of the asbestos fibres. Some non-friable materials such as plaster, drywall and ceiling tiles that are considered to be non-friable in an undisturbed state but can release fibers when damaged or disturbed.

It is Stantec's understanding that the subject building was constructed before 1990. This construction time period is consistent with those dates when asbestos-containing building materials were commonly used.

A visual assessment of accessible areas is undertaken in order to check for the presence of materials suspected of containing asbestos. Locations to collect discrete bulk asbestos samples of suspect building materials are identified. Samples of representative materials are then collected at these locations. An assessment of the condition and accessibility is completed for each occurrence of an ACM. The Public Works and Government Services Canada (PWGSC) document entitled *Deputy Ministers Directive 057 – Asbestos Management* (Last Revised June 16, 1999) was used as the basis for the criteria that was applied in evaluating the presence of ACMs and PACMs within the subject building, where applicable.

Samples of suspect ACMs from various building materials were collected and submitted to Paracel Laboratories Ltd. (Paracel) located in Ottawa, Ontario for analysis using Polarized Light Microscopy (PLM) with dispersion staining. The analysis was conducted following the U.S. EPA/600/R-93/116 Method. Paracel is certified under the National Voluntary Laboratory Accreditation Program (NVLAP) to perform asbestos analysis of bulk samples. Asbestos-containing materials are defined as a material that contains 0.5 per cent or more asbestos by dry weight.

A positive stop option was used. Multiple samples of visually similar material were collected and submitted for laboratory analysis. Once a sample within the set is identified to contain asbestos, further analysis of the subsequent samples is deemed to be unnecessary and not conducted.

4.1 FACILITY DESCRIPTION

The multi-residential building located at 56 Bedford Street consists of a two (2) level building with 21 units. The reported construction date of the building is 1975. The typical structural components and finishes associated with this building consist of brick exterior walls with metal soffit, various types of flooring including concrete, vinyl floor tile, vinyl sheet flooring, and ceramic tile flooring

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and interior concrete block, ceramic tile and drywall walls with suspended ceiling tile, drywall, and stucco ceilings.

4.2 DOCUMENT REVIEW

Stantec was not provided with previous reports for review.

5.0 FINDINGS

A summary list of the bulk samples collected by Stantec, including a description of the material, sampling location, type of analysis and laboratory test results are provided in **Appendix A**. A copy of the PLM Laboratory Certificates of Analysis for bulk samples collected is provided in **Appendix B**.

A summary of occurrences of ACMs and/or PACMs is provided in **Appendix C**. Each ACM occurrence includes the following information:

- Room component that contains ACM;
- Location of the ACM within the room space;
- ACM description;
- Estimated quantity;
- Original sample number or representative sample number;
- Friability; and,
- Condition.

Selected site photographs are provided in **Appendix D**.

5.1 FRIABLE ASBESTOS-CONTAINING MATERIALS

Friable building materials were observed to be present and identified by laboratory analysis to be asbestos-containing in the form of:

- Stucco.

This material was observed to be in good condition.

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5.2 NON-FRIABLE ASBESTOS-CONTAINING MATERIALS

Non-friable building materials were observed to be present and identified by laboratory analysis to be asbestos-containing in the form of:

- 12"x12" vinyl floor tile – beige with grey specks;
- Drywall joint-fill compound; and,
- Mastic puck – brown.

These materials were observed to be in good condition. It should be noted that drywall joint-fill compound is considered non-friable in its undisturbed state but can release fibers when damaged.

5.3 PRESUMED ASBESTOS-CONTAINING MATERIALS

The following building materials were observed to be present but not sampled, and are listed as PACMs:

- Ceramic tile grout and mortar/adhesive;
- Brick mortar;
- Fire rated doors;
- Exterior window caulking – white;
- Exterior door caulking – white;
- Roof caulking; and,
- Shingles.

These materials were observed to be in good condition. These materials were not sampled to preserve their integrity and these materials were not sampled as they are not part of the scope of work as determined by Stantec's understanding of the project. As these materials are known to have been manufactured with asbestos, they should be presumed to be asbestos-containing unless proven otherwise by laboratory analysis.

5.4 NON-ASBESTOS-CONTAINING MATERIALS

The roof and vinyl sheet flooring in the stairwells was reported by Leeds Grenville to have been replaced within the past five (5) years; as such, the materials are not expected to be asbestos-containing.

A summary list of the bulk samples collected during this assessment and confirmed to be non-ACMs by laboratory analysis is provided in **Appendix A**.

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5.5 POTENTIAL FOR VERMICULITE INSULATION

It should be noted that various walls of the subject facility were comprised of masonry (concrete) blocks. Asbestos-contaminated vermiculite was historically used as insulating material in masonry block or brick walls. To assess for this potential ACM, destructive sampling is required, which was not conducted as part of this assessment. Although various holes, breaches and cracks were observed and no vermiculite was present, the presence of this potential ACM cannot be ruled out without destructive testing.

6.0 RECOMMENDATIONS

Based on the visual assessment and laboratory analysis, the locations of ACMs and PACMs are provided in **Appendix C**. Stantec recommends the following with regards to meeting the requirements of O. Reg. 278/05:

- Asbestos-containing materials that may be impacted during renovation or demolition activities should be removed prior to the renovation or demolition activities;
- Prior to renovation and/or demolition activities that would disturb them, undertake testing of PACMs that may be impacted to determine their asbestos content. Confirmed asbestos materials should be handled accordingly;
- Should a material suspected to contain asbestos fibres become uncovered during renovation or demolition activities, all work in the areas that may disturb the material should be stopped. Samples of the suspect material should be submitted for laboratory analysis to determine if asbestos fibres are present. Confirmed asbestos materials should be handled accordingly;
- If masonry block walls are to be impacted by renovation or demolition work, and these walls have not been checked for the presence of vermiculite insulation, intrusive assessments for vermiculite should be undertaken prior to planned renovation or demolition work. If vermiculite insulation is suspected to be present, this material should be treated as an ACM until testing can show otherwise; and,
- This report should be added to the Asbestos Management Program and referred to as the current asbestos record.

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7.0 CLOSURE

This report has been prepared for the sole benefit of United Counties of Leeds & Grenville. The report may not be used by any other person or entity without the express written consent of Stantec Consulting Ltd. and United Counties of Leeds & Grenville.

Any uses that a third party makes of this report, or any reliance on decisions based on it, are the responsibility of such third parties. Stantec Consulting Ltd. accepts no responsibility for damages, if any, suffered by any third 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. Conclusions presented in this report should not be construed as legal advice.

The conclusions presented in this report represent the best technical judgment of Stantec Consulting Ltd. based on the data obtained from the work. The conclusions are based on the site conditions encountered by Stantec Consulting Ltd. at the time the work was performed at the specific assessment and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations. The extent of the limited area depends on building construction and conditions, weather, building usage and other factors. Due to the nature of the investigation and the limited data available, Stantec Consulting Ltd. cannot warrant against undiscovered environmental liabilities.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

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We trust that the above is satisfactory for your purposes at this time. Should you have any questions or concerns, or require additional information, please do not hesitate to contact the undersigned at your convenience.

This report was prepared by Urvashi Vyas and reviewed by Michael Shortt and Martin Ling.

Regards,

STANTEC CONSULTING LTD.



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ASBESTOS BUILDING MATERIALS ASSESSMENT

Appendix A
Summary of Results for Analysis of Bulk Samples for Asbestos Content
February 17, 2017

Appendix A

Summary of Results for Analysis of Bulk Samples for Asbestos Content

Summary of Bulk Sample Analysis for Asbestos Type and Content

Sample Number	Sampling Location	Description of Sampled Material	Asbestos Type and Content	Analysis
56-BS-01A	First Floor - Unit 101 Closet Wall	Drywall Joint-Fill Compound	1% Chrysotile	PLM
56-BS-01B	Second Floor - Unit 209 Closet Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-01C	Second Floor - Laundry Room Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-01D	Second Floor - Hallway Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-01E	Second Floor - Hallway Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-01F	First Floor - South Stairwell Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-01G	First Floor - Garbage Room Wall	Drywall Joint-Fill Compound	Positive Stop (Not Analyzed)	PLM
56-BS-02A	First Floor - Unit 101 Closet	Stucco Ceiling	3% Chrysotile	PLM
56-BS-02B	Second Floor - Unit 209 Closet	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-02C	Second Floor - South Stairwell	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-02D	First Floor - South Stairwell	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-02E	First Floor - Common Room	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-02F	First Floor - Common Room	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-02G	First Floor - North Stairwell	Stucco Ceiling	Positive Stop (Not Analyzed)	PLM
56-BS-03A	First Floor - Unit 101 Closet	12"x12" Vinyl Floor Tile - Beige with Grey Specks	1.45% Chrysotile	PLM
56-BS-03B	First Floor - Unit 101 Closet	12"x12" Vinyl Floor Tile - Beige with Grey Specks	Positive Stop (Not Analyzed)	PLM
56-BS-03C	First Floor - Janitor's Room	12"x12" Vinyl Floor Tile - Beige with Grey Specks	Positive Stop (Not Analyzed)	PLM

Summary of Bulk Sample Analysis for Asbestos Type and Content

Sample Number	Sampling Location	Description of Sampled Material	Asbestos Type and Content	Analysis
56-BS-04A	Second Floor - Hallway	2'x4' Acoustical Ceiling Tile - Pindot with Fissures in 2' Direction	None Detected	PLM
56-BS-04B	Second Floor - Hallway	2'x4' Acoustical Ceiling Tile - Pindot with Fissures in 2' Direction	None Detected	PLM
56-BS-04C	Second Floor - Hallway	2'x4' Acoustical Ceiling Tile - Pindot with Fissures in 2' Direction	None Detected	PLM
56-BS-05A	Exterior - Garage	Mastic Puck - Brown	1.2% Chrysotile	PLM
56-BS-05B	Exterior - Garage	Mastic Puck - Brown	Positive Stop (Not Analyzed)	PLM
56-BS-05C	Exterior - Garage	Mastic Puck - Brown	Positive Stop (Not Analyzed)	PLM

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Appendix B
Laboratory Analytical Reports – Asbestos: Polarized Light Microscopy
February 17, 2017

Appendix B **Laboratory Analytical Reports – Asbestos: Polarized Light Microscopy**

Certificate of Analysis

Stantec Consulting Ltd. (Ottawa)

300-675 Cochrane Dr West Tower
Markham, ON L3R 0B8
Attn: Linda Fleet

Client PO: 56 Bedford St Westport
Project: 122150275
Custody:

Report Date: 24-Jan-2017
Order Date: 18-Jan-2017

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
1703248-01	56-BS-01A (DJC)
1703248-02	56-BS-01B (DJC)
1703248-03	56-BS-01C (DJC)
1703248-04	56-BS-01D (DJC)
1703248-05	56-BS-01E (DJC)
1703248-06	56-BS-01F (DJC)
1703248-07	56-BS-01G (DJC)
1703248-08	56-BS-02A (stucco ceiling)
1703248-09	56-BS-02B (stucco ceiling)
1703248-10	56-BS-02C (stucco ceiling)
1703248-11	56-BS-02D (stucco ceiling)
1703248-12	56-BS-02E (stucco ceiling)
1703248-13	56-BS-02F (stucco ceiling)
1703248-14	56-BS-02G (stucco ceiling)
1703248-15	56-BS-03A (VFT)
1703248-16	56-BS-03B (VFT)
1703248-17	56-BS-03C (VFT)
1703248-18	56-BS-04A (ACT)
1703248-19	56-BS-04B (ACT)
1703248-20	56-BS-04C (ACT)
1703248-21	56-BS-05A (mastic)
1703248-22	56-BS-05B (mastic)
1703248-23	56-BS-05C (mastic)

Approved By:



Emma Diaz
Senior Analyst

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Certificate of Analysis

Report Date: 24-Jan-2017

Client: Stantec Consulting Ltd. (Ottawa)

Order Date: 18-Jan-2017

Client PO: 56 Bedford St Westport

Project Description: 122150275

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1703248-01	13-Jan-17	sample homogenized	Grey	Drywall Joint Compound	Yes	Client ID: 56-BS-01A (DJC) Chrysotile	1
						Non-Fibers	99
1703248-02	13-Jan-17					Client ID: 56-BS-01B (DJC) not analyzed	
1703248-03	13-Jan-17					Client ID: 56-BS-01C (DJC) not analyzed	
1703248-04	13-Jan-17					Client ID: 56-BS-01D (DJC) not analyzed	
1703248-05	13-Jan-17					Client ID: 56-BS-01E (DJC) not analyzed	
1703248-06	13-Jan-17					Client ID: 56-BS-01F (DJC) not analyzed	
1703248-07	13-Jan-17					Client ID: 56-BS-01G (DJC) not analyzed	
1703248-08	13-Jan-17	sample homogenized	Beige	Stucco	Yes	Client ID: 56-BS-02A (stucco ceiling) Chrysotile	3
						Non-Fibers	97
1703248-09	13-Jan-17					Client ID: 56-BS-02B (stucco ceiling) not analyzed	
1703248-10	13-Jan-17					Client ID: 56-BS-02C (stucco ceiling) not analyzed	
1703248-11	13-Jan-17					Client ID: 56-BS-02D (stucco ceiling) not analyzed	
1703248-12	13-Jan-17					Client ID: 56-BS-02E (stucco ceiling) not analyzed	
1703248-13	13-Jan-17					Client ID: 56-BS-02F (stucco ceiling) not analyzed	
1703248-14	13-Jan-17					Client ID: 56-BS-02G (stucco ceiling) not analyzed	
1703248-15	13-Jan-17	sample homogenized	Grey	Floor Tile	Yes	Client ID: 56-BS-03A (VFT) <small>[AS-PRE]</small> Chrysotile	1.45
						Non-Fibers	98.55
1703248-16	13-Jan-17					Client ID: 56-BS-03B (VFT) not analyzed	

Certificate of Analysis
 Client: **Stantec Consulting Ltd. (Ottawa)**
 Client PO: **56 Bedford St Westport**

Report Date: 24-Jan-2017
 Order Date: 18-Jan-2017
 Project Description: **122150275**

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1703248-17	13-Jan-17					Client ID: 56-BS-03C (VFT) not analyzed	
1703248-18	13-Jan-17	sample homogenized	White/Grey	Ceiling Tile	No	Client ID: 56-BS-04A (ACT) [AS-PRE] Cellulose MMVF Non-Fibers	40 20 40
1703248-19	13-Jan-17	sample homogenized	White/Grey	Ceiling Tile	No	Client ID: 56-BS-04B (ACT) [AS-PRE] Cellulose MMVF Non-Fibers	40 20 40
1703248-20	13-Jan-17	sample homogenized	White/Grey	Ceiling Tile	No	Client ID: 56-BS-04C (ACT) [AS-PRE] Cellulose MMVF Non-Fibers	40 20 40
1703248-21	13-Jan-17	sample homogenized	Brown/Grey	Mastic	Yes	Client ID: 56-BS-05A (mastic) [AS-PRE] Chrysotile Non-Fibers	1.2 98.8
1703248-22	13-Jan-17					Client ID: 56-BS-05B (mastic) not analyzed	
1703248-23	13-Jan-17					Client ID: 56-BS-05C (mastic) not analyzed	

* MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

** Analytes in bold indicate asbestos mineral content.

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	NVLAP Lab Code *	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	2 - Ottawa West Lab	200812-0	24-Jan-17

* Reference to the NVLAP term does not permit the user of this report to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Qualifier Notes

Sample Qualifiers :

AS-PRE: Due to the difficult nature of the bulk sample (interfering fibers/binders), additional NOB preparation was required prior to analysis

Certificate of Analysis

Client: **Stantec Consulting Ltd. (Ottawa)**

Client PO: **56 Bedford St Westport**

Report Date: 24-Jan-2017

Order Date: 18-Jan-2017

Project Description: **122150275**

Work Order Revisions / Comments

None

ASBESTOS BUILDING MATERIALS ASSESSMENT

Appendix C
Summary of Occurrences of Asbestos-Containing Materials
February 17, 2017

Appendix C

Summary of Occurrences of Asbestos-Containing Materials

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Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Common Room	Ceiling	Ceiling	Stucco	40 sq. m	Ref: 56-BS-02A	No	3% Chrysotile	Yes Yes	C	good	ACM
1	Common Room	Walls	Walls	Drywall Joint-Fill Compound	60 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Common Room Storage	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	4 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
1	Common Room Storage	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	4 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Common Room Storage	Walls	Walls	Drywall Joint-Fill Compound	20 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Custodian Room	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	30 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
1	Custodian Room	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	30 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Custodian Room	Ceiling	Ceiling	Drywall Joint-Fill Compound	30 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Garbage Room	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	40 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Hallway	Walls	Walls	Drywall Joint-Fill Compound	240 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Handicap Washroom	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	2 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM

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1	Handicap Washroom	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	20 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Handicap Washroom	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	2 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Janitor's Room	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	3 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Janitor's Room	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	40 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Janitor's Room	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	3 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
1	Laundry Room	Floor	Floor	Ceramic Tile Grout and Mortar/Adhesive	15 sq. m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Laundry Room	Walls	Walls	Drywall Joint-Fill Compound	30 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Lobby	Walls	Walls	Drywall Joint-Fill Compound	30 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Lobby	Floor	Floor	Ceramic Tile Grout and Mortar/Adhesive	20 sq. m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Unit 101	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	48 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM

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Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Unit 101	Living Room, Hallway, Bedroom	Ceiling	Stucco	40 sq. m	56-BS-02A	Yes	3% Chrysotile	Yes Yes	C	good	ACM
1	Unit 101	Throughout, Excluding Washroom	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	48 sq. m	56-BS-03A	Yes	1.45% Chrysotile	No Yes	A	good	ACM
1	Unit 101	Washroom	Floor	Ceramic Tile Grout and Mortar/Adhesive	2 sq. m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Unit 101	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	200 sq. m	56-BS-01A	Yes	1% Chrysotile	No Yes	A	good	ACM
1	Washroom	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	2 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Washroom	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	20 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1	Washroom	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	2 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
1/2	North Stairwell	Ceiling	Ceiling	Stucco	30 sq. m	Ref: 56-BS-02A	No	3% Chrysotile	Yes Yes	C	good	ACM
1/2	North Stairwell	Walls	Walls	Drywall Joint-Fill Compound	80 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
1/2	South Stairwell	Ceiling	Ceiling	Stucco	30 sq. m	Ref: 56-BS-02A	No	3% Chrysotile	Yes Yes	C	good	ACM
1/2	South Stairwell	Walls	Walls	Drywall Joint-Fill Compound	80 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM

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2	Hallway	Walls	Walls	Drywall Joint-Fill Compound	240 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
2	Laundry Room	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	40 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
2	Laundry Room	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	12 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
2	Laundry Room	Floor	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	12 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
2	Unit 210	Walls and Ceiling	Walls and Ceiling	Drywall Joint-Fill Compound	200 sq. m	Ref: 56-BS-01A	No	1% Chrysotile	No Yes	A	good	ACM
2	Unit 210	Living Room, Hallway, Bedroom	Ceiling	Stucco	40 sq. m	Ref: 56-BS-02A	No	3% Chrysotile	Yes Yes	C	good	ACM
2	Unit 210	Washroom	Floor	12"x12" Vinyl Floor Tile - Beige with Grey Specks	2 sq. m	Ref: 56-BS-03A	No	1.45% Chrysotile	No Yes	A	good	ACM
2	Unit 210	Washroom	Floor	Ceramic Tile Grout and Mortar/Adhesive	2 sq. m	NS	No	PACM	No Yes	A	good (PACM)	PACM
2	Unit 210	Washroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tiles - Beige with Grey Specks	2 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
E	Exterior	Exterior	Windows	Exterior Window Caulking - White	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM
E	Exterior	Exterior	Walls	Brick Mortar	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM

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E	Exterior	Exterior	Windows	Exterior Door Caulking - White	NQ	NS	No	PACM	No	Yes	A	good (PACM)	PACM
E	Exterior Garage	Block Wall	Wall	Mastic Puck - Brown	10 sq. m	56-BS-05A	Yes	1.2% Chrysotile	No	Yes	A	good	ACM
I	Interior	Floor	Under Floor Tile	Mastic Associated with Vinyl Floor Tiles	NQ	NS	No	PACM	No	No	D	unknown (PACM)	PACM
I	Interior	Interior	Walls	Fire Rated Doors - Metal	NQ	NS	No	PACM	No	Yes	A	good (PACM)	PACM
R	Roof	Roofing	Roofing	Roof Caulking	NQ	NS	No	PACM	No	Yes	C	good (PACM)	PACM

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ASBESTOS BUILDING MATERIALS ASSESSMENT

Appendix D
Selected Site Photographs
February 17, 2017

Appendix D **Selected Site Photographs**

ASBESTOS BUILDING MATERIALS ASSESSMENT

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February 17, 2017



Photo 1: 12"x12" vinyl floor tile – beige with grey specks identified to be asbestos-containing in Unit 101 (1.45% Chrysotile).



Photo 2: Stucco identified to be asbestos-containing in Unit 210 (3% Chrysotile).



Photo 3: Drywall joint-fill compound identified to be asbestos-containing in the hallways (1% Chrysotile).



Photo 4: Mastic puck – brown on the block walls in the exterior garage identified to be asbestos-containing (1.2% Chrysotile).

ASBESTOS BUILDING MATERIALS ASSESSMENT

Appendix D
Selected Site Photographs
February 17, 2017



Photo 5: Brick mortar is presumed to be asbestos-containing.



Photo 6: Ceramic tile grout and mortar/adhesive is presumed to be asbestos-containing in the laundry room.



Photo 7: Exterior window and door caulking is presumed to be asbestos-containing.



Photo 8: Roof shingles are presumed to be asbestos-containing.