

Asbestos Building Materials Assessment

Multi-Residential Building
240 Helen Street
Cardinal ON



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

Prepared by:
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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 multi-residential building (subject building), located at 240 Helen Street in Cardinal, 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 renovation purposes. The conclusions presented herein represent the findings for a limited number of residential units. 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. The work was carried out in accordance with the requirements of the OHSA. The site work was conducted by Victoria Pereira on January 18, 2017.

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

- Texture coat (friable);
- 12"x12" vinyl floor tiles – beige with black dots (non-friable);
- 12"x12" vinyl floor tiles – beige with brown smears (non-friable);
- Drywall joint-fill compound (non-friable); and,
- Plaster (non-friable).

The 12"x12" vinyl floor tiles – beige with black dots were observed to be in poor condition in unit 108 living room and in unit 106 hallway. Drywall joint-fill compound was observed to be in poor condition in the laundry room's hot water tank room. The remaining materials were observed to be in good condition.

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

- Mastic associated with 12"x12" vinyl floor tile – blue with white smears;
- Mastic associated with 12"x12" vinyl floor tile – beige with black dots;
- Mastic associated with 12"x12" vinyl floor tile – beige with brown smears;
- Fire rated doors;
- Brick mortar; and,
- Roof caulking.

These materials were observed to be in good condition. These materials were not sampled to preserve their integrity. 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.

Similar materials are likely to present in units not assessed and these should be treated as ACMs or PACMs.

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.

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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 multi-residential building (subject building), located at 240 Helen Street in Cardinal, Ontario.

The purpose of the assessment was to assist the 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 renovation purposes. The conclusions presented herein represent the findings for a limited number of residential units. The conclusions presented herein represent the findings for a limited number of residential units. 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/or PACMs.

The work was carried out in accordance with the requirements of the OHSA. The site work was conducted by Victoria Pereira on January 18, 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:

- Under metal roofing;
- 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;
- Window and door glazing compounds;
- 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 vinyl sheet flooring was reported by Leeds Grenville to have been installed within with last three (3) years and is not suspected to contain asbestos.

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

- Units 106, 108, 205 and 212;
- Common areas (janitor/laundry/storage/garbage/common room, custodian office, lobbies, main entrance, washrooms, and corridors);
- Mechanical Rooms (hot water tank room, elevator room and electrical room);
- Attic; and,
- Exterior.

Asbestos-containing plaster was only observed in accessible areas and may be present in other areas.

The following areas were not accessed, for the reasons indicated:

- Roof (no access/metal 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 OHSA, 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

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of cuts, tears or punctures and disposed of at a licensed waste station which has been properly notified of the presence of asbestos waste.

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 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 was 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 were identified. Samples of representative materials were then collected at these locations. An assessment of the condition and accessibility was 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 one sample within the set is identified to contain asbestos, further analysis of the subsequent samples is deemed to be unnecessary and not conducted.

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4.1 FACILITY DESCRIPTION

The multi-residential building located at 240 Helen Street consists of a two (2) level building with 39 units. The reported construction date of the building is 1972. The typical structural components and finishes associated with this building consist of brick exterior walls, various types of flooring including cement, vinyl floor tile, ceramic tile, carpet and vinyl sheet flooring and interior concrete block and drywall walls with suspended ceiling tile and texture coat 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 is 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;
- Condition; and,
- Comments regarding recommended actions.

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:

- Texture coat.

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 tiles – beige with black dots;
- 12"x12" vinyl floor tiles – beige with brown smears;
- Drywall joint-fill compound; and,
- Plaster.

The 12"x12" vinyl floor tiles – beige with black dots were observed to be in poor condition in Unit 108 living room (1 cracked tile) and in Unit 106 hallway (1 cracked tile). Drywall joint-fill compound was observed to be in poor condition in the laundry room's hot water tank room. The remaining materials were observed to be in good condition.

It should be noted that drywall joint-fill compound and plaster are considered non-friable in their 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:

- Mastic associated with 12"x12" vinyl floor tile – blue with white smears;
- Mastic associated with 12"x12" vinyl floor tile – beige with black dots;
- Mastic associated with 12"x12" vinyl floor tile – beige with brown smears;
- Fire rated doors;
- Brick mortar; and,
- Roof caulking.

These materials were observed to be in good condition. These materials were not sampled to preserve their integrity. 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

It should be noted that the vinyl sheet flooring was reported by Leeds Grenville to have been installed within the last three (3) years and is not suspected to contain asbestos.

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

Various walls of the subject buildings 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

Stantec recommends the following with regards to meeting the requirements of O. Reg. 278/05:

- Cracked asbestos-containing 12"x12" vinyl floor tile – beige with black dots should be removed and disposed of following Type 1 abatement procedures;
- Non-asbestos-containing vinyl floor tiles should be installed over exposed presumed asbestos-containing mastic;
- Damaged asbestos-containing drywall joint-fill compound be removed following Type 2 abatement procedures;
- Asbestos-containing materials that may be impacted during renovation and/or demolition activities should be removed prior to the renovation and/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 and/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 and/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 and/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 or relied upon 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.

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.

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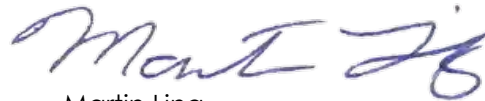
This report was prepared by Victoria Pereira and reviewed by Linda Fleet and Martin Ling.

Regards,

STANTEC CONSULTING LTD.



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Appendix A
Summary of Results for Analysis of Bulk Samples for Asbestos Content
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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
240-BS-01A-ADHESIVE	1st Floor, Lobby - baseboard	Ceramic tile adhesive	None Detected	PLM
240-BS-01A-GROUT	1st Floor, Lobby - baseboard	Ceramic tile grout	None Detected	PLM
240-BS-01B-ADHESIVE	1st Floor, Lobby - baseboard	Ceramic tile adhesive	None Detected	PLM
240-BS-01B-GROUT	1st Floor, Lobby - baseboard	Ceramic tile grout	None Detected	PLM
240-BS-01C-ADHESIVE	1st Floor, Lobby - baseboard	Ceramic tile adhesive	None Detected	PLM
240-BS-01C-GROUT	1st Floor, Lobby - baseboard	Ceramic tile grout	None Detected	PLM
240-BS-02A	Exterior, North Corridor near South Stairs - door	Exterior caulking - grey	None Detected	PLM
240-BS-02B	Exterior, North Corridor near South Stairs - door	Exterior caulking - grey	None Detected	PLM
240-BS-02C	Exterior, North Corridor near South Stairs - door	Exterior caulking - grey	None Detected	PLM
240-BS-03A	Exterior, North Corridor - siding	Exterior caulking - beige	None Detected	PLM
240-BS-03B	Exterior, North Corridor - siding	Exterior caulking - beige	None Detected	PLM
240-BS-03C	Exterior, North Corridor - siding	Exterior caulking - beige	None Detected	PLM
240-BS-04A	1st Floor, North Corridor - ceiling	2'x4' Acoustic ceiling tile - small fissures and pinholes	None Detected	PLM
240-BS-04B	1st Floor, North Corridor - ceiling	2'x4' Acoustic ceiling tile - small fissures and pinholes	None Detected	PLM
240-BS-04C	1st Floor, North Corridor - ceiling	2'x4' Acoustic ceiling tile - small fissures and pinholes	None Detected	PLM
240-BS-05A	1st Floor, North Corridor near South Stairs - ceiling	2'x4' Acoustic ceiling tile - large fissures and pinholes	None Detected	PLM
240-BS-05B	1st Floor, North Corridor near South Stairs - ceiling	2'x4' Acoustic ceiling tile - large fissures and pinholes	None Detected	PLM

Summary of Bulk Sample Analysis for Asbestos Type and Content

Sample Number	Sampling Location	Description of Sampled Material	Asbestos Type and Content	Analysis
240-BS-05C	1st Floor, North Corridor near South Stairs - ceiling	2'x4' Acoustic ceiling tile - large fissures and pinholes	None Detected	PLM
240-BS-06A	1st Floor, Lounge Room - bulkhead	Drywall joint-fill compound	1% Chrysotile	PLM
240-BS-06B	1st Floor, North Corridor - bulkhead	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-06C	1st Floor, South Stairs - wall	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-06D	1st Floor, Hot Water Room - ceiling	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-06E	1st Floor, Laundry Room - wall	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-06F	1st Floor, Corridor to Laundry Room - wall	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-06G	2nd Floor, Lobby Area - wall	Drywall joint-fill compound	Positive Stop Not Analyzed	PLM
240-BS-07A	1st Floor, Lounge Room - ceiling	Texture coat	0.84% Chrysotile	PLM
240-BS-07B	1st Floor, South Stairs - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-07C	1st Floor, Lobby - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-07D	1st Floor, Corridor to Laundry Room - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-07E	2nd Floor, Lobby - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-07F	2nd Floor, North Corridor - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-07G	2nd Floor, East Corridor - ceiling	Texture coat	Positive Stop Not Analyzed	PLM
240-BS-08A-ROUGH COAT	1st Floor, Garbage Room - wall	Plaster	None Detected	PLM

Summary of Bulk Sample Analysis for Asbestos Type and Content

Sample Number	Sampling Location	Description of Sampled Material	Asbestos Type and Content	Analysis
240-BS-08A-SKIM COAT	1st Floor, Garbage Room - wall	Plaster	1% Chrysotile	PLM
240-BS-08B-ROUGH COAT	1st Floor, Garbage Room - wall	Plaster	None Detected	PLM
240-BS-08B-SKIM COAT	1st Floor, Garbage Room - wall	Plaster	Positive Stop Not Analyzed	PLM
240-BS-08C-ROUGH COAT	1st Floor, Garbage Room - wall	Plaster	<0.5% Chrysotile	PLM
240-BS-08C-SKIM COAT	1st Floor, Garbage Room - wall	Plaster	Positive Stop Not Analyzed	PLM
240-BS-09A	1st Floor, Unit 108 Living Room	12"x12"Vinyl floor tile - beige with black dots	2.35% Chrysotile	PLM
240-BS-09B	1st Floor, Unit 108 Living Room	12"x12"Vinyl floor tile - beige with black dots	Positive Stop Not Analyzed	PLM
240-BS-09C	1st Floor, Unit 108 Living Room	12"x12"Vinyl floor tile - beige with black dots	Positive Stop Not Analyzed	PLM
240-BS-10A	1st Floor, Unit 108 Kitchen	12"x12"Vinyl floor tile - beige with brown smears	0.77% Chrysotile	PLM
240-BS-10B	1st Floor, Unit 108 Kitchen	12"x12"Vinyl floor tile - beige with brown smears	Positive Stop Not Analyzed	PLM
240-BS-10C	1st Floor, Unit 108 Kitchen	12"x12"Vinyl floor tile - beige with brown smears	Positive Stop Not Analyzed	PLM
240-BS-11A	1st Floor, Electrical Room	12"x12"Vinyl floor tile - blue with white smears	None Detected	PLM
240-BS-11B	1st Floor, Electrical Room	12"x12"Vinyl floor tile - blue with white smears	None Detected	PLM
240-BS-11C	1st Floor, Electrical Room	12"x12"Vinyl floor tile - blue with white smears	None Detected	PLM
240-BS-12A	1st Floor, North Corridor	2'x4'Acoustic ceiling tile - medium fissures and pinholes	None Detected	PLM
240-BS-12B	1st Floor, North Corridor	2'x4'Acoustic ceiling tile - medium fissures and pinholes	None Detected	PLM

Summary of Bulk Sample Analysis for Asbestos Type and Content

Sample Number	Sampling Location	Description of Sampled Material	Asbestos Type and Content	Analysis
240-BS-12C	1st Floor, North Corridor	2'x4' Acoustic ceiling tile - medium fissures and pinholes	None Detected	PLM
240-BS-13A	Exterior, Lounge Room - window	Exterior caulking - white	None Detected	PLM
240-BS-13B	Exterior, Lounge Room - window	Exterior caulking - white	None Detected	PLM
240-BS-13C	Exterior, Lounge Room - window	Exterior caulking - white	None Detected	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: Victoria Pereira

Client PO: 240 Helen St
Project: 122150275
Custody:

Report Date: 26-Jan-2017
Order Date: 23-Jan-2017

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

Paracel ID	Client ID
1704135-01	240-BS-01A (grout)
1704135-02	240-BS-01B (grout)
1704135-03	240-BS-01C (grout)
1704135-04	240-BS-01A (adhesive)
1704135-05	240-BS-01B (adhesive)
1704135-06	240-BS-01C (adhesive)
1704135-07	240-BS-02A
1704135-08	240-BS-02B
1704135-09	240-BS-02C
1704135-10	240-BS-03A
1704135-11	240-BS-03B
1704135-12	240-BS-03C
1704135-13	240-BS-04A
1704135-14	240-BS-04B
1704135-15	240-BS-04C
1704135-16	240-BS-05A
1704135-17	240-BS-05B
1704135-18	240-BS-05C
1704135-19	240-BS-06A
1704135-20	240-BS-06B
1704135-21	240-BS-06C
1704135-22	240-BS-06D
1704135-23	240-BS-06E
1704135-24	240-BS-06F
1704135-25	240-BS-06G
1704135-26	240-BS-07A

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

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

Client PO: **240 Helen St**

Report Date: 26-Jan-2017

Order Date: 23-Jan-2017

Project Description: **122150275**

1704135-27	240-BS-07B
1704135-28	240-BS-07C
1704135-29	240-BS-07D
1704135-30	240-BS-07E
1704135-31	240-BS-07F
1704135-32	240-BS-07G
1704135-33	240-BS-08A (rough coat)
1704135-34	240-BS-08B (rough coat)
1704135-35	240-BS-08C (rough coat)
1704135-36	240-BS-08A (skim coat)
1704135-37	240-BS-08B (skim coat)
1704135-38	240-BS-08C (skim coat)
1704135-39	240-BS-09A
1704135-40	240-BS-09B
1704135-41	240-BS-09C
1704135-42	240-BS-10A
1704135-43	240-BS-10B
1704135-44	240-BS-10C
1704135-45	240-BS-11A
1704135-46	240-BS-11B
1704135-47	240-BS-11C
1704135-48	240-BS-12A
1704135-49	240-BS-12B
1704135-50	240-BS-12C
1704135-51	240-BS-13A
1704135-52	240-BS-13B
1704135-53	240-BS-13C

Certificate of Analysis
 Client: **Stantec Consulting Ltd. (Ottawa)**
 Client PO: **240 Helen St**

Report Date: 26-Jan-2017
 Order Date: 23-Jan-2017
 Project Description: **122150275**

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

<i>Parcel I.D.</i>	<i>Sample Date</i>	<i>Layers Analyzed</i>	<i>Colour</i>	<i>Description</i>	<i>Asbestos Detected:</i>	<i>Material Identification</i>	<i>% Content</i>
1704135-01	23-Jan-17	sample homogenized	Grey	Grout	No	Client ID: 240-BS-01A (grout) Non-Fibers	100
1704135-02	23-Jan-17	sample homogenized	Grey	Grout	No	Client ID: 240-BS-01B (grout) Non-Fibers	100
1704135-03	23-Jan-17	sample homogenized	Grey	Grout	No	Client ID: 240-BS-01C (grout) Non-Fibers	100
1704135-04	23-Jan-17	sample homogenized	Yellow	Adhesive	No	Client ID: 240-BS-01A (adhesive) [AS-PRE] Non-Fibers	100
1704135-05	23-Jan-17	sample homogenized	Yellow	Adhesive	No	Client ID: 240-BS-01B (adhesive) [AS-PRE] Non-Fibers	100
1704135-06	23-Jan-17	sample homogenized	Yellow	Adhesive	No	Client ID: 240-BS-01C (adhesive) [AS-PRE] Non-Fibers	100
1704135-07	23-Jan-17	sample homogenized	Grey	Caulking	No	Client ID: 240-BS-02A [AS-PRE] MMVF Non-Fibers	<MDL 100
1704135-08	23-Jan-17	sample homogenized	Grey	Caulking	No	Client ID: 240-BS-02B [AS-PRE] MMVF Non-Fibers	<MDL 100
1704135-09	23-Jan-17	sample homogenized	Grey	Caulking	No	Client ID: 240-BS-02C [AS-PRE] MMVF Non-Fibers	<MDL 100
1704135-10	23-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-03A [AS-PRE] Non-Fibers	100
1704135-11	23-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-03B [AS-PRE] Non-Fibers	100
1704135-12	23-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-03C [AS-PRE] Non-Fibers	100
1704135-13	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-04A [AS-PRE] Cellulose MMVF Non-Fibers	50 20 30
1704135-14	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-04B [AS-PRE] Cellulose MMVF Non-Fibers	50 20 30

Certificate of Analysis
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 Client PO: **240 Helen St**

Report Date: 26-Jan-2017
 Order Date: 23-Jan-2017
 Project Description: **122150275**

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

<i>Parcel I.D.</i>	<i>Sample Date</i>	<i>Layers Analyzed</i>	<i>Colour</i>	<i>Description</i>	<i>Asbestos Detected:</i>	<i>Material Identification</i>	<i>% Content</i>
1704135-15	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-04C [AS-PRE] Cellulose	50
						MMVF	20
						Non-Fibers	30
1704135-16	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-05A [AS-PRE] Cellulose	40
						MMVF	30
						Non-Fibers	30
1704135-17	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-05B [AS-PRE] Cellulose	40
						MMVF	30
						Non-Fibers	30
1704135-18	23-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-05C [AS-PRE] Cellulose	40
						MMVF	30
						Non-Fibers	30
1704135-19	23-Jan-17	sample homogenized	White	Drywall Joint Compound	Yes	Client ID: 240-BS-06A Chrysotile	1
						Non-Fibers	99
1704135-20	23-Jan-17					Client ID: 240-BS-06B not analyzed	
1704135-21	23-Jan-17					Client ID: 240-BS-06C not analyzed	
1704135-22	23-Jan-17					Client ID: 240-BS-06D not analyzed	
1704135-23	23-Jan-17					Client ID: 240-BS-06E not analyzed	
1704135-24	23-Jan-17					Client ID: 240-BS-06F not analyzed	
1704135-25	23-Jan-17					Client ID: 240-BS-06G not analyzed	
1704135-26	23-Jan-17	sample homogenized	White	Texture Coat	Yes	Client ID: 240-BS-07A [AS-PRE] Chrysotile	0.84
						Non-Fibers	99.16

Certificate of Analysis
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Report Date: 26-Jan-2017
 Order Date: 23-Jan-2017
 Project Description: **122150275**

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

<i>Parcel I.D.</i>	<i>Sample Date</i>	<i>Layers Analyzed</i>	<i>Colour</i>	<i>Description</i>	<i>Asbestos Detected:</i>	<i>Material Identification</i>	<i>% Content</i>
1704135-27	18-Jan-17					Client ID: 240-BS-07B not analyzed	
1704135-28	18-Jan-17					Client ID: 240-BS-07C not analyzed	
1704135-29	18-Jan-17					Client ID: 240-BS-07D not analyzed	
1704135-30	18-Jan-17					Client ID: 240-BS-07E not analyzed	
1704135-31	18-Jan-17					Client ID: 240-BS-07F not analyzed	
1704135-32	18-Jan-17					Client ID: 240-BS-07G not analyzed	
1704135-33	18-Jan-17	sample homogenized	Grey	Plaster	No	Client ID: 240-BS-08A (rough coat) Non-Fibers	100
1704135-34	18-Jan-17	sample homogenized	Grey	Plaster	No	Client ID: 240-BS-08B (rough coat) Non-Fibers	100
1704135-35	18-Jan-17	sample homogenized	Grey	Plaster	Yes	Client ID: 240-BS-08C (rough coat) [ASTrc] Chrysotile Non-Fibers	<MDL 100
1704135-36	18-Jan-17	sample homogenized	White	Plaster	Yes	Client ID: 240-BS-08A (skim coat) Chrysotile Non-Fibers	1 99
1704135-37	18-Jan-17					Client ID: 240-BS-08B (skim coat) not analyzed	
1704135-38	18-Jan-17					Client ID: 240-BS-08C (skim coat) not analyzed	
1704135-39	18-Jan-17	sample homogenized	Beige	Floor Tile	Yes	Client ID: 240-BS-09A Chrysotile Non-Fibers	2.35 97.65
1704135-40	18-Jan-17					Client ID: 240-BS-09B not analyzed	
1704135-41	18-Jan-17					Client ID: 240-BS-09C not analyzed	

Certificate of Analysis
 Client: **Stantec Consulting Ltd. (Ottawa)**
 Client PO: **240 Helen St**

Report Date: 26-Jan-2017
 Order Date: 23-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
1704135-42	18-Jan-17	sample homogenized	Beige	Floor Tile	Yes	Client ID: 240-BS-10A [AS-PRE] Chrysotile Non-Fibers	0.77 99.23
1704135-43	18-Jan-17					Client ID: 240-BS-10B not analyzed	
1704135-44	18-Jan-17					Client ID: 240-BS-10C not analyzed	
1704135-45	18-Jan-17	sample homogenized	Blue	Floor Tile	No	Client ID: 240-BS-11A [AS-PRE] Non-Fibers	100
1704135-46	18-Jan-17	sample homogenized	Blue	Floor Tile	No	Client ID: 240-BS-11B [AS-PRE] Non-Fibers	100
1704135-47	18-Jan-17	sample homogenized	Blue	Floor Tile	No	Client ID: 240-BS-11C [AS-PRE] Non-Fibers	100
1704135-48	18-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-12A [AS-PRE] Cellulose MMVF Non-Fibers	40 30 30
1704135-49	18-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-12B [AS-PRE] Cellulose MMVF Non-Fibers	40 30 30
1704135-50	18-Jan-17	sample homogenized	Beige	Ceiling Tile	No	Client ID: 240-BS-12C [AS-PRE] Cellulose MMVF Non-Fibers	40 30 30
1704135-51	18-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-13A [AS-PRE] Non-Fibers	100
1704135-52	18-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-13B [AS-PRE] Non-Fibers	100
1704135-53	18-Jan-17	sample homogenized	White	Caulking	No	Client ID: 240-BS-13C [AS-PRE] Non-Fibers	100

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

** Analytes in bold indicate asbestos mineral content.

Certificate of Analysis
Client: Stantec Consulting Ltd. (Ottawa)
Client PO: 240 Helen St

Report Date: 26-Jan-2017
Order Date: 23-Jan-2017
Project Description: 122150275

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	NVLAP Lab Code *	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	1 - Mississauga	200863-0	26-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

AS-PT: Asbestos quantitation by PLM Point Count method.

ASTrc: Trace asbestos was observed below the noted detection limit but could not be accurately quantified.

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

Summary of Occurrences of Asbestos-Containing Materials

Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Corridors	To Laundry Room	Ceiling	Texture Coat	20 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Corridors	To Laundry Room	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	40 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Corridors	East	Ceiling	Drywall Joint-Fill Compound	10 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Corridors	East	Ceiling	Texture Coat	50 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Corridors	North	Walls	Brick Mortar	5 sq.m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Corridors	North	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	200 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Corridors	Doors	Doors	Fire Rated Doors	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Electrical Room	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	50 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Electrical Room	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Blue with White Smears	20 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Elevator Room	Walls, Ceiling and Bulkhead	Walls and Ceiling	Drywall Joint-Fill Compound	10 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM

Accessibility Classification

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- C - Areas of the building above 2.4 m where use of a ladder is required to reach the asbestos
- D - Areas of the building behind inaccessible solid ceiling systems, walls, or mechanical equipment, etc., where demolition of the ceiling, wall, or equipment, etc., is required to reach the asbestos

Visibility

- Yes - Suspect material is visible without opening hatches or lifting ceiling files
- No - Suspect material can only be viewed if access hatches are opened or ceiling tiles lifted.

* Based on a non-intrusive inspection of visible surfaces within the room space.

- Notes:
- ACM - asbestos-containing material
 - PACM - presumed asbestos-containing material
 - Access. - accessibility
 - nq - not quantified
 - na - not applicable
 - ns - not sampled
 - ref - reference sample
 - F - friable
 - NF - non friable
 - RCA - recommend corrective action
 - BS - bulk sample

Summary of Occurrences of Asbestos-Containing Materials

Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Elevator Room	Ceiling	Ceiling	Texture Coat	5 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Elevator Room	Floor	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Blue with White Smears	5 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Garbage Room	Wall	Wall	Plaster - Skim Coat	15 sq.m	240-BS-08A	Yes	1% Chrysotile	No Yes	A	good	ACM
1	Gentlemen Washroom	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	20 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Janitor Room	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	40 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Ladies Washroom	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	20 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Laundry Room	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	20 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Laundry Room	Hot Water Tank Room	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	50 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	B	poor	3 SQ.M DAMAGED DRYWALL JOINT-FILL COMPOUND ON CEILING AND BULKHEAD
1	Lobby	Wall	Wall	Ceramic Tile Grout and Mortar / Adhesive	5 sq.m	NS	No	PACM	No Yes	A	good (PACM)	PACM

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Summary of Occurrences of Asbestos-Containing Materials

Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Lobby	Ceiling	Ceiling	Texture Coat	20 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Lobby	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	15 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Lounge Room	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	200 sq.m	240-BS-06A	Yes	1% Chrysotile	No Yes	A	good	ACM
1	Lounge Room	Ceiling	Ceiling	Texture Coat	100 sq.m	240-BS-07A	Yes	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Main Entrance	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	10 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Stairs	South	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	25 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Stairs	Doors	Doors	Fire Rated Doors	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Stairs	Center	Ceiling	Texture Coat	10 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Stairs	Center	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	5 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Stairs	East	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	5 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM

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 - nq - not quantified
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 - BS - bulk sample

Summary of Occurrences of Asbestos-Containing Materials

Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
1	Stairs	South	Ceiling	Texture Coat	10 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Unit 106	Washroom	Wall	Ceramic Tile Grout and Mortar / Adhesive	5 sq.m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Unit 106	Kitchen	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Unit 106	Living Room, Hallway, Closets and Bedroom	Ceiling	Texture Coat	60 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Unit 106	Kitchen	Floor	12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	Ref: 240-BS-10A	No	0.77% Chrysotile	No Yes	A	good	ACM
1	Unit 106	Living Room, Hallway, Closets, Washroom and Bedroom	Floor	12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	Ref: 240-BS-09A	No	2.35% Chrysotile	No Yes	A	poor	CRACKED TILE OBSERVED AT HALLWAY
1	Unit 106	Living Room, Washroom, Kitchen, Bedroom, Closets and Hallway	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	120 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM

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 - F - friable
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Summary of Occurrences of Asbestos-Containing Materials

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 106	Living Room, Hallway, Closets, Washroom and Bedroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Unit 108	Living Room, Hallway, Closets, Washroom and Bedroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
1	Unit 108	Living Room, Hallway, Closets and Bedroom	Ceiling	Texture Coat	60 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
1	Unit 108	Washroom	Wall	Ceramic Tile Grout and Mortar / Adhesive	5 sq.m	NS	No	PACM	No Yes	A	good (PACM)	PACM
1	Unit 108	Living Room, Washroom, Kitchen, Bedroom, Closets and Hallway	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	120 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
1	Unit 108	Living Room, Hallway, Closets, Washroom and Bedroom	Floor	12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	Ref: 240-BS-09A	No	2.35% Chrysotile	No Yes	A	poor	CRACKED TILE OBSERVED AT EXTERIOR DOOR IN LIVING ROOM

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Summary of Occurrences of Asbestos-Containing Materials

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 108	Kitchen	Floor	12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	240-BS-10A	Yes	0.77% Chrysotile	No Yes	A	good	ACM
1	Unit 108	Living Room, Hallway, Closets, Washroom and Bedroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	Ref: 240-BS-09A	No	2.35% Chrysotile	No No	D	unknown (PACM)	PACM
1	Unit 108	Kitchen	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
2	Corridors	East	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	150 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Corridors	Doors	Doors	Fire Rated Doors	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM
2	Corridors	North	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	150 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Corridors	North	Ceiling	Texture Coat	100 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Corridors	East	Ceiling	Texture Coat	50 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Custodian Office	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	100 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM

Accessibility Classification

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Visibility

- Yes - Suspect material is visible without opening hatches or lifting ceiling files
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* Based on a non-intrusive inspection of visible surfaces within the room space.

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2	Garbage Room	Ceiling	Ceiling	Texture Coat	15 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Lobby	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	150 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Lobby	Ceiling	Ceiling	Texture Coat	40 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Stairs	Doors	Doors	Fire Rated Doors	NQ	NS	No	PACM	No Yes	A	good (PACM)	PACM
2	Stairs	South	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	25 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Stairs	Center	Ceiling	Texture Coat	20 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Stairs	Center	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	5 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Stairs	East	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	5 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Stairs	South	Ceiling	Texture Coat	10 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Storage Room near Center Stairs	Ceiling	Ceiling	Texture Coat	5 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM

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Summary of Occurrences of Asbestos-Containing Materials

Level	Room	Specific Location	ACM Location	ACM Type	Estimated Quantity	Sample Number	Original Sample?	Asbestos Content	Friable? Visible?	Access.	ACM Condition	Comments/ Notes
2	Storage Room near Center Stairs	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	15 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Storage Room near Garbage Room	Walls, Ceiling and Bulkhead	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	10 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Storage Room near Garbage Room	Ceiling	Ceiling	Texture Coat	20 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Unit 205	Living Room, Hallway, Closets and Bedroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Black Dots	60 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
2	Unit 205	Washroom	Wall	Ceramic Tile Grout and Mortar / Adhesive	5 sq.m	NS	No	PACM	No Yes	A	good (PACM)	PACM
2	Unit 205	Kitchen	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	NS	No	PACM	No No	D	unknown (PACM)	PACM
2	Unit 205	Living Room, Hallway, Closets and Bedroom	Floor	12"x12" Vinyl Floor Tile - Beige with Black Dots	60 sq.m	Ref: 240-BS-09A	No	2.35% Chrysotile	No Yes	A	good	ACM
2	Unit 205	Living Room, Hallway, Closets and Bedroom	Ceiling	Texture Coat	60 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM

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2	Unit 205	Living Room, Washroom, Kitchen, Bedroom, Closets and Hallway	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	120 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM
2	Unit 205	Kitchen	Floor	12"x12" Vinyl Floor Tile - Beige with Brown Smears	5 sq.m	Ref: 240-BS-10A	No	0.77% Chrysotile	No Yes	A	good	ACM
2	Unit 212	Living Room, Hallway, Closets and Bedroom	Ceiling	Texture Coat	60 sq.m	Ref: 240-BS-07A	No	0.84% Chrysotile	Yes Yes	C	good	ACM
2	Unit 212	Living Room, Hallway, Closets, Washroom and Bedroom	Under Floor Tile	Mastic Associated with 12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	NS	No	PACM	No No	D	unknown (PACM)	CARPET OVER TILES IN BEDROOM AND LIVING ROOM
2	Unit 212	Living Room, Hallway, Closets, Washroom and Bedroom	Floor	12"x12" Vinyl Floor Tile - Beige with Black Dots	65 sq.m	Ref: 240-BS-09A	No	2.35% Chrysotile	No No	A	unknown	CARPET OVER TILES IN BEDROOM AND LIVING ROOM
2	Unit 212	Living Room, Washroom, Kitchen, Bedroom, Closets and Hallway	Walls, Ceiling and Bulkhead	Drywall Joint-Fill Compound	120 sq.m	Ref: 240-BS-06A	No	1% Chrysotile	No Yes	A	good	ACM

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2	Unit 212	Washroom	Wall	Ceramic Tile Grout and Mortar / Adhesive	5 sq.m	NS	No	PACM	No	Yes	A	good (PACM)	PACM
Exterior	Exterior	Walls	Walls	Brick Mortar	NQ	NS	No	PACM	No	Yes	A	good (PACM)	PACM
Roof	Roof	Roofing	Roofing	Roof Caulking	NQ	NS	No	PACM	No	Yes	C	unknown (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

Appendix D
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February 17, 2017



Photo 1: Asbestos-containing drywall joint-fill compound observed to be in poor condition on the ceiling in the hot water tank room located in the laundry room.



Photo 2: Asbestos-containing 12"x12" vinyl floor tile – beige with black dots observed to be in poor condition (cracked tiles) in the living room of Unit 108.

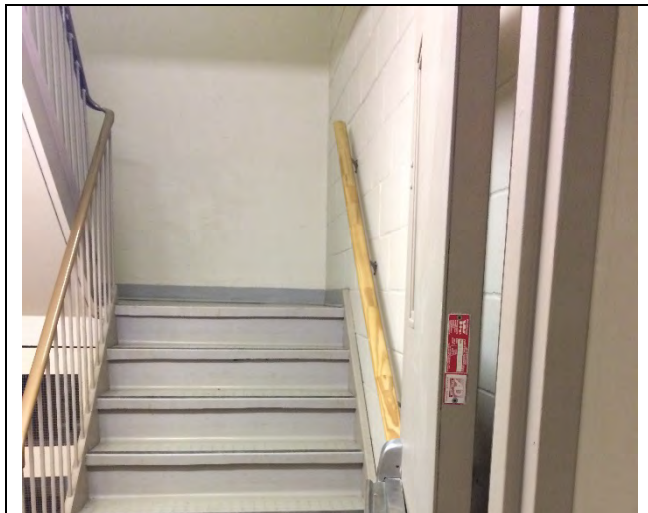


Photo 3: Presumed asbestos-containing fire rated door.



Photo 4: Asbestos-containing texture coat in the 1st floor north stairs.

ASBESTOS BUILDING MATERIALS ASSESSMENT

Appendix D
Selected Site Photographs
February 17, 2017



Photo 5: Presumed asbestos-containing brick mortar observed to be in good condition on the exterior walls



Photo 6: Asbestos-containing plaster observed in the garbage room.

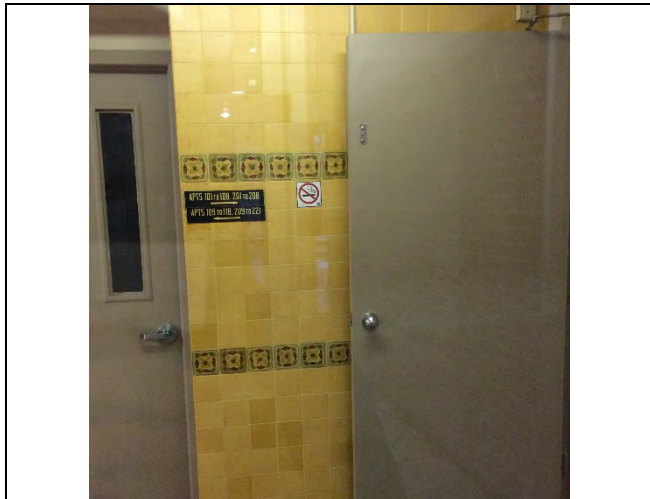


Photo 7: Presumed asbestos-containing ceramic tile grout and mortar/adhesive.



Photo 8: Asbestos-containing 12"x12" vinyl floor tile – beige with brown.