



December 7, 2017

## CITY OF SASKATOON

# Asbestos-Containing Building Materials Assessment Report - Vic Rempel Administration Building



**Submitted to:**

The City of Saskatoon  
1101 Avenue P North  
Saskatoon, SK S7L 7K6

**Report Number: 1667963**

**Distribution:**

One Copy: City of Saskatoon  
One Copy: Golder Associates Ltd.

REPORT





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### 1.0 INTRODUCTION

Golder Associates Ltd. (Golder) was retained by the City of Saskatoon (the Client) to conduct an asbestos-containing building materials assessment of the Vic Rempel Administration Building (the Site) located at 325 – 3<sup>rd</sup> Avenue North in Saskatoon, Saskatchewan. This assessment report details our findings, conclusions and recommendations for the Site. A walkthrough of the Site was conducted on September 5, 2017 and the assessment was conducted on October 15, 2017 by Kody Henderson, OHS Project Manager. Asbestos-containing building materials were identified within the Vic Rempel Administration Building during the assessment. Further information is provided in Section 3.0.

### 2.0 SCOPE OF WORK

In accordance with Tender 16-0844, Golder's scope of work included conducting an asbestos-containing building materials assessment of the Site to evaluate the quantities, locations, and conditions of asbestos-containing building materials.

Following the field work, Golder prepared this assessment report that includes laboratory analysis results, findings of the assessment, conclusions, and recommendations.

#### 2.1 Asbestos-Containing Materials

The assessment involved a non-destructive inspection of the Site to assess the type and extent of suspect ACMs in the facility. The systems that were reviewed as part of the inspections included, but were not limited to:

- *Structural* - systems including: insulation between solid webbed joists, fireproofing, building envelope, and interior/exterior caulking around windows and doors;
- *Mechanical* - systems insulation including: hot water and steam system, condensate system, chilled water system, glycol system, domestic hot and cold water, emergency generator exhaust, boiler units, heat exchangers, and asbestos cement piping; and
- *Architectural* - systems including: texture coats, sheet flooring, vinyl floor tile, acoustical spray-applied materials, condensation control applications, ceiling tile, wall board, drywall joint compound, and asbestos sheet products.

Systematic sampling of suspect ACMs was conducted as part of the assessment. Samples were submitted under chain of custody to International Asbestos Testing Laboratory Inc. (IATL) and analyzed for asbestos type and percentage content using Polarized Light Microscopy (PLM) in accordance with EPA methodologies (EPA 600/R-93/116).

Further information related to the assessment and sample collection methods can be found in the Golder document *Golder Asbestos Assessment General Survey Plan and Protocol* provided to the Client.



### 3.0 RESULTS AND DISCUSSION

The Vic Rempel Administration Building consists of office spaces, washrooms, storage rooms, meeting rooms, and hallways and was constructed in 1989. During the assessment, the entire building was treated as one functional space.

- The Laboratory Certificate of Analysis report for the bulk asbestos samples is included in Appendix A.
- Photographs collected during the assessment are provided in Appendix B.
- A room by room spreadsheet outlining the locations, quantities, friability, and condition of identified asbestos-containing materials as well as additional information is provided in Appendix C.
- Floor plans outlining the sample locations and locations of identified asbestos-containing materials is provided in Appendix D.
- Please refer to Sections 4.0 and 6.0 of this report for a summary of the limitations encountered.

### 3.1 Asbestos-Containing Materials

A total of thirty (30) samples of building materials were collected and tested for asbestos content during the assessment of the Assessors Building. One (1) of the samples was found to contain asbestos.

Potential asbestos-containing materials may be located within the electrical panels on Site.

#### 3.1.1 List of Identified Asbestos-Containing Materials

A list of the identified asbestos-containing materials is provided below.

- Gold Sink Undercoat.

Further information on the identified asbestos-containing materials listed is provided below.

##### *Gold Sink Undercoat*

One (1) sample of gold sink undercoat was collected during the assessment. The sample collected was found to contain 4.1% Chrysotile asbestos. Asbestos-containing gold sink undercoat (see Photograph 1 in Appendix B) was observed in the following locations:

- Room 138 (approximately 1 sink).

#### 3.1.2 Non Asbestos-Containing Materials

The following materials were sampled during this assessment and were found to not contain asbestos or were observed to be non-suspect materials:

- White building caulking;
- Brick mortar;
- Drywall joint compound;
- White pipe caulking;
- Dark brown duct mastic;



- White sink undercoat;
- Grey duct mastic;
- Grey firestop;
- Pipe-fitting insulation;
- Grey floor levelling compound;
- Black window caulking;
- Brown window frame caulking;
- Grey building caulking;
- The 2'x4' textured ceiling tiles were date coded to a time period in which asbestos use was not widespread;
- The duct work throughout the ceiling space was observed to be uninsulated; and
- The walls were observed to be constructed of concrete block, brick, pre-fabricated drywall, and drywall with non-asbestos-containing joint compound with ceilings constructed of non-asbestos-containing ceiling tiles, followed by a second drywall ceiling finished with non-asbestos-containing drywall joint compound above the ceiling tiles. The flooring throughout the building was observed to be carpet, concrete, or ceramic tiles.

### 4.0 EXCLUDED AREAS AND MATERIALS

The following is a list of the areas and/or materials excluded during the assessment.

- The roof and associated components were not assessed by Golder during the assessment as per Tender 16-0844. If the roof and associated components are to be removed or impacted by future renovation or demolition activities, additional investigation and sampling of suspect materials may be required.
- The concrete block walls were not assessed by Golder during the assessment as per Tender 16-0844. If the concrete block walls are to be removed or impacted by future renovation or demolition activities, additional investigation and sampling of suspect materials may be required.
- The electrical panels and associated components were not inspected by Golder during the assessment. If the panels are to be removed or impacted by future renovation or demolition activities, additional investigation and sampling of suspect materials may be required.
- The crawlspace that is accessible via Room 124 was not entered as it was deemed to be a confined space. If the crawlspace is to be impacted by future renovation or demolition activities, additional investigation and sampling of suspect materials may be required.



### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the visual assessment and the laboratory analytical results, the following project specific conclusions and recommendations are provided.

#### 5.1 Asbestos-Containing Materials

Asbestos was positively identified within the gold sink undercoat on Site. Asbestos was not identified in the remaining samples collected and analyzed.

If the building is scheduled for renovations that will impact the identified or potential asbestos-containing materials, it must be removed. If additional suspect asbestos-containing building materials are encountered during renovation activities, additional sampling should be undertaken to evaluate asbestos content.

Removal work should be completed by workers that are adequately trained in the hazards and proper methods of working with asbestos. Throughout the abatement activities, appropriate air monitoring and inspections should be conducted by a competent person to document that contamination is contained and that ACM are disposed of appropriately. Ensure asbestos waste is disposed of in accordance with the requirements of the Government of Saskatchewan.

All quantities listed in the report are approximate and are based on the conditions at the time of the assessment. Prior to abatement work it is recommended that a competent person conduct a review of the site to quantify and obtain all measurements of all building materials detailed in this report for cost estimating purposes.

In anticipation of potential abatement, Golder's recommendations for the asbestos-containing materials identified during the assessment are outlined below.

##### **Gold Sink Undercoat**

If scheduled for impact, asbestos-containing gold sink undercoat should be abated following low-risk abatement work procedures as outlined in the *Saskatchewan Asbestos Abatement Manual* (2017). Alternatively, as the gold sink undercoat was observed in good condition, and with a priority rating of 5 (please see the room by room spreadsheet provided in Appendix C for a description of the priority ratings), it can be managed in place if not scheduled for impact.

### 6.0 SURVEY LIMITATIONS

This report is based on data and information collected by Golder during the assessment conducted on October 15, 2017 and is based solely on site conditions encountered at the time of the assessment. Any use of this document or the findings, conclusions or recommendations provided in this report by any person other than the City of Saskatoon is at the sole risk of such user.

The conclusions and recommendations contained in this survey report are based upon professional opinions with regard to the subject matter. These opinions are in accordance with currently accepted environmental assessment standards and practices applicable to these locations and are subject to the following inherent limitations:



## ASBESTOS-CONTAINING BUILDING MATERIALS ASSESSMENT REPORT - VIC REMPEL ADMINISTRATION BUILDING

The data and findings presented in this report are valid as of the dates of the investigations. The passage of time, manifestation of latent conditions or occurrence of future events may warrant further exploration at the properties, analysis of the data, and re-evaluation of the findings, observations, and conclusions expressed in this report. No assurance is made regarding changes in conditions or practices subsequent to the time of the investigation. It was beyond the scope of this assessment to conduct a risk assessment and the potential health risks that may be associated with asbestos exposure for building occupants.

The data reported and the findings, observations and conclusions expressed in this report are limited by the Scope of Work. The Scope of Work was defined by Tender 16-0844 and the initial site walkthrough with the Client, the time and budgetary constraints imposed by the Client, and availability of access to the property.

Because of the limitations stated above, the findings, observations and conclusions expressed by Golder in this report are not, and must not be, considered an opinion concerning compliance of any past or present owner or operator of the site with any federal, provincial or local laws or regulations.

No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon site conditions in existence at the time of investigation.

Golder's assessment reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, provincial, or local governmental agencies. Any use of the survey report constitutes acceptance of the limits of Golder's liability.

Golder's liability extends only to its client and not to other parties who may obtain this survey report. Issues raised by the report must be reviewed by appropriate legal counsel.

## 7.0 CLOSURE

We trust the information presented in this report meets your requirements. If you have any questions, please contact Kody Henderson at (780) 483-3499 or email at [kody\\_henderson@golder.com](mailto:kody_henderson@golder.com). Thank you for the opportunity to be of service. We look forward to working with you again in the future.



## ASBESTOS-CONTAINING BUILDING MATERIALS ASSESSMENT REPORT - VIC REMPEL ADMINISTRATION BUILDING

### Report Signature Page

#### GOLDER ASSOCIATES LTD.

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KH/AG/ba

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# **APPENDIX A**

## **Laboratory Certificate of Analysis Report**

### CERTIFICATE OF ANALYSIS

Client: Golder Associates Ltd  
16820 107 Ave  
Edmonton AB T5P 4C3

Report Date: 10/28/2017  
Report No.: 550049 - PLM  
Project: Vic Rempel Admin Bldg  
Project No.: 1667963

Client: GOL572

### PLM BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 6368275  
**Client No.:** A-001

**Analyst Observation:** White/Grey Caulk  
**Client Description:** White Bldg Caulking

**Location:** Rm 101  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

**Lab No.:** 6368276  
**Client No.:** A-002

**Analyst Observation:** Red Brick  
**Client Description:** Brick Mortar

**Location:** Rm 109  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

**Lab No.:** 6368276(L2)  
**Client No.:** A-002

**Analyst Observation:** Grey Mortar  
**Client Description:** Brick Mortar

**Location:** Rm 109  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

**Lab No.:** 6368277  
**Client No.:** A-003

**Analyst Observation:** White Joint Compound  
**Client Description:** Drywall Joint Compound

**Location:** Rm 102  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

**Lab No.:** 6368278  
**Client No.:** A-004

**Analyst Observation:** White Joint Compound  
**Client Description:** Drywall Joint Compound

**Location:** Rm 103  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

**Lab No.:** 6368279  
**Client No.:** A-005

**Analyst Observation:** White Joint Compound  
**Client Description:** Drywall Joint Compound

**Location:** Rm 142  
**Facility:**

Percent Asbestos:  
*None Detected*

Percent Non-Asbestos Fibrous Material:  
None Detected

Percent Non-Fibrous Material:  
100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

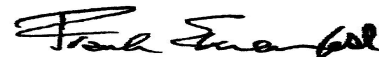
Date Received: 10/18/2017

Date Analyzed: 10/28/2017

Signature:

Analyst: Linda Price

Approved By:



Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

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16820 107 Ave  
Edmonton AB T5P 4C3

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Client: GOL572

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 6368280	<b>Analyst Observation:</b> White Caulk	<b>Location:</b> Rm 142
<b>Client No.:</b> A-006	<b>Client Description:</b> White Bldg Caulking	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

<b>Lab No.:</b> 6368281	<b>Analyst Observation:</b> White Joint Compound	<b>Location:</b> Rm 110
<b>Client No.:</b> A-007	<b>Client Description:</b> Drywall Joint Compound	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


<b>Lab No.:</b> 6368281(L2)	<b>Analyst Observation:</b> Yellow Mastic	<b>Location:</b> Rm 110
<b>Client No.:</b> A-007	<b>Client Description:</b> Drywall Joint Compound	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

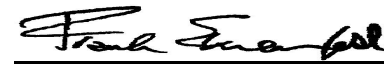
<b>Lab No.:</b> 6368282	<b>Analyst Observation:</b> White Caulk	<b>Location:</b> Crawlspace
<b>Client No.:</b> A-008	<b>Client Description:</b> White Pipe Caulking	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

<b>Lab No.:</b> 6368282(L2)	<b>Analyst Observation:</b> Grey Cementitious	<b>Location:</b> Crawlspace
<b>Client No.:</b> A-008	<b>Client Description:</b> White Pipe Caulking	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

<b>Lab No.:</b> 6368283	<b>Analyst Observation:</b> Brown Mastic	<b>Location:</b> Crawlspace
<b>Client No.:</b> A-009	<b>Client Description:</b> Dk Brown Duct Mastic	<b>Facility:</b>
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/18/2017  
Date Analyzed: 10/28/2017  
Signature:   
Analyst: Linda Price

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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Edmonton AB T5P 4C3


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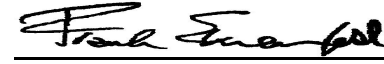
Client: GOL572

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 6368284 <b>Client No.:</b> A-010 <u>Percent Asbestos:</u> <b>PC 4.1 Chrysotile</b>	<b>Analyst Observation:</b> Gold Sink Undercoating <b>Client Description:</b> Gold Sink Undercoat <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 138 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 95.9
<b>Lab No.:</b> 6368285 <b>Client No.:</b> A-011 <u>Percent Asbestos:</u> <b>None Detected</b>	<b>Analyst Observation:</b> Brown Mastic <b>Client Description:</b> Dk Brown Duct Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 138 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368286 <b>Client No.:</b> A-012 <u>Percent Asbestos:</u> <b>None Detected</b>	<b>Analyst Observation:</b> White Joint Compound <b>Client Description:</b> Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 130 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368286(L2) <b>Client No.:</b> A-012 <u>Percent Asbestos:</u> <b>None Detected</b>	<b>Analyst Observation:</b> Yellow Mastic <b>Client Description:</b> Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 130 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368287 <b>Client No.:</b> A-013 <u>Percent Asbestos:</u> <b>None Detected</b>	<b>Analyst Observation:</b> White/Brown Sheetrock/Joint Compound <b>Client Description:</b> Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose	<b>Location:</b> Rm 117; Composite <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 90
<b>Lab No.:</b> 6368288 <b>Client No.:</b> A-014 <u>Percent Asbestos:</u> <b>None Detected</b>	<b>Analyst Observation:</b> White/Brown Sheetrock <b>Client Description:</b> Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 85

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/18/2017  
Date Analyzed: 10/28/2017  
Signature:   
Analyst: Linda Price

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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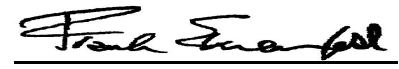
Client: GOL572

### PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 6368289 <b>Client No.:</b> A-015 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> White Sink Undercoating <b>Client Description:</b> White Sink Undercoat <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368290 <b>Client No.:</b> A-016 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> Grey/Silver Mastic/Foil <b>Client Description:</b> Grey Duct Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368291 <b>Client No.:</b> A-017 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> Grey Insulation <b>Client Description:</b> Grey Firestop <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 90
<b>Lab No.:</b> 6368292 <b>Client No.:</b> A-018 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> Grey Insulation <b>Client Description:</b> Pipe-Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 60
<b>Lab No.:</b> 6368293 <b>Client No.:</b> A-019 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> Grey Insulation <b>Client Description:</b> Pipe-Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 60
<b>Lab No.:</b> 6368293(L2) <b>Client No.:</b> A-019 <u>Percent Asbestos:</u> <i>None Detected</i>	<b>Analyst Observation:</b> Yellow Insulation <b>Client Description:</b> Pipe-Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 95 Mineral Wool	<b>Location:</b> Rm 124 <b>Facility:</b> <u>Percent Non-Fibrous Material:</u> 5

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/18/2017  
Date Analyzed: 10/28/2017  
Signature:   
Analyst: Linda Price

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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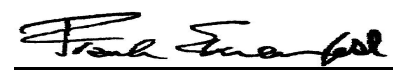
Client: GOL572

### PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 6368294 <b>Client No.:</b> A-020	<b>Analyst Observation:</b> Off-White Insulation <b>Client Description:</b> Pipe-Fitting Insulation	<b>Location:</b> Rm 124 <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
<b>Lab No.:</b> 6368295 <b>Client No.:</b> A-021	<b>Analyst Observation:</b> Grey Insulation <b>Client Description:</b> Pipe-Fitting Insulation	<b>Location:</b> Rm 124 <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 50
<b>Lab No.:</b> 6368296 <b>Client No.:</b> A-022	<b>Analyst Observation:</b> Grey Insulation <b>Client Description:</b> Pipe-Fitting Insulation	<b>Location:</b> Rm 124 <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 50
<b>Lab No.:</b> 6368297 <b>Client No.:</b> A-023	<b>Analyst Observation:</b> Grey/Yellow Leveling Compound / Mastic <b>Client Description:</b> Grey Floor Leveling Compound	<b>Location:</b> Rm 110 <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368298 <b>Client No.:</b> A-024	<b>Analyst Observation:</b> Grey Mortar <b>Client Description:</b> Brick Mortar	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368299 <b>Client No.:</b> A-025	<b>Analyst Observation:</b> Grey Mortar <b>Client Description:</b> Brick Mortar	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/18/2017  
Date Analyzed: 10/28/2017  
Signature:   
Analyst: Linda Price

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

### CERTIFICATE OF ANALYSIS

Client: Golder Associates Ltd  
16820 107 Ave  
Edmonton AB T5P 4C3


Report Date: 10/28/2017  
Report No.: 550049 - PLM  
Project: Vic Rempel Admin Bldg  
Project No.: 1667963

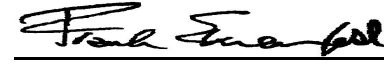
Client: GOL572

### PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 6368300 <b>Client No.:</b> A-026	<b>Analyst Observation:</b> Grey Mortar <b>Client Description:</b> Brick Mortar	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368301 <b>Client No.:</b> A-027	<b>Analyst Observation:</b> Grey Mortar <b>Client Description:</b> Brick Mortar	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368302 <b>Client No.:</b> A-028	<b>Analyst Observation:</b> Black Caulk <b>Client Description:</b> Black Window Caulking	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
<b>Lab No.:</b> 6368303 <b>Client No.:</b> A-029	<b>Analyst Observation:</b> Brown Caulk <b>Client Description:</b> Brown Window Frame Caulking	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 6368304 <b>Client No.:</b> A-030	<b>Analyst Observation:</b> Grey Caulk <b>Client Description:</b> Grey Bldg Caulking	<b>Location:</b> Exterior <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Analytical Method -US EPA 600, R93-116. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/18/2017  
Date Analyzed: 10/28/2017  
Signature:   
Analyst: Linda Price

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



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CERTIFICATE OF ANALYSIS

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Client: Golder Associates Ltd  
16820 107 Ave  
Edmonton AB T5P 4C3

Client: GOL572

Report Date: 10/28/2017  
Report No.: 550049 - PLM  
Project: Vic Rempel Admin Bldg  
Project No.: 1667963

## Appendix to Analytical Report

**Customer Contact:**

**Analysis:** US EPA 600, R93-116

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com

**iATL Office Manager:** cdavis@iatl.com

**iATL Account Representative:** Pete Lesniak

**Sample Login Notes:** See Batch Sheet Attached

**Sample Matrix:** Bulk Building Materials

**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

#### Certifications:

- NIST-NVLAP No. 101165-0
- NY-DOH No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)  
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)>



## CERTIFICATE OF ANALYSIS

Client: Golder Associates Ltd  
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Client: GOL572

Report Date: 10/28/2017  
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Project: Vic Rempel Admin Bldg  
Project No.: 1667963

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

### Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.

### Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov), United States Geological Survey (USGS) [www.minerals.usgs.gov/minerals/](http://www.minerals.usgs.gov/minerals/), US EPA [www.epa.gov/asbestos](http://www.epa.gov/asbestos). The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional.

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116  
**Requirements/Comments:** Minimum of 0.1 g of sample. ~0.25% LOQ for most samples.
- 2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.
- 3) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Floats" only.
- 4) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.
- 5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

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CERTIFICATE OF ANALYSIS

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Client: Golder Associates Ltd  
16820 107 Ave  
Edmonton AB T5P 4C3

Client: GOL572

Report Date: 10/28/2017  
Report No.: 550049 - PLM  
Project: Vic Rempel Admin Bldg  
Project No.: 1667963

**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Suspension" only.

LOQ, Limit of Quantitation estimates for mass and volume analyses.

\*With advance notice and confirmation by the laboratory.

\*\*Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).



# **APPENDIX B**

## **Site Photographs**



## APPENDIX B

### Site Photographs



**Photograph 1: Asbestos-Containing Gold Sink Undercoat.**

\\golder\gal\edmonton\active\2016\3 proj\1667963 cityofsaskatoon\_asbsurveys\_saskatoon\07 reports\75 - vic rempel administration bldg\appendix b - vic rempel admin building - site photographs.docx



# **APPENDIX C**

## **Vic Rempel Administration Building Room by Room Spreadsheet**

Appendix C  
Vic Rempel Administration Building  
ACM Inventory

Included/ Excluded	Floor	Room #	Area Description	Elements	Subelements	Material Description	Accessibility	Suspect?	Sampled?	Asbestos Containing Material?	Condition	Field Notes	Sample Type	Sample ID	Sample Date	Asbestos Type	ACM Product	% of asbestos	Friable	Sprayed-on	Maintenance	Inspection	Priority	Potential for Disturbance	Recommended Action	Quantity	Photograph ID	Labelling Type	
Included	M	All	All	Doors	Regular Door	Non Suspect Door	High	No	No	No	Good	Non-suspect doors.																	
												A finished drywall ceiling is located above the ceiling tiles throughout the Building.		VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	All	All	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good																		
												White building caulking (painted grey sporadically) is located on walls throughout the Building. Samples collected in Room 101 (A-001), Room 142 (A-006), and the Office Crawlspace (A-008).		A-001, A-006, A-008															
Included	M	All	All	Walls	Caulking	White Building Caulking	High	No	Yes	No	Good		Bulk		15-Oct-17														
												Grey floor leveling compound was observed sporadically below carpeting throughout the Building. Sample collected in Room 110.		A-023															
Included	M	All	All	Floor	Floor	Grey Floor Levelling Compound	High	No	Yes	No	Good		Bulk		15-Oct-17														
												Uninsulated duct work with dark brown duct mastic was observed throughout the ceiling space of all areas assessed. Samples collected in the Office Crawlspace (A-009) and Room 138 (A-011).		A-009, A-011															
Included	M	All	All	Mechanical	Duct	Dark Brown Duct Mastic	High	No	Yes	No	Good		Bulk		15-Oct-17														
														VS A-002, A-024, A-025, A-026, A-027															
Included	M	101	Vestibule	Walls	Walls	Brick Mortar	High	No	Yes	No	Good																		
Included	M	101	Vestibule	Floor	Floor	Ceramic Tile	High	No	Yes	No	Good																		
Included	M	101	Vestibule	Ceiling	Ceiling	Metal Slat	High	No	No	No	Good		Bulk	A-001	15-Oct-17														
Included	M	101	Vestibule	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
														VS A-002, A-024, A-025, A-026, A-027															
Included	M	102	Lobby	Walls	Walls	Brick Mortar	High	No	Yes	No	Good																		
Included	M	102	Lobby	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-003	15-Oct-17														
Included	M	102	Lobby	Floor	Floor	Ceramic Tile	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	102	Lobby	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	103	Offices	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	103	Offices	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-004	15-Oct-17														
Included	M	103	Offices	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	103	Offices	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	103	Offices	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good	Behind drywall.																	
Included	M	103	Offices	Electrical	Electrical Panels and Components	Electrical Panels and Components	High	Yes	No	Potential	Good	Not sampled due to safety concerns.													Inspect and sample if scheduled for removal.				
Included	M	104	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	104	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	104	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	104	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	104	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good	Behind drywall.																	
Included	M	105	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	105	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	105	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	105	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	106	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	106	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	106	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	107	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	107	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	107	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	108	Printer Area	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	108	Printer Area	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	108	Printer Area	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	109	Vestibule	Walls	Walls	Brick Mortar	High	No	Yes	No	Good		Bulk	A-002	15-Oct-17														
Included	M	109	Vestibule	Floor	Floor	Ceramic Tile	High	No	Yes	No	Good																		
Included	M	109	Vestibule	Ceiling	Ceiling	Metal Slat	High	No	No	No	Good																		
Included	M	109	Vestibule	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
Included	M	110	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-007	15-Oct-17														
Included	M	110	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	110	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	110	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
Included	M	111	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	111	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	111	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	111	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	111	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
Included	M	112	Offices	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	112	Offices	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	112	Offices	F																									

**Appendix C**  
**Vic Rempel Administration Building**  
**ACM Inventory**

Included/ Excluded	Floor	Room #	Area Description	Elements	Subelements	Material Description	Accessibility	Suspect?	Sampled?	Asbestos Containing Material?	Condition	Field Notes	Sample Type	Sample ID	Sample Date	Asbestos Type	ACM Product	% of asbestos	Friable	Sprayed-on	Maintenance	Inspection	Priority	Potential for Disturbance	Recommended Action	Quantity	Photograph ID	Labelling Type
Included	M	112	Offices	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good	Date coded to a time period in which asbestos use was not widespread.																
Included	M	112	Offices	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
Included	M	113	Hallway	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	113	Hallway	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	113	Hallway	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	113	Hallway	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	114	Hallway	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	114	Hallway	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	114	Hallway	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	114	Hallway	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	115	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	115	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	115	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	116	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	116	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	116	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	117	Janitor Room	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-013	15-Oct-17													
Included	M	117	Janitor Room	Floor	Floor	Concrete	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	117	Janitor Room	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	117	Janitor Room	Mechanical	Duct	Dark Brown Duct Mastic	High	No	Yes	No	Good			VS A-009, A-011														
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	118	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	118	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	118	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	118	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	118	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	119	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	119	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	119	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	119	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	119	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	120	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	120	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	120	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	120	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	120	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	121	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	121	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	121	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	121	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	121	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	122	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	122	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	122	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	122	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	123	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																	
Included	M	123	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	123	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	123	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	123	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
Included	M	124	Mechanical Room	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-014	15-Oct-17													
Included	M	124	Mechanical Room	Walls	Walls	Concrete Block	High	No	No	No	Good																	
Included	M	124	Mechanical Room	Floor	Floor	Concrete	High	No	No	No	Good																	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	124	Mechanical Room	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-015	15-Oct-17													
Included	M	124	Mechanical Room	Plumbing	Sink	White Sink Undercoat	High	No	Yes	No	Good																	
Included	M	124	Mechanical Room	Mechanical	Duct	Dark Brown Duct Mastic (Painted White)	High	No	Yes	No	Good																	
Included	M	124	Mechanical Room	Mechanical	Duct	Grey Duct Mastic	High	No	Yes	No	Good		Bulk	A-016	15-Oct-17													

Appendix C  
Vic Rempel Administration Building  
ACM Inventory

Included/ Excluded	Floor	Room #	Area Description	Elements	Subelements	Material Description	Accessibility	Suspect?	Sampled?	Asbestos Containing Material?	Condition	Field Notes	Sample Type	Sample ID	Sample Date	Asbestos Type	ACM Product	% of asbestos	Friable	Sprayed-on	Maintenance	Inspection	Priority	Potential for Disturbance	Recommended Action	Quantity	Photograph ID	Labelling Type
Included	M	124	Mechanical Room	Mechanical	Piping	Pipe-Fitting Insulation	High	No	Yes	No	Good			A-018, A-019, A-020, A-021, A-022	15-Oct-17													
Included	M	124	Mechanical Room	Walls	Firestop	Grey Firestop	High	No	Yes	No	Good		Bulk	A-017	15-Oct-17													
Included	M	124	Mechanical Room	Electrical	Electrical Panels and Components	Electrical Panels and Components	High	Yes	No	Potential	Good	Not sampled due to safety concerns.													Inspect and sample if scheduled for removal.			
Included	M	125	Washroom	Walls	Walls	Ceramic Tile	High	No	No	No	Good																	
Included	M	125	Washroom	Floor	Floor	Ceramic Tile	High	No	No	No	Good																	
Included	M	125	Washroom	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	126	Hallway	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	126	Hallway	Floor	Floor	Carpet	High	No	No	No	Good																	
Included	M	126	Hallway	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	127	Boardroom	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	127	Boardroom	Floor	Floor	Carpet	High	No	No	No	Good																	
Included	M	127	Boardroom	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	128	Hallway	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	128	Hallway	Floor	Floor	Carpet	High	No	No	No	Good																	
Included	M	128	Hallway	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	128	Hallway	Electrical	Electrical Panels and Components	Electrical Panels and Components	High	Yes	No	Potential	Good	Not sampled due to safety concerns.													Inspect and sample if scheduled for removal.			
Included	M	129	Washroom	Walls	Walls	Ceramic Tile	High	No	No	No	Good																	
Included	M	129	Washroom	Floor	Floor	Ceramic Tile	High	No	No	No	Good																	
Included	M	129	Washroom	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	130	Hallway	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-012	15-Oct-17													
Included	M	130	Hallway	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	130	Hallway	Floor	Floor	Carpet	High	No	No	No	Good																	
Included	M	130	Hallway	Ceiling	Ceiling	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	131	Offices	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	131	Offices	Floor	Floor	Carpet	High	No	No	No	Good																	
Included	M	131	Offices	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	132	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	132	Office	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	132	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	132	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
Included	M	133	Offices	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	133	Offices	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	133	Offices	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	133	Offices	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
Included	M	134	Offices	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	134	Offices	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	134	Offices	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	134	Offices	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																	
Included	M	134	Offices	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																	
Included	M	135	Offices	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good			VS A-003, A-004, A-005, A-007, A-012, A-013, A-014														
Included	M	135	Offices	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																	
Included	M	135	Offices	Floor	Floor	Carpet	High	No	No	No	Good																	
												Date coded to a time period in which asbestos use was not widespread.																
Included	M	135	Offices	Ceiling	Ceiling																							



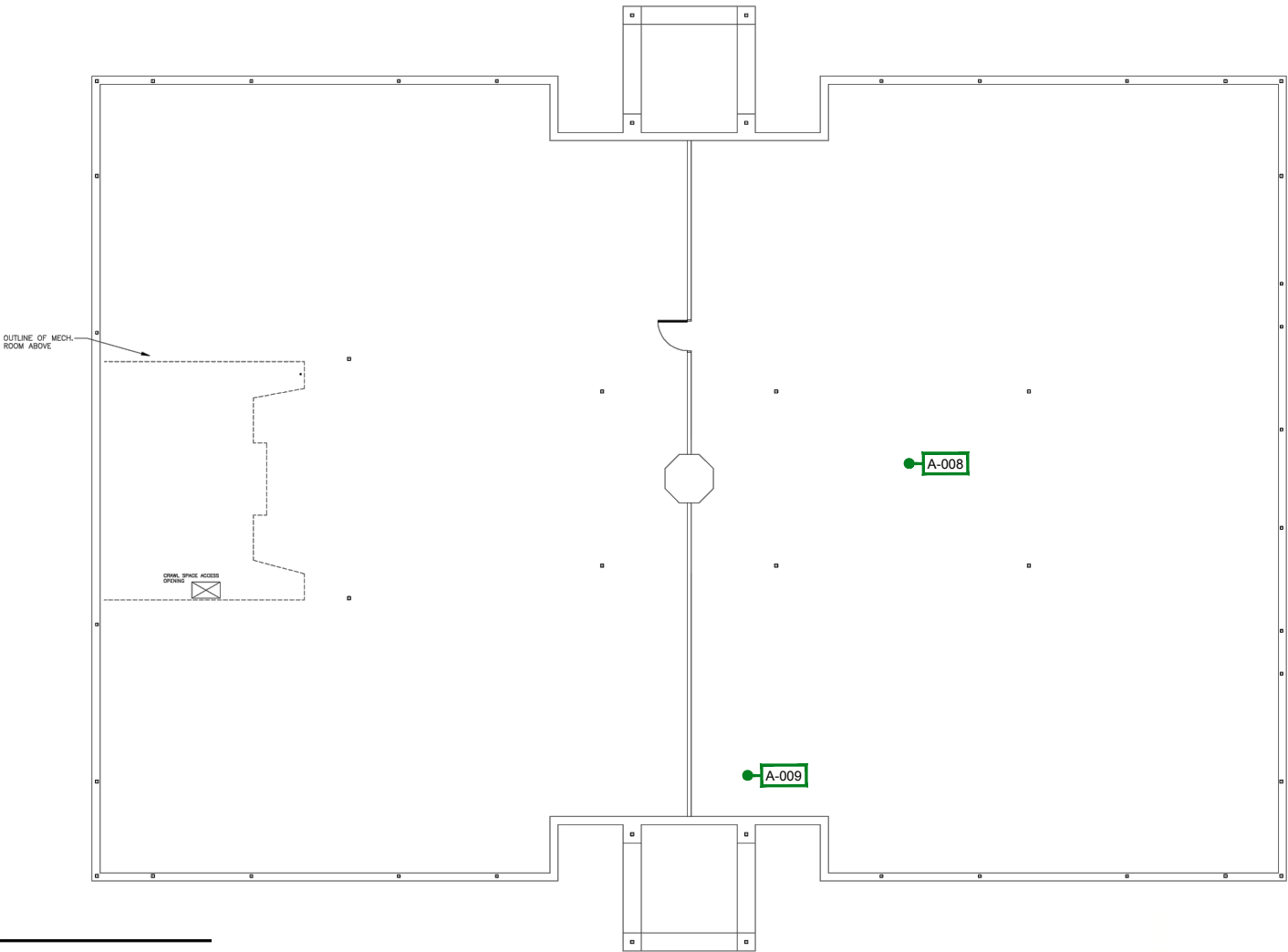
Appendix C  
Vic Rempel Administration Building  
ACM Inventory

Included/ Excluded	Floor	Room #	Area Description	Elements	Subelements	Material Description	Accessibility	Suspect?	Sampled?	Asbestos Containing Material?	Condition	Field Notes	Sample Type	Sample ID	Sample Date	Asbestos Type	ACM Product	% of asbestos	Friable	Sprayed-on	Maintenance	Inspection	Priority	Potential for Disturbance	Recommended Action	Quantity	Photograph ID	Labelling Type	
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	137	Closet	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	137	Closet	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	137	Closet	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	138	Lunch Room	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	138	Lunch Room	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	138	Lunch Room	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	138	Lunch Room	Plumbing	Sink	Gold Sink Undercoat	High	Yes	Yes	Yes	Good		Bulk	A-010	15-Oct-17	Chrysotile	Gold Sink Undercoat	4.10%	No	No	No	Annually	5	Moderate	Manage in place.	1 Sink	Photograph 1	Door Jamb	
Included	M	138	Lunch Room	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	139	Reception	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	139	Reception	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	139	Reception	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	139	Reception	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	140	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	140	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	140	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	140	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	140	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	141	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	141	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	141	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	141	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	141	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
Included	M	142	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good		Bulk	A-005	15-Oct-17														
Included	M	142	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	142	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	142	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	142	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	143	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	143	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	143	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	143	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	143	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
														VS A-003, A-004, A-005, A-007, A-012, A-013, A-014															
Included	M	144	Office	Walls	Walls	Drywall Joint Compound	High	No	Yes	No	Good																		
Included	M	144	Office	Walls	Walls	Pre-Fabricated Drywall	High	No	No	No	Good																		
Included	M	144	Office	Floor	Floor	Carpet	High	No	No	No	Good																		
												Date coded to a time period in which asbestos use was not widespread.																	
Included	M	144	Office	Ceiling	Ceiling	2'x4' Textured Ceiling Tile	High	No	No	No	Good																		
Included	M	144	Office	Windows	Caulking	Rubber Window Caulking	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Walls	Walls	Fibreglass Panels	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Walls	Walls	Wood	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Floor	Floor	Vinyl/Canvas/Polyethylene Mats	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Ceiling	Ceiling	Concrete	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Mechanical	Piping	PVC or Fibreglass Pipe Insulation	High	No	No	No	Good																		
Included	CS	CS	Office Crawlspace	Mechanical	Piping	PVC Drain Lines	High	No	No	No	Good																		
Included	E	Exterior	Exterior	Walls	Walls	Brick Mortar	High	No	Yes	No	Good		Bulk	A-024, A-025, A-026, A-027	15-Oct-17														
Included	E	Exterior	Exterior	Walls	Caulking	Black Window Caulking	High	No	Yes	No	Good		Bulk	A-028	15-Oct-17														
Included	E	Exterior	Exterior	Walls	Doors	Brown Window Frame Caulking	High	No	Yes	No	Good		Bulk	A-029	15-Oct-17														
Included	E	Exterior	Exterior	Walls	Caulking	Grey Building Caulking	High	No	Yes	No	Good		Bulk	A-030	15-Oct-17														
Excluded		CS	Mechanical Crawlspace	Entire Area	Entire Area							Not assessed due to scope of work.																	
Excluded		Exterior	Roof	Exterior Roof	Exterior Roof							Not assessed due to scope of work.																	





# **APPENDIX D**

## **Floor Plans**



**LEGEND**

 ASBESTOS SAMPLE LOCATION

 ASBESTOS - CONTAINING SINK UNDERCOAT

**NOTE(S)**

1. ASBESTOS IS A CARCINOGEN. DO NOT BREATHE ASBESTOS DUST.

**REFERENCE(S)**

PLAN OBTAINED FROM INFRASTRUCTURE SERVICES DEPARTMENT CITY OF SASKATOON. DATED: 20Sep2011

CLIENT  
CITY OF SASKATOON

CONSULTANT



YYYY-MM-DD 2017-12-07

DESIGNED KH

PREPARED VI

REVIEWED KH

APPROVED AG

SCHEMATIC ONLY, NOT TO SCALE

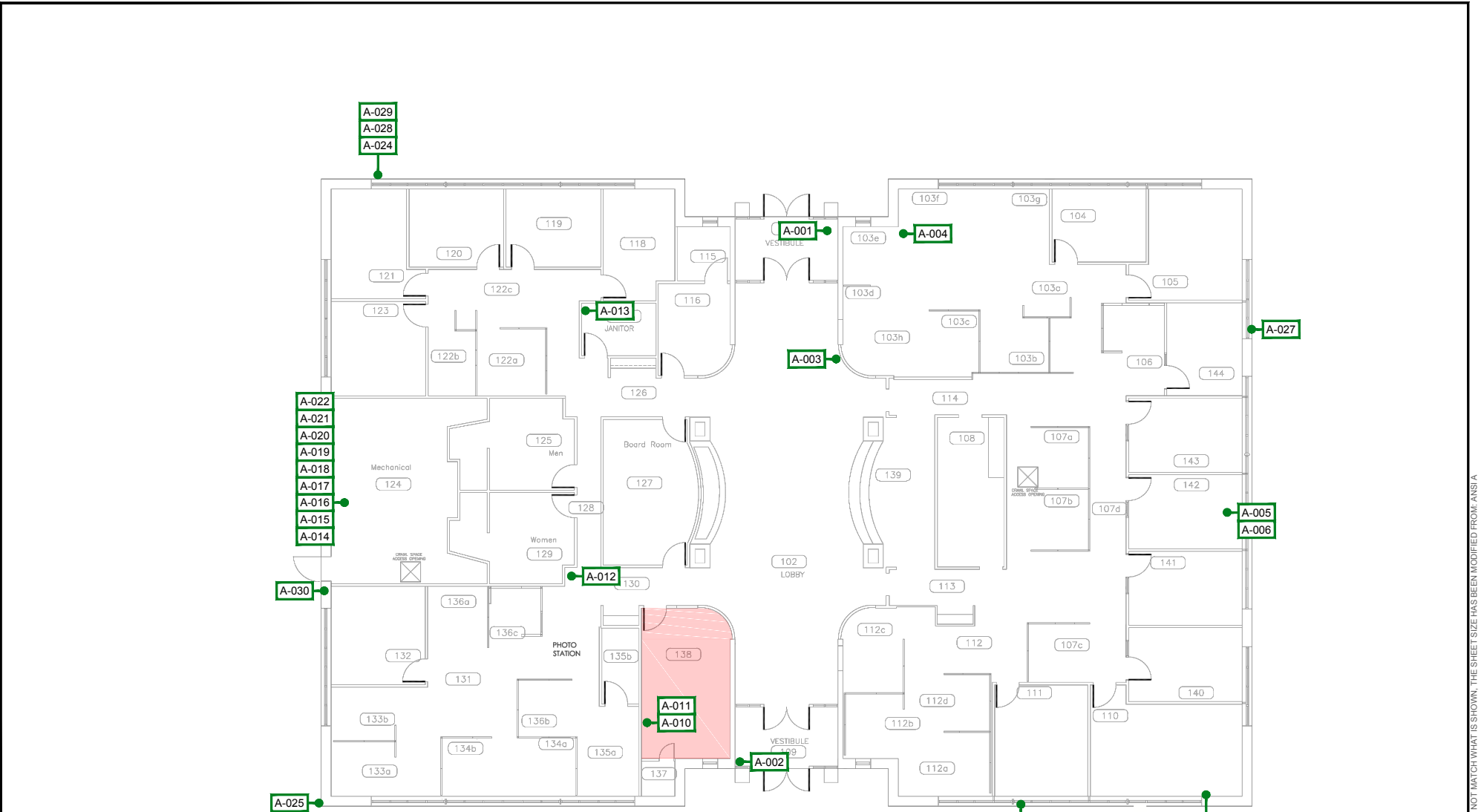
PROJECT  
ASBESTOS ASSESSMENT  
VIC REMPEL ADMINISTRATION BUILDING  
1101 AVENUE P NORTH

TITLE  
**LOWER FLOOR**


PROJECT NO.	CONTROL	REV.	FIGURE
1667963	1000-HM-0001	0	1


IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

26 mm



**LEGEND**

 # ASBESTOS SAMPLE LOCATION

 ASBESTOS - CONTAINING SINK UNDERCOAT

**NOTE(S)**

1. ASBESTOS IS A CARCINOGEN. DO NOT BREATHE ASBESTOS DUST.

**REFERENCE(S)**

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CITY OF SASKATOON

CONSULTANT



YYYY-MM-DD 2017-12-07

DESIGNED KH

PREPARED VI

REVIEWED KH

APPROVED AG

PROJECT  
ASBESTOS ASSESSMENT  
VIC REMPEL ADMINISTRATION BUILDING  
1101 AVENUE P NORTH

TITLE  
**MAIN FLOOR**

PROJECT NO.  
1667963

CONTROL  
1000-HM-0002

REV.  
0

FIGURE  
2

SCHEMATIC ONLY, NOT TO SCALE

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

26 mm

As a global, employee-owned organisation with over 50 years of experience, Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

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