



Sutherland Hall Asbestos Survey Report



February 2014

Prepared For: City Of Saskatoon- Infrastructure Services Department
1101 Avenue P North, Saskatoon, SK.
Attn: Brent Anderson

Prepared By: Bersch & Associates Ltd.
Project No. : B67SRB04

1.0 EXECUTIVE SUMMARY

The survey of the Sutherland Hall located at 1112 Central Avenue in Saskatoon, Saskatchewan entailed the inspection of all accessible suspect asbestos containing material (ACM) located throughout the facility. The survey entailed the inspection of all accessible areas of the facility. Materials inspected included mechanical insulating material, vinyl floor covering, textured ceiling material, and fire-stop material.

Bulk sample analysis results indicate the presence of “Chrysotile” asbestos within the Sutherland Hall located in Saskatoon, SK. Please refer to **Appendix I for Bulk Sample Analysis** results.

The recommended actions to be implemented in reference to the ACM identified are Removal, Cleanup and Management. Please refer to section 5 Asbestos Abatement Discussion for definitions. It should be noted that the recommendation of “Management” as part of the asbestos action plan is based upon the premise that renovations are not scheduled throughout the area that would impact the asbestos containing material present. ***Prior to any major renovation/demolition activity, a destructive investigation is recommended to identify any inaccessible ACM that is physically concealed or isolated in areas such as enclosed wall/ceiling/floor cavities and pipe chases.*** Asbestos was detected in the following forms throughout the facility:

- **Asbestos Mud Compound** is located on ducting in the Mechanical Room and Storage Rooms within the basement.
- **Asbestos Floor Tile** is located in the basement common room.
- **Heat Shield Material** is found within six light fixtures stored in the basement North Storage Room.

The various types of accessible ACM within the facility have been clearly identified to eliminate uncertainty of asbestos content. The identification of these materials is as follows:

- The Asbestos Mud Compound is identified with a red “ASBESTOS” stencil.
- Asbestos Floor Tile is identified on the Floor Plans in Appendix III of this report.

Throughout the survey of the Sutherland Hall the Asbestos Containing Materials were assessed and given a Priority Rating of One, Two or Three, with Priority One being the items requiring the most immediate attention. See the Survey Spreadsheet Database in Appendix II for a room-by-room account.

Bersch & Associates Ltd. implemented the use of doorjamb labels that are applied to all the doorjambs of the rooms containing asbestos within the facility. This permits anyone accessing the room to easily identify the ACM present without having to reference the written report. Legends providing explanation of the abbreviations used on door jambs were placed on the backside of all maintenance/custodial doors within the facility. Employees and contractors will use the legend as a reference to identify ACM within the areas they are working.

2.0 INTRODUCTION

Bersch & Associates Ltd. was retained by the City of Saskatoon to conduct an Asbestos Survey and Hazard Assessment of the Sutherland Hall located in Saskatoon, SK. The survey entailed the inspection of all accessible areas of the facility; including crawlspaces, ceiling spaces, pipe chases, and attics. The purpose of the survey was to locate, identify and assess the condition of all Asbestos Containing Materials (ACM) located throughout the facility. This report gives a detailed account of the inspection results and our firm's recommendations on control options to be implemented to bring the facility in compliance with the Province of Saskatchewan Occupational Health and Safety Act and Regulations. Bersch & Associates Ltd. conducted the survey in February 2014. A review of this report shall be conducted with all trades that are entering the facility to perform maintenance or renovation activity. This will ensure they are familiar with the types and locations of asbestos-containing materials present and prevent any uncontrolled disturbance and/or possible exposure to asbestos.

3.0 METHODOLOGY

Bersch & Associates Ltd. conducted the survey of the Sutherland Hall in Saskatoon, SK in February of 2014. The primary documents for guidance and criteria in this survey were the Province of Saskatchewan "Occupational Health and Safety Act and Regulations, 1996", Province of Saskatchewan "Managing Asbestos", and the U.S. Environmental Protection Agency "Guidance for Controlling Asbestos Containing Materials in Buildings". The USEPA document identifies factors associated with the "condition" and the "potential for disturbance or erosion" of asbestos containing materials (ACM). These factors help to determine potential for exposure to ACM and were used to make a qualitative evaluation of the material. It should be noted that the recommendation of "Management" Asbestos Abatement Action is based upon the premise that renovations are not scheduled in that area that will require disturbing or violating the asbestos containing material. In the event that renovations are scheduled that impact upon the areas of asbestos containing material then pre-removal of the asbestos containing materials may be necessary.

In total, twelve (12) bulk samples of suspect asbestos-containing materials were collected throughout the facility. Chrysotile asbestos was identified within the samples collected. Refer to Appendix I for a copy of the Bulk Sample Analysis Report. All bulk samples collected were analyzed by Bersch & Associates Ltd. laboratory in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as <1% by volume.

4.0 RECOMMENDATIONS:

Throughout the survey of the Sutherland Hall the Asbestos Containing Materials were assessed and given a Priority Rating of One, Two or Three, with Priority One being the items requiring the

most immediate attention. As a result, “Priority One” items were identified within the facility within the Basement Mechanical Room. Future planning should begin to address these areas as per the recommendations provided in the attached **Asbestos Survey Database found in Appendix II**. Priority Ratings for all other ACM identified is also found in the database on a room-by-room account.

5.0 ASBESTOS ABATEMENT DISCUSSION

Asbestos is a known carcinogen and is listed in the Province of Saskatchewan under the Occupational Health and Safety Appendix, Part V as a Hazardous Chemical Substance and any release of asbestos fibres into the atmosphere creates a potential health hazard. Although the mechanism and epidemiology of asbestos carcinogenesis is not yet well defined, accumulating evidence suggests the significance of exposure at even very low fibre concentrations and hence human exposure should be kept to a minimum. It should be noted however that asbestos is a natural mineral and a measurable background concentration can be detected in any location sampled (inside buildings, outside buildings, urban, rural, etc.). The recommendations of the report are therefore intended to keep the potential exposure to an absolute minimum with the knowledge that a zero exposure is not possible.

Asbestos containing materials have been used in a wide variety of applications. Of particular concern, is the group of so called friable products. A friable product is one that can be crumbled or reduced to powder or smaller fragments by hand pressure. Publications from the U.S.E.P.A. as early as 1977 have indicated the potential hazard of asbestos exposure in buildings containing these friable products. The two main uses of friable asbestos products are as spray insulation (thermal, acoustic or fireproofing) on deck and/or beams or as thermal insulation on piping or mechanical equipment. A large amount of non-friable asbestos-containing materials have also been used in building construction such as asbestos cement board and asbestos containing vinyl flooring.

The mere presence of a friable asbestos containing material does not imply that there is an actual presence of elevated airborne fibre. As numerous studies have indicated, elevated asbestos fibre levels are generally found when settled dust or the actual asbestos containing material itself is disturbed by maintenance, renovation, inadvertent contact or vibration. The factors considered in the Environmental Protection Agency (USEPA) exposure assessment (condition of material, water damage, activity, movement, exposed surface area, accessibility, friability and presence in an air stream) often give some indication of the likelihood of fibre release but are not in any way definitive in determining whether a hazard exists or not. That is, even if the most friable product exists in a building, elevated fibre levels will not likely occur unless there is some disturbance by physical contact, vibration or an air stream.

There are four possible approaches to control exposure to airborne asbestos once a friable material is identified in a building. These methods briefly are as follows:

- A) Removal** - Asbestos material is removed and disposed of by burial and replaced by non-asbestos materials.

- B) Encapsulation** - Asbestos material is coated with a bridging or penetrating sealant.
- C) Enclosure** - Asbestos containing materials are separated from the building environment by barriers such as suspended ceilings or cladding materials.
- D) Deferred Action or Management and Custodial Control** - The Province of Saskatchewan Human Resources, Labor and Employment Branch under the Occupational health and Safety Regulations publish a document outlining “The Management of Asbestos”. In the guide for compliance, an action plan is outlined for management of the asbestos materials identified and in summary is:
1. Identification, which has been accomplished by this report.
 2. Development of Written Handling Procedures for maintenance personnel or often arrangements are made for a qualified contractor to conduct the necessary removal or spot maintenance prior to the regular staff conducting maintenance.
 3. Asbestos Abatement Awareness and Process Training if the regular maintenance personnel are required to conduct asbestos related activities.
 4. Inspection on regular basis is conducted to determine the ongoing condition of the material. Sask. Occupational Health & Safety Regulations require an “annual” inspection of all “friable” asbestos materials by a competent person.

In the event renovations or maintenance is performed within areas containing asbestos materials, written procedures must be developed to conduct the activity or prior removal if the situation warrants.

6.0 REFERENCES

- .1 Province of Saskatchewan "The Occupational Health and Safety Act and The Occupational Health and Safety Regulations" Office Consolidation, December 1996.
- .2 Province of Saskatchewan Human Resources, Labor, and Employment "The Management of Asbestos" January, 1991.
- .3 USEPA, 1985. U.S. Environmental Protection Agency, "Guidance for Controlling Asbestos-Containing Materials in Buildings". Washington, DC: Office of Toxic Substances, USEPA.
- .4 Midwest Centre for Occupational Health & Safety St. Paul's, Minnesota – Asbestos Training For Inspectors & Management Planners
- .5 McCrone Research Institute Course Hayward California " Asbestos Identification"
- .6 Environment Management and Protection Act, Saskatchewan Environment, October 2002
- .7 Hazardous Substances and waste Dangerous Goods Regulations, Saskatchewan Environment, April 1989

APPENDIX I

BULK SAMPLE ANALYSIS REPORT

BERSCH & ASSOCIATES LTD.

February 6, 2014

City Of Saskatoon
Infrastructure Services Department
1101 Avenue P North
Saskatoon, Sk.
S7L 7K6

ATTENTION: Brent Anderson

SUBJECT: Bulk Sample Analysis Report

Please find attached the laboratory results for the bulk analysis of the samples collected throughout the Sutherland Hall located at 1112 Central Avenue in Saskatoon, SK. The samples were analyzed in our laboratory for the identification of asbestos.

The results for the bulk samples were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client. If any questions arise on the results of the attached information please contact me at 306 222 7477. Thank you for this opportunity of service!

Sincerely,

Brad Berschiminsky
Bersch & Associates Ltd.
File: B67BLB04

Bersch & Associates Ltd.

B67BAE15

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO. B67.14****CLIENT: City of Saskatoon****Infrastructure Services - Facilities Branch****Contact: Brent Anderson****Location: Sutherland Hall - 1112 Central Ave, Saskatoon, SK.**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	15-May-13	Basement Mechanical Room - Mud compound on ducting behind furnace #1, adjacent south wall	Chrysotile	60	WB
2	15-May-13	Basement - 9" x 9" floor tile, gray with white streak	Chrysotile	1 to 5	WB
3	15-May-13	Basement - textured ceiling material	None detected		WB
4	15-May-13	2nd Floor Kitchen - Sheet flooring, tan/ white/ blue stone pattern	None detected		WB
5	4-Feb-14	Basement Mechanical Room - Putty at copper pipe penetration into ducting of furnace #4	None detected		WB
6	4-Feb-14	Basement North Storage- Drywall tape and mud compound	None detected		WB
7	4-Feb-14	Main Hall- 1' x 1' floor tile, beige with black spec	None detected		WB

Bersch & Associates Ltd.

B67BAE15

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO. B67.14****CLIENT: City of Saskatoon****Infrastructure Services - Facilities Branch****Contact: Brent Anderson****Location: Sutherland Hall - 1112 Central Ave, Saskatoon, SK.**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
8	4-Feb-14	Main Hall- Fiber board on walls	None detected		WB
9	4-Feb-14	Main Floor corridor adjacent Washrooms- 1' x 1' floor tile, tan and beige brush marks	None detected		WB
10	4-Feb-14	Main Floor Men's Washroom- Stipple textured ceiling materials	None detected		WB
11	4-Feb-14	Main Floor Men's Washroom- Fire-stop at duct penetration overhead of entry	None detected		WB
12	4-Feb-14	Basement North Storage- Heat shield material in light fixture lying on block wall in northeast corner	None detected		WB

APPENDIX II

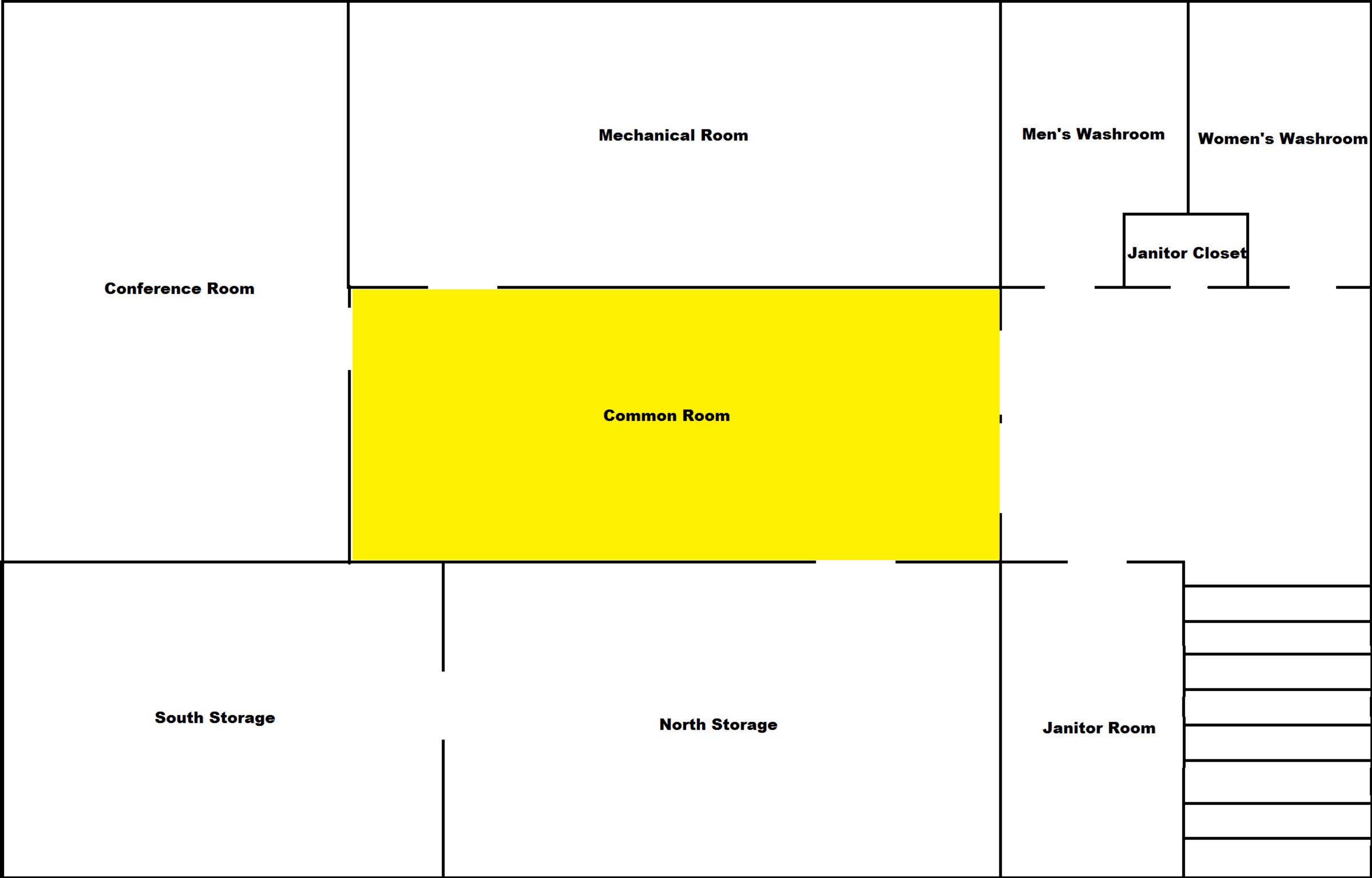
ASBESTOS SURVEY DATABASE

Sutherland Hall															
			SAMPLE DATA												
Floor	Room Number	Use	SAMPLE SAMPLE REP	Sample ID	Date DD/MM/YY	Asbestos Type	% of Asbestos	Tradename ACM Product	Condition	Priority	Description of Sample Location	Asbestos Content In Area	Potential for Disturbance	Recommended Action	Comments
B		Mechanical Room	Sample	B67-ASB.1	15-May-13	Chrysotile	60%	Mud Compound	Poor	1	Basement Mechanical Room - Mud compound on ducting behind furnace #1, adjacent south wall	Mud Compound	High	Remove	Remove remnants of mud compound on overhead ducting attached to Furnace #1. Large amounts are located adjacent the north and south walls. Remnants are located on entire duct running overhead adjacent the west wall. Debris is also noted on top of electrical breaker boxes on the west wall and on top of ducting in upper southwest corner which should be cleaned up.
B		Mechanical Room	Sample	B67-ASB.5	04-Feb-14		None	Fire-Stop Material			Basement Mechanical Room - Putty at copper pipe penetration into ducting of furnace #4	Mud Compound			
B		Conference Room										No Accessible ACM			
B		South Storage	Sample Rep	B67-ASB.1	15-May-13	Chrysotile	60%	Mud Compound	Good	3	Basement Mechanical Room - Mud compound on ducting behind furnace #1, adjacent south wall	Mud Compound	Low	Manage	The mud compound is located on ducting presently enclosed in drywall. The drywall bulkhead in which the asbestos mud is located is labeled with a red "ASBESTOS" stencil within the North Storage Room. Special procedures should be used to access these bulkheads containing asbestos mud compound.
B		North Storage	Sample	B67-ASB.6	04-Feb-14		None	Drywall Compound			Basement North Storage- Drywall tape and mud compound	Mud Compound, Heat Shield Material in Light Fixture			
B		North Storage	Sample	B67-ASB.12	04-Feb-14	Chrysotile	70%	Heat Shield Material	Mod/Good	2	Basement North Storage- Heat shield material in light fixture lying on block wall in northeast corner	Mud Compound, Heat Shield Material in Light Fixture	Low/Mod	Dispose	Dispose of 6 light fixtures containing asbestos heat shields found on top of block wall in the upper northeast corner.
B		North Storage	Sample Rep	B67-ASB.1	15-May-13	Chrysotile	60%	Mud Compound	Good	3	Basement Mechanical Room - Mud compound on ducting behind furnace #1, adjacent south wall	Mud Compound	Low	Manage	The mud compound is located on ducting presently enclosed in drywall. The drywall bulkhead in which the asbestos mud is located is labeled with a red "ASBESTOS" stencil. Special procedures should be used to access these bulkheads containing asbestos mud compound.
B		Janitor Storage										No Accessible ACM			
B		Common Area	Sample	B67-ASB.2	15-May-13	Chrysotile	1-5%	Vinyl Asbestos Tile	Good	3	Basement - 9" x 9" floor tile, gray with white streak	Vinyl Asbestos Tile	Low	Manage	
B		Common Area	Sample	B67-ASB.3	15-May-13		None	Stipple Ceiling Texture			Basement - textured ceiling material	Vinyl Asbestos Tile			
B		Men's Washroom										No Accessible ACM			
B		Women's Washroom										No Accessible ACM			
B		Janitor Closet										No Accessible ACM			
M		Main Hall	Sample	B67-ASB.7	04-Feb-14		None	Vinyl Floor Tile			Main Hall- 1' x 1' floor tile, beige with black spec				
M		Main Hall	Sample	B67-ASB.8	04-Feb-14		None	Wall Board			Main Hall- Fiber board on walls				
M		Entry Vestibule										No Accessible ACM			
M		Corridor	Sample	B67-ASB.9	04-Feb-14		None	Vinyl Floor Tile			Main Floor corridor adjacent Washrooms- 1' x 1' floor tile, tan and beige brush marks	No Accessible ACM			
M		Men's Washroom	Sample	B67-ASB.10	04-Feb-14		None	Stipple Ceiling Texture			Main Floor Men's Washroom- Stipple textured ceiling materials	No Accessible ACM			
M		Men's Washroom	Sample	B67-ASB.11	04-Feb-14		None	Fire-Stop Material			Main Floor Men's Washroom- Fire-stop at duct penetration overhead of entry	No Accessible ACM			
M		Women's Washroom										No Accessible ACM			
M		Maintenance Room										No Accessible ACM			
2		Kitchen	Sample	B67-ASB.4	15-May-13		None	Vinyl Sheet Flooring			2nd Floor Kitchen - Sheet flooring, tan/ white/ blue stone pattern	No Accessible ACM			
2		Multi Use Room										No Accessible ACM			
2		Stage										No Accessible ACM			

APPENDIX III

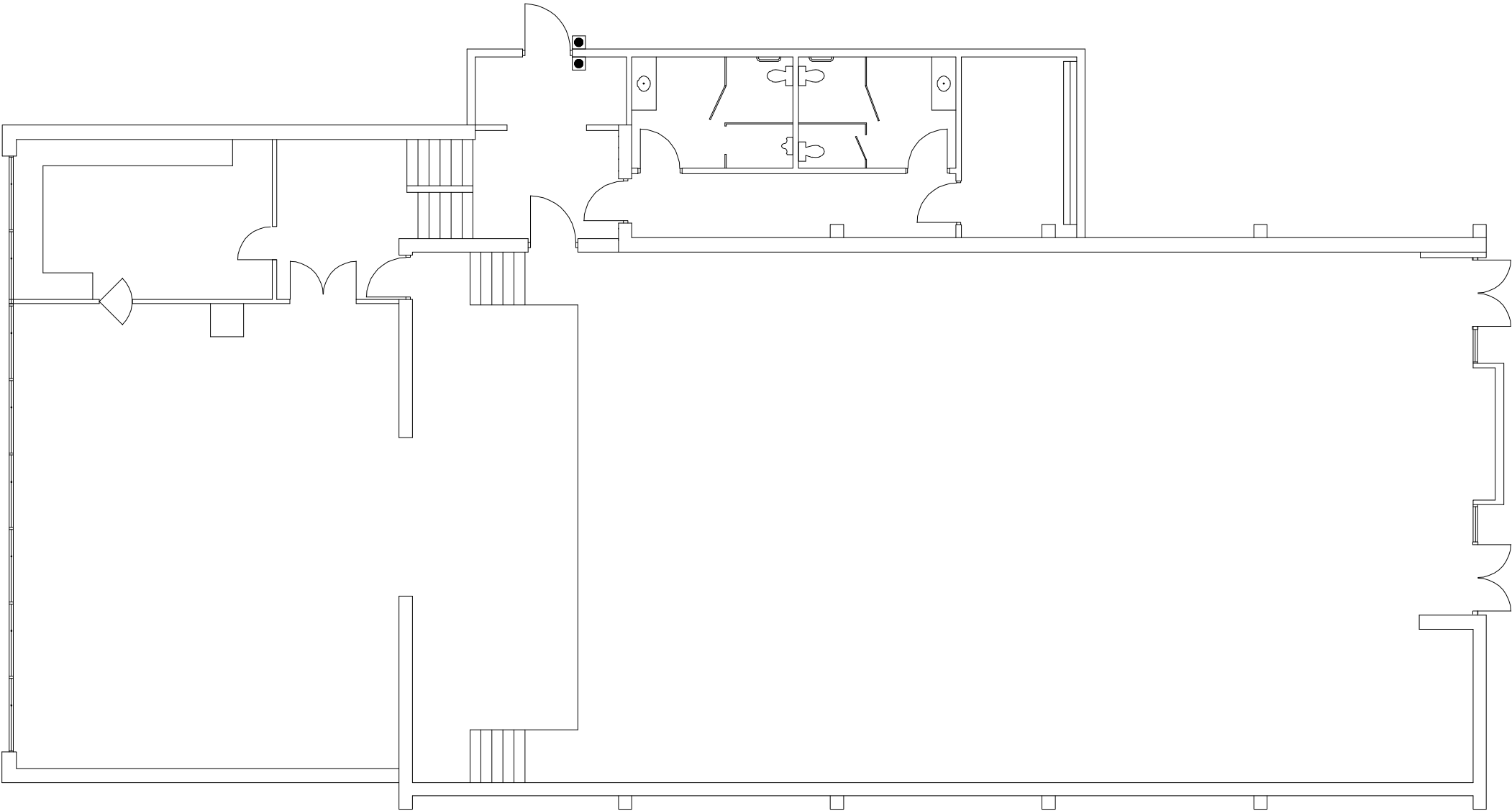
FLOOR PLANS

Sutherland Hall - Basement



Key

Vinyl Asbestos Floor Tile



Infrastructure Services
Department

Facilities Branch
306-975-3300

- GENERAL NOTES:
- 1. All dimensions are in millimetres
 - 2. Drawings are not to be scaled.
 - 3. All drawings to be read in conjunction with the specifications, unless otherwise noted.
 - 4. Verify site conditions and location of all utilities prior to the start of construction.
 - 5. Report all discrepancies to the Consultant.
 - 6. If in doubt, ask.

REV	ISSUED FOR	DATE
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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REQUESTED BY:
	dp		

SCALE:	DATE:
1:125	07/10/2005

SHEET NAME
**Main Floor
Floor Plan**

PROJECT TITLE
**610
Sutherland
Hall**

PROJECT NO.	SHEET
	REV. NO.

**ASBESTOS REMOVAL
NOTIFICATION FORM**

January 1, 2015

This form must be completed and submitted to the City of Saskatoon, Building Standards prior to the issuance of a building permit for the demolition, alteration or renovation of a building that was constructed before 1983 or that is known to contain asbestos products.

Project Name: Sutherland HALL REPAIRS AND UPGRADESProject Address: 1112 CENTRAL AVE, SASKATOON

(Check applicable box below.)


- ☐ Materials having the potential for releasing asbestos fibres have been removed from the project area to be altered or demolished in accordance with Saskatchewan Occupational Health and Safety (OH&S) Regulations.

OR

- ☒ Asbestos removal is planned as part of this renovation or demolition project. Attach details.

OR

- ☐ Asbestos containing materials will not be disturbed or removed as part of this project.

Name (print): BRAD BERSCHIMINSKYSignature: Representing (firm): Bersch + Associates LTD.Address: #200 2002 Quebec Ave, SASKATOON SK. S7K 1W4Phone: 306 222 7477Date: 19 JAN 2016**Frequently Asked Questions:**

Do I need a building permit to perform asbestos abatement work?

No. A building permit is not a permit to perform asbestos abatement work. Rather, this form is required as part of your building permit application and serves as notification to ensure the safety of building inspectors. Limited demolition or construction is expected during asbestos abatement work and jurisdiction for this work is with the Government of Saskatchewan. Contact Provincial Occupational Health and Safety (OH&S) at 306-933-5052.

What happens if I find asbestos after I already have a building permit?

In the event that asbestos is discovered, you are expected to:

1. Immediately stop work;
2. Contact the building inspections phone line at 306-975-7924 to notify the building inspector; and
3. Address the asbestos that has been encountered by providing notification as required by OH&S and ensuring asbestos will be dealt with according to OH&S requirements.

Sources of Asbestos Containing Materials (ACM) in buildings may be found at the following:

- <http://www.saskatchewan.ca/work/safety-in-the-workplace/safety-standards-and-alerts/asbestos>
- Drawing of an older home depicted on the reverse side of this form.

BERSCH & ASSOCIATES LTD.

February 2, 2016

City of Saskatoon
Facilities and Fleet
3130 Laurier Drive
Saskatoon, Sk
S7L 5J7

ATTENTION: Logan Wilson

**SUBJECT: Bulk Sample Analysis Report / Site Investigation – Sutherland Hall
Repairs and Upgrades.**

Please find attached the laboratory results for the bulk samples collected from the Sutherland Hall on January 19, 2016 located at 1112 Central Avenue, Saskatoon, SK. The additional sampling was requested prior to the project planned for the Main Floor Bar and Basement Washrooms. The samples were analyzed for the identification of asbestos. Asbestos **was** detected in the drywall mud compound in the basement washrooms.

The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

Bersch recommends removing the drywall throughout the basement washrooms if the wall surfaces will be affected in the renovation project. The removal of the drywall / asbestos containing drywall mud compound may be removed as a low risk asbestos process. We recommend along with the low risk process the inclusion of a containment to isolate the abatement area from the adjacent areas.

In addition to the attached bulk sample analysis report, Bersch & Associates Ltd. conducted the investigation of the concrete block walls in select areas to determine the presence or absence of vermiculite insulation. The examination of the: 1) south block wall in the area of the main floor hall southeast corner 2) Basement Men's & Women's washrooms block walls, of which vermiculite block wall infill insulation was not present throughout the areas cored into, to visually assess.

Sutherland Hall
Jan. 19 Bulk Analysis / Site Investigation

Page 2 of 2

If any questions arise on the results of the attached information, please contact our office 306 222 7477. Thank you for this opportunity of service!

Sincerely,

Brad Berschiminsky
Bersch & Associates Ltd.
File: B67BLA19

Bersch & Associates Ltd.

B67BAA19

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO: B67.16****CLIENT: CITY OF SASKATOON - FACILITIES AND FLEET****CONTACT: LOGAN WILSON****LOCATION: SUTHERLAND HALL - SASKATOON, SK.****Sutherland Hall Repairs and Upgrades**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	19-Jan-16	Basement Level - Compilation Drywall Mud Compound - Various Locations Along The Ceiling Of The Men's & Women's Washrooms.	Chrysotile	2	WB
2	19-Jan-16	Basement Level - Compilation Drywall Mud Compound - Various Locations Along The Walls Of The Men's & Women's Washrooms.	Chrysotile	2	WB
3	19-Jan-16	Basement Level - Women's Washroom - Wall Tile Grout.	No Asbestos Detected		WB
4	19-Jan-16	Basement Level - Men's Washroom - 2" X 2" Brownish/Terracotta Floor Tile	No Asbestos Detected		WB
5	19-Jan-16	Basement Level - Men's Washroom - 2" X 2" Brownish/Terracotta Floor Tile Grey Grout	No Asbestos Detected		WB
6	19-Jan-16	Main Level - Bar Area Along East Side Of The Hall - Floor Sample At The Heat Register - Similar On Stairwell To Upper Kitchen.	No Asbestos Detected		WB

BERSCH & ASSOCIATES LTD.

April 13, 2016

City of Saskatoon
Facilities and Fleet
3130 Laurier Drive
Saskatoon, Sk
S7L 5J7

ATTENTION: Logan Wilson

**SUBJECT: Bulk Sample Analysis Report / Site Investigation – Sutherland Hall
Boiler Replacement.**

Please find attached the laboratory results for the bulk samples collected from the Sutherland Hall on April 5, 2016 located at 1112 Central Avenue, Saskatoon, SK. The additional sampling was requested prior to the project planned for the replacement of the Boilers. The samples were analyzed for the identification of asbestos. Asbestos **was** detected in one of the drywall mud compound samples.

The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

Bersch also examined the area surrounding the boiler exhaust at the penetration into the east concrete block wall. A visual assessment resulted in:

- a) no insulating material present in the east block wall at the exhaust wall penetration
- b) the material surrounding the exhaust at the wall penetration is concrete block mortar
- c) the view, although quite restricted, of the chimney chase behind the east mechanical room wall does not appear to present material suspect of containing asbestos. Upon opening the block wall and removing the drywall to expose the chimney cavity, if material is encountered that is suspect of containing asbestos, the workers shall stop work and a sample of the material will be collected and analyzed for asbestos content.

The removal of the drywall / asbestos containing drywall mud compound from the south side of the chimney chase may be removed as a low risk asbestos process.

If any questions arise on the results of the attached information, please contact our office 306 222 7477. Thank you for this opportunity of service!

Sincerely,

A handwritten signature in black ink, appearing to read 'B Berschiminsky', with a long horizontal flourish extending to the right.

Brad Berschiminsky
Bersch & Associates Ltd.
File: B67BLD05

Bersch & Associates Ltd.

B67BAD05

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT

PROJECT NO: B67.16

CLIENT: CITY OF SASKATOON - FACILITIES AND FLEET

CONTACT: LOGAN WILSON

LOCATION: SUTHERLAND HALL - SASKATOON, SK.

Sutherland Hall Boiler Replacement

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	5-Apr-16	Basement Level ~ Mechanical Room - Compilation Drywall Mud Compound - Various Locations Along The Ceiling Of The Mechanical Room.	No Asbestos Detected		WB
2	5-Apr-16	Basement Level ~ Common Room - Drywall Mud Compound On The South Side Of The Chimney Chase Next To The Brick.	Chrysotile	2	WB