### PRE-DEMOLITION ENVIRONMENTAL INSPECTION SUMMARY REPORT

Prepared For:

### **Ingham County Land Bank**

3024 Turner Street Lansing, MI 48906

Parcel:	33-01-01-15-426-121
House No:	207 Lathrop Street, Lansing, MI 48912
Date Inspected:	09/24/2015
Inspected By:	Michael Charest
Inspectors State Card #	A-26601

### **Building Information**

No. Stories	2 + Attic	Garage	Detached
Square Footage	900 SF	Garage Square Footage	440 SF
Basement Square Footage	750 SF	Garage Siding	Concrete Blocks
Siding	Aluminum Sided	Garage Color	White
Color	Green	Garage Shingles	Asphalt Shingle
Roof Shingles	Asphalt Shingle	Electric (Gone)	Disconnected
Asbestos present	Yes	Gas (Gone)	Disconnected
Inaccessible areas			



ETC Job #: 174415



38900 West Huron River Drive, Romulus, MI 48174 PHONE: (734) 955-6600 FAX: (734) 955-6604

WEBSITE: www.2etc.com

### Pre-Demolition Environmental Inspection Summary Report

Parcel: 33-01-01-15-426-121

House No. 207 Lathrop Street, Lansing, MI 48912

Date Inspected: 09/24/2015

### TABLE 1

### **HAZARDOUS MATERIALS**

Material Description	Quantity & Units	Location
Paint Can (Latex)	17 - 1 Gallon & 1 - 5 Gallon Bucket	Garage 14
Compact Fluorescent bulbs/CFL	1	Room 1
Compact Fluorescent bulbs/CFL	1	Room 7
Compact Fluorescent bulbs/CFL	1	Exterior 13
Television	1	Room 3
Fire Extinguisher	2	Garage 14
Oils	1 - 1 gal & 1-1 quart	Garage 14
Other Petroleum Products	1-20 pound LPB tank	Garage 14

### TIRE(s) REPORT

Material	Quantity & Units	Location
Bicycle Tires	1	Garage 14

### Pre-Demolition Environmental Inspection Summary Report

Parcel: 33-01-01-15-426-121

House No. 207 Lathrop Street, Lansing, MI 48912

Date Inspected: 09/24/2015

### TABLE 2 SUSPECT ASBESTOS CONTAINING MATERIALS

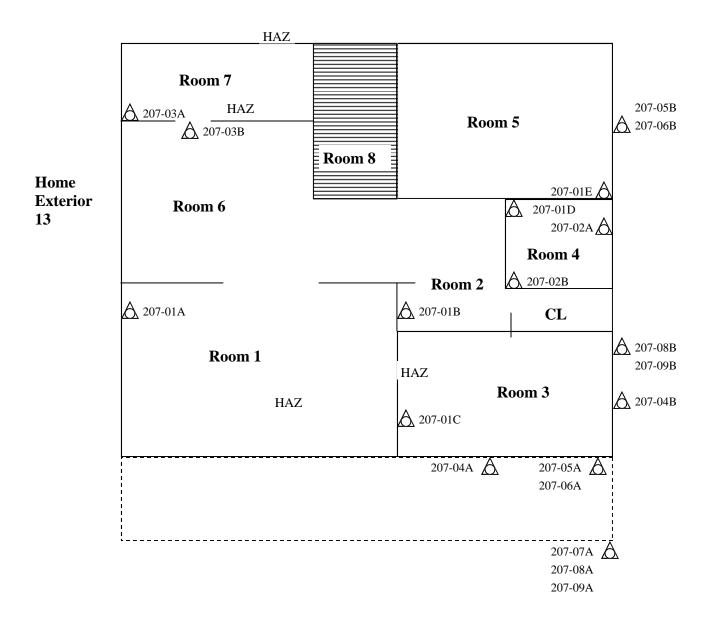
Material #	Friable (F) / Non-Friable (NF)	Material Description	Material Location	Estimated Quantity	ACM Present
1	F	Plaster	Throughout	2,500 SF	No
2	NF	Linoleum with Paper Back, Beige	Room 4	40 SF	No
3	NF	Linoleum with Paper Back, Wood Grain	Room 7	75 SF	No
4	F	Window Glaze, White	Exterior 13 Wood Windows	16 Windows	No
5	F	Blown-In Insulation, Cellulose	Exterior 13 Wall Cavities	1,200 SF	No
6	F	Fibrous Paper, Black, Under Wood Siding	Exterior 13, Under Wood Siding	1,200 SF	No
7	NF	Shingles, Brown, Top Layer	Exterior 13 and Garage 14 Roof	2,000 SF	No
8	NF	Shingles, Green, 2nd Layer	Exterior 13 Roof	1,200 SF	No
9	NF	Felt Paper, Black, Bottom Layer	Exterior 13 Roof	1,200 SF	No

Table 2 - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. Quantities that are listed are <u>estimates only</u>. It is the contractor's responsibility to verify all amounts of asbestos identified during the bid process.

Attachment:

Site Drawing

### 1st floor





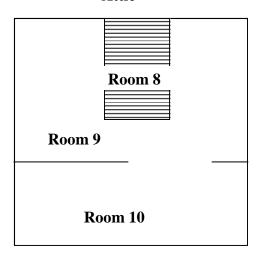
 $_{
m HAZ}$  Hazardous materials  $_{
m \Delta}$ 

Sample Location

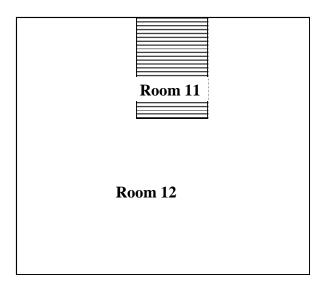
Tires

Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

### Attic



### **Basement**





HAZ Hazardous materials

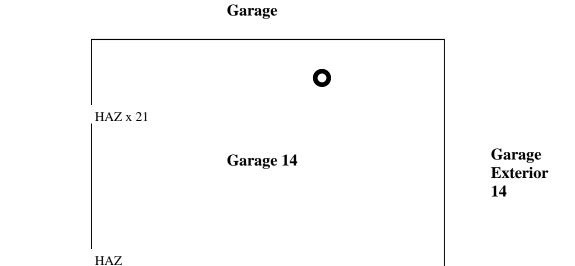
 $\triangle$ 

Sample Location



Tires

Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.





HAZ

Hazardous materials

207-07B

Sample Location

Tires

Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

Attachment:

Site Photographs

### **Representative Pictures of House/Property**

Parcel: 33-01-01-15-426-121

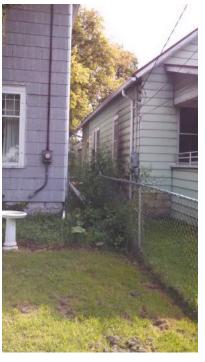
House No. 207 Lathrop Street, Lansing, MI 48912



Front of house/property



Back of house/property



Side #1 of house/property



Side #2 of house/property

### **Representative Pictures of House/Property**

Parcel: 33-01-01-15-426-121

House No. 207 Lathrop Street, Lansing, MI 48912



Garage

### **Representative Pictures of Hazardous Materials**

Parcel: 33-01-01-15-426-121

House No. 207 Lathrop Street, Lansing, MI 48912



Paint Can (Latex),
Oils & Other Petroleum Products
Garage 14



Compact Fluorescent bulbs/CFL, Room 1



Compact Fluorescent bulbs/CFL, Room 7



Compact Fluorescent bulbs/CFL, Exterior 13

### **Representative Pictures of Hazardous Materials**

Parcel: 33-01-01-15-426-121

House No. 207 Lathrop Street, Lansing, MI 48912



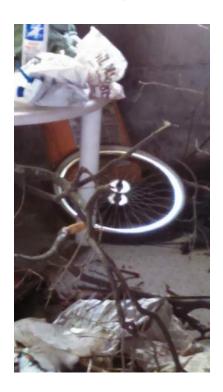
Television, Room 3



Fire Extinguisher, Garage 14



Fire Extinguisher, Garage 14



Bicycle Tires, Garage 14

Attachment:

Laboratory Analytical Results

### **ENVIRONMENTAL TESTING LABORATORIES, INC.**

38900 Huron River Drive, Suite 200 Romulus, Michigan 48174 (734) 955-6600 Fax: (734) 955-6604

### **REVISED REPORT**



**To:** Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus, MI 48174

Attention: Roxanne Case

Client Project: 33-01-01-15-426-121

Project Location: Vacant Residence

207 Lathrop Street, Lansing, MI 48912

**ETC Job**: 174415

**Report Date**: 10/2/2015

376700         1B         Asbestos Analysis         10/02/2           376701         1C         Asbestos Analysis         10/02/2           376702         1D         Asbestos Analysis         10/02/2           376703         1E         Asbestos Analysis         10/02/2           376704         2A         Asbestos Analysis         10/02/2           376705         2B         Asbestos Analysis         10/02/2           376706         3A         Asbestos Analysis         10/02/2           376707         3B         Asbestos Analysis         10/02/2           376708         4A         Asbestos Analysis         10/02/2           376710         5A         Asbestos Analysis         10/02/2           376711         5B         Asbestos Analysis         10/02/2           376713         6B         Asbestos Analysis         10/02/2           376714         7A         Asbestos Analysis         10/02/2           376715         7B         Asbestos Analysis         10/02/2	Login#	Sample ID	Work Requested	Completed
376701         1C         Asbestos Analysis         10/02/2           376702         1D         Asbestos Analysis         10/02/2           376703         1E         Asbestos Analysis         10/02/2           376704         2A         Asbestos Analysis         10/02/2           376705         2B         Asbestos Analysis         10/02/2           376706         3A         Asbestos Analysis         10/02/2           376707         3B         Asbestos Analysis         10/02/2           376708         4A         Asbestos Analysis         10/02/2           376710         5A         Asbestos Analysis         10/02/2           376711         5B         Asbestos Analysis         10/02/2           376712         6A         Asbestos Analysis         10/02/2           376713         6B         Asbestos Analysis         10/02/2           376714         7A         Asbestos Analysis         10/02/2           376715         7B         Asbestos Analysis         10/02/2	376699	1A	Asbestos Analysis	10/02/2015
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376703       1E       Asbestos Analysis       10/02/2         376704       2A       Asbestos Analysis       10/02/2         376705       2B       Asbestos Analysis       10/02/2         376706       3A       Asbestos Analysis       10/02/2         376707       3B       Asbestos Analysis       10/02/2         376708       4A       Asbestos Analysis       10/02/2         376709       4B       Asbestos Analysis       10/02/2         376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376701	1C	Asbestos Analysis	10/02/2015
376704       2A       Asbestos Analysis       10/02/2         376705       2B       Asbestos Analysis       10/02/2         376706       3A       Asbestos Analysis       10/02/2         376707       3B       Asbestos Analysis       10/02/2         376708       4A       Asbestos Analysis       10/02/2         376709       4B       Asbestos Analysis       10/02/2         376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376702	1D	Asbestos Analysis	10/02/2015
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376706       3A       Asbestos Analysis       10/02/2         376707       3B       Asbestos Analysis       10/02/2         376708       4A       Asbestos Analysis       10/02/2         376709       4B       Asbestos Analysis       10/02/2         376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376704	2A	Asbestos Analysis	10/02/2015
376707       3B       Asbestos Analysis       10/02/2         376708       4A       Asbestos Analysis       10/02/2         376709       4B       Asbestos Analysis       10/02/2         376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376705	2B	Asbestos Analysis	10/02/2015
376708       4A       Asbestos Analysis       10/02/2         376709       4B       Asbestos Analysis       10/02/2         376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376706	3A	Asbestos Analysis	10/02/2015
376719 4B Asbestos Analysis 10/02/2 376710 5A Asbestos Analysis 10/02/2 376711 5B Asbestos Analysis 10/02/2 376712 6A Asbestos Analysis 10/02/2 376713 6B Asbestos Analysis 10/02/2 376714 7A Asbestos Analysis 10/02/2 376715 7B Asbestos Analysis 10/02/2	376707	3B	Asbestos Analysis	10/02/2015
376710       5A       Asbestos Analysis       10/02/2         376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376708	4A	Asbestos Analysis	10/02/2015
376711       5B       Asbestos Analysis       10/02/2         376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376709	4B	Asbestos Analysis	10/02/2015
376712       6A       Asbestos Analysis       10/02/2         376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376710	5A	Asbestos Analysis	10/02/2015
376713       6B       Asbestos Analysis       10/02/2         376714       7A       Asbestos Analysis       10/02/2         376715       7B       Asbestos Analysis       10/02/2	376711	5B	Asbestos Analysis	10/02/2015
376714         7A         Asbestos Analysis         10/02/2           376715         7B         Asbestos Analysis         10/02/2	376712	6A	Asbestos Analysis	10/02/2015
376715 7B Asbestos Analysis 10/02/2	376713	6B	Asbestos Analysis	10/02/2015
	376714	7A	Asbestos Analysis	10/02/2015
376716 8A Asbestos Analysis 10/02/2	376715	7B	Asbestos Analysis	10/02/2015
·	376716	8A	Asbestos Analysis	10/02/2015
376717 8B Asbestos Analysis 10/02/2	376717	8B	Asbestos Analysis	10/02/2015
376718 9A Asbestos Analysis 10/02/2	376718	9A	Asbestos Analysis	10/02/2015

**Report Date**: 10/2/2015

Login #	Sample ID	Work Requested	Completed
376719	9B	Asbestos Analysis	10/02/2015

Reviewed by:

Quality Assurance Coordinator



Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,

(734) 955-6600, Fax: (734) 955-6604

### Polarized Light Microscopy Asbestos Analysis Report

To: Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus,MI 48174

Location: Vacant Residence

207 Lathrop Street, Lansing, MI 48912

**ETC Job**: 174415

Client Project: 33-01-01-15-426-121

Date Collected: 09/24/2015

**Date Received**: 10/01/2015

**Date Analyzed**: 10/02/2015

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
376699 1A Rm 1 Layer-1 Analyst: Ale	Plaster x Vande Guchte	Gray Non-Fibrous Homogenous	1% Cellulose	99% Other	None Detected
376699 1A Rm 1 Layer-2 Analyst: Ale	Skim Coat x Vande Guchte	White Non-Fibrous Homogenous		100% Other	None Detected
376700 1B Rm 2 Layer-1 Analyst: Ale	Plaster x Vande Guchte	Gray Non-Fibrous Homogenous		100% Other	None Detected
376700 1B Rm 2 Layer-2 Analyst: Ale	Skim Coat x Vande Guchte	White Non-Fibrous Homogenous		100% Other	None Detected
376701 1C Rm 3 Layer-1 Analyst: Ale	Plaster x Vande Guchte	Gray Non-Fibrous Homogenous	1% Cellulose	99% Other	None Detected
376701 1C Rm 3 Layer-2 Analyst: Ale	Skim Coat x Vande Guchte	White Non-Fibrous Homogenous		100% Other	None Detected
376702 1D Rm 4 Layer-1 Analyst: Ale	Plaster x Vande Guchte	Gray Non-Fibrous Homogenous	2% Cellulose	98% Other	None Detected
376702 1D Rm 4 Layer-2 Analyst: Ale	Skim Coat x Vande Guchte	White Non-Fibrous Homogenous		100% Other	None Detected



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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
376703 1E Rm 5 Layer-1 Analyst: A	Plaster Alex Vande Guchte	Gray Non-Fibrous Homogenous	2% Cellulose	98% Other	None Detected
376703 1E Rm 5 Layer-2 Analyst: <i>I</i>	Skim Coat Alex Vande Guchte	White Non-Fibrous Homogenous		100% Other	None Detected
376704 2A Rm 4 Analyst: Alex Van	Linoleum w/ Paper Back	Beige Fibrous Homogenous	50% Cellulose	50% Other	None Detected
376705 2B Rm 4 Analyst: Alex Van	Linoleum w/ Paper Back	Beige Fibrous Homogenous	50% Cellulose	50% Other	None Detected
376706 3A Rm 7 Analyst: Alex Van	Wood Grain Linoleum w/ Paper Back nde Guchte	Brown Fibrous Homogenous	50% Cellulose	50% Other	None Detected
376707 3B Rm 7 Analyst: Alex Van	Wood Grain Linoleum w/ Paper Back nde Guchte	Brown Fibrous Homogenous	50% Cellulose	50% Other	None Detected
376708 4A Ext 13 Analyst: Alex Van	Window Glaze	White Non-Fibrous Homogenous		100% Other	None Detected



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Romulus,MI 48174

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207 Lathrop Street, Lansing, MI 48912

**ETC Job**: 174415

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**Date Collected** : 09/24/2015

**Date Received**: 10/01/2015

**Date Analyzed**: 10/02/2015

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
376709 4B Ext 13 Analyst: Alex Var	Window Glaze nde Guchte	White Non-Fibrous Homogenous		100% Other	None Detected
376710 5A Ext 13 Analyst: Alex Var	Blown In Insulation  nde Guchte	Brown Fibrous Homogenous	100% Cellulose		None Detected
376711 5B Ext 13 Analyst: Alex Var	Blown In Insulation	Brown Fibrous Homogenous	100% Cellulose		None Detected
376712 6A Ext 13 Analyst: Alex Var	Fiber Paper Under Wood Siding	Black Fibrous Homogenous	100% Cellulose		None Detected
376713 6B Ext 13 Analyst: Alex Var	Fiber Paper Under Wood Siding	Black Fibrous Homogenous	100% Cellulose		None Detected
376714 7A Ext 13 Roof Analyst: Alex Var	Shingles - Top Layer	Brown Non-Fibrous Homogenous	2% Cellulose	98% Other	None Detected
376715 7B Ext 13 Roof Analyst: Alex Var	Shingles - Top Layer	Brown Non-Fibrous Homogenous	5% Cellulose	95% Other	None Detected



Environmental Testing Laboratories, Inc.



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### Polarized Light Microscopy Asbestos Analysis Report

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**Date Analyzed**: 10/02/2015

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
376716 8A Ext 13 Roof Analyst: Alex Vand	Shingles - 2nd Layer e Guchte	Green Non-Fibrous Homogenous	2% Cellulose	98% Other	None Detected
376717 8B Ext 13 Roof Analyst: Alex Vand	Shingles - 2nd Layer e Guchte	Green Non-Fibrous Homogenous	2% Cellulose	98% Other	None Detected
376718 9A Ext 13 Roof Analyst: Alex Vand	Felt Paper - Bottom Layer e Guchte	Black Fibrous Homogenous	70% Cellulose	30% Other	None Detected
376719 9B Ext 13 Roof Analyst: Alex Vand	Felt Paper - Bottom Layer e Guchte	Black Fibrous Homogenous	70% Cellulose	30% Other	None Detected

Lab Supervisor/Other Signatory

Analyst: Alex Vande Gucht

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")

Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples

Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples

EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials

EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

## ENVIRONMENTAL TESTING LABORATORIES, INC. 38900 Huron River Drive, Suite 200 Romulus, Michigan 48174 (734) 955-1223 Fax: (734) 955-1224



Desired Analysis

### CHAIN-OF-CUSTODY

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Contact: Leo Wall	Phone: 734-955-6600	Fax: 734-955-6604	e-mail: results@2etc.com	Results by: fax / e-mail / verbal	
ETC			Romulus, MI 48174		
Client:	No de de la constante de la co	Addiess.			

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Seals Intact Upon Receipt Preservatives. All Containers Labeled

Sample Condition (Lab Only)

LAB PROJECT#:

Asbestos Material Sampling Summary Sheet Surfacing materials

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:1000 SF = 3 samples

1000 - <5000 = 5 samples

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### Asbestos Material Sampling Summary Sheet Miscellaneous materials

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2 samples

Attachment:

Inspection Procedures

### **Pre-Demolition Environmental Inspection Procedures**

### HAZARDOUS MATERIALS INSPECTION

A table showing hazardous materials, above the household quantity limitations, found at the house is included as **Table 1: Hazardous Materials**. This table lists non-asbestos materials that may be hazardous and require special handling and disposal requirements. Items that might be in this category include: mercury switches, fluorescent lighting tubes and ballasts, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

Under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is a residential household quantity exclusion. Materials are listed in Table I if they are present in quantities larger than what would typically be expected to be used and disposed in a normal household, and/or may require special handling and disposal requirements, such as: paints, solvents, adhesives, oils, tires, large circuit boards (such as televisions, computers, and security systems), prescription drugs, and syringes. On the other hand, if there were only household sized containers of maintenance, cleaning, non-prescription health and personal hygiene products, radios, and controllers present, as would be found in most homes, these materials would not be listed.

Fluorescent lighting systems have ballasts that have the potential to contain polychlorinated biphenyls (PCBs). Although PCBs are no longer commercially produced in the United States, they may be present in U.S. products that were produced prior to 1979, and may still be commercially available from other countries. Fluorescent bulbs, thermostats, and thermometers may contain mercury and can be treated as Universal Waste, which are streamlined standards for managing common types of hazardous waste.

If obtained, photographs of hazardous materials for the above referenced property are included in **Attachment: Site Photographs.** 

### ASBESTOS CONTAINING BUILDING MATERIAL INSPECTION

The property was inspected for the presence of asbestos-containing materials (ACMs) in order to meet the requirements of 40 CFR, Part 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP).

### **Asbestos Inspection**

The property was inspected for the presence of suspected ACMs. Typical building materials that may contain asbestos included drywall, plaster, stucco, floor tiles, roofing felt and shingles, ceiling tiles, insulation, pipe insulation, and duct insulation.

### Sample Collection

Representative bulk samples of suspect asbestos containing building materials were randomly collected within each building area. The materials sampled were broken down into distinct homogenous (similar) materials. Homogenous material determination was based on the following criteria:

- Similar physical characteristics (same color and texture, etc.)
- Application (sprayed-on, troweled-on, assembly into a system etc.)
- Material function (Thermal insulation, floor tile, wallboard system etc.)

### **Pre-Demolition Environmental Inspection Procedures**

At least two samples of each suspected asbestos containing material identified during the inspection was collected. For surfacing materials (sprayed and/or troweled on) a minimum of three samples were collected for areas that contained less than 1000 square feet of the material; 5 samples were collected for materials 1000 to 5000 square feet, and 7 samples were taken for areas greater than 5000 square feet. A Michigan Accredited Asbestos Inspector collected representative samples of each suspected ACM. Each sample was placed into a sealed plastic bag and labeled. A description of the material and location of the sample collected was recorded in the field notes. The total quantity of each suspected ACM was estimated and recorded in the field notes.

A listing of suspect ACMs at this property that were sampled and sent to the laboratory for analysis is included in **Table 2.** A copy of a floor plan showing sample locations is included in **Attachment: Site Drawing.** 

### **Laboratory Analysis / Results**

Each sample of suspect ACM collected at this property was analyzed for asbestos content using polarized light microscopy (PLM) by a NVLAP and NIST accredited laboratory in accordance with 40 CFR Ch. I (1-1-87 Edition) Part 763, Subpart F, Appendix A, pp. 293-299. Asbestos containing materials are defined as materials that contain greater than one percent (>1%) asbestos.

Each sample collected for analysis was delivered to either IATL (International Asbestos Testing Laboratories), 9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054, ETL (Environmental Testing Laboratories), 38900 W. Huron River Drive, Suite 200, Romulus, MI 48174, and/or ACM Engineering & Environmental Services, 26598 US Highway 20 West, South Bend, IN 46628. Laboratory results are included in **Attachment: Laboratory Analytical Results.** 

### **SIGNATURE**

This report was prepared based on the site conditions that existed at the time of the inspection, sample collection, and the laboratory analytical results.

Prepared by:

Michael Charest, Michigan Certified Asbestos Inspector (s)

Michigan Accreditation Number (s) A-26601



January 7, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

209 Lathrop St., Lansing, Ingham County, MI

### Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 209 Lathrop St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

### **SUMMARY**

Build	ling Information
Property Address	209 Lathrop St., Lansing MI
Parcel #	33-01-01-15-426-131
No. Stories	2
Square Footage (approx.)	900 SF
Siding	Transite
Basement	Yes
Garage	Yes



		A - l t O t - i i A	A = 1 = 1.1	
		Asbestos Containing N	lateriai	
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
Exterior	Window Glaze	Non Friable	5% Chrysotile	10 Windows (150 SF)
RM-2, RM-3	Vent Wrap	Non Friable	60% Chrysotile	15 SF
RM-5	Sink Undercoat	Non Friable	2% Chrysotile	4 SF
Exterior	Siding	Non Friable	18% Chrysotile	1,800 SF

	Universal Waste Inventory	
Location	Material Description	Quantity
RM-4	Thermostat	1
Exterior, Basement	Fire Extinguisher	2
RM-1, RM-5, Basement	TV	3
RM-2, RM-3, RM-7	Smoke Detector	3
RM-5	CFL Bulb	2
Garage	Fluorescent Bulb	1

TECHNICAL SKILL. CREATIVE SPIRIT.

	Other Regulated Materials Inventory	
Location	Material Description	Quantity
RM-5	Refrigerator	1
Basement	Washing Machine	1
Basement	Dryer	1
RM-1	Space Heater	1

	Hazardous Materials	
Location	Material Description	Quantity
	**No Hazardous Materials were found onsite	**

### PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

### **METHODOLOGIES**

An RMS was conducted on the single-family home located at 209 Lathrop St., in Lansing Michigan on December 5, 2018. Due to the amount of debris, the detached garage was not accessible and therefore the RMS was conducted on the single-family home. On January 3, 2019 MSG returned to conduct an RMS survey on the detached garage. Methodologies employed during the completion of each task of the RMS are detailed below.

### **ACM Survey Procedures**

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable;
- Assessed as being in good, fair or poor condition;

- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous);
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA quidelines.

### Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard, and is regulated as such by one or more of the following:
  - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
  - o IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG) Code:
  - o IATA International Air Transport Association; Dangerous Goods Regulations;
  - o ICAO International Civil Aviation Organization; Technical Instructions; and
  - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

### Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) List of Hazardous Substances and Reportable Quantities, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

### Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

### **SURVEY RESULTS**

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B, Limitations*.

### **ACM Survey Results**

MSG identified eighteen (18) homogenous materials that were suspect as asbestos containing during the ACM survey. Thirty nine (39) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found four (4) homogenous materials (samples 4-1, 5-1, 10-1 and 15-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. Sample 10-1 was point counted and confirmed to be greater than 1% asbestos.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

### Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.* 

### CONCLUSIONS AND RECOMMENDATIONS

### **Asbestos Containing Materials**

Of the eighteen (18) homogenous materials sampled as part of the ACM survey, four (4) homogenous materials contained asbestos greater than 1% (samples 4-1, 5-1, 10-1 and 15-1) with these four (4) homogenous materials being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

### Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

**Environmental Scientist** 

Accreditation Number A47903

Charlie Bush

Senior Project Manager

Accreditation Number A34293

Attachments

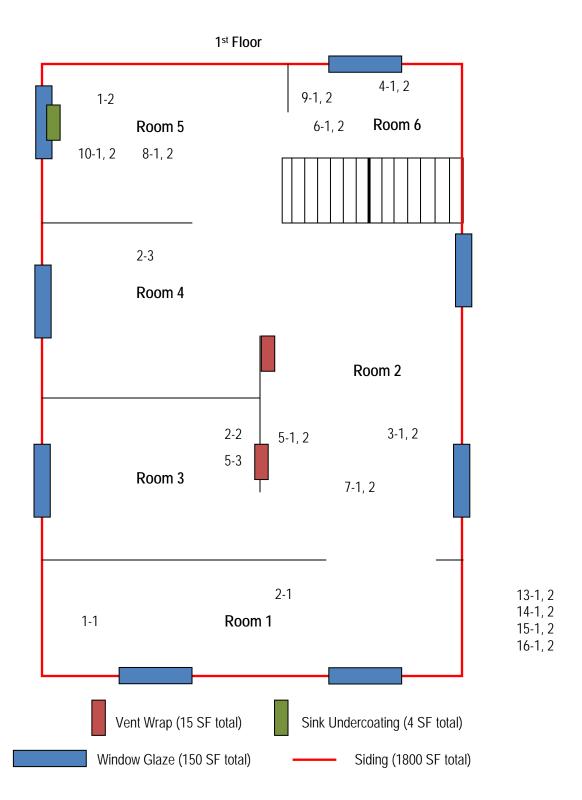
## FIGURE



721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 209 Lathrop Street Date: January 7, 2019

### Drawing not to scale





### TECHNICAL SKILL.

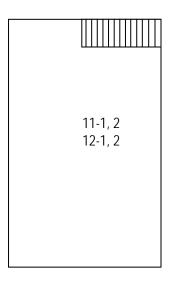
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: Date: January 7, 2019 209 Lathrop Street

Drawing not to scale

2<sup>nd</sup> Floor 1-3 Room 7

**Basement** 



Garage

18-1, 2 17-1, 2

# **TABLES**

TABLE 1
Asbestos Sampling Results

Client Survey Loc Survey D	ation	Ingham Count 209 Lathrop December 7, 2		ank Authority						
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-5	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-7	2	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-2	1	AS 2-1	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1400 SF
RM-3	1	AS 2-2	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1400 SF
RM-4	1	AS 2-3	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1400 SF
RM-2	1	AS 3-1	HA-3	Window caulk	Non-Friable	Good	Miscellaneous	No	No	150 LF (10 Windows)
RM-2	1	AS 3-2	HA-3	Window caulk	Non-Friable	Good	Miscellaneous	No	No	150 LF (10 Windows)
RM-6	1	AS 4-1	HA-4	Window Glaze	Non-Friable	Good	Miscellaneous	Yes	5% Chrysotile	150 SF (10 Windows)
RM-6	1	AS 4-2	HA-4	Window Glaze	Non-Friable	Good	Miscellaneous	Yes	NA	150 SF (10 Windows)
RM-2	1	AS 5-1	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	60% Chrysotile	15 SF
RM-3	1	AS 5-2	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	15 SF
RM-3	1	AS 5-3	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	15 SF
RM-6	1	AS 6-1	HA-6	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-6	1	AS 6-2	HA-6	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-2	1	AS 7-1	HA-7	White 12x12	Non-Friable	Good	Miscellaneous	No	No	425 SF
RM-2	1	AS 7-2	HA-7	White 12x12	Non-Friable	Good	Miscellaneous	No	No	425 SF
RM-5	1	AS 8-1	HA-8	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-5	1	AS 8-2	HA-8	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	100 SF

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	ty Land B	ank Authority						
Survey Loca Survey Da		209 Lathrop December 7, 2	2010							
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-6	1	AS 9-1	HA-9	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-6	1	AS 9-2	HA-9	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-5	1	AS 10-1	HA-10	Sink undercoat	Non-Friable	Good	Miscellaneous	No	2% Chrysotile	4 SF
RM-5	1	AS 10-2	HA-10	Sink undercoat	Non-Friable	Good	Miscellaneous	No	NA	4 SF
Basement	В	AS 11-1	HA-11	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 11-2	HA-11	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 12-1	HA-12	Basement floor Concrete	Non-Friable	Good	Miscellaneous	No	No	400 SF
Basement	В	AS 12-2	HA-12	Basement floor Concrete	Non-Friable	Good	Miscellaneous	No	No	400 SF
Exterior	E	AS 13-1	HA-13	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	250 SF
Exterior	E	AS 13-2	HA-13	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	250 SF
Roof	E	AS 14-1	HA-14	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	900 SF
Roof	E	AS 14-2	HA-14	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	900 SF
Exterior	E	AS 15-1	HA-15	Siding	Non-Friable	Good	Miscellaneous	No	18% Chrysotile	1800 SF
Exterior	E	AS 15-2	HA-15	Siding	Non-Friable	Good	Miscellaneous	No	NA	1800 SF
Exterior	E	AS 16-1	HA-16	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1800 SF
Exterior	Е	AS 16-2	HA-16	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1800 SF
Garage	1	AS 17-1	HA-17	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF (3 Windows)
Garage	1	AS 17-2	HA-17	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF (3 Windows)
Garage	1	AS 18-1	HA-18	Cream 12x12	Non-Friable	Good	Miscellaneous	No	No	15 SF
Garage	1	AS 18-2	HA-18	Cream 12x12	Non-Friable	Good	Miscellaneous	No	No	15 SF

### Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 209 Lathrop St.

Lansing, Ingham County, Michigan

	Universal Waste Inventory	
Location	Type of Waste	Approximate Quantity
RM-4	Thermostat	1
Exterior, Basement	Fire Extinguisher	2
RM-1, RM-5, Basement	TV	3
RM-2, RM-3, RM-7	Smoke Detector	3
RM-5	CFL Bulb	2
Garage	Fluorescent Bulb	1
Н	azardous Materials Inventory	
Location	Type of Waste	Approximate Quantity
-	-	-
Othe	er Regulated Materials Inventory	I
Location	Type of Waste	Approximate Quantity
RM-5	Refrigerator	1
Basement	Washing Machine	1
Basement	Dryer	1
RM-1	Space Heater	1

### ATTACHMENT A PHOTO LOG

### Ingham County Land Bank 209 Lathrop, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

### **Property Photos**



209 Lathrop, Front of House



Back of House



Side of House



Side of House

### Ingham County Land Bank 209 Lathrop, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

### **Inaccessible Areas**



Sample ID: AS 1-1 Location: RM-1 Notes: Drywall



Sample ID: AS 5-1 Location: RM-2 Notes: Vent Wrap



Sample ID: AS 2-1 Location: RM-2 Notes: Plaster



Sample ID: AS 5-2 Location: RM-3 Notes: Vent Wrap



Sample ID: AS 4-1 Location: RM-6 Notes: Window Glaze



Sample ID: AS 10-1 Location: RM-5 Notes: Sink Undercoating

### Ingham County Land Bank 209 Lathrop, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

### **Inaccessible Areas**



Sample ID: AS 15-1 Location: Exterior Notes: Transite Siding



Sample ID: AS 8-1 Location: RM-5 Notes: Blue 12x12 Tile



Sample ID: AS 3-1 Location: RM-2 Notes: Window Caulk



Sample ID: AS 11-1 Location: Basement Notes: Stack Cement



Sample ID: AS 17-1 Location: Garage Notes: Garage Window Glaze



Sample ID: AS 18-1 Location: Garage Notes: Cream 12x12

### ATTACHMENT B LIMITATIONS



### REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

TECHNICAL SKILL. CREATIVE SPIRIT.

this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

### ATTACHMENT C

**ANALYTICAL REPORTS AND CHAINS OF CUSTODY** 



### 00007

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 An	alyzed	12/11/18 12/14/18 12/14/18	Project Order # Project #	209 Lathrop 00007 I1440003
		BULK SAMP	LE AN	ALYSIS SUMMA	.RY	
	Client ID AS 1-1 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound	0.00% rous.	O0007-1	l	ocation RM-1
	Client ID AS 1-2 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound	0.00% rous.	O0007-2	l	ocation RM-5
	Client ID AS 1-3 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound	0.00% rous.	O0007-3	l	ocation RM-7
	Client ID AS 2-1 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat	0.00% rous.	O0007-4	Į.	ocation RM-2
	Client ID AS 2-2 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat	0.00% rous.	O0007-5		ocation RM-3
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized Ligucchesi Quality Manager Pr A Claes Laboratory Direc	r	roscopy		Accreditations NIST-NVLAP No. 600212-0

### 00007

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200	Received Analyzed Reported	12/14/18	Project Order # Project #	209 Lathrop 00007 I1440003
		BULK SAM	IPLE AN	ALYSIS SUMMA	ARY	
	Client ID AS 2-3 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Layer 2 Skim Coat  Type Non Detect White, homogenous, 1 100% non-asbest	0.00% fibrous.	O0007-6	l	Location RM-4
	Client ID AS 3-1 Layer 1 Window Caulk Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos		Lab ID	O0007-7	I	Location RM-2
	Client ID AS 3-2 Layer 1 Window Caulk Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos		Lab ID	00007-8	l	Location RM-2
	Client ID AS 4-1 Layer 1 Window Glaze Chrysotile 5.00% n, homogenous, fibrous. 95% non-asbestos		Lab ID	O0007-9	l	ocation RM-6
Type Cream	Client ID AS 4-2 Layer 1 Window Glaze Not Analyzed - n, homogenous, fibrous.		Lab ID	O0007-10	I	Location RM-6
Analytica Analyst: Reviewe	Joshua P L	0/R-93/116 by Polarized ucchesi Quality Mana er A Claes Laboratory Di	ger	roscopy		Accreditations NIST-NVLAP No. 600212-0

### 00007

Client	The Mannik & Smith Group, Inc 2193 Association Dr., Suite 200 Okemos, MI, 48864		12/14/18 Order #	•
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 5-1 Layer 1 Vent Wrap Chrysotile 60.00% homogenous, fibrous. 40% non-asbestos	Lab ID	O0007-11	Location RM-2
Type Tan,	Client ID AS 5-2 Layer 1  Vent Wrap  Not Analyzed - homogenous, fibrous.	Lab ID	O0007-12	Location RM-3
Type Tan,	Client ID AS 5-3 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0007-13	Location RM-3
	Client ID AS 6-1 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0007-14	Location RM-6
	Client ID AS 6-2 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0007-15	Location RM-6
Analytica Analyst: Reviewe	Joshua P Lucc	t-93/116 by Polarized Light Mico hesi Quality Manager Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

### 00007

Client	The Mannik & Smith Group	, Inc.	Received	12/11/18	Project	209 Lathrop
	2193 Association Dr., Suite	200	Analyzed	12/14/18	Order#	00007
	Okemos, MI, 48864		Reported	12/14/18	Project #	11440003
		BULK SAM	IPLE AN	ALYSIS SUMN	ЛARY	
	Client ID AS 7-1 Layer 1	Layer 2	Lab ID	O0007-16	L	ocation RM-2
	White 12x12	Mastic				
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Non Detect Orange, homogenous, 100% non-asbest				
	Client ID AS 7-2 Layer 1 White 12x12	Layer 2 Mastic		O0007-17	L	ocation RM-2
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Non Detect Orange, homogenous, 100% non-asbest				
	Client ID AS 8-1 Layer 1 Blue 12x12 Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2  Backing  Type Non Detect  Black, homogenous, f  100% non-asbest	0.00% ibrous.	O0007-18	L	ocation RM-5
	Client ID AS 8-2 Layer 1 Blue 12x12 Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2  Backing  Type Non Detect  Black, homogenous, f  100% non-asbest	0.00% ibrous.	O0007-19	L	ocation RM-5
Type Brown,	Client ID AS 9-1 Layer 1  Brown Linoleum  Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2  Mastic  Type Non Detect  Orange, homogenous, 100% non-asbest	0.00% fibrous.	O0007-20		ocation RM-6
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized ucchesi Quality Manag er A Claes Laboratory Di	ger	roscopy		Accreditations NIST-NVLAP No. 600212-0

### 00007

Client The Mannik & S 2193 Associatio Okemos, MI, 48		Received Analyzed Reported	12/14/18	Project Order # Project #	209 Lathrop 00007 I1440003
	BULK SAN	/IPLE AN	ALYSIS SUMMARY	,	
Client ID Layer 1 Brown Linoleun Type Non Detect Brown, homogenous, 100% non-asbest	Layer 2  Mastic  O.00% Type Non Detect Orange, homogenous	0.00% , fibrous.	O0007-21	L	ocation RM-6
Client ID Layer 1 Sink Undercoat Type Chrysotile Tan, homogenous, fi 98% non-asbest	2.00% brous.	Lab ID	O0007-22	L	ocation RM-5
Client ID Layer 1 Sink Undercoat Type Not Analyzed Tan, homogenous, fi	:	Lab ID	O0007-23	L	ocation RM-5
Client ID Layer 1 Stack Cement Type Non Detect Gray, homogenous, fi 100% non-asbest	0.00% ibrous.	Lab ID	O0007-24	L	ocation Basement
Client ID Layer 1 Stack Cement Type Non Detect Gray, homogenous, fi 100% non-asbest	0.00% ibrous.	Lab ID	O0007-25	L	ocation Basement
Analyst:	US EPA 600/R-93/116 by Polarized Joshua P Lucchesi Quality Mana Christopher A Claes Laboratory D	iger	roscopy		Accreditations NIST-NVLAP No. 600212-0

### 00007

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18	Project Order # Project #	209 Lathrop 00007 I1440003
		BULK SAMPLE AN	ALYSIS SUMM.	ARY	
Type Gray, ho	Client ID AS 12-1 Layer 1 ement Floor Concrete Non Detect 0.00% omogenous, nonfibrous. 00% non-asbestos	Lab ID	O0007-26	L	ocation Basement
Type Gray, ho	Client ID AS 12-2 Layer 1 ement Floor Concrete Non Detect 0.00% omogenous, nonfibrous. 00% non-asbestos	Lab ID	O0007-27	L	ocation Basement
	Client ID AS 13-1 Layer 1  Exterior Caulk  Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0007-28	L	ocation Exterior
	Client ID AS 13-2 Layer 1  Exterior Caulk  Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0007-29	L	ocation Exterior
	Client ID AS 14-1 Layer 1 Roof Shingle Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0007-30	L	ocation Roof
Analytica Analyst: Reviewer	Joshua P L	D/R-93/116 by Polarized Light Mico ucchesi Quality Manager or A Claes Laboratory Director	roscopy		Accreditations NIST-NVLAP No. 600212-0

### 00007

Client	The Mannik & Smith Group, I 2193 Association Dr., Suite 20 Okemos, MI, 48864	·	/14/18 Order #	209 Lathrop 00007 I1440003
		BULK SAMPLE ANAL	YSIS SUMMARY	
	Client ID AS 14-2 Layer 1 Roof Shingle Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	Lab ID O	0007-31 L	ocation Roof
	Client ID AS 15-1 Layer 1 Siding Chrysotile 18.00% homogenous, fibrous. 82% non-asbestos	Lab ID O	0007-32 L	ocation Exterior
Type Gray	Client ID AS 15-2 Layer 1 Siding Not Analyzed - t, homogenous, fibrous.	Lab ID O	0007-33 L	ocation Exterior
Type Black	Client ID AS 16-1 Layer 1 iding Underlayment Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Lab ID O	0007-34 L	ocation Exterior
Type Black	Client ID AS 16-2 Layer 1 iding Underlayment Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Lab ID O	0007-35 L	ocation Exterior
Analytic Analyst: Reviewe	Joshua P Luc	R-93/116 by Polarized Light Microsocchesi Quality Manager A Claes Laboratory Director	сору	Accreditations NIST-NVLAP No. 600212-0

Turn Around	Project	Address	Client		
☐ 4 Hour	209 Lathrop	2193 Association Drive, Suite 200	The Mannik & Smith Group, Inc.	Analytical Laboratories	The Mannik & Smith Group
24 Hour		te 200	, Inc.	al Labor	ik & Smi
	Project#			atories	th Grou
48 Hour	11440003 Email				p
✓ 72 Hour	Email	Contact	City, State		
lour	cbush@mai	Charlie Bush	City, State Lansing, MI	0rc	
1 Week	nniksmithgroup.com	18		Order Number:	Chai
Report to	Fax	Phone	Zip Code		n of Cı
✓ Email		(517) 316-9232		0	ain of Custody
✓ Email ☐ Fax		1.08		00007	
12/7/2018	Date Sampled:	✓ TTP ☐ Point Count	*Bulk Samples Only*		

Lab ID Customer ID	Material Type	Material Location
	Drywall	RM-1
AS 1-2	Drywall	RM-5
AS 1-3	Drywall	RM-7
AS 2-1	Plaster	RM-2
AS 2-2	Plaster	RM-3
AS 2-3	Plaster	RM-4
AS 3-1	Window caulk	RM-2
AS 3-2	Window caulk	RM-2
AS 4-1	Window Glaze	RM-6
AS 4-2	Window Glaze	RM-6
AS 5-1	Vent wrap	RM-2
AS 5-2	Vent wrap	RM-3
AS 5-3	Vent wrap	RM-3
AS 6-1	Wall mastic	RM-6
AS 6-2	Wall mastic	RM-6
AS 7-1	White 12x12	RM-2
AS 7-2	White 12x12	RM-2
AS 8-1	Blue 12x12	RM-5
AS 8-2	Blue 12x12	RM-5
	Brown Linoleum	BM-6

Relinquished by Date and Time\_

Received by

Date and Time

CITCITE	THE MAILING & SHILLI GLOUP, HIC.	o, ITIC.		city, state Lansing, IVII	-	TIP Code		bulk Salliples Olliy
Address	2193 Association Drive, Suite 200	ite 200		Contact Charlie Bush	4	Phone (51	(517) 316-9232	✓ TTP ☐ Point Count
Project	209 Lathrop		Project#   11440003	003 Email cbush@manniksmithgroup.com		Fax		Date Sampled:
Turn Around	193000	24 Hour	48 Hour	√ 72 H		Report to	✓ Email ☐ Fax	12/7/2018
Lab ID	Customer ID		Mat	Material Type		Material Location	tion	Notes
	AS 9-2		Brown	Brown Linoleum		RM-6		
	AS 10-1		Sink	Sink undercoat		RM-5		
	AS 10-2		Sinkı	Sink undercoat		RM-5		
	AS 11-1		Stac	Stack Cement		Basement		
	AS 11-2		Stac	Stack Cement		Basement		
	AS 12-1		Basement	Basement floor Concrete		Basement		
	AS 12-2		Basement	Basement floor Concrete		Basement		
	AS 13-1		Exte	Exterior Caulk		Exterior		
	AS 13-2		Exte	Exterior Caulk		Exterior		
	AS 14-1		Roo	Roof Shingle		Roof		
	AS 14-2		Roo	Roof Shingle		Roof		
	AS 15-1			Siding		Exterior		
	AS 15-2			Siding		Exterior		
	AS 16-1		Siding u	Siding underlayment		Exterior		
	AS 16-2		Siding u	Siding underlayment		Exterior		
	e.							
	8050							
Comments:							2	
				(a				

Relinquished by

Date and Time

Date and Time

Received by

### 00016

Client	The Mannik & Smith Group 2193 Association Drive, Suit Okemos, MI	te 200 Ar	nalyzed	01/03/19 01/04/19 01/04/19	Project Order # Project #	209 Lathrop 00016 I1440003
		BULK SAMP	LE AN	ALYSIS SUMN	ЛARY	
	Client ID AS 17-1 Layer 1	L	.ab ID	O0016-1	L	ocation Garage
Gar	rage Window Glaze					
	Non Detect 0.00%, homogenous, fibrous. 00% non-asbestos					
	Client ID AS 17-2 Layer 1	L	ab ID	00016-2	L	ocation Garage
Gar	rage Window Glaze					
	Non Detect 0.00%, homogenous, fibrous. 00% non-asbestos					
	Client ID AS 18-1		ab ID	00016-3	L	ocation Garage
	Layer 1	Layer 2				
	Cream 12X12	Mastic				
	Non Detect 0.00%, homogenous, fibrous. 00% non-asbestos	Type Non Detect Yellow, homogenous, fik 100% non-asbestos				
	Client ID AS 18-2		ab ID	00016-4	L	ocation Garage
	Layer 1	Layer 2				
	Cream 12X12	Mastic				
	Non Detect 0.00%, homogenous, fibrous. 00% non-asbestos	Type Non Detect Yellow, homogenous, fik 100% non-asbestos				

Analytical Method:	US EPA 600/R-93/116 by Polarized Light Microscopy	Accreditations
Analyst:	Joshua P Lucchesi Quality Manager	NIST-NVLAP
Reviewer:	Christopher A Claes Laboratory Director	No. 600212-0

	The Manni	The Mannik & Smith Group	Chain of Custody
	Analytica	Analytical Laboratories Order	Order Number:
lient	The Mannik & Smith Group, Inc.	Oup, Inc. City, State しゅういろ, MI	M   Zip Code
ddress	2193 Association Pr. Suite	200 Contact (	Bush
roject	209 Lathrop St.	Project # I1440003 Email	Chushe manniksmithgroup.com Fax
urn Around	id 4 Hour	☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐	1 Week
Lab ID	Customer ID	Material Type	
	AS 17-1	Garage Winow Glaze	
	AS 17-2	Garage Window glaze	
	AS 18-1	Cream 12×12	
	AS-18-2	Cream 12×12	
8			
<b>S</b>	Relinquished by Date and Time _	1-3-18 1600	Received by W Date and Time   - 3
omments		9	

### ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



### NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,	•	
LICENSING	AND	REGI	RAI	DRY	AFE	AIRS
CHETTOWALE	DOM	No. 100	PDM	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

·	
DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:
Postmark Date/ Rec'd Date/	Name:
Emergency Date/ Valid No	Mailing Address.
☐ OK ☐ Send Def Ltr. Date of Def Ltr//	
	Contact: Phone:
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:
	Name:
	_ Mailing Address:
	City/State/Zip:
Notification NoTrans No	
Calculate LARA Asbestos Project Fee: (1% Project Fee	Contact: Phone:
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)
Type of Contractor: License No.:	Name:
Licensing Authority:	Mailing Address:
1. NOTIFICATION:	City/State/Zip:
Date of Notification:	E-mail:
Date of Revision(s):	
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION:     Facility Name:
Mark appropriate boxes: (both DEQ and LARA may apply):	Location Address/Description:
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:
☐ Planned Renovation – 10 working days notice☐ Emergency Renovation	City/Twp State: Zip Code:
☐ Scheduled Demolition – 10 <b>working</b> days notice	County: Nearest Crossroad:
<ul> <li>☐ Intentional Burn – 10 working days notice</li> <li>☐ Ordered Demolition</li> </ul>	Size: (sq. ft.) No. of Floors: Floor No.:
LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:
<ul> <li>□ Demo, Reno, Encap. (&gt;10 ln. ft./15 sq. ft.) 10 <u>calendar</u> days notice</li> <li>□ Emergency Renovation/Encapsulation</li> </ul>	Specific Location(s) in Facility:
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:
START DATE END DATE	Name:
* Renovation	Location Address:
+Asb. Removal	City/State/Zip:
+Demolition:	
Encapsulation:	
Work Schedule: Please indicate the anticipated days of the week and	Name: Address:
work hours for the purpose of scheduling a compliance inspection.	Address:  City/State/Zip:
Days of the Week Work Hours	Phone:
Asb. Removal:	ORDERED DEMOLITIONS: (See NESHAP regulations for definition of
Demolition:	"Ordered Demolition.") A copy of the official Order must accompany this
Encapsulation:	notification.
* Includes setup, build enclosure, asbestos removal, demobilizing, etc. +Include <b>only</b> those dates you are conducting asbestos removal/demo.	Gov't Agency Ordering Demo:
	Name/Title of Person Signing Order:
Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.	
the startona date of each phase.	Date of Order: Date Ordered to Begin:
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remo	oved prior to demolition
Estimate the amount of asbestos: Include RACM RACM to be	Non-friable ACM <u>not</u> e RACM to be removed prior to demo.
(Regulated Asbestos Containing Material) to be Removed	
removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category	□ Ln. Ft. □ Ln. M.
I and/or Category II ACM that will not be removed prior	□ Sq. Ft. □ Sq. M.
to demolition. (NOTE: In a demolition, cementatious ACM cannot remain in a structure, as it is likely to	☐ Cu. Ft.* ☐ Cu.M.*
become regulated in the demolition/handling process. *\/olume (cub)	ic ft./meters) should be used only if unable to measure by linear/square measure
It must be removed prior to demolition.)	postos has fallen off of surface)

(example: asbestos has fallen off of surface).

### NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:
	carefully lower, etc.):	
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:
14.		<b>S: A)</b> Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting
		survey:
	C) Name, accreditation number of inspector, and date of inspection:	
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project.  Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,
18.	I certify that the above information is correct:	
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: b://www.michigan.gov/asbestos	For <b>NESHAP Demolitions/Renovations</b> , <b>40 CFR</b> , <b>Part 61</b> , <b>Subpart M</b> , please use the e-submittal process. For more information visit <a href="http://www.michigan.gov/air">http://www.michigan.gov/air</a> , under Air Links click on Asbestos NESHAP Program.
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 nsing, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)
517	7.636.4551 (office), 517.322.1713 (fax)	017.204.0777 (Ollide)

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)



December 21, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

530 Christiancy St., Lansing, Ingham County, MI

### Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 530 Christiancy St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

### **SUMMARY**

Build	ling Information
Property Address	530 Christiancy St., Lansing MI
Parcel #	33-01-01-21-427-129
No. Stories	2
Square Footage (approx.)	600 SF
Siding	Wood
Basement	Yes
Garage	No



	Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity	
Exterior	Basement Window Glaze	Non Friable	2.5% Chrysotile	60 SF	
Various	Vermiculite	Friable	Assumed	Unknown	

	Other Regulated Materials Inventory		
Location Material Description Quantity			
	**No Regulated Materials were found onsite	**	

	Hazardous Materials					
Location	Location Material Description Quantity					
	**No Hazardous Materials were found onsite	**				

	Universal Waste Inventory					
Location	Location Material Description Quantity					
	**No Universal Waste was found onsite**	-				

### PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

### **METHODOLOGIES**

The RMS was conducted on December 11, 2018. During the time of the survey a significant amount of debris located within the home rendered it inaccessible and therefore the RMS was limited to the exterior of the home. Methodologies employed during the completion of each task of the RMS are detailed below.

### **ACM Survey Procedures**

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable:
- Assessed as being in good, fair or poor condition;
- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous):
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA guidelines.

### **Universal Wastes and Hazardous Material Survey Procedures**

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard, and is regulated as such by one or more of the following:
  - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
  - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
     Code;
  - o IATA International Air Transport Association; Dangerous Goods Regulations;
  - o ICAO International Civil Aviation Organization; Technical Instructions; and
  - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal

Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

### **Other Regulated Materials**

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

### **SURVEY RESULTS**

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B. Limitations*.

### **ACM Survey Results**

MSG performed a limited external survey due to excessive debris within the house. However, during assessment of the access to the home vermiculite was identified on debris and surfaces throughout the home. The vermiculite was assumed to contain asbestos. MSG identified five (5) additional homogenous materials on the exterior that were suspect as asbestos containing during the limited ACM survey. Ten (10) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found one (1) homogenous material (samples 4-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. Sample 4-1 was point counted and confirmed to contain greater than 1% asbestos.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

### Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.* 

### **CONCLUSIONS AND RECOMMENDATIONS**

### **Asbestos Containing Materials**

Of the five (5) homogenous materials collected as part of the limited ACM survey, one (1) homogenous material contained asbestos greater than 1% (sample 4-1) with this one (1) homogenous material being classified as RACM. Although the home was not accessible due to the amount of debris, vermiculite was identified on debris throughout the home likely from insulation that has fallen from holes in the ceiling. Due to the quantity of debris and presence of vermiculite MSG recommends all the debris within the home be removed as asbestos containing prior to a full ACM inspection of the home and/or the entire home be demolished and removed as asbestos containing materials. All materials containing ACM or assumed to contain ACM must be disposed of in a licensed landfill.

Prior to renovation/demolition, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be

disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

### Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist

Accreditation Number A47903

Charlie Bush

Senior Project Manager

Accreditation Number A34293

Attachments

## FIGURE



### TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address:	530 Christiancy St	Date:	December 11, 2018
		Drawing not to scale	
		1 <sup>st</sup> Floor	
		Inside of house was inaccessible due to excessive debris.	
		to excessive depris.	
			1.1 2
			1-1, 2 2-1, 2 3-1, 2 5-1, 2



### TECHNICAL SKILL.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

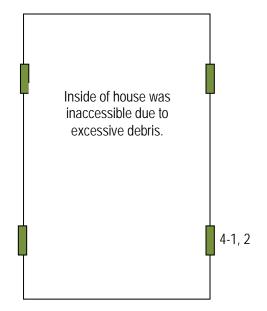
Address: 530 Christiancy St. Date: December 11, 2018

Drawing not to scale

2<sup>nd</sup> Floor

Inside of house was inaccessible due to excessive debris.

**Basement** 



Basement Window Glaze (60 SF total)

# **TABLES**

TABLE 1
Asbestos Sampling Results

Client		Ingham County Land Bank Authority								
Survey Loc		530 Christiancy St								
Survey Da Functional Area	Floor	December 11, Sample ID	2018 HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Exterior	Е	AS 1-1	HA-1	Window Glaze	Non Friable	Fair	Miscellaneous	No	No	210 SF
Exterior	Е	AS 1-2	HA-1	Window Glaze	Non Friable	Fair	Miscellaneous	No	No	210 SF
Exterior	Е	AS 2-1	HA-2	Siding underlayment	Non Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	Е	AS 2-2	HA-2	Siding underlayment	Non Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	E	AS 3-1	HA-3	Exterior Caulk	Non Friable	Good	Miscellaneous	No	No	150 SF
Exterior	E	AS 3-2	HA-3	Exterior Caulk	Non Friable	Good	Miscellaneous	No	No	150 SF
Exterior	E	AS 4-1	HA-4	Basement Window Glaze	Non Friable	Good	Miscellaneous	Yes	2.5% Chrysotile	60 SF
Exterior	E	AS 4-2	HA-4	Basement Window Glaze	Non Friable	Good	Miscellaneous	Yes	NA	60 SF
Roof	E	AS 5-1	HA-5	Roof	Non Friable	Good	Miscellaneous	No	No	900 SF
Roof	Е	AS 5-2	HA-5	Roof	Non Friable	Good	Miscellaneous	No	No	900 SF

### Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 530 Christiancy St.

### Lansing, Ingham County, Michigan

Universal Waste Inventory						
Location	Type of Waste	Approximate Quantity				
-	-	-				
Hazardous Materials Inventory						
Location	Type of Waste	Approximate Quantity				
-	-	-				
Other Regulated Materials Inventory						
Location	Type of Waste	Approximate Quantity				
-	-	-				

## ATTACHMENT A PHOTO LOG

### Ingham County Land Bank 530 Christiancy St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

### **Property Photos**



530 Christiancy St, Front of House



Back of House



Side of House



Side of House

### Ingham County Land Bank 530 Christiancy St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

### Samples



Sample ID: AS 1-1 Location: Exterior Notes: Window Glaze



Sample ID: AS 4-1 Location: Exterior

Notes: Basement Window Glaze



Sample ID: AS 2-1 Location: Exterior Notes: Siding Underlayment



Sample ID: AS 5-1 Location: Roof Notes: Roof Shingle



Sample ID: AS 3-1 Location: Exterior Notes: Exterior Caulk

### Ingham County Land Bank 530 Christiancy St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

### **Inaccessible Areas**



Inside of House Location: Interior

Notes: Excessive Debris with Vermiculite Insulation



Inside of House Location: Interior Notes: Excessive Debris



Inside of House Location: Interior Notes: Excessive Debris



Inside of House Location: Interior Notes: Excessive Debris

# ATTACHMENT B LIMITATIONS



### REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

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this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

### ATTACHMENT C

**ANALYTICAL REPORTS AND CHAINS OF CUSTODY** 



### The Mannik & Smith Group Analytical Laboratories

### 00015

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/17/18 Orde	•
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 1-1 Layer 1 Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-1	Location Exterior
	Client ID AS 1-2 Layer 1 Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-2	Location Exterior
Type Browi	Client ID AS 2-1 Layer 1 iding Underlayment Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-3	Location Exterior
Type Browi	Client ID AS 2-2 Layer 1 iding Underlayment  Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-4	Location Exterior
	Client ID AS 3-1 Layer 1  Exterior Caulk  Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-5	Location Exterior
Analytic Analyst: Reviewe	Joshua P Lu	n/R-93/116 by Polarized Light Mico ncchesi Quality Manager r A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

The results herein relate only to the samples as received and tested by The Mannik & Smith Analytical Laboratories. This report can not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any other agency of the Federal Government. Please see the Sample Protocol before submitting samples for analysis in order to ensure laboratory staff safety and analysis accuracy.

### The Mannik & Smith Group Analytical Laboratories

### 00015

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/17/18 Order #	•
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 3-2 Layer 1  Exterior Caulk  Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-6	Location Exterior
Type White 9	Client ID AS 4-1 Layer 1  sement Window Glaze  Chrysotile 2.50% e, homogenous, fibrous. 07.5% non-asbestos int count performed.	Lab ID	O0015-7	Location Exterior
Туре	Client ID AS 4-2 Layer 1  sement Window Glaze  Not Analyzed e, homogenous, fibrous.	Lab ID	O0015-8	Location Exterior
	Client ID AS 5-1 Layer 1 Roof Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-9	Location Roof
	Client ID AS 5-2 Layer 1 Roof Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID	O0015-10	Location Roof
Analytic Analyst: Reviewe	Joshua P Lu	r/R-93/116 by Polarized Light Mico acchesi Quality Manager r A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

The results herein relate only to the samples as received and tested by The Mannik & Smith Analytical Laboratories. This report can not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any other agency of the Federal Government. Please see the Sample Protocol before submitting samples for analysis in order to ensure laboratory staff safety and analysis accuracy.

### The Mannik & Sr Analytical Labo

Client	The Mannik & Smith Group, Inc.	, Inc. City, State Lansing, MI	Zip Code	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200	Contact	Phone (517) 316-9232	✓ TTP ☐ Point Count
Project	530 Christiancy St	Project #	Fax	Date Sampled:
Turn Around	100000	☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 1 Week	ek Report to 🗸 Email 🗌 Fax	12/11/2018
Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Window Glaze	Exterior	
	AS 1-2	Window Glaze	Exterior	
	AS 2-1	Siding underlayment	Exterior	
	AS 2-2	Siding underlayment	Exterior	
	AS 3-1	Exterior Caulk	Exterior	
	AS 3-2	Exterior Caulk	Exterior	
	AS 4-1	Basement Window Glaze	Exterior	
	AS 4-2	Basement Window Glaze	Exterior	
	AS 5-1	Roof	Roof	
	AS 5-2	Roof	Roof	
	2			
Comments:				

Relinquished by

Date and Time

1/3/18

Date and Time

Received by

### ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



### NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,	•	
LICENSING	AND	REGI	RAI	on	AFE	AIRS
CHETTOWALE	DOM	No. 100	PDM	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:			
Postmark Date/ Rec'd Date/	Name:			
Emergency Date/ Valid No	Mailing Address:			
☐ OK ☐ Send Def Ltr. Date of Def Ltr/	City/State/Zip:E-mail:			
	Contact: Phone:			
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:			
	Name:			
	Mailing Address:			
	City/State/Zip:			
Notification NoTrans No	/ E-mail:			
Calculate LARA Asbestos Project Fee: (1% Project Fee)	Contact: Phone:			
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)			
Type of Contractor: License No.:	Name:			
Licensing Authority:	Mailing Address:			
1. NOTIFICATION:	City/State/Zip:			
Date of Notification:	E-mail:			
Date of Revision(s):	Contact: Phone:			
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION:			
Mark appropriate boxes: (both DEQ and LARA may apply):	Facility Name: Location Address/Description:			
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:			
☐ Planned Renovation – 10 working days notice	City/Twp State: Zip Code:			
<ul> <li>☐ Emergency Renovation</li> <li>☐ Scheduled Demolition – 10 working days notice</li> </ul>	County: Nearest Crossroad:			
☐ Intentional Burn – 10 working days notice	Size: (sq. ft.) No. of Floors: Floor No.:			
☐ Ordered Demolition  LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:			
☐ Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice	Specific Location(s) in Facility:			
☐ Emergency Renovation/Encapsulation	- Diabooti oler			
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:			
START DATE END DATE	Name:			
* Renovation	Location Address:			
+Asb. Removal	City/State/Zip:			
+Demolition:	8. WASTE TRANSPORTER 1: WASTE TRANSPORTER 2:			
Encapsulation:	Name:			
<b>Work Schedule:</b> Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.	Address:			
Days of the Week Work Hours	City/State/Zip:			
Asb. Removal:	Phone:			
Demolition:	<ol> <li>ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this</li> </ol>			
Encapsulation:	notification.			
* Includes setup, build enclosure, asbestos removal, demobilizing, etc.	Gov't Agency Ordering Demo:			
+Include only those dates you are conducting asbestos removal/demo.	Name/Title of Person Signing Order:			
☐ Check here if this is a multi-phased project, attach a schedule showing				
the start/end date of each phase.	Date of Order: Date Ordered to Begin:			
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remove	ed prior to demolition			
	Non-friable ACM <u>not</u>			
Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be  RACM to be Removed	RACM to be removed prior to demo.  Encapsulated Category I Category II Units of Measure			
removed, encapsulated, etc. Also include the amount	□ Ln. Ft. □ Ln. M.			
and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior	☐ Sq. Ft. ☐ Sq. M.			
to demolition. (NOTE: In a demolition, cementatious	☐ Cu. Ft.* ☐ Cu.M.*			
ACM <u>cannot</u> remain in a structure, as it is likely to become regulated in the demolition/handling process.	4 (masters) about the constant of the transfer of the constant			
*\/olumo /oubje f	t./meters) should be used only if unable to measure by linear/square measure			

(example: asbestos has fallen off of surface).

### NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:			
	carefully lower, etc.):				
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility			
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and			
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:			
14.	4. PROCEDURE(S) USED TO DETECT THE PRESENCE OF ASBESTOS: A) Indicate how you determined whether or not asbestos is in the facility. If analytical sampling was used, describe method of analysis. (The determination of the presence or absence of asbestos must be made prior to submitting a renovation/demolition notification.):				
		survey:			
	C) Name, accreditation number of inspector, and date of inspection:				
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:			
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:			
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for			
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date			
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project.  Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,			
18.	I certify that the above information is correct:				
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date			
MAILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine which agency requirements/regulations are applicable to your project.)					
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For <b>NESHAP Demolitions/Renovations</b> , <b>40 CFR</b> , <b>Part 61</b> , <b>Subpart M</b> , please use the e-submittal process. For more information visit <a href="http://www.michigan.gov/air">http://www.michigan.gov/air</a> , under Air Links click on Asbestos NESHAP Program.			
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 asing, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760			
517.284.6777 (Office) 517.636.4551 (office), 517.322.1713 (fax)					

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