



**NESHAP RENOVATION / DEMOLITION INSPECTION OF
ASBESTOS CONTAINING MATERIALS
AND OTHER HAZARDOUS WASTE MATERIALS**



FOR THE PROPERTY KNOWN AS:

68-70 Frelinghuysen Avenue
Battle Creek, MI 49017

Prepared for:

City of Battle Creek
10 North Division Street - Rm 117
Battle Creek, MI 49017
269-966-3323

Prepared By:

Ben South & Heather Broome
Michigan Certification #: A-53589 & A-48908
Environmental Testing & Consulting, Inc.
38900 West Huron River Drive
Romulus, Michigan 48174
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ETC Job #: 223531

07/11/19
Date of Survey

07/16/19
Date of Report

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1. Introduction

City of Battle Creek contracted Environmental Testing & Consulting, Inc. (ETC) to perform a renovation/demolition inspection of the building located at 68-70 Frelinghuysen Avenue, Battle Creek, MI 49017. This inspection was conducted on 07/11/19.

The EPA, under the National Emission Standards for Hazardous Air Pollutants (NESHAPs) asbestos rule, requires that prior to the start of a renovation and/or demolition project, the building must be inspected for asbestos containing materials (ACM's). The purpose of this inspection was to determine the presence and quantity of friable or potentially friable ACM's. Depending on the ACM found and the condition that it is in, removal of the material may be necessary before demolition work can begin. Prior to the start of a demolition project, it is necessary that friable or potentially friable ACM's be removed.

ETC's certified inspector, Ben South & Heather Broome, conducted the asbestos containing building material (ACBM) inspection and identified materials suspected of containing asbestos. Ben South & Heather Broome's State of Michigan Asbestos Building Inspector's certification number is A-53589 & A-48908.

Wherever potential asbestos materials were found, data was collected and recorded regarding quantities and observed conditions of the suspected material. As required by the Occupational Safety and Health (OSHA) and the Environmental Protection Agency (EPA), three (3) samples of each type of material were taken in different locations to determine actual asbestos content.

Included along with this report are copies of the bulk sample results, a site map showing sample locations and a copy of the State of Michigan Notification of Intent to Renovate/Demolish. This information will be necessary for the asbestos abatement contractor selected to perform asbestos abatement activities on the property. ETC has included its information on the second page.

2. Information about Asbestos Inspections

a. Sampling Procedures

Representative bulk samples of suspected ACBMs 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.)

It is important to note that some companies are only taking one sample of select non-friable materials. While this procedure is allowed under the NESHAP regulation, the OSHA standard suggests a minimum of three samples of each homogeneous

material. This is a better approach due the potential errors in the analytical method used.

To provide the most accurate information possible and be sure of our results, ETC chooses to take three samples of each sampled material.

Additionally, some inspection companies have taken to assuming that materials contain asbestos rather than paying for the time and expenses of sampling them. This is not in the client's best interest. If materials are being assumed to contain asbestos, the client must treat them as asbestos containing even if they are not. This can lead to significantly increased costs for the building owner.

In general, ETC only assumes materials to be asbestos when sampling them will ruin their integrity (i.e. fire doors) or when they are too dangerous to sample (i.e. live electrical lines).

b. PLM Analysis Methodology

Polarized Light Microscopy (PLM) samples were analyzed utilizing the Environmental Protection Agency's Test Methods: Methods for the determination of Asbestos in Bulk Building Materials (EPA 600/R-93/116, July 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as method references. Additional treatment and tests may be required to accurately define composition (i.e. ashing, extraction, acetone treatment, and TEM).

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample.

According to NESHAP requirements, any bulk sample that has an asbestos content above 0% but below 10% should be point counted for final determination of percentage. ***Please note, the contract DID NOT include point counting as defined in NESHAP.*** Should City of Battle Creek wish to have this additional analysis conducted, ETC can send any samples in this range for point counting. However, this will require additional charges for analysis. Therefore, for any samples in the range above 0% but below 10%, these results can only be considered estimates.

c. Interpretation of Inspection Results

A material is considered by OSHA, the EPA and the State of Michigan to be asbestos-containing if at least one sample collected from the homogenous material has asbestos fibers present in a concentration greater than one percent (>1 %).

A summary of the materials sampled, asbestos content, quantities and locations can be found on the Chart A in Section 4.0 – Summary and Conclusions.

d. Other Hazardous Materials

Additionally, information showing other hazardous materials (above the household quantity limitations) found at the site is included on Chart B in Section 4.0 – Summary and Conclusions. This lists non-asbestos materials that may be hazardous, and may require special handling and disposal requirements. Items that might be in this category include things like mercury switches, florescent lighting tubes, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

However, under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is residential household quantity exclusion. Therefore, these materials will only be listed in this chart if they are present in quantities larger than what would be expected in a normal household. For instance, if the home was a farm and had a 55 gallon drum of pesticide present, this would be listed in Chart B. On the other hand, if there were a few pesticide containers present as would be found in most homes, these materials would not be listed.

3. Regulatory Requirements

There are two main regulations that affect renovation/demolition of residential homes and asbestos materials. The MIOSHA Asbestos Construction Standard has requirements to protect the workers performing the renovation/demolition, while the EPA – NESHAP regulation has requirements that protect the general public and environment.

a. MIOSHA Construction Asbestos Regulations

The MIOSHA standard establishes a permissible exposure limit (PEL) average over an 8 hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling during renovation or demolition activities be at or near the PEL, the employer will have to:

- Notify workers
- Provide worker training
- Post danger signs
- Establish periodic air monitoring regulated areas and decontamination facilities
- Provide respiratory protection and personnel protective clothing
- Conduct employee respiration monitoring
- Maintain/provide record keeping
- Perform medical surveillance (if employee will be exposed 30 days per year or more).

Until recently, only schools were federally mandated to conduct asbestos inspections of their buildings. However, with the passage of new MIOSHA regulations, all building owners, in this case City of Battle Creek, are now required to notify all renovation/demolition workers of the presence, location and quantity of all ACBM's within the building.

In most cases, it is more practical to have an asbestos contractor remove the ACM from the building prior to renovation/demolition than have the renovation/demolition contractor comply with all these requirements.

b. NESHAP Requirements

Prior to beginning a renovation or demolition project, NESHAP (enforced in Michigan by the Department of Environmental Quality – MDEQ) requires a full inspection of the following materials to determine their asbestos content:

- Friable Materials
- Category 1 – Non-friable Materials (Packings, gaskets, resilient floor covering, and asphalt roofing products)
- Category II – Non-friable Materials (All other non-friable materials)

In general, MDEQ, prior to renovation or demolition activities, requires any identified asbestos materials be removed that would dislodge, disturb or otherwise affect these materials. There is an exception that if a licensed supervisor will state in writing that the material will not become friable during the renovation/demolition process, it may be left in the building. However, be very careful with this exemption. MDEQ has stated that they believe that the only materials that MIGHT qualify for this exemption would be roofing felt and asphalt roofing materials. In order to use even this small exemption, the following would be required from the demolition contractor:

- A signed document from a licensed asbestos abatement supervisor that the material will not become friable
- The supervisor will have to be on-site during all renovation or demolition to insure that the material stays intact.
- The waste generated from the activity must be taken to an asbestos dump and they must be informed that the waste is mixed asbestos waste.

It is obviously very expensive and difficult to try and leave ACM within an area/building during renovation or demolition activities. If the MDEQ reviews the site and finds the material crumbled or disturbed, both the contractor and building owner may be sited up to \$27,500 per day. Therefore, ETC recommends that all ACM be removed. This is why ETC does not assume materials to be ACM.

c. Notification Requirements

When performing abatement work within the State of Michigan, notification requirements depend on the quantity of materials and the friability of the material being removed.

If removing friable material **greater than** 160 square feet and / or 260 linear feet, the contractor must provide a ten working day notification to Michigan Department of Environmental Quality (MDEQ) and a ten calendar day notification to Michigan Department of Licensing and Regulatory Affairs (LARA) – Asbestos Program. If only non-friable materials are being removed, MDEQ does not require a notification.

If removing **more than** 15 square feet but **less than** 160 square feet, or **greater than** 10 linear feet but **less than** 260 linear feet, the contractor only needs to notify LARA as stated above.

For removals of **less than** 15 square feet or **less than** 10 linear feet, no notification is required.

In conjunction with any notification to LARA, the contractor must pay a 1% fee for the project. This fee must reflect 1% of the total abatement contract amount.

d. Abatement Requirements

Any company hired to remove identified ACM must ensure that all asbestos companies, supervisors, and workers are licensed by LARA. Additionally, these companies must insure that:

- The State of Michigan must be notified of the work in advance.
- An asbestos supervisor must be on-site at all times when work is occurring.
- All work must be completed within regulated work areas.
- All work must be completed utilizing asbestos work practices defined in the MIOSHA regulations.
- On-site personnel sampling be conducted during the removal activities.
- Prior to dismantling and leaving the site, the contractor must request and pass (below 0.05 f/cc) a final asbestos clearance performed by a neutral.
- Meet all other current regulations and standards.

In addition to these requirements, ETC strongly recommends that City of Battle Creek ensure that they receive the following documents from the contractor prior to making final payment:

- Written/signed documentation from the supervisor if any asbestos materials are to be left in place during renovation or demolition (Not recommended)
- Copy of the asbestos abatement notification
- Copy of the personnel monitoring during the work
- Copy of the final asbestos clearance report

By requiring these documents, City of Battle Creek will substantially reduce its liability should something occur during the asbestos removal at this site.

4. Summary and Conclusions

ETC has endeavored to identify potential asbestos containing materials (ACM) that were accessible (without destructive testing) at the time of the inspection. However, other potential ACM may be buried or have been inaccessible at the time of the initial survey.

As has been evidenced on numerous other demolition and renovation projects, when tearing out or demolishing existing building surfaces, it is very common to encounter other

building materials that were not accessible during the initial testing for ACM or lead/cadmium painted surfaces. It is therefore incumbent on City of Battle Creek or its selected construction renovation contractor to refer to the chart of sampled materials consistently during the renovation process. If materials are encountered during this process that are not clearly identifiable on the initial survey chart, ETC should be called to test and verify the asbestos/lead cadmium content of these items.

ETC cannot be held responsible for materials encountered after the initial survey is completed unless we are contacted and given the opportunity to test and verify the material content. The costs associated with this additional testing are not included within the scope of this project and City of Battle Creek will incur additional charges for the additional sampling and analysis.

On the following charts, please find:

- Chart A - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. ***If additional materials are encountered that were not previously identified, the contractor is responsible for contacting ETC and having these materials tested. These additional sampling costs are not included in the scope of work or price for this survey.***

Quantities that are listed are estimates only; in general, listed quantities represent only what was visible during testing. It is likely that where ACM has been identified throughout specific floors, similar materials and quantities exist on other like floors. It is the contractors'/client's responsibility to verify all amounts of asbestos identified during any bid process, or during future renovation and/or demolition activities. Materials that are identical in both relative location and physical description to already tested materials listed in this report should always be assumed to be ACM.

Chart A – Materials Sampled and Asbestos Content

Material #	Material Description	Asbestos	Quantity	Location (Refer to map in Appendix B)
1	Plaster – Grey w/ Skim Coat	No	14772 SF	Throughout
2	Texture – White Swirls	No	144 SF	Room 15
3	Texture – White	No	576 SF	Rooms 3, 4, 12, 17
4	Duct Wrap – Grey	40%	250 SF	Throughout Room 14
5	Ceiling Tile – White	No	576 SF	Rooms 1, 2, 16, 18
6	Linoleum – Brown w/ Diamond	No	868 SF	Rooms 24, 25; Closets of Rooms 15, 18, 19
7	Peel & Stick – Brown	No	220 SF	Rooms 13, 17
8	Peel & Stick – White	No	220 SF	Rooms 13, 17
9	Drywall – White	No	100 SF	Room 23
10	Linoleum – Stain Wood Grain Tan	No	140 SF	Room 21
11	Peel & Stick – Tan	No	288 SF	Rooms 24, 25
12	Peel & Stick – Green/Yellow	50%	288 SF	Rooms 24, 25
13	Peel & Stick – Black	No	90 SF	Room 10
14	Flooring – Wood Grain	No	230 SF	Rooms 10, 11
15	Brick Mortar – Grey	No	200 SF	Rooms 13, 27
16	Stack Pipe Cement – Grey	No	30 SF	Rooms 14, 28
17	Tape – White	No	100 SF	Room 23
18	Window Glaze – Brown/White	No	42 Units	Exterior Windows
19	House Wrap/Siding – Yellow w/ Silver Paper	No	6336 SF	Exterior House
20	Interior Caulk – White	No	200 LF	Rooms 3, 11, 17, 25
21	Blown-In Insulation – Tan	No	2830 SF	Room 30

5. Inspector's Information

The information contained in this report is a true and accurate representation of the conditions and activities at this property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this survey. All inspection work was completed by a Michigan certified asbestos inspector as detailed below.

The image shows two handwritten signatures in black ink on a light-colored background. The signature on the left is 'Benjamin South' and the signature on the right is 'Heather Broome'. The signatures are written in a cursive, flowing style.

Ben South & Heather Broome
State of Michigan Certification #: A-53589 & A-48908

APPENDIX A

POLARIZED LIGHT MICROSCOPY ASBESTOS ANALYSIS RESULT FORMS



To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 223531

Client Project: 22351

Report Date: 7/16/2019

Attention: Scott Parker

Project Location: 68-70 Frelinghuysen Ave, Battle Creek, MI 49017
Vacant Multifamily Building

Lab Sample Number	Client Sample Number	Sample Type	Completed
1059614	01A	Asbestos PLM	07/15/2019
1059615	01B	Asbestos PLM	07/15/2019
1059616	01C	Asbestos PLM	07/15/2019
1059617	01D	Asbestos PLM	07/15/2019
1059618	01E	Asbestos PLM	07/15/2019
1059619	01F	Asbestos PLM	07/15/2019
1059620	01G	Asbestos PLM	07/15/2019
1059621	02A	Asbestos PLM	07/15/2019
1059622	02B	Asbestos PLM	07/15/2019
1059623	02C	Asbestos PLM	07/15/2019
1059624	03A	Asbestos PLM	07/15/2019
1059625	03B	Asbestos PLM	07/15/2019
1059626	03C	Asbestos PLM	07/15/2019
1059627	04A	Asbestos PLM	07/15/2019
1059628	04B	Asbestos PLM	07/15/2019
1059629	04C	Asbestos PLM	07/15/2019
1059630	05A	Asbestos PLM	07/16/2019

Lab Sample Number	Client Sample Number	Sample Type	Completed
1059631	05B	Asbestos PLM	07/16/2019
1059632	06A	Asbestos PLM	07/16/2019
1059633	06B	Asbestos PLM	07/16/2019
1059634	07A	Asbestos PLM	07/16/2019
1059635	07B	Asbestos PLM	07/16/2019
1059636	08A	Asbestos PLM	07/16/2019
1059637	08B	Asbestos PLM	07/16/2019
1059638	09A	Asbestos PLM	07/16/2019
1059639	09B	Asbestos PLM	07/16/2019
1059640	10A	Asbestos PLM	07/16/2019
1059641	10B	Asbestos PLM	07/16/2019
1059642	11A	Asbestos PLM	07/16/2019
1059643	11B	Asbestos PLM	07/16/2019
1059644	12A	Asbestos PLM	07/16/2019
1059645	12B	Asbestos PLM	07/16/2019
1059646	13A	Asbestos PLM	07/16/2019
1059647	13B	Asbestos PLM	07/16/2019
1059648	14A	Asbestos PLM	07/16/2019
1059649	14B	Asbestos PLM	07/16/2019
1059650	15A	Asbestos PLM	07/16/2019
1059651	15B	Asbestos PLM	07/16/2019
1059652	16A	Asbestos PLM	07/16/2019
1059653	16B	Asbestos PLM	07/16/2019
1059654	17A	Asbestos PLM	07/16/2019
1059655	17B	Asbestos PLM	07/16/2019
1059656	18A	Asbestos PLM	07/16/2019

Lab Sample Number	Client Sample Number	Sample Type	Completed
1059657	18B	Asbestos PLM	07/16/2019
1059658	19A	Asbestos PLM	07/16/2019
1059659	19B	Asbestos PLM	07/16/2019
1059660	20A	Asbestos PLM	07/16/2019
1059661	20B	Asbestos PLM	07/16/2019
1059662	21A	Asbestos PLM	07/16/2019
1059663	21B	Asbestos PLM	07/16/2019

Reviewed by:



Quality Assurance Coordinator



Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059614 01A Bed 15 S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059614 01A Bed 15 S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059615 01B Bed 15 S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059615 01B Bed 15 S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059616 01C Bed 15 S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059616 01C Bed 15 S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059617 01D Bed 15 SE Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059617 01D Bed 15 SE Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059618 01E Bed 15 SE Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059618 01E Bed 15 SE Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059619 01F Bed 15 SW Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059619 01F Bed 15 SW Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Romulus, MI 48174
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68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059620 01G Bed 15 SW Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Plaster	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1059620 01G Bed 15 SW Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059621 02A Bed 15 NE Ceiling Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture, Swirls	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059622 02B Bed 15 NE Ceiling Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture, Swirls	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059623 02C Bed 15 NE Ceiling Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture, Swirls	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059624 03A Bath 12 E Wall Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : Vacant Multifamily Building
 68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059625 03B Bath 12 E Wall Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059626 03C Bath 12 E Wall Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Texture	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059627 04A Bsmt 14 N Duct Analyst: Jessica Dilworth Date Analyzed : 07/15/2019	Duct Wrap	Gray Fibrous Homogenous	PLM 20% Cellulose	PLM 40% Other	PLM 40% Chrysotile
1059628 04B Bsmt 14 N Duct Analyst: Jessica Dilworth Date Analyzed : 07/15/2019		Positive Stop			
Sample Not Analyzed					
1059629 04C Bsmt 14 N Duct Analyst: Jessica Dilworth Date Analyzed : 07/15/2019		Positive Stop			
Sample Not Analyzed					
1059630 05A Bedrm 18 SE Ceiling Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Ceiling Tile	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059631 05B Bedrm 18 SE Ceiling Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Ceiling Tile	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1059632 06A CL in Bedrm 18 Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Linoleum, with Diamond	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1059632 06A CL in Bedrm 18 Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059633 06B CL in Bedrm 18 Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Linoleum, with Diamond	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1059633 06B CL in Bedrm 18 Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059634 07A Bath 17 S Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Brown Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected



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Client Project : 22351
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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059635 07B Bath 17 S Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Brown Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059636 08A Bath 17 S Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	White Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059637 08B Bath 17 S Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	White Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059638 09A Dining 23 E Wall Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Drywall	White Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
1059639 09B Dining 23 E Wall Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Drywall	White Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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 38900 Huron River Drive
 Romulus, MI 48174
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ETC Job : 223531
Client Project : 22351
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Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059640 10A Entry 21 S Floor Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Linoleum, Stain Wood Grain	Tan Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059640 10A Entry 21 S Floor Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Tan Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059641 10B Entry 21 S Floor Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Linoleum, Stain Wood Grain	Tan Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059641 10B Entry 21 S Floor Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Tan Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059642 11A Kitchen 25 Center Floor Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Tan Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059642 11A Kitchen 25 Center Floor Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Yellow Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected

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38900 Huron River Drive
Romulus, MI 48174

Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059643 11B Kitchen 25 Center Floor Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Tan Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059643 11B Kitchen 25 Center Floor Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mastic	Yellow Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059644 12A Kitchen 25 Center Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Green/Yellow Fibrous Homogenous	PLM 10% Cellulose	PLM 40% Other	PLM 50% Chrysotile
1059645 12B Kitchen 25 Center Floor Analyst: Jessica Dilworth Date Analyzed : 07/16/2019		Positive Stop			
Sample Not Analyzed					
1059646 13A Kitchen 10 Floor E Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Black Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected
1059647 13B Kitchen 10 Floor E Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Peel and Stick	Black Non-Fibrous Homogenous	PLM 3% Other fibrous	PLM 97% Other	PLM None Detected



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Romulus, MI 48174
Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059648 14A Kitchen 10 Floor E Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Flooring, Wood Grain	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059649 14B Kitchen 10 Floor E Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Flooring, Wood Grain	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059650 15A Base Stairs 27 W Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Brick Mortar	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059651 15B Base Stairs 27 W Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Brick Mortar	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1059652 16A Basement 28 SW Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Stack Pipe Cement	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059653 16B Basement 28 SW Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Stack Pipe Cement	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected



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Romulus, MI 48174
Location : Vacant Multifamily Building
68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059654 17A Dining 23 S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Tape	White Fibrous Homogenous	PLM 95% Fiberglass	PLM 5% Other	PLM None Detected
1059654 17A Dining 23 S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mud	White Non-Fibrous Homogenous	PLM 1% Cellulose PLM 5% Fiberglass	PLM 94% Other	PLM None Detected
1059655 17B Dining 23 S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Tape	White Fibrous Homogenous	PLM 95% Fiberglass	PLM 5% Other	PLM None Detected
1059655 17B Dining 23 S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Mud	White Non-Fibrous Homogenous	PLM 1% Cellulose PLM 5% Fiberglass	PLM 94% Other	PLM None Detected
1059656 18A Dining 9 E Window Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Window Glaze	Brown/White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1059657 18B Dining 9 E Window Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Window Glaze	Brown/White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected



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Romulus, MI 48174
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68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059658 19A E Ext House Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	House Wrap/Siding	Yellow Fibrous Homogenous	PLM 50% Other fibrous	PLM 50% Other	PLM None Detected
1059658 19A E Ext House Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Paper	Silver Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1059659 19B E Ext House Layer-1 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	House Wrap/Siding	Yellow Fibrous Homogenous	PLM 50% Other fibrous	PLM 50% Other	PLM None Detected
1059659 19B E Ext House Layer-2 Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Paper	Silver Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1059660 20A Kitchen 11 N Wall Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Interior Caulk	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected
1059661 20B Kitchen 11 N Wall Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Interior Caulk	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected

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 68-70 Frelinghuysen Ave, Battle Creek, MI 49017

ETC Job : 223531
Client Project : 22351
Date Collected : 07/11/2019
Date Received : 07/12/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1059662 21A Attic 30 Center Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Blown In Insulation	Tan Fibrous Homogenous	PLM 95% Mineral wool	PLM 5% Other	PLM None Detected
1059663 21B Attic 30 Center Analyst: Jessica Dilworth Date Analyzed : 07/16/2019	Blown In Insulation	Tan Fibrous Homogenous	PLM 95% Mineral wool	PLM 5% Other	PLM None Detected



Lab Supervisor/Other Signatory

Analyst:



Jessica Dilworth

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

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ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
 www.2etl.com

**Bulk Asbestos/Mold
 Chain of Custody**

ETL Project #: 223531

Client: ETC	Contact: Jake Gleason	Project Location/Name: 68-70 Frelinghuysen Ave, Battle Creek MI
Address: 38900 W Huron River Dr	Phone: 734 955 6600	Client Project #: 223531
	Fax: ~	Date Sampled: 7/11/19
	E-mail: results@2etl.com	
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		

Turnaround Time (TAT): RUSH (2 hrs) Same Day 24 hrs 48 hrs Standard (3-5 days) Other _____

Asbestos PLM/Mold Instructions
 (Check all that apply)

PLM EPA600/R-93/116, 1993 (Standard method) <input checked="" type="checkbox"/>	Stop at 1st Positive: Yes <input checked="" type="checkbox"/> / No <input type="checkbox"/>
Point Counting: Yes <input checked="" type="checkbox"/> / No <input type="checkbox"/> *400 Points <input checked="" type="checkbox"/> *1000 Points <input type="checkbox"/>	Clearly Mark Homogenous Group
Point Counting Criteria:	*Gravimetric Reduction <input type="checkbox"/> *Nuisance Dust <input type="checkbox"/>
Mold Air <input type="checkbox"/> Mold Tape <input type="checkbox"/> Mold Bulk <input type="checkbox"/>	*Soil or Vermiculite Analysis <input type="checkbox"/>

** Additional charge and turnaround may be required*

Lab ID	Sample ID	Sample Location	Material Description/Volume
	01A-G	see attached	see attached
	02A-C	pages	pages
	↓		
	04A-C		
	05A-B		
	↓		
	21A-B		

Relinquished (Name/Organization): Heather Boone	Date: 7/11/19	Time: 5:30 AM/PM
Received (Name/ETL): Rovena Shparthi, Roxella Spasala	Date: 7-12-19	Time: 10:50 AM/PM
Stereoscopical/Sample Analysis (Name/ETL): Jisica Blitnik		
Special Instructions: point count count anything 3% or less	Remarks:	

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF
 **RUSHES ARE NOT ACCEPTED AFTER 3:00 PM AND SAME DAYS ARE NOT ACCEPTED AFTER 2:00 PM

Asbestos Material Sampling Summary Sheet

Surfacing materials

Revision date 5/7/2015

Job #: 223531		68-70 Frelinghuysen Ave, Battle Creek, MI 49017			7/11/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
01	Material: plaster	I	A	Bed 15 south wall 1059614	throughout	14772 SF	
	grey w/shim coat		B	Bed 15 south wall 615			
			C	Bed 15 south wall 616			
			D	Bed 15 SE wall 617			
			E	Bed 15 SE wall 618			
			F	Bed 15 SW wall 619			
			G	Bed 15 SW wall 620			
02	Material: Texture	F	A	Bed 15 NE ceiling 621	144 SF		
	swirls white		B	Bed 15 NE ceiling 622			
			C	Bed 15 NE ceiling 623, 5			
03	Material: Texture	F	A	Bath 12 east wall 624	12, 17 3, 4	576 SF	
	white		B	Bath 12 east wall 625			
			C	Bath 12 east wall 626			

<1000 SF = 3 samples

1000 - <5000 = 5 samples

>5000 = 7 samples

Asbestos Material Sampling Summary Sheet
TSI (Thermal System Insulation) materials

Revision date 5/7/2015

Job #: 223531		68-70 Frelinghuysen Ave, Battle creek			7/11/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
04	Material: Duct wrap	1059627	A	Basement 14 north duct	throughout 14	250 SF	
	Description: grey	F 628	3	Basement 14 north duct			
		629	C	Basement 14 north duct			
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						

3 samples with the exception of patches less than 6 LF or 6 SF, then only 1 sample

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #: 223531		68-70 Frelinghuysen Ave, Battle Creek, MI 49017			7/11/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
05	Material: Ceiling tile	NF	A	Bedroom 18 SE ceiling 1050	1050, 1030, 18, 10	576 SF	
	Description: white		B	Bedroom 18 SE ceiling 631			
06	Material: Linoleum	NF	A	CL in Bedroom 18 632	CL in 18, CL in 15, CL in 19, 24, 25	868 SF	
	Description: brown w/diamond		B	CL in Bedroom 18 633			
07	Material: Peel and stick	NF	A	Bath 17 south floor 634	17, 13	220 SF	
	Description: brown		B	Bath 17 south floor 635			
08	Material: Peel and stick	NF	A	same as 07A 636	17, 13	220 SF	
	Description: white		B	same as 07B 637			
09	Material: Drywall	F	A	Dining 23 east wall 638	23	100 SF	
	Description: white		B	Dining 23 east wall 639			
10	Material: Linoleum	NF	A	Entry 21 south floor 640	21	140 SF	
	Description: stain wood grain tan		B	Entry 21 south floor 641			
11	Material: Peel and stick	NF	A	Kitchen 25 center floor 642	24, 25	288 SF	
	Description: tan		B	Kitchen 25 center floor 643			

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #: 223531		68-70 Frelinghuysen Ave, Battle creek, MI			7/11/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
12	Material: Linoleum W.J.	NF	A	same as 11A 1059644	24, 25	288 SF	
	Description: green/yellow		B	same as 11B 645			
13	Material: Peel and stick	NF	A	Kitchen 10 floor east	646 64710	90 SF	
	Description: black		B	Kitchen 10 floor east			
14	Material: Flooring	NF	A	Kitchen 10 floor east	648 649, 11	230 SF	
	Description: wood grain		B	Kitchen 10 floor east			
15	Material: Brick mortar	NF	A	Base stairs 27 west	650, 13, 27	200 SF	
	Description: grey		B	Base stairs 27 west			
16	Material: Stack pipe cement	NF	A	Basement 28 SW 652	14, 28	30 SF	
	Description: grey		B	Basement 28 SW 653			
17	Material: Tape	F	A	Dining 23 south wall 654	23	100 SF	
	Description: white		B	Dining 23 south wall 655			
18	Material: Window Glaze	NF	A	Dining 9 east window 656	ext windows	42 units	
	Description: brown/white		B	Dining 9 east window 657			

Asbestos Material Sampling Summary Sheet Miscellaneous materials

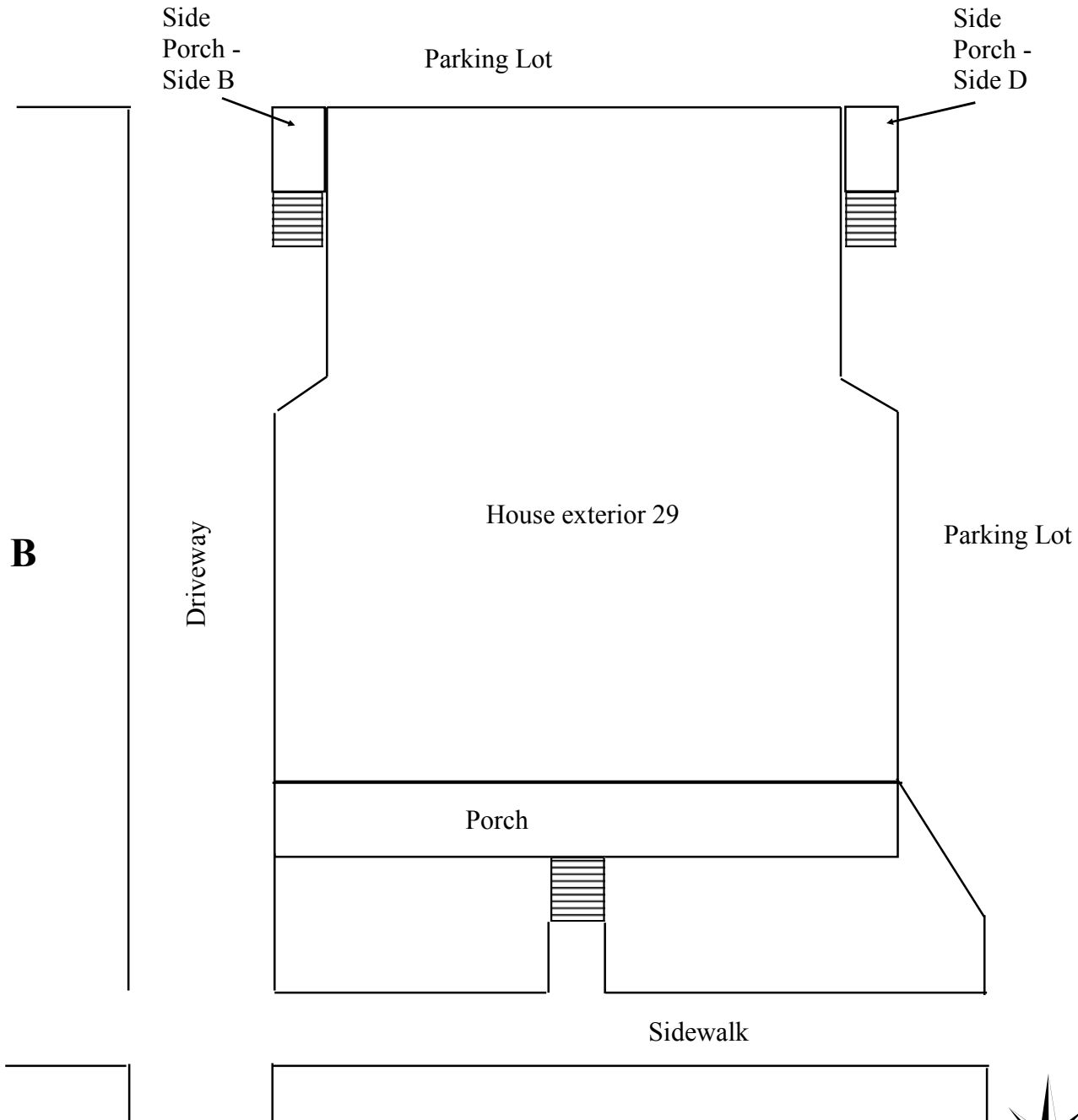
Revision date 5/7/2015

Job #: 223531		68-70 Freelinghuysen Ave			7/11/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
19	Material: House wrap / siding	NF 2	A	east ext house 1059658	ext house	6336 SF	
	Description: yellow w/ silver paper		3	east ext house 659			
20	Material: interior caulk	NF 2	A	kitchell north wall 660	11, 3, 25, 17	200 LF	
	Description: white		3	kitchell north wall 661			
21	Material: Blown In Insulation	F	A	Attic 30 center 662	30	2830 SF	
	Description: tan		3	Attic 30 center 663			
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						

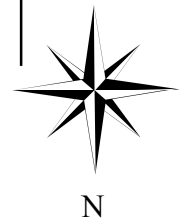
APPENDIX B

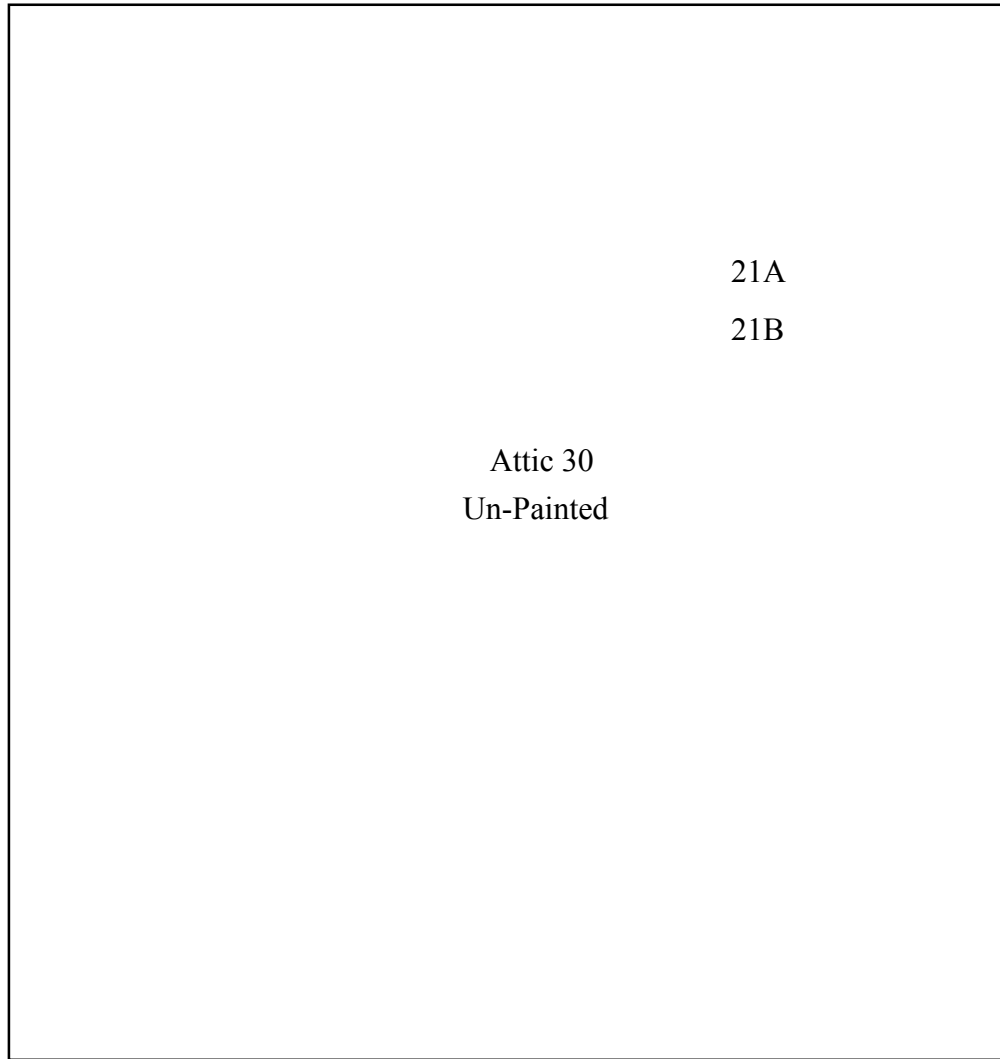
SITE MAP

C

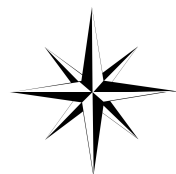


Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.





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.



N

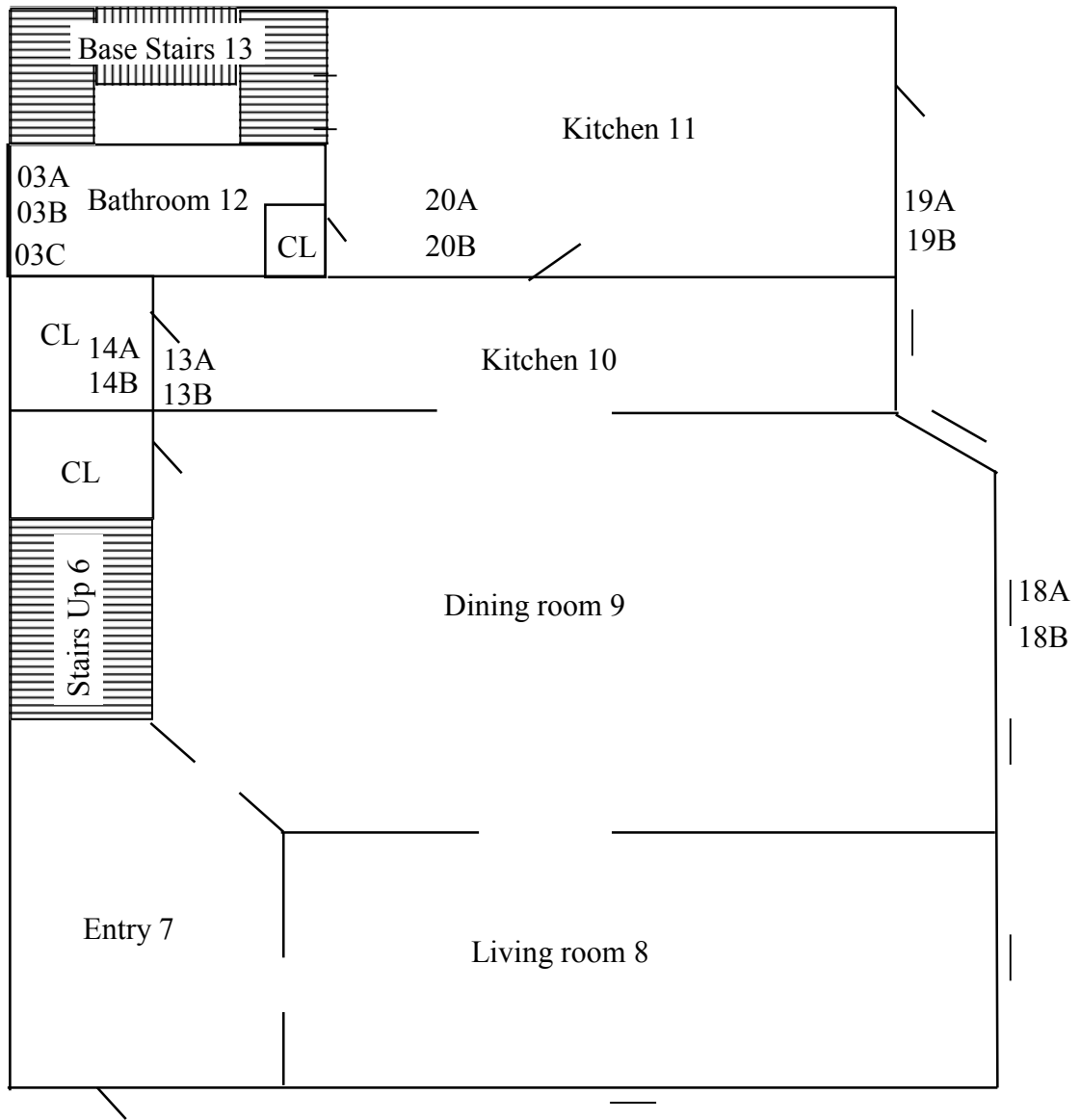
Unit 68 Frelinghuysen Avenue
1st Floor

68-70 Frelinghuysen, Battle Creek, MI 49017

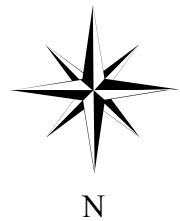
C

B

D

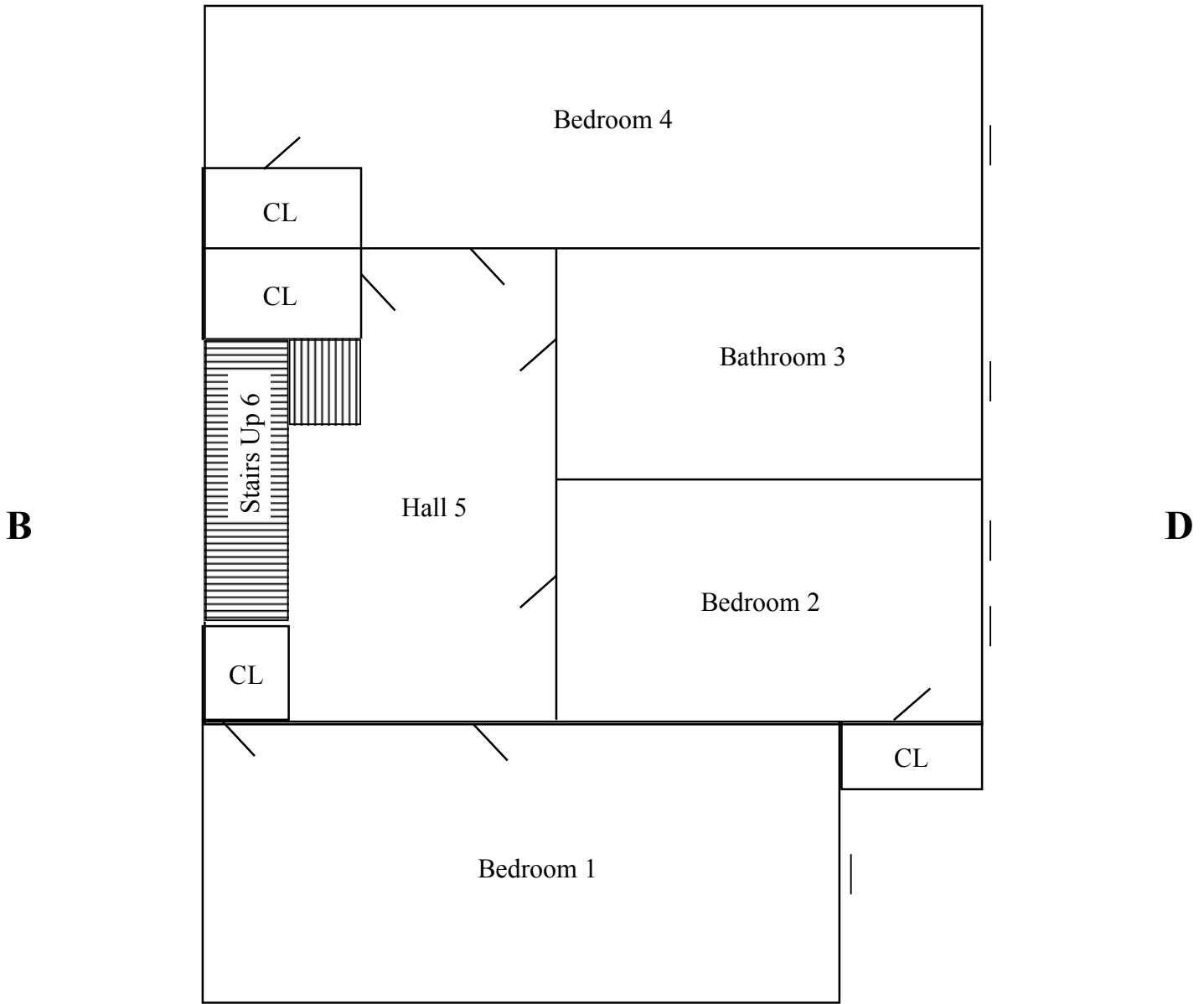


Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



City of Battle Creek
223531

A

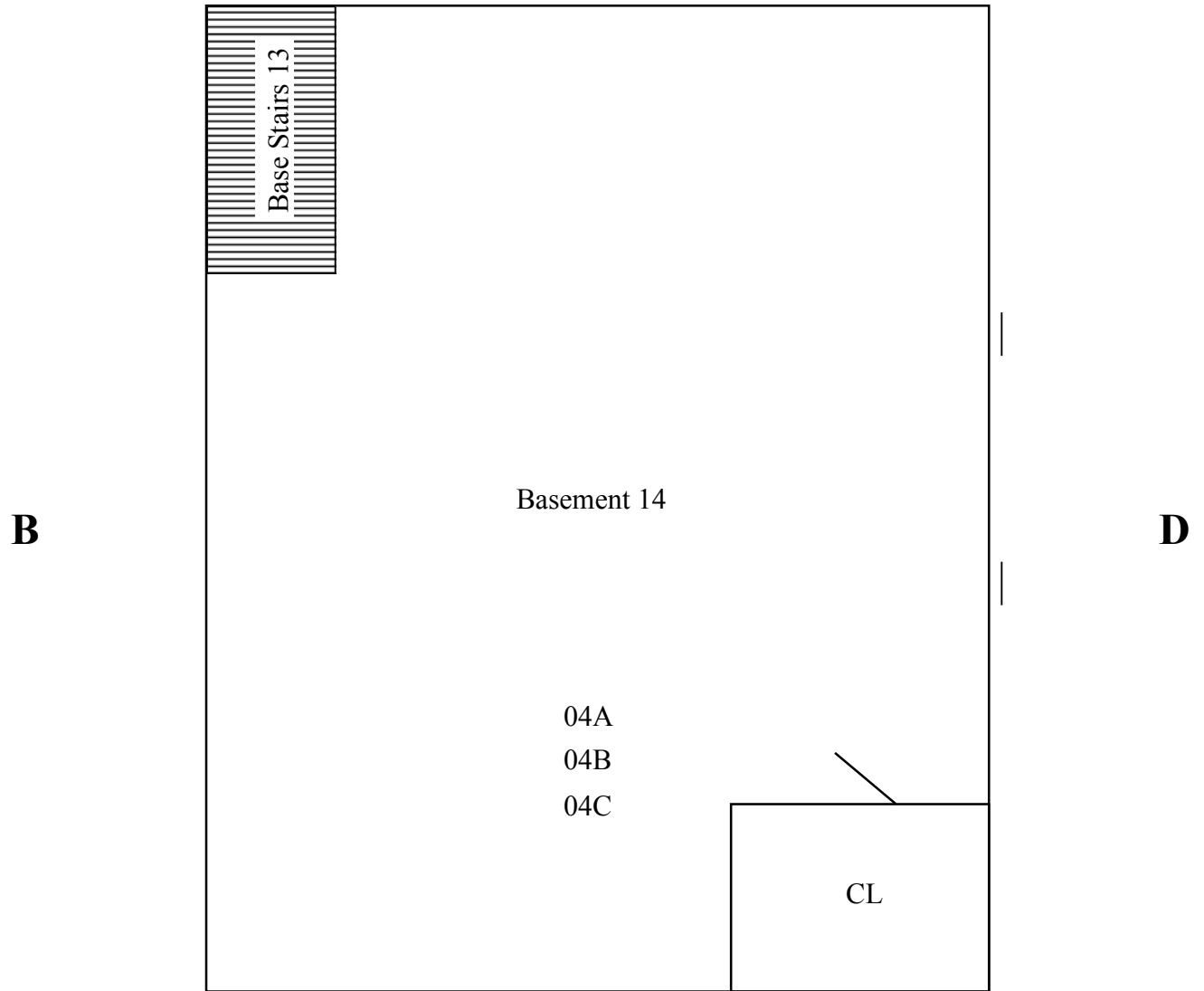


Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



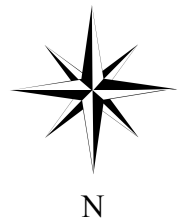
Unit 68 Frelinghuysen Avenue
Basement

C 68-70 Frelinghuysen, Battle Creek, MI 49017



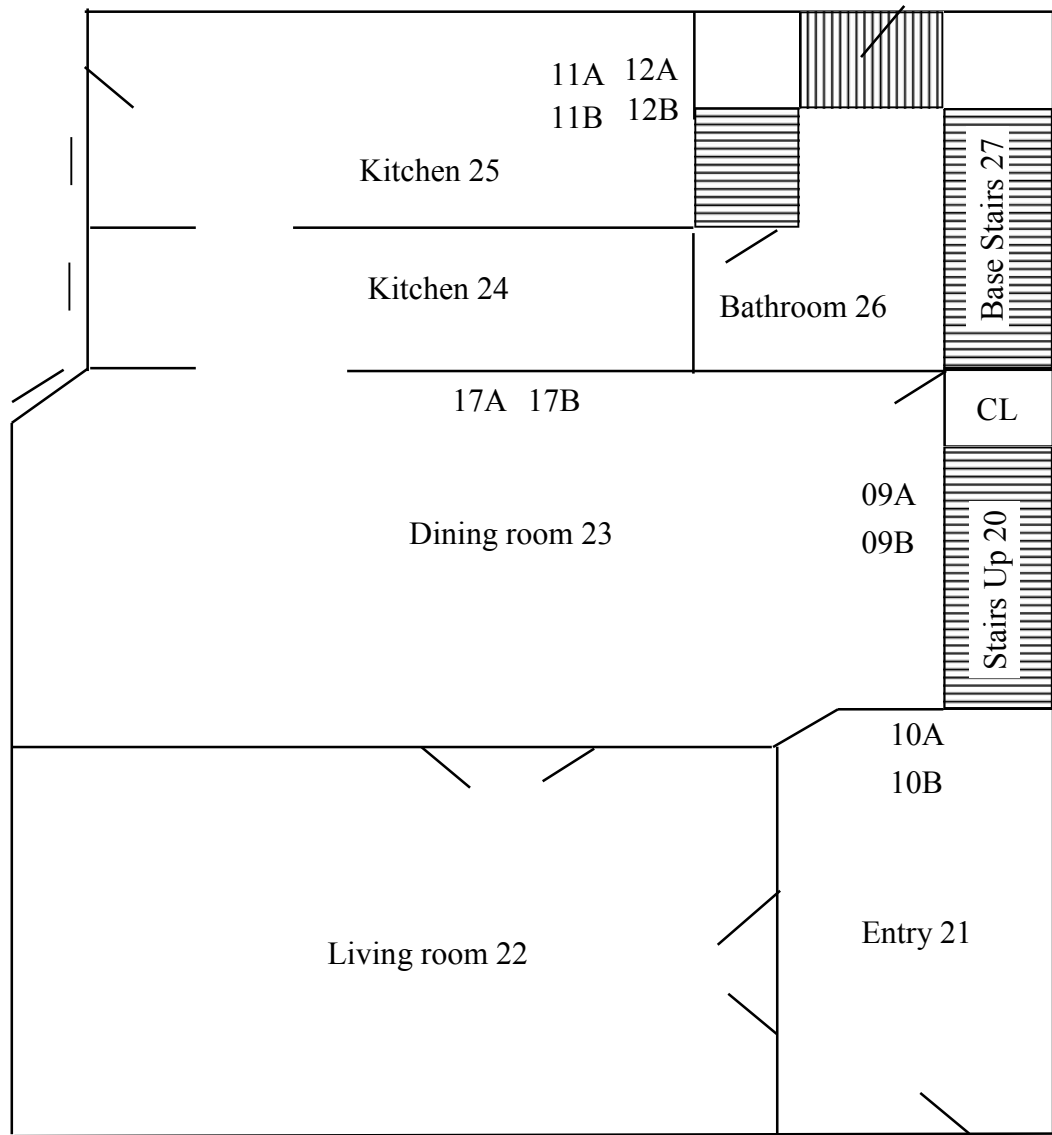
Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

A



City of Battle Creek
223531

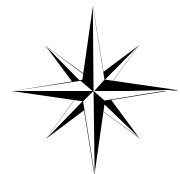
B



D

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.

A



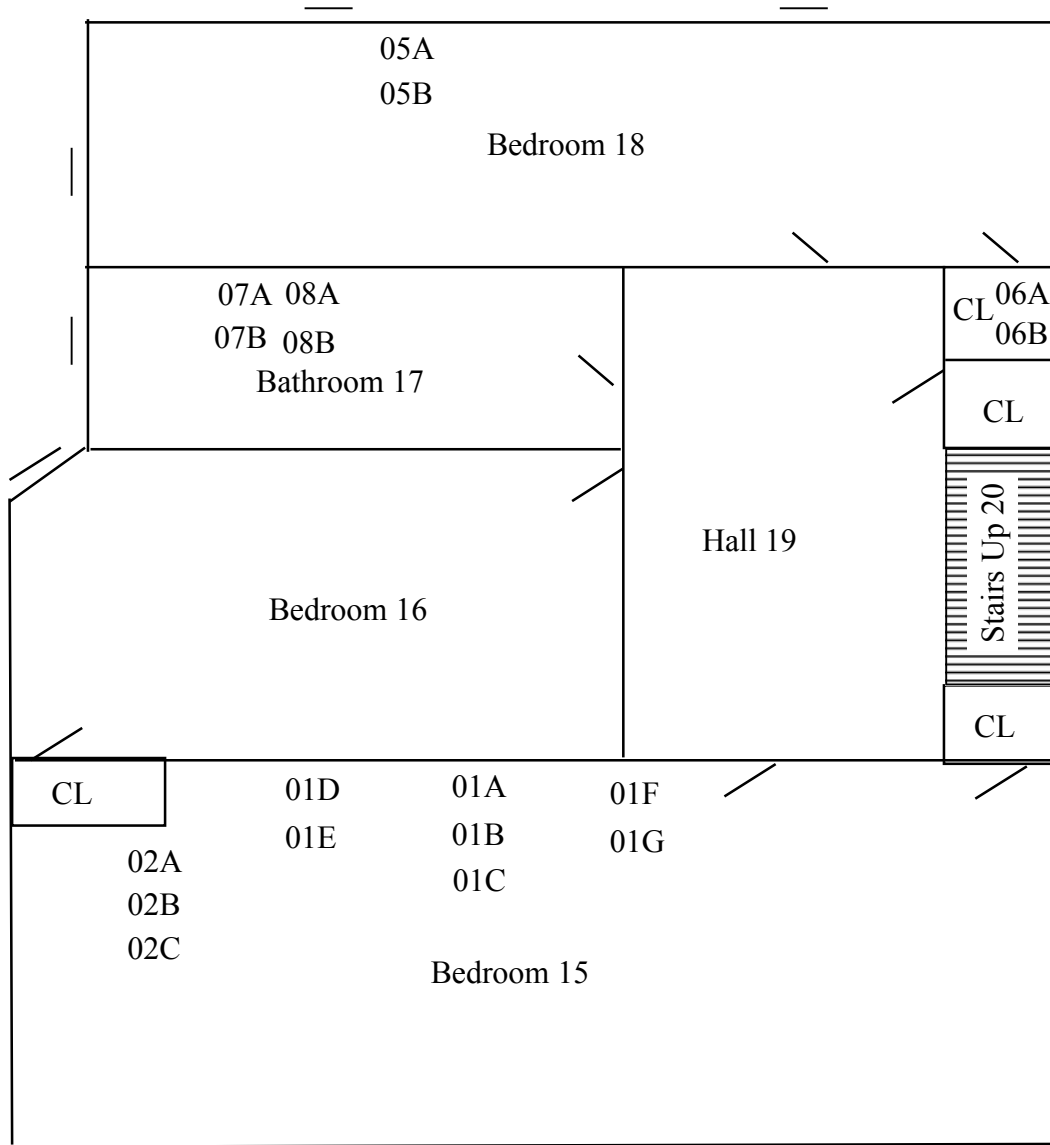
N

C

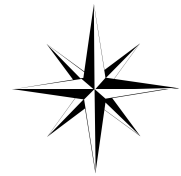
Unit 70 Frelinghuysen Avenue
2nd Floor

68-70 Frelinghuysen, Battle Creek, MI 49017

B



D



N

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.

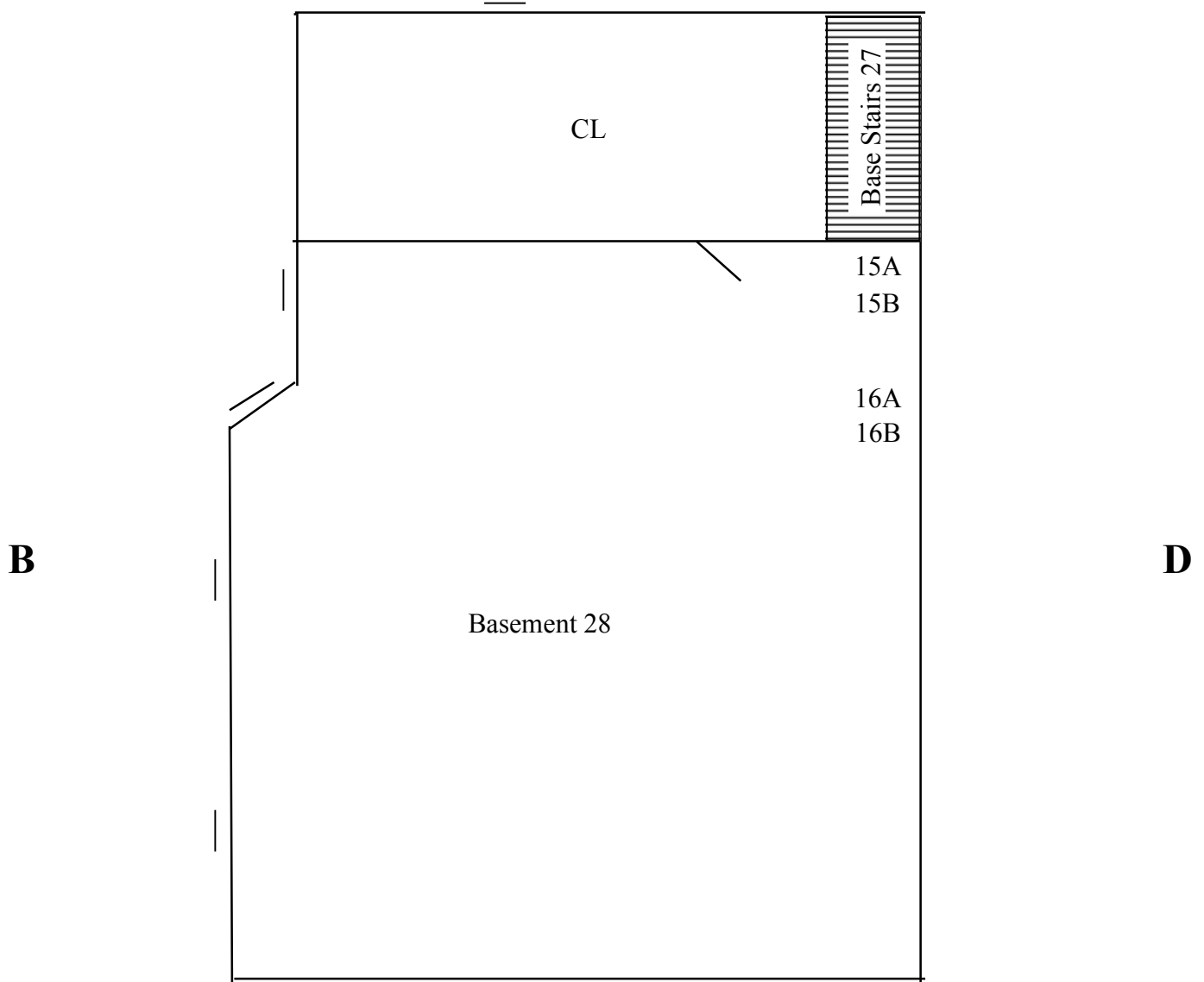
A

City of Battle Creek
223531

C

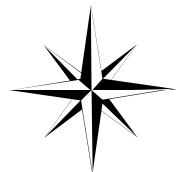
Unit 70 Frelinghuysen Avenue
Basement

68-70 Frelinghuysen, Battle Creek, MI 49017



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.

A



N

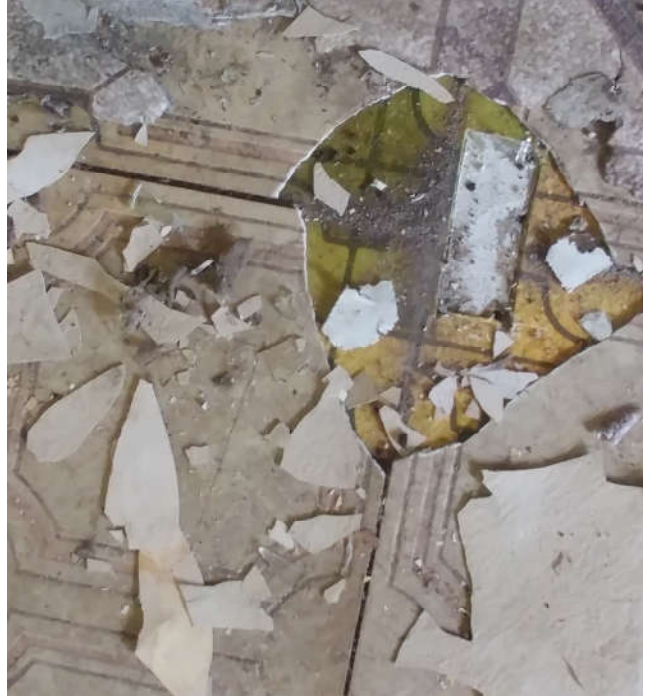
City of Battle Creek
223531

APPENDIX C

PHOTOGRAPHS



Duct Wrap - Grey



Peel & Stick - Green/Yellow

APPENDIX D

STATE OF MICHIGAN NOTIFICATION OF INTENT TO RENOVATE OR DEMOLISH

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



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



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

Postmark Date ___/___/___ Rec'd Date ___/___/___
 Emergency Date ___/___/___ Valid No. _____
 OK Send Def Ltr. Date of Def Ltr. ___/___/___
 FOLLOW UP ___/___/___ Spoke w/ _____
 Comments: _____

 Notification No. _____ Trans No. _____

Calculate LARA Asbestos Project Fee: (1% Project Fee)
 Total Project Cost: _____ x 0.01 = _____
 Type of Contractor: _____ License No.: _____
 Licensing Authority: _____

1. NOTIFICATION:
 Date of Notification: _____
 Date of Revision(s): _____
 Notification Type: Original Revised Canceled Annual
Mark appropriate boxes: (both DEQ and LARA may apply):
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]
 Planned Renovation – 10 working days notice
 Emergency Renovation
 Scheduled Demolition – 10 working days notice
 Intentional Burn – 10 working days notice
 Ordered Demolition
LARA (MIOSHA) [Will not accept annual notifications]
 Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice
 Emergency Renovation/Encapsulation

2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

	Days of the Week	Work Hours
Asb. Removal:	_____	_____
Demolition:	_____	_____
Encapsulation:	_____	_____

* Includes setup, build enclosure, asbestos removal, demobilizing, etc.
 +Include only those dates you are conducting asbestos removal/demo.
 Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

3. ABATEMENT CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

4. DEMOLITION CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

5. FACILITY OWNER: ("Facility" includes Bridges)
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

6. FACILITY DESCRIPTION:
 Facility Name: _____
 Location Address/Description: _____
 _____ If Apt. # of units: _____
 City/Twp. _____ State: _____ Zip Code: _____
 County: _____ Nearest Crossroad: _____
 Size: (sq. ft.) _____ No. of Floors: _____ Floor No.: _____
 Age: _____ Present Use: _____ Prior Use: _____
 Specific Location(s) in Facility: _____

7. DISPOSAL SITE:
 Name: _____
 Location Address: _____
 City/State/Zip: _____

8. WASTE TRANSPORTER 1:	WASTE TRANSPORTER 2:
Name: _____	_____
Address: _____	_____
City/State/Zip: _____	_____
Phone: _____	_____

9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.
 Gov't Agency Ordering Demo: _____
 Name/Title of Person Signing Order: _____

 Date of Order: _____ Date Ordered to Begin: _____

10. IS ASBESTOS PRESENT? Yes No To be removed prior to demolition

Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (NOTE: In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo.		Units of Measure	
		Category I	Category II		
_____	_____	_____	_____	<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
_____	_____	_____	_____	<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
_____	_____	_____	_____	<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu.M.*

*Volume (cubic ft./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 removal/encapsulation) and/or **B) for Demolition:**

A) RENOVATION: Mark all surfaces/types of RACM to be removed:

- Piping Fittings Boiler(s) Tanks(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Mag Block Other (describe) _____

Encapsulation (for LARA): Mark surfaces/types to be encapsulated:

- Piping Fittings Boiler(s) Tank(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Other (describe) _____

Method of removal: Describe how the asbestos will be removed from the surface (example: glove bag, scrape with hand tools, cut in sections and carefully lower, etc.): _____

B) DEMOLITION: Describe the method of demolition of facility, bridge, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: _____

12. ENGINEERING CONTROLS: Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: _____

13. UNEXPECTED ASBESTOS: Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: _____

14. 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.): _____

B) Name, address, and phone number of company performing asbestos 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 equipment damage and/or an unreasonable financial burden: _____

16. I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

Signature of Owner or Abatement Contractor Date

Signature of Owner or Demolition Contractor Date

17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)

Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. *I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.*

Signature of Building Owner or Lessee Date

Signature of Asbestos Abatement Contractor Representative Date

NOTE: It is not mandatory that a signed copy be sent to LARA unless requested. For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

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.)

For **Public Act 135 of 1986, as amended, Section 220 (1-4) or (8)**, mail to address below. For more info visit: <http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program
 LARA, CSHD
 P.O. Box 30671
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

For **NESHAP Demolitions/Renovations, 40 CFR, Part 61, Subpart M**, mail notifications to the appropriate address below (by county of subject facility): For more info visit <http://www.michigan.gov/deq> click on Air, then Asbestos NESHAP Program.

All Counties (except Wayne County)

NESHAP Asbestos Program
 DEQ, AQD
 P.O. Box 30260
 Lansing, MI 48909-7760

517.241.7463 (Office)
 517.373.7064 (Revision Line)

Wayne County Only

NESHAP Asbestos Program
 Detroit Field Office, DEQ, AQD
 Cadillac Place, Suite 2-300
 3058 West Grand Boulevard
 Detroit, MI 48202

313.456.4686 (Office)
 313.456.2558 (Revision Line)