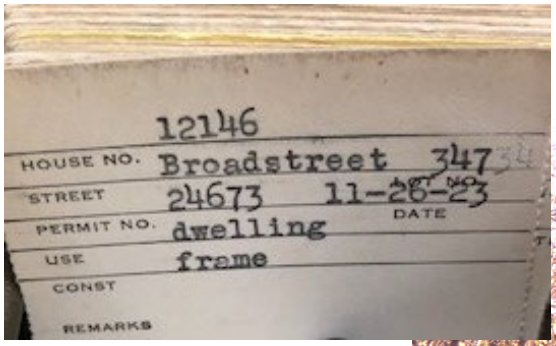
STAFF REPORT: 03-11-20 MEETING **PREPARED BY**: A. DYE
APPLICATION NUMBER: 20-6671
ADDRESS: 12146 BROADSTREET
HISTORIC DISTRICT: RUSSELL WOODS-SULLIVAN
APPLICANT: DETROIT LAND BANK AUTHORITY AND DETROIT BUILDING AUTHORITY
DATE OF COMPLETE APPLICATION: 02-21-2020
DATE OF STAFF SITE VISIT: 02-28-2020

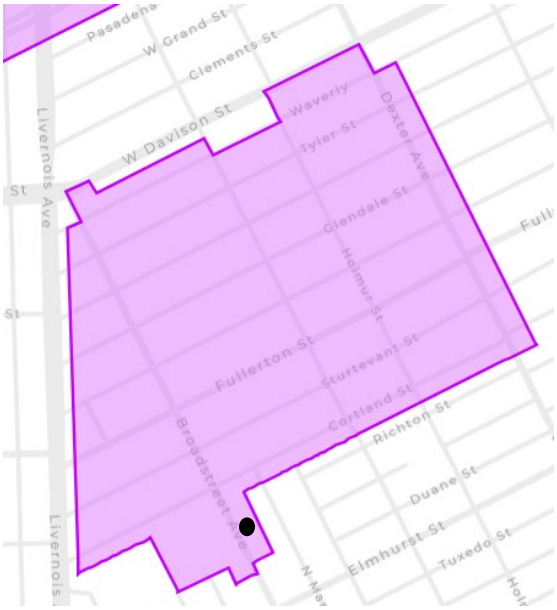
SCOPE: DEMOLISH SINGLE-FAMILY HOUSE

EXISTING CONDITIONS
The bungalow at 12146 Broadstreet was constructed in 1923. The side gable roof is punctuated by a central dormer on the front and rear elevations and the side elevations featured clapboard siding on the first floor and shake siding on the second floor. Brick piers, running from grade to halfway between the porch floor and eave, are topped with squared, tapered wood columns, a hallmark detail to the porch that spans the full width of the house. At the time of historic district designation, a side addition with a shed roof was intact.



Above: Designation Photo, 1999. HDAB

Left: Current photo (2/28/20). HDC



Located between Cortland and Elmhurst, the house is near the southern border of the Russell Woods-Sullivan historic district.

The Detroit Land Bank Authority (DLBA) owns 12146 Broadstreet. It completed a pre-demolition environmental inspection report in September 2018; it was revised in December 2019. It also commissioned a "Historic Structural Assessment Report" from Robert Silman Associates in February 2020. An abridged version of the structural report states the following:

Historic Structural Assessment Report - Silman

Foundation

Walls appear to be in poor condition. Water was observed to flow through the step cracking observed in the interior face of the west foundation wall. Vegetative growth was also observed.

Floor Framing

The central timber supporting the north-south spanning joist has failed, resulting in the collapse in the majority of the first floor. Due to this condition, the wood joist and supporting wood stud-bearing walls at the second floor appear to be in poor condition. Extensive fire damage of the joists observed. Entire middle portion of the building appeared to be collapsing inward.

Roof Framing

From the exterior, the roof framing appeared to be sagging inward, likely due to the collapsed framing support found on the interior.

Exterior

Wood façade observed to be in poor condition. Fire damage was observed around window/door openings and most of the front porch. The primary joist supporting the porch was shown to be unsupported at their end conditions; the spandrel beam spanning between wood posts appeared to be sagging. The southern-most post appears to have shifted and is now out of plumb and alignment with the brick masonry pier below. Severe warping of the porch floor was observed.

Overall Comments

All interior framing appeared to be collapsing inward; the entire framing of the first and second floors, attic and likely roof needs to be replaced. The exterior bearing walls exhibited severe fire damage and need to be replaced. The front porch should be removed and replaced.

Neighborhood Sales and Rehabilitation Cost – Detroit Land Bank
The DLBA states the neighborhood real estate values likely would not justify the extensive repair costs. Within a one-mile radius of 12146 Broadstreet, the median sale price of single-family homes that sold on the private market in 2019 is $33,000 ($21/sq. ft).

In 2019, four houses sold for over $150,000 within a one-mile radius of the property. Three of them are located on Oakman Boulevard, which has a unique real estate market and demand is stronger than surrounding areas. The fourth house is on Leslie Street in the heart of Russell Woods, where demand is also stronger than in the area of the subject property. All four have brick exterior with intact historic details; median square footage is 2,115 – nearly twice the square footage of 12146 Broadstreet. The highest price per square foot in a one-mile radius in 2019 was $81/sq. ft. – much lower than the $150/sq. ft. the DLBA estimated is needed to rehab this house.

PROPOSAL
The DLBA is requesting to demolish the structure at 12146 Broadstreet. Per a January 31, 2020 memo from the DLBA to the Detroit Building Authority, "After the demolition is complete, the DLBA plans to list the lot as a side lot for adjacent homeowners to purchase. While the house immediately next door is vacant, the houses across the alley are currently occupied and would be eligible to purchase the lot."

STAFF OBSERVATIONS AND RESEARCH

- Staff noted this block has four single-family houses, two multi-family houses, four apartment buildings (three of which are large 1920s-era structures), two churches, three single-story commercial buildings and a large, circa 1920s school (now a charter school). The remaining lots serve as surface parking, a community garden, or are open, grassy lots.
- The post-1951 Sanborn map of the east side of Broadstreet reflects current density. 12146 Broadstreet is outlined in orange. The four single-family houses flank two of the three apartment buildings. Hope Academy fills about ½ the length of the block on the west side of Broadstreet.
- The highest density of structures is within the northern half of Broadstreet near Cortland. HDC staff conducted a windshield survey of the adjacent properties which showed them to be occupied, or if vacant, structurally sound with rehabilitation potential.
- Hope Academy, a public charter school, has requested the house be demolished. The academy submitted a letter of support for its demolition.

ISSUES

- The structural assessment noted the estimated building damage at 90 – 100%. All interior and the majority of the exterior building materials require replacement thereby causing the loss of the building's historic integrity.
- On the east side of Broadstreet between Cortland and Elmhurst, there are seven empty lots and eleven buildings, making an inconsistent streetwall. Additionally the proximity of 12146 Broadstreet to its residential neighbor is so small, the demolition and removal of 12146 Broadstreet would not cause a noticeable change to the street's existing visual identity.

RECOMMENDATION

It is staff's opinion, based on the physical deterioration of the existing structure and minimal retention of historic materials, coupled with the estimated costs for rebuilding this structure, that the applicant has proven it is not economically feasible to rebuild and therefore, that the proposal for demolition meets the 36CFR67.7 Standards for Rehabilitation, which shall be applied taking into consideration economic and technical feasibility. Staff recommends the proposal be approved by the Commission.

Silman

12146 Broadstreet Avenue Residence
Russell Woods-Sullivan Michigan Local Historic District
Historic Structural Assessment Report

February 14, 2020

Prepared for
City of Detroit Building Authority
1301 Third Street, Suite 32B
Detroit, MI 48226

Prepared by
Silman
211 N. Fourth Avenue, Suite 2A
Ann Arbor, MI 48104

Silman Project #W3757

TABLE OF CONTENTS

INTRODUCTION

Silman has been retained to perform a historic structure assessment of the building at 12146 Broadstreet Avenue in Detroit, Michigan. The purpose of the report is to assess the existing conditions, document observations and provide recommendations as related to the structure. This investigation serves to help the Historic District Commission as they review and make decisions regarding the structural integrity of the building. As part of our investigation Silman has referenced Secretary of the Interior's Preservation Brief 35 and the structural assessment templates/checklists provided by the city.

The property is in the "Russell Woods-Sullivan" Michigan Local Historic District, which is in the northwest section of the city of Detroit about five miles from downtown. Per the nomination report the Historic District "is primarily residential, consisting of slightly over 1000 single family houses, two-family houses, and a limited number of other multi-unit dwellings, all within a thirty-two block area." The boundaries of the historic district are roughly north of Cortland, south of Waverly, east of Livernois and west of Dexter as shown in the site plan below (see **Figure 1**).

Figure 1 Site Plan of Russell Woods Sullivan Historic District *(Google Maps)*

Per the nomination "the Russel Woods-Sullivan Area" consists of two subdivisions platted nine years apart by two different developers". The area west of Petoskey Avenue is the Russell Woods section. It typically consists of two-and-a-half story single family homes built in the 1920s and 1930s with some apartment buildings at the northern border. The area east of Petoskey Avenue is the Sullivan section with homes built in the 1930s and 1940s and some larger commercial and multi-family structures at the north and east boundaries.

Structural Description & History

The building at 12146 Broadstreet Avenue was originally built in 1923 based on available documentation. The building was done in the bungalow architectural style. The structure is roughly 1,200 square feet with 2 stories and plan dimensions of about 30 feet in the north-south direction and 40 feet in the east-west direction. A vicinity map has been provided below showing the building's location within the Russell Woods-Sullivan Historic District (see **Figure 2**).

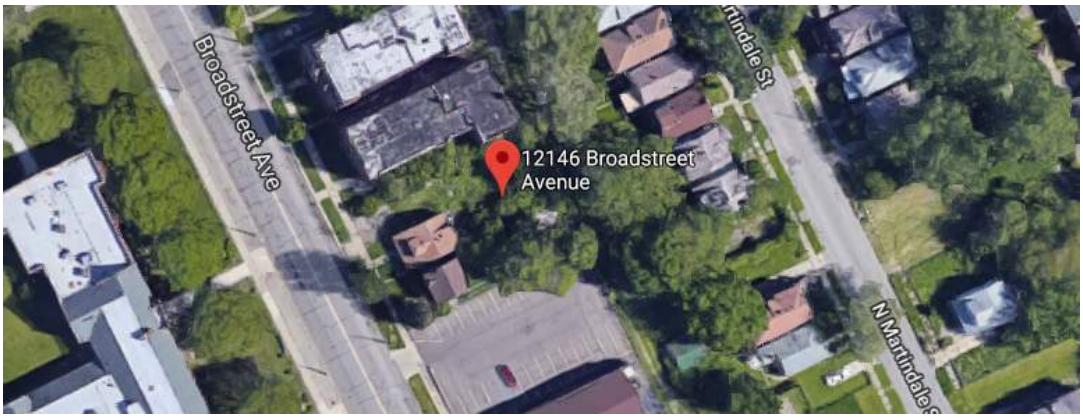


Figure 2 Vicinity Map Showing Structure's Location *(Google Maps)*

Foundation

Silman observed the foundation system to be comprised of CMU foundation walls and a slab on grade in the basement. The foundation elements supporting the CMU walls were not visible. Note that Silman's observation of the foundation walls were partially limited as some wall finishes were present; the identification and assessment of these walls were observed in areas where the finishes have deteriorated or were removed.

Floor Framing

The first-floor framing appears to consist of wood joists spanning north-south in two bays. There is an interior line of support that consists of a timber member that spans between bearing walls and is supported periodically by steel pipe columns. The joists typically span between the north/south foundation walls and the interior timber support line.

The second floor framing primarily consists of wood joists spanning north-south between exterior and interior wood stud bearing walls, running in the east-west direction. Note that observations of the second floor framing was limited due to collapse of the floor below. Observations were primarily made from the stairway at the east entrance.

Roof Framing

The roof framing could not be observed from inside the building due to lack of access. Portions of the first floor were observed to be collapsed, cutting off access to the stairway leading to the second floor. From the exterior, local areas of the roof and dormer framing were exposed due to deterioration and weathering; the framing appeared to consist of wood rafters, supporting a sheathing assembly and asphalt shingles.

Exterior

The façade of the building typically consists of a wood paneling assembly. A wood framed porch constructed off of the buildings west façade was observed as well. The roof in this area overhangs the porch and is supported by wood joists spanning between wood posts, supported on brick masonry piers.

STRUCTURAL CONDITION ASSESSMENT

Assessment completed 1/16/2020

Foundation

From Silman's limited observations of the foundation walls (due to obstructions from finishes), the walls appeared to be in poor condition. Water was observed to be flowing through the step cracking observed in the interior face of the west foundation wall (Figure 3). Vegetative growth was observed through the walls as well (Figure 4). The slab on grade could not be appropriately assessed due to the large amount of debris and standing water present (Figure 5).

Floor Framing

At the first floor, the wood joists within the southernmost bay were observed to have failed where a large section of the floor had collapsed (Figure 6). The central timber supporting the north-south spanning joist had appeared to failed as well, resulting in the collapse in the majority of the first floor (Figure 7). The steel pipe columns supporting the failed timber had visible signs of surface rusting, were out of plumb, and appeared to be punching through the timber (Figure 8).

From Silman's limited observation due to the collapse of the first floor, the wood joist and supporting wood stud bearing walls at the second floor appeared to be in poor condition. Extensive fire damage of the joists was observed (Figure 9 to Figure 11). The entire middle portion of the building appeared to be collapsing inward, in the same location of the collapsed first floor below (Figure 10).

Roof Framing

Due to the collapse at the first floor, there was no access to the stairway leading to the floor above. As a result, observation of the roof / attic framing from the interior was prohibited. From the exterior, the roof framing was concealed by the roofing assembly but appeared to be sagging inward, likely due to the collapsed framing support found at the interior (Figure 12 & Figure 21).

Exterior

The wood façade was observed to be in poor condition, typically. Fire damage was observed typically around window/door openings and throughout most of the front porch area (Figure 12, Figure 15, & Figure 18). In areas, where fire damaged was not apparent, extensive weathering was observed indicated by the extensive paint deterioration (Figure 19 & Figure 20). Ivy growth was observed at the north façade (Figure 18).

The front porch was observed to be in poor condition as well. Severe warping of the floor was observed (Figure 13). The primary joist supporting the porch were observed to be unsupported at their end conditions (Figure 14). At the upper sections of the porch, the spandrel beam spanning between wood post appeared to be sagging (Figure 16). The southern most wood post appeared to have shifted and is now out of plumb and alignment with the brick masonry pier below (Figure 17).

RECOMMENDATIONS

Critical Deficiencies

- All the interior framing observed appeared to be collapsing inward, likely due to the failure of the first-floor framing. The interior bearing line at the first floor had failed which compromises the support of the remaining framing above. The entire framing of the first floor, second floor, attic, and likely the roof needs to be replaced. The exterior bearing walls that were visible also exhibited severe fire damage and would need to be replaced. Entrance to the house should be restricted to the unsafe nature of all the framing.
- The front porch should be removed and replaced if desired.

Serious Deficiency

- The large cracks in the CMU block walls at the basement need to be repaired to prevent water infiltration into the basement.

APPENDIX A – PHOTOGRAPHS

Figure 3 Existing Condition of Foundation CMU Walls With Cracking Observed

Figure 4 Vegetative Growth Through Foundation Walls

Figure 5 Basement Slab with Standing Water Observed

Figure 6 First Floor Failed Joist Framing

Figure 7 First Floor Failed Central Timber (Red)

Figure 8 Apparent Punching Failure of Post Through Timber

Figure 9 Second Floor Framing with Extensive Fire Damage

Figure 10 Wood Stud Walls with Extensive Fire Damage

Figure 11 Second Floor Joist Framing with Extensive Fire Damage

Figure 12 West Facade

Figure 13 Front Porch

Figure 14 Side View of Front Porch

Figure 15 Underside of Porch Framing with Extensive Fire Damage

Figure 16 Apparent Sagging of Roof and Spandrel Beam

Figure 17 Wood Post Roof Support Out of Alignment

Figure 18 North Facade

Figure 19 South Facade

Figure 20 South Lower Facade

Figure 21 East Facade

APPENDIX B – STRUCTURAL ASSESSMENT REPORT VISUAL INSPECTION CHECKLIST

Silman

PROPERTY: 12146 Broad Street Ave

Part 1: Property Description

Type of Construction:

[Wood Frame]	Brick
Steel Frame	Stone
Concrete	Other (List)

Building Classification:

[Residential]	Government
Commercial	Religious
Institutional	Industrial

Characteristics:

Building Age:	0-25yrs	25-120 yrs	[50-100yrs]	100 + yrs		
Foundation:	Pier	Slab	Chain Wall	[Basement]	Other	
Roof Type:	Hipped	[Gable and Dormer]	Mansard	Pyramid	Flat	Other
Roof Cover:	Slate	Metal	Tile	[Asphalt]	Asbestos	Other
Wall Finish:	Stucco	[Wood]	Vinyl	Masonry	Asbestos	Other
Landscape:	[Walkway]	[Driveway]	Fences	Sculpture/Fountain	Structures	
Interior Condition:	Mold/Mildew	Falling Plaster	Structural Damage	Other		

Flood Data:

Nature of Water	[Standing]	[Flowing]	Seepage	Water Marks	Other
Space where water entered	[Basement]	Crawl	First Floor	Roof	Other

Depth of water measured from main floor (+/-) _____

Evaluation:

Collapsed or off Foundation	Minor	Moderate	Severe	
Leaning/Other Structural Damage	Minor	Moderate	[Severe]	
Damage to Window/Doors	Minor	[Moderate]	Severe	
Chimney, parapet, or other falling hazards	Minor	Moderate	Severe	None Observed
Roof Damage	Minor	Moderate	[Severe]	
Foundation Damage	Minor	[Moderate]	Severe	
Damaged Cladding: Material Ext. Brick Veneer	[Minor]	[Moderate]	[Severe]	Moderate (Ext), Severe (Interior finishes)
Damaged Electrical/Mechanical/AC Systems	Minor	Moderate	Severe	
Landscape damage	Minor	Moderate	Severe	

Estimate Building Damage:

None	30-60%
10%	60-90%
1-30%	[90-100%]

Silman

PROPERTY: 12146 Broad Street Ave

Part 2: Structural Assessment

1. **Structural plans and details:**
   a) Description of the site and its structures Drive way, front lawn, back lawn
   b) Description of the foundation system CMU block foundation walls
   c) Description of the structural system (including story height)

2 story - Basement, 1st floor, 2nd floor, attic. Wood Framing Wood joist spanning to perimeter wood stud bearing wall (L2 and up) Appears there may be a interior wood stud bearing wall. At basement, wood joist spanning between perimeter CMU bearing wall and timber (supported on steel post)

2. **Presence of critical structures and structures without redundancies:**
   (i.e. transfer girders, small/ narrow/ slender columns, cantilever structures, long span structures, cable structures, timber structures, etc.) None observed

3. **Loading:**
   a) Compatibility of existing usage with the design loading Structure cannot support design loading. 1st and second floor collapsed
   b) Deviation from intended use or supporting higher design imposed loads
   c) Signs of overloading (to show affected locations on plan)

4. **Addition and Alteration works:** None observed
   a) Presence of Additions and Alterations
   b) Impact of Additions and Alterations on the building structure

5. **Signs of structural defects and deterioration:**
   a) Building tilt/ settlement Settlement @ center of basement slab. 1st, 2nd, and roof framing significant sloping towards center of house
   b) Structural deformation See comment above
   c) Major structural defects (e.g. structural cracks, decayed timber member) Failed timber supporting 1 st floor joist, failed joist at 1st floor, 2nd floor framing appears to be sloping toward center of house indicating failure of members. Extensive fire damage throughout building
   d) Minor structural defects
   e) Non-structural defects

6. **Termite Attack:**
   a) Need for inspection by anti-termite specialist
   b) Need for termite treatment by anti-termite specialist

7. **Exposure to aggressive environment:**
   a) Immersed in water – Columns and Basement, or Leaks in Roof Water leaking through basement wall. Water ponding at center of slab. Extensive fire damage throughout house at all levels
   b) Aggressive chemical which may accelerate the deterioration of structural elements, particularly in industrial buildings

8. **Retaining walls and slope protection structures:** N/A
   a) Defects of retaining wall and other slope protection structures (e.g. cracks, tilt, displacement)
   b) Signs of undesirable condition surrounding retaining wall (e.g. tension cracks in soil, presence of big trees nearby, inadequate surface, drainage)

9. **Safety Barriers (i.e. parapets & railings):** N/A
   a) Any defects

10) Record of previous strengthening works done None observed

Silman

PROPERTY: 12146 Broad Street Ave

Foundation:

CMU Block foundation walls

Basement slab sloping toward center
w/ pooling water

Water seeping through basement
foundation wall

Extensive cracking at south and east
foundation wall

Floor Framing:

1st Floor:
- Partial collapse of 10.75" x 2" @ 1'-6" o.c. wood joist, bearing on CMU foundation wall
- Joist framing back to timber running along center of building. Timber is supported by steel posts. Timber has failed

2nd Floor:
- Extensive fire damage of ceiling framing and joist observed
- Center of 2nd floor appears to be significantly sloping towards center of building indicating potential failure of members. Observation was limited due to failure of first floor framing

Attic Framing:
- Could not be observed due to failure of first floor framing

*Interior wall finish appears to be wood slat finish

Roof Framing:

Perimeter of roof at front of house supported on wood post and brick piers
- Rafter framing between wood post appears to be sagging at mid span
- Wood post supporting roof framing appears to have shifted off center of brick pier below (eastern corner)

Extensive warping of roof visible from exterior, (sloping towards dormer)
Roofing missing / deteriorated in some locations
Water damage observed along perimeter of roof
Front of dormer open to exterior; hole in top roof of dormer
Back Dormer open to exterior as well

Exterior:

West Facade

-Extensive fire damage to front of facade and underside of porch framing

North Facade

- Extensive fire damage at roof, ivy growth along base of house

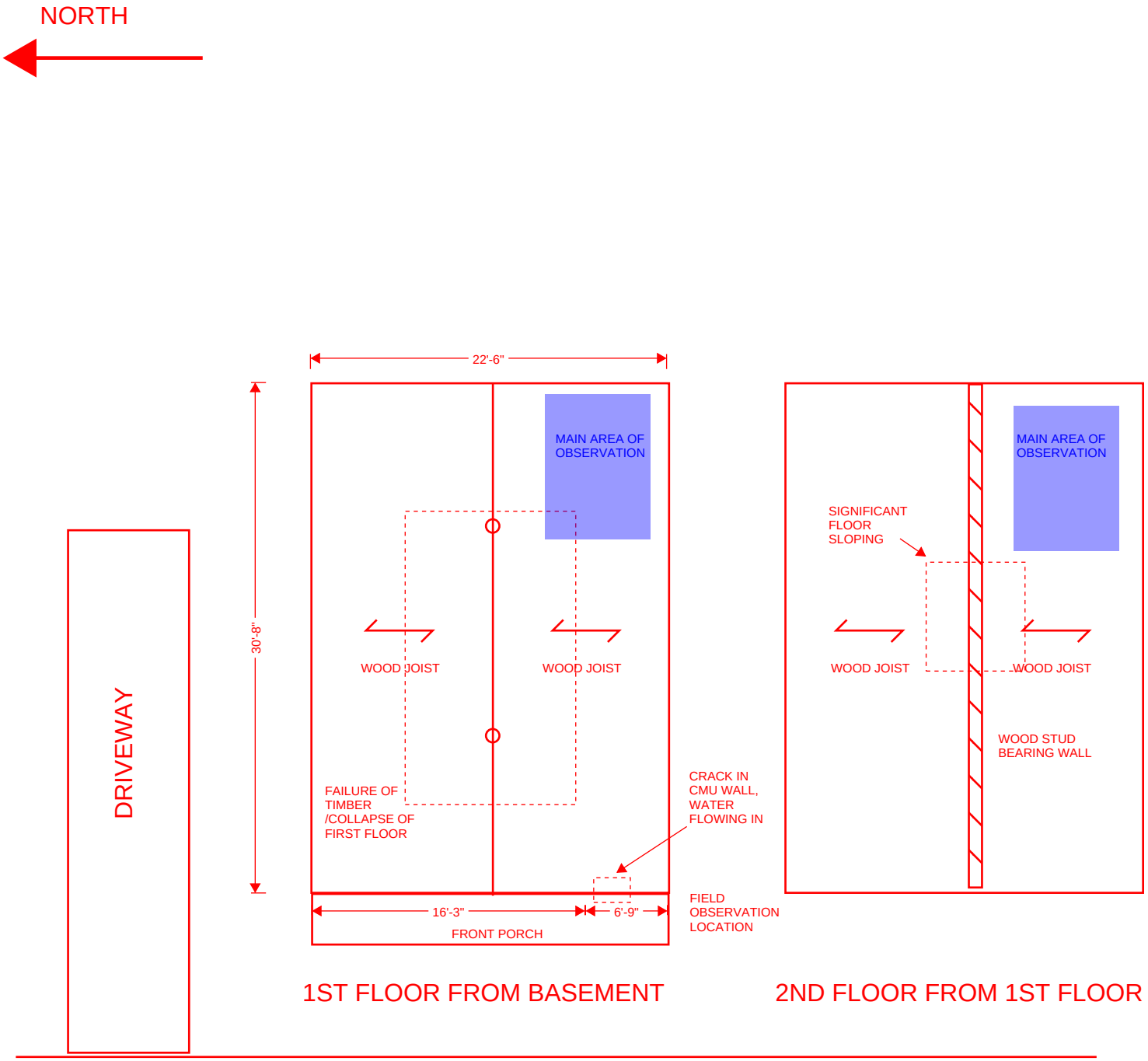
East Facade

- Fire damage around 2nd floor window. Siding not present below window

- Fire damaged observed beneath siding as well

South Facade

- Extensive fire damage around 1st floor window


NORTH
22'-6"
30'-8"
MAIN AREA OF OBSERVATION
WOOD JOIST
WOOD JOIST
FAILURE OF TIMBER /COLLAPSE OF FIRST FLOOR
CRACK IN CMU WALL, WATER FLOWING IN
FIELD OBSERVATION LOCATION
16'-3"
6'-9"
FRONT PORCH
DRIVEWAY
1ST FLOOR FROM BASEMENT
MAIN AREA OF OBSERVATION
SIGNIFICANT FLOOR SLOPING
WOOD JOIST
WOOD JOIST
WOOD STUD BEARING WALL
2ND FLOOR FROM 1ST FLOOR
BROAD STREET AVE

PRE-DEMOLITION ENVIRONMENTAL INSPECTION SUMMARY REPORT

Prepared For:

City of Detroit Housing and Revitalization Department
2 Woodward Avenue, Suite 908
Detroit, MI 48226

Parcel:	14012131-2
House No:	12146 Broadstreet, Detroit, MI 48204
Date Inspected:	08/26/2018
Inspected By:	Kelvin Duncan
Inspector ID #:	A-51050
Report Date:	09/07/2018 Revised: 12/16/2019

Building Information

No. Stories	2 & Attic		
Square Footage	900 SF		
Basement Square Footage	900 SF		
Siding	Wood	Garage	No
Color	Black	Garage Square Footage	-
Roof Shingles	Shingle	Garage Siding	-
Electric (Gone)	Disconnected	Garage Color	-
Gas (Gone)	Disconnected	Garage Shingles	-
Survey Limitations: House is unsafe to enter due to fire damage			

ETC Job #: 212922

the ETC group
Environmental Consulting
Laboratory Analysis
Training Services

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:	14012131-2
House No.	12146 Broadstreet, Detroit, MI 48204
Date Inspected:	08/26/2018

TABLE 1

HAZARDOUS MATERIALS

Material	Quantity & Units	Location
Misc. Items	Below De Minimis	Throughout Property

TIRE(s) REPORT

Material	Quantity & Units	Location
None Observed		

Pre-Demolition Environmental Inspection Summary Report

Parcel:	14012131-2
House No.	12146 Broadstreet, Detroit, MI 48204
Date Inspected:	08/26/2018

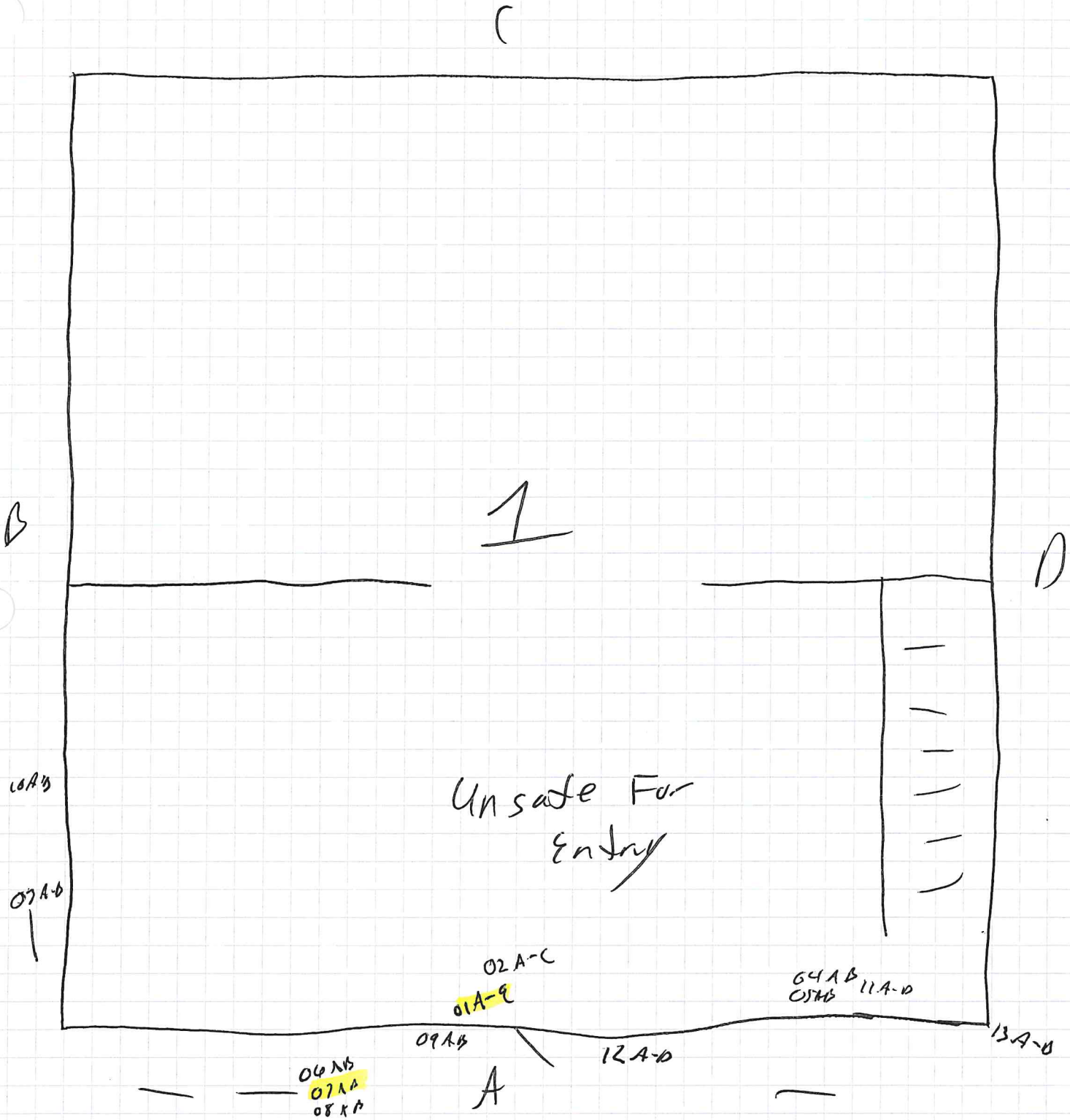
TABLE 2
SUSPECT ASBESTOS CONTAINING MATERIALS

Material #	Friable (F) / Non-friable (NF)	Material	Material Location	Estimated Quantity	ACM Present
1	**F**	**Plaster on Lath**	**Throughout House**	**4800 SF**	**Yes**
2	F	Plaster on Metal	FS1	100 SF	No
3	F	Rolled Insulation, White	Exterior	100 SF	No
4	F	Blown-in Insulation, White	Throughout	2100 SF	No
5	F	Rolled Insulation, Pink	Throughout	2100 SF	No
6	NF Cat 2	Window Rope, White	Exterior	12 Units	No
7	**NF Cat 2**	**Window Glaze, Black/White**	**Exterior**	**12 Units**	**Yes**
8	NF Cat 2	Exterior Caulk, White	Exterior	12 Units	No
9	NF Cat 2	Red Brick Mortar, Grey	Exterior	100 SF	No
10	NF Cat 2	Cinder Block Mortar, Grey	Exterior	1800 SF	No
11	NF Cat 2	Drywall, White	FS1	200 SF	No
12	NF Cat 2	House Wrap, Black	Exterior	12,100 SF	No
13	NF Cat 1	Shingles, Brown	Exterior Roof	1200 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 estimates only. It is the contractor's responsibility to verify all amounts of asbestos identified during the bid process.

Attachment:

Site Drawing



House
212922
12146 Broadstreet

North

Attachment:

Site Photographs

EA A - fire damage/unsafe

EA B - fire damage/unsafe

EA C - fire damage/unsafe

EA D - fire damage/unsafe

FS 01- fire damage/unsafe

Attachment:

Laboratory Analytical Results

and

NVLAP Certification

Environmental Testing Laboratories, Inc.

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

REVISED REPORT

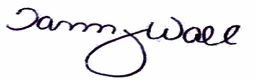
To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 212922
Client Project: 14012131-2
Report Date: 8/31/2018

Attention: Salley Meyer
Project Location: 12146 Broadstreet, Detroit, MI 48204
Vacant Residence

Lab Sample Number	Client Sample Number	Sample Type	Completed
824647	01A	Asbestos PLM	8/30/2018
824648	01B	Asbestos PLM	8/30/2018
824649	01C	Asbestos PLM	8/30/2018
824650	01D	Asbestos PLM	8/30/2018
824651	01E	Asbestos PLM	8/30/2018
824652	02A	Asbestos PLM	8/30/2018
824653	02B	Asbestos PLM	8/30/2018
824654	02C	Asbestos PLM	8/30/2018
824655	03A	Asbestos PLM	8/30/2018
824656	03B	Asbestos PLM	8/30/2018
824657	04A	Asbestos PLM	8/30/2018
824658	04B	Asbestos PLM	8/30/2018
824659	05A	Asbestos PLM	8/30/2018
824660	05B	Asbestos PLM	8/30/2018
824661	06A	Asbestos PLM	8/30/2018
824662	06B	Asbestos PLM	8/30/2018
824663	07A	Asbestos PLM	8/30/2018

Lab Sample Number	Client Sample Number	Sample Type	Completed
824664	07B	Asbestos PLM	8/30/2018
824665	08A	Asbestos PLM	8/30/2018
824666	08B	Asbestos PLM	8/30/2018
824667	09A	Asbestos PLM	8/30/2018
824668	09B	Asbestos PLM	8/30/2018
824669	10A	Asbestos PLM	8/30/2018
824670	10B	Asbestos PLM	8/30/2018
824671	11A	Asbestos PLM	8/30/2018
824672	11B	Asbestos PLM	8/30/2018
824673	12A	Asbestos PLM	8/30/2018
824674	12B	Asbestos PLM	8/30/2018
824675	13A	Asbestos PLM	8/30/2018
824676	13B	Asbestos PLM	8/30/2018

Reviewed by: 

Quality Assurance Coordinator

NVLAP LAB CODE 201028-0

Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Certificate of Analysis

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus,MI 48174
Location : Vacant Residence
12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824647 01A 1 Layer-1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Lath	Grey Non-Fibrous Homogenous		PC 99.25% Other	PC 0.75% Chrysotile
824647 01A 1 Layer-2 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Skim	White Non-Fibrous Homogenous		PLM 100% Other	None Detected
824648 01B 1 Layer-1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Lath	Grey Non-Fibrous Homogenous		PC 99.75% Other	PC 0.25% Chrysotile
824648 01B 1 Layer-2 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Skim	White Non-Fibrous Homogenous		PLM 100% Other	None Detected
824649 01C 1 Layer-1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Lath	Grey Non-Fibrous Homogenous		PC 99.25% Other	PC 0.75% Chrysotile
824649 01C 1 Layer-2 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Skim	Grey Non-Fibrous Homogenous		PLM 100% Other	None Detected

NVLAP LAB CODE 201028-0

Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Certificate of Analysis

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus,MI 48174
Location : Vacant Residence
12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824650 01D 1 Layer-1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Lath	Grey Non-Fibrous Homogenous		PC 98.75% Other	PC 1.25% Chrysotile
824650 01D 1 Layer-2 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Skim	White Non-Fibrous Homogenous		PLM 100% Other	None Detected
824651 01E 1 Layer-1 Analyst: Preet Sahani Date Analyzed : 08/30/2018		Not Analyzed			
824651 01E 1 Layer-2 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Skim	White Non-Fibrous Homogenous		PLM 100% Other	None Detected
824652 02A 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Metal	Grey Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	None Detected
824653 02B 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Metal	Grey Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	None Detected

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ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824654 02C 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Plaster on Metal	Grey Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	None Detected
824655 03A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Rolled Insulation	White Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	None Detected
824656 03B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Rolled Insulation	White Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	None Detected
824657 04A 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Blown Insulation	White Fibrous Homogenous	PLM 60% Cellulose	PLM 40% Other	None Detected
824658 04B 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Blown Insulation	White Fibrous Homogenous	PLM 60% Cellulose	PLM 40% Other	None Detected
824659 05A 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Rolled Insulation	Pink Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	None Detected

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Polarized Light Microscopy Asbestos Analysis Report

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12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824660 05B 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Rolled Insulation	Pink Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	None Detected
824661 06A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Window Rope	White Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824662 06B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Window Rope	White Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824663 07A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Window Glaze	White/Black Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 96% Other	PLM 2% Chrysotile
824664 07B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018		Not Analyzed			
824665 08A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Exterior Caulk	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected

NVLAP LAB CODE 201028-0

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Certificate of Analysis

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus,MI 48174
Location : Vacant Residence
12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824666 08B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Exterior Caulk	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824667 09A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Red Brick Mortar	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824668 09B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Red Brick Mortar	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824669 10A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Cinder Block Mortar	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824670 10B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	Cinder Block Mortar	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824671 11A 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Drywall	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected

NVLAP LAB CODE 201028-0

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

Certificate of Analysis

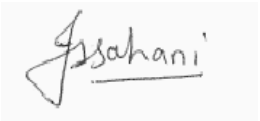
Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus,MI 48174
Location : Vacant Residence
12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
824672 11B 1 Analyst: Preet Sahani Date Analyzed : 08/30/2018	Drywall	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824673 12A Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	House Wrap	Black Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824674 12B Ext Analyst: Preet Sahani Date Analyzed : 08/30/2018	House Wrap	Black Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824675 13A Ext Roof Analyst: Preet Sahani Date Analyzed : 08/30/2018	Shingles	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected
824676 13B Ext Roof Analyst: Preet Sahani Date Analyzed : 08/30/2018	Shingles	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	None Detected

Lab Supervisor/Other Signatory



Analyst: Preet Sahani

NVLAP LAB CODE 201028-0

Certificate of Analysis

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

Polarized Light Microscopy Asbestos Analysis Report

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Romulus,MI 48174
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12146 Broadstreet, Detroit, MI 48204

ETC Job : 212922
Client Project : 14012131-2
Date Collected : 08/26/2018
Date Received : 08/27/2018

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos

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

Bulk Asbestos Chain of Custody

ETL Project #: 212922

Client: ETC	**Contact:** Leo Wall	**Project Location/name:**	12146 Broadstreet Detroit, MI
Address: 38900 W Huron River Dr.	**Phone:** 734.955.6600		
	Fax: 734.955.6604		
	E-mail: results@2etc.com	**Client Project #:**	212922
Please Provide Results: X Email ☐ Fax ☐ Verbal ☐ Other _____		**Date Sampled:**	8/24/18

Turnaround Time (TAT): ☐ RUSH ☐ Same Day ☐ 24 hr ☐ 48 hr X Standard (3 days) ☐ Other _____

PLM Instructions (Check all that apply)	
X PLM EPA600/R-93/116, 1993 (Standard method)	X Stop at 1st Positive - *Clearly mark Homogenous Group*
Point Counting: ☐ 400 Points* ☐ NYSDOH ELAP 198.1, 2002*	
☐ Gravimetric Reduction* ☐ NYSDOH ELAP 198.6, 2010*	
☐ PLM Non-Building Material (Dust, Wipe, Tape)	☐ Soil or Vermiculite Analysis*

** Additional charge and turnaround may be required*

Lab ID	Sample ID	Sample Location	Material Description
	01 A-E	SEE ATTACHED PAPERWORK	SEE ATTACHED PAPERWORK
	02 A-C		
	03 A-B		
	13 A-B		

		Date	Time
Relinquished (Name/Organization):		8/27/18	822 am/pm
Received (Name/ETL):		8/27/18	8:30 am/pm
Sample Login (Name/ETL):	Rivera Separtee	8-27-18	12:30 am/pm
Stereoscopical/Sample Analysis (Name/ETL)	~~Malaw~~	8-27-18	4:30 am/pm
Results (Name/ETL):	Brian Ruiz	8/30/18	3:38 am/pm
QA/QC Review (Name/ETL):	Brian Ruiz	8/30/18	3:38 am/pm

Special Instructions: POINT COUNT PLASTER <5% AND ALL OTHER MATERIALS THAT ARE GREATER THAN 0 AND LESS THAN 1%	**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**

Asbestos Material Sampling Summary Sheet
Surfacing materials

Job #:	212922	Building:	12146 Broadstreet	Date:	8/24/18

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 on Lath	F	A	1 8246047	Throughout house	4800 SF	
			B	1 648			
			C	1 649			
			D	1 650			
			E	1 651			
02	Material: Plaste on metal	F	A	1 652	1	700 SF	
			B	1 653			
			C	1 654			
	Material:						

<1000 SF = 3 samples | 1000 - <5000 = 5 samples | >5000 = 7 samples

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Job #:	212922	Bldg.	12146 Broadstreet	Date:	8/24/18

Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
03	Material: Rolled insulation Description: White	F	A	Ext 8241655	Ext	100 SF	
			B	ext 1656			
04	Material: Blow insulation Description: White	F	A	1 1657	throughout	2100 SF	
			B	1 1658			
05	Material: Rolled insulation Description: Pink	F	A	1 1659	throughout		
			B	1 1660			
06	Material: Window Rope Description: White	3 NF	A	EXT 1661	Ext	12 linear ft	
			B	1662			
07	Material: Window glaze Description: White/Black	3 NF	A	1663			
			B	1664			
08	Material: Exterior caulk Description: White	NF 2	A	1665			
			B	1666			
09	Material: Red Brick mortar Description: Grey	3 NF	A	1667		100 SF	
			B	1668			
10	Material: Cinder Blackmortar Description: Grey	3 NF	A	1669		1500 SF	
			B	1670			
11	Material: Drywall Description: White	2 NF	A	1 1671	1	2025F	
			B	1 1672			
12	Material: House wrap Description: Black	2 NF	A	EXT 1673	EXT	2,100 SF	
			B	1674			

2 samples

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Job #:	212922	Bldg.	12146 Broadstreet		Date: 8/24/18		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
13	Material: Shingles Description Brown	1 NF	A B	Ext Roof 824675 676	Ext Roof	2 1200 SF	
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						
	Material: Description						

2 samples

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 201028-0

Environmental Testing Laboratories, Inc.

Romulus, MI

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-04-01 through 2017-03-31
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

David F. Alderman
For the National Voluntary Laboratory Accreditation Program

Attachment:

MDEQ Notification of Intent to
Renovate / Demolish Form EQP 5661

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 1988, 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 ln. 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 ln. 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:
Name: _____
Address: _____
City/State/Zip: _____
Phone: _____

WASTE TRANSPORTER 2:

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, cementatious 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 not removed prior to demo. Category I	Non•friable ACM not removed prior to demo. Category II	Units of Measure	
				☐ Ln. Ft.	☐ Ln. M.
				☐ Sq. Ft.	☐ Sq. M.
				☐ Cu. Ft.*	☐ 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).

(continued on reverse side)

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

517.322.1320 (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)

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

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.**

Pre-Demolition Environmental Inspection Procedures

Table 2 (ACM Identified, Material Type, Friability Category, Removal Methods and Cost Estimate)

This chart provides the following information:

- The specific asbestos containing materials (ACM) found (i.e. floor tiles, pipe insulation, etc.)
- The type of material involved (1) surfacing (trowel of spray applied materials), (2) thermal system insulation (TSI) used for heat exclusion or retention purposes on HVAC equipment or (3) miscellaneous materials that include all materials that are not surfacing or TSI.
- The friability category defined by the National Emissions Standard for Hazardous Air Pollutants NESHAPS either (1) Friable—meaning the material can be crumbled or pulverized by hand pressure, (2) Category 1—Non-friable material—meaning asbestos-containing packing, gasket, resilient floor covering or asphalt roofing products and (3) Category 2—Non-friable material including all other non-friable materials not included in Category 1 definition.
- The minimal removal methods that should be utilized to remove the material including:

Full Negative Pressure Enclosure Techniques

Full negative pressure enclosure techniques include the following. Before beginning work, the enclosure must be inspected for breaches and smoke tested for leaks. If any breaches or leaks are present, they must be repaired before work is to begin. Briefly, the full negative pressure enclosure method involves sealing off the entire removal area with air tight polyethylene barriers (including wall, floors and ceilings when non-porous) and drawing air out of the enclosure using air filtration devices (AFD's) equipped with High Efficiency Particulate Air (HEPA) filters. The removal of air from within the sealed environment causes negative pressure (similar to a mild vacuum) within the removal area. This negative pressure prevents any contaminated air from within the enclosure from escaping and effecting unprotected workers outside the enclosed space.

When removing materials from within an enclosure, the contractor must insure that it is very wet in order to keep the asbestos fiber release from the materials to a minimum. When airborne asbestos fibers are wetted, the extra weight of the H_2O forces the fibers to the floor keeping the airborne contaminant level as low as possible.

Although wetting usually keeps the asbestos being removed from emitting a lot of fibers, there is still a strong possibility of high fiber levels within any contained area. For this reason, the contractors personnel and any other person entering the area is required to wear complete personal protective equipment including: disposable coveralls, appropriate respirators, head and foot coverings. As this clothing will more than likely become contaminated while working within the enclosure, they must be removed and disposed of when exiting the removal area.

Further, personnel entering the enclosure must change street clothing into temporary disposable clothing prior to entering the enclosure. This allows the personnel to perform their work and change out of their contaminated clothing prior to taking a shower on the way out to remove any residual fibers that are still on their bodies.

Pre-Demolition Environmental Inspection Procedures

Glovebag Techniques

The glove bag process involves installing the glovebag around the material to be removed (i.e. piping or tanks), putting hands into the rubber gloves that are built in as part of the bag, and proceeding to remove the insulation material. In order to remove the material, the abatement workers must have all appropriate tools to perform the activities within the bag prior to beginning work. Additionally, the glovebags are required to be leak checked with smoke tubes prior to beginning removal. The work must be accomplished while the material is wet (per NESHAPS 40 CFR part 61 regulation) so this requires the personnel to place an airless sprayer into the bag and continue to wet the material while it is being removed to insure that fiber levels are below the PEL of 0.10 f/cc.

Following the removal of the material, the substrate within the glove bag is scrubbed off with wire brushes and scrubbing pads and then washed with water and sprayed with an encapsulant. The encapsulant is a heavy duty paint like substance that fastens down whatever residual fibers may be left on the substrate. After the material has been encapsulated, the bottom of the bag (with the wetted asbestos waste) is twisted closed and sealed with tape.

The twisted area is then covered with duct tape and the top of the bag is separated from the bottom of the bag. The abatement contractor may then safely cut away the bottom of the bag and dispose of the waste. The top of the bag with the tools must then be addressed. The tools within the bag are pulled through one of the glove and sealed with duct tape. These tools (still sealed within the glove) may be transferred to the next glovebag. The remaining top section of the glovebag should then be carefully sliced away from the substrate while a HEPA vacuum is held close to the surface. This will prevent any residual fibers from escaping from within the bag.

Although the glovebag should insure that no fibers escape the enclosed space, it is possible that fibers may escape and all precautions possible must be followed to insure protection to abatement workers and workers in the general environment around the removal area. This means that workers must follow all rules and regulations including wearing disposable coveralls, appropriate respirators, head and foot coverings and following all decontamination methods. Further, partial or complete decontamination facilities and/or staging areas may be required based upon the amount of material being removed.

The following listed items are requirements of using the glovebag process as required by OSHA 1926.1101: 1) The glovebag must be made of a an air tight 6-mil polyethylene bag with a seamless bottom; 2) Before beginning work the glovebag must be smoke tested for leaks. If any leaks are present, they must be repaired before work can begin; 3) Also, before work can begin, any loose or friable material next to the glovebag work area must be sealed with two layers of 6-mil plastic so that it is not disturb during the glovebag operations; 4) Glovebags may not be moved from place to place, they must be used only once; 5) Glovebags can only be used on surfaces whose temperatures do not exceed 150 degrees; 6) At least two people must perform glovebag operations no matter how much material is to be removed.

Pre-Demolition Environmental Inspection Procedures

Critical Barrier Techniques

Critical barrier techniques were utilized during this project. Although this method was used, the materials being removed were non-friable in nature and kept wet throughout the removal process. The critical barrier removal method is the least stringent approved method for removing asbestos and can only be used in certain situations.

Critical barrier removal methods are usually used for removal for materials such as floor tile, transite board, roofing materials and/or other non-friable materials. This method insures the safest environment reasonable when removing currently unregulated non-friable asbestos containing materials.

In short, the critical barrier method of removal is similar to the full enclosure technique (refer to the EPA purple book) only not so stringent. The area is still sealed off from the surrounding areas with polyethylene sheeting, but the negative pressure system, shower unit, and/or full decontamination unit (dirty room, shower and clean room) procedures may not always be implemented. The specific requirements (as compared to the full enclosure removal) vary from area to area and project to project. The requirements for this project were dictated by the types of material being removed and the judgment of the project designer for the removal project.

- Lastly, this chart includes estimates for the cost to removal each of the materials and a total removal cost that will be uploaded into the saleforce platform.

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 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: 

Kelvin Duncan, Michigan Certified Asbestos Inspector (s)
Michigan Accreditation Number (s) A-51050

From: Inventory Department, Detroit Land Bank Authority

To: Detroit Building Authority

Date: January 31, 2020

In re: 12146 Broadstreet (Parcel ID: 14012131-2)

The Detroit Land Bank Authority believes the structure at the above-referenced address should be demolished based on the following factors:

- *Property condition:* The structure displays signs of *extensive* fire damage. A property inspection on 1/5/2017, as well as the environmental survey carried out on 8/26/2018, reveal significant and widespread fire damage to the interior and exterior of the house. The house was deemed unsafe for entry on both visits. Here is a link to past inspection images:
    - 2017 inspection: https://gtjadmin.com/view_assets.asp?id=2164282
    - 2018 environmental survey: https://drive.google.com/drive/folders/1AYXap5EU6rvEm_zCLhBxyaEIGYimu7v8
- *Property location:* While growing, neighborhood real estate values likely would not justify these extensive property repair costs. The house is, moreover, located in the southernmost section of the neighborhood, adjacent to areas of higher vacancy and disinvestment, where property values are lower and sale would be more difficult. Finally, unlike other parts of Russell Woods, this section of Broadstreet lacks historic structural intactness.
- *Public input:* Members of the public have requested that the DLBA demolish this house. Hope Academy, a public charter school located across the street, has requested that the house be demolished.
- *Future use:* After the demolition is complete, the DLBA plans to list the lot as a side lot for adjacent homeowners to purchase. While the house immediately next door is vacant, the houses across the alley are currently occupied and would be eligible to purchase the lot.

Detroit Land Bank Authority
500 Griswold Street Suite 1200
Detroit, MI 48226
Main: 313.974.6869| Fax: 313.447.3056|buildingdetroit.org

Hope Academy
Office of the Superintendent
12121Broadstreet Avenue
Detroit, Michigan 48204
313.934.0054 ♦ 313.934.0074 fax

April 28, 2017

Mayor Michael Duggan
City of Detroit
2 Woodward Avenue, Suite 1126
Detroit, Michigan 48226

Dear Honorable Mayor Duggan,

I am writing this letter to bring to your attention the need to tear down two vacant homes directly across the street from Hope Academy. Both structures have been severely damaged from being set ablaze from past fires and appear to be beyond repair. Needless to say, they are a safety hazard for our students, parents and community that must past by them each day and night. The addresses of these homes are: 12142 Broadstreet and 12150 Broadstreet.

I have spoken to Marshall Bullock, Detroit District 7 Manager in the past by telephone as well as met with him at Hope Academy about the need for these homes to be torn down. He shared with me that there was no money available for this because both homes are outside of the "Empowerment Zone."

As you well know, the safety and welfare of our students is a high priority. We need to have these homes torn down as quickly as possible.

I welcome your recommendation in addressing this safety concern for all stakeholders of the Hope Academy. If you have any additional questions, I may be reached at the number listed above or by email: rwilliams@hopeacademydistrict.org.

On behalf of the entire Hope Academy Community, thank you.

Sincerely,

Dr. Ronald E. Williams, Ed.D.
Superintendent

SEC. 25-2-130. RUSSELL WOODS-SULLIVAN HISTORIC DISTRICT.

(A) a historic district to be known as the Russell Woods-Sullivan historic district is hereby established in accordance with the provisions of this article.

(B) this historic district designation is hereby certified as being consistent with the Detroit master plan.

(C) the boundaries of the Russell Woods-Sullivan Historic District are as shown on the map on file in the office of the city clerk, and shall be: on the north, a line beginning at a point at the intersection of the centerline of Waverly Avenue and the centerline extended northward of the north-south alley between Livernois Avenue and Broadstreet Boulevard; thence east along the centerline of Waverly Avenue to its intersection with the centerline of Broadstreet Boulevard; thence north along the centerline of Broadstreet Boulevard to its intersection with the centerline of West Davison Avenue, thence east along said centerline of West Davison Avenue to its intersection with the centerline extended northward of the north-south alley between Broadstreet Boulevard and Petoskey Avenue; thence south along the centerline of said alley to its intersection with the centerline of the east-west alley between West Davison and Waverly Avenue; thence east along the centerline of said alley to its intersection with the centerline of Petoskey Avenue; thence south along the centerline of Petoskey Avenue to its intersection with the centerline of Waverly Avenue; thence east along the centerline of Waverly Avenue to its intersection with the centerline of Holmur avenue; thence north along centerline of Holmur avenue to its intersection with the centerline of West Davison Avenue; thence east along said centerline of West Davison Avenue to its intersection with the centerline of Dexter Boulevard; thence south along said centerline of Dexter Boulevard to its intersection with the centerline of Waverly Avenue; thence east along said centerline of Waverly Avenue to its intersection with the centerline of the north-south alley lying between Dexter Boulevard and Wildemere Avenue. On the east, the centerline of the north-south alley lying between Dexter Boulevard and Wildemere Avenue. On the south, a line beginning at a point, that point being the intersection of the centerline of the north-south alley lying between Dexter Boulevard and Wildemere Avenue with the southern boundary, extended eastward and westward, of lot 36 of Linwood Heights subdivision (l.35, p.6); thence westerly along said southern boundary of lot 36 to its intersection with the centerline of Dexter Boulevard; thence north along the centerline of Dexter Boulevard to its intersection with the southern boundary of the Daniel Sullivan's Dexter Blvd. #1 subdivision (l.55, p.53); thence westerly along the southern boundary of Daniel Sullivan's Dexter Blvd. #1 subdivision (l.55, p.53) and continuing along the southern boundary of the Russell Woods subdivision (l.34, p.3) to its intersection with the centerline of the north-south alley between Broadstreet Boulevard and Martindale avenue; thence south along the centerline of said alley to its intersection with the south line of lot 336, extended east and west, of Brown and Babcock's subdivision (l.16, p.15); thence west along said lot line as extended to its intersection with the centerline of Broadstreet Avenue; thence north along said centerline of Broadstreet Boulevard to its intersection with the south lot line of lot 20 of Brown and Babcock's subdivision (l.16, p.15), as extended east and west; thence west along said south line of lot 20 to its intersection with the centerline of the north-south alley between Cascade Avenue and Broadstreet Boulevard; thence north along the centerline of said alley to its intersection with the centerline of the east-west alley lying between Cortland Avenue and Elmhurst Avenue and adjacent to the northwest corner of lot 17 of Brown and Babcock's subdivision (l. 16, p.15); thence west along said alley to its intersection with a line 192 feet west of the east lot line of out lot 8 of Joseph Yerkes subdivision of the northerly part of fractional 1/4 sec. 30, t.t.a.t. (L.3, p.38) as extended north and south; thence north

along said line to its intersection with the southern boundary of the Russell Woods Subdivision (l.34, p.3); thence westerly along the southern boundary of the Russell Woods Subdivision (l.34, p.3) to its intersection with the centerline of the north-south alley lying between Livernois Avenue and Broadstreet Boulevard and immediately adjacent to the rear of the lots fronting on the east side of Livernois Avenue. On the west, the centerline of the north-south alley directly south of Livernois Avenue. (The property included within these boundaries includes lots 1-443 and lots 445-620 of the Russell Woods Subdivision, liber 34 page 3; lots 1-20 and 336-350 of Brown & Babcocks subdivision, liber 16 page 15; lots 1-4, 67-73, and 136-142 of Lathrup's Dexter Boulevard Subdivision, liber 32 page 15; lots 36-66 of the Linwood Heights Subdivision, liber 35 page 6; lots 10-14 of Sullivan's Dexter Boulevard Subdivision, liber 46 page 30; lots 74-571 of Sullivan's Dexter Boulevard Subdivision no. 1, liber 55 page 53; out lot 7 of Joseph Yerkes subdivision of the northerly part of part of the fractional quarter section 30, ten thousand acre tract, liber 3 page 36; and all that part of quarter section 12, ten thousand acre tract, lying between Davison Avenue and Waverly Avenue and between Dexter Boulevard and vacated Holmur Avenue.

(D) The design treatment level of the Russell Woods-Sullivan Historic District shall be conservation as provided for in section 25-2-2(3) of this code.

(E) The defined elements of design, as provided for in section 25-2-2 of this code, shall be as follows:

(1) *Height*. The dominant residential structures in the Russell woods-Sullivan historic district range from one-and-a-half (1½) to two-and-a-half (2½) stories tall, with those of two (2) to two-and-a-half (2½) forming a substantial majority. One-and-a-half (1½) story houses typically have a very steep roof pitch, increasing the overall height. A few one (1) story houses exist but are not characteristic. Additions to existing buildings shall be related to the existing structure. Commercial and institutional structures on Dexter Boulevard and one (1) apartment building adjacent to Dexter Boulevard depart from these norms, ranging in height from one to four stories. New single family and two family residences shall meet the following standards:

(i) Eight (8) adjoining houses on the same block face, excluding any one-story houses, shall be used to determine an average height. If eight (8) houses are not available on the same block face, then one (1) or more houses as close as possible to being directly across the street from the proposed structure may be used. The height of the two (2) adjoining houses shall be added into the total twice, with a divisor of ten (10) used to determine the average. The main roof of any new building must have a height of at least eighty percent (80%) of the resulting average. In no case shall a new building be taller than the tallest roof height included in the calculation. In determining the height of existing buildings and proposed buildings, the highest point of the main roof shall be used, even where towers or other minor elements may be higher.

(ii) The level of the eaves of the proposed new structure has as much or more significance for compatibility

as the roof height. Therefore, an average eave or cornice height shall be determined by the process in Subsection (E)(1)(i) of this section described, again excluding one-story houses. The proposed new structure shall have a height at the eaves or cornice of not less than ninety percent (90%) of the average determined from existing structures; and in no case shall the eaves or cornice of the proposed structure be lower than the lowest eave or cornice height used in the computation, or higher than the highest eave or cornice.

(2) *Proportion of buildings front facades*. The typical front facade of a single or two-unit house in the Russell Woods-Sullivan Historic District is approximately as tall to its eaves as it is wide. One-and-a-half (1½) story houses sometimes have facades wider than tall, but balanced by a steeply pitched roof resulting in a balanced overall composition. The two terrace buildings are wider than tall along Petoskey; multi-story apartment buildings are taller than wide. Commercial buildings that contribute to the historic district on Dexter Boulevard, where they exist adjacent to similar buildings, form a horizontal row.

(3) *Proportion of openings within the facades*. In residential buildings, openings amount to between twenty (20) and thirty-five (35) percent of the front facade, with the majority ranging from twenty-five (25) to thirty (30) percent. Buildings of the "moderne" and "Art deco" styles will have a percentage of openings in the upper portion of the general range. Typical openings are taller than wide. It is not uncommon for several windows which are taller than wide to fill a single opening which is wider than tall. Houses built later in the period of development sometimes have individual windows which are balanced or somewhat wider than tall; such a window is often the main opening of the first floor front facade.

(4) *Rhythm of solids to voids in front facades*. In four-square style buildings and buildings derived from classical precedents, voids are usually arranged in a symmetrical and evenly-spaced manner within the facades. In examples of other styles, particularly those of English medieval inspiration, voids are arranged with more freedom, but usually result in a balanced composition. On Dexter Boulevard, the repetitive flow of storefront openings, where they exist, create a rhythm along the commercial frontage.

(5) *Rhythm of spacing of buildings on streets*. In the Russell Woods-Sullivan Historic District, the spacing of the buildings is generally determined by the lot sizes and setbacks from side lot lines. There is a general regularity in the widths of subdivision lots from one block to another. The residential lots generally range from thirty-five to forty (40) feet wide, with the exception of Broadstreet Boulevard, where the majority of lots range from forty-eight (48) feet to sixty-eight (68) feet in width, the larger being the corner lots. Also with the exception of Broadstreet Boulevard, houses are usually situated close to the western lot line, allowing for just enough space for a side driveway along the eastern lot line.

(6) *Rhythm of entrance and/or porch projections*. Porch types relate to the type and style of the building. Buildings with an upper and lower unit, primarily on Cortland Avenue, Buena Vista Avenue, Tyler Avenue and Waverly Avenue, often have two story porches that project from the main wall surface. One common entrance arrangement on vernacular English revival single-family houses is that of

a slightly projecting, steeply gabled vestibule, either enclosed or open, entered through an arched opening. The first floor wall surface of the front facade is sometimes extended to contain either a narrow arched opening for pedestrians to pass or a car-width sized opening serving as an entrance over the driveway for a car to pass through. Another common arrangement, predominantly at the eastern end of the district in the Sullivan Subdivision, is the open porch with metal awning frames overhead. In general, a variety of residential porch types exist in the district; most tend to be shallow, are not always covered, and vary in placement on the front facade. They create an interesting rhythm along the streetscape, especially where a number of any one kind exist in a row.

(7) *Relationship of materials*. The majority of houses are faced with brick, often combined with wood, stone or stucco. Some houses on Glendale and Waverly Avenues in the Russell Woods Subdivision are entirely of wood; very few houses are entirely stucco. Stone trim is common, and wood is almost universally used for window frames and other functional trim. Windows are commonly either metal casements or wooden sash. Original metal awning shades and balustrades exist. Roofs on the majority of the buildings in the Russell Woods-Sullivan Historic District are now asphalt shingled, whereas many were likely originally shingled in wood. Only two apartment buildings on Broadstreet Boulevard and the Broadstreet Presbyterian church retain their slate roofs.

(8) *Relationship of textures*. The major texture is that of brick laid in mortar, often juxtaposed with wood or smooth or rough-faced stone elements and trim. Textured brick and brick laid in patterns creates considerable interest, as does half-timbering, leaded and subdivided windows, and wood shingled or horizontal sided elements. Slate and wood shingle roofs have particular textural values where they exist. Asphalt shingles generally have little textural interest, even in those types which purport to imitate some other variety.

(9) *Relationship of colors*. Natural brick colors (such as red, yellow, brown, and buff) predominate in wall surfaces. Natural stone colors also exist. Where stucco or concrete exists, it usually remains in its natural state, or is painted in a shade of cream. Roofs are in natural colors (tile and slate colors, natural and stained wood colors), and asphalt shingles are predominantly within this same dark color range. Paint colors often relate to style. The buildings derived from classical precedents, particularly those of neo-classical styles, generally have woodwork painted white, cream, or in the range of those colors. Colors known to have been in use on similar buildings of this style in the eighteenth or early twentieth centuries may be considered for appropriateness. Buildings or vernacular English revival styles generally have painted woodwork and window frames of a dark brown or cream color. Half timbering is almost always stained dark brown. Tile, mosaics, and stained glass, where it exists as decoration visible on the front facade, contributes to the artistic interest of the building. The original colors of any building, as determined by professional analysis, are always acceptable for a house, and may provide guidance for similar houses.

(10) *Relationship of architectural details*. The architectural elements and details of each structure generally relate to its style. Residential buildings derived from classical styles display modest detail, mostly in wood. Porches, shutters, window frames, cornices, and dormer windows are commonly, although not always, treated. Characteristic elements and details displayed on vernacular English revival- influenced buildings include arched windows and door openings, steeply

pitched gables, towers, and sometimes half-timbering. Artistic touches, including stained glass, tile, and mosaics, provide artistic decoration. Bungalows and arts and crafts style buildings feature wide porches and overhangs. Commercial buildings along Dexter Avenue range in style from neo-Georgian to art deco and art moderne. Institutional buildings on Dexter Boulevard are art moderne or modern in appearance. Broadstreet Presbyterian church is vernacular late neo-gothic in style. In general, the district is rich in early to mid-twentieth century architectural styles.

(11) *Relationship of roof shapes*. The Russell Woods-Sullivan Historic District is primarily composed of houses displaying a variety of roof shapes relating to style. Common are the multiple steeply sloped gables and substantial chimneys present on vernacular English revival-influenced houses. Typical houses built in the 1930s in the Sullivan Subdivision often have turrets and gables projection above the roof line. Classically-inspired buildings display pitched roofs, with or without dormers; some have front or side-facing gambrels. Roofs of houses built later in the period of development of the district tend to have significantly lower slopes. Commercial buildings on Dexter have flat roofs that are not visible from the street

(12) *Walls of continuity*. The common setbacks of the houses on the residential streets and the placement of commercial buildings on Dexter at the front lot line create very strong walls of continuity.

(13) *Relationship of significant landscape features and surface treatments*. The typical treatment of individual properties is a flat front lawn area in grass turf, subdivided by a straight or curving walk leading to the front entrance and a single width side driveway leading to a garage at the rear of the lot. Recent front yard steel lamp posts with round globes are common on some blocks. Foundation plantings, often of a deciduous nature and characteristic of the period 1920-1960, are present virtually without exception. Large evergreen trees shield some houses from view. There is variety in the landscape treatment of individual properties. Hedges and fencing between properties are not common, although rear yards are commonly fenced. There is a wide range in the type of fencing, with chain-link common. The placement of trees on the tree lawn between the public sidewalk and curb varies from block to block or street to street, and is not consistent, although rows of maple trees have been planted to replace the mature maples on Cortland. Lack of street trees in some blocks likely reflects loss through disease of the American elms once common in Detroit. Replacement trees should be characteristic of the area and period. Plantings of new trees should be directed to "tree lawns" and medians. If American elm is planted, it should be disease resistant. Street lighting throughout the district is mounted on wooden utility poles, except around Russell Woods Park, where tall steel standards are located on the periphery of the park. On corner lots, garages and driveways face the side streets. Alleys have been vacated.

(14) *Relationship of open space to structures*. The Russell Woods-Sullivan Historic District has as its main open space Russell Woods Park, bounded by Old Mill Place, Fullerton Avenue, Broadstreet Boulevard and Leslie Avenue. Another public recreational area exists at the northeast corner of the district between Waverly Avenue and West Davison Avenue. All houses have rear yards as well as front yards. Additional open space on Dexter Boulevard and West Davison Avenue is a result of building demolition and the existence of parking lots.

(15) *Scale of facades and facade elements*. The Russell Woods-Sullivan Historic District comprises a neighborhood of moderately scaled houses and multi-unit buildings and a low-scale commercial strip along Dexter Avenue. Single-family houses on Broadstreet Boulevard are generally larger in scale than houses elsewhere in the district, with the exception of some comparably-scaled houses on corner lots. Elements and details within are appropriately scaled, dependent on the style of the building. Broadstreet Presbyterian Church is a small-scale religious institution.

(16) *Directional expression of front elevations*. Most single family houses in the Russell Woods-Sullivan Historic District are neutral in directional expression, with the exception of a few of the neo-Tudor revival houses on Broadstreet and more recent houses in the ranch and tri-level styles, which express themselves horizontally. Multi-story apartment buildings are vertical in directional expression; institutional buildings and commercial buildings, especially where they exist in rows, are horizontal in directional expression.

(17) *Rhythm of building setbacks*. Front and side yard setbacks are consistent on each residential street in the Russell Woods-Sullivan Historic District; the contributing commercial buildings on Dexter Boulevard are set at the front lot line and have no front or side yard setback. Setbacks for institutional buildings vary.

(18) *Relationship of lot coverages*. The lot coverage for the single and two-family residential structures ranges generally from twenty-five (25) per cent to thirty-five (35) per cent, including the usual freestanding garage. The multi-unit structures adjacent to Petoskey Street have about sixty (60) percent lot coverage, while the apartment building at Dexter Boulevard and Tyler Avenue has a lot coverage of approximately eighty (80) per cent. Commercial buildings on Dexter Boulevard have a range of lot coverages from approximately twenty (20) per cent to one hundred (100) per cent, with contributing structures ranging generally from sixty (60) percent to eighty (80) percent. They are typically placed at the front lot line, but may not fill the lot at the rear. The commercial structures on Dexter Boulevard that have a lot coverage as low as twenty (20) percent are usually the more recent structures which provide paved areas on the property; lot coverage for institutional buildings in the district varies considerably. Broadstreet Presbyterian Church occupies approximately forty (40) per cent of its property; its siting at the rear lot line with an addition at its south end create a substantial green space in front.

(19) *Degree of complexity within the facades*. The facades within the Russell Woods-Sullivan Historic District range from very simple to quite complex, depending on style, but are straightforward in its arrangement of elements and details; overall, there is a low degree of complexity.

(20) *Orientation, vistas, overviews*. The orientations of buildings and streets were created by the subdivision plans, which place the largest lots and houses on a north-south street, Broadstreet Boulevard, and adjacent to a park, and assign smaller lot sizes and houses to adjacent east-west streets. Individual houses are oriented toward the street, almost without exception; even the multiple unit buildings located on Buena Vista street and Tyler street at Petoskey Street have been given more fully developed facades facing the main residential streets. The residential neighborhood is sandwiched between two major commercial thoroughfares, Dexter Boulevard on the east and Livernois Avenue on the west.

(21) *Symmetric or asymmetric appearance*. Front facades of buildings range from completely symmetrical to asymmetrical but balanced.

(22) *General environmental character*. The Russell Woods-Sullivan Historic District is a fully-developed middle-class residential area of the second quarter of the twentieth century, with a planned hierarchy of housing stock ranging from the largest houses on Broadstreet and adjacent to the park to the smaller, including double houses, located on the east-west streets. Its straight streets and the consistent lot sizes on each street create a comfortable and handsome urban residential environment.