

# HISTORIC DISTRICT COMMISSION ADDITIONAL INFORMATION REQUEST

City of Detroit - Planning & Development Department 2 Woodward Avenue, Suite 808 Detroit, Michigan 48226

Date: 11/19/2025 Application Number: HDC2025-00705

# APPLICANT & PROPERTY INFORMATION NAME: Alissa N Jacobs COMPANY NAME: 4545 Architecture ADDRESS: 2761 E. Jefferson, Suite 302 CITY: Detroit STATE: MI ZIP: 48207 PROJECT ADDRESS: 1815 Seminole St HISTORIC DISTRICT: Indian Village

### REQUESTED INFORMATION

We have received your application, but it is not yet complete for review. Please provide additional details based on the comments and questions listed below. Should you need to attach additional files per this request, use the paperclip icons at the end of this form. You may attach up to (5) files per icon up to 25MB:

If you wish for the project to be added to the Commission's December 10, 2025 regular meeting, please provide the following information in complete on or before 11/21/2025 at 9:00AM EST:

- -Current interior and exterior photos of each of the windows proposed for replacement. The photos must be labeled to clearly show their location at the building's exterior
- -For existing windows AND proposed please provide drawings showing the elevation and horizontal and vertical sections (typical). Drawing should be dimensioned and show all window components to include muntins, meeting rails, sash, frames, moldings, and other features. Construction details must be apparent. The window's relationship to the existing wall plane must also be provided
- -application notes that the windows cannot be retained due to their poor condition and/or the p[resecence of hazardous materials. Please provide the referenced documentation/substantiation of the stated conditions

-

APPLICANT RESPONSE	
Response Date: 11/20/2025	
Additional documents attached.	

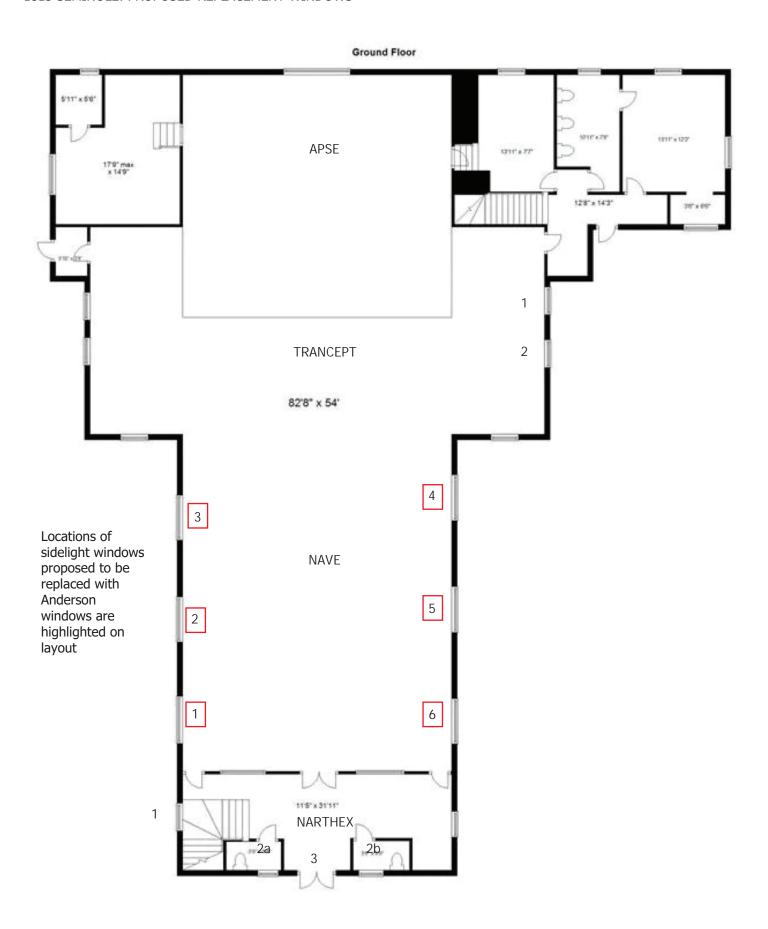
1815 SEMINOLE ST., DETROIT, MI 48214 ELEVATION KEY







SOUTH ELEVATION

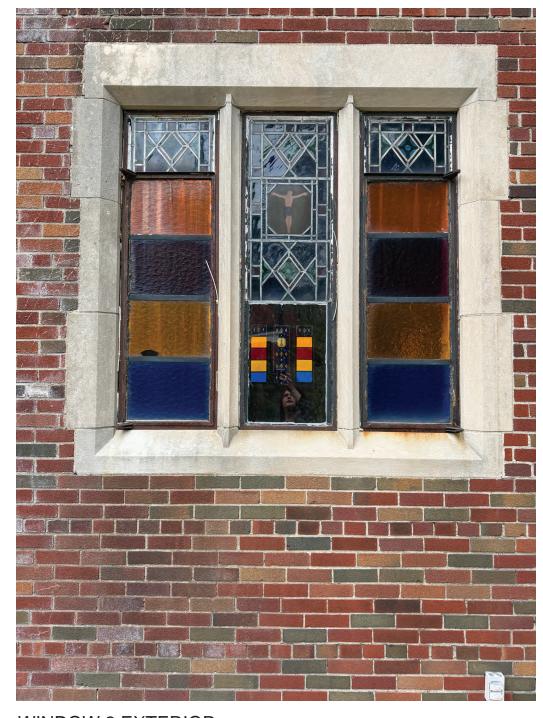




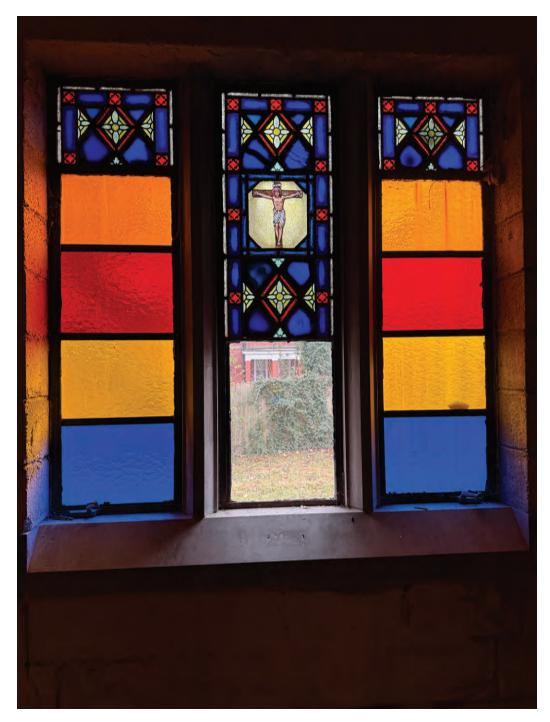
WINDOW 1 EXTERIOR



WINDOW 1 INTERIOR



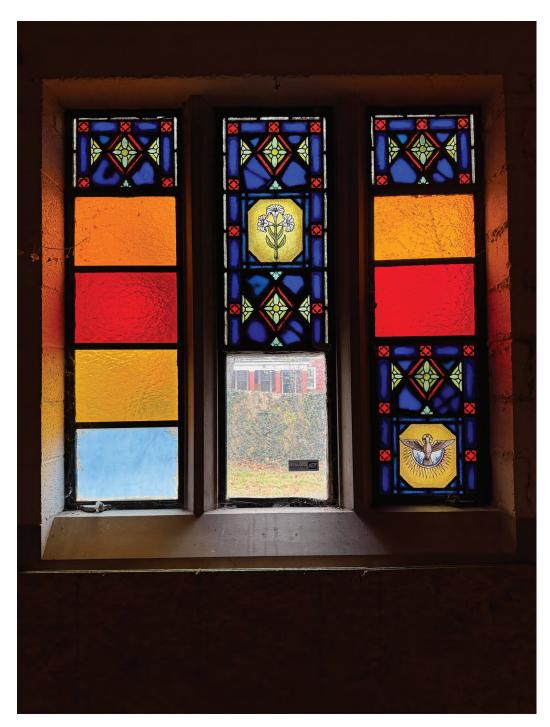
WINDOW 2 EXTERIOR



WINDOW 2 INTERIOR



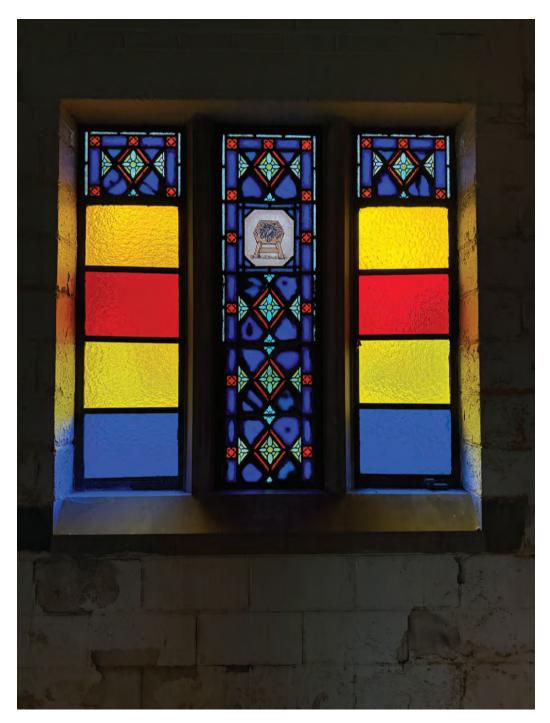
WINDOW 3 EXTERIOR



WINDOW 3 INTERIOR



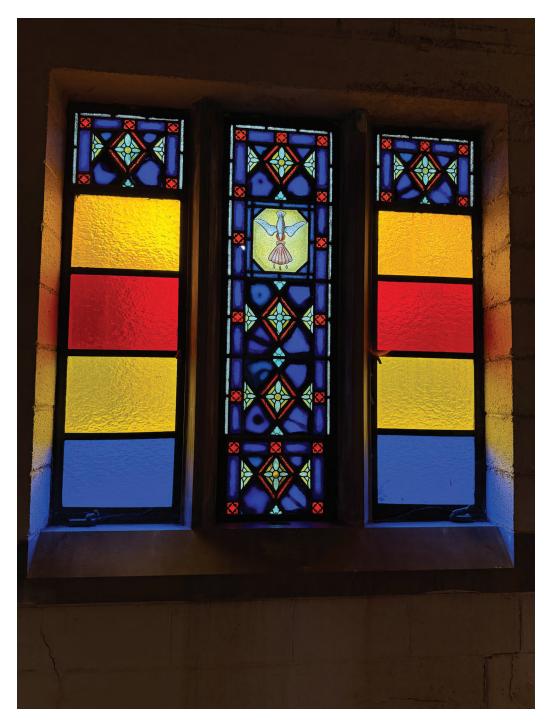
WINDOW 4 EXTERIOR



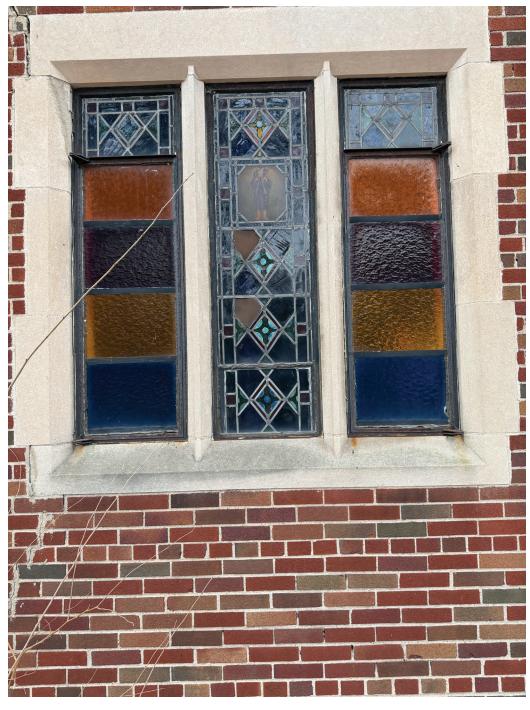
WINDOW 4 INTERIOR



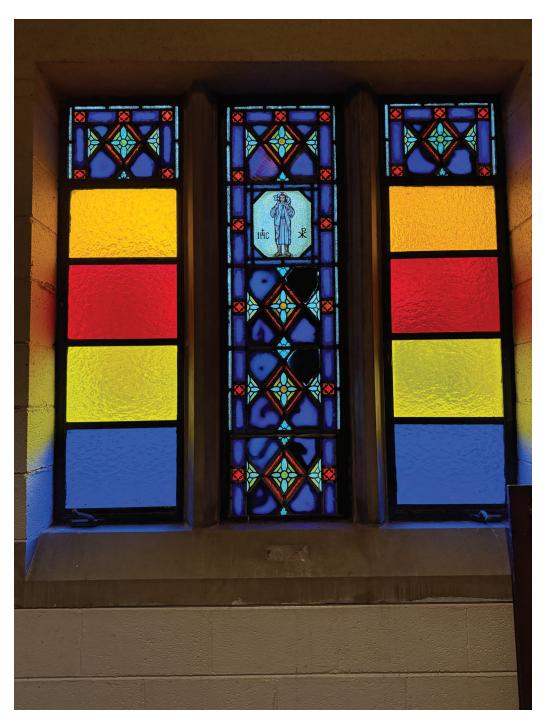
WINDOW 5 EXTERIOR



WINDOW 5 INTERIOR



WINDOW 6 EXTERIOR



WINDOW 6 INTERIOR

1815 SEMINOLE ST., DETROIT, MI 48214 WINDOW DETAILS

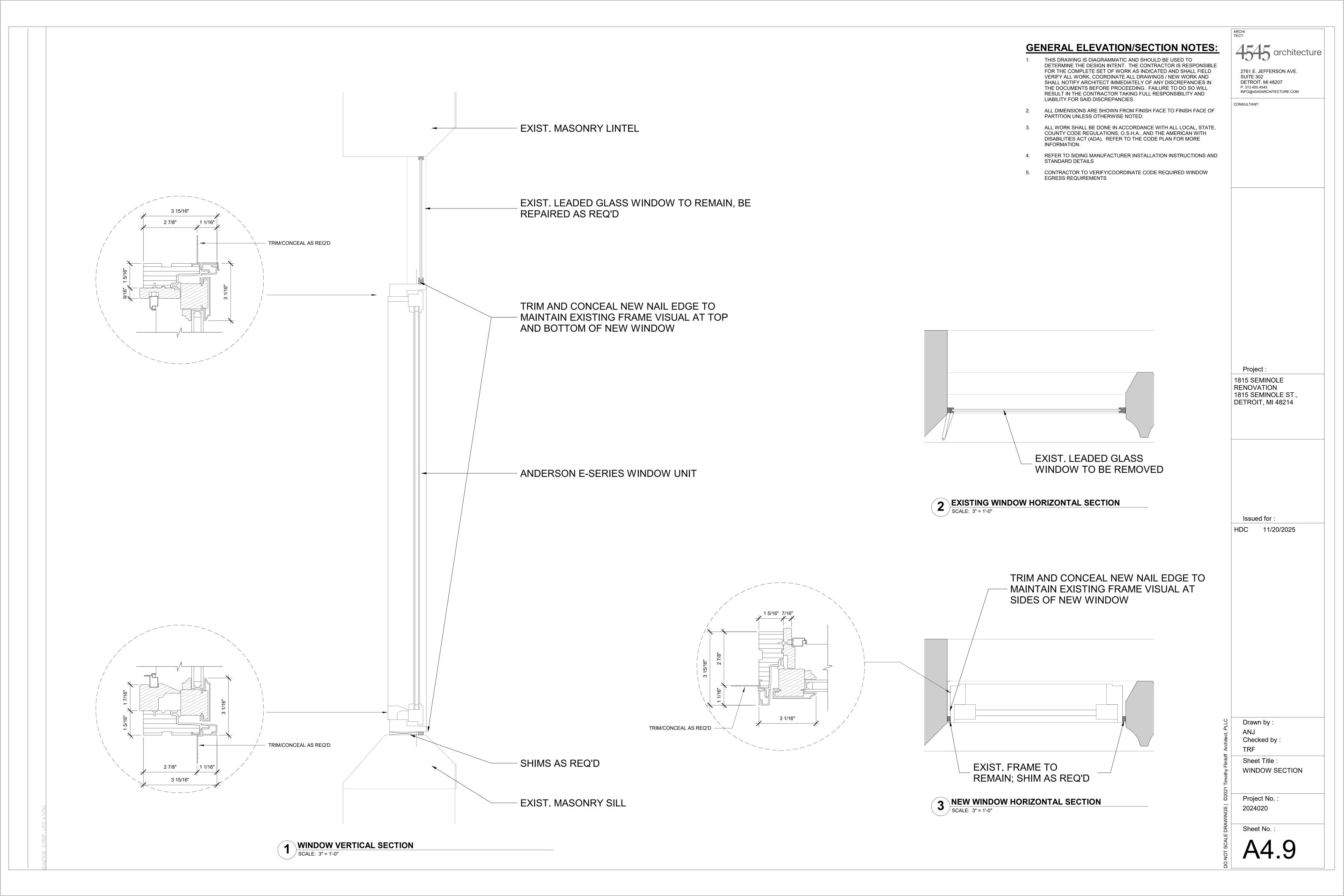








EXISTING EXTERIOR FRAME/CAULK CONDITIONS (TYP.)





# **GENERAL ELEVATION/SECTION NOTES:**

- 1. THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
- ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
- 3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION.
- 4. REFER TO SIDING MANUFACTURER INSTALLATION INSTRUCTIONS AND STANDARD DETAILS
- 5. CONTRACTOR TO VERIFY/COORDINATE CODE REQUIRED WINDOW EGRESS REQUIREMENTS

01-First Floor 0' - 5 7/8" 2761 E. JEFFERSON AVE.
SUITE 302
DETROIT, MI 48207
P. 313.450.4545
INFO@4545ARCHITECTURE.COM

CONSULTANT:

Project :

1815 SEMINOLE
RENOVATION
1815 SEMINOLE ST.,
DETROIT, MI 48214

Issued for :

HDC 11/20/2025

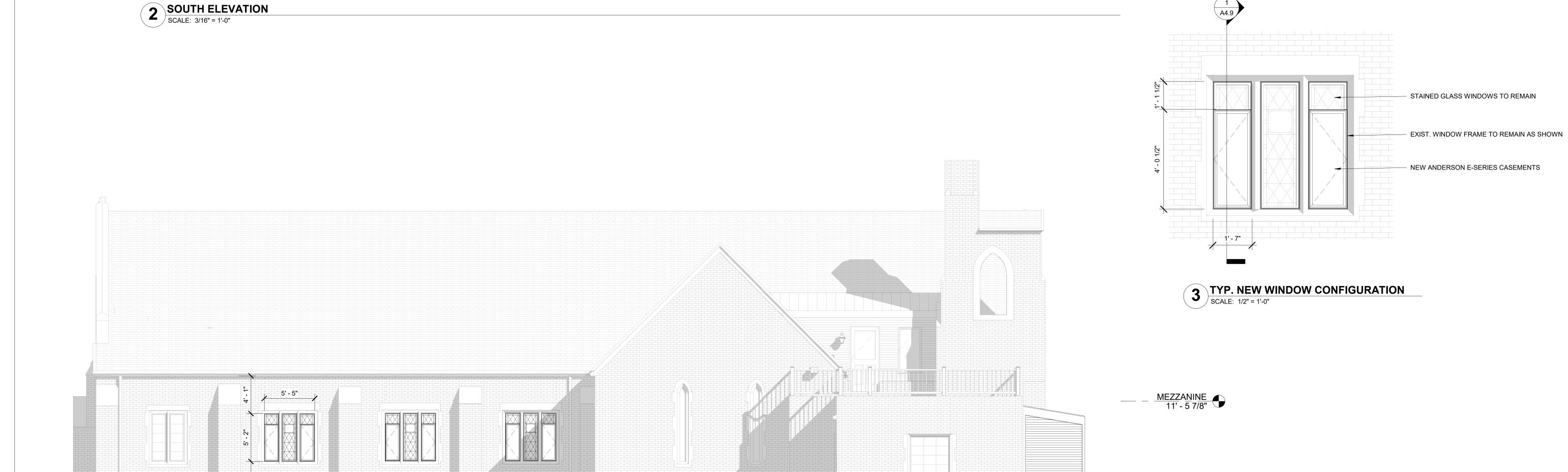
Drawn by :
ANJ
Checked by :
TRF

Sheet Title : EXTERIOR ELEVATIONS

Project No. : 2024020

Sheet No.:





Hugh Russell
Asbestos Building Inspector / Project Designer

Michigan Air Consultants 3985 Fort St Lincoln Park, MI 48146 hrussell@mac-enviro.com | 734-394-9253

11/20/2025

**Detroit Historical Commission** 

Re: Condition Assessment and Recommendation for Window Restoration + Replacement – 1815 Seminole

Dear Members of the Detroit Historical Commission,

I am writing in my capacity as an environmental consultant to provide a professional assessment of the existing windows at 1815 Seminole and to explain why they are beyond repair. Based on my site inspection and evaluation, meeting with window restoration experts, and testing, it is my recommendation that the operable windows labeled 1-6 on the provided plan be replaced with new. This recommendation is made due to the following critical conditions:

### 1. Presence of Hazardous Materials

The existing windows and associated components contain hazardous materials, including lead and asbestos-containing materials (See test results attached). The deterioration of these materials presents significant health and safety risks during repair, handling, and ongoing occupancy. Proper abatement would require extensive removal and disturbance, making repair infeasible and unsafe compared to full replacement.

### 2. Structural Failure and Missing Components

The property was abandoned for approximately 15 years without maintenance. During this period, exposure to moisture, temperature swings, and lack of protection allowed the steel window frames to rust beyond repair. The extent of corrosion and material degradation precludes any meaningful restoration or stabilization of the existing units. One of the window units is missing its steel frame entirely, eliminating any structural integrity and making restoration impossible. Other windows exhibit severe corrosion and metal loss, compromising their function and rendering them structurally unsalvageable. The original operating hardware and mechanisms are completely inoperable. Due to rust, metal fatigue, and long-term neglect, these components cannot be restored to safe or functional condition.

Given these conditions, repair efforts would not only be impractical for the operation sides but would also fail to meet modern environmental, structural, and safety standards. Replacement is the only viable option that ensures safety while maintaining the architectural character of the structure. The homeowner has remained steadfast in their commitment to keeping the original leaded glass where they are fixed in place.

Thank you for your consideration. Please feel free to contact me with any questions.

Sincerely, Hugh Russell

M.A.C Environmental



2105 Pless Drive Brighton, Michigan 48114 Phone (810)229-7575 Fax (810)229-8650 E-mail labs@brightonanalytical.com

May 16, 2025

Federal Environmental Ryan Hoedebeck

Subject: Mendy

1815 Seminole

Dear: Mr. Hoedebeck

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 05/12/2025 for the above mentioned project. NELAP/TNI Accredited Analysis and EGLE Drinking Water Certified Analysis will be identified in their respective reporting formats. Hard copies can be supplied at your request for a fee of \$20.00 per copy. Quality Control summaries can also be provided upon request.

The invoice for this project will be emailed separately. If you have any questions concerning the data or invoice, please don't hesitate to contact our office. We welcome your comments and suggestions to improve our quality systems. Please reference Brighton Analytical, L.L.C. Project ID 107199 when calling or emailing. We thank you for this opportunity to partner with you on this project and hope to work with you again in the future.

Sincerely, Brighton Analytical, L.L.C.







### **Brighton Analytical LLC**

2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail: labs@brightonanalytical.com

EGLE Certified #9404 NELAC Accredited #176507

Sample Date: 05/05/2025 Submit Date: 05/12/2025

To: Federal Environmental

Ryan Hoedebeck

Method

BA Report Number:

Report Date:

107199

Project Name:

Mendy

BA Sample ID:

CX07852

05/16/2025

Project Number: 1815 Seminole

Sample ID:

Glass #1

DL Reference Date **Parameters** Result Units Analyst **Total Metal Analysis** Total Lead 7200000 ug/Kg 10000 SW846 6020A MH 05/15/2025 Metal Soil (digestion) JG **Digested** 3050B 05/14/2025

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

No duplication of this report is allowed, except in its entirety.

Elevated metals dl due to sample matrix. Results based on wet weight due to sample matrix.

> Released by Date 5/16/2025

Analysis



### **Brighton Analytical LLC**

2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail: labs@brightonanalytical.com

EGLE Certified #9404 NELAC Accredited #176507

Sample Date: 05/05/2025 Submit Date: 05/12/2025

Report Date: 05/16/2025

To:

Federal Environmental Ryan Hoedebeck

BA Report Number:

107199

Project Name:

Mendy

BA Sample ID:

CX07853

Project Number: 1815 Seminole

Sample ID:

Lead Frame #2

Method Analysis DLReference Date **Parameters** Result Units Analyst **Total Metal Analysis** Total Lead 170000000 ug/Kg 1000000 SW846 6020A MH 05/15/2025 Metal Soil (digestion) JG **Digested** 3050B 05/14/2025

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

No duplication of this report is allowed, except in its entirety.

Elevated metals dl due to sample matrix. Results based on wet weight due to sample matrix.

Released by

Date

5/16/2025

	Brighton Analytical, L.L.C™	lytical, L.L.C	×	BA PRO	PROJECT	Analys	is Requ	Analysis Requested/Method	poų	PAGE: OF
	2105 Pless Drive Brighton, MI 48114	ss Drive MI 48114		ABBREVIATIONS FOR SAMPLE MATRIX	IONS FOR MATRIX					COMPANY
	Phone: 810-229-7575 Fax: 810-229-8 email:bai-brighton@sbcglobal.net	Fax: 810-229-8650 n@sbcglobal.net	A 1	S = Solid L = Liquid DW = Drinkina H.0	H.0					
COMPANY	Federal Enviro	Environmental		WW = Wastewater O = Oil P = Wipe	ater.		ASSESSMENT			Attn: Ryan Horde beck
PROJECT NAME (48 SPACES MAXIMUM)	Mendy			A = Air (Tedlar F = Filter T = Tube	Bag)					F 254 88 810 : PHONE:
PROJECT NUMBER (25 SPACES MAXIMUM)	1815 Seninole			GW = Groundwater SW = Surface Water M - Misc.	rater Mater					EMAIL: FEOR PRIVIEMENTER 6
Sample collected by	The Beallith	If RUSH Co.	Container Ty	Type & Qua	Quantity					For Laboratory Use Only: YQ\nCO.CO
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RUSH: 1 Business d RUSH: 2 Business d RUSH: 3 Business da	9 6 X	Sampling (PRES)	HDPE NAOH	MBER GLAS JARESERVI SLASS (PRE NO PRESEI	ILIZED BAC TALS FILTEI Field OR (L) OH Preservior (L) ab Pre	mple M				pH verified in login? yes □ no pA Headspace/bubbles in VOA'S? yes □ no □ n/a
Brackon (D#	Sample Description 35 Characters Limit	Date Time		AMBER C	TBM F) BM	23) PS				Sample containers and COC match? yes kno
) 7289 8	5/gss #1	5/C 2/00 X				メ				P.O. NUMBER:
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(6)										Send to LCHD? yes □ no □
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Special Instructions:		enegasopologicapidos de egasiógenes la centes dolor esposençenições								MCL Failure yes □ no □ Client Notified (date/time/initials):
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### METHODS REGULATED BY NELAC AND OR STATE OF MICHIGAN

EPA 120.1-1982

EPA 150.1-1982

EPA 160.2-1979

EPA 160.3-1979

EPA 1631E-2002

EPA 200.7-1994

EPA 200.8 REV 5.4-1994

EPA 245.1-1994

EPA 245.2-1974

EPA 300.0R2.1-1993

EPA 310.1-1978

EPA 335.1-1974

EPA 335.4-1993

EPA 350.1 REV.2-1993

EPA 351.2 REV.2-1993

EPA 365.2-1971

EPA 405.1-1974

EPA 410.4 REV.2-1993

EPA 415.1-1974

EPA 420.1-1978

EPA 524.4-2013

EPA 608.3-2016

EPA 615-1993

EPA 624-1984

EPA 624.1-2016

EPA 625-1984

EPA 625.1-2016

SM 2540C-1997

SM 2540D-1997

SM 4500 H+B-1996

SM 4500 PE-1997

SM 5210B-1997

SM 5310B-1996

SM 9223B-1997

SW846 6010B-1996

SW846 6020A-2007

SW846 7471-1994

SW846 8081B-2007

SW846 8082A-2000

SW846 8151A-1996

SW846 8260C-2006

SW846 8270D-2007

SW846 9040B-1994

# **ASBESTOS SURVEY REPORT**

### **LOCATION**

Vacant Church 1815 Seminole Street Detroit, MI



### **INSPECTION DATE**

April 18, 2025

# **Prepared For:**

Milton Roberts Mendy Cohen 418 N Main St, 2<sup>nd</sup> fl Royal Oak, MI 48067

# **Prepared By:**

Ryan Hoedebeck Inspector Federal Environmental Contracting, Inc.

# **Table of Contents**

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### **Executive Summary**

April 22, 2025

Milton Roberts Mendy Cohen 418 N Main St, 2nd fl Royal Oak, MI 48067

Survey on the house located at 1815 Seminole in Detroit, Michigan.

Dear Mendy,

Federal Environmental Contracting surveyed the church located at 1815 Seminole in Detroit, Michigan at the request of Mendy Cohen. All accessible areas were inspected. Samples of homogenous areas were collected to determine what materials could be classified as non-ACM.

The following materials were determined to be positive for asbestos.

- Window glazing- (40 windows)
- Pipe insulation- basement
- Exterior window caulk

Building owners, along with employees of potentially exposed employees, are assigned specific information conveying and retention duties by the Michigan Department of Labor and Economic Growth MDLEG and U.S. OSHA rules. These duties include the following:

- 1) Notification of the presence, location and quantity of ACM in their building Facilities for each of the following groups.
  - a) Prospective employers bidding on work in or adjacent to areas containing ACM.
  - b) Owner employees who will work in or adjacent to areas containing ACM.
  - c) other employees performing work in or adjacent to areas containing ACM.
  - d) Tenants who will occupy areas containing ACM.

Notification either shall be in writing or shall consist of a personal communication between the owner and the person whom notification must be given or their authorized representatives.

2) At the entrance to areas that contain ACM, post signs that identify the material, its location, and appropriate work practices which will ensure that ACM will not be disturbed.

Respectfully Submitted,

Ryan Hoedebeck/Inspector A57754

### **Purpose and Scope of Work**

NESHAP regulations require building owners to inspect facilities for the presence of asbestos. Federal Environmental Contracting was contracted by Mendy Cohen to conduct this inspection to determine the amount, location, and condition of all friable and non-friable asbestos containing materials (ACBM) located at 1815 Seminole St in Detroit, MI. All sampling, analysis, and assessment activities were conducted in accordance with the applicable sections of 40 CFR 763.

The EPA has determined that the following materials need not to be assumed as ACBM:

Wood

Glass

Fiberglass

• Foam Rubber Insulation

Steel

Non-Building Materials

Except for the items listed above, all materials are assumed to contain asbestos unless they are sampled and proven to be non-ACM in accordance with the procedures in 40CFR763.86-88.

### **Visual Inspection of Homogenous Areas**

In accordance with USEPA AHERA rules, homogenous areas of the building materials were inspected as specified above for friability and conditions of deterioration by

• Ryan Hoedebeck, Michigan Asbestos Building Inspector A57754

For each homogenous area, the inspector.

- Visually inspected the area to identify the locations of all suspected ACBM.
- Touched all suspected ACBM to determine whether it was friable.
- Identified all homogenous areas of friable suspected ACBM and all homogenous areas of non-friable suspected ACBM.
- Assumed that some or all the homogenous areas are ACM, and,
- For each homogenous area that was not assumed to be ACM, collected bulk samples and submitted for asbestos analysis.
- Assessed friable material in areas where samples are collected and friable material in areas that are assumed to be ACBM.

To assist the owner/employer in the proper management of ACM it is categorized in several different ways:

- Friable or non-friable
- TSI, Surfacing or Miscellaneous Materials; and
- Good, Damaged, or Significantly Damaged Condition.

The inspector recorded the following:

- An inspection report with the date of the inspection signed by each accredited person making the inspection, State of Accreditation, and if applicable, his or her accreditation number.
- An inventory of the locations of the homogenous areas where the samples are collected, exact location where each bulk sample is collected, dates that samples were collected, homogenous areas where friable suspected ACBM is assumed to be ACM, homogenous. areas where non-friable suspected ACBM is assumed to be ACM.
- A description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and if applicable, his or her accreditation number.
- A list of whether the homogenous areas identified are surfacing material, thermal system insulation, or miscellaneous material.
- Assessments made of friable material, the name and signature of each accredited inspector making the assessment, State of accreditation, and if applicable, his or her accreditation number.

### **Findings**

The following items tested positive for asbestos: Window glazing, pipe insulation, exterior window caulk.

### **Laboratory Information**

Apex Research of 7717 Kensington Court in Brighton, Michigan, has been contracted to provide analytical services for this project. All samples collected during this project were transported within rigid chain of custody procedures to protect sample integrity. Samples were analyzed for asbestos content by PLM, using the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" found at appendix E to subpart E of 40CFR76.

### **Summary**

The inspection has determined the presence and location of asbestos containing materials present at 1815 Seminole St in Detroit, Michigan. As a result of this presence of ACM, there are steps the owner and all on site employers must take to protect their employees and members of the public. All demolition scenarios require prior removal and proper disposal of materials containing asbestos prior to actual demolition activities performed that may disturb the matrix of the asbestos containing materials.

Federal Environmental Contracting can assist you in planning demolition activities that ensure that ACM is properly removed and disposed of in accordance with applicable Michigan rules and regulations.

The owner/operator of this facility also has responsibilities to inspect all other buildings on site for the presence, location, and amount of asbestos in accordance with 29CFR1910.0110 (k), 29CFR1926.1101 (k), and 40CFR61.145 (a).

### Disclaimer

All buildings contain building materials that are inaccessible except by destroying the structure.

Additionally, some asbestos containing materials (ACM) may not be visible until renovation or demolition begins. While Federal Environmental Contracting has exercised due diligence to discover all ACM existing within these structures, the owner and/or operator of this facility should be alert to the potential of undiscovered ACBM and ACM in the building and should take all necessary precautions to prevent exposure to asbestos because of demolition or renovation activities. The owner/operator retains the responsibility to properly handle all asbestos discovered during any maintenance, renovation, or demolition activity. The owner has OSHA mandated notification responsibilities for tenants, employees and actual potential employers that will be working in or near areas that contain asbestos.

Bulk Sample Analysis Federal Env. Contracting Milton Roberts 418 N Main St, 2<sup>nd</sup> fl Royal Oak, MI 48067 Sample analyzed: 4-21-25 1815 Seminole St Detroit, MI

# **Bulk Analysis Results**

Sample	Sample	Visual	Sample Contents	<b>Contains Asbestos</b>
Number	Identification	Description	(%)	(%)
1	Plaster finish coat entry ceiling	White	Other-100%	No
1a	Plater base coat entry ceiling	Grey	Hair-1% Other-99%	No
1b	Drywall rear bathroom ceiling	White	Cellulose-20% Other-80%	No
2	Plaster finish coat rear bathroom ceiling	White	Other-100%	No
2a	Plaster base coat rear bathroom ceiling	Grey	Hair-2% Other-98%	No
3	Plaster finish coat front bathroom ceiling	White	Other-100%	No
3a	Plaster base coat front bathroom ceiling	Grey	Hair-1% Other-99%	No
4	Linoleum front stairs	Brown	Cellulose-40% Other-60%	No
4a	Glue front stairs	Brown	Other-100%	No
5	Linoleum back stairs	Brown	Cellulose-40% Other-60%	No
5a	Glue back stairs	Brown	Other-100%	No
6	Roofing roof	Black	Cellulose-40% Other-60%	No

7	Roofing roof	Black	Cellulose-40% Other-60%	No
8	Window glazing SE-stained glass	Brown	Chrystotile-10% Other-90%	Yes Chrysotile-10%
9	Window glazing NW- stained glass	Brown	NOT ANALYZED (positive stop)	-
10	Brown adhesive 1 <sup>st</sup> floor cinderblock	Yellow	Other-100%	No
11	Brown adhesive basement cinderblock	Yellow	Other-100%	No
12	Pipe insulation basement in wall	Brown	Chrysotile-5% Cellulose-80% Other-15%	Yes Chrysotile-5%
13	Pipe insulation basement debris	Brown	NOT ANALYZED (positive stop)	-
14	Pipe insulation basement in wall	Brown	NOT ANALYZED (positive stop)	-
15	Exterior caulk SE windows	White	Chrysotile-5% Other-95%	Yes Chrysotile-5%
16	Exterior caulk NW windows	White	NOT ANALYZED (positive stop)	-

Samples were analyzed by an independent laboratory using the EPA 600 Method: Apex Research, Brighton, MI 48116

Ryan Hoedebeck/Inspector A57754

Bulk Sample Analysis Federal Env. Contracting Milton Roberts 418 N Main St, 2nd fl Royal Oak, MI 48067 Sample analyzed: 4-21-25 1815 Seminole St Detroit, MI

## **Summary of Positive Results**

8	Window glazing SE- stained glass	Brown	Chrystotile-10% Other-90%	Yes Chrysotile-10%
9	Window glazing NW- stained glass	Brown	NOT ANALYZED (positive stop)	-
12	Pipe insulation basement in wall	Brown	Chrysotile-5% Cellulose-80% Other-15%	Yes Chrysotile-5%
13	Pipe insulation basement debris	Brown	NOT ANALYZED (positive stop)	-
14	Pipe insulation basement in wall	Brown	NOT ANALYZED (positive stop)	-
15	Exterior caulk SE windows	White	Chrysotile-5% Other-95%	Yes Chrysotile-5%
16	Exterior caulk NW windows	White	NOT ANALYZED (positive stop)	-

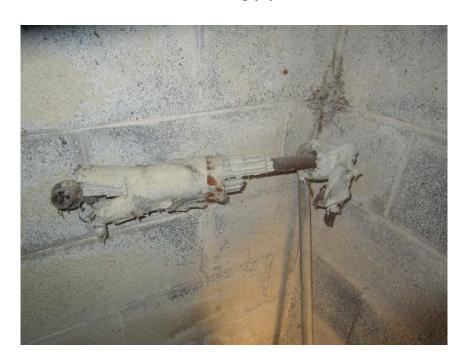
Samples were analyzed by an independent laboratory using the EPA 600 Method: Apex Research, Brighton, MI 48116

Ayar Hoedebeck/ Inspector A57754

# **PHOTOS**



Asbestos-containing pipe insulation.





Windows, including the stained glasss, have both caulk and glazing that tested positive for asbestos.



# Test Method, Polarized Light Microscopy (PLM)



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report To:ARI Report #25-117176Mr. Ryan HoedebeckDate Collected:04/18/25Federal EnvironmentalDate Received:04/21/25P.O. Box 808Date Analyzed:04/22/25

South Lyon, MI 48178 Date Reported: 04/22/25

Sample Information Asbestos Type/Percent Non-Asbestos Material

No Asbestos Observed

Lab ID #: 117176 - 01 Asbestos Present: **NO** Other - 100%

Cust. #: 1
Material: Plaster Finish Coat

Material: Plaster Finish Coat Location: Entry Ceiling

Appearance: white,nonfibrous,homogenous

Layer: 1 of 3

 Lab ID #:
 117176 - 01a
 Asbestos Present:
 NO
 Hair - 1%

 Cust. #:
 1
 No Asbestos Observed
 Other - 99%

Cust. #: 1 Material: Plaster Base G

Material: Plaster Base Coat Location: Entry Ceiling

Appearance: grey,fibrous,homogenous

Layer: 2 of 3

Lab ID #: 117176 - 01b Asbestos Present: **NO** Cellulose - 20% Cust. #: 1 No Asbestos Observed Other - 80%

Material: Drywall

Location: Rear Bathroom Ceiling Appearance: white, fibrous, homogenous

Layer: 3 of 3

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



# Test Method, Polarized Light Microscopy (PLM)



Project: Mendy Project #: 1815 Seminole St., Detroit, MI

Report To: ARI Report # 25-117176 Date Collected: 04/18/25 Mr. Ryan Hoedebeck Federal Environmental Date Received: 04/21/25 P.O. Box 808 Date Analyzed: 04/22/25 Date Reported: South Lyon, MI 48178 04/22/25

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 117176 - 02

Cust. #:

Material: Plaster Finish Coat Location: Rear Bathroom Ceiling

Appearance: white,nonfibrous,homogenous

Layer: of

Lab ID #: 117176 - 02a

Cust. #:

Material: Plaster Base Coat Location: Rear Bathroom Ceiling Appearance: grey,fibrous,homogenous

of Layer: 2

Lab ID #: 117176 - 03

Cust. #:

Material: Plaster Finish Coat

Appearance: white, nonfibrous, homogenous

For Layered Samples, each component will be analyzed and reported separately.

Layer: of

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

Location: Front Bathroom Ceiling

Hair - 2%

Other - 98%

Other - 100%

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



# Test Method, Polarized Light Microscopy (PLM)



Project: Mendy Project #: 1815 Seminole St., Detroit, MI

Report To: ARI Report # 25-117176 Date Collected: Mr. Ryan Hoedebeck 04/18/25 Federal Environmental Date Received: 04/21/25 P.O. Box 808 Date Analyzed: 04/22/25 South Lyon, MI 48178 Date Reported: 04/22/25

Sample Information Asbestos Type/Percent Non-Asbestos Material

Lab ID #: 117176 - 03a Asbestos Present: NO

Hair - 1% Cust. #: No Asbestos Observed Other - 99%

Material: Plaster Base Coat Location: Front Bathroom Ceiling

Layer: of

Asbestos Present: NO Lab ID #: 117176 - 04 Cellulose - 40% No Asbestos Observed Other - 60%

Cust. #: Material: Linoleum

Location: Front Stairs

Appearance: grey,fibrous,homogenous

Appearance: brown, fibrous, nonhomogenous

Layer: of

Lab ID #: 117176 - 04a Asbestos Present: NO Other - 100%

No Asbestos Observed Cust. #: Material: Glue

Appearance: brown, nonfibrous, homogenous

Layer: of

Location: Front Stairs

For Layered Samples, each component will be analyzed and reported separately.

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



# Test Method, Polarized Light Microscopy (PLM)



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report To:ARI Report #25-117176Mr. Ryan HoedebeckDate Collected:04/18/25Federal EnvironmentalDate Received:04/21/25P.O. Box 808Date Analyzed:04/22/25

South Lyon, MI 48178 Date Reported: 04/22/25

Sample Information Asbestos Type/Percent Non-Asbestos Material

Lab ID #: 117176 - 05 Asbestos Present: **NO** Cellulose - 40%

Cust. #: 5 No Asbestos Observed Other - 60% Material: Linoleum

Appearance: brown,fibrous,nonhomogenous

Layer: 1 of 2

Location: Back Stairs

Lab ID #: 117176 - 05a Asbestos Present: **NO** Other - 100%

Cust. #: 5 No Asbestos Observed Material: Glue

Appearance: brown,nonfibrous,homogenous

Layer: 2 of 2

Location: Back Stairs

Lab ID #: 117176 - 06 Asbestos Present: **NO** Cellulose - 40% Cust. #: 6 No Asbestos Observed Other - 60%

Material: Roofing

Location: Roof
Appearance: black,fibrous,nonhomogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



### Test Method, Polarized Light Microscopy (PLM)



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report To:ARI Report #25-117176Mr. Ryan HoedebeckDate Collected:04/18/25Federal EnvironmentalDate Received:04/21/25P.O. Box 808Date Analyzed:04/22/25South Lyon, MI 48178Date Reported:04/22/25

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 117176 - 07 Asbestos Present: **NO** Cellulose - 40% Cust. #: 7 No Asbestos Observed Other - 60%

Material: Roofing Location: Roof

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 117176 - 08 Asbestos Present: **YES** Other - 90%

Chrysotile - 10%

Cust. #: 8

Material: Window Glazing Location: SE Stained Glass

Appearance: brown,fibrous,homogenous

Layer: 1 of 1

Lab ID #: 117176 - 09 Asbestos Present:

Cust. #: 9

Material: Window Glazing

Location: NW Stained Glass NOT ANALYZED

Appearance:

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



### Test Method, Polarized Light Microscopy (PLM)



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report To:ARI Report #25-117176Mr. Ryan HoedebeckDate Collected:04/18/25Federal EnvironmentalDate Received:04/21/25P.O. Box 808Date Analyzed:04/22/25South Lyon, MI 48178Date Reported:04/22/25

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **YES** 

Chrysotile - 5%

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Cellulose - 80% Other - 15%

Lab ID #: 117176 - 10

Cust. #: 10

Material: Brown Adhesive

Location: 1st Floor Cinderblock

Appearance: yellow,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 117176 - 11

Cust. #: 11

Material: Brown Adhesive Location: Basement Cinderblock

Appearance: yellow,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 117176 - 12

Cust. #: 12

Material: Pipe Insulation Location: Basement - In Wall

Appearance: brown,fibrous,nonhomogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



### Test Method, Polarized Light Microscopy (PLM)



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report To:ARI Report #25-117176Mr. Ryan HoedebeckDate Collected:04/18/25Federal EnvironmentalDate Received:04/21/25P.O. Box 808Date Analyzed:04/22/25South Lyon, MI 48178Date Reported:04/22/25

Sample Information Asbestos Type/Percent Non-Asbestos Material

Asbestos Present:

NOT ANALYZED

Asbestos Present:

NOT ANALYZED

Chrysotile - 5%

Asbestos Present: **YES** 

Lab ID #: 117176 - 13

Cust. #: 13

Material: Pipe Insulation

Location: Basement - Debris

Appearance:

Layer: 1 of 1

Lab ID #: 117176 - 14

Cust. #: 14

Material: Pipe Insulation

Location: Basement - In Wall

Appearance:

Layer: 1 of 1

Lab ID #: 117176 - 15

Cust. #: 15

Material: Exterior Caulk Location: SE Windows

Appearance: white, fibrous, homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 95%

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



### Test Method, Polarized Light Microscopy (PLM)



25-117176

04/18/25

04/21/25

ARI Report #

Date Collected:

Date Received:

Project: Mendy Project #: 1815 Seminole St., Detroit, MI

P.O. Box 808 South Lyon, MI 48178		Date Analyzed: 04/22/25 Date Reported: 04/22/25
Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 117176 - 16 Cust. #: 16	Asbestos Present:	
Material: Exterior Caulk Location: NW Windows Appearance: Layer: 1 of 1	NOT ANALYZED	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

For Layered Samples, each component will be analyzed and reported separately.

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Liability limited to cost of analysis.



Report To:

Mr. Ryan Hoedebeck

Federal Environmental



### Certificate of Analysis - Metals in Paint

Method: EPA SW846-7420M



Project: Mendy
Project #: 1815 Seminole St., Detroit, MI

Report to:	ARL Report #: 25-L27455
Mr. Ryan Hoedebeck	Date Sampled: 04/18/25
Federal Environmental	Date Received: 04/21/25
P.O. Box 808	Date Analyzed: 04/21/25
South Lyon, MI 48178	Date Reported: 04/22/25

Laboratory ID:	Client ID:	Reporting Limit:	Lead:
L27455-01	17	0.01%	<b>Pb</b> - < 0.01%
	White Paint / Sactu	ary	
L27455-02	18	0.01%	<b>Pb</b> - 0.04%
	Cream Paint / N. C	orner Room	
L27455-03	19	0.01%	<b>Pb</b> - 0.01%
	Cream Paint / Loft		

Reporting Limit of 0.01% is based on minimum sample weight of 100mg per our SOP, and may vary based on smaller sample size. APEX Research is not responsible for sample collection activities, and results apply to samples as received. Methods have been slightly modified. Samples received in acceptable condition unless otherwise noted. This certificate of analysis relates only to the samples tested and to ensure the integrity of the results, may only be reproduced in full. Liability limited to cost of analysis. APEX Research, Inc. (Laboratory ID# 227441) is accredited by the AIHA Laboratory Accreditation Programs, LLC (AIHA LAP,LLC) in the Environmental Lead Laboratory Accreditation Program for Lead in Paint as documented by the Scope of Accreditation Certificate and associated Scope.

Robert T. Letarte Jr., Laboratory Director



877-665-3373

# Laboratory Report

### **Prepared Exclusively For:**

Advanced Air Quality Larry Voight PO Box 57 Novi, MI 48376 248-374-2200 larry@aaqservices.com





Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

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#### 8 Sample Identification Definitions

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#### 9 Glossary of Terms

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#### 10 References

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Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 1 - IMS Laboratory, LLC

IMS Laboratory, LLC operates a state-of-the-art environmental laboratory, specializing in full service microbial, asbestos and radon analyses. We maintain the highest levels of quality and personalized service in the industry. Our analytical staff includes only Certified Indoor Air Quality Professionals, Ph.D. Microbiologists, Mycologists, Microbiologists, and Biochemists. Our team's extensive experience in indoor air quality sampling techniques, microbial identification, and analytical interpretation allows us to offer our clients expert personalized service and has made IMS Laboratory an industry leader.

IMS Laboratory is accredited through the American Industrial Hygiene Association Laboratory Accreditation Programs (AIHA LAP) for nonviable fungal identification and through the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos. To maintain quality control and quality assurance, we use standardized procedures approved under strict AIHA LAP and NVLAP guidelines. Client data information is compiled and stored in a specially designed computer management system for secure, redundant data and the ability to comply with AIHA LAP and NVLAP quality system requirements. A portion of this quality system includes inter-analyst comparisons and statistical quality control using blind duplicate analyses and process blanks. Laboratory data is provided in compliance with AIHA LAP and NVLAP policy modules and ISO/IEC 17025:2017 guidelines.

This data is intended for use by professionals having the necessary knowledge of the testing methods to interpret them accurately.



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 2 - Description of Testing Methods

Air Samples - Spore Trap Sampling: Nonviable spore trap cassette sampling impacts nonviable particles directly into a spore trap cassette at a predetermined flow rate and time. After the sampling period, the cassette is analyzed at IMS Laboratory through direct microscopic examination by a qualified mycologist. Because the analysis does not include culturing the fungi, the results include both viable and non-viable spores. Spore trap samples identify particles, pollen and fungal elements. High particulates in the air can result in underestimation of spore concentrations. This collection methodology is biased toward larger spore sizes. Because some fungal spores cannot be distinguished by direct microscopic examination (e.g. *Penicillium* and *Aspergillus*), these organisms are grouped into larger categories. Examples include the Pen/Asp group, Basidiospores, and Ascospores. Results from this methodology are reported as spores per cubic meter.



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 3 - Laboratory Results

#### **Location: Rear Attic**

#### Sample # E221337 - 1

Medium Type: AllergencoD

Serial # 5873565

Exposure: 15.00 l/min. for 5.00 min. Total Volume: 75.00 liters Reporting Limit: 53 Spores/cu. m

NOTE: Background material interfered with analysis. Spore levels and types may be underestimates.

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	18	960	75.00%
Basidiospores	5	267	20.86%
Cladosporium	1	53	4.14%
Total Fungi	24	1,280	100.00%
- Other - Hyphal Fragment	1	53	100.00%

<b>Background Item</b>	Level
Dust / Debris	High
Hyphal Fragments	Very Low
Opaque Particles	Low

#### **Location: Basement**

#### Sample # E221337 - 2

Medium Type: AllergencoD

Serial # 5873554

Exposure: 15.00 l/min. for 5.00 min. Total Volume: 75.00 liters Reporting Limit: 53 Spores/cu. m

NOTE: Background material interfered with analysis. Spore levels and types may be underestimates.

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	344	18,300	98.85%
Cladosporium	3	160	0.86%
Stachybotrys	1	53	0.29%
Total Fungi	348	18,500	100.00%
- Other -			
Hyphal Fragment	1	53	100.00%

Background Item	Level
Dust / Debris	High
Hyphal Fragments	Very Low
Opaque Particles	Very Low

#### **Location: Sanctuary**

#### Sample # E221337 - 3

Medium Type: AllergencoD

Serial # 5873532

Exposure: 15.00 l/min. for 5.00 min.

Total Volume: 75.00 liters Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -	•		
Pen/Asp group	43	2,290	87.74%
Basidiospores	3	160	6.13%
Cladosporium	2	107	4.10%
Ascospores	1	53	2.03%
Total Fungi	49	2,610	100.00%

<sup>-</sup> Sample data continued on next page -



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

<b>Background Item</b>	Level
Dust / Debris	Very High
Opaque Particles	Low

#### **Location: Outside / Background**

#### Sample # E221337 - 4

Medium Type: AllergencoD

Serial # 5873525

Exposure: 15.00 l/min. for 5.00 min.

Total Volume: 75.00 liters

Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			•
Cladosporium	16	853	66.69%
Basidiospores	6	320	25.02%
Pen/Asp group	1	53	4.14%
Smuts/Periconia/Myxomycetes	1	53	4.14%
Total Fungi	24	1,280	100.00%
- Other -			
Pollen	12	640	92.35%
Hyphal Fragment	1	53	7.65%
Total Other	13	693	100.00%

<b>Background Item</b>	Level
Dust / Debris	Medium
Hyphal Fragments	Very Low
Opaque Particles	Very Low

#### **Analytic Methods and Formulas:**

Calculated results may include one more significant figure than is mathematically justified in order to accommodate the client's needs. IMS Laboratory Analytical Method: 2.2 (method for analyzing spore trap). Counting and identification performed at 600X magnification. Spores per cubic meter is determined by: Total Spore Count x 4000 / (sampling rate x sampling time).

Note that this report may use mold-specific units of measure, such as Spores/cu. m and CFU/cu. m, for Sample Identifications which are not mold. Examples include pollen, fabric and fiberglass fibers, insect particles, and ash. In this context, "CFU" and "Spore" refer to individual pieces of the identified material. For Background Items, the Levels are defined thus: "Very Low" is present on less than 5% of sample area; "Low" is present on 6%-25% of sample area; "Medium" is present on 26%-50% of sample area; "High" is present on 51%-75% of sample area; "Very High" is present on 76%-100% of sample area.

IMS Laboratory, LLC is accredited through the AIHA LAP and participates in Environmental Microbiology Proficiency Testing, EMPAT #172958. Data is provided in compliance with AIHA LAP policy modules and ISO/IEC 17025:2017 guidelines.



Kathum C. Langley 04/21/2025

Kathryn C. Langley, Laboratory Manager



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 4 - Spore Trap Comparison Chart

#### **SAMPLING LOCATIONS**

1: Rear Attic

2: Basement

3: Sanctuary

4: Outside / Background

### **Spores per Cubic Meter**

Mold Name \ Location #	1	2	3	4
Alternaria				
Arthrinium				
Ascospores			53	
Basidiospores	267		160	320
Bipolaris / Drechslera group				
Chaetomium				
Cladosporium	53	160	107	853
Curvularia				
Erysiphe/Oidium				
Fusarium				
Ganoderma				
Mitospores				
Pen/Asp group	960	18,300	2,290	53
Pithomyces				
Polythrincium				
Rust				
Smuts/Periconia/Myxomycetes				53
Stachybotrys		53		
Stemphylium				
Torula				
Unknown Fungi				
FUNGAL TOTAL	1,280	18,500	2,610	1,280
Pollen				640
Hyphal Fragment	53	53		53
Pollen				

Please refer to the Laboratory Results section for additional details.



Project Name: Mendy

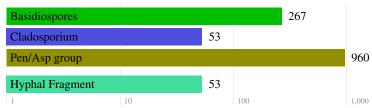
Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

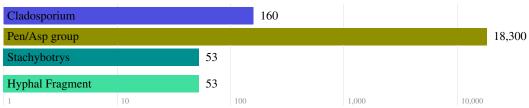
# 5 - Sample Comparison Graph

### **Spore Trap Samples - Spores per Cubic Meter**

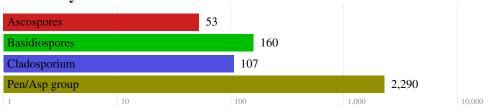
#### **Rear Attic**



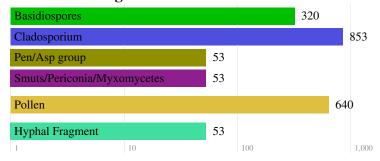
#### **Basement**



#### Sanctuary



#### **Outside / Background**





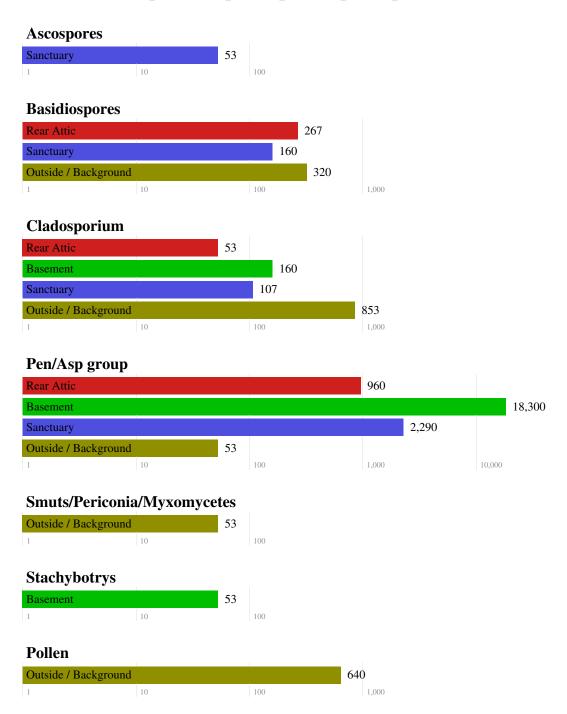
Project Name: Mendy

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# 6 - Background Comparison Graph

### Spore Trap Samples - Spores per Cubic Meter





Project Name: Mendy

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Report Date: 04/21/2025 Lab Number: E221337

### **Spore Trap Samples - Spores per Cubic Meter**

#### **Hyphal Fragment**





Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 7 - Understanding Laboratory Results

Laboratory findings must only be considered as part of an overall mold investigation. The interpretation of the findings must only be made by a qualified individual after reviewing all relevant data. Visual information and environmental conditions measured during the site assessment are crucial to any final interpretation of the results. A very good reference book which covers sampling and data interpretation has been published by The American Conference of Governmental and Industrial Hygienists and is entitled *Bioaerosols: Assessment and Control*, 1999.

Numerical guidelines cannot be used as the primary determinant as to whether a mold problem may exist. Concentrations of mold in the air will vary depending on weather conditions, building air flow, time of day and time of year. Comparisons between indoor and outdoor mold levels, types of mold found, visual information and environmental conditions are more important in interpreting results than reliance on specific numeric thresholds.

In *Indoor Air Quality in Office Buildings: A Technical Guide*, Health Canada, Revised 1995 (Pages 49-50), Health Canada set forth guidelines which can be used to better understand air testing results. The guidelines included these general principles. Significant numbers of certain pathogenic fungi should not be present in indoor air (e.g. *Aspergillus fumigatus*, *Histoplasma*, and *Cryptcoccus*). Bird or bat droppings in air intakes, ducts or rooms should be assumed to contain these pathogens. The persistent presence of significant numbers of toxigenic fungi (e.g. *Stachybotrys atra*, toxigenic *Aspergillus*, *Penicillium* and *Fusarium* species) indicate that further investigation and action should be taken. The confirmed presence of one or more fungal species occurring as a significant percentage of a sample in indoor air samples and not similarly present in concurrent outdoor samples is evidence of a fungal amplifier. The "normal" air mycoflora is qualitatively similar and quantitatively lower than that of outdoor air. The significant presence of fungi in humidifiers and diffuser ducts and on moldy ceiling tiles and other surfaces requires investigation and remedial action regardless of the airborne mold concentrations.

Generally, mold spores are present everywhere. As a general rule, "normal" air mycoflora is qualitatively similar and quantitatively lower than that of outdoor air. When the converse is true, it is likely that an indoor source of mold may exist. However, even this most basic rule may produce misleading results. Airborne mold spore levels vary widely due to factors such as weather conditions and activity levels. For example, in a "normal" home, indoor mold spore levels may be elevated above outdoor spore levels after vacuuming (when airborne indoor levels could be unusually high) or after a heavy snow (when outdoor levels could be unusually low).



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

Surface Sampling primarily identifies the types and relative proportions of mold on a surface. Viable surface sampling will identify living mold, while nonviable surface sampling will identify all mold (but cannot distinguish between living or dead mold). Surface sampling may confirm that a substance is mold or identify the types of mold present on the surface. Because mold is everywhere, there is a high probability that a surface sample from a "clean" surface will still identify mold on that surface.

There are currently no state or federal standards or guidelines regarding results of fungal samples. There are no levels, which are typical or permissible. There are no recommended exposure limits, no permissible exposure limits, no threshold limit values and no short term exposure limits.

These guidelines are not intended, nor should they be used, for health evaluation purposes or to evaluate the safety of an occupied space. A physician should be consulted regarding health and/or safety questions.



Project Name: Mendy

Project Number: 1815 Seminole St, Detroit

Report Date: 04/21/2025 Lab Number: E221337

# 8 - Sample Identification Definitions

#### **Ascospores**

A large group of spores that are very ubiquitous in nature. They are frequently found in the air after a rain. Most ascospores are plant pathogens; a small portion have been known to cause infection in humans but are identified separately.

Found in these Sample Locations: (3) Sanctuary

#### **Basidiospores**

A large group of spores that are very ubiquitous in nature. They are released from mushrooms, shelf fungi, puffballs, and a variety of other macro fungi. Basidiospores may be allergenic to those with seasonal allergies.

Found in these Sample Locations: (1) Rear Attic (3) Sanctuary (4) Outside / Background

#### **Cladosporium**

One of the most commonly identified outdoor fungi. It is often found indoors in numbers less than outdoors. Cladosporium is also found on decaying plants and food, straw, paint, and textiles. It is generally regarded to be allergenic and can be a cause of extrinsic asthma (immediate type hypersensitivity: Type I). Cladosporium has been reported in cases of skin lesions, keratitis, onychomycosis, sinusitis, and pulmonary infections.

Found in these Sample Locations: (1) Rear Attic (2) Basement (3) Sanctuary (4) Outside / Background

#### **Hyphal Fragment**

A tubular filament which is the vegetative, nutrient-absorbing portion of the fungus.

Found in these Sample Locations: (1) Rear Attic (2) Basement (4) Outside / Background

#### Pen/Asp group

The spores of the genera *Penicillium*, *Aspergillus*, *Talaromyces*, and *Trichoderma* are quite similar when viewed under a microscope and are grouped together under the heading Pen/Asp. *Penicillium* species are among the most common fungi found in indoor environments, particularly basements. Certain species may cause infections of the eye, external ear, respiratory system, and urinary tract. Some species of *Aspergillus* are parasitic on insects, plants, and animals including humans. All *Aspergillus* species are allergenic. Various species can cause extrinsic asthma, pulmonary emphysema, opportunistic infections of the ears and eyes, and severe pulmonary infections. *Talaromyces* species are widespread in nature; several have been



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reported to be involved in human infection. Some species of *Penicillium*, *Aspergillus*, and *Trichoderma* produce mycotoxins which may be associated with diseases in humans and animals. Several toxins are considered potential human carcinogens. The genus *Trichoderma* has been reported to cause infections in immunocompromised individuals, patients undergoing dialysis, and individuals with chronic kidney failure or chronic lung disease.

Found in these Sample Locations: (1) Rear Attic (2) Basement (3) Sanctuary (4) Outside / Background

#### **Pollen**

Pollen are coarse to fine particles/grains produced by various trees, weeds, and grasses. For individuals with seasonal allergies, pollen is often the causative agent.

Found in these Sample Locations: (4) Outside / Background

#### Smuts/Periconia/Myxomycetes

A group of plant pathogens with similar morphology. They are commonly found in the outdoor environment in soil and on wood, grasses, cereal crops, and flowering plants. Myxomycete spores are considered to cause Type 1 allergies (hay fever and asthma).

Found in these Sample Locations: (4) Outside / Background

#### **Stachybotrys**

A fungus naturally found on decaying plant and tree material. In the indoor environment, it grows on building material with a high cellulose and water content and a low nitrogen content (e.g. wet drywall). There are over 20 documented species of Stachybotrys, and at least two are reported to be toxigenic; if not speciated, the genus Stachybotrys should be assumed to be toxigenic. Specifically, it can produce the mycotoxin trichothecene (Satratoxin H), which is poisonous upon inhalation. Individuals with chronic exposure to the toxin produced by this fungus reported cold and flu symptoms, sore throats, diarrhea, headaches, fatigue, dermatitis, intermittent local hair loss, and general malaise. The toxin may suppress the immune system, affecting the lymphoid tissue and the bone marrow. It is also reported to be a liver and kidney carcinogen. Effects by absorption of the toxin in the human lung are known as pneumomycosis. Areas with relative humidity above 55% are subject to temperature fluctuations and are ideal for toxin production. Stachybotrys is rarely found in outdoor samples. It is usually difficult to find in indoor air samples unless it is physically disturbed.

Found in these Sample Locations: (2) Basement



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## 9 - Glossary of Terms

#### Agar ~

A gelatinous medium used for growing microorganisms (e.g. mold, yeast, and bacteria).

#### Colony ~

A group of hyphae (filaments) of the same type of microorganism growing together. A colony can be seen with the naked eye.

#### Colony Forming Unit (CFU) ~

A unit of measure describing the number of colonies present in or on a surface of a sample.

#### Exposure ~

The exposure refers to the quantity of a sample collected for laboratory analysis. With reference to air tests, the exposure is determined by multiplying the flow rate of the collection device by the length of time the device was operating.

#### Fungus (fungi, pl) ~

Fungi are a form of life (eukaryotic) which can range from unicellular to filamentous. Fungi lack chlorophyll and absorb nutrients. Fungi can reproduce by sexual, asexual, or both means. Mold is a type of fungi.

#### Hypha (hyphae, pl) / hyphal fragment ~

Hypha is the tubular filament which is the vegetative, nutrient absorbing portion of the fungus.

#### Isolate (verb, Microbiology) ~

To obtain or extract a microorganism from an environment or mixed culture.

#### Mold ~

A very large group of microscopic fungi. Most are filamentous organisms and produce spores that can be air-, water-, or insect-borne. Mold can be a common trigger for allergies. For people who are sensitive to mold, exposure can cause symptoms such as nasal stuffiness, eye irritation, or wheezing. People with serious allergies to mold may have more severe reactions. Severe reactions may occur among workers exposed to large amounts of molds in occupational settings. People with chronic illnesses, such as obstructive lung disease, may develop mold infections in their lungs. Mold growth in the home can be slowed by keeping humidity levels below 50% and ventilating showers and cooking areas.



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#### Mycotoxin ~

A substance produced by fungi which can be toxic to man and/or animals.

#### Opaque particle ~

Opaque particles are dark, non-biological, debris through which light will not pass.

#### Petri Dish ~

A dish containing agar for the culturing of microorganisms (e.g. fungi or bacteria).

#### Raw Count ~

The number of particles counted by an analyst during the examination of specimen.

#### Reporting Limit (RL) ~

The reporting limit (RL) is the limit of detection for an analyte that can be reliably reported by using a given analytical method. The RL is dependent on the time and volume of sampling.

#### Sample Medium ~

The sample medium refers to the type of test conducted (e.g. swab, spore trap air test, tape lift, etc.).

#### Serial Number ~

A manufacturer's specific identification code on a test medium (e.g. spore trap or tape lift).

#### Spore ~

A propagule/structure produced by fungi as a means of reproduction, survival, and dissemination. Spores can be single cellular or multicellular.

#### Spore Trap ~

A Spore trap is a collection device (or media) used to capture airborne spores and other airborne particulates. Spore traps are analyzed by microscopic means and do not distinguish between viable and non-viable cells.

#### Too Numerous To Count (TNTC) ~

TNTC is used to denote specimens in which a type of organism is present at an extremely high level or has grown together so that individual colonies cannot be distinguished.

#### Toxigenic fungi ~

Toxigenic fungi are fungi capable of producing toxic substances.



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### 10 - References

Centers for Disease Control and Prevention. *Mold.* www.cdc.gov/mold.

De Hoog, G. S., J. Guarro, J. Gene, & M. J. Figueras. *Atlas of Clinical Fungi 2nd*. Centraalbureau voor Schimmel cultures, 2000.

Ellis, M.B. Dematiaceous Hyphomyces. CABI Publishing; Cambridge, MA. 1971.

Ellis, M.B. More Dematiaceous Hyphomyces. CABI Publishing; Cambridge, MA. 2001.

Finegold, Sydney M. and Ellen Jo Baron. *Baily and Scott's Diagnostic Microbiology 7th edition*. C. V. Mosby Co.; St. Louis, MO 1986.

Helbling, A., G. Federica, and K.A. Brander. *Respiratory allergy to mushroom spores: not well recognized, but relevant.* Ann. Allergy, Asthma, and Immunology. 1999, Vol 83, no. 1, pp. 178-19.

Hurst, Christon J. et al. *Manual of Environmental Microbiology 2nd edition*. ASM Press; Washington, D.C. 2002.

Kendrick, Bryce. The Fifth Kingdom 2nd edition. Focus Texts, Newburyport, MA 1992.

Klich, Maren. *Identification of Common Aspergillus Species*. Centraalbureau v. Schimmelcultures, Utrecht, the Netherlands. 2002.

Koneman EW et al. *Color atlas & Textbook of Diagnostic Microbiology 4th edition.* JB Lippincott Co.; Philadelphia, PA 1992

Larone, Davise H. Medically Important Fungi a Guide to Identification 4th edition. ASM Press; Washington, D.C. 2002.

Lstiburek, Joseph & John Carmody. *Moisture Control Handbook*. John Wiley & Sons Inc. June 1996.

Macher, Janet et al. Bioaerosols: Assessment and Control. ACGIH; Cincinnati, OH.

Marta, E., MD and Kathleen S. Kern PhD. *Medical Mycology: A self Instructional Text 2nd edition*. FA Davis Co. 1997.



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May, Jeffery C. My House is Killing Me. The Johns Hopkins Univ. Press, Baltimore, MD 2001.

McCrone Research Institute. *Indoor Air Quality: Identification of Fungal Spores and House Dust.* McCrone Research Institute. Chicago, IL 2003.

Pitt, John L. *A Laboratory Guide to Common Penicillium Spores-3rd Edition*. Food Science Australia, CSIRO, Australia 2000.

Smith, E. Grant. Sampling and Identifying Allergenic Pollens and Molds An Illustrated Identification Manual for Air Samples. Blewstone Press, San Antonio, TX. 1990.

Sugar, Alan M. and Caron A. Lyman. *A Practical Guide to Medically Important Fungi and Diseases They Cause*. Lippincott Raven Publishers; Philadelphia, PA 1997.

Ulloa, Miguel and Richard T. Hanlin. *Illustrated Dictionary of Mycology*. Amer. Phytopathological Society; 2000.

Unites States Environmental Protection Agency. *Mold Remediation in Schools and Commercial Buildings*. United States Environmental Protection Agency. EPA 402-K-01-001. March 2001.

United States Environmental Protection Agency. Molds and Moisture. www.epa.gov/mold.



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# 11 - Warranties, Legal Disclaimers, and Limitations

IMS's scope of accreditation through the AIHA LAP is for the following FoT(s) / Method(s): Fungal Air - Culturable (SOP 2.4 Cultured Air Sample Reporting); Fungal Bulk - Culturable (SOP 2.5); Fungal Surface - Culturable (SOP 2.5); Fungal Air - Direct Examination (SOP 2.2 and 2.3); Fungal Bulk - Direct Examination (SOP 2.6); and Fungal Surface - Direct Examination (SOP 2.1).

The study and understanding of molds is a progressing science. Because different methods of sampling, collection and analysis exist within the indoor air quality industry, different inspectors or analysts may not always agree on the mold concentrations present in a given environment. Additionally, the airborne levels of mold change frequently and by large amounts due to many factors including activity levels, weather, air exchange rates (indoors), and disturbance of growth sites. It is possible for report interpretations and ranges of accuracy to vary since comprehensive, generally accepted industry standards do not currently exist for indoor air quality inspections of mold in residential indoor environments. This report is intended to provide an analysis based upon samples taken at the site at the time of the inspection. Mold levels can and do change rapidly, especially if home building materials or contents remain wet for more than 24 hours, or if they are wet frequently. This report is not intended to provide medical or healthcare advice. All allergy or medical-related questions and concerns, including health concerns relating to possible mold exposure, should be directed to a qualified physician. If this report indicates indoor mold levels that are higher than in typical indoor living spaces relative to the outdoor environment, or indicates any findings that are of concern to you, further evaluation by a trained mold professional or a Certified Industrial Hygienist (CIH) may be advisable.

Results pertain only to the samples tested as received by IMS. Unless otherwise noted in the body of this report the condition of samples upon receipt was acceptable. Blank samples are reported in the same manner as all other samples. The results are not corrected for contamination.

This report is generated by IMS at the request of, and for the exclusive use of, the IMS client named on this report. Project Name, Project Number, Sampling Date, Sampling Locations and Exposure times and rates have been provided to IMS by the client, and may affect the validity of the results. The analysis of the test samples is performed by IMS. This report applies only to the samples taken at the time, place and location referenced in the report and received by IMS, and to the property and weather conditions existing at that time only. Please be aware, however, that property conditions, inspection findings and laboratory results can and do change over time relative to the original sampling due to changing conditions, the normal fluctuation of airborne mold, and many other factors. IMS does not furnish, and has no responsibility for, the inspector or inspection service that performs the inspection or collects the test samples. It is the responsibility of the end-user of this report to select a properly trained professional to conduct the



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inspection and collect appropriate samples for analysis and interpretation. Neither IMS, nor its affiliates, subsidiaries, suppliers, employees, agents, contractors and attorneys ("IMS related party") are able to make and do not make any determinations as to the safety or health condition of a property in this report. The client and client's customer are solely responsible for the use of, and any determinations made from, this report, and no IMS related party shall have any liability with respect to decisions or recommendations made or actions taken by either the client or the client's customer based on the report.

Samples analyzed by IMS are disposed the day that they are analyzed. Storage may be available for a fee with written request at the time the samples are submitted for analysis.

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- End of Lab Report Number E221337 -