Cass County Land Bank Authority

Request for Proposal
General Contractor
Home Rehabilitation

(Demolition, Exterior Repairs and Replacement and Interior Rehabilitation to achieve Certificate of Occupancy)

At:

1219 Barron Lake Rd – Niles, MI

Request for Proposal Published:
March 13, 2026

Proposals Due:
March 26, 2026 @ 10am to Cass County Treasurer's Office
- 3 Hard Copies of each proposal to be included

Hard Copy, Sealed Bids shall be submitted to:
Hope Anderson, Cass County Treasurer
120 N Broadway St, Ste #113
Cassopolis, MI 49031

Section 1: General Information

Through The Barton Group, Cass County Land Bank is hereby soliciting proposals from qualified vendors for general contractors to perform rehabilitation work at the two-story/cape cod single family home located at 1219 Barron Lake Rd in Niles in Cass County, Michigan (Parcel #: 14-020-021-148-00). Significant exterior renovations are proposed to stabilize the property. The issue date of this proposal is March 13, 2026.

The requested scope involves work to rehabilitate, prevent further decay, improve, and achieve a certificate of occupancy. The scope of work is further defined in Section 3: Scope of Services and Section 5: Specifications. The ideal time for the work to be completed would be in less than 12 weeks of contract execution and an absolute deadline would be for the work to be completed within 16 weeks of contract execution.

The selected bidder may subcontract work but will be responsible for all work defined in this RFP. Subcontractors, including business name and the name of every owner/principal, should be identified with bid submission and will be approved in advance by Cass County. For each identified subcontractor also provide the same proof of insurance coverage as required of the Selected Bidder, and state license(s) required for their trade(s) as applicable.

Cass County Land Bank Authority will review the list of contractors and subcontractors (if applicable) debarred, suspended, or otherwise excluded from receiving federal funds and will not enter a contract with a vendor on this exclusion list.

This RFP includes the following attachments:

1. Site Photos & Floor Plan Sketch of Main Floor
2. Federal and State Provisions/Requirements
3. Sam.gov Wage Determinations
4. Structural Evaluation Report (Bridger Engineering and Design 12/3/2025)
5. Hazardous Materials Survey & Lead Assessment (12/26/2025)
6. Bidding Scope

This RFP includes the following appendices to be completed:

1. Insurance Documentation
2. Bidder's Checklist
3. Fee Schedule

Modifications to this RFP, if any, shall take the form of one or more written addenda. Such addenda shall be considered as part of the original RFP.

A contract agreement will be carried out between Cass County and the Selected Bidder post-bid award. The contract will contain language pertaining to compliance with federal requirements, including but not limited to document retention (through December 31, 2031), certified payroll, and the Contractor will be required to pay Davis Bacon/Prevailing Wages.

This project is subject to Davis-Bacon Act prevailing wage requirements. The Contractor and all Subcontractors shall comply with all applicable federal, state, and local laws and regulations governing the payment of prevailing wages. Specifically:

1. **Wage Rates**: All laborers and mechanics employed by the Contractor or any Subcontractor on the project shall be paid wages at rates not less than those prevailing for similar work in the locality, as determined by the U.S. Department of Labor. In addition, contractors must be required to pay wages at least once a week. Wage determinations include both direct wages and indirect benefits given to the employee. Attachment 3 includes current wage determinations.

2. **Certified Payroll**: The Contractor shall submit certified Davis-Bacon and Related Acts Weekly Certified Payroll Form WH-347 for itself and every subcontractor that supplies laborers during the week, and records to the Owner/Agency, detailing the name, classification, hours worked, and wages paid to each worker every week. These records must be submitted no later than the Tuesday after the week the work is completed.

3. **Record of Employee Interview**: U.S. Department of Housing and Urban Development Office of Davis-Bacon and Labor Standards Record of Employee Interview Form will be completed by the land bank or its representative. The interviewer must be someone unaffiliated with the contractors and on site regularly. Interviews must be sufficient in number to establish the degree of adequacy and accuracy of the records and the nature and extent of any violations. The interviews should also be generally representative of all classifications of employees on the project.

4. **Posting Requirements**: The Contractor shall post the applicable prevailing wage rates and fringe benefits in a conspicuous location at the job site, accessible to all workers.

5. **Right of Inspection**: The Contractor shall allow authorized representatives of the Owner/Agency or relevant labor authority to inspect payroll records and interview workers to ensure compliance.

6. **Withholding of Payments**: The Owner/Agency reserves the right to withhold up to 25% of any payment due to the Contractor until all required certified payrolls are submitted and verified.

7. **Penalties**: Failure to comply with prevailing wage requirements may result in penalties, including but not limited to contract termination, withholding of funds, and legal action.

Section 2: Background

1219 Barron Lake Rd is owned by the Cass County Land Bank Authority. Acquired in 2023, the 0.52-acre property includes a 630 SF garage and 1,256 SF house made up of 3 bedrooms and 1 bathroom.

With the priority of safety and creating a house to be occupied, Cass County Land Bank Authority will be completing rehabilitation activities in order to achieve a certificate of occupancy. All work is to be completed in compliance with all federal, state, and local laws, regulations, and ordinances. Significant interior and exterior renovations and remodeling will occur with new mechanicals, electrical and plumbing as well as durable finishes to include paint, flooring, appliances, etc.

Section 3: General Requirements

The successful General Contractor to provide all construction services to execute all construction including, but not limited to equipment, manpower, tooling, and materials for the complete rehabilitating single family homes.

General Contractors Responsibilities including but not limited to:

- All Insurance and documentation
- Obtain all permitting requirements and fees.
- All Warranties
- All Commissioning
- All Site-Specific Safety Plans (Safety Policies), OSHA/MIOSHA regulations.
- Providing all contractors-subcontractor information (rosters, makeup of company, company credentials, all cost values, scopes of work executed in the past 3-5 years showing performance- project lists, photos, display of quality of work, a minimum of 3 contacts-references) at contractor interview process.
- All daily/weekly cleanup to not affect the property, site, building and contractors safety and performance.
- All quality control and approval by WCLB or their designees.
- All means and methods
- All submittals and approvals
- Value engineering
- Constructability solutions
- All temporary protection and boarding for construction access to building and secured door system
- All temporary facilities
- Secure fencing, signage, and access controls for all properties under construction.
- All pre-punch lists, punch lists, closeout documentation (including commissioning)
- Scheduling
- A detailed baseline construction schedule within 14 days of Notice to Proceed, updated bi-weekly.
- Schedule must clearly show sequencing across all properties to ensure completion by July 30, 2026.
- Federal/State Compliance
- Explicit compliance with Davis-Bacon prevailing wage, Section 3, Buy American, and lead-safe work practices.
- Submission of certified payrolls weekly, subject to audit.
- Require contractors to demonstrate a system for tracking workforce and supplier diversity goals.
- Quality assurance
- Require photo documentation of key construction milestones (demo, rough-in, final)
- Coordinating with Project Manager on all utility reconnections (electric, gas, water) with the relevant agencies to ensure active service prior to commencement of major interior construction. All utilities must be permanently reconnected and operational prior to rough-in inspections, final inspections, and issuance of Certificates of Occupancy.
- Closeout & Turnover. In addition to punch lists, require O&M manuals, warranties, and subcontractor contact sheets at turnover.
- Provide Certificate of Occupancy and pass all final inspections

Safety, Security, and Maintenance of Project Sites. Electricity is available on-site, but there is no water currently functioning nor gas/HVAC. The Selected Bidder shall be responsible for conducting all work in a manner that is protective of human health and the environment. The vendor is responsible for determining and providing its

workers with adequate personal protective equipment (PPE), such as but not necessarily limited to respirators and protective clothing.

The Selected Bidder's operations shall not interfere with street traffic and shall be conducted to permit access to emergency vehicles and local right-of-way access to residences and/or businesses. No restroom facilities are available on site. The Selected Bidder is responsible for determining access to restroom facilities or providing temporary/portable restroom facilities for its workers.

The Selected Bidder shall assume full responsibility for loss or damage to the sites during the entire work period resulting from conditions and all other causes whatsoever due to the acts of neglect by the Contractor or any hired Subcontractors.

The vendor shall notify the Cass County Land Bank Authority immediately of any irregularities or changes in the scope of the work.

Bonding: Performance/payment bonds will be required for this portion of the project if the contract exceeds $50,000. Before any contract, exceeding $50,000.00 for the construction, alteration, or repair of any public building or public work or improvement of the state or a county, city, village, township, school district, public educational institution, other political subdivision, public authority, or public agency hereinafter referred to as the "governmental unit" is awarded, the proposed contractor, hereinafter referred to as the "principal contractor" shall furnish at his or her own cost to the governmental unit a performance bond and a payment bond for a total of 100% of the base contract price which shall become binding upon the award of the contract to the principal contractor.

Section 5: Specifications

This RFP identifies the requirements that are considered the minimum by Cass County Land Bank Authority. Specific details described within this RFP notwithstanding, it will be the obligation of the selected vendor to adhere to accepted industry standard methods and practices in completing work and to comply with such local and state laws and regulations as are applicable to this work.

Bidder Submittals. The vendor shall submit with their bid copies of all Michigan accreditation cards as issued by the Michigan Department of Labor and Economic Opportunity, for any contractor or subcontractor completing work. A proposed completion schedule for all requested services should also be submitted as part of the bid package. Insurance submittals are also required and discussed in Appendix A.

Section 6: Terms and Conditions

The RFP is not an offer of contract. Receipt of a proposal commits neither Cass County Land Bank Authority to award a contract to any vendor, even if all requirements stated in this proposal are met, nor limits the Cass County Land Bank Authority's right to negotiate in its best interest.

Cass County Land Bank Authority reserves the right to contract a vendor for reasons other than the lowest price. Evaluation of bids may include factors such as price, qualifications, experience, and scheduling.

Expenses incurred in the preparation of proposals in response to this RFP are the bidder's responsibility. Expense plus percent or cost-plus percent is not allowable.

No work performed by the Selected Bidder that is out of the scope of this RFP and/or as defined by the vendor's proposal will be reimbursed unless specifically authorized by the Cass County Land Bank Authority in writing.

The Selected Bidder, subcontractors, and their employees shall be considered independent contractors and shall not be deemed employees of the Cass County Land Bank Authority for any reason.

All proposals are subject to the Michigan Freedom of Information Act. Once the bids are opened, the information contained therein becomes freely accessible to the public.

All required documentation shall be received prior to payment to the Selected Bidder. Payment is anticipated to be NET 45 terms after receipt of the vendor invoice and all required supporting documentation.

See Appendix A for insurance requirements. Subcontractors will be required to maintain the same level of insurance. Cass County Land Bank Authority will secure builder’s risk insurance for the duration of the rehab project.

Section 7: Site Inspection Prior to Bid and Proposal Requirements

Site access to the premises can be arranged for investigation by Amelia Barker-King at 269-823-3572 or amelia@bartongroupllc.com.

It is Cass County Land Bank Authority's understanding that sufficient information is included within this RFP to inform bidding decisions, and a question-and-answer period has been included within the bidding process. Therefore, any misunderstanding of the project scope or level of effort required to complete the requested scope of work will not release the Selected Bidder from any responsibility outlined within this RFP. Change Orders will only be considered for the scope of work clearly outside the scope of this RFP.

The following shall be the minimum contents of the proposal: the completed Bid Form, identification of any subcontractors expected to be retained for the project, a copy of all applicable licenses/accreditations, proof of bid bond, and proof of insurance or a letter from the vendor's insurance company indicating insurance can be obtained in accordance with the specific terms identified in Appendix A.

Questions regarding this RFP shall be submitted by email by March 17, 2026, and directed to Amelia Barker-King listed below:

Amelia Barker-King
The Barton Group
Amelia@bartongroupllc.com

Responses to questions will be emailed to all interested bidders as well as available on builder's exchange and the county website on March 19, 2026, by the end of day.

The Bid Form shall be submitted by email with the following subject: "Barron Rd Rehabilitation." To be considered, 3 hard copy, sealed proposals must be received by Cass County Treasurer's Office by March 26, 2026, at 10am.

Bids will be opened by the County Treasurer and the Barton Group immediately following the submission deadline on March 26 2026, at 10:10am in the Board of Commissioner's Room.

Bids will be considered by members of Cass County Land Bank Authority and the Barton Group. It is anticipated, but not required, that a bid decision will be made by March 27, 2026.

Bids submitted may not be withdrawn or modified for 60 days following the date on which they are opened by the County Treasurer unless requested by Cass County Land Bank Authority or its representative.

Section 8: Bid Form - Rehabilitation for 1219 Barron Lake Rd Niles, MI

The undersigned hereby declares that the instructions and specifications, including all appendices, have been carefully examined and that the work for rehabilitation and remodel for 1219 Barron Lake Rd Niles, MI, will be done for the prices set forth in this bid. It is understood and agreed that all bid prices shall remain in effect for at least sixty (60) days from the date of the bid opening to allow for the award of the bid and that if chosen the bid price remains firm. The undersigned bidder further agrees and understands that Cass County reserves the right to reject any and/or all bids and the right to waive irregularities in bidding if it determines such action to be in the best interest of Cass County.

Bidding Company	
Address/City/State/Zip	
Phone and E-mail	
Authorized Representative/Title	
Signature	
Date	

	Cost to complete the general requirements and scope of work (attach alternates and additional pricing)
1219 Barron Lake Rd - House	$
Performance & Payment Bond	$
TOTAL BID	$
Proposed Completion Schedule (may be attached)	
Fee Schedule (attached)	

Please check the following:

□ I acknowledge that the work for Rehabilitation will be furnished within a maximum of 16 weeks from executing a contract.

Additional Questions required to complete the Bid Form. Information to be provided in a supplemental document.

1. How is your company organized (corporation, partnership, etc.) and how long have you been in business? List the name and contact information of the owner, president, managing partner, or CEO.

2. Please provide the name and resume of the Project Manager you are assigning to this contract. This Project Manager will be the main contact for the county and will oversee contract compliance, timeliness, and work quality.

3. Attach any professional licenses/certifications of the company or employees assigned to this contract as applicable to this project.

4. Attach a list of proposed subcontractors. List of subcontractors (company name, address, phone, email, and all owner/principal name(s)) and the tasks for which they will be used. The CCLBA will determine whether each proposed subcontractor is eligible to do business on a federally funded contract and will inform the contractor if any are ineligible.

5. Has your company had a similar contract terminated for cause within the last three years? If yes, please explain.

6. Has your company received any violations in the last five years? If yes, please list and explain how the violations were resolved.

7. Please provide the names, phone numbers, and email addresses of at least three customers for whom you have completed similar construction services within the last five years. If possible, these customers should be government or public entities.

I hereby state that I have the authority to submit this Proposal on behalf of the undersigned. I hereby state that I have not communicated with, nor accepted anything of value from, any official or employee of Cass county regarding this Request for Proposals.

This Bid is Presented By:

Company Name	Authorized By (Printed Name/Title)
Authorized Signature	Date

Section 9: Non-Iran Business Certification

Pursuant to Michigan law (Iran Economic Sanctions Act, Michigan PA 517 of 2012), before accepting any bid or proposal or entering into any contract for goods and services with any prospective vendor, the County must obtain certification from the vendor that it is not an "Iran-Linked Business."

By signing below, I certify and agree on behalf of the company submitting this form and myself the following: (1) that I am duly authorized to legally bind the company submitting this proposal; (2) that the company submitting this proposal is not an "Iran Linked Business," as that term is defined in Section 2(E) of the Iran Economic Sanctions Act, Michigan PA 517 of 2012; and (3) that I and the company submitting this proposal will immediately comply with any further certifications or information submissions requested by the county in this regard.

Company Name	Authorized By (Printed Name/Title)
Authorized Signature	Date

Fee Schedule - 1219 Barron Lake Rd

Activity	Cost	Notes
Permits & General Conditions		
Demolition		
Foundation & Tuck-pointing		
Roof		
Exterior (siding, gutters, stairs, paint)		
Carpentry & Interior Doors		
Cabinets & Countertops		
Flooring		
Doors & Windows		
Drywall/Paint		
HVAC		
Electrical		
Plumbing		
Landscape (moderate)		
Other:		
Other:		
Other:		
Total		

Other Considerations:

APPENDIX A — Insurance Requirements

The Selected Bidder, and all their subcontractors, shall not commence work under this contract until they have obtained the insurance required under this attachment. All coverage shall be with insurance companies licensed and admitted doing business in the State of Michigan. All coverage shall be with insurance carriers acceptable to Cass County Land Bank Authority. If the term of any insurance expires during the project, the renewal certificate of insurance must be provided immediately.

Workers' Compensation Insurance: The Vendor shall procure and maintain during the life of this contract Workers' Compensation Insurance, including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

Commercial General Liability Insurance: The Vendor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than $1,000,000 per occurrence and aggregate combined single limit for Personal Injury, Bodily Injury, and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included (E) Deletion of all Explosion, Collapse, and Underground (XCU) Exclusions, if applicable.

Motor Vehicle Liability: The Vendor shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including Michigan No-Fault Coverage, with limits of liability not less than $1,000,000 per occurrence combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

Builder's Risk: The Cass County Land Bank will secure Builder's Risk insurance.

Additional Insured: Commercial General Liability, as described above, shall include an endorsement stating that the following shall be Additional Insureds: Cass County, all elected and appointed officials, all employees and volunteers, all boards, commissions, and/or authorities and board members, including employees and volunteers thereof; The Barton Group and Fishbeck.

Cancellation Notice: Workers' Compensation Insurance, Commercial General Liability Insurance, and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "It is understood and agreed that Thirty (30) days Advance Written Notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be sent to: Amelia@bartongroupllc.com

APPENDIX B — Bidder's Checklist

	Checklist Items
	1. Completely reviewed this Invitation to Bid document and understand all requirements. You must return the complete Bid Form, Fee Schedule and required attachments.
	2. Calendar check — bid must be submitted by March 26, 2026, at 10 AM.
	4. Completed required non-Iran linked business certification form (pg. 10) and returned with Bid Packet.
	5. Required attachment — proof of insurance or proof of insurability from insurance agent

Attachment 1 – Required Federal and State Provisions

On March 11, 2021, the Coronavirus State and Local Fiscal Recovery Funds ("SLFRF") were established, as part of the American Rescue Plan Act ("ARP"), to support the response to a recovery from the COVID-19 pandemic. Pursuant to the SLFRF, ARP funding was directed to the State of Michigan (the "State"), which appropriated a portion to the SLBA for purposes of creating a Program to address the impacts of COVID-19. The State of Michigan (by 2023 P.A. 1) appropriated a portion of this funding to the State Land Bank Authority's ("SLBA") Blight Elimination Program for this purpose ("Program Funds"). The CCLBA has received grant funding from the SLBA's Blight Elimination Program to fund activities which are the subject matter of the Agreement to which this Exhibit pertains. As a recipient of Program Funds, the CCLBA is obligated to ensure the use of these federal funds complies with SLFRF. Pursuant to this obligation, this Agreement and Contractor are therefore subject to the following additional Federal and State Requirements:

A. **RECORDKEEPING REQUIREMENTS**. Generally, all contractors and subcontractors must maintain records and financial documents related to this contract until at least December 31, 2031. U.S. Treasury may request the transfer of records of long-term value at the end of such period. Wherever practicable, such records should be collected, transmitted, and stored in open and machine-readable formats. See generally, 2 CFR 200.334 through 200.338.

All contractors and subcontractors must agree to provide or make available such records to Treasury upon request, and to the Government Accountability Office (GAO), Treasury's Office of Inspector General (OIG), and their authorized representative in order to conduct audits or other investigations.

B. **UNIFORM GUIDANCE**. Under the Final Rule issued by the U.S. Department of the Treasury (Treasury) referenced at https://home.treasury.gov/system/files/136/SLFRF-Final-Rule-FAQ.pdf, this contract is subject to the requirements set forth in the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the "Uniform Guidance") at 2 CFR 200.317 through 200.327. All payments requested under this program should be accounted for with supporting documentation. All contractors and subcontractors should maintain documentation evidence that the Program Funds were expended in accordance with federal, state, and local regulations.

C. **TERMINATION/RECOVERY OF PROGRAM FUNDS.** Treasury requires any Program Funds received pursuant to this Agreement, and any attachments that are expended in a manner that fails to comply with SLFRF and all other applicable laws, to be returned to Treasury. The State reserves the right to monitor the Subrecipient and their contractors and subcontractors and take such corrective action for noncompliance as it deems necessary and appropriate, including but not limited to, termination of the Grant Agreement and return of Program Funds previously provided thereunder.

D. **TERMINATION FOR CAUSE.** This Agreement may be terminated by the CCLBA, for among other things, as follows:

A. Upon 10 days' written notice to the Contractor:
    a. If the Contractor fails to comply with any of the material terms and conditions of the Agreement;
    b. If the Contractor knowingly and willingly presents false information to the CCLBA for the purpose of obtaining this Agreement or any payment under this Agreement;
    c. If the CCLBA finds that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities, favors, or gifts of monetary value to any official, employee, or agent of the CCLBA in an attempt to secure a subcontract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Agreement;
    d. During the 10-day written notice period, the CCLBA shall also withhold payment for any findings under subparagraphs i-iii, above;
    e. If the Contractor or any contractor, subcontractor, manufacturer, or supplier of Contractor appears in the register of persons engaging in unfair labor practices that are compiled by the Michigan Department of Licensing and Regulatory Affairs (LARA) or its successor, or
    f. Fails to cure a breach within the time period specified in a notice of breach provided by the CCLBA.

B. Immediately and without further liability to the CCLBA if the Contractor, or any agent of the Contractor, or any agent of any contractor or subcontractor is:
   a. Convicted of a criminal offense incident to the application for or performance of a State, public, or private contract or subcontract;
   b. Convicted of a criminal offense, including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees;
   c. Convicted under State or federal antitrust statutes;
   d. Convicted of any other criminal offense that, in the sole discretion of the CCLBA, reflects on the Contractor's business integrity; or
   e. Added to the federal or state Suspension and Debarment list.

C. If the Agreement is terminated for cause, or if the CCLBA is required to repay to the state or federal government all or a portion of the Blight Elimination Grant Funding utilized pursuant to this Agreement because of Contractor's failure to comply with all of this Agreement's terms and conditions (including any and all federal requirements), then the CCLBA reserves the right to require the Contractor to repay all or a portion of the funds paid to it under this Agreement.

D. The Contractor must pay all reasonable costs incurred by the CCLBA in terminating this Agreement for cause, including administrative costs, attorneys' fees, court costs, costs to complete the work specified in the Scope of Work, and any additional costs the CCLBA incurs.

E. If the CCLBA terminates this Agreement for cause and it is determined, for any reason, that the Contractor was not in breach of the Agreement, the termination will be deemed to have been a termination for convenience as provided in this Agreement, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in that Section.

E. **TERMINATION FOR CONVENIENCE**. The CCLBA may fully or partially terminate this Agreement for its convenience, for any reason or no reason, if the CCLBA determines that a termination is in the CCLBA's best interest. Reasons for the termination are within the sole discretion of the CCLBA and may include: (a) the CCLBA no longer needs the activities or deliverables specified in this Agreement; (b) a relocation of office, program changes, or changes in laws, rules, or regulations make the deliverable(s) no longer practical or feasible for the CCLBA; (c) unacceptable prices for Agreement changes; or (d) falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the CCLBA. The CCLBA may terminate this Agreement for its convenience by giving the Contractor notice at least thirty (30) days before the date of termination. If the CCLBA chooses to terminate this Agreement in part, any charges payable to the Contractor must be equitably adjusted to reflect those deliverable(s) that are terminated.

F. **DAVIS–BACON ACT**, as amended (40 U.S.C. 3141–3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non–Federal entities must include a provision for compliance with the Davis–Bacon Act (40 U.S.C. 3141–3144, and 3146–3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the U.S. Secretary of Labor.

G. **EQUAL EMPLOYMENT OPPORTUNITY**. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60–1.3 must include the equal opportunity clause provided under 41 CFR Part 60–1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part 1964–1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

H. **COPELAND "ANTI–KICKBACK" ACT** (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or Subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work to give up any part of the compensation to which he or she is otherwise entitled. The non–Federal entity must report all suspected or reported violations to the Federal awarding agency.

I. **DEBARMENT AND SUSPENSION** (Executive Orders 12549 and 12689). A contract or grant award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. All contractors and subcontractors must be vetted for debarment. If debarment action has been taken against the contractor, the contract shall be terminated. If debarment action has been taken against any subcontractor, the contractor shall provide an alternative subcontractor within 10 days of notification. The debarred subcontractor may not work on the project.

J. **DOMESTIC PREFERENCES FOR PROCUREMENTS** (2 CFR 200.322).

a. As appropriate and to the extent consistent with law, the non–Federal entity should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards, including all contracts and purchase orders for work or products under this award.

b. For purposes of this section:

(i) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(ii) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

K. **CONFLICT OF INTEREST** (2 CFR 200.318 and 24 CFR 570.611)

The general rule is that no persons who exercise or have exercised any functions or responsibilities with respect to activities assisted, or who are in a position to participate in a decision making process or gain inside information with regard to such activities, may obtain a financial interest or benefit from an assisted activity, or have a financial interest in any contract, subcontract, or agreement with respect to an assisted activity, or with respect to the proceeds of the assisted activity, either for themselves or those with whom they have business or immediate family ties, during their tenure or for one year thereafter.

L. **CONTRACT WORK HOURS AND SAFETY STANDARDS ACT** (40 U.S.C. 3701–3708). Where applicable, all contracts awarded in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Contract Work Hours and Safety Standards Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

M. **BYRD ANTI-LOBBYING AMENDMENT** (31 U.S.C. 1352). Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non–Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non–Federal award.

N. **CLEAN AIR ACT** (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387) as amended. Contracts, grant agreements, and subgrants of amounts in excess of $150,000 must agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

O. **LEAD RENOVATION, REPAIR AND PAINTING PROGRAM.** Prohibition of Use of Lead-Based Paint. The construction or rehabilitation of residential structures is subject to the HUD Lead-Based Paint regulations promulgated at 24 CFR Part 35, 24 CFR 570.608, and 24 CFR Section 745, Subpart E, as applicable. The Contractor and his/her subcontractors shall comply with the provisions for the notification and elimination of lead-based paint hazards of said regulations.

P. **PROCUREMENT OF RECOVERED MATERIALS (2 CFR 200.323).** A non–Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Attachment 2 – Pictures







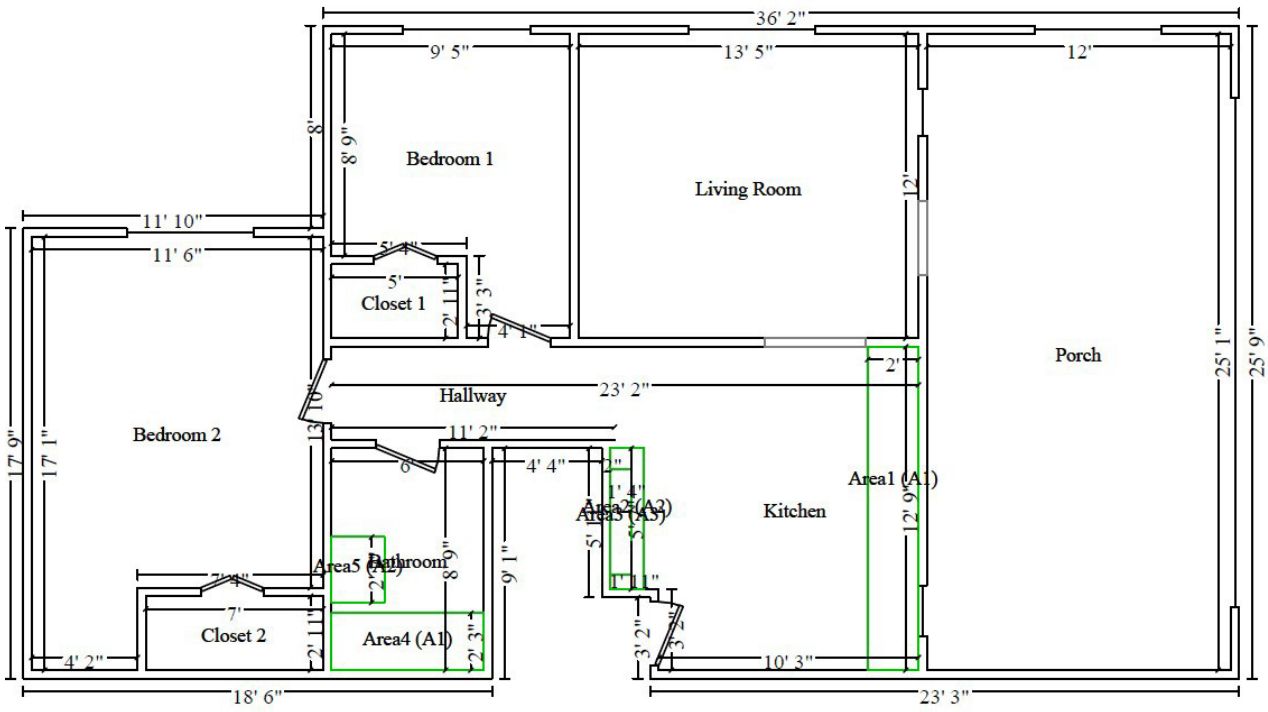








Request for Proposal
General Contractor – Rehabilitation
Activities



Attachment 3 – Wage Determination

"General Decision Number: MI20250026 08/08/2025

Superseded General Decision Number: MI20240026

State: Michigan

Construction Type: Residential

Counties: Berrien and Cass Counties in Michigan.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least $17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or	Executive Order 13658 generally applies to the contract. The contractor must pay all

extended on or after January 30, 2022:	covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2025
1	07/04/2025
2	08/08/2025

ELEC0153-005 06/08/2023

	Rates	Fringes
ELECTRICIAN	$ 27.00	18.29

ENGI0325-005 06/01/2025

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1	$ 48.98	25.25
GROUP 2	$ 45.68	25.25
GROUP 3	$ 44.00	25.25

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: $1.50 per hour above the group 1 rate.
Crane operator with main boom and jib 400' or longer: $3.00 per hour above the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Crane operator with main boom and jib 400', 300', or 220' or longer.

GROUP 2: Crane operator with main boom and jib 140' or longer, tower crane, gantry crane, whirley derrick

GROUP 3: Bulldozer; Crane; Grader/Blade; Loader; Scraper; stiff leg derrick

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IRON0292-007 06/01/2020

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 31.75	22.84

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* LABO0355-002 06/01/2025

	Rates	Fringes
LABORER: Mason Tender - Cement/Concrete	$ 27.21	13.45

PAIN0312-011 06/12/2014

	Rates	Fringes
PAINTER: Brush and Roller	$ 21.75	11.94

PLUM0172-005 05/30/2016

BERRIEN (City of Niles & vicinity) & CASS COUNTIES

	Rates	Fringes
PIPEFITTER (HVAC Pipe Installation Only)	$ 20.96	19.18

ROOF0023-009 06/01/2024

	Rates	Fringes
ROOFER		
Composition	$ 34.55	21.04
Slate & Tile	$ 36.05	21.04

SHEE0020-030 07/01/2009

	Rates	Fringes
SHEET METAL WORKER, Includes HVAC Duct and Unit Installation	$ 19.87	13.46

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* SUMI2010-024 09/16/2010

	Rates	Fringes
CARPENTER	$ 18.81	6.38
CEMENT MASON/CONCRETE FINISHER	$ 19.27	5.85
LABORER: Common or General	$ 16.87 **	5.46
LABORER: Landscape	$ 9.64 **	2.81
LABORER: Pipelayer	$ 17.95	5.46
OPERATOR: Backhoe/Excavator	$ 19.94	5.46

OPERATOR: Bobcat/Skid
Steer/Skid Loader ..... $ 17.66 ** 7.65

PLUMBER, Excludes HVAC Pipe
Installation.....$ 26.17 7.55

TRUCK DRIVER: Dump Truck.....$ 17.00 ** 5.71

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.75) or 13658 ($13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.
Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for

those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME

refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations

Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

Attachment 4 – Structural Evaluation Report

(Several structural items are in the bidding scope, please refer to this report for details and suggestions on the structural items listed in the bid scope)

Structural Evaluation Report

1219 Barron Lake Rd, Niles, MI

Date: December 3, 2025

1. Overview

Bridger Engineering & Design was retained to provide a structural repair evaluation for the existing residence and detached two-car garage located at 1219 Barron Lake Rd, Niles, Michigan. The exact construction dates are unknown; however, it is likely that both structures were built between 1920 and 1940.

The residence is conventionally wood-framed and supported on a CMU foundation. It consists of a main level with two bedrooms, kitchen, bathroom, living room, and porch, along with a finished attic bedroom and a partial basement. The detached garage is also of conventional wood framing, with multiple additions to the east and west that vary significantly in age and condition.

2. Garage Evaluation

2.1 East Addition

The east addition is constructed as a pole-style lean-to. Round log posts are embedded directly into the soil with 2×4 purlins between posts. The roof framing consists of 2×4 rafters at 24" o.c. supporting flat 1×6 purlins and a tin roof. The floor is dirt.

Observed deficiencies include:

- Significant rot in both rafters and purlins.

- Roof bearing occurring on only (2) 2×4 members without adequate support.

- Separation between the wall and roof system at the southwest corner.

<u>Recommendation:</u>

This addition is in non-serviceable condition and provides minimal structural or functional value. Removal in its entirety is recommended.

2.2 Main Garage

Exterior observations revealed rot in exposed rafter tails and deterioration of sheathing and trim near overhead doors.

Interior framing consists of 2×4 stud walls at 24" o.c. Most wall framing was in serviceable condition, though areas near exterior door openings showed water-related deterioration at sill plates and vertical studs. Headers were not installed at window and door openings. Ceiling rafters appear serviceable, though spans exceed current code limits.

Recommendations:

- Install new structural headers at all new or existing window/door openings.

- Sister new 2×6 lumber to existing rafters where rafter tails are rotted, extending to support the roof overhang.

- Replace any rotted studs with new members matching existing dimensions.

- Replace rotted sill plates with preservative-treated lumber anchored to the foundation per code with ½”Ø wedge or epoxy anchors

- Remove existing damaged fiberboard sheathing and replace with 7/16" OSB, nailed per code.

2.3 West Addition

The west addition appears to be newer construction. Roof framing consists of 2×4 rafters at 16" o.c. with OSB sheathing. The roof is fastened to the existing garage rafter tails. The walls were concealed and could not be inspected, but likely consist of 2×4 studs at 16"–24" o.c. The floor appears to be wood decking on joists placed directly on grade. A foundation was not confirmed.

Water damage was noted near the roof intersection with the main garage, affecting both sheathing and rafter tails. Water damage at the lower roof area likely extends into the wall cavity.

Recommendations:

- If a proper foundation is discovered during renovation, repair damaged roofing and wall materials using in-kind replacement and install a new ledger at the main garage wall with new rafters.

- If no foundation is present and the floor system is wood-on-grade, the addition has little repair value and should be removed completely.

- Due to extensive water damage in multiple areas of the garage, remove all roof material and install new roof sheathing and roofing to ensure the structure is watertight.

3. Residence Evaluation

3.1 General Configuration

The residence appears to have been constructed in three phases:

1. Original home on a full basement.

2. East bedroom addition on a crawlspace.

3. Enclosed west porch addition.

3.2 Basement and Original Structure

The CMU basement walls are in generally good condition. One horizontal crack was observed along the north wall within a mortar joint, allowing water infiltration. Crack may be due to excessive loading of adjacent driveway.

Floor framing above the basement was free from mold and severe decay. sagging was noted in a dropped beam supporting floor framing. Sill plates around the basement perimeter showed insect damage. Water damage to subflooring was also found beneath the main-level bathroom.

Recommendations:

- Seal and repoint the cracked exterior mortar joint to stop water infiltration.

- Install an adjustable column beneath the beam south of the water heater to correct floor sag.

- Remove and replace all deteriorated sill plates with treated lumber.

- Remove and replace any framing exhibiting insect damage.

- Replace water-damaged subflooring at bathroom with new in-kind materials.

-Additional wall reinforcement should be provided at north end cmu wall to prevent future horizontal cracking due to vehicular loadings.

3.3 East Addition

The east addition could only be inspected from the main level; no access was available to the crawlspace or roof cavity. Exterior observations indicate:

- Likely construction: 2×4 walls, 2×8 floor framing, wood trusses, CMU foundation.

- No crawlspace ventilation was observed.

No significant roof movement or water staining was present.

Recommendations:

- During renovation, inspect for moisture-related damage. Replace damaged materials and treat all affected areas for mold.

- if not present install crawlspace ventilation along the perimeter to mitigate future condensation issues.

3.4 West Addition

This addition is also on CMU foundation, with ventilation observed. Due to basement sill plate infestation, similar insect damage is likely at this addition.

Interior ceiling damage revealed framing consisting of 2×4 roof rafters and ceiling joists at 24" o.c., bearing on the existing structure. Members appear serviceable, but water intrusion was significant.

Recommendations:

- Remove interior finishes to expose the full framing system.

- Inspect rafters, joists, and wall framing for rot or mold.

- Replace any degraded materials with matching in-kind lumber.

3.5 Main Residence (Above-Grade)

Most interior walls are covered with paneling, limiting visibility. No significant ceiling cracking was observed. The floor slopes between the living room and kitchen. Bathroom water damage was noted at the exterior wall, window, and flooring.

Recommendations:

- Remove water-damaged components and replace with new in-kind materials.

3.6 Attic/Upper Level

Minor cracking in finish materials was noted. Some floor sheathing was removed and requires infill. Roof framing consists of 2×4 rafters at 24" o.c. and floor framing of 2×8 at 16" o.c., both appearing serviceable.

Due to widespread water issues, full roof redecking and reroofing is recommended.

4. Notes & Limitations

The recommendations herein are schematic in nature. Final design, repair detailing, and construction documentation must be performed under a separate contract.

Large portions of the existing structure were not accessible or were concealed at the time of inspection. Additional concealed damage may exist and should be addressed as it is uncovered during renovations.

Photos:

East side addition of garage. Picture shows double 2x4 top plate supporting roof rafters. And purlin roof black rot in 1x6 material.

East side addition of garage. Picture shows 2x4 roof rafters and roof purlins. Roof purlins and rafters show signs of rot.

East side garage addition: picture shows gap between wall top plate and roof system. Separation of plate due to excessive movement.

North side exterior garage: picture shows damage to siding, fiber sheathing and sill plate between the garage doors.

North side of garage between east addition and main garage: Photo shows damage to roof rafter tails.

West side addition of garage: photo shows roof ledger to rafter tales and water damage to sheathing.

East side addition to garage: water damage through roof sheathing at lower bearing condition.

West side addition to residence: photo shows water damage to ceiling and walls.

West side addition to residence: shows ceiling bearing condition on existing rafter tails. Ceiling was removed in this area due to extensive water damage.

Basement of residence north side: photo shows cracking of cmu at north window along with horizontal crack below. Horizontal crack extends approximately 10 feet. Addental wall reinforcement should be added to prevent future cracking.

Basement of residence west side: photo depicts insect damage to wood sill plate. Damage was noted along the whole perimeter.

Basement of residence looking south: photo shows existing water heater with floor support beam above at the top left. Support beam was sagging with noticeable floor deflection on the main level.

Attachment 5 – MTC Hazardous Materials Survey & Lead Assessment

(all abatement will be completed before general contractor's rehabilitation work may begin)

Lead Inspection & Risk Assessment Report

For the property at:

1219 Barron Lake Road
Niles, Michigan 49120
Year Built: Pre-1978

Prepared for:

Owner

Cass County Land Bank Authority
120 North Broadway
Cassopolis, MI 49031
(269) 445-4468

Date of inspection: 12/09/2025

Date of report: 12/15/2025

Report prepared and submitted by:

Tim Raymond
Michigan Certification P-07817
XRF serial number: X550-01932

Materials Testing Consultants
693 Plymouth Avenue NE
Grand Rapids, Michigan 49505
616-456-5469

TABLE OF CONTENTS

Purpose of the investigation report

The purpose of this report is to share lead-testing results and recommendations for removing identified hazards. *Please refer to Appendix C-3 for your future responsibilities as they relate to this report.* Use the "Key Definitions" below as a guide when reading the results. Floor plan maps are provided in Appendix B-3 – use these as a guide when reading the results. See Appendix C for information about lead hazards and abatement versus interim control options.

KEY DEFINITIONS

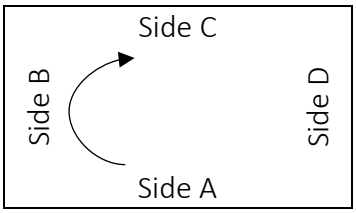
Reading #: Identification number of each tested surface.

MG/CM^2: Milligrams per square centimeter.

Result: Reported as a positive or negative for lead on component tested.

Component: The surface tested. *Examples: door, door trim, wall, ceiling, exterior siding*

Side: The location of tested area or item. Side A is always the address side of the building. Sides B, C, and D move in a clockwise direction from Side A.



(Address Side)

Side #: Used to differentiate between same side component locations (i.e., if there are two windows in the same room, a side number would represent each window).

Color: The color of the surface tested.

Condition: The condition of the paint on the surface tested. *Intact* means the paint is not damaged. *Deteriorated* means the paint is damaged (peeling, chipping, cracking).

Substrate: The type of material where paint is applied. *Examples: plaster, wood, metal*

Room Type: The room where testing occurred.

Room #: Rooms are identified by a number because room usage may change (i.e., a bedroom may be used as an office).

Floor: The floor level or story level of the building.

Cond Cause: The cause of the deterioration. *Examples: weather, moisture, impact, friction*

Fric-Imp: Friction-impact occurs when two components rub or come together by force.

Teeth marks: Indicates if teeth marks are present.

Lead testing results and recommendations

The following tables detail where lead was found and provides corrective action options. Samples were taken using the following methods:

☒ X-Ray Fluorescence (XRF) device (for paint)
☒ Dust wipes
☒ Soil samples
☐ Water samples

ALL LEAD HAZARDS & CORRECTIVE ACTION OPTIONS

Table 1 is a summary of all lead hazards found in paint, dust, soil, and water if applicable. Options to correct the hazards are provided.

Table 1: All lead hazards				
Component & location of hazard	Severity*	Priority**	Abatement options	Interim control options
Home Interior Throughout – Lead Dust	1	1	HEPA vacuum and wet wipe all surfaces to reduce lead-dust hazards on window sills, wells, and on floors.	HEPA vacuum and wet wipe all surfaces to reduce lead-dust hazards on window sills, wells, and on floors.
Porch 1 Side A6 Exterior Window Jamb (*Porch 1 exterior windows share the same paint history, however only window A6 resulted in levels above the action level*)	2	1	1. Remove and replace with new vinyl replacement system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint.	1. Remove paint at friction/ impact points. Wet, scrape, and paint. 2. Remove paint at friction/ impact points and install sash pack system.
Bed 10 Side D Exterior Window Sash and Parting Bead	2	1	1. Remove and replace with new vinyl replacement system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint.	1. Remove paint at friction/ impact points. Wet, scrape, and paint. 2. Remove paint at friction/ impact points and install sash pack system.

Table 1: All lead hazards				
Component & location of hazard	Severity*	Priority**	Abatement options	Interim control options
Bed 10 Side B Exterior Window Sash	2	1	1. Remove and replace with new vinyl replacement system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint.	1. Remove paint at friction/ impact points. Wet, scrape, and paint. 2. Remove paint at friction/ impact points and install sash pack system.
Basement 11 Side D1 Exterior Window Sash	2	2	1. Remove and replace with new vinyl replacement or glass-block system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint. 3. Enclose both sides of the window with a dust-tight covering.	1. Remove paint at friction/ impact points. Wet, scrape, and paint.
Basement 11 Side D2 Exterior Window Sash and Jamb	2	2	1. Remove and replace with new vinyl replacement or glass-block system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint. 3. Enclose both sides of the window with a dust-tight covering.	1. Remove paint at friction/ impact points. Wet, scrape, and paint.
HE (Home Exterior) Side A Window Casings and Sills	2	2	1. Enclose lead-painted surfaces with aluminum or vinyl. 2. Strip all lead-painted surfaces to substrate, stabilize surfaces, and repaint. 3. Remove and replace with new components	1. Wet, scrape, and paint

Table 1: All lead hazards				
Component & location of hazard	Severity*	Priority**	Abatement options	Interim control options
HE Side B Window Casing and Sill to Bed 10	2	2	1. Enclose lead-painted surfaces with aluminum or vinyl. 2. Strip all lead-painted surfaces to substrate, stabilize surfaces, and repaint. 3. Remove and replace with new components.	1. Wet, scrape, and paint
GE (Garage Exterior) Side B Overhead Door Casings	2	1	1. Enclose lead-painted surfaces with aluminum or vinyl. 2. Strip all lead-painted surfaces to substrate, stabilize surfaces, and repaint. 3. Remove and replace with new components.	1. Wet, scrape, and paint
GE Side C1 and C2 Window Sashes	2	2	1. Remove and replace with new vinyl replacement system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint.	1. Remove paint at friction/ impact points. Wet, scrape, and paint.
GE Side B Window Sill	2	1	1. Enclose lead-painted surfaces with aluminum or vinyl. 2. Strip all lead-painted surfaces to substrate, stabilize surfaces, and repaint. 3. Remove and replace with new components	1. Wet, scrape, and paint

Table 1: All lead hazards				
Component & location of hazard	Severity*	Priority**	Abatement options	Interim control options
GE Side B Window Sash and Jamb	2	1	1. Remove and replace with new vinyl replacement system. 2. Strip all painted surfaces to substrate, stabilize surfaces, and repaint.	1. Remove paint at friction/ impact points. Wet, scrape, and paint. 2. Remove paint at friction/ impact points and install sash pack system.

** Severity: 1 = most severe (extensive damage, deterioration, close to or more than 10x the EPA hazard level; 2 = very severe (moderate damage, deterioration or more than double the EPA hazard level); 3 = somewhat severe (minimal damage, deterioration, or slightly above the EPA hazard level)*

***Priority: 1 = high priority (immediate accessibility or exposure to children); 2 = medium priority (moderate accessibility or exposure); 3 = low priority (limited access, minimal exposure, or no access)*

POSITIVE LEAD-BASED PAINT HAZARDS

All paint testing results are in Appendix D. **All results listed in Table 2 are positive lead hazards.** Paint is tested using an XRF.

Table 2: Positive lead-based paint hazards results												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
52	Porch 1	Window	Exterior Jamb	A6	Wood	White	Deteriorated	Moisture	Positive	1.02	Yes	No
230	Bed 10	Window	Exterior Sash	D	Wood	Varnish	Deteriorated	Moisture	Positive	1.01	Yes	No
231	Bed 10	Window	Parting Bead	D	Wood	White	Deteriorated	Moisture	Positive	1.0	Yes	No
232	Bed 10	Window	Exterior Sash	B	Wood	White	Deteriorated	Moisture	Positive	1.03	Yes	No
248	Basement 11	Window	Exterior Sash	D1	Wood	Green	Deteriorated	Moisture	Positive	3.83	Yes	No
252	Basement 11	Window	Exterior Sash	D2	Wood	White	Deteriorated	Moisture	Positive	2.77	Yes	No
253	Basement 11	Window	Exterior Jamb	D2	Wood	White	Deteriorated	Moisture	Positive	2.1	No	No
255	Home Ext.	Window	Casing	A	Wood	Grey	Deteriorated	Weathering	Positive	1.0	No	No
256	Home Ext.	Window	Casing	A	Wood	Grey	Deteriorated	Weathering	Positive	1.01	No	No
258	Home Ext.	Window	Sill	A	Wood	Grey	Deteriorated	Weathering	Positive	1.15	No	No
275	Home Ext.	Window to Bed 10	Casing	B	Wood	Grey	Deteriorated	Weathering	Positive	1.71	No	No
276	Home Ext.	Window to Bed 10	Sill	B	Wood	Grey	Deteriorated	Weathering	Positive	1.35	No	No

Table 2: Positive lead-based paint hazards												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
305	Garage Ext.	Overhead Door	Casing	B	Wood	Grey	Deteriorated	Weathering	Positive	1.55	No	No
315	Garage Ext.	Window	Sash	C1	Wood	Green	Deteriorated	Weathering	Positive	1.65	No	No
319	Garage Ext.	Window	Sash	C2	Wood	Green	Deteriorated	Weathering	Positive	1.25	No	No
321	Garage Ext.	Window	Sill	B	Wood	Grey	Deteriorated	Weathering	Positive	1.13	No	No
322	Garage Ext.	Window	Sash	B	Wood	Grey	Deteriorated	Weathering	Positive	1.12	Yes	No
323	Garage Ext.	Window	Jamb	B	Wood	Grey	Deteriorated	Weathering	Positive	3.01	Yes	No

HUD reporting limits for positive XRF results are ≥ 1.0 mg/cm^2 (milligrams per square centimeter) for painted or coated surfaces.

POTENTIAL LEAD-BASED PAINT HAZARDS

Lead can exist in your home and not be a hazard. Table 3 below details all surfaces found to contain lead but are not current hazards. Please make a note of these surfaces and remember to monitor them for changes. Any changes could make the surface a lead hazard, which will alter severity and priority levels and require lead hazard control options. Refer to Appendix C-3 for ways to monitor.

Table 3: Potential lead-based paint hazards												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
No potential lead-based paint hazards found at the time of this lead inspection risk assessment												

HUD reporting limits for positive XRF results are ≥ 1.0 mg/cm^2 (milligrams per square centimeter) for painted or coated surfaces.

DUST WIPE SAMPLE RESULTS

☐ Porch was not tested due to snow/rain. *(If this is checked, caution should be used to prevent tracking potential lead dust into the home until the porch can be tested and determined safe.)*

☒ Porch was not tested due to non-existence (porch not present).

Table 4: Dust wipe sample results					
Sample #	Room/wipe location	Side	Surface tested*	Lead hazard?	Lab result in micrograms per square foot ($\mu g/ft^2$)
01	Kitchen 2	B	Window Stool/Sill (WS)	No	33.0
02	Kitchen 2	B	Hard Floor (HF)	No	9.4
03	**Living 7**	**D**	**Window Trough (WT)**	**Yes**	**590.0**
04	Living 7	D	Hard Floor (HF)	No	5.2
05	**Bed 6**	**D**	**Window Stool/Sill (WS)**	**Yes**	**140.0**
06	**Bed 6**	**D**	**Hard Floor (HF)**	**Yes**	**190.0**
07	**Bed 5**	**C**	**Window Trough (WT)**	**Yes**	**1500.0**
08	Bed 5	C	Carpet Floor (CF)	No	BRL
09	**Bed 10**	**B**	**Window Stool/Sill (WS)**	**Yes**	**170.0**
10	**Bed 10**	**B**	**Hard Floor (HF)**	**Yes**	**20.0**
11	**Porch 1**	**B**	**Window Trough (WT)**	**Yes**	**1300.0**
12	**Porch 1**	**B**	**Hard Floor (HF)**	**Yes**	**14.0**
13	Bed 6	C	Window Stool/Sill (WS)	No	BRL
14	Entry/Stairs 3	B	Hard Floor (HF)	No	8.0
15	Field Blank	N/A	N/A	N/A	BRL

*Lead hazard levels for dust: Floors ≥ 10 $\mu g/ft^2$; Exterior porch floors ≥ 40 $\mu g/ft^2$; Window stools/interior sills ≥ 100 $\mu g/ft^2$; Window troughs ≥ 100 $\mu g/ft^2$. BRL = Below Reporting Limits. N/D = Not Detected. N/A = Not Applicable. *Surface tested: Hard Floor (HF); Carpet Floor (CF); Soft Floor (SF); Window Trough (WT); Window Stool/Sill (WS); Exterior Porch Carpet Floor (EPCF) or Exterior Porch Hard Floor (EPHF)*

SOIL SAMPLE RESULTS

☐ Soil samples not collected due to snow or frozen ground.

☐ Soil samples not collected due to no bare soil present.

☐ Urban background soil sample collected.

Table 5: Soil sample results					
Sample #	Bare soil area/sample location	Approx. area in square-feet (ft^2)	Play area, non-play area, or garden?	Lead hazard?	Lab result in parts per million (ppm)
16	House Exterior Side B Dripline	24	Non-play area	No	BRL
17	House Exterior Side C Dripline	18	Non-play area	No	BRL

EPA and HUD lead hazard levels for bare soil: Non-play areas ≥ 1,200 ppm; Child play areas and vegetable gardens ≥ 400 ppm.

BRL = Below Reporting Limits. N/D = Not Detected. If soil sample results are ≥ 5,000 ppm, abatement must occur.

NON-REGULATED SAMPLE RESULTS

Table 6 below details all non-regulated surfaces that were tested. Testing these surfaces can help find other sources of lead exposure. These surfaces are not required to be tested. **The recommended corrective action provided in the table below are the responsibility of the report recipient.**

Table 6: Non-regulated sample results & corrective action						
Sample #	Surface/item description	Location	Material	Testing method (XRF, dust wipe, lab)	Result	Recommended corrective action
No non-regulated samples taken at the time of this lead inspection risk assessment						

Items listed above were tested using an XRF, dust wipe, or were sent to the lab for analysis (such as spices or cosmetics). The results are limited because the surfaces tested do not comply with the devices testing ability. These items may be a potential source of lead exposure. [XRF results are reported as mg/cm^2 = milligrams per square centimeter] [Dust wipe results are reported as $\mu g/ft^2$ = micrograms per square foot] [Lab analysis results are generally reported as ppm = parts per million, or ppb = parts per billion]

SURFACES UNABLE TO BE TESTED

A lead investigation requires testing all painted surfaces. Some painted surfaces in your home may be out of reach. These surfaces are not tested. Surfaces out of reach that are not tested are assumed to contain lead-based paint. If the paint looks deteriorated, the surface is assumed a lead-based paint hazard. Table 7 below details untested painted surfaces; it also details why the surface was not tested. Photos of the untested surface should be found in Appendix B-4.

Table 7: Surfaces unable to test

Room	Component	Reason not tested
No surfaces unable to be tested at the time of this lead inspection risk assessment		

Investigator insight

The most likely source of lead dust in the home would be coming from lead-painted window components.

Investigator certification

The information contained in this report is a true and accurate representation of the conditions and activities at this property at the time of this investigation, based on the professional judgement of the person(s) who conducted and reported this investigation. If soil samples were not collected as indicated in Table 5 due to snow, these samples will be collected at the earliest opportunity. An amended report will be sent with any soil hazards found and corrective action options.

Tim Raymond 12/15/2025

Michigan Certified Lead Inspector/Risk Assessor # P- 07817

Inspector email: traymond@mtc-test.com

Appendices

APPENDIX A – RESIDENT INTERVIEW

The purpose of this interview is to help find where to take dust and soil samples. Questions will help find:

- Most frequently used entrances and windows.
- Areas where children sleep, eat, and play.
- Recent renovations.

Resident interview questions & responses:

Resident interview questions & responses	
Question	**Response**
Is the house currently occupied or vacant?	Vacant

ASK: Where does your child like to sleep, eat, and play? *(For outdoor play areas, specify locations including bare soil areas)*

Child name (first and last)	Age (yrs.)	Sleeps where?	Eats where?	Plays indoors	Plays outdoors
This home is vacant					

Is there a child under the age of 19 living in the home?	N/A
What is the first and last name of the person interviewed? What is their relationship to the child?	N/A N/A
ASK: How long have you lived here at this address?	N/A
ASK: Which entrances are used most frequently?	N/A
ASK: If this home is in a building with other dwelling units, what common areas in the building are used by children?	N/A
Are there floor mats at entrances to the home? If yes, where?	No

Resident interview questions & responses	
Question	Response
ASK: Do occupants take shoes off at the door?	N/A
ASK: Do you have a dog, cat, or other pet that could track soil or dust inside?	N/A
ASK: Which windows are opened most frequently?	N/A
ASK: Is there a window fan that is used during summer months? If yes, where?	N/A
ASK: Are window air conditioners used? If yes, where? Is there paint damage from condensate? If yes, what room?	N/A
ASK: How do you clean your home? For example: cleaning wipes; sweeping; vacuuming; dry dusting; wet dusting; wet mopping; etc. *Inspector observation (Dust/debris/dirt present? Match response?)*	N/A
ASK: Does your family eat food grown in a home / personal / local garden? If yes, does your child play in this garden?	N/A
ASK: Does your child chew on painted surfaces such as painted cribs, windowsills, furniture edges, railings, door moldings, or broom handles?	N/A N/A
ASK: Does your child eat without washing hands before meals or snacks?	N/A

Resident interview questions & responses	
Question	Response
ASK: On a typical week this past summer, how much time did your child play outside in your yard?	N/A Days N/A Hours per day
ASK: Do you use hot water from the faucet to drink, cook, or make baby formula? If yes, was education provided?	N/A N/A
ASK: Has the child been seen eating soil? Where?	N/A
ASK: Does anyone living with or caring for the child have an occupation or hobby that could result in lead exposure? ☐ Auto body/boat (making parts; repairing) ☐ Batteries (making; repairing) ☐ Bronze polishing ☐ Burn painted wood ☐ Chemical stripper ☐ Construction *(bridge/tunnel/highway repair; power washing older homes; renovating/remodeling older homes; wrecking; demolition)* ☐ Create explosives or ammunition ☐ Electronics *(making or splicing cable or wire; soldering connections)* ☐ Furniture (refinishing) ☐ Glass *(leaded glass manufacturing; stained glass making; work in glass factory)* ☐ Jewelry (making; repairing)	N/A ☐ Metal *(brass/copper/aluminum processing; machining/grinding/melting lead alloys; melting for reuse / smelting; pouring molten metals: brass, copper, bronze, lead, iron; work in metal foundry; scrap metal handling/salvaging)* ☐ Paint *(art; manufacturing: non-residential; removal: sandblasting/scraping/sanding/heat guns/torches)* ☐ Plastic/rubber (products manufacturing) ☐ Plumber/pipe fitter ☐ Pottery or ceramics (making) ☐ Radiator repair ☐ Use lead shot/bullets ☐ Use fishing sinkers ☐ Welding, burning, torch/cutting ☐ Work at firing range ☐ Work in oil refinery

APPENDIX A1 – RESIDENT INTERVIEW: ENVIRONMENTAL INVESTIGATION BEHAVIOR QUESTIONS

The purpose of this interview is to help find other items that may be causing lead poisoning. Questions will help find:

- Household items or imported goods that may contain lead
- Child behaviors that may be exposing them to lead
- Jobs or hobbies that may be contributing to lead in the home

Environmental investigation behavior questions

Environmental investigation questions for additional insight	
Question	**Response**
ASK: Are there any areas of peeling paint on furniture or toys?	N/A
ASK: Does your child chew or eat paint chips or pick at painted surfaces?	N/A
Are there bite marks found anywhere in the home, such as a child's crib, furniture, or windowsills?	No
ASK: Does your child suck his/her fingers or thumb?	N/A
ASK: When was the last time the toys were washed? Pacifiers?	N/A
ASK: I need to dust test the windowsill in this room for lead. When was the last time it was wiped down? *Inspector observation (Dust present? Soiled? Match response?)*	N/A
Are vinyl mini blinds present? Does the child have access?	No N/A

Environmental investigation questions for additional insight	
Question	Response
Is the bathtub deteriorated? Does the child bathe in it? (If yes, test with XRF and take dust wipe)	Yes N/A
ASK: Has anyone in the household recently (within the last year) traveled outside the U.S.? If yes, who and to what countries?	N/A
Dietary risk factors	
ASK: Does your family get take-out from or eat at the same restaurant more than twice a month? If yes, which restaurant?	N/A
ASK: Do you eat meat from animals obtained through hunting? (Venison, duck, pheasant, etc.)	N/A
ASK: Does your family thoroughly wash all fresh fruits and vegetables?	N/A
ASK: Is food prepared, served, or stored in imported glazed ceramic or clayware dishes, pewter, crystal, open cans, or soldered types of containers?	N/A
ASK: Does the child have a favorite cup or eating utensil? If yes, what is it?	N/A
ASK: In the last year, has anyone in the family (or child with EBL) used home remedies; imported medicines, canned foods, candies, or spices (curry powder, cumin, turmeric); folk medicines, herbal treatments, or mineral supplements? If yes, check all that apply. N/A	

Environmental investigation questions for additional insight	
Question	Response

ASK: Does your child have access to or put any of the following in their mouth? If yes, which ones? N/A

Self-care products:	Hobby related items:	Common household items:
☐ Cosmetics	☐ Shellacs	☐ Matches
☐ Hair preparations	☐ Lacquers	☐ Lead acid batteries
☐ Talcum powder	☐ Epoxy resins	☐ Gear oil
	☐ Industrial (big) crayons or markers	☐ Pipe sealants
	☐ Dyes	☐ Pesticides
	☐ Coloring pigments	☐ Printed material *(newspapers, magazines)*
	☐ Paints	☐ Putty *(plumbing, window glaze)*
	☐ Painted objects	☐ Industrial detergents *(power washing detergent)*
	☐ Soft metal objects *(pewter/metal toy soldiers/jewelry/gunshot/bullets/beads/fishing sinkers/electronic components)*	

ASK: In the last year, has your child been cared for away from home? If yes, where? N/A
(This includes preschool and/or childcare at a center, dedicated home, or with a friend or relative).

APPENDIX B – SITE INFORMATION, FLOOR PLANS, AND PHOTOS

B-1: General property description:

This is a one and a half story vacant home with vinyl siding and aluminum wrapped soffit fascia. The home has a mix of different types of wooden windows and doors. The floors consist of hardwood, vinyl plank, carpet, and linoleum. The home has a Michigan basement that has a concrete floor and block walls. The walls consist of unpainted paneling, painted drywall, and painted plaster. The heating system for the home is a forced air furnace. In the rear of the property, there is a garage that has two additions, and a metal shed behind the garage. There is an unpainted wooden fence on side D and a t-post wire fence on side B.

Note – Most of the trim and door components are factory unpainted composite wood. Most of these components are not required to be sampled for lead-paint.

B-2: Building condition survey questions & responses

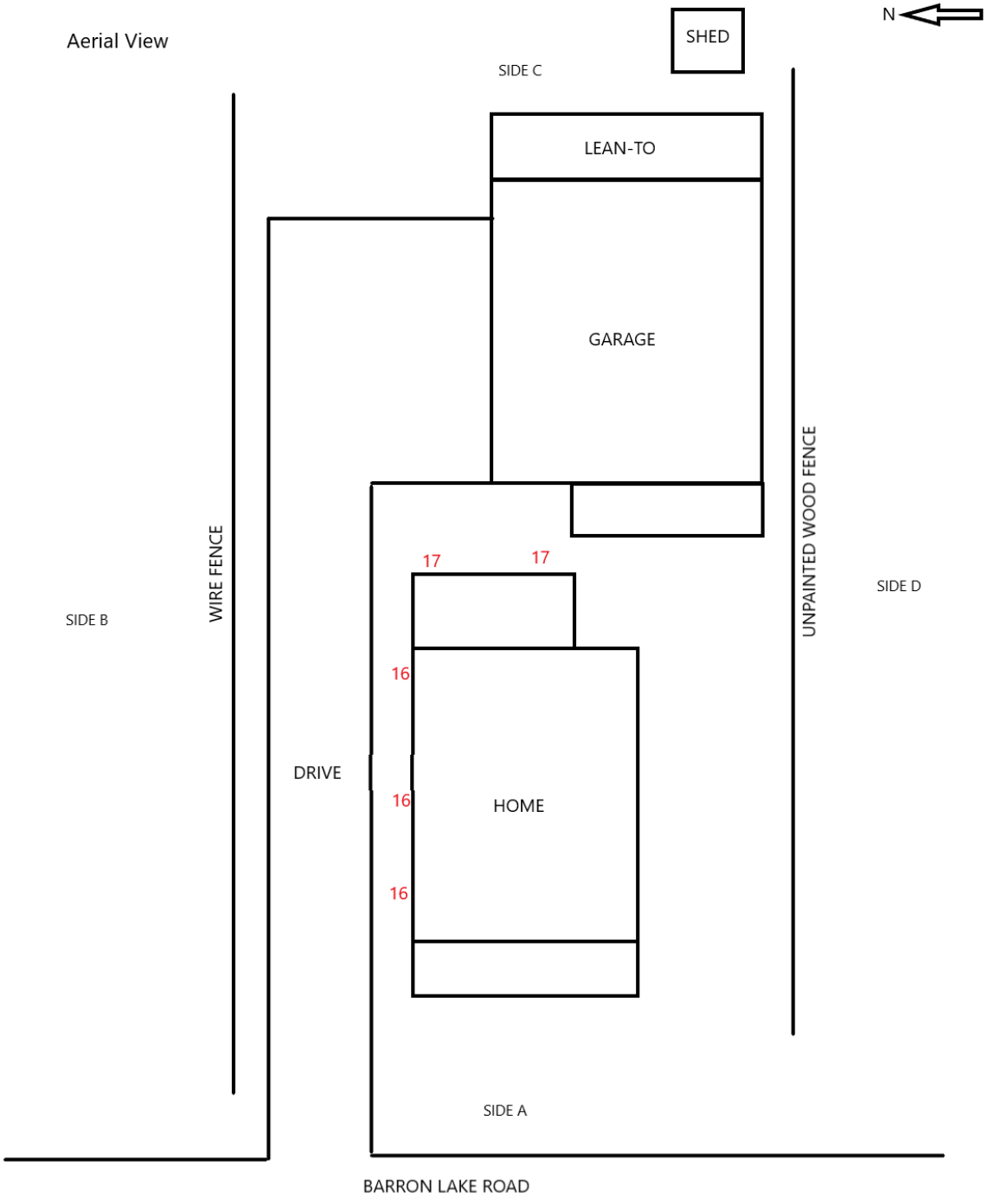
Exposure to lead is usually from lead-based paint. Lead-based paint becomes a source of lead exposure when the paint is deteriorated. Deteriorated paint is paint that is chipping, peeling, cracking, or chalking and may be caused by poor building conditions. A leaky roof is an example of a poor building condition that can cause paint to become deteriorated. Lead work cannot begin before building conditions causing paint to deteriorate are fixed. The building condition survey helps find these areas. A “yes” response may mean the building condition is poor and needs fixing.

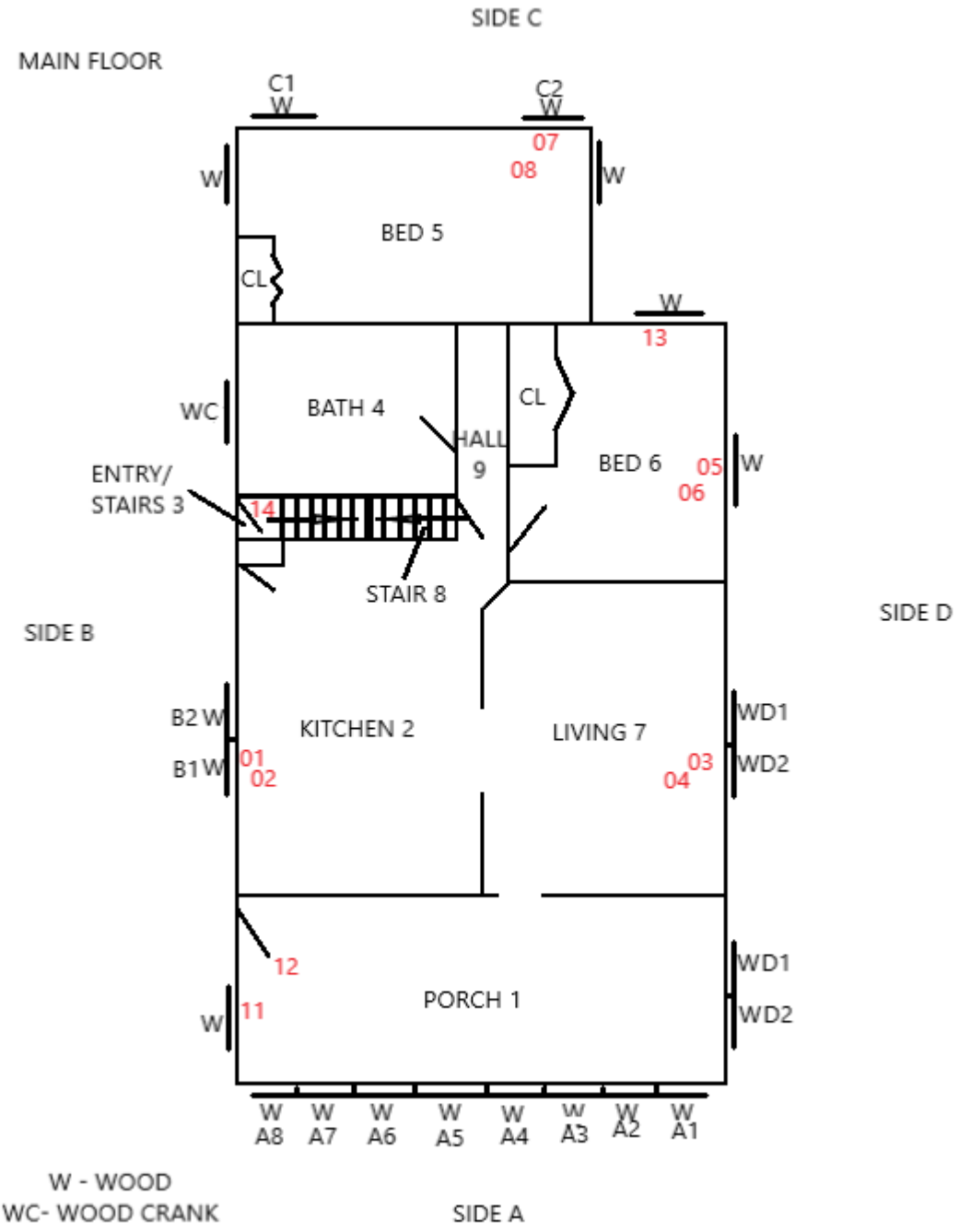
General property, exterior and interior building condition	
Question	**Response**
General property condition	
ASK: What year was this building built?	Pre-1978
ASK: Has there been any lead testing (including soil) done to this property within the last year? If yes, when, where and do you have any documentation?	Don't know

General property, exterior and interior building condition	
Question	Response
ASK: Were any external renovations done on a neighboring property? *Example: Repainting, remodeling, renovation, window replacement, sanding, scraping, or power washing painted surfaces inside or outside of the home?*	Don't know
ASK: Have nearby buildings or structures (bridge, water tower, homes, etc.) recently been repainted, demolished, or burned?	Don't know
ASK: To the best of your knowledge, is this dwelling near a lead-producing industry (such as a battery plant, smelter, radiator repair shop, electronics plant, or soldering plant)?	Don't know
ASK: Is the dwelling located within two blocks of a major roadway, freeway, elevated highway, or other transportation structure?	No
ASK: Were any home renovations, lead abatement or other lead hazard control work done to your home within the past year? If yes, what, and where?	Don't know
ASK: Are you or the landlord planning any building renovations?	N/A
ASK: Are you or the landlord planning any landscaping activities?	N/A
Is or was building debris stored in the yard?	The yard is covered in snow
Are there other buildings on the property? (*Garage, shed, barn, chickencoop, gazebo, child's tree fort, etc.)*	Yes – Garage and metal shed on side C of the property
Other notable general property conditions?	No.
Exterior building condition	
Is the exterior siding missing components?	No.

General property, exterior and interior building condition	
Question	**Response**
Do exterior walls have large cracks, or damage requiring more than routine painting?	No.
Is the roof missing parts (shingles, boards, tiles, etc.), or does it have holes or large cracks?	Roof is covered in snow, but looks to have some damage.
Are gutters or downspouts broken?	No.
Are there two or more windows or doors missing, broken, or boarded up?	No.
Does the porch or steps have major cracks, missing materials, structural leans, or is it visibly unsound?	No.
Does the foundation have damage, structural leans or is it visibly unsound?	No.
Are chimney blocks or masonry joints cracked, with loose or missing components, out of plumb or otherwise deteriorated?	No.
Other notable exterior building conditions?	No.
Interior building condition	
ASK: Has there been any recent water damage in the home?	Unknown
ASK: Are there any plumbing leaks?	Unknown
Are there water stains on interior walls or ceilings?	No
Are plaster walls or ceilings deteriorated?	Yes – Kitchen 2 and Living 7 walls
Do interior walls have large cracks, or damage requiring more than routine painting?	Yes – Cracks and damage to walls throughout
ASK: Are there any areas of peeling paint on walls, ceilings, stairs, or woodwork?	Yes – Bath 4 has moisture damaged walls and ceiling
Other notable interior building conditions?	No.

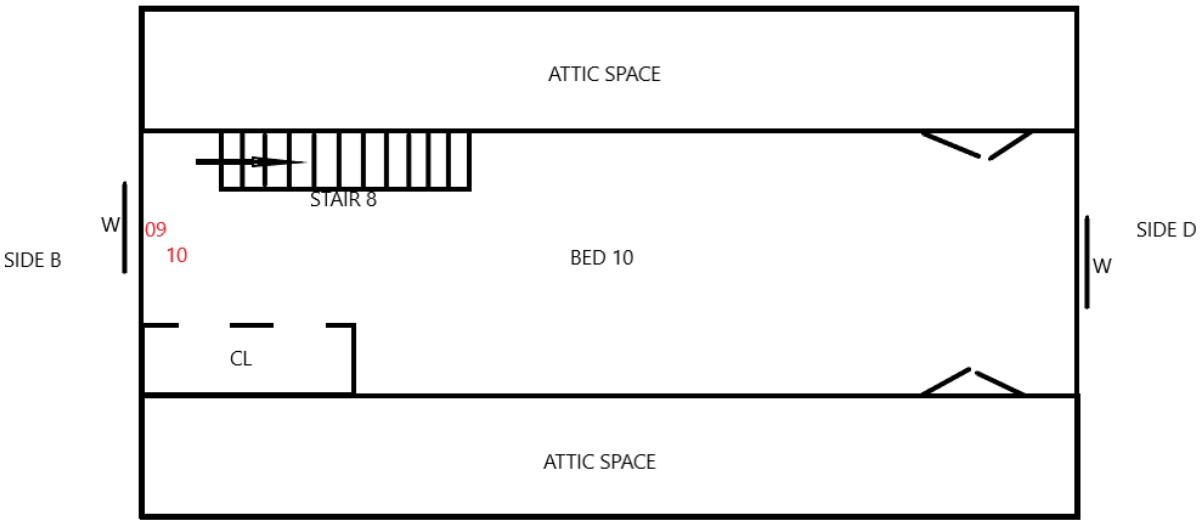
B-3: Floor Plans




SIDE C
MAIN FLOOR
C1
W
C2
W
07
08
W
W
BED 5
CL
W
13
WC
BATH 4
CL
HALL
9
BED 6
05
06
W
ENTRY/
STAIRS 3
14
STAIR 8
SIDE B
SIDE D
B2 W
B1 W
KITCHEN 2
LIVING 7
01
02
03
04
WD1
WD2
12
PORCH 1
W
11
WD1
WD2
W
A8
W
A7
W
A6
W
A5
W
A4
W
A3
W
A2
W
A1
W - WOOD
WC- WOOD CRANK
SIDE A

2ND FLOOR

SIDE C

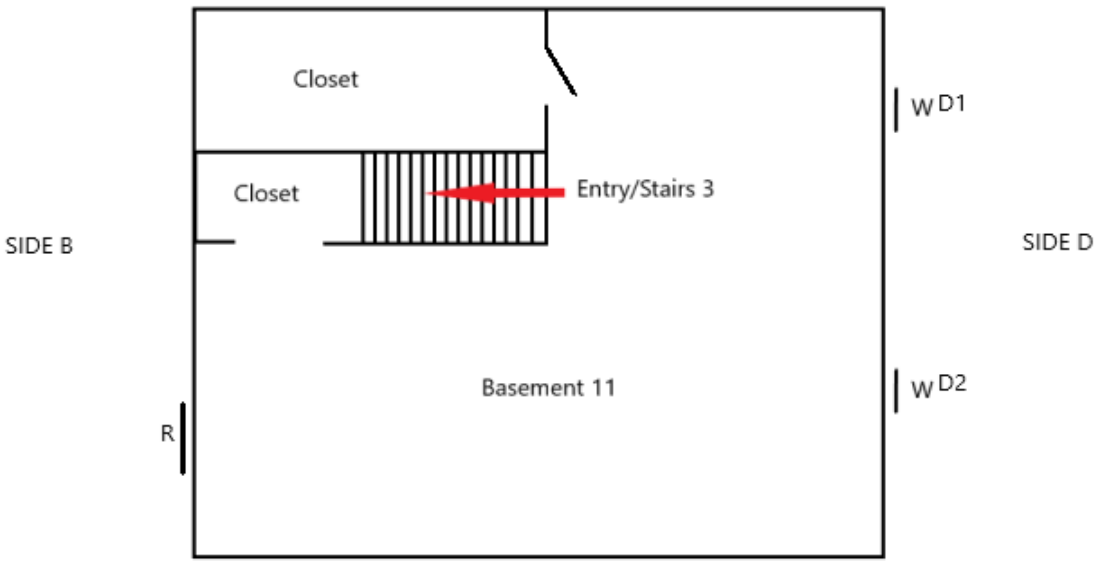


SIDE A

W - WOOD WINDOW

BASEMENT

SIDE C



SIDE A

W - WOOD WINDOW
R - REMOVED WINDOW

B-4: Photos

House Exterior Side A

House Exterior Side B

House Exterior Side C

House Exterior Side D

Garage Exterior Side A

Garage Exterior Side B

Garage Exterior Side C

Garage Exterior Side D

Garage Interior

Porch 1

Kitchen 2

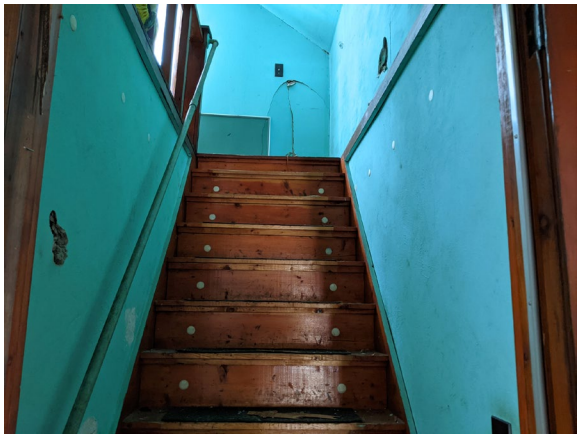
Entry / Stairs 3

Bath 4

Bed 5

Bed 6

Living 7



Stair 8

Hall 9

Bed 10

Basement 11

Basement 11

Metal Shed behind Garage

Unpainted Components

Unpainted factory doors

Unpainted kitchen cabinets

APPENDIX C – LEAD: EDUCATION, TESTING, RESOURCES & LAWS

C-1: Lead education

Visit Michigan.gov/MiLeadSafe to learn about lead-based paint, health effects, and more.

Lead-based paint

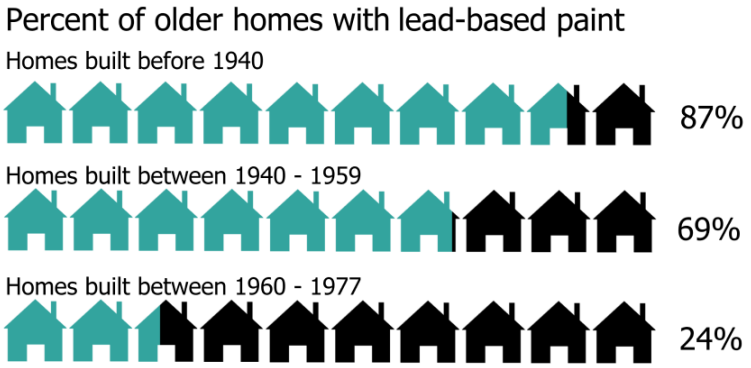
Lead is a highly toxic metal. When we say paint, it includes:

- Varnishes
- Enamels
- Lacquers
- Glazes
- Stains
- Primers
- Coatings
- Paint

Lead-based paint is a paint that has lead in it. Lead is used in paint to:

- Brighten the color
- Speed up drying time
- Reduce corrosion (weathering / wear and tear)

Homes built before 1978 are more likely to have lead-based paint. Lead was often added to paint used in homes built before 1978. In 1978, the federal government banned the use of lead-based paint in homes. The older the home, the more likely it is to have lead-based paint.



Lead-based paint hazards

Lead hazards are found in paint, dust, and soil. There are specific definitions for different lead hazards.

Type of hazard	Hazard definition
Lead-Based Paint Hazard	Deteriorated lead-based paint, including lead dust, soil, and any chewable lead-based painted surface with evidence of teeth marks that would have an adverse effect on human health.

Type of hazard	Hazard definition
Dust-Lead Hazard	Surface dust in a residence containing a mass per area concentration of lead equal to or in excess of: • 10 µg/ft^2 (micrograms per square foot) on floors • 40 µg/ft^2 on porches • 100 µg/ft^2 on interior windowsills • 100 µg/ft^2 on window troughs
Soil-Lead Hazard	Bare soil (*soil not covered with grass, sod, some other vegetation, or paving, including the sand in sandboxes*) on a residential property that contains lead equal to or in excess of: • 400 ppm (parts per million) in play areas [*an area of frequent soil contact by children (sandboxes, swing sets, etc.)*] and vegetable gardens. • 1,200 ppm in the rest of the yard.

To correct lead hazards, there are two options:

Abatement	The permanent elimination of lead-based paint hazards. This includes: • Removal of building components coated with lead-based paint • Safe removal of lead-based paint • Removal of dust-lead hazards • Removal of lead-contaminated soil • Overlaying soil with durable covering such as concrete or asphalt • Enclosing lead-based paint hazards • Coating lead-based paint hazards with approved encapsulant (a thick paint-like liquid used to cover lead-based paint) This method requires preparation; waste disposal; recordkeeping; cleanup; post abatement clearance testing; and monitoring (if applicable).
Interim control	A temporary measure to reduce exposure to lead-based paint hazards. This includes, but is not limited to: • Preparing surfaces and painting over lead-based paint hazards • Treatment of friction and impact surfaces • Specialized cleaning • Landscaping over soil-lead hazards (grass, sod, mulch, gravel, etc.)

Lead exposure and health effects

Why should I be concerned about lead exposure?

When lead is swallowed, it can cause health problems. Swallowing lead can be a serious issue for children because their bodies and nervous systems are still developing. Too much lead can cause

problems with learning; behavior; speech; hearing; growth rates; and development of the nervous system.

How do I know if I am being exposed to lead?

The only way to know if you have a recent or on-going exposure to lead is to get a blood lead test. You can contact your healthcare provider to request a simple blood test to see if you and your loved ones are being exposed.

Who is at risk for lead exposure?

People who live in homes built before 1978, especially children. Children are most at risk because they:

- Eat and drink more based on their body size when compared to adults.
- Breathe at faster rates when compared to adults.
- Absorb 4-5 times more of the lead they swallow than adults.
- May be missing key nutrients in their body, such as calcium and iron – so their body mistakenly keeps lead in place of healthy nutrients.
- Often put their hands in their mouths.
- Sometimes chew on toys and other household objects and furniture that may contain lead.

Fetuses and nursing babies are also at risk because lead can pass through the placenta to the fetus when the mother is exposed. Lead can pass through breast milk to a nursing baby when the mother is exposed. Note, the benefits of breastfeeding are usually greater than these risks, though. Talk to your healthcare provider to determine what is best for you and your baby.

People with pica are at risk for lead exposure. Pica is the craving to eat nonfood items, such as dirt, paint chips, and clay. It's most common in 1- and 2-year-old children and usually goes away as they get older. Pica has also been observed in adults, especially pregnant women. Pica is sometimes a result of a nutritional shortage, such as iron-deficiency anemia.

People who have jobs working with lead are at risk for lead exposure. People who work with lead could track it home if proper measures are not taken to stop that from happening. Your employer should inform you if lead is in use at your workplace.

People with hobbies that use lead are at risk for lead exposure. Common hobbies that may use lead include stained glass making, hunting, and fishing.

People who get their drinking water from a public water supply that has an Action Level Exceedance according to the State's Lead and Copper Rule.

What are the health effects?

Talk with your healthcare provider about getting a blood lead test for you and your loved ones if you are concerned about a recent or ongoing lead exposure. Or, if you live in southeast Michigan, visit one of our free mobile lab events near you!

Most people who have lead in their blood do not look or act sick. However, there is no safe level of lead in the blood. As lead exposure increases, the range and seriousness of health effects increases.

Lower levels of lead in children can result in:

- Lower IQ scores.
- Decreased academic achievement.
- Increased problems with behavior and attention related disorders.
- Decreased hearing.
- Decreased kidney function.

Along with the health effects listed above, higher levels of lead in children can also result in:

- Anemia.
- Severe stomachache, nausea, vomiting, diarrhea, and/or constipation.
- Muscle weakness or soreness.
- Severe damage to the brain, nervous system, and kidneys.

Lower levels of lead in adults can result in:

- Increased blood pressure.
- Decreased kidney function.
- Decreased cognitive function.
- Slower reaction times.
- Altered mood and behavior.

Along with the health effects listed above, higher levels of lead in adults can also result in:

- Anemia.
- Muscle weakness or soreness.
- Severe stomachache, nausea, vomiting, diarrhea, and/or constipation.
- Poor sperm and semen quality.
- Delayed conception.
- Increased risk of heart disease.

A blood lead test is the only way to know if you and your loved ones have recent or on-going exposures to lead. The Michigan Department of Health and Human Services considers 3.5 micrograms per deciliter (µg/dL) or more to be an Elevated Blood Lead Level (or EBLL). Talk to your healthcare provider about getting a blood lead test for you and your loved ones if you're concerned about a recent or on-going lead exposure.

How can I protect myself from lead?

If you live in a home built before 1978:

- Wash toys and flat surfaces – like windowsills and tables – using soapy water.
- Take your shoes off before going into your home to avoid tracking lead-containing soil and dust from outside.
- Vacuum with a High Efficiency Particulate Air (HEPA) filtered vacuum.
- Eat healthy foods with calcium, iron, and vitamin C to limit the amount of lead getting into your body.

- Always wash your hands before eating to keep from accidentally swallowing lead dust.
- Grow fruits and vegetables in raised beds.
- Keep paint in good repair; fix chipping or cracked paint right away and consider hiring a certified lead professional to test your home and help with home repairs and renovation in houses built before 1978.

If you're worried about lead in your drinking water:

- Use an NSF-certified filter and only use cold water for drinking or cooking.
- Run your water before using it for drinking or cooking (also called flushing your lines).

If you have a job or hobby that uses lead:

- Wear the right protective equipment.
- Wash your clothes separately from other laundry. After washing lead-contaminated clothing and removing them from the machine, run the rinse cycle once before using the washing machine again.

If you use imported goods or foods:

- Pay attention to recalls that are caused by lead.
- Throw away any recalled household items or food.

C-2: Lead testing procedures; housing components; and material cost estimates

Paint testing procedures

To test for lead in paint, an XRF instrument is used. XRF stands for "X-Ray Fluorescence."

To measure lead, this device uses low level radiation. The radiation excites atoms within painted surfaces. Excitement, or movement of atoms cause radiation to rebound back to the device. This rebound tells the device if lead is present. Lead is reported in micrograms per square centimeter ($\mu g/cm^2$).

Appendix D-2 details the XRF device used.

Dust testing procedures

Dust is collected using dust wipes, which are disposable cloths used to collect dust within a sample area. Sample areas are identified by the investigator. One dust wipe is required per sample area. All collected samples are submitted to an accredited laboratory for analysis. Dust wipe sample results are reported in micrograms per square foot ($\mu g/ft^2$). Investigators follow dust wipe best practices provided by American Society for Testing and Materials (ASTM) International.

Soil testing procedures

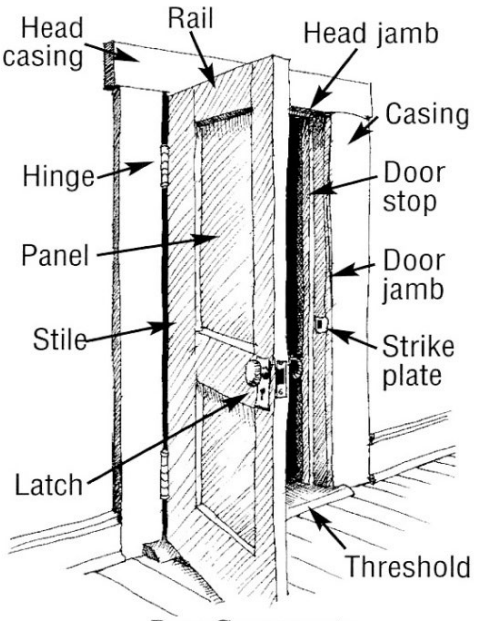
Soil is collected using ASTM best practices.

A soil sample comes from the upper ½ inch of soil. Garden soil is tested 4-6 inches below the surface. All soil must come from soil on the property. Areas may include sandboxes, child play

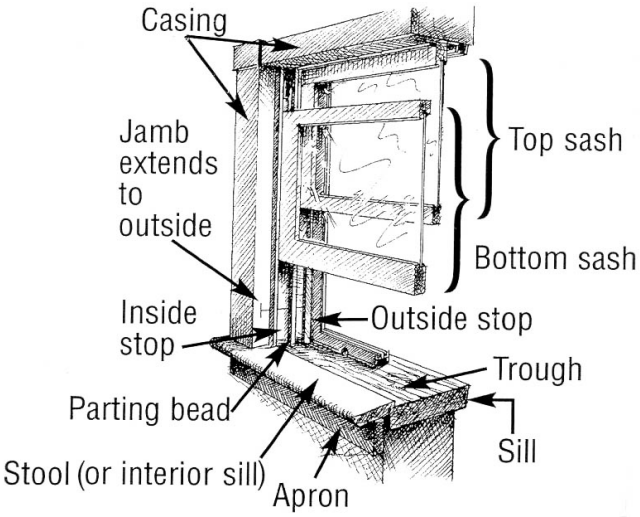
areas, and the roof drip line. An accredited laboratory analyzes the soil for lead. Soil sample results are reported in parts per million (ppm).

Housing component identification

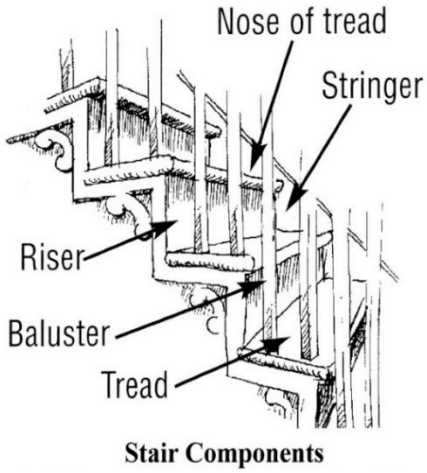
Please use the photos/diagrams below as a guide to help identify housing components noted in this report. Diagrams are adopted from Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work, U.S. Department of Housing and Urban Development, Office of Lead Hazard Control, June 1999.



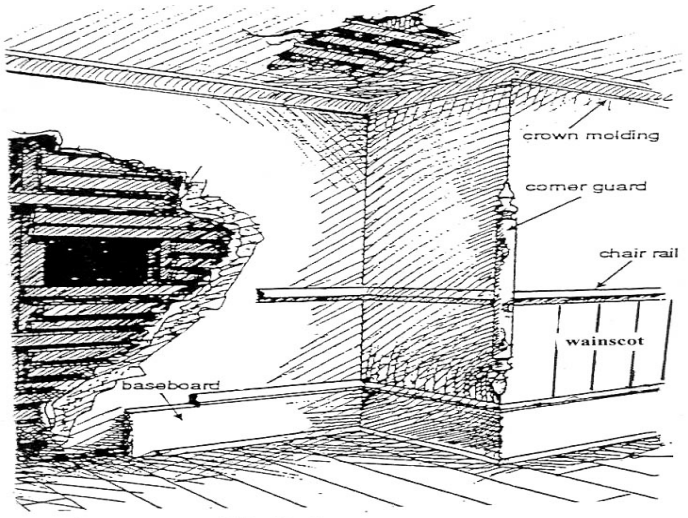
Door Components



Window Components



Stair Components



Wall Components

Lead hazard correction cost estimates

The cost estimates provided are simply estimated. Cost estimates may change without notice due to unforeseen cost increases or decreases of products, raw materials, or currency fluctuations.

Window replacement	$300 - $800
Wood window replacement	$700 - $2,000
Window jamb liners	$150 - $500
Siding exterior	$400 - $1,400 square*
Painting exterior	$200 - $800 square
Exterior door replacement	$300 - $1,500
Interior door replacement	$100 - $1,000
Friction/impact door	$150 - $700
E-cap baseboards	$150 - $400 per room
Paint baseboards	$200 - $400 per room
Stair system w/rubber	$300 - $1,500
Lead cleaning	$100 - $500 per room
Drywall enclosure	$3-10/$ft^2$
Exterior aluminum coil stock enclosure	$500 - $1,000 square ($5-10/ft^2)
Floor enclosure	$500 - $1,000 square ($5-10/ft^2)
Cabinet replacement	$250 - $800
Water service line replacement	~ $6,000

**Square = 100 square feet*

C-3: Responsibilities for monitoring

Re-evaluation & monitoring schedule

Property owner may monitor potential lead-based paint hazards visually or they can have a risk assessor re-evaluate the property using the following recommendations.

Visual survey	Perform one month and six months after the lead inspection/risk assessment or after lead hazard control work is completed. Perform once each year if no problems found. Visual survey is completed by homeowner. A visual survey includes: • Looking at painted surfaces known to have lead to see if paint is in good repair. • Looking at areas where lead hazards were fixed to see if areas are in good repair. • Finding problems with the building that could cause new lead hazards. • Monitoring areas after severe weather, renovations, water damage or physical damage. If any occur, additional visual inspections are

	recommended for those locations.
Re-evaluate	Every two years a certified risk assessor should re-evaluate the building. This includes: • Measuring dust for lead. • Measuring soil for lead. • Performing a visual assessment of painted surfaces known to have lead. • Visually assessing where work was completed (to identify if work is still in good condition).

Future owners of this property

Federal law (24 CFR part 35 and 40 CFR part 745) requires this report be shared before purchasers or tenants become obligated under a lease or sales contract.

Landlords (lessors) and sellers are required to:

- Distribute an educational pamphlet. This pamphlet is approved from the U.S. Environmental Protection Agency (EPA). The document is: "*Protect Your Family from Lead in Your Home.*"
- Include standard warning language in lease or sale contracts. This is to ensure parents have information they need to protect their children from lead hazards.

Contact the National Lead Information Center's lead hotline at 800-424-5323 for information about your obligations under federal regulations.

Landlord penalty law (notice to landlords)

If a child with an elevated blood lead level is identified in a rental unit, the landlord is responsible for ensuring that lead hazards identified in the environmental investigation report have been properly addressed.

If the landlord is conducting the work or they hire a contractor to perform the work on their rental unit, they must be certified through the EPA Renovation, Repair, and Painting (RRP) Program or certified through the Michigan Department of Health and Human Services.

Landlords are encouraged to hire a certified lead abatement firm or apply to the state Lead Safe Home Program for assistance. To find these resources, visit Michigan.gov/MiLeadSafe.

Any questions regarding compliance, please email HHSInfo@michigan.gov or call 517-335-9390.

APPENDIX D – ALL XRF RESULTS & DEVICE USED

D-1: Results

All XRF results & visual assessment

Table 8: All XRF Results & Visual Assessment

Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
1									Cal	0.95		
2									Cal	0.93		
3									Cal	0.95		
4									Cal	0		
5									Cal	0		
6									Cal	0		
7	Porch 1	Room	Wall	A	Wood	White	Deteriorated	Impact	Negative	0.01	No	No
8	Porch 1	Room	Wall	A	Wood	White	Deteriorated	Impact	Negative	0	No	No
9	Porch 1	Room	Wall	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
10	Porch 1	Room	Wall	C	Wood	White	Deteriorated	Impact	Negative	0.31	No	No
11	Porch 1	Room	Wall	D	Wood	White	Deteriorated	Impact	Negative	0.01	No	No
12	Porch 1	Room	Wall	D	Wood	White	Deteriorated	Impact	Negative	0.01	No	No
13	Porch 1	Room	Ceiling	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
14	Porch 1	Door	Casing	B	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
15	Porch 1	Door	Door	B	Wood	Varnish	Deteriorated	Impact	Negative	0.01	Yes	No
16	Porch 1	Door	Exterior Stop	B	Wood	Grey	Deteriorated	Weathering	Negative	0.22	Yes	No
17	Porch 1	Door	Door Exterior	B	Wood	Grey	Deteriorated	Weathering	Negative	0	Yes	No
18	Porch 1	Door	Casing	C	Wood	Brown	Deteriorated	Impact	Negative	0.01	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
19	Porch 1	Door	Jamb	C	Wood	Brown	Deteriorated	Impact	Negative	0.07	No	No
20	Porch 1	Door	Stop	C	Wood	Brown	Deteriorated	Impact	Negative	0.78	No	No
21	Porch 1	Window	Casing	A1-8	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
22	Porch 1	Window	Sill	A1-8	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
23	Porch 1	Window	Apron	A1-8	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
24	Porch 1	Window	Sash	A1	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
25	Porch 1	Window	Jamb	A1	Wood	Brown	Deteriorated	Friction	Negative	0.09	Yes	No
26	Porch 1	Window	Stop	A1	Wood	Brown	Deteriorated	Friction	Negative	0.01	Yes	No
27	Porch 1	Window	Jamb	A1	Wood	Beige	Deteriorated	Friction	Negative	0.1	Yes	No
28	Porch 1	Window	Exterior Sash	A1	Wood	White	Deteriorated	Moisture	Negative	0.49	Yes	No
29	Porch 1	Window	Exterior Jamb	A1	Wood	White	Deteriorated	Moisture	Negative	0.63	Yes	No
30	Porch 1	Window	Well	A1	Wood	White	Deteriorated	Moisture	Negative	0.38	Yes	No
31	Porch 1	Window	Sash	A2	Wood	Brown	Deteriorated	Friction	Negative	0.08	Yes	No
32	Porch 1	Window	Jamb	A2	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
33	Porch 1	Window	Exterior Jamb	A2	Wood	White	Deteriorated	Moisture	Negative	0.79	Yes	No
34	Porch 1	Window	Exterior Sash	A2	Wood	White	Deteriorated	Moisture	Negative	0.32	Yes	No
35	Porch 1	Window	Sash	A3	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
36	Porch 1	Window	Jamb	A3	Wood	Brown	Deteriorated	Friction	Negative	0.02	Yes	No
37	Porch 1	Window	Jamb	A3	Wood	Brown	Deteriorated	Friction	Negative	0.82	Yes	No
38	Porch 1	Window	Exterior Sash	A3	Wood	White	Deteriorated	Moisture	Negative	0.62	Yes	No
39	Porch 1	Window	Well	A3	Wood	White	Deteriorated	Moisture	Negative	0.42	Yes	No
40	Porch 1	Window	Sash	A4	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
41	Porch 1	Window	Jamb	A4	Wood	Brown	Deteriorated	Friction	Negative	0.03	Yes	No
42	Porch 1	Window	Stop	A4	Wood	Brown	Deteriorated	Friction	Negative	0.01	Yes	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
43	Porch 1	Window	Exterior Sash	A4	Wood	White	Deteriorated	Moisture	Negative	0.11	Yes	No
44	Porch 1	Window	Exterior Jamb	A4	Wood	White	Deteriorated	Moisture	Negative	0.88	Yes	No
45	Porch 1	Window	Sash	A5	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
46	Porch 1	Window	Jamb	A5	Wood	Brown	Deteriorated	Friction	Negative	0.05	Yes	No
47	Porch 1	Window	Exterior Sash	A5	Wood	White	Deteriorated	Moisture	Negative	0.57	Yes	No
48	Porch 1	Window	Exterior Stop	A5	Wood	White	Deteriorated	Friction	Negative	0.85	Yes	No
49	Porch 1	Window	Sash	A6	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
50	Porch 1	Window	Jamb	A6	Wood	Brown	Deteriorated	Friction	Negative	0.06	Yes	No
51	Porch 1	Window	Exterior Sash	A6	Wood	White	Deteriorated	Moisture	Negative	0.57	Yes	No
52	Porch 1	Window	Exterior Jamb	A6	Wood	White	Deteriorated	Moisture	Positive	1.02	Yes	No
53	Porch 1	Window	Well	A6	Wood	White	Deteriorated	Moisture	Negative	0.61	Yes	No
54	Porch 1	Window	Sash	A7	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
55	Porch 1	Window	Jamb	A7	Wood	Brown	Deteriorated	Friction	Negative	0.31	Yes	No
56	Porch 1	Window	Parting Bead	A7	Wood	Brown	Deteriorated	Friction	Negative	0.25	Yes	No
57	Porch 1	Window	Exterior Jamb	A7	Wood	White	Deteriorated	Moisture	Negative	0.74	Yes	No
58	Porch 1	Window	Exterior Sash	A7	Wood	White	Deteriorated	Moisture	Negative	0.59	Yes	No
59	Porch 1	Window	Sash	A8	Wood	Brown	Deteriorated	Friction	Negative	0.01	Yes	No
60	Porch 1	Window	Jamb	A8	Wood	Brown	Deteriorated	Friction	Negative	0.47	Yes	No
61	Porch 1	Window	Exterior Jamb	A8	Wood	White	Deteriorated	Friction	Negative	0.86	Yes	No
62	Porch 1	Window	Exterior Sash	A8	Wood	White	Deteriorated	Friction	Negative	0.53	Yes	No
63	Porch 1	Window	Casing	B	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
64	Porch 1	Window	Sill	B	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
65	Porch 1	Window	Apron	B	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
66	Porch 1	Window	Sash	B	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
67	Porch 1	Window	Jamb	B	Wood	Brown	Deteriorated	Friction	Negative	0.09	Yes	No
68	Porch 1	Window	Exterior Jamb	B	Wood	White	Deteriorated	Moisture	Negative	0.77	Yes	No
69	Porch 1	Window	Exterior Sash	B	Wood	White	Deteriorated	Moisture	Negative	0.46	Yes	No
70	Porch 1	Window	Well	B	Wood	White	Deteriorated	Moisture	Negative	0.34	Yes	No
71	Porch 1	Window to Kitchen 2	Casing	C	Wood	Brown	Deteriorated	Impact	Negative	0.02	No	No
72	Porch 1	Window to Kitchen 2	Stop	C	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
73	Porch 1	Window to Kitchen 2	Sash	C	Wood	Brown	Deteriorated	Impact	Negative	0.05	No	No
74	Porch 1	Window to Living 7	Casing	C	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
75	Porch 1	Window to Living 7	Stop	C	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
76	Porch 1	Window	Casing	D1-2	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
77	Porch 1	Window	Sill	D1-2	Wood	Brown	Deteriorated	Impact	Negative	0.01	No	No
78	Porch 1	Window	Apron	D1-2	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
79	Porch 1	Window	Sash	D1	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
80	Porch 1	Window	Stop	D1	Wood	Brown	Deteriorated	Friction	Negative	0.01	Yes	No
81	Porch 1	Window	Jamb	D1	Wood	Brown	Deteriorated	Friction	Negative	0.39	Yes	No
82	Porch 1	Window	Exterior Jamb	D1	Wood	White	Deteriorated	Moisture	Negative	0.69	Yes	No
83	Porch 1	Window	Exterior Sash	D1	Wood	White	Deteriorated	Moisture	Negative	0.42	Yes	No
84	Porch 1	Window	Well	D1	Wood	White	Deteriorated	Moisture	Negative	0.59	Yes	No
85	Porch 1	Window	Sash	D2	Wood	Brown	Deteriorated	Friction	Negative	0	Yes	No
86	Porch 1	Window	Jamb	D2	Wood	Brown	Deteriorated	Friction	Negative	0.23	Yes	No
87	Porch 1	Window	Parting Bead	D2	Wood	Brown	Deteriorated	Friction	Negative	0.24	Yes	No
88	Porch 1	Window	Exterior Stop	D2	Wood	White	Deteriorated	Moisture	Negative	0.72	Yes	No
89	Porch 1	Window	Exterior Sash	D2	Wood	White	Deteriorated	Moisture	Negative	0.42	Yes	No
90	Porch 1	Exposed Soffit	Soffit	C	Wood	White	Deteriorated	Weathering	Negative	0.01	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
91	Porch 1	Exposed Fascia	Fascia	C	Wood	White	Deteriorated	Weathering	Negative	0.01	Yes	No
92	Kitchen 2	Room	Wall	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
93	Kitchen 2	Room	Wall	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
94	Kitchen 2	Room	Wall	C	Wood	White	Deteriorated	Impact	Negative	0.07	No	No
95	Kitchen 2	Room	Wall	D	Wood	White	Deteriorated	Impact	Negative	0	No	No
96	Kitchen 2	Room	Exposed Wall	D	Plaster	White	Deteriorated	Impact	Negative	0.08	No	No
97	Kitchen 2	Room	Exposed Wall	D	Plaster	White	Deteriorated	Impact	Negative	0.05	No	No
98	Kitchen 2	Room	Ceiling	A	Plaster	White	Deteriorated	Structural	Negative	0.05	No	No
99	Kitchen 2	Door	Door	C	Wood	Brown	Deteriorated	Impact	Negative	0.14	Yes	No
100	Kitchen 2	Door	Door Exterior	C	Wood	Brown	Deteriorated	Impact	Negative	0.01	Yes	No
101	Kitchen 2	Window	Sash	A	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
102	Kitchen 2	Window	Casing	B1-2	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
103	Kitchen 2	Window	Stop	B1	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
104	Kitchen 2	Window	Sill	B1-2	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
105	Kitchen 2	Window	Sash	B1	Wood	Varnish	Deteriorated	Friction	Negative	0.06	Yes	No
106	Kitchen 2	Window	Jamb	B1	Wood	Varnish	Deteriorated	Moisture	Negative	0	No	No
107	Kitchen 2	Window	Exterior Sash	B1	Wood	White	Deteriorated	Moisture	Negative	0.13	Yes	No
108	Kitchen 2	Window	Exterior Stop	B1	Wood	White	Deteriorated	Moisture	Negative	0	No	No
109	Kitchen 2	Window	Well	B1	Wood	White	Deteriorated	Moisture	Negative	0.01	Yes	No
110	Kitchen 2	Window	Sash	B2	Wood	Varnish	Deteriorated	Friction	Negative	0.08	Yes	No
111	Kitchen 2	Window	Stop	B2	Wood	Varnish	Deteriorated	Moisture	Negative	0	No	No
112	Kitchen 2	Window	Exterior Sash	B2	Wood	White	Deteriorated	Moisture	Negative	0.14	Yes	No
113	Kitchen 2	Window	Well	B2	Wood	White	Deteriorated	Moisture	Negative	0.01	Yes	No
114	Entry Stair 3	Room	Wall	A	Drywall	White	Deteriorated	Impact	Negative	0	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
115	Entry Stair 3	Room	Wall	B	Drywall	White	Deteriorated	Impact	Negative	0	No	No
116	Entry Stair 3	Room	Wall	C	Drywall	White	Deteriorated	Impact	Negative	0	No	No
117	Entry Stair 3	Room	Wall	D	Drywall	White	Deteriorated	Impact	Negative	0	No	No
118	Entry Stair 3	Door	Door	B	Metal	Brown	Deteriorated	Impact	Negative	0	Yes	No
119	Entry Stair 3	Door	Door Exterior	B	Metal	Brown	Deteriorated	Impact	Negative	0	Yes	No
120	Entry Stair 3	Door	Casing	B	Wood	Brown	Deteriorated	Impact	Negative	0.01	No	No
121	Entry Stair 3	Door	Jamb	B	Wood	Brown	Deteriorated	Impact	Negative	0	Yes	No
122	Entry Stair 3	Door	Stop	B	Wood	Brown	Deteriorated	Impact	Negative	0	Yes	No
123	Entry Stair 3	Hatch Door	Casing	C	Wood	Brown	Deteriorated	Impact	Negative	0.05	No	No
124	Entry Stair 3	Hatch Door	Door	C	Wood	Brown	Deteriorated	Impact	Negative	0.38	Yes	No
125	Entry Stair 3	Hatch Door	Door Exterior	C	Wood	Grey	Deteriorated	Impact	Negative	0.34	Yes	No
126	Entry Stair 3	Room	Floor	A	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
127	Entry Stair 3	Stair	Tread	D	Wood	Grey	Deteriorated	Friction	Negative	0.02	Yes	No
128	Entry Stair 3	Stair	Riser	B	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
129	Entry Stair 3	Room	Baseboard	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
130	Bath 4	Room	Wall	A	Plaster	Blue	Deteriorated	Moisture	Negative	0.04	No	No
131	Bath 4	Room	Wall	B	Plaster	Blue	Deteriorated	Moisture	Negative	0	No	No
132	Bath 4	Room	Wall	C	Plaster	Blue	Deteriorated	Moisture	Negative	0	No	No
133	Bath 4	Room	Wall	D	Plaster	Blue	Deteriorated	Moisture	Negative	0.02	No	No
134	Bath 4	Room	Ceiling	A	Plaster	White	Deteriorated	Moisture	Negative	0.02	No	No
135	Bath 4	Window	Casing	B	Wood	Varnish	Deteriorated	Moisture	Negative	0	No	No
136	Bath 4	Window	Stop	B	Wood	Varnish	Deteriorated	Moisture	Negative	0	No	No
137	Bath 4	Window	Sash	B	Wood	Varnish	Deteriorated	Moisture	Negative	0	No	No
138	Bath 4	Window	Exterior Sash	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
139	Bed 5	Room	Wall	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
140	Bed 5	Room	Wall	B	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
141	Bed 5	Room	Wall	C	Plaster	Blue	Deteriorated	Impact	Negative	0.03	No	No
142	Bed 5	Room	Wall	D	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
143	Bed 5	Room	Ceiling	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
144	Bed 5	Door	Door	A	Wood	Brown	Deteriorated	Impact	Negative	0.06	Yes	No
145	Bed 5	Door	Door Exterior	A	Wood	Brown	Deteriorated	Impact	Negative	0.01	Yes	No
146	Bed 5	Door	Jamb	A	Wood	Varnish	Deteriorated	Impact	Negative	0.05	Yes	No
147	Bed 5	Window	Jamb Exterior	A	Wood	Varnish	Deteriorated	Impact	Negative	0.03	No	No
148	Bed 5	Window	Sash	B	Wood	Brown	Deteriorated	Friction	Negative	0.73	Yes	No
149	Bed 5	Window	Jamb	B	Wood	Brown	Deteriorated	Friction	Negative	0.5	Yes	No
150	Bed 5	Window	Exterior Jamb	B	Wood	White	Deteriorated	Moisture	Negative	0.36	Yes	No
151	Bed 5	Window	Exterior Sash	B	Wood	White	Deteriorated	Moisture	Negative	0.51	Yes	No
152	Bed 5	Window	Well	B	Wood	White	Deteriorated	Moisture	Negative	0.41	Yes	No
153	Bed 5	Window	Sash	C1	Wood	Brown	Deteriorated	Friction	Negative	0.7	Yes	No
154	Bed 5	Window	Jamb	C1	Wood	Brown	Deteriorated	Friction	Negative	0.44	Yes	No
155	Bed 5	Window	Exterior Jamb	C1	Wood	White	Deteriorated	Moisture	Negative	0.35	Yes	No
156	Bed 5	Window	Exterior Sash	C1	Wood	White	Deteriorated	Moisture	Negative	0.45	Yes	No
157	Bed 5	Window	Sash	C2	Wood	Brown	Deteriorated	Friction	Negative	0.66	Yes	No
158	Bed 5	Window	Jamb	C2	Wood	Brown	Deteriorated	Friction	Negative	0.55	Yes	No
159	Bed 5	Window	Exterior Jamb	C2	Wood	White	Deteriorated	Moisture	Negative	0.53	Yes	No
160	Bed 5	Window	Exterior Sash	C2	Wood	White	Deteriorated	Moisture	Negative	0.7	Yes	No
161	Bed 5	Window	Sash	D	Wood	Brown	Deteriorated	Friction	Negative	0.78	Yes	No
162	Bed 5	Window	Parting Bead	D	Wood	Brown	Deteriorated	Friction	Negative	0.22	Yes	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
163	Bed 5	Window	Exterior Jamb	D	Wood	White	Deteriorated	Moisture	Negative	0.45	Yes	No
164	Bed 5	Window	Exterior Sash	D	Wood	White	Deteriorated	Moisture	Negative	0.64	Yes	No
165	Bed 5	Window	Well	D	Wood	White	Deteriorated	Moisture	Negative	0.52	Yes	No
166	Bed 5	Room	Ceiling Trim	A	Wood	White	Deteriorated	Impact	Negative	0	No	No
167	Bed 6	Room	Wall	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
168	Bed 6	Room	Wall	B	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
169	Bed 6	Room	Wall	C	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
170	Bed 6	Room	Wall	D	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
171	Bed 6	Room	Ceiling	A	Plaster	White	Deteriorated	Structural	Negative	0.06	No	No
172	Bed 6	Room	Floor	A	Wood	Red	Deteriorated	Friction	Negative	0.12	Yes	No
173	Bed 6	Window	Sash	C	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
174	Bed 6	Window	Stop	C	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
175	Bed 6	Window	Exterior Stop	C	Wood	White	Deteriorated	Moisture	Negative	0	No	No
176	Bed 6	Window	Exterior Sash	C	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
177	Bed 6	Window	Well	C	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
178	Bed 6	Window	Sash	D	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
179	Bed 6	Window	Stop	D	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
180	Bed 6	Window	Exterior Stop	D	Wood	White	Deteriorated	Moisture	Negative	0	No	No
181	Bed 6	Window	Exterior Sash	D	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
182	Living 7	Room	Wall	A	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
183	Living 7	Room	Wall	B	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
184	Living 7	Room	Exposed Wall	B	Plaster	White	Deteriorated	Impact	Negative	0.02	No	No
185	Living 7	Room	Wall	C	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
186	Living 7	Room	Wall	D	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No

Table 8: All XRF Results & Visual Assessment

Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
187	Living 7	Room	Ceiling	A	Plaster	White	Deteriorated	Impact	Negative	0	No	No
188	Living 7	Window	Stop	A	Wood	Brown	Deteriorated	Impact	Negative	0	No	No
189	Living 7	Window	Sash	D1	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
190	Living 7	Window	Stop	D1	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
191	Living 7	Window	Exterior Stop	D1	Wood	White	Deteriorated	Moisture	Negative	0	No	No
192	Living 7	Window	Exterior Sash	D1	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
193	Living 7	Window	Well	D1	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
194	Living 7	Window	Sash	D2	Wood	Varnish	Deteriorated	Friction	Negative	0	Yes	No
195	Living 7	Window	Stop	D2	Wood	Varnish	Deteriorated	Impact	Negative	0	No	No
196	Living 7	Window	Exterior Sash	D2	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
197	Living 7	Window	Well	D2	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
198	Stair 8	Room	Wall	A	Drywall	Blue	Deteriorated	Impact	Negative	0	No	No
199	Stair 8	Room	Wall	C	Drywall	Blue	Deteriorated	Impact	Negative	0	No	No
200	Stair 8	Door	Casing	D	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
201	Stair 8	Stair	Tread	C	Wood	Varnish	Deteriorated	Friction	Negative	0.01	Yes	No
202	Stair 8	Stair	Stringer	C	Wood	Varnish	Deteriorated	Impact	Negative	0.01	No	No
203	Stair 8	Stair	Railing	A	Wood	Varnish	Deteriorated	Impact	Negative	0.02	No	No
204	Hall 9	Room	Wall	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
205	Hall 9	Room	Wall	C	Wood	White	Deteriorated	Impact	Negative	0	No	No
206	Hall 9	Room	Wall	D	Wood	White	Deteriorated	Impact	Negative	0	No	No
207	Hall 9	Room	Ceiling	A	Drywall	Tan	Deteriorated	Impact	Negative	0	No	No
208	Hall 9	Door to Stair 8	Door	B	Wood	Brown	Deteriorated	Impact	Negative	0.01	Yes	No
209	Hall 9	Door to Stair 8	Door Exterior	B	Wood	Brown	Deteriorated	Impact	Negative	0.01	Yes	No
210	Bed 10	Room	Wall	A	Drywall	Blue	Deteriorated	Impact	Negative	0	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
211	Bed 10	Room	Wall	B	Drywall	Blue	Deteriorated	Impact	Negative	0.09	No	No
212	Bed 10	Room	Wall	C	Drywall	Blue	Deteriorated	Impact	Negative	0.01	No	No
213	Bed 10	Room	Wall	D	Drywall	Blue	Deteriorated	Impact	Negative	0.06	No	No
214	Bed 10	Room	Ceiling	D	Drywall	Blue	Deteriorated	Impact	Negative	0.01	No	No
215	Bed 10	Room	Ceiling	D	Drywall	White	Deteriorated	Impact	Negative	0.01	No	No
216	Bed 10	Room	Floor	D	Wood	Varnish	Deteriorated	Friction	Negative	0.02	Yes	No
217	Bed 10	Attic Hatch	Door	A	Wood	Blue	Deteriorated	Impact	Negative	0.01	Yes	No
218	Bed 10	Attic Hatch	Casing	A	Wood	Blue	Deteriorated	Impact	Negative	0	Yes	No
219	Bed 10	Window	Casing	B	Wood	Varnish	Deteriorated	Impact	Negative	0.11	No	No
220	Bed 10	Window	Sill	B	Wood	Varnish	Deteriorated	Impact	Negative	0.04	No	No
221	Bed 10	Window	Stop	B	Wood	Varnish	Deteriorated	Friction	Negative	0.02	Yes	No
222	Bed 10	Window	Sash	B	Wood	Varnish	Deteriorated	Friction	Negative	0.03	Yes	No
223	Bed 10	Window	Jamb	B	Wood	Varnish	Deteriorated	Friction	Negative	0.02	Yes	No
224	Bed 10	Window	Exterior Jamb	B	Wood	White	Deteriorated	Moisture	Negative	0.22	Yes	No
225	Bed 10	Window	Exterior Sash	B	Wood	White	Deteriorated	Moisture	Negative	0.92	Yes	No
226	Bed 10	Window	Well	B	Wood	White	Deteriorated	Moisture	Negative	0.02	Yes	No
227	Bed 10	Window	Casing	D	Wood	Varnish	Deteriorated	Impact	Negative	0.03	No	No
228	Bed 10	Window	Sill	D	Wood	Varnish	Deteriorated	Impact	Negative	0.11	No	No
229	Bed 10	Window	Stop	D	Wood	Varnish	Deteriorated	Friction	Negative	0.02	Yes	No
230	Bed 10	Window	Exterior Sash	D	Wood	Varnish	Deteriorated	Moisture	Positive	1.01	Yes	No
231	Bed 10	Window	Parting Bead	D	Wood	White	Deteriorated	Moisture	Positive	1.0	Yes	No
232	Bed 10	Window	Exterior Sash	B	Wood	White	Deteriorated	Moisture	Positive	1.03	Yes	No
233	Basement 11	Room	Wall	A	Block	White	Deteriorated	Moisture	Negative	0	No	No
234	Basement 11	Room	Wall	B	Block	White	Deteriorated	Moisture	Negative	0.2	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
235	Basement 11	Room	Wall	C	Block	White	Deteriorated	Moisture	Negative	0.46	No	No
236	Basement 11	Room	Wall	D	Block	White	Deteriorated	Moisture	Negative	0	No	No
237	Basement 11	Room	Ceiling	D	Wood	White	Deteriorated	Moisture	Negative	0.49	No	No
238	Basement 11	Room	Floor	D	Concrete	Grey	Deteriorated	Moisture	Negative	0	Yes	No
239	Basement 11	Room	Support Post	A	Wood	White	Deteriorated	Impact	Negative	0	No	No
240	Basement 11	Room	Shelving	C	Wood	White	Deteriorated	Impact	Negative	0.17	No	No
241	Basement 11	Room	Wall	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
242	Basement 11	Door	Door	B	Wood	White	Deteriorated	Impact	Negative	0	No	No
243	Basement 11	Door	Door Exterior	B	Wood	White	Deteriorated	Impact	Negative	0	Yes	No
244	Basement 11	Door	Jamb	B	Wood	White	Deteriorated	Impact	Negative	0	Yes	No
245	Basement 11	Closet	Shelving	C	Wood	White	Deteriorated	Impact	Negative	0	No	No
246	Basement 11	Window	Jamb	D1	Wood	Green	Deteriorated	Moisture	Negative	0.07	Yes	No
247	Basement 11	Window	Sash	D1	Wood	Green	Deteriorated	Moisture	Negative	0.04	Yes	No
248	Basement 11	Window	Exterior Sash	D1	Wood	Green	Deteriorated	Moisture	Positive	3.83	Yes	No
249	Basement 11	Window	Exterior Jamb	D1	Wood	White	Deteriorated	Moisture	Negative	0.35	No	No
250	Basement 11	Window	Jamb	D2	Wood	Green	Deteriorated	Moisture	Negative	0	Yes	No
251	Basement 11	Window	Sash	D2	Wood	Green	Deteriorated	Moisture	Negative	0	Yes	No
252	Basement 11	Window	Exterior Sash	D2	Wood	White	Deteriorated	Moisture	Positive	2.77	Yes	No
253	Basement 11	Window	Exterior Jamb	D2	Wood	White	Deteriorated	Moisture	Positive	2.1	No	No
254	Basement 11	Cabinet	Frame	B/C	Wood	White	Deteriorated	Impact	Negative	0.13	No	No
255	Home Ext.	Window	Casing	A	Wood	Grey	Deteriorated	Weathering	Positive	1.0	No	No
256	Home Ext.	Window	Casing	A	Wood	Grey	Deteriorated	Weathering	Positive	1.01	No	No
257	Home Ext.	Window	Sill	A	Wood	Grey	Deteriorated	Weathering	Negative	0.69	No	No
258	Home Ext.	Window	Sill	A	Wood	Grey	Deteriorated	Weathering	Positive	1.15	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
259	Home Ext.	Ramp	Railing	A	Wood	White	Deteriorated	Weathering	Negative	0	No	No
260	Home Ext.	Window to Porch 1	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0.81	No	No
261	Home Ext.	Window to Porch 1	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0.39	No	No
262	Home Ext.	Window to Porch 1	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0.6	No	No
263	Home Ext.	Window to Porch 1	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0.49	No	No
264	Home Ext.	Window to Porch 1	Sill	B	Wood	Grey	Deteriorated	Weathering	Negative	0.1	No	No
265	Home Ext.	Door to Porch 1	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
266	Home Ext.	Door to Porch 1	Threshold	B	Wood	Grey	Deteriorated	Weathering	Negative	0	Yes	No
267	Home Ext.	Foundation	Foundation	B	Block	Grey	Deteriorated	Weathering	Negative	0	No	No
268	Home Ext.	Window to Kitchen 2	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
269	Home Ext.	Window to Kitchen 2	Sill	B	Wood	Grey	Deteriorated	Weathering	Negative	0.01	No	No
270	Home Ext.	Door to Entry 3	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
271	Home Ext.	Window to Bath 4	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
272	Home Ext.	Window to Bath 4	Sill	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
273	Home Ext.	Window to Bed 5	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
274	Home Ext.	Window to Bed 5	Sill	B	Wood	Grey	Deteriorated	Weathering	Negative	0.19	No	No
275	Home Ext.	Window to Bed 10	Casing	B	Wood	Grey	Deteriorated	Weathering	Positive	1.71	No	No
276	Home Ext.	Window to Bed 10	Sill	B	Wood	Grey	Deteriorated	Weathering	Positive	1.35	No	No
277	Home Ext.	Window to Bed 5	Casing	C1	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
278	Home Ext.	Window to Bed 5	Sill	C1	Wood	Grey	Deteriorated	Weathering	Negative	0.21	No	No
279	Home Ext.	Window to Bed 5	Sill	C1	Wood	Grey	Deteriorated	Weathering	Negative	0.22	No	No
280	Home Ext.	Window to Bed 5	Casing	C2	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
281	Home Ext.	Window to Bed 5	Sill	C2	Wood	Grey	Deteriorated	Weathering	Negative	0.39	No	No
282	Home Ext.	Downspout	Downspout	C	Metal	White	Deteriorated	Weathering	Negative	0.01	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
283	Home Ext.	Window to Bed 5	Casing	D	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
284	Home Ext.	Window to Bed 5	Sill	D	Wood	Grey	Deteriorated	Weathering	Negative	0.07	No	No
285	Home Ext.	Window to Bed 6	Casing	C	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
286	Home Ext.	Window to Bed 6	Sill	C	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
287	Home Ext.	Fence Post	Post	C	Wood	Green	Deteriorated	Weathering	Negative	0	No	No
288	Home Ext.	Laundry Hanger	Post	C	Metal	Red	Deteriorated	Weathering	Negative	0.07	No	No
289	Home Ext.	Window to Bed 6	Casing	D	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
290	Home Ext.	Window to Bed 6	Sill	D	Wood	Grey	Deteriorated	Weathering	Negative	0.02	No	No
291	Home Ext.	Window to Living 7	Casing	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
292	Home Ext.	Window to Living 7	Sill	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
293	Home Ext.	Window to Porch 1	Casing	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0.68	No	No
294	Home Ext.	Window to Porch 1	Casing	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0.55	No	No
295	Home Ext.	Window to Porch 1	Sill	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0.86	No	No
296	Home Ext.	Window to Porch 1	Sill	D1-2	Wood	Grey	Deteriorated	Weathering	Negative	0.3	No	No
297	Home Ext.	Window to Bed 10	Casing	D	Wood	Grey	Deteriorated	Weathering	Negative	0.42	No	No
298	Home Ext.	Window to Bed 10	Casing	D	Wood	Grey	Deteriorated	Weathering	Negative	0.48	No	No
299	Home Ext.	Window to Bed 10	Sill	D	Wood	Grey	Deteriorated	Weathering	Negative	0.68	No	No
300	Garage Ext.	Door	Casing	A	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
301	Garage Ext.	Door	Stop	A	Wood	Grey	Deteriorated	Weathering	Negative	0.62	Yes	No
302	Garage Ext.	Door	Door	A	Wood	Grey	Deteriorated	Weathering	Negative	0	Yes	No
303	Garage Ext.	Siding	Cornerboard	A	Wood	Grey	Deteriorated	Weathering	Negative	0.04	No	No
304	Garage Ext.	Soffit	Rafter Tail	A	Wood	Beige	Deteriorated	Weathering	Negative	0.02	No	No
305	Garage Ext.	Overhead Door	Casing	B	Wood	Grey	Deteriorated	Weathering	Positive	1.55	No	No
306	Garage Ext.	Overhead Door	Stop	B	Wood	Grey	Deteriorated	Weathering	Negative	0.79	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
307	Garage Ext.	Overhead Door	Stop	B	Wood	Grey	Deteriorated	Weathering	Negative	0.11	No	No
308	Garage Ext.	Overhead Door	Door	B	Wood	Grey	Deteriorated	Weathering	Negative	0	Yes	No
309	Garage Ext.	Overhead Door	Door	B	Wood	Grey	Deteriorated	Weathering	Negative	0	Yes	No
310	Garage Ext.	Overhead Door	Stop	B	Wood	Grey	Deteriorated	Weathering	Negative	0.83	Yes	No
311	Garage Ext.	Garage Lean-To	Door Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0.01	No	No
312	Garage Ext.	Garage Lean-To	Door	B	Wood	Grey	Deteriorated	Weathering	Negative	0.02	Yes	No
313	Garage Ext.	Window	Casing	C1	Wood	Green	Deteriorated	Weathering	Negative	0	No	No
314	Garage Ext.	Window	Sill	C1	Wood	Green	Deteriorated	Weathering	Negative	0.01	No	No
315	Garage Ext.	Window	Sash	C1	Wood	Green	Deteriorated	Weathering	Positive	1.65	No	No
316	Garage Ext.	Window	Stop	C1	Wood	Green	Deteriorated	Weathering	Negative	0	No	No
317	Garage Ext.	Window	Casing	C2	Wood	Green	Deteriorated	Weathering	Negative	0.07	No	No
318	Garage Ext.	Window	Sill	C2	Wood	Green	Deteriorated	Weathering	Negative	0	No	No
319	Garage Ext.	Window	Sash	C2	Wood	Green	Deteriorated	Weathering	Positive	1.25	No	No
320	Garage Ext.	Window	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
321	Garage Ext.	Window	Sill	B	Wood	Grey	Deteriorated	Weathering	Positive	1.13	No	No
322	Garage Ext.	Window	Sash	B	Wood	Grey	Deteriorated	Weathering	Positive	1.12	Yes	No
323	Garage Ext.	Window	Jamb	B	Wood	Grey	Deteriorated	Weathering	Positive	3.01	Yes	No
324	Garage Ext.	Door	Casing	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
325	Garage Ext.	Door	Door	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
326	Garage Ext.	Door	Door Exterior	B	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
327	Garage Ext.	Window	Casing	D2	Wood	Grey	Deteriorated	Weathering	Negative	0	No	No
328	Garage Ext.	Window	Sill	D2	Wood	Grey	Deteriorated	Weathering	Negative	0.1	No	No
329	Garage Ext.	Window	Exterior Sash	D2	Wood	Grey	Deteriorated	Weathering	Negative	0.75	Yes	No
330	Garage Ext.	Window	Exterior Stop	D2	Wood	Grey	Deteriorated	Weathering	Negative	0.73	Yes	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
331	Garage Ext.	Window	Casing	D1	Wood	Grey	Deteriorated	Weathering	Negative	0.01	No	No
332	Garage Ext.	Window	Sill	D1	Wood	Grey	Deteriorated	Weathering	Negative	0.41	No	No
333	Garage Ext.	Window	Exterior Sash	D1	Wood	Grey	Deteriorated	Weathering	Negative	0.41	Yes	No
334	Garage Ext.	Window	Exterior Stop	D1	Wood	Grey	Deteriorated	Weathering	Negative	0.34	No	No
335	Garage Ext.	Soffit	Rafter Tail	D	Wood	Beige	Deteriorated	Weathering	Negative	0.01	No	No
336	Garage Int.	Window	Sash	B	Wood	Brown	Deteriorated	Moisture	Negative	0	Yes	No
337	Garage Int.	Room	Ceiling Rafter	B	Wood	Brown	Deteriorated	Moisture	Negative	0	No	No
338	Garage Int.	Room	Wall	B	Wood	Brown	Deteriorated	Moisture	Negative	0	No	No
339	Garage Int.	Room	Wall	D	Wood	Brown	Deteriorated	Moisture	Negative	0	No	No
340	Garage Int.	Window	Jamb	B	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
341	Garage Int.	Exposed Rafter	Rafter Tail	C	Wood	White	Deteriorated	Weathering	Negative	0.01	No	No
342	Garage Int.	Overhead Door	Door	B	Wood	White	Deteriorated	Weathering	Negative	0	Yes	No
343	Garage Int.	Room	Wall	A	Wood	White	Deteriorated	Impact	Negative	0	No	No
344	Garage Int.	Door	Door	A	Wood	White	Deteriorated	Moisture	Negative	0.14	Yes	No
345	Garage Int.	Door	Jamb	A	Wood	White	Deteriorated	Moisture	Negative	0.02	Yes	No
346	Garage Int.	Room	Wall	B	Wood	Black	Deteriorated	Moisture	Negative	0	No	No
347	Garage Int.	Room	Wall	C	Wood	Black	Deteriorated	Moisture	Negative	0	No	No
348	Garage Int.	Room	Wall	D	Wood	Black	Deteriorated	Moisture	Negative	0	No	No
349	Garage Int.	Overhead Door	Door	B	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
350	Garage Int.	Window	Sash	D1	Wood	White	Deteriorated	Moisture	Negative	0.05	Yes	No
351	Garage Int.	Window	Jamb	D1	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
352	Garage Int.	Window	Sash	D2	Wood	White	Deteriorated	Moisture	Negative	0.06	Yes	No
353	Garage Int.	Window	Jamb	D2	Wood	White	Deteriorated	Moisture	Negative	0	Yes	No
354	Garage Int.	Garage Lean-To	Window Casing	A	Wood	Brown	Deteriorated	Moisture	Negative	0.57	No	No

Table 8: All XRF Results & Visual Assessment												
Reading #	Room	Component	Component Type	Side	Substrate	Color	Condition	Cond cause	Result	mg/cm2	Fric-imp	Teeth marks
355	Garage Int.	Garage Lean-To	Window Casing	A	Wood	Brown	Deteriorated	Moisture	Negative	0.89	No	No
356	Garage Int.	Garage Lean-To	Window Sill	A	Wood	Brown	Deteriorated	Moisture	Negative	0.46	No	No
357	Garage Int.	Garage Lean-To	Window Jamb	A	Wood	White	Deteriorated	Moisture	Negative	0.56	No	No
358	Garage Int.	Garage Lean-To	Window Sash	C1	Wood	Brown	Deteriorated	Moisture	Negative	0.09	No	No
359	Garage Int.	Garage Lean-To	Window Sash	C2	Wood	Brown	Deteriorated	Moisture	Negative	0.1	No	No
360									Cal	1		
361									Cal	0.95		
362									Cal	0.97		
363									Cal	0		
364									Cal	0		
365									Cal	0		

HUD reporting limits for positive XRF results are ≥ 1.0 mg/cm^2 for painted or coated surfaces.

D-2: XRF Device used

SciAps X 550, 1/1/2022

PERFORMANCE CHARACTERISTIC SHEET

MANUFACTURER Make and Model:

Make: *SciAps*

Models: *Model X-550*

X-Ray Source: *Rhodium (Rh) or Gold (Au) Anode*

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

1.0 mg/cm2

OPERATING PARAMETERS:

Timed mode: fixed 1

0-second reading.

Quick mode: variable-time reading (approximately 2-6 seconds).

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) on NIST SRM 2579 (1.02 mg/cm^2)/NIST SRM 2573, or equivalent

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

Au Anode (quick) **READING DESCRIPTION**	**SUBSTRATE**	**THRESHOLD (mg/cm^2)**
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	1.0 1.0 1.0 1.0 1.0 1.0
Rh Anode (Timed or Quick), Au Anode (Timed) **READING DESCRIPTION**	**SUBSTRATE**	**THRESHOLD (mg/cm^2)**
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.9 0.9 0.9 0.9 0.9 0.9

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in February 2022, with two separate instruments of each Anode type, operated in both Timed and Quick modes.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm2 film; for NIST SRM 2579a, use film 2573 (1.04 mg/cm2).
If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi- family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C. Multiply the number C by

0.0072. Call this quantity D. Add the

number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original

XRF readings. Compute the average of all

ten re-test XRF readings. Find the absolute

difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The reading time in Archive tests was 10 seconds in Timed mode and from 2-6 seconds in Quick mode, for both the Rh Anode and Au Anode.

CLASSIFICATION OF RESULTS:

XRF results for the Au Anode in Quick mode are classified as positive if they are greater than or equal to 1.0 mg/cm2 and negative if they are less than to 1.0 mg/cm2. XRF results for the Au Anode in Timed mode and for the Rh Anode in Timed or Quick mode are classified as positive if they are greater than or equal to 0.9 mg/cm2 and negative if they are less than to 0.9 mg/cm2.

DOCUMENTATION:

A report titled Methodology for XRF Performance Characteristic Sheets (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm2 and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september- 1997.

APPENDIX E – LABORATORIES USED, ORIGINAL LABORATORY ANALYSIS REPORTS, & CHAIN OF CUSTODY FORMS

E-1: Laboratories used

Trace Metals Laboratory used to test dust and soil samples:

EMSL Analytical, Inc.
6340 Castleplace Drive
Indianapolis, Indiana 46250
P: 800-220-3675

E-2: Original laboratory analysis reports & chain of custody form

All the original laboratory analysis reports and chain of custody forms for any samples that were sent for testing are included in the following pages.

EMSL Analytical, Inc.

6340 Castleplace Drive, Indianapolis, IN, 46250
Telephone: 317.803.2997 Fax:317.803.3047
www.emsl.com

EMSL Order ID: 162564487
LIMS Reference ID: CD64487
EMSL Customer ID: MATE53

Attention: Tim Raymond
Materials Testing Consultants [MATE53]
693 Plymouth N.E.
Grand Rapids, MI 49505
(800) 968-8379
traymond@mtc-test.com

Project Name: 1219 BANON LAKE ROUND

Customer PO: 251943
EMSL Sales Rep: Jeromy Bish
Received: 12/10/2025 10:51
Reported: 12/12/2025 09:07

Analytical Results

Analyte	Results	RL	Weight(g)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: 16/HOME EXTERIOR SIDE B DRIPLINE								**Date Sampled: 12/09/25**	
Matrix: Soils								**LIMS Reference ID: CD64487-16**	
Lead	<32 mg/kg	32 mg/kg	0.506	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 17/HOME EXTERIOR SIDE C DRIPLINE								**Date Sampled: 12/09/25**	
Matrix: Soils								**LIMS Reference ID: CD64487-17**	
Lead	<32 mg/kg	32 mg/kg	0.5004	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									

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Analytical Results (Continued)

Analyte	Results	RL	Area(in²)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: 01/KITCHEN 2 SIDE B WINDOW SILL								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-01**	
Lead	33 µg/ft²	22 µg/ft²	51.75	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 02/KITCHEN 2 SIDE B FLOOR								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-02**	
Lead	9.4 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 03/LIVING 7 SIDE D WINDOW WELL								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-03**	
Lead	590 µg/ft²	9.5 µg/ft²	121.5	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 04/LIVING 7 SIDE D FLOOR								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-04**	
Lead	5.2 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 05/BED 6 SIDE D WINDOW SILL								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-05**	
Lead	140 µg/ft²	43 µg/ft²	27	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 06/BED 6 SIDE D FLOOR								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-06**	
Lead	190 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 07/BED 5 SIDE C WINDOW WELL								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-07**	
Lead	1500 µg/ft²	99 µg/ft²	116.875	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		10
Sample Comments:									
Client Sample ID: 08/BED 5 SIDE C FLOOR								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-08**	
Lead	<4.0 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 09/BED 10 SIDE B WINDOW SILL								**Date Sampled: 12/09/25**	
Matrix: Wipe								**LIMS Reference ID: CD64487-09**	
Lead	170 µg/ft²	11 µg/ft²	103.125	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									

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Analytical Results (Continued)

Analyte	Results	RL	Area(in²)	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: 10/BED 10 SIDE B FLOOR									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-10**
Lead	20 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 11/PORCH 1 SIDE B WINDOW WELL									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-11**
Lead	1300 µg/ft²	87 µg/ft²	131.75	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		10
Sample Comments:									
Client Sample ID: 12/PORCH 1 SIDE B FLOOR									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-12**
Lead	14 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 13/BED 6 SIDE C WINDOW SILL									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-13**
Lead	<43 µg/ft²	43 µg/ft²	27	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 14/ENTRY/STAIRS 3 SIDE B ENTRY FLOOR									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-14**
Lead	8.0 µg/ft²	4.0 µg/ft²	288	12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									
Client Sample ID: 15/FIELD BLANK									**Date Sampled: 12/09/25**
Matrix: Wipe									**LIMS Reference ID: CD64487-15**
Lead	<8.0 ug/wipe	8.0 ug/wipe		12/11/25 OCX	SW-846 3050B	12/11/25 OCX	SW 846-7000B		1
Sample Comments:									

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Certified Analyses included in this Report

Analyte	Certifications
SW 846-7000B in Soils	
Lead	16-OHDOH,16-AIHA ELLAP
SW 846-7000B in Wipe	
Lead	16-OHDOH,16-AIHA ELLAP

List of Certifications

Code	Description	Number	Expires
16-MO	Missouri Drinking Water	10180	03/31/2026
16-NYDOH	New York Potable Water, Metals Solid and Hazardous Waste - Asbestos	12130	04/01/2026
16-AIHA ELLAP	American Industrial Hygiene Association (AIHA LAP, LLC) - ELLAP	157245	08/01/2027
16-AIHA IHLAP	American Industrial Hygiene Association (AIHA LAP, LLC) - IHLAP	157245	08/01/2027
16-CA ELAP	California Metals in DW, Chemistry and Bulk Asbestos in Hazardous Waste	2575	06/30/2026
16-A2LA Food	A2LA Food Microbiology	2845.11	01/31/2026
16-A2LA Chemistry	A2LA Environmental and Chemistry	2845.25	11/30/2025
16-IN Metals/Asbestos	Indiana Lead and Metals and Asbestos in Drinking Water	C-49-09	12/31/2026
16-OHDOH	Ohio - Lead in Paint Chips, Wipes, Soil and Air	E10040	05/03/2026
16-FLDOH	Florida Asbestos and Metals in Drinking Water, PCBs	E871170	06/30/2026
16-NJDEP	New Jersey Metals, Organics and Inorganics in DW PCBs	IN002	06/30/2026
16-IN Colilert/HPC	Indiana Colilert and HPC	M-49-06	12/31/2026

Please see the specific Field of Testing (FOT) on www.emsl.com <http://www.emsl.com> for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the detection limit.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit
Wet	Sample is not dry weight corrected.

Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.

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Sara Dille Laboratory Manager or other approved signatory

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 8 µg/wipe and is not responsible for any result or reporting limit provided in µg/ft2 since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.

1602504487

mtc-test.com 800.968.8378

PROJECT NO.: 251943
PROJECT NAME: 1219 Barron Lake Road
CLIENT: Fishbeck

CHAIN OF CUSTODY

Report to:
- [ ] Matthew Plummer
- [ ] Chris Kestner
- [x] Tim Raymond
- [ ] other: _____

Email to:
- [ ] Matthew Plummer — Mplummer@mtc-test.com
- [ ] Chris Kestner — Ckestner@mtc-test.com
- [x] Tim Raymond — Traymond@mtc-test.com
- [ ] other: _____

Analysis Requested:
- [ ] Asbestos: PLM EPA 600
- [ ] Paint: FAA, Lead
- [ ] Paint: FAA, Lead, Cadnium, Chromium
- [x] Other: EPA 7000B lead wipes and soil

Turnaround Time:
- [ ] 1 week
- [x] 72 hour (Standard)
- [ ] Other_____

QA Check by:
- [ ] Matthew Plummer
- [ ] Chris Kestner

Sampled by: Tim Raymond Sample Date: 12-9-25

Remarks:

Relinquished by: Tim Raymond Date/Time: 12-9-25

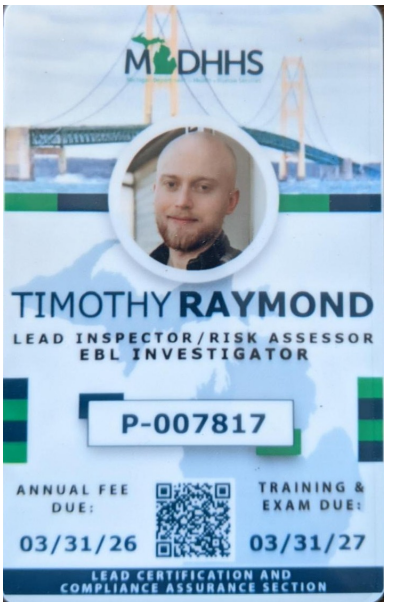
Positive Stop: ~~Yes / No~~

Tracking Number:

No. of samples submitted ___

Received by: Date/Time: 12/10/25 10:51

No. of pages attached___


MDHHS
TIMOTHY RAYMOND
LEAD INSPECTOR/RISK ASSESSOR
EBL INVESTIGATOR
P-007817
ANNUAL FEE DUE:
03/31/26
TRAINING & EXAM DUE:
03/31/27
LEAD CERTIFICATION AND COMPLIANCE ASSURANCE SECTION

Attachment 6 – Scope of Work

Cass County Land Bank	**REQUEST FOR BID**
Project at: 1219 Barron Lake Rd Niles, MI	Contact Information:The Barton Group Phone:269-823-3572 Email: Amelia@bartongroupllc.com

Item #	Description
1	**PERFORMANCE BOND** For contract amounts above $49,999.99, a performance bond in the amount of 100% of the contract price must be procured by the contractor and presented to the Land Bank within two weeks of bid qualification. This bond must be submitted to the Land Bank prior to issuing a Proceed to Work Order. A letter of bond pre-approval must be submitted with your bid.
3	**GENERAL BUILDING PERMIT** Cost of building permit for general work as specified. Please note that on projects involving federal funds, the building permit fee will be based on total value of all the construction work. In addition, each trade will also be required to pull permits for their associated line items. Your price should reflect this fee structure. Note: Contractor to supply Land Bank with building permit receipt when submitting for draw and finaled building permit at the completion of job.
4	**DUMPSTER SERVICE** Furnish dumpster service for construction on site. NOTE: Recycling of all construction materials: As we move forward to a more circular environment, promote best practices in recycling and repurposing leftover construction materials, by reducing the amount of materials to landfills. This includes all trades: structural, electrical, plumbing, and HVAC.
5	**PORT-A-JOHN ON SITE** Furnish a port-a-john on site, in secure location, from beginning of project until bathroom facilities are available on project. Location: On project site or as close as allowable.
6	**POST CONSTRUCTION CLEANING** At the completion of project, the jobsite is to be thoroughly cleaned including, but not limited to, tag removal, carpets swept, flooring washed, house wide dusting, including vents, windows cleaned and washed (interior and exterior), cabinets cleaned out and wiped down, tubs, sinks and toilets cleaned, inside of furnace and all other and appropriate cleaning. Location: Entire house and basement Note: Verification of proper cleaning to be done during punch list walk-through unless scheduled for an alternate time.
7	**GARAGE DEMOLITION** Demolish and dispose of all existing garage structure and materials. All personal property and lead containing items will be removed prior. Leave concrete slabs in place as much as possible.

Cass County Land Bank	**REQUEST FOR BID**
Project at: 1219 Barron Lake Rd Niles, MI	Contact Information:The Barton Group Phone:269-823-3572 Email: Amelia@bartongroupllc.com

Item #	Description
8	**RADON MITIGATION SYSTEM** Furnish and install a new active radon gas mitigating system. Furnish all required permits and facilitate all required inspections and approvals. Supply Land Bank with copy of permit and final approval documentation. Ensure proper combustion air to fuel burning appliances to prevent back draft from occuring. All work to be done by a National Environmental Professional, per ASTM standards, Designation E-2121-03. All penetrations to be properly sealed and caulked. All work to comply with applicable building, mechanical, plumbing, electrical, energy and fire prevention codes and the standards and regulations of the Cass County. NOTE: Contractor will be responsible to conceal the new radon system inside the interior walls and floor surfaces complete. Wall and floor surfaces to match existing surfaces as needed. Location: Basement floor through the roof system.
9	**LANDSCAPING & SEEDING** Remove and dispose of yews on west side of house. Provide fill and grading to drain water away from house. Prepare soil properly (rototill, landscape rake, level, etc.) prior to fertilizer and seed application. Apply 12-6-6 fertilizer uniformly over the entire area to be seeded at the rate recommended for new grass growth.
10	**EXTERIOR LANDING AND STEPS** Remove and dispose of existing landing and steps. Furnish and install new pressure treated wood landing and new closed, raised pressure treated wood steps. Furnish and install new concrete footings , 2 inch x pressure treated wood beams and 6 inch x 6 inch .60 pressure treated support posts. Include new pressure treated floor system, sized per code, with 2 inch x pressure treated floor joists @ 16" oc, appropriate flashing, fasteners and anchors. Include new 5/4 inch x 6 inch pressure treated floor boards, installed using approved deck screws, flat side down with no space between boards. Include new pressure treated wood guardrail system with 2 inch x 2 inch pressure treated square spindles and 4 inch x 4 inch pressure treated wood support newel posts. Include new pressure treated wood closed, raised stair system with 5/4 inch x 6 inch pressure treated floor boards, pressure treated 1 inch x 8 inch (ripped to size) riser boards and pressure treated handrail system with 2 inch x 2 inch pressure treated square spindles and 4 inch x 4 inch pressure treated newel posts. Include 1 inch x 6 inch pressure treated vertical, enclosed landing skirting. All work to be done to ensure proper structural integrity and meet all current code requirements. Location: Elevated entrance on north side Notes: 1) Clean and seal landing using appropriate cleaner and sealant at the end of job. 2) DO NOT directly secure any part of new landing to any vinyl surface. Install nailing blocks prior to vinyl installation.

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Item #	Description
11	**TUCKPOINT & FOUNDATION WALLS REPAIR** Seal and repoint the cracked exterior mortar join to stop water infiltration. Install an adjustable column beneath the beam south of the water heater to correct floor sag. Remove and replace all deteriorated sill plates with treated lumber. Remove and replace any framing exhibiting insect daamage. Support floor to prevent damage to structure. Furnish and install new steel support columns of adequate size to carry applied loads and concrete footings as required to properly support beam. Work to be done to ensure proper structural integrity and meet all current code requirements. Location: Basement
12	**CONCRETE STOOP** Create concrete stoop on grade with north door into kitchen. Excavate to provide sufficient depth to install a 4 inch thick concrete pad on 4 inch (minimum) compacted sand. Approximately 4' wide by 3' deep. Note: 1. There will be zero negative slope towards the house.
13	**VINYL REPLACEMENT WINDOWS** Remove and dispose of boarding materials to prepare for new window installation. Foam, caulk, and/or insulate cavity prior to installation of replacement window. Furnish and install new double hung, stationary, sliding and awning PVC, thermopane replacement window unit as manufactured by Silverline #8500 or approved equal. Windows to have Low "E"/ Argon gas filled glass. New window to meet all current code requirements. Provide new full snap in screen unit. Recommend northern climate energy star rated windows. Location: House: 23 double-hung windows on exterior and 1 casement window Contractor to open up window opening complete, interior/exterior to match existing wall surfaces.

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Item #	Description
14	**STEEL DOOR, HALF CIRCLE LIGHT W/LOCK** Remove and dispose of doors and related material completely. Furnish and install new steel, prehung, insulated door as manufactured by Therma Tru, "Profiles" SERIES 24-Gauge #255HD. New steel door to have a minimum 10-year warranty. New door to have a half divided light at the top, and be embossed with four panels. Recommend northern climate energy star rated doors. Installation to include new peepsite, weatherstripping, threshold, and lockset/deadbolt tandem keyed to each other. Provide "GRADE 2" deadbolt and "GRADE 3" cylindrical lockset, or approved equal with keypad access. New door to have a sill cover or adequately protect door sill during construction. New doors to meet all current code requirements. Location: Side (2) entry doors, in existing locations. Note: 1. Provide Land Bank a key as soon as lock is installed.
15	**STORM AND SCREEN DOORS** Remove and dispose of screen/storm door and related material completely. Furnish and install new enameled finish 1 1/4 inch aluminum self-storing storm and screen door as manufactured by Andersen 3000 series full view or approved equal. Provide door to fit opening. Include chain stop and all hardware complete. Door MUST latch completely and without excessive slamming when entry door is in closed position. Location: See below 1) Side (2) entry doors, in existing locations Note: Contact Land Bank for door swing prior to ordering and installing new storm doors.

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Item #	Description
16	**ARCHITECTURAL SHINGLES** Remove and dispose of shingles and related material. Furnish and install new 15-pound felt paper over entire roof. Furnish and install new ice and water shield at roof edges from the eave edges up the roof to at least two feet past the exterior wall, and full roll width in valleys. Furnish and install Architectural self-sealing, asphalt roofing shingles with a class "A" fire rating and a 30-year warranty, as manufactured by CertainTeed "LANDMARK" Series, or approved equal. Fasten new shingles securely to structure as recommended by the shingle manufacturer. Install new aluminum drip edge at roof edges. Ensure that sound weathertight flashing is installed according to shingle manufactures written instructions, at valleys, junctions of roof and wall surfaces and at roof penetrations, include the B-vent. Complete roofing to be free of scratched, dented or split shingles for a weathertight surface. Furnish and install new attic ventilation as per manufacturer's written requirements. Furnish Land Bank with a written warranty from the manufacturer for the product installed for a minimum of 30 years. Verify shingle color with Land Bank selection sheet. Location: Roof of house Notes: 1) Include a separate per sheet, installed price for 7/16 inch OSB sheathing for house. 2) Include a separate full roof re-deck with 7/16 inch OSB sheathing. 3) Remove and replace all damaged and decay sections before installing new roof system.

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Item #	Description
17	**SIDING AND TRIM** Remove and dispose of all damaged siding and trim. Prepare surfaces for new siding and trim installation to match existing as close as possible, including replacing missing, damaged or improperly installed flashing. Installation to include aluminum wrapped BUILT OUT window and door trim to maintain existing reveals. Include UTILITY BLOCKS at exterior lights (to match light base size), electrical outlets, sillcocks, and vent terminations. Any soffit or fascia that is damaged to be replaced and repaired before trim and siding placed. 1) Contractor to match all siding and trim to match the exisitng siding and trim coverage, as needed. 3) Contractor to propely power wash foundation walls complete and paint all exterior foundation walls surfaces complete. Color to be white. 3) Aluminum trim to be a minimum thickness of 0.019 inches as manufactured by Wolverine-Petronix Inc., Alcoa, Alsco Anaconda Inc., or Reynolds. Furnish and install aluminum ventilatied soffit and/or aluminum ventilated eave as required to provide at least 20% of the required ventilation for the roof when at least 20% of the required ventilation comes from the eave or cornice vents, and the remaining ventilation comes from roof vents installed in the upper part of the roof. Provide free space for ventilation from soffit/eave to attic, including cutting away required soffit/eave materials and raking back attic insulation, and the installation of styrofoam baffles to provide adequate airflow from soffit to roof vents. Installation to provide a complete, weathertight exterior. Location: Exterior of house (mostly southeast section) and covered porches Note: Run front porch soffit
18	**NEW GUTTERS** Remove and dispose of existing damaged gutters completely. Furnish and install new 5-inch gutters, 3-inch downspouts, and 36 inch long extensions. Construct gutters and downspouts of 0.027 gauge seamless aluminum. Provide watertight construction fastened securely to structure. Location: Entire house NOTE: Contractor to properly direct water discharge away from the dwelling and foundation system, as needed.

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Item #	Description
19	**FIBERGLASS INSULATION** Furnish and install new fiberglass building insulation blankets as manufactured by Owens - Corning Fiberglass Corp., Toledo, Ohio, or approved equal. The thermal resistance (R-Value) of the insulation blanket shall be R-19 for bonds and R-13 for knee walls. Insulation shall be installed in strict accordance with the manufacturers written instructions. Work to meet all current code requirements. Location: House floor bonds and attic knee walls. New rear ktichen addition to be included. Note: Supply Land Bank with insulation certificate at the end of job. A new home energy audit will then be ordered to verify a 5-star energy rating. NOTE: Closed Cell Foam: Furnish and install a closed cell foam insulation. Insulation shall have a R-7 value (nominal). Apply per manufacturer'swritten instructions. Fill entire cavity. Installation to meet all current code requirements. Location: Exterior walls
20	**SEALING (AIR INFILTRATION)** Furnish and install new paintable silicone caulk at top and bottom of sill plate on the interior, and at the bottom of the sill plate on the exterior, around the entire perimeter of the house. Seal all penetrations to the exterior with caulk on interior and exterior. Insulate around all windows, doors, outlets, switches and all other penetrations to the exterior walls. Caulk or insulate rim board cavities. Use caulk backer at large openings. Furnish and install approved tape to seal all exposed heating duct and return air seams and boots. Prior to finishing the exterior of the house, install paintable silicone caulk at all trim where wood trim and wood siding meet. Prior to interior painting, install new paintable silicone caulk where all interior trim and plaster/gypsum meet, at window trim, door trim and base trim. Locaton: Entire house. Note: Supply Land Bank with insulation certificate at the end of job. A new home energy audit will then be ordered to verify a five (5) star energy rating.
21	**WALL AND CEILING REPAIRS** Replace all loose, damaged, and deteriorated wall and ceiling surfaces with new gypsum drywall and/or plaster fastened securely to structure. Tape and sand joints to provide surface even with existing adjacent surfaces. Location: Entire house 1st & 2nd Floors .

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Item #	Description
22	**RE-DRYWALL DRYWALL-WALLS AND CEILINGS** Remove and dispose of all drywall and/or plaster in entire house complete. Furnish and install over existing wall and ceiling framing, new 1/2-inch gypsum drywall, as manufactured by "US GYPSUM", or approved equal. Fastened securely to structure per manufacturer's specifications. Tape and sand joints to provide an even finish, per General Requirements. Provide new metal corner beads at outside corners. Location:1st and 2nd floors and vestibules NOTE: . Contractor to install proper insulation before new drywall installation. Replace all damaged wall and ceiling surfaces as needed to match existing as close as possible. Remove existing paneling, inspect the wall surfaces and framing. Framing will need to be in satisfactory conditon before any insulation and drywall is applied. Provide and frame-in new bulkhead walls for the new tub surrounding unit complete. Wall, ceiling surfaces and trim to be repaired and/or replaced to match existing surfaces as needed after removal of all appliances cabinets, countertops and flooring.
23	**PLASTER WALL REPAIRS** Repair damaged plaster. Apply patching material to provide a sound and even finish matching adjacent plaster finish. Location: Entire house rooms 1st & 2nd Floors
24	**PAINTING CEILINGS AND WALLS** Prepare and paint, as stated in the General Requirements, wall and ceiling surfaces, trim, moulding, hand rails, doors, door frames, window frames, and window stools with "Sherwin Williams ProMar 200 Zero VOC Interior Latex, B20-2600 Series". Provide "Sherwin Williams ProMar 200 Zero VOC Interior Latex Primer" coat on new surfaces. Final coat to be semi-gloss on ceilings in baths, kitchen and trim/doors. Provide eggshell finish on walls and ceiling paint on ceilings. Verify colors with Land Bank. Location: Entire house (upper and lower levels) and basement stairwalls and steps and closets
25	**BASEMENT TREADS AND RISERS AND LANDING** Remove existing treads, risers and landing to existing stairway. Provide and properly install new closed treads, risers and landing complete. Check all stringers and landing areas, and replace any damaged or decay sections as needed to secure the proper structural integrity and meet all current local code requirements. Location: Stairway to Basement

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Item #	Description
26	**EXTERIOR PAINTING (FOUNDATION WALLS/DOORS)** Prepare and paint all exterior foundation walls/doors, Sherwin Williams A-100 Exterior Latex Satin Finish, A82-100 Series paint or approved equal. Verify colors of paint with Land Bank. Foundation walls to be white. Location: Exterior, exposed foundation walls and exterior doors
27	**NEW TRIM AND SHOE MOLDING WHERE NEEDED (INTERIOR)** Furnish and install new trim and shoe molding to match existing interior trim as close as possible. Fill holes from installation and caulk to provide a smooth and even surface ready for paint. Location: Entire House Notes: 1) Use a paintable pine or approval equal in bathrooms and laundry, NOT MDF. 2) Base and casing numbers and sizes are based on Molding and Millwork molding selection pocket guide.
28	**INTERIOR HANDRAIL** Remove and dispose of exisitng handrail. Furnish and install new 1 3/4 inch pine pipe handrail with returns and supports. Work to be done to ensure proper structural integrity and meet all current code requirements. Location: Basement and 1st floor to 2nd stoor stairway
29	**CLOSET SHELVES/RODS** Remove and dispose of shelves and rods completely. Furnish and install new materials required to repair closet walls and ceiling, including removal of loose wallpaper and patching plaster with patching material to provide a sound and even finish matching adjacent plaster surfaces. Furnish and install new 1 inch x 12 inch MDF bullnosed shelving with 1 inch x 2 inch primed wood cleats. Secure and caulk shelf to cleats and wall. Include new adjustable metal clothes rod fastened securely to wall and new rod brackets. Location: All closets Notes: 1) If shelf is over 48 inch long, furnish and install a rod bracket fastened to a stud as close to center of span as possible. 2) All clothes closets to be one (1) shelf and one (1) rod.

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Item #	Description
30	**INTERIOR DOORS, PREHUNG** Remove and dispose of door and jamb and related material completely. Furnish and install new interior hollow core, pre-hung door with six (6) panels as manufactured by "Colonist" or approved equal. Installation to include three (3) hinges, hardware and new passage lockset for a complete installation. Bedrooms and bathrooms shall have privacy locksets. Locksets to be same manufacturer and style as exterior door locksets. Location: Entire house (5 room doors and 2 closet doors)
31	**CABINETS-BASE, WALL AND VANITY** Furnish and install new base (standard series), wall (select series) and vanity cabinets, as manufactured by AristoKraft or approved equal. Furnish and install matching crown molding, fillers, scribe molding and all necessary accessories. Fasten securely to structure. Verify style and finish with Land Bank selection sheet. See kitchen and bath layout sheet. Location: Kitchen and bathroom NOTE: 1. Remove all soffits complete in kitchen before installation of new wall and base cabinets.
32	**HOME HARDWARE** Furnish and install two (2) new towel bars, one (1) toilet paper holders, shower curtain rod with mounting hardware (no tension rods) at each bathroom. Furnish and install new solid hinge and wall bumps, 1/4 inch mirrors, medicine cabinet and mailbox, if applicable. Include 3A:40-B:C rated fire extinguisher (install in a readily accessable location, under kitchen sink is prefered if possible). Verify with Land Bank selection sheet. Location: Bathroom and kitchen
33	**COUNTERTOPS-PLASTIC LAMINATE WITH 4" BACKSPLASH** Furnish and install new plastic laminate countertop as manufactured by "WILSONART" or "FORMICA", with laminated endcaps, or approved equal. Install laminate on NAUF "TAFIPAM" particle board or approved equal glued with a water base contact cement. Include a separate 4-inch laminate backsplash and 4-inch laminate sidesplashes at all walls. Fasten securely to cabinets. Provide caulk that matches laminate at all junctions of counter and back/side splashes. See layout sheet. Verify color with Land Bank selection sheet. DO NOT INSTALL POST-FORMED COUNTERTOPS. Location: Kitchen

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Item #	Description
34	**NEW APPLIANCES** Furnish and install new appliances for kitchen and laundry, including all power source and final hookups. Kitchen: 1) Refrigerator with ice maker 2) Range 3) Re-circulating combination range hood/microwave oven (secure cord in cabinet) 4) Dishwasher See Land Bank selection sheet. Location: Kitchen NOTE: 1. All new appliances will be Energy Star units.
35	**LUXURY VINYL TILE FLOORING** Patch and clean or replace subfloor to provide a smooth, even and sound surface to receive new materials. Furnish and install new underlayment and new sheet LVT floor covering. Provide transition strips. Where the wood base exists, provide shoe moulding where existing wood base and new floor covering meet. Provide finish to match existing wood base. Fasten flooring and base to structure with waterproof adhesive. Undercut all doors to provide a minimum of 1/4-inch clearance above finished floor. Verify color and style with Land Bank selection sheet. Location: Kitchen, bathroom, entrance, living room, porch, hallways
36	**CARPETING** Repair existing floor to provide an even, sound surface, flush with existing floor. Furnish and install new 7/16 inch rebond carpet pad with a minimum 6-lb density, and new carpeting as manufactured by Shaw, Philadelphia Bran "Fusion Value 550 E221" (solid color) or "Fusion Value 650 E222" (flecked color) line, or approved equal. new carpet to have minimum 10-year quality assurance warranty, 10-year stain resistance warrarty and 100% recyclable. Secure carpeting properly to the floor to prevent displacement. See selection sheet for product line and color. Location: 2nd floor bedroom, stairwell, and 2 1st floor berooms

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Item #	Description
37	**ATTIC AND WALL INSULATION** Closed cell foam: Furnish and install a closed cell foam insulation. Insulation shall have a R-7 value (nominal). Apply per manufactures' written instruction. Fill entire cavites. Installation to meet all current code requirements. NOTE: 1. The thermal resistance (R-Value) of the insulation blanket shall be R-19 for bonds and R-13 for knee walls. Insulation shall be installed in strict accordance with the manufacturers written instuctions. Work to meet all current code requirements. 2. Contractor to hire a professical insulation company to insulate the exteror walls and attic areas. Locations: Attic and exterior wall surfaces.
	# Plumbing
38	**PERMIT FOR PLUMBING CONTRACT** Cost of permit for Plumbing contract. Note: Supply Land bank with plumbing permit receipt when submitting for draw and finalized permit at the end of job.
39	**WATER HEATER-DIRECT VENT** Remove and dispose of existing water heaters and related materials completely. Furnish and install new 50 gallon, gas fired, direct vent water heater with a minimum 6-year warranty on tank and parts. Water heater must have a first hour rating and be Energy Star rated; have an energy factor of 0.67 or better; and must have a recovery rate of 79% or better. Provide final hook-ups and venting as required for a complete installation and to meet all current code requirements. Rheem or approved equal. Location: Basement, in existing location. NOTE: Remove two (2) hot water heaters complete. Install one (1) new hot water heater complete. The chimney will be removed completely.

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Item #	Description
40	**PEX SUPPLY PIPING TO FIRST FLOOR PER LOCAL CODES** Remove and dispose of improper horizontal and vertical hot and cold water supply piping and waste lines in basement and up to first floor plumbing fixtures. Furnish and install new PEX-A piping and fittings required to provide a complete supply piping system. Installation to meet local codes and to meet manufacturers written instructions using manufacturer recommended fittings, support hangars and installation methods. Include new shut-off valves at each plumbing fixture, and new 8-inch freezeless sill cock(s) with fixed vacuum breakers at existing location(s). Provide braided stainless steel feed lines at exposed piping areas. DO NOT install PEX piping in an area of direct sunlight. Install so manufacturers warranty applies. Location: Entire basement up to first floor plumbing fixtures.
41	**PEX PIPING TO ICE MAKER** Furnish and install new Pex piping from the nearest accessible location. Furnish and install in a wall mounted box. Include a solid connection and shut off valves. Location: Refrigerator in kitchen Note: Do not pin-tap into water line.
42	**REPLACE SANITARY PIPING AND TRAP** Replace sanitary piping with new sanitary piping and new sanitary trap as needed to include vent. Work to meet all current code requirements. Location: At all necessary locations and as current code requires.
43	**CLEAN SANITARY PIPING** Camera and record condition of sanitary piping. Inform Land Bank of any damage or concerns which may hinder proper function of sanitary piping prior to cleanout. Clean out sanitary piping from clean out located at sanitary stack to main sanitary pipe at street. Ensure proper flow and function. Location: Basement to street Notes: 1) Supply Land Bank with receipt after work is completed. 2) Clean out to be performed at beginning of job prior to any interior or exterior flatwork is performed. 3) This item should be the first item performed before the beginning of the project.
44	**FLOOR DRAIN** Remove and dispose of existing floor drain. Furnish and install new floor drain, matching existing size. Location: Basement, in existing location.

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Item #	Description
45	**FIBERGLASS TUB OR SHOWER SURROUND** Prepare opening as required to accept new tub/surround. Furnish and install a new white three (3) piece, 30-inch fiberglass surround and bathtub as manufactured by Lasco, model #2603 Trio or approved equal. Install per manuafacture's written instructions. Provide all related sanitary and supply piping, fittings as manufactured by MOEN, model 2353 with pressure balance valve or approved equal to include new faucet, valves, handles and showerhead. Work to meet all current code requirements. Location: Bathroom
46	**REPLACE WATER CLOSETS** Remove and dispose of water closet completely. Furnish and install new white, vitreous china water closet (replace with same color where color water closet is existing unless otherwise specified under location) as manufactured by American Standard complete with seat or approved equal. Include stainless steel braided supply line and new wax ring, as required for a proper installation. Include new Church "Easy Clean" #540EC seat and bolt covers. Furnish and install all necessary supply and sanitary piping. Work to meet all current code requirements. Location: Bathroom
47	**SINK, FAUCET AND DISPOSAL** Install new minimum 20 gauge 33" X 22", stainless steel double bowl sink as manufactured by DAYTON, model DSE233224 or approved equal. Furnish and install new combination sink faucet as manufactured by MOEN, model 7430, with chrome sprayer, or approved equal. Furnish and install new Insinkerator food waste disposal model number 333 with a minimum 3/4 hp motor, stainless steel flange, hopper and shredding mechanism and corrosion resistant housing. Work to meet all current code requirements. Location: Kitchen
48	**LAUNDRY STANDPIPE** Furnish and install new 2-inch laundry standpipe with cleanout, backwater valve and venting to meet all current code requirements. Location: Basement
49	**INSTALL DISHWASHER** Install dishwasher provided by General Contractor. Furnish and install all necessary wiring. Work to meet all current code requirements. Location: Kitchen

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Item #	Description
50	**CULTURED MARBLE TOPS** Furnish and install new cultured marble vanity top with integrated recessed oval sink INCLUDING OVERFLOW, as manufactured by "U.S. Marble Countertop" or approved equal, to include new fixtures, valves, fittings, pop-up assembly and faucet as manufactured by MOEN, model L4635 or L4625, or approved equal, for a complete installation. Furnish and install all necessary supply and sanitary piping. Work to meet all current code requirements. Verify color of top with Land Bankt. Location and size: Bathroom
51	**REPLACE HOSE BIBS** Replace existing hose bibs with new freezeless hose bibs and shut-offs. Work to meet all current code requirements. Location: Exterior, in existing locations.
	# Mechanical
52	**PERMIT FOR MECHANICAL CONTRACT** Cost for permit for Mechanical Contract. Note: Supply Land bank with mechanical permit receipt when submitting for draw and finalized mechanical permit at the end of job.

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Item #	Description
53	**95% EFFICIENT FURNACE** Remove and dispose of furnace and related equipment completely. Provide a concrete base or approved equal to support new furnace a minimum of 2 inches above finished floor. Furnish and install a new gas fired Direct Vent high efficiency furnace with a minimum efficiency of 95%. New furnace to be AGA Approved and have a minimum 20-year warranty on the heat exchanger. Balance system upon completion of installation. Connect new furnace to existing supply and return air plenums and ducts. Install new grills and registers. Contractors will be responsible for installing new ductwork for proper distribution to habitable rooms. Contractor to conceal new exposed ductwork when it cannot readily be concealed in existing surfaces. Furnish and install new Energy Star Compliant 5-2 Day programmable electronic thermostat as manufactured by Honeywell, model # TH4210D1005 or approved equal. Contractor will be responsible for proper venting of new furnace. Work to meet all current code requirements. Locations: Basement in the existing location. Notes: 1) Supply Land Bank with documentation of furnace efficiency after installation. 2) Furnish and install new clean furnace filters at the end of job. 3) Contractor to seal all existing and new seams and ductwork as needed.
54	**AIR CONDITIONING** Remove and dispose of existing air conditioning unit and related material completely. Furnish and install new air conditioning unit with minimum 14-Seer rating. Furnish and install all necessary wiring. Unit to be sized to properly cool house. Work to meet all current code requirements. Location: Exterior, in existing location.
55	**HEAT DUCT AND REGISTERS - WHERE NEEDED** Remove and dispose of all damaged, rusted and improper existing heat ducts and registers. Furnish and install new supply air duct and registers. In finished areas, conceal all new ductwork. If new duct cannot be concealed, identify location on Proposal and Contract Form, when submitting bid. If not noted on Proposal, contractor will conceal all new exposed ductwork with approved materials. Location: At all necessary locations and as current code requires Note: Fill-in or re-size existing duct openings to accommodate new duct sizes and to allow for proper flooring installation.

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Item #	Description
56	**RETURN AIR DUCT AND REGISTERS- WHERE NEEDED** Remove and dispose of all damaged, rusted and improper existing return air ducts and registers. Furnish and install new return air duct and registers. In finished areas, conceal all new ductwork. If new duct cannot be concealed, identify location on Proposal and Contract Form, when submitting bid. If not noted on Proposal, contractor will conceal all new exposed ductwork with approved materials. Location: At all necessary locations and as current code requires. Notes: 1) Fill-in or re-size existing duct openings to accommodate new duct sizes and to allow for proper flooring installation. 2) Paint new return air duct openings using flat, black paint to hide drywall and framing materials. 3) Contractor to seal all new and exsiting ductwork, as needed.
57	**VENT FOR BATH FANS** Furnish and install new rigid metal vent required to exhaust bathroom ventilation fan/light combination to daylight as required by current code. In unconditioned areas, provide insulation at vent pipe. Coordinate work with Electrical Contractor installing fan/light unit. Location: Bathroom
58	**REPAIR GAS PIPING** Repair gas piping as required to meet all current code requirements. Location: Entire house
59	**DRYER VENT** Remove and dispose of existing dryer vent. Furnish and install new wall cap and new rigid metal vent piping to ventilate clothes dryer. Install wall cap to provide a weathertight condition. Location: Basement
	# Electrical
60	**PERMIT FOR ELECTRICAL CONTRACT** Cost of permit for electrical contract. Note: Supply Land Bank with electrical permit receipt when submitted for draw and finalized permit at the end of job.

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Item #	Description
61	**MAST & METER** Remove and dispose of existing mast and meter. Furnish and install new mast and, if necessary, new meter (or re-use old meter). All work to meet the prevailing National Electrical Code as well as requirements from {ELECTRIC SUPPLY COMPANY}. Location: In existing location.
62	**CORRECT AND UPDATE WIRING ISSUES** 1) Replace all damaged or unsightly switches, outlets, phone and cable jacks and covers. Color to be white. 2) Test and identify defective and ungrounded wiring at all switches, outlets, and fixtures. 3) Furnish and install new wiring where wire is deteriorated, unsafe per NEC. 4) Furnish and install new GFCI outlets where required by code. 5) Where needed, furnish and install new dedicated circuits for range, a/c, water heater, sump pump, dishwasher, refrigerator, garbage disposal and smoke detectors per NEC. 6) Where needed, furnish and install dedicated circuits for kitchen. 7) Install wiring and switches as needed for interior and exterior light fixtures. 8) Furnish and install new LED bulbs in all fixtures. 9) Furnish and install GFCI protected outlets at exterior front and rear of house. 10) All new recepticles to be tamper proof. 13) Furnish and properly install new combo carbon monoxide detector/smoke detector 120-volt with battery back-up. Install according to manfacturer's installation instructions and local code requirements. 14) Electrical contractor will be responsible for properly installing a main disconnect per all codes. 15) Electrical contractor is responible for contacting the building contractor for all new locations of electrical fixtures and recepticles that will be installed and will be removed for all wall and ceiling repairs. 16) Furnish and instll new 220 plug for new electric range complete in kitchen area. See MPC Lumber for location. 18) Bedrooms Provide and install a new ceiling fan with lights (LED) complete.

Cass County Land Bank	**REQUEST FOR BID**
Project at: 1219 Barron Lake Rd Niles, MI	Contact Information:The Barton Group Phone:269-823-3572 Email: Amelia@bartongroupllc.com

Item #	Description
63	**150 AMP SERVICE** Remove and dispose of electrical service equipment and add on panels. Furnish and install new 150 AMP electrical service and circuit breaker panel. Provide a separate appliance circuit for kitchen countertop outlet. When required include new mast, meter socket, and meter. Label each circuit at electrical panel. Check and balance total electrical system. Installation of new service shall meet the requirements of the most current edition of the National Electric Code and the most current edition of the adopted {OTHER CODES IN THE JURSIDICTION}. Repair siding and trim at service meter and mast to provide a weathertightand secure installation to match adjacent surfaces. Repair other areas altered to match existing adjacent surfaces. If sub-panels remain in basement, then wiring must be placed in conduit. Location: Basement, in existing location. Note: If installation is on driveway side of structure, new service must be protected with rigid conduit.
64	**HOME STANDARD BATH VENTS WITH LED LIGHTS** Furnish and install new bath fan that provides continuous air exchange sized and balanced by mechanical contractor (calculations to be provided) and also have a >80 CFM boost function fan with light switched either at the entrance to the room or with an adjustable time delay function. Additional fan must have a >80 CFM boost function fan with light switch. Location: Bathroom
65	**BATH VENT AND LIGHT** Furnish and install new exhaust fan with light/LED bulb, as manufactured by NuTone, Model #769 RL, or approved equal, including new solid METAL ductwork, wall switch and GFCI branch circuit wiring per manufacturer's installation instructions, to meet all current code requirements. Coordinate work with Mechanical Contractor installing vent piping. Location: Bathroom
66	**LIGHT FIXTURES** Remove and dispose of all light fixtures. Furnish and install new ceiling and wall mounted light fixture/LED bulbs. Work to meet all current code requirements. See Land Bank for selection.

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Item #	Description
67	**NEW EXTERIOR LIGHT FIXTURES** Remove and dispose of existing exterior light fixture. Furnish and install new exterior light fixture/LED bulb. See Land Bank selection sheet for styles and models. Work to meet all current code requirements. Location: 3) Side (2) entry doors
68	**NEW SWITCHED PORCELAIN FIXTURES** Remove and dispose of existing porcelain light fixtures. Furnish and install new porcelain light fixture/LED bulb and new wall switches. All lights to be switched include new wiring (if necessary) for a complete installation to meet all current code requirements. Location: Basement, in existing locations.