REQUEST FOR PROPOSAL

STATE LAND BANK AUTHORITY

DEMOLITION AND ABATEMENT CONTRACTOR FOR
FOUR (4) RESIDENTIAL PROPERTIES IN IRON COUNTY, MICHIGAN

RFP-CASE-20-002

Important Dates:

Event	Date Due	Time Due	Method of Communication
RFP Release	8/14/20		SIGMA, Website, direct email
Pre-Bid Meeting	No meeting		
Questions on RFP	8/21/20	Noon	landbank@michigan.gov
Answers to Questions	8/25/20	3 pm	SIGMA, website & email to individuals asking questions
RFP Response Due	8/31/20	5 pm	landbank@michigan.gov
Estimated Contract Start	9/15/20		

REMINDER

Please check your submission to make sure you have included all of the information which is required in the Request for Proposal. In addition, please submit files as noted on the RFP cover page which include the following:

- Technical Submission (Section II-A) with Cover Sheet (Attachment A) and Signed Independent Price Determination Certificate (Attachment B)
- Price Proposal (Section II-B)

Submit separately marked electronic files of your Technical Submission and Price Proposal as noted on the RFP cover page. The State Land Bank Authority (the "SLBA") has no obligation to consider any Submission that is not received on time. **Submissions will only be accepted as noted on the RFP cover page.**

RESPONDENTS ARE RESPONSIBLE FOR ASSURING THAT THE FOLLOWING IDENTIFYING INFORMATION APPEARS IN THE FILE NAME OF YOUR SUBMISSION: *"RFP-CASE-20-002 Price Proposal" and "RFP-CASE-20-002 Technical Submission."*

The SLBA will not respond to telephone inquiries, or visitation by Respondents, or their representatives. Respondent's sole point of contact concerning the RFP is below and any communication outside of this process may result in disqualification.

State Land Bank Authority
111 S. Capitol Avenue
Lansing, Michigan 48933
landbank@michigan.gov

ENVIRONMENTAL CONSULTANT FOR THIS PROJECT:

AKT Peerless Environmental Services
Heath Bobick
Phone 989-754-9896 x 120
BobickH@AKTPeerless.com

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REQUEST FOR PROPOSAL
DEMOLITION AND ABATEMENT CONTRACTOR FOR
FOUR (4) RESIDENTIAL PROPERTIES IN IRON COUNTY, MICHIGAN
RFP-CASE-20-002

This Request for Proposal (the "RFP") is issued by the State Land Bank Authority (the "SLBA"). The SLBA is the sole point of contact with regard to all bidding and contractual matters relating to the services described in this RFP. The SLBA is the only office authorized to change, modify, amend, alter, clarify, etc. the specifications, terms and conditions of this RFP and any contract(s) awarded as a result of this RFP (the "Contract"). The SLBA will remain the SOLE POINT OF CONTACT throughout the bidding process. ***The SLBA will not respond to telephone inquiries, or visitation by Respondents or their representatives. Respondent's sole point of contact concerning the RFP is below and any communication outside of this process may result in disqualification.***

State Land Bank Authority
111 S. Capitol Avenue
Lansing, Michigan 48933
landbank@michigan.gov

SECTION I
STATEMENT OF WORK

A) PURPOSE AND BACKGROUND STATEMENT

The SLBA is the owner of four (4) properties located in Iron County, Michigan ("the Premises"). The properties are all residential properties in poor condition.

Properties and Legal Descriptions:

- 32 Roundhouse Road, Crystal Falls MI
  - 179-336 226-251 229-394 273-112 275-428 CFC-29 3/2 101-M SEC 29 T43N R32W BEG 658' S & 400' W OF NE COR OF SEC 29, TH S 442' TO C & NW RY CO R/W, TH NW'LY ALG R/W 759', TH E 627' TO POB. 3.2 A. 32 ROUNDHOUSE RD
  - Property ID Number: 05202901100
- 113 E Railroad Street, Caspian MI
  - City of Caspian, Caspian Plat 470-229 284-444 282-242 267-478 177-185 177-168 240-324 CPC-A24 4&5 1 SEC 1 T42NR35W PLAT OF CASPIAN LOTS 4 & 5 BLK 1.
  - Property ID Number: 051-161-004-00
- 321 Second Street, Caspian MI
  - First Addition to Plat of Caspian 414-302 184-83 547-19 567-286 CPC-A32 7 6 SEC 1 T42N R35W 1ST ADD TO PLAT OF CASPIAN LOT 7 BLK 6.
  - Property ID Number: 051-206-007-00
- 321 Brady Avenue, Caspian MI
  - First Morgan Addition CPC-B21 4-7 3 SEC 1 T42N R35W 1ST MORGAN ADDITION LOTS 4, 5, 6 & 7 BLK 3.
  - Parcel ID Number: 051-253-004-00

B) SCOPE OF WORK

This RFP is open to all qualified abatement and/or demolition contractors who are capable and qualified to meet the objectives and requirements described in this document. Qualified DBE/MDE/WBE organizations are encouraged to respond. Respondents must supply documentation supporting their qualifications for evaluation.

1. **Abatement and Demolition of Structure:** The Scope of Work ("Work") for this RFP may include, but is not necessarily limited to:
   a. Security: Provide site security for duration of project after notice to proceed is received.
   b. Mobilization: Includes all labor, equipment, materials, and incidentals to mobilize to the project site to perform the work. It includes all supervision of successful Respondent personnel, and office support. It includes project meetings, surveying, site security, temporary controls and utilities, pre-work submittals, preparation of all submittals including, the successful Respondent's Site Specific Work Plan and Health and Safety Plan (HASP), personal protective equipment, permits, disposal approvals, erosion controls, barricades, traffic control, trash disposal, cleaning, and demobilization. Total cost of this item shall not exceed four (4%) percent of the successful Respondent's overall base bid.

c. Utilities: The SLBA has requested disconnection of gas and electric service from this site. Letters will be forward to the successful Respondent indicating the disconnection of those same utilities. It will be the successful Respondent's responsibility to have any other utilities cut and removed from the site as required by regulation, local ordinance or, at a minimum, generally accepted methods. The successful Respondent is responsible for contacting Miss Dig prior to any demolition activity.
    i. Contractor is responsible to cut and cap utilities other than gas and electric and pay all associated fees. This may include well capping and proper closure of any on-site sewer systems or drainage systems as detailed in Phase I/II reports, or as found by successful Respondent.

d. Asbestos Containing Materials: Includes all labor, equipment, materials, incidentals, transportation, and disposal fees for the pre-demolition abatement of asbestos containing materials. Successful Respondent to submit Notification of Intent to Renovate/Demolish to EGLE and the MIOSHA Asbestos Program at the Michigan Department of Licensing and Regulatory Affairs ("LARA"), provide the SLBA with copy of notification and any subsequent revisions to notification.

e. Universal Waste: Include all labor, equipment, materials, and incidentals, transportation and disposal fees needed to manage Universal Waste and its disposal prior to demolition. Universal waste include, but are not limited to, bulbs; ballasts; batteries; mercury containing/equipment; and electronic equipment.
    i. The Pre-demolition survey report from AKT Peerless Environmental Services, Appendix C through F, identified all materials found on site. All must be addressed as part of abatement.

f. Clearances: Coordinate visual and/or air clearance examinations through the SLBA's environmental consultant. Any costs for failed examinations shall be deducted from the final payment to the successful Respondent's final invoice.

g. Demolition: Includes all labor, equipment, materials, fees, permits and incidentals needed: to demolish building, flatwork, and below grade structures associated with the building (including basement, foundations, footings, sumps, pits, vaults etc.); transportation and disposal of all demolition debris; removal of all concrete and asphalt drives and parking areas on site; and utility disconnects, removal, abandonment, or protection of buried underground utilities as specified. Use of explosives is strictly prohibited. Do not burn demolished materials. Except for items or materials indicated to be reused, salvaged, or otherwise indicated to remain property of SLBA, demolished materials shall become the successful Respondent's property and shall be removed, recycled, or disposed from Project site in an appropriate and legal manner. Successful Respondent will be required to provide water, application equipment and personnel for dust suppression during demolition activities.

h. Site Restoration: Site restoration shall include general backfilling, leveling and compaction and the installation of topsoil, grass seed and straw. Procedures, methods, materials, and other information regarding excavation and backfill shall be included in the Project Work Plan developed by the successful Respondent. The following information regarding excavation and backfilling shall be included in the Project Work Plan, at a minimum: (1.) Project Schedule; (2.) List of Subcontractors; (3.) Description of the methods and equipment to be used for each related operation (i.e., excavation, transportation, sampling, etc.); (4.) Transportation company; (5.) Method to protect any storm sewers and conveyances during soil excavation in close proximity of the site; and (6.) Description of the means, methods, and procedures for site restoration.

i. Backfill material: The successful Respondent shall submit data on proposed backfill materials (sand and gravel) to the SLBA for approval. This data shall include the source of backfill material; grain size analysis, including MDOT classification; and analytical results (including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and Michigan metals) verifying that backfill material is uncontaminated. Testing shall be the responsibility of the successful Respondent and shall be performed at no additional cost to the SLBA.

   A. Satisfactory materials shall be MDOT Class II sand or MDOT Class III granular fill and shall be free of trash, debris, roots, and other organic matter. Native fill can be reused in the excavation from which it came, if determined by SLBA or its designee to be suitable. Any sampling, sample delivery, and laboratory analysis deemed necessary for reuse of native fill shall be the responsibility of the successful Respondent and is incidental to the project.

   B. Unsuitable materials

      I. Contaminated soil includes, but is not limited to, soils that are visually or olfactory impacted. Any VOCs, SVOCs, PCBs, or other contaminants are detected in backfill material from an offsite location and/or if the SLBA or its designee detects any contamination through visual or olfactory senses, then this will constitute classification as "contaminated soil."

      II. Unsuitable materials include the following materials: (1.) Soils that, when classified under ASTM D 2487 - Classification of Soils for Engineering Purposes, fall in the classification of Pt, OH, CH, MH, or OL; (2.) Soils that cannot be compacted sufficiently to achieve the density specified for the intended use; (3.) Soil with more than 10% organics; (4.) Soils that contain greater concentrations of chloride or sulfate ions or have a soil resistivity or pH less than the existing onsite soils; (5.) Topsoil; (6.) Slag; (7.) Crushed concrete; (8.) Rock; (9.) Fill with brick, block or concrete; and/or (10.) Fill with rocks larger than 4” diameter.

   C. Analytical Reports: The successful Respondent shall submit to the SLBA all analytical results of the backfill, waste characterization, and any other samples collected/required for the work.

ii. Surface Grade: After demolition activities have been completed, all disturbed surfaces shall be graded, prior to surface restoration, so as to leave no ruts, pits, piles, or ridges. If is required, the successful Respondent shall be responsible for settlement of fill over any fill areas and shall be required to repair any voids or holes that appear for a period of one year after final acceptance of work by the SLBA, at the successful Respondent's own expense. The finished grade shall be flush (+ or -3”) with existing sidewalks which will remain immediately adjacent to the affected area is to be considered grade.

   A. The successful Respondent shall place 4-inches of topsoil throughout, Kentucky Bluegrass seed fertilize, and mulch. The topsoils shall be free of stones, stumps, lumps and similar objects larger than 2-inches in diameter and shall be raked out. The

successful Respondent shall apply starter type fertilizer at the rate recommended by the manufacturer. The successful Respondent shall be required to place topsoil and seed, and provide any maintenance for a complete establishment of grass cover within one year of final acceptance, at successful Respondent's own expense.

iii. Finish Grade: Finish grade shall match the pre-work grade at undisturbed areas and the perimeter of the site. The finish grade shall be approximately 2-inches below the pre-work grade at the center of the property with a gentle upward slope towards the perimeter of the property where the finish grade matches the preexisting grade. Grading shall be conducted as directed by the SLBA or its designee. All impacted area by site activities, including pavements, roads, vegetation, and all other disturbed or altered structures/features shall be restored to pre-work condition. The finished grade shall be flush (+ or -3") with existing sidewalks which will remain immediately adjacent to the affected area is to be considered grade.

A. The successful Respondent shall place 4-inches of topsoil throughout. The topsoils shall be free of stones, stumps, lumps and similar objects larger than 2-inches in diameter, and shall be raked out.

B. The successful Respondent shall leave in place soil erosion fencing upon completion in order to control spring runoff.

iv. Roadway and Parking Areas: The successful Respondent is required to repair, in-kind or better, any areas of the successful Respondent's access point, such as public roads, sidewalk or curbs, disturbed as a result of the successful Respondent's work or access.

i. Demobilization**:** Includes all labor, equipment, materials, and incidentals to complete balance of the Work under the bidding documents including but not limited to: site demobilization including removing personnel, equipment, supplies, rubbish and incidentals from the project site.

C) DELIVERABLES:

The successful Respondent must submit the following documentation to the SLBA following the noted milestones. Prior to processing of final payment, all documents must be delivered to the SLBA.

1. **Prior to work beginning:** Project schedule; pre-work photos of site; project work plan; HASP; spill contingency plan; proposed disposal facilities and proposed disposal facility licenses
2. **Prior to Abatement**: Abatement notification(s) to the State of Michigan
3. **After Abatement:** Copies of site/project manager's verification of the quantity and description of removed materials; Copies of all asbestos and hazardous materials waste manifests; passed visual and/or air clearance examination (to be conducted by SLBA's environmental consultant)
4. **Prior To Demolition**: NESHAP notification(s); permit applications and permits; dust control and air monitoring plan; soil erosion and sedimentation control plan; utility disconnects applications and verifications; and Abandoned Well Plugging Record.
5. **After Demolition:** Copies of all asbestos, hazardous materials and demolition waste manifests; copies of daily site activity reports; photos of finished site; and backfill analytical report.

D) QUALIFICATIONS

The Respondent shall demonstrate by submitting documentation with their response to this RFP that they meet the following qualification criteria:

1. Hold a valid **State of Michigan Residential Builder or Maintenance Contractor license.**
2. Meet the insurance requirements listed in Section II, A. 10. Insurance.
3. Provide a list of similar projects that demonstrates a minimum of three (3) years' experience with demolitions similar to this project.
4. Provide three (3) references, include organization, contact person, and their phone number.
5. Be qualified, licensed and/or certified to handle noted wastes, asbestos and work in contact with potentially contaminated soils.
6. Able to certify all criteria listed on the Cover Sheet, Attachment A.
7. The SLBA Staff will review all public sites including, but not limited to, those listing debarred contractors for use of federal or state funds, licensing sites, OSHA violation sites and environmental violation sites, to verify qualifications applicable to this site and/or funding source.

E) PRE-BID MEETING

A pre-bid meeting will be not be held. Respondents can visit the site and view the property at their convenience.

F) RESPONDENT RESPONSIBILITIES

It is the responsibility of each Respondent, before submitting a bid, to:

1. Examine the RFP and associated documents thoroughly;
2. Visit the site and, if necessary, record conditions at the site (through logs/notes, photographs, video or any other means);
3. Study and correlate the Respondent's observations with the RFP documents;
4. Submit written questions or inquiries about the RFP documents or the Work; and
5. Account for all general, local and prevailing conditions at or near the site that may in any manner affect the cost, schedule, progress, performance or furnishing of the work.

G) SITE INFORMATION

The SLBA has conducted, and is providing in Attachment C through F, a Pre-Demolition Asbestos and Hazardous Material Survey on the subject property.

1. To the extent that any Respondent considers that additional information is necessary for determining its bid, it is the responsibility of that Respondent to request from the SLBA the necessary additional information. In the event the SLBA does not have the requested additional information, it shall be the responsibility of the Respondent, at the Respondent's sole cost, to undertake reasonable examinations of the site and any other pertinent available information and data that the Respondent considers necessary for determining its bid.
2. The Respondent awarded the contract shall be responsible for obtaining any lands, areas, properties, facilities, rights-of-way and easements, in addition to those furnished by the SLBA, that the Respondent considers necessary for temporary facilities, storage, disposal of spoil or waste material or any other similar purpose. The

SLBA does not assume any responsibility for site conditions at any lands, areas, properties, facilities, rights-of- way and easements obtained by any Respondent.

H) PERFORMANCE CONDITIONS AND REQUIREMENTS

1. The Respondent awarded the contract shall comply with all Executive Orders and applicable laws, including, but not limited to, laws affecting cost, schedule, progress, performance or furnishing of the Work. Examples of those laws include, but are not limited to, those relating to nondiscrimination in employment, protection of public and employee health and safety, environmental protection, building codes, fire protection, grading and drainage, use of explosives, vehicular traffic, restoration of lands and property under the control of the State or a political subdivision, taxes, permits and licensing. By way of example, but not exhaustive, all work must comply with the following regulatory requirements:

a. Federal Laws and Regulations
   i. 40 CFR Parts 239 through 282 - Resource Conservation and Recovery Act (RCRA), as amended
   ii. Public Law 91-596 - Occupational Safety and Health Act (OSHA) of 1970, as amended
   iii. 29 CFR Part 1910.120 - Hazardous Waste Operations and Emergency Response (HAZWOPER), as amended
   iv. 29 CFR Part 1926 - Safety and Health Regulations for Construction, as amended
   v. 40 CFR Part 260 - Construction Hazardous Waste Management Systems
   vi. 40 CFR Part 261 - General Identification and Listing of Hazardous Wastes
   vii. 40 CFR Part 262 - Standards Applicable to Generators of Hazardous Wastes
   viii. 40 CFR Part 263 - Standards Applicable to Transporters of Hazardous Wastes
   ix. 40 CFR Part 264 - Standards for Hazardous Wastes TSDF SLBAs and Operators
   x. 40 CFR Part 265 - Interim Standards for Hazardous Wastes TSDF SLBAs and Operators
   xi. 40 CFR Part 270 - Hazardous Waste Permits
   xii. 49 CFR Part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans
   xiii. 49 CFR Part 173 - General Requirements for Shipments and Packaging
   xiv. 49 CFR Part 174-77 - Transporter Requirements
   xv. 49 CFR Part 178-79 - Container Specifications

b. State of Michigan Laws
   i. Michigan Public Act 451, Part 201 - Environmental Remediation, as amended
   ii. Michigan Public Act 451, Part 115 - Solid Waste Management as amended
   iii. Michigan Public Act 451, Part 111 - Hazardous Waste Management, as amended
   iv. Michigan Public Act 451, Part 121 - Liquid Industrial By-Products
   v. Michigan Public Act 154 - Michigan Occupational Safety and Health Act (MIOSHA)
   vi. Michigan Public Act 451 Part 91 – Soil Erosion and Sedimentation Control, as amended
   vii. Michigan Public Act 174, Miss Dig Underground Facility Damage Prevention and Safety Act

c. Local Laws: City of Caspian and/or Crystal Falls and/or County of Iron.

2. **Permits:** The demolition permit shall be obtained through the local jurisdiction or State of Michigan. A copy is to be provided to the SLBA.

3. **Meetings:** *Pre-Demolition Conference:* The SLBA may schedule a pre-demolition conference to be attended by the SLBA, environmental consultant, and the successful Respondent and its subcontractors, as applicable. When no organizational meeting is called, the successful Respondent, before beginning any work, must meet with the staff of the SLBA and arrange a work schedule for the project. Once the project has been started, the successful Respondent must carry it to completion without delay. *Progress Meetings:* The SLBA may schedule progress meetings, in person or by phone conference, to be held whenever needed to supply information necessary to prevent job interruptions, to observe the work or to inspect completed work. The successful Respondent must be represented at each progress meeting by persons with full authority to act for the successful Respondent in regard to all portions of the Work.

4. **Soil Erosion:** With respect to any earth disturbance associated with this contract, the successful Respondent shall comply with the Natural Resources and Environmental Protection Act; Soil Erosion and Sedimentation Control, 1994 PA 451 Part 91, as amended.
   a. The successful Respondent shall be responsible for all application fees and obtaining a soil erosion and sedimentation control (SESC) permit.
   b. The successful Respondent shall furnish, install, and maintain as long as necessary and remove when no longer required, all necessary engineering controls to prevent erosion and sedimentation of onsite soils in accordance with Part 91 of P.A. 451 and the SESC permit. The successful Respondent is expected to leave any soil erosion fencing in place upon completion.

5. **Hazardous Material:** The successful Respondent shall use, handle, store, dispose of, process, transport and transfer any material considered a hazardous material in accordance with all federal, State and local laws. If the successful Respondent encounters material reasonably believed to be a hazardous material and which may present a substantial danger, the successful Respondent shall immediately stop all affected work, give written notice to the SLBA of the conditions encountered, and take appropriate health and safety precautions.

6. **Subcontractors:** Each Respondent shall include a list of subcontractors, if any are utilized, with their submission. The Respondent shall provide licensing data for trades for which licensing is required and, if applicable, indicate minority, woman or handicapped status. If the SLBA objects, for good cause, to any listed subcontractor, the SLBA, before issuing an award, may request replacement of that subcontractor at no increase in contract price and/or contract time. In that event, the Respondent shall provide a substitute subcontractor or the Respondent itself, if qualified for the work involved. If the Respondent declines, that Respondent shall not be considered.
   a. All subcontractors are subject to the same qualification process as the Respondent.
   b. Any replacement or addition to listed subcontractor(s) shall be required to meet the requirements of the RFP documents. If the SLBA objects for good cause to any such newly listed subcontractor, the successful Respondent shall provide a replacement subcontractor at no increase in contract price and/or contract time.

7. **Use of Premises:** The successful Respondent shall confine its operations (including, but not limited to, construction equipment and laydown and storage) to the site and lands, areas, properties, facilities, rights-of-way and easements identified and permitted by the contract documents and shall not unreasonably encumber the Premises. The successful Respondent shall be responsible for any damage to the Premises (including, but not limited to, damage to any real and personal property) and for any damage to any adjacent lands, areas, properties, facilities, rights-of-way and easements (including, but not limited to, damage to any real and personal property) resulting from the successful Respondent's operations. The successful Respondent shall defend, indemnify and hold harmless the SLBA and its environmental consultant against all claims, as construed in adjacent lands, areas, properties, facilities, rights-of-way and easements (inclusive of real and personal property), including loss of use, to the extent resulting from the successful Respondent's operations.

   a. The successful Respondent shall keep the Premises free from accumulations of waste materials, rubbish and other debris, and shall not remove, injure, cut, alter or destroy trees, shrubs, plants or grass, unless otherwise provided elsewhere in the contract documents. At the completion of the work, the successful Respondent shall remove all obstructions, waste and surplus materials, rubbish, debris, tools and construction equipment and shall leave the site clean.
   b. The successful Respondent shall restore to pre-existing conditions all walks, roadways, paved areas and other real and personal property not designated for alteration by the contract documents. To the extent the successful Respondent refuses, fails or neglects to replace all such altered premises and/or restore to its pre-existing condition any walk, roadway, paved or landscaped area and other property not designated for alteration by the contract documents, the successful Respondent shall bear its proportionate share of the delay and costs resulting from the successful Respondent’s refusal, failure or neglect to do so.
   c. The successful Respondent shall not subject any part of the work or adjacent property to stresses or pressures that will damage or endanger the work or adjacent property, or both.
   d. Storage or sale of removed items or materials on-site will not be permitted without advance written approval from the SLBA.
   e. The successful Respondent is responsible for any and all actions necessary to remedy situations involving material spilled or leaked in transit, or mud or dirt tracked off the site. This includes trucks carrying imported fill or other materials to the site (i.e. dust generated from trucks entering the site on adjacent roads). Perform cleanup in accordance with all applicable federal, State, and local regulations at no additional cost to SLBA.
   f. Reuse of Soil and/or Aggregates: Excavate, handle and/or stockpile any reused soil separately from all other materials. Provide each staging area with adequate thickness of polyethylene sheeting to completely cover all materials. Covers shall be large enough to cover the entire staging area when materials are stored. Arrange material stockpiles such that they can be covered and secured each day with polyethylene sheeting. In the event the stockpiles are arranged or sized such that they cannot be adequately covered, the successful Respondent shall reconfigure them at its sole expense. Cover all reuse soil stockpiles left untouched for 8 hours with a secured polyethylene tarp.

8. **Reports:** The successful Respondent shall maintain and make available to the SLBA and environmental consultant daily field reports recording the onsite labor force and equipment (successful Respondent and subcontractors); materials/equipment received (at the site or at another location); visits by suppliers; significant in-progress and completed trade work within major areas; and other pertinent information. Such daily field reports shall be furnished by the successful Respondent promptly to the SLBA and/or its environmental consultant upon their request, and shall be accepted for information only. Neither the SLBA nor its environmental consultant's review of any daily field report shall be construed as agreement with the information contained in any such daily field report.

9. **Emergencies**: In emergencies affecting the safety or protection of persons, the work or property at or adjacent to the site, the successful Respondent, without any special instruction or authorization from the SLBA, is obligated to act to prevent threatened damage, death, injury or loss. The successful Respondent shall give the SLBA prompt written notice of any emergencies and any changes in the work resulting from the action taken. If the SLBA concurs, the SLBA will amend the contract documents to provide for those changes and, unless the emergency resulted in whole or in part from any act or omission within the control of the successful Respondent, will make any corresponding adjustment in contract price and/or contract time.

10. **Schedule:** A schedule of activities must be provided by the successful Respondent after award of contract and prior to beginning activities on the site.

11. **Debris Disposal:** Off-site disposal of materials must be in State licensed locations or landfills. Follow all applicable requirements and regulations.

12. **Inspections:** Following abatement activities, the successful Respondent shall contact the SLBA's environmental consultant for a visual and/or air clearance examination. Any costs associated with clearance failures shall be deducted from successful Respondent's invoice(s). The SLBA's environmental consultant shall be on site for the demolition of the structure and will provide written summary of demolition activities. It is the successful Respondent's responsibility to coordinate demolition with the consultant's availability.

13. **Signage and Safety:** The successful Respondent must post appropriate signs to advise the project personnel and visitors of the limits of construction work areas, hardhat areas, excavations, asbestos abatement, construction parking and staging areas, etc. Advertising signage by successful Respondents, subcontractors, or suppliers is not allowed. The successful Respondent must maintain safe and adequate pedestrian and vehicular access to fire hydrants, commercial and industrial establishments, churches, schools, parking lots, hospitals, fire and police stations and like establishments. The successful Respondent must obtain written approval from the SLBA ten (10) calendar days before connecting to existing facilities or interrupting the services on site.
    a. The successful Respondent must furnish, install and maintain as long as necessary and remove when no longer required adequate barriers, warning signs or lights at all dangerous points throughout the work for protection of property, workers and the public.
    b. Street Barricades: The successful Respondent must erect and maintain all street barricades, signal lights and lane change markers during the periods that a traffic lane is closed for their operations. There must be full compliance with rules and ordinances respecting such street barricading and devices must be removed when hazard is no longer present

14. **Temporary Fencing:** The successful Respondent must entirely enclose the demolition activity area by means of woven wire or snow fence having minimum height of four feet if an open hole is left overnight. Gates must be provided at all points of access, as applicable. Gates must be closed and secured in place at all times when work is not in progress. The fence must be removed and grounds restored to original condition upon completion of the work.

15. **Changes in Scope of Work:** The SLBA is entitled to make changes within the general scope of work outlined in the RFP consisting of additions, deletions or other revisions in the specifications and/or drawings, any means and methods or any SLBA-furnished lands, equipment, materials or services, or directing acceleration of the work. Such changes will result in the release of an amendment to this RFP with applicable time extensions and changes in costs as deemed necessary.

16. **Underground Utilities:** The successful Respondent shall comply with all laws concerning underground utilities, including but not limited to, Michigan Public Act 174, Miss Dig Underground Facility Damage Prevention and Safety Act. In addition, the successful Respondent shall be responsible for immediately notifying the SLBA of any contact with or damage to underground utilities, and for the safety, protection of and repairing of any damage done to any work and any surface and subsurface facilities. The successful Respondent shall bear an appropriate portion of the delay and costs relating to the obligations set forth in this paragraph except as outlined in PA 174, 460.728 Section 8.

17. **Request for Final Payment:** To receive final payment the successful Respondent must have submitted and/or completed the following:
    a. Complete a substantial completion punch list, if any, within the contract time and date fixed by the SLBA.
    b. Submit all documentation outlined in Section I, C. Deliverables, above.
    c. If applicable, the successful Respondent must complete any identified incomplete or defective work to the satisfaction of the SLBA.

18. **Performance and Payment Bonds:** A performance and payment bond will be required for the full amount of the contract. Both the performance bond and payment bond must remain in effect from the date of Contract award until final completion of the Contract. The surety bonds required for a Contract will not be accepted by the SLBA unless the surety bonding company is listed in the current United States Government, Department of Treasury's, Listing of approved sureties (bonding/insurance companies), Department Circular 570. Copies of the current Circular listing may be obtained through the internet web site at https://www.fiscal.treasury.gov/fsreports/ref/suretyBnd/c570_a-z.htm.

SECTION II
SUBMISSION FORMAT

To be considered, each Respondent must submit a COMPLETE submission in response to this RFP using the format specified. Respondent's submission must be submitted in the format outlined below. There should be no attachments, enclosures, or exhibits other than those required in the RFP or considered by the Respondent to be essential to a complete understanding of the submission. Each section of the submission should be clearly identified with appropriate headings:

A) SUBMISSION

1. Business Organization and History – State the full name, address, and phone and facsimile number of your organization and, if applicable, the branch office or other subordinate element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, or corporation; if as a corporation, include the state in which it is incorporated. If appropriate, the submission must state whether the organization is licensed to operate in the State of Michigan. **Provide a copy of your State of Michigan Residential Builder License or Maintenance and Alteration License with Demolition classification.**

2. Statement of the Problem – State in succinct terms your understanding of SLBA's intent presented by this RFP.

3. Narrative – Include a narrative summary description of the proposed effort and of the services(s)/products(s) that will be delivered.

4. Technical Work Plans – Provide detailed information on the qualifications that your firm has to accomplish each of the areas in the Scope of Work.

5. Prior Experience – Describe the prior experience of your organization which you consider relevant to the successful accomplishment of the project defined in this RFP. Include sufficient detail to demonstrate the relevance of such relevant experience. Submissions submitted should include, in this Section, descriptions of qualifying experience to include project descriptions, costs, and starting and completion dates of projects successfully completed; also include the name, address, and phone number of the responsible official of the client organization who may be contacted. The SLBA may evaluate the Respondent's prior performance with the SLBA or the State of Michigan, and prior performance information may be a factor in the award decision.

6. Project Staffing – The Respondent must be able to staff a project team which possesses talent and expertise in the field of the requirements of this RFP. Please provide a **brief** outline of qualifications and similar projects completed for each current staff member and their areas of expertise. Submit copies of any specialized training, certifications and current licenses for each staff member. Indicate which of these individuals you consider key to the successful completion of the work. Do not include any financials for the contemplated work within the Submission.

7. Subcontractors – Include a list of all subcontractors that may be engaged to supplement your work under a future contract; include firm name and address, contact person and complete description of work to be subcontracted. Include descriptive information

concerning subcontractors' organization and abilities. Also, the information provided in response to A-5 and A-6, above, should include detailed information about each potential subcontractors.

8. Financial Stability – Provide FY 2018 and 2019 Balance Sheets. Reviews will be made to reasonably ensure Respondent's financial position is such that it will continue to prosper as a business during the term of the contract, and beyond if appropriate, and have adequate financial resources to perform all contractual duties on a reimbursement basis.

9. Respondent's Authorized Expediter – Include the name and telephone number of person(s) in your organization authorized to expedite any proposed contract with the SLBA.

10. Bid Bond – The SLBA requires all Respondents to submit a bid bond with their proposal.

11. Insurance – Provide a copy of your Certificate of Insurance including Commercial General Liability insurance, Automobile insurance, Workers Compensation insurance, and Errors and Omissions Liability insurance. All levels of insurance must meet, or exceed, the SLBA's contract requirements.

    a) Commercial General Liability – Occurrence form, including coverage for bodily injury, personal injury, property damage (broad form), premises/operations, blanket contractual, and products/completed operations. Coverage shall be endorsed to include SLBA as additional insured for work performed by Contractor or for Contractor in accordance with this Agreement.
    Minimum Limits:

    -$1,000,000 per occurrence/$2,000,000 general aggregate
    -$2,000,000 aggregate for products and completed operations
    -$1,000,000 personal and advertising injury

    b) Automobile – Michigan no-fault coverage, and residual automobile liability, comprehensive form, covering owned, hired, and non-owned automobiles. Coverage shall be endorsed to include SLBA as additional insured for work performed by or for Contractor in accordance with this Agreement.

    Minimum Limits:

    - No-fault coverages – statutory
    -$500,000 per person/$1,000,000 per accident – bodily injury
    -$500,000 per occurrence – property damage **OR**
    -A combined single limit of $1,000,000 per occurrence

    c) Workers' Compensation – statutory;

    Employer's Liability - $100,000 each accident/$100,000 disease – each employee; and

    $500,000 disease – policy limit.

12. Additional Information and Comments – Include any other information that is believed to be pertinent, but not specifically asked for elsewhere.

13. References – Provide a minimum of three references for each type of service outlined in the Scope of Work. Include contact name, company name, contact information and very brief description of the work completed.

14. Violations – Briefly list and describe any state or federal environmental or safety violations your firm has received in the past 5 years from State or Federal inspectors. Briefly summarize the nature of the violation, the current status of the violation and corrective measures taken to avoid future, similar violations.

B) PRICE PROPOSAL

Provide a turnkey price for the project as outlined. The SLBA is exempt from federal excise tax, and state and local sales taxes. The Price Proposal should not include taxes. Costs for abatement and demolition should be presented separately.

Separate travel related expenses will not be accepted.

Subject to any agreed extension of the period for holding bids, bids shall remain valid for acceptance by the SLBA for ninety (90) calendar days after the date of bid opening. In addition, the SLBA expressly reserves the right, within the SLBA's sole discretion, to reject any or all bids, to waive any irregularities, to issue post-bid Addenda and rebid the work without re-advertising, to re-advertise for bids, to withhold the award for any reason the SLBA determines and/or to take any other appropriate action.

THE PRICE PROPOSAL AND TECHNICAL PORTION MUST BE IDENTIFIED ACCORDING TO THE INSTRUCTIONS OF THIS RFP. Price proposal files will remain unopened until the Joint Evaluation Committee (the "JEC") has completed evaluation of the technical proposals.

Respondents Please Note: Rates quoted in response to this RFP are firm for ninety (90) calendar days after the date of bid opening. No price increase will be permitted during the contract awarded to the successful Respondent.

C) SUBMISSION

Submit separately marked electronic files of your Technical Submission and Price Proposal as noted on the RFP cover page. The SLBA has no obligation to consider any Submission that is not timely received. **Submissions will only be accepted as noted on the RFP cover page.**

Your files are limited to 15MB. You may upload more than one file for Price Proposal and/or Technical Submission in response to this RFP.

RESPONDENTS ARE RESPONSIBLE FOR ASSURING THAT THE FOLLOWING IDENTIFYING INFORMATION APPEARS IN THE FILE NAME OF YOUR SUBMISSION: *"RFP-CASE-20-002 Price Proposal" and "RFP-CASE-20-002 Technical Submission."*

SECTION III
RFP PROCESS AND TERMS AND CONDITIONS

A) QUESTIONS

A pre-bid meeting will not be held. Questions from Respondents concerning the specifications in this RFP must be received as noted on the RFP cover page.

Questions that are phoned, faxed or sent through regular mail will not be accepted. The SLBA has no obligation to respond to questions received after date noted on the RFP cover page

B) SUBMISSIONS

To be considered, Respondents must submit a complete response to this RFP, using the format provided in Section II of this RFP, as noted on the RFP cover page. No other distribution of submission is to be made by the Respondent.

The Cover Sheet must be **signed physically or electronically** by the Respondent's Authorized Signatory. The Cover Sheet must be the first page of the Technical Submission.

The proposal must include a statement as to the period during which it remains valid; this period must be at least ninety (90) days from the response date this RFP is due. The rates quoted in the Price Proposal must remain firm for the period indicated in Section II. All print and digital materials submitted become the property of the SLBA and will not be returned to the Respondent.

C) ECONOMY OF PREPARATION

Each submission should be prepared simply and economically, providing a straightforward, concise description of the Respondent's ability to meet the requirements of the RFP. Emphasis should be on completeness and clarity of content.

D) SELECTION CRITERIA

Responses to this RFP will be evaluated based upon a three-step selection process. The submission must address the requirements described in Section II of this RFP.

1) Step I – Initial evaluation for compliance

   a) *Submission Content* – SLBA staff will screen the submissions for technical compliance to include but not be limited to:

      - Timely submission of the documentation.
      - Submission signed physically or electronically.
      - Submissions satisfy the form and content requirements of this RFP.

2) Step II – Criteria for Satisfactory Submissions

   a) During the second step of the selection process, submissions will be considered by a Joint Evaluation Committee (the "JEC") comprised of individuals selected by the SLBA. Only those submissions that satisfy the requirements described in this

RFP, as determined in the sole discretion of the JEC, will be considered for evaluation in Step II. The JEC reserves the right to request additional information from any Respondent.

b) *Competence, Experience and Staffing Capacity* – The submission should indicate the ability of the Respondent to meet the requirements of this RFP, especially the time constraints, quality, and recent projects similar to that described in this RFP. The submission should indicate the competence of the personnel whom the Respondent intends to assign to the project, including education and experience, with particular reference to experience on projects similar to that described in this RFP and qualifications of Respondent's Project Manager and the Project Manager's dedicated management time, as well as that of other key personnel working on this project.

		Points Possible
1.	Statement of Work	5
2.	Respondent Information/Completeness	15
3.	Prior Experience	30
4.	Staffing	30
5.	Financial Stability & Insurance	20
	TOTAL	**100**

c) During the JEC's review, Respondents may be required to make oral presentations of their proposals to the JEC. These presentations provide an opportunity for the Respondents to clarify the proposals. The SLBA will schedule these presentations, if required by the JEC.

d) Only those proposals receiving a score of ***80 or more*** in the technical proposal evaluation will have their pricing evaluated to be considered for award.

3) Step III – Selection for Specific Projects

a) Based on what is in the best interest of the SLBA, the SLBA will award the Contract considering value, quality, and the ability to meet the objectives of this RFP, of proposals that were approved as a result of this two-step evaluation process.

b) The SLBA reserves the right to consider the economic impact on the State of Michigan when evaluating proposal pricing. This includes, but is not limited to: job creation, job retention, tax revenue implications, and other economic considerations.

c) The award recommendation will be made to the responsive and responsible qualified Respondent who offers the best value to the SLBA and the State of Michigan. Best value will be determined by the SLBA with the Respondent meeting the minimum point threshold and offering the *best proposal that meets the objectives of the RFP.*

E) RESPONDENTS COSTS

The SLBA is not liable for any costs incurred by any Respondent prior to signing of a Contract by all parties.

F) TAXES

The SLBA may refuse to qualify a Respondent who has failed to pay any applicable taxes or if the Respondent has an outstanding debt to the State of Michigan or the SLBA.

Except as otherwise disclosed in an exhibit to the submission, Respondent certifies that all applicable taxes are paid as of the date the Respondent's Qualifications were submitted to the SLBA and the Respondent owes no outstanding debt to the State of Michigan or the SLBA.

G) CONFLICT OF INTEREST

The Respondent must disclose, in an exhibit to the submission, any possible conflicts of interest that may result from the award of a Contract or the services provided under a Contract.

Except as otherwise disclosed in the submission, the Respondent affirms that to the best of its knowledge there exists no actual or potential conflict between the Respondent, the Respondent's project manager(s) or its family's business or financial interests ("Interests") and the services provided under a Contract. In the event of any change in either Interests or the services provided under a Contract, the Respondent will inform the SLBA regarding possible conflicts of interest which may arise as a result of such change and agrees that all conflicts shall be resolved to the SLBA's satisfaction or the Respondent may be disqualified from consideration under this RFP. As used in this Section, "conflict of interest" shall include, but not be limited to, the following:

1) Giving or offering a gratuity, kickback, money, gift, or anything of value to a SLBA official, officer, or employee with the intent of receiving a contract from the SLBA or favorable treatment under a contract;

2) Having or acquiring at any point during the RFP process or during the term of any Contract, any contractual, financial, business or other interest, direct or indirect, that would conflict in any manner or degree with Respondent's performance of its duties and responsibilities to the SLBA under a Contract or otherwise create the appearance of impropriety with respect to the award or performance of a Contract; or

3) Currently in possession of or accepting during the RFP process or the term of any Contract anything of value based on an understanding that the actions of the Respondent or its affiliates or Interests on behalf of the SLBA will be influenced.

H) BREACH OF CONTRACT

Except as otherwise disclosed in an exhibit to Respondent's submission, Respondent is not in material default or breach of any contract or agreement that it may have with the State of Michigan or any of its departments, commissions, boards or agencies, or any other public body in the State of Michigan. Further, Respondent represents and warrants that it has not been a party to any contract with the State of Michigan or any public body that was terminated within the previous five (5) years because the Respondent failed to perform or otherwise breached an obligation of such contract.

I) DISCLOSURE OF LITIGATION

Except as otherwise disclosed in an exhibit to Respondent's submission, there is no criminal litigation, investigations or proceedings involving the Respondent (and each Subcontractor, if Subcontractors will be used to provide the goods/services requested under this RFP) or any of the Respondent's officers or directors or any litigation or proceedings under the Sarbanes-Oxley Act. In addition, Respondents must disclose in the exhibit requested under this Section of the RFP any civil litigation, arbitration or proceeding to which the Respondent (or, to the extent Respondent is aware, any Subcontractor) is a party and which involves: (1) disputes that might reasonably be expected to adversely affect the viability or financial stability of the Respondent (or Subcontractor); or (2) a claim or written allegation of fraud or breach of contract against Respondent (or, to the extent Respondent is aware, Subcontractor), by a governmental or public entity arising out of their business dealings with governmental or public entities. Details of any settlements which Respondent is prevented from disclosing under the terms of the settlement may be annotated as such.

J) FALSE INFORMATION

If the SLBA determines that an Respondent purposefully or willfully submitted false information in response to this RFP, the Respondent will not be considered for an award and any resulting Contract that may have been executed may be terminated.

K) DISCLOSURE

All Respondents should be aware that submissions submitted to the SLBA in response to this RFP may be subject to disclosure under the provisions of Public Act 442 of 1976, as amended, known as the Freedom of Information Act ("FOIA"). Accordingly, confidential information should be excluded from Respondents' submissions. Respondents, however, are encouraged to provide sufficient information to enable the SLBA to determine the Respondent's qualifications and to understand or identify areas where confidential information exists and could be provided. The FOIA also provides for the complete disclosure of a Contract and any attachments or exhibits thereto.

L) PRICES HELD FIRM

LENGTH OF TIME PRICES ARE TO BE HELD FIRM: All rates quoted in Respondent's response to this RFP will be firm for at least ninety (90) days after the response date of this RFP submission. No price changes will be permitted. IN THE EVENT THAT PROPOSED CHANGES ARE NOT ACCEPTABLE TO THE SLBA, THE CONTRACT SHALL BE TERMINATED, AND THE MODIFIED CONTRACT SHALL BE SUBJECT TO COMPETITIVE BIDDING.

M) CLARIFICATION/CHANGES IN THE RFP

Changes made to the RFP as the result of responses made to qualifying questions or concerns will be posted through the SIGMA system. Respondents are encouraged to regularly check this site for changes or other information related to the RFP.

If the initial period does not produce a viable response, the SLBA may, at its discretion, extend the period until it receives a viable submission. Timelines will be moved to correspond to the accepted submission date. Notification of an extension will be made through SIGMA. The first qualifying submission that is received and accepted will end the extension period.

N) ELECTRONIC BID RECEIPT

YOUR SUBMISSION MUST BE RECEIVED AS NOTED ON THE RFP COVER PAGE. Respondents are responsible for timely submission of their documentation. THE SLBA HAS NO OBLIGATION TO CONSIDER ANY SUBMISSION THAT IS NOT RECEIVED BY THE APPOINTED DATE AND TIME.

O) RESERVATION OF SLBA DISCRETION

Notwithstanding any other statement in this RFP, the SLBA reserves the right to:

1) reject any and all submissions;
2) waive any errors or irregularities in the bidding process or in any submission;
3) rebid the project;
4) negotiate with any Respondent for a reduced price, or for an increased price to include any alternates that the Respondent may propose;
5) revise or reduce the scope of the project, and rebid or negotiate with any Respondent regarding the revised project;
6) defer or abandon the project;
7) amend or revise the RFP; and/or
8) request clarification of information submitted and to request additional information of one or more Respondents.

The SLBA's decision is final and not subject to appeal. Any attempt by a Respondent, collaborating entity, or other party of interest to the project to influence the awards process, to appeal, and/or take any action, including, but not limited to, legal action, regarding the submission or awards process in general may result in the Respondent's disqualification and elimination form the award process.

P) JURISDICTION

The laws of the State of Michigan shall govern this Agreement. The Parties shall make a good faith effort to resolve any controversies that arise regarding this Agreement. If a controversy cannot be resolved, the Parties agree that any legal actions concerning this Agreement shall be brought in the Michigan Court of Claims or, as appropriate, the Ingham County Circuit Court in Ingham County, Michigan. By signing this Agreement, Respondent acknowledges that it is

subject to the jurisdiction of this court and agrees to service by first class or express delivery wherever Contractor resides, in or outside of the United States.

Q) ADDITIONAL CERTIFICATION

Pursuant to Public Act 517 of 2012, an Iran linked business is not eligible to submit a submission on a request for qualifications, with a public entity.

Respondents must certify on the Cover Sheet that it is not an Iran-linked business as defined in MCL 129.312.

Failure to sign this certification will result in disqualification from consideration.

ATTACHMENT A

Request for Proposal/Qualification Response Cover Sheet Form

(Attach as a cover sheet to your Technical Submission file)

DEMOLITION AND ABATEMENT CONTRACTOR

RFP-CASE-20-002

General Information:

Firm Legal Name: _____ SIGMA ID #*: _____

Firm's DBA (if any): _____

Firm's Address: _____

Firm's Telephone #: _____ Fax #: _____

Contact Name: _____ Contact's Telephone #: _____

Contact's Email Address: _____

Name of Authorized Signatory for the firm: _____

❒ Michigan Limited Liability Company ❒ Michigan Corporation
❒ Other: _____
Check if firm qualifies as any of the following: ❒ DBE ❒ MDE ❒ WBE

CERTIFICATIONS-Authorized Signatory to initial each of the following, as applicable:

_____ Respondent certifies that it is not an Iran-linked business as defined in MCL 129.312.

_____ Respondent certifies that taxes are paid to federal, state, and local jurisdictions as of this date.

_____ Respondent certifies that owes no outstanding debt to the State of Michigan or SLBA.

_____ Respondent certifies that: (check one)

- ☐ To the best of its knowledge, there exists no actual or potential conflict of interest between Respondent, Respondent's project manager(s) or its family's business or financial interests ("Interests") and the service provided under a potential Contract.
- ☐ That there is an actual or potential conflict which is explained in the submittal.

_____ Date: _____
Signature of Authorized Signatory

*Your SIGMA ID Number is located in your State of Michigan vendor file. If you are not currently registered as a vendor with the State of Michigan, you may go to: www.michigan.gov/SIGMAVSS and register. If you have any problems, please contact the SIGMA helpline at 1-800-856-6246.

ATTACHMENT B

INDEPENDENT PRICE DETERMINATION AND PRICES HELD FIRM CERTIFICATION

INDEPENDENT PRICE DETERMINATION

By submission of a proposal, the Respondent certifies, and in the case of a joint proposal, each party thereto certifies as to its own organization, that in connection with this proposal:

1. The prices in the proposal have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other Respondent or with any competitor;

2. Unless otherwise required by law, the prices which have been quoted in the proposal have not been knowingly disclosed by the Respondent and will not knowingly be disclosed by the Respondent prior to award directly or indirectly to any other Respondent or to any competitor; and

3. No attempt has been made or will be made by the Respondent to induce any other person or firm to submit or not submit a proposal for the purpose of restricting competition.

Each person signing the proposal certifies that she/he:

A) Is the person in the Respondent's organization responsible within that organization for the decision as to the prices being offered in the proposal and has not participated (and will not participate) in any action contrary to 1, 2, and 3 above; or

B) Is not the person in the Respondent's organization responsible within that organization for the decision as to the prices being offered in the proposal but has been authorized, in writing, to act 33as agent for the persons responsible for such decision in certifying that such persons have not participated (and will not participate) in any action contrary to 1, 2, and 3 above.

A proposal will not be considered for award if this Attachment B has been altered so as to delete or modify 1 or 3, above. If 2, above, has been modified or deleted, the proposal will not be considered for award unless the Respondent provides, with this Attachment B, a signed statement which sets forth, in detail, the circumstances of the disclosure and the SLBA determines that such disclosure was not made for the purpose of restricting competition.

PRICES HELD FIRM

LENGTH OF TIME PRICES ARE TO BE HELD FIRM: All rates quoted in Respondent's response to this RFP will be firm for ninety (90) calendar days after the date of bid opening. No price changes will be permitted after award of the contract, other than those resulting from an agreed upon change in scope of work.

Signed: _____

Print Name:

Date: _____

ATTACHMENT C

PRE-DEMOLITION ASBESTOS AND HAZARDOUS MATERIALS SURVEY

Conducted by AKT Peerless Environmental Services
Date: June 12, 2020
Address: 32 Roadhouse Road, Crystal Falls MI

AKTPEERLESS

Pre-Demolition and Hazardous Materials Survey

32 Roadhouse Road
Crystal Falls, Michigan 49920
AKT Peerless Project No. 15060s-1-194

PREPARED FOR **Michigan Land Bank Fast Track Authority**
300 North Washington Square
Lansing, Michigan 48913

PROJECT # 15060s-1-194

DATE June 12, 2020

AKTPEERLESS

SITE SKETCH

APPENDICES

AKTPEERLESS

PRE-DEMOLITION AND HAZARDOUS MATERIALS SURVEY

32 Roadhouse Road
Crystal Falls, Michigan 49920
AKT Peerless Project No. 15060s-1-194

1.0 Introduction

AKT Peerless Environmental Services (AKT Peerless) was retained by the Michigan Land Bank Fast Track Authority (Client) to conduct a Pre-Demolition and Hazardous Materials Survey of 32 Roadhouse Road, Crystal Falls, Michigan. AKT Peerless' scope of work is based on its proposal PS-26016, as well as the terms and conditions of the agreement with the Client. AKT Peerless' Pre-Demolition and Hazardous Materials Survey was performed for the benefit of the Michigan Land Bank Fast Track Authority.

1.1 Purpose

The purpose of AKT Peerless' Pre-Demolition and Hazardous Materials (HazMat) Survey was to identify the location and presence of: (1) asbestos-containing building materials (ACBMs); (2) potential polychlorinated biphenyl (PCB) containing electrical or hydraulic equipment; (3) potentially hazardous or regulated materials/wastes located in containers and drums; (4) potential, mercury or radioactive-containing equipment or materials located in the building; and (5) any other materials that would require special handling or disposal requirements and should be segregated from general construction debris.

1.2 Scope of Work

The scope of work for this survey is specifically designed to support facility demolition, as identified within proposal PS-26016. AKT Peerless understands that the scope of demolition at the site includes all interior and accessible exterior components of the Subject Building.

Michigan Licensing and Regulatory Affairs (LARA) accredited Asbestos Inspector Mr. Mark Breeden (A44842) of AKT Peerless conducted the Pre-Demolition and Hazardous Materials Survey of the property.

1.2.1 Asbestos Survey

The scope of work for AKT Peerless' asbestos survey is based on the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). The purpose of ASHARA is to extend the Asbestos Hazard Emergency Response Act (AHERA) inspection and management requirements to commercial and industrial buildings. Since the facility is slated for demolition, it is also subject to Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

Asbestos Containing Material (ACM) survey activities were completed according to the following protocol:

1. Functional spaces were identified for the purpose of assessing all suspect materials, as appropriate.
2. The ACM inspection was performed in an effort to determine the extent and location of ACM present in the Subject Building. This survey was qualitative and quantitative in that an attempt was made to locate accessible friable and non-friable ACM areas, as well as estimate the amount of ACM. All accessible locations of the survey areas were inspected with exception of inaccessible areas or materials not surveyed that are identified in Section 1.3.
3. Bulk samples of suspect ACMs were collected in accordance with professional standards by a Michigan-accredited Asbestos Building Inspector.
4. Bulk samples were collected in each homogeneous area in accordance with EPA-recommended sampling guidelines.
5. Samples of suspect ACM were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory for analysis, via Polarized Light Microscopy and dispersion staining (PLM) following the EPA Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
6. In an effort to minimize costs, the laboratory analyses were performed using first positive stop analysis methodologies. First positive stop involves analyzing samples by homogeneous area groupings. Laboratory analyses proceeded sample by sample, within each homogeneous area grouping until a sample was determined to be asbestos containing.
7. Upon completion of the field inspection and receipt of laboratory data, this report was prepared and includes: (a) a general description of the suspect ACM identified and non-suspect homogeneous materials that were visually evaluated; (b) quantity of suspect materials observed as able to be determined; and (c) laboratory testing results.

1.2.2 PCB, Mercury, Lead, and Other Hazardous Materials

The survey for PCBs, potential lead/mercury-containing equipment, and containers that may contain universal hazardous wastes or regulated materials/wastes were completed according to the following procedures:

1. The building was inspected for potential hazardous materials such as PCB-containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, and mercury light tubes and switches. The survey of lighting/alarm systems comprised a visual inspection of the exterior of accessible emergency, light and exit sign fixtures, panels or components for possible PCB-containing ballast systems, mercury vapor lighting fixtures, batteries, or other hazardous materials. No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. Limited sampling was performed as summarized, and as part of the survey report, an inventory of the materials identified has been included that summarizes the quantities of the hazardous building materials observed.

During execution of this survey, the work was performed using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

1.3 Limitations and Exceptions of the Survey

The following general limitations were encountered during the preparation of this survey:

- AKT Peerless uses trained and licensed inspectors in attempting to locate and identify materials potentially containing some form of hazardous material (i.e., asbestos, lead, PCB, etc.). The possibility exists that AKT Peerless did not identify all hazardous materials within the building. Some buildings have hidden spaces that may not be immediately obvious to a surveyor, who is not intimately familiar with the buildings, and who has only a limited time in the buildings. There may be additional hazardous materials that were not found because they were not visible or accessible to the inspection team. Asbestos, PCB, lead, and mercury were used in a variety of building components and in many types of materials in the construction of buildings. In some of these materials, a hazardous material may be present, not as an intentional ingredient, but as a contaminant.

The following building-specific limitations apply to this Pre-Demolition and Hazardous Materials Survey:

- Areas enclosed by fixed wall, ceiling systems, and roofing systems were restricted to limited visual access in identifying materials such as, but not limited to; pipe wrap, mud fittings, roof flashing, caulks, etc. Fixed wall and ceiling systems may include plaster, drywall partitions, ceramic tile finish, concrete, and masonry, and roofing systems, and may potentially contain multiple layers of building materials. These systems are installed throughout the exterior and interior areas of the building(s). Representative intrusive observations were made above drop ceilings, inside walls, and below flooring materials such as carpeting and roofing, whereas applicable. As such, a complete survey and delineation of all hidden materials were not performed. **Due to these limitations, actual quantities of hazardous materials present may be greater than those inventoried as part of this survey.**

- Whereas applicable, access to suspect ACM could potentially be located within restricted areas defined as being within a regulated confined space (i.e., such as pipe chases, pipe trenches, attics, elevator shafts, etc.). These areas require the use of trained confined space professionals, personnel protective equipment, and rescue personnel. AKT Peerless did not access confined space areas.

- The Basement (FS-9) walls were partially collapsed and could not be fully accessed.

- Observations of the Attic (FS-11) were limited due to this area being a confined space.

- The Subject Buildings are currently vacant. AKT Peerless used portable spotlights and flashlights to improve general viewing conditions whereas applicable.

- During the survey, no dismantling of electrical or mechanical equipment was conducted. Since trade personnel was not available (i.e. electricians, plumbers, etc.), no dismantling of equipment was performed to identify the existence of PCB containing components, mercury switches, or asbestos insulation.

- Estimated and not estimated quantities of materials reported are based on observations and estimates made by AKT Peerless at the time of the inspection. Specific materials including, but not limited to: roof flashing, roofing materials, tar coatings, thermal insulation and fittings, pipe wraps and debris, mud fittings, building caulks, and wall adhesives were located in inaccessible

areas such as behind fixed walls or ceilings, unsafe areas, confined spaces, and/or elevated heights. **Due to these limitations, actual quantities may vary from those estimated as part of this survey.**

Other limitations pertaining to material accessibility or characterization may also be described in the survey data tables contained herein.

Quantities of identified ACM reported in this document are provided for reference only and are not authorized to be relied upon for Contractor abatement bidding purposes. AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing. AKT Peerless recommends that a contingency allowance be used to address estimating method uncertainties for quantified materials.

2.0 Asbestos Survey Methodology

The following sections of this survey outline the approach, procedures, and methods employed by AKT Peerless to complete the ACM Survey of the Subject Property. Photographs of the Subject Property are attached as Appendix A.

2.1 Description of Homogenous Areas

During the asbestos survey, AKT Peerless identified Homogeneous Areas (HA) based on appearances and type of materials observed. As defined under AHERA, a homogeneous area is an area (material) that appears similar throughout in terms of its color, texture, and date of material application.
In addition, building materials suspect for asbestos content are also described based on one of three following material classifications:

Surfacing Materials: A material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. Glued-on ceiling panels are interpreted by the State of Michigan as a surfacing material.

Thermal System Insulation: A material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat lost or gain, or water condensation, or for other purposes.

Miscellaneous Materials: A building material on structural components, structural members or fixtures, such as floor and ceiling panels, and does not include surfacing material or thermal system insulation.

AKT Peerless identified homogeneous suspect ACMs at the Subject Property for sampling. Homogeneous areas were identified based on the site inspection by AKT Peerless. Any materials that were identified, but were not sampled due to inaccessibility were recorded.

2.2 Description of Functional Spaces

In general, functional spaces are defined as spatially distinct units or areas within the building, which contain identifiable populations of building occupants. Functional spaces can also include storage spaces, mechanical rooms, closets and services areas, etc. However, a functional space can also be

delineated based on general building layout, facility use factors, and can be assigned using various arbitrary factors that were useful in the completion of this survey. Functional Spaces are field marked.

2.3 Bulk Sample Material Inventory

Based on homogeneous and functional areas identified during the survey, AKT Peerless collected bulk samples for analysis. Samples were collected in polyethylene containers and labeled with an identification number. In general, AKT Peerless' sampling protocol consisted of: (a) wetting or misting the sample as appropriate; (b) extracting a sample with a clean knife, chisel, or coring tool; and (c) placing the sample into its properly labeled sample container.

The sampling protocol used to procure the appropriate number of samples for an identified homogeneous area of suspect ACM is based on sampling guidelines outlined under AHERA or as proposed in the approved scope of work.

2.4 Laboratory Analytical Procedures

All samples collected by AKT Peerless were submitted to Apex Research, Inc. (Apex) of Whitmore Lake, Michigan for analysis. Apex is accredited by the American Industrial Hygiene Association (AIHA) and participates in the NVLAP. Samples were submitted under chain-of-custody guidelines to ensure proper handling and delivery of the samples. The samples were analyzed using PLM with dispersion staining in accordance with the following USEPA guidance document *Determination of Asbestos in Bulk Building Materials*: EPA/600/R-93/116, dated July 1993.

The USEPA defines ACM as those materials that contain **greater than one percent** asbestos. Friable materials are defined as those that can be crumbled or reduced to powder by hand pressure. The NESHAP for asbestos, dated November 1990 stipulates that any friable material identified as containing asbestos in concentrations greater than one percent must be considered ACM.

Materials containing one (1) percent or less asbestos are generally considered non-asbestos-containing, and therefore are not regulated by NESHAP. The OSHA definition of ACM is similarly any material containing more than one (1) percent asbestos. However, specific work practices must be followed under OSHA regulations for materials containing less than one percent asbestos if an individual layer exceeds one percent. Under the PLM method, percentages and types of fibrous components in these samples were determined by visual estimation of the amount of fibrous materials versus the total amount of material present.

Current USEPA guidelines specify that when initial laboratory analysis of friable or non-friable materials regulated under NESHAP detects the presence of asbestos in a quantity between less than one percent (or trace) and less than ten percent, a verification analysis using the point counting analytical method should be considered or the material in question should be treated as ACBM as identified by PLM analysis.

AKT Peerless utilized the "positive-stop" method of sample analyses. In this method, the analyses of a homogeneous material is stopped on a group of samples once the first positive (e.g., greater than 1% asbestos) sample is analyzed. According to the USEPA, if one sample of a homogenous material is identified to be asbestos-containing, the entire material must be considered asbestos-containing.

Based on appearances and type of materials, suspect ACMs were grouped into homogeneous areas and functional spaces as appropriate based on apparent age and similarity in texture and color. Upon completion of these activities, representative bulk samples of the suspect materials were collected. A copy of the bulk sample laboratory report and chain-of-custody record is presented in Appendix B.

3.0 Asbestos and Other Hazardous Materials Conclusions and Recommendations

AKT Peerless was retained by the Client to conduct a Pre-Demolition and Hazardous Materials Survey of 32 Roundhouse Road, Crystal Falls, Michigan. The purpose of the survey was to identify hazardous materials that will require special handling procedures or removal activities prior to demolition activities. The following sections of this report summarize the findings of the Pre-Demolition and Hazardous Materials Survey.

3.1 Homogeneous Area & Asbestos Containing Materials (ACMs)

Based on the results of the asbestos survey, the following ACMs were identified:

Summary of Homogeneous Areas & Asbestos Containing Materials

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Plaster	1-1	Throughout	3,200 SF	F	NAD
12" Smooth Ceiling Tile	2-1	FS-1 Foyer FS-2 Living Room FS-3 Kitchen FS-4 Bedroom #1 FS-5 Bathroom	825 SF	F	NAD
Window Caulk – 1st and 2nd Floors	**3-1**	**FS-15 Exterior**	**14 Windows**	**NF**	**5% CHR**
White Brick Pattern Flooring	4-1	FS-3 Kitchen	120 SF	NF	NAD
Brown and Tan Flooring	5-1	FS-5 Bathroom	45 SF	NF	NAD
Brown and Tan Flooring	6-1	FS-7 Bedroom #2	75 SF	NF	NAD
Multi-Colored Linoleum with Layers	7-1	FS-6 Utility Room	70 SF	NF	NAD

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Panel Adhesive	8-1	FS-3 Kitchen	1,200 SF Panel 120 SF Adhesive	NF	NAD
Roofing Material - House	9-1	FS-15 Exterior	1,100 SF	F	NAD
Roofing Material - Garage	10-1	FS-15 Exterior	600 SF	NF	NAD
Mortar between Exterior Barn Logs	11-1	FS-15 Exterior	NE	F	NAD
Roofing Material - Outhouse	12-1	FS-15 Exterior	110 SF	NF	NAD
Red Rolled Tar Paper	13-1	FS-15 Exterior	4 SF	F	NAD
Foundation Brick and Mortar	14-1	FS-15 Exterior	NE	NF	NAD
Stack Cement	15-1	FS-3 Kitchen FS-11 Bedroom #4	4 SF	NF	NAD
Garage Concrete Floor	16-1	FS-14 Garage	1,050 SF	NF	NAD
Foundation Block and Mortar	17-1	FS-15 Exterior	NE	NF	NAD
Window Caulk - Barn	**18-1**	**FS-15 Exterior**	**2 Windows**	**NF**	**1.75% CHR PC**
Basement Window Caulk	**19-1**	**FS-15 Exterior**	**1 Window**	**F**	**1.5% CHR PC**

Table Notes:
F = Friable NF = Non-friable FS = Functional Space NAD = No Asbestos Detected CHR = Chrysotile
AMO = Amosite SF = Square Feet LF = Linear Feet PC = Point Count NE = Not Estimated
CRO = Crocidolite ACT = Actinolite T = Tile M = Mastic MF = Mud Fittings CF = Cubic Feet
ACM = Asbestos Containing Material (Greater than 1% Asbestos Content) NS = Not Sampled
ASSUMED = Suspect material that was not sampled, but was assumed asbestos-containing

Asbestos Recommendation:

1. Asbestos containing materials were not identified within the laboratory analytical of suspect materials sampled during this survey.

2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

3.2 Summary of Identified Other Potentially Hazardous Materials

During the Hazardous Material Survey, AKT Peerless observed the existence of various types of potentially hazardous materials within the various buildings. In general, these materials were stored in containers of various capacities. The following materials were identified at the site:

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Lawnmower	FS-14 Garage	1	Possibly Contains Gas and/or Oil
Miscellaneous Electronics	FS-2 Living Room	2	Miscellaneous Electronics
	FS-3 Kitchen	1	
Gas Floor Heater	FS-3 Kitchen	1	
Refrigerator	FS-3 Kitchen	1	Possibly CFC Containing
Automobiles	FS-14 Garage	1	
Water Heater	FS-3 Kitchen	1	
Fluorescent Bulbs	FS-10 Bedroom #3	1	Possibly Contains Mercury
Light Ballasts	FS-10 Bedroom #3	1	Possibly Oil or PCB Containing
Medication	FS-4 Bedroom #1	5	Pill Bottles / Various Amts.

The survey was conducted to identify universal hazardous wastes or regulated materials/wastes. The buildings were inspected for potential hazardous materials, such as PCBs or oil containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, mercury light tubes and switches, and underground storage tanks (USTs). No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. No sampling of any hazardous component materials was performed.

AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition activities. Based on the conditions observed it is recommended that unknown waste materials and oil stained concrete, as well as standing water that may be identified during demolition activities within but not limited to cisterns, basements, sump basins, and/or potential storm water discharge pits are appropriately characterized for waste disposal or recycling purposes, whereas applicable.

Hazardous Materials Recommendation:

The following summarizes our recommendations regarding the hazardous materials identified:

1. The materials included in Hazardous / Regulated Materials Summary and other items banned from landfill disposal, identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.

2. AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition. Based on the conditions observed, it is recommended that unknown waste materials, and oil stained concrete be sampled and appropriately characterized for waste disposal or recycling purposes, whereas applicable.

3. During any future demolition activities, in the event of any identified oil stained concrete, the contractor must delineate materials and segregate materials from the recyclable materials.

3.3 Electrical Transformers

AKT Peerless did not identify electrical transformers on the Subject Properties.

4.0 Limitations

The information and opinions obtained in this report are for the exclusive use of the Client. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties, who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), agrees to be bound by the original terms and conditions entered into by AKT Peerless and the Client.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by the Client(s) or third parties is complete or accurate.

AKTPEERLESS

5.0 Signatures of Environmental Professionals

The following individuals contributed to the completion of this report.

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Site Sketch

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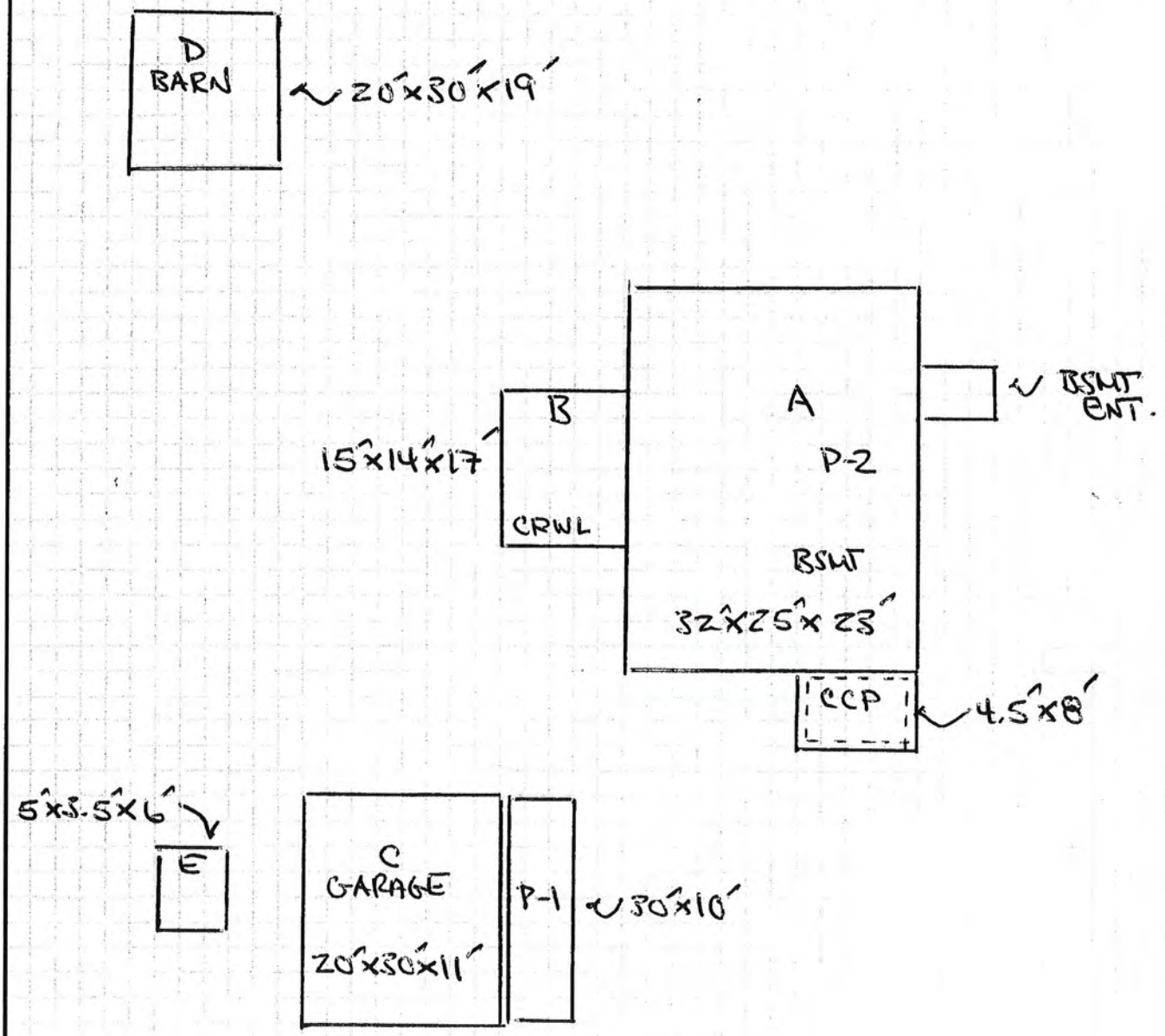
Page ____ of ____

Project Name: 32 ROADHOUSE RD, CRYSTAL FALLS, VT

Date: _____

Project No.: 150605 - 1-194



Appendix A

Photographs

EXTERIOR VIEW OF HOUSE FACING NORTH

EXTERIOR VIEW OF HOUSE FACING NORTHEAST

AKTPEERLESS

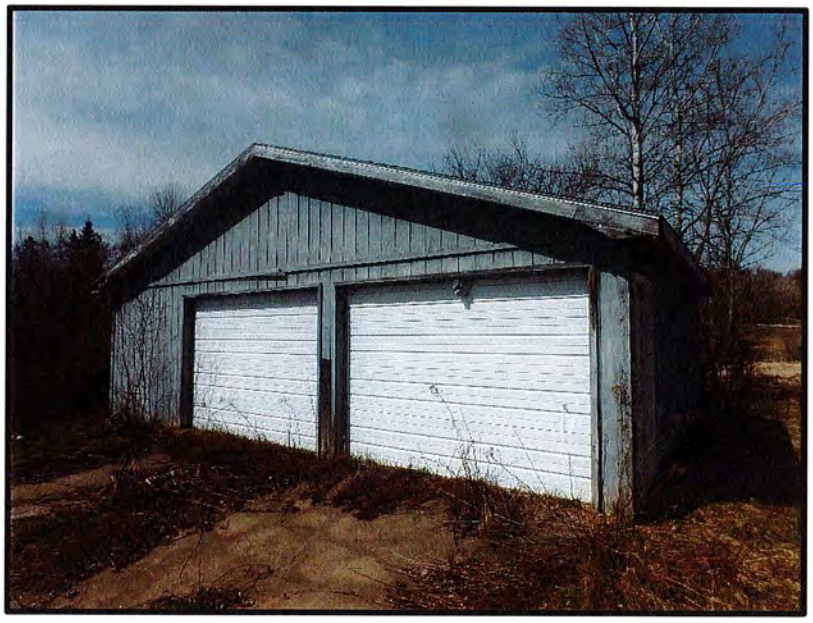
PROPERTY PHOTOGRAPHS

32 ROADHOUSE ROAD,
CRYSTAL FALLS, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-1-194

EXTERIOR VIEW OF HOUSE FACING SOUTH



EXTERIOR VIEW OF GARAGE (FS-14)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

32 ROADHOUSE ROAD,
CRYSTAL FALLS, MICHIGAN

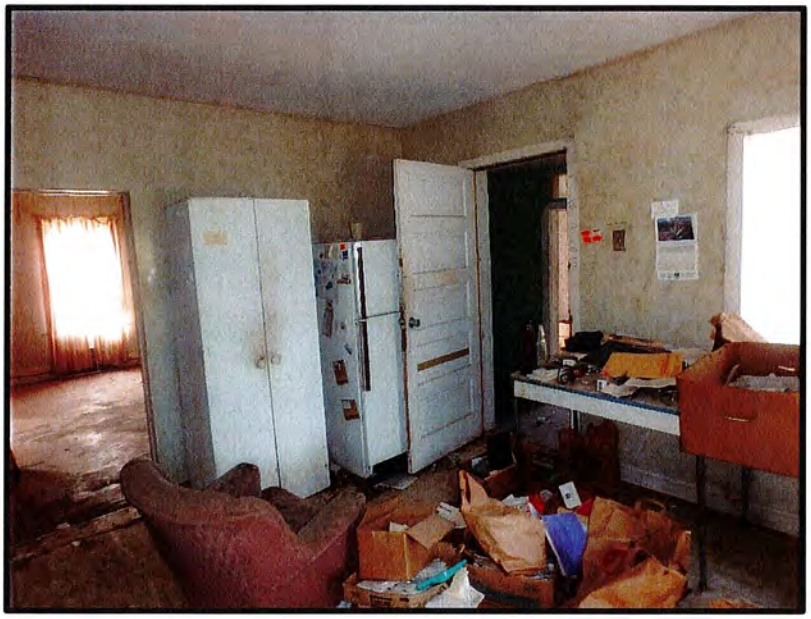
TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-1-194

EXTERIOR VIEW OF BARN (FS-17)

EXTERIOR VIEW OF OUTHOUSE (FS-16)

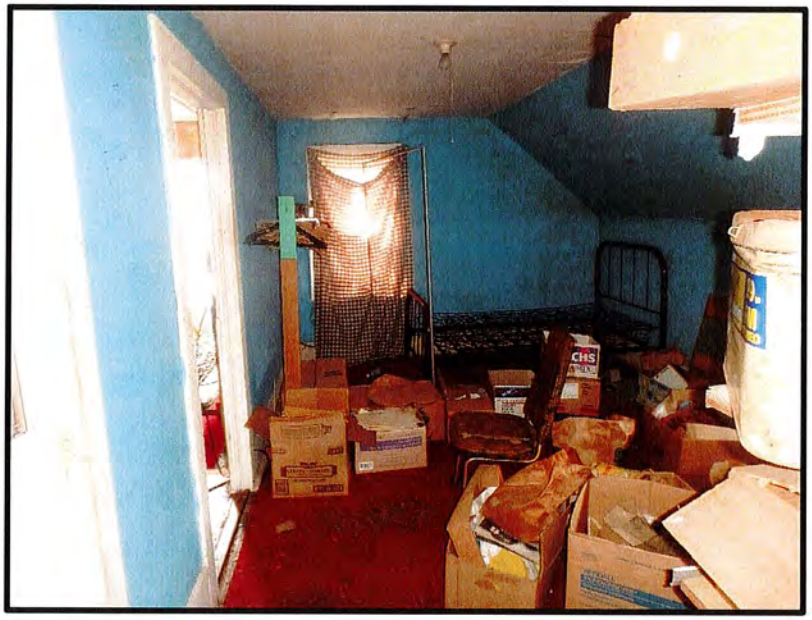
AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 32 ROADHOUSE ROAD, CRYSTAL FALLS, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-1-194



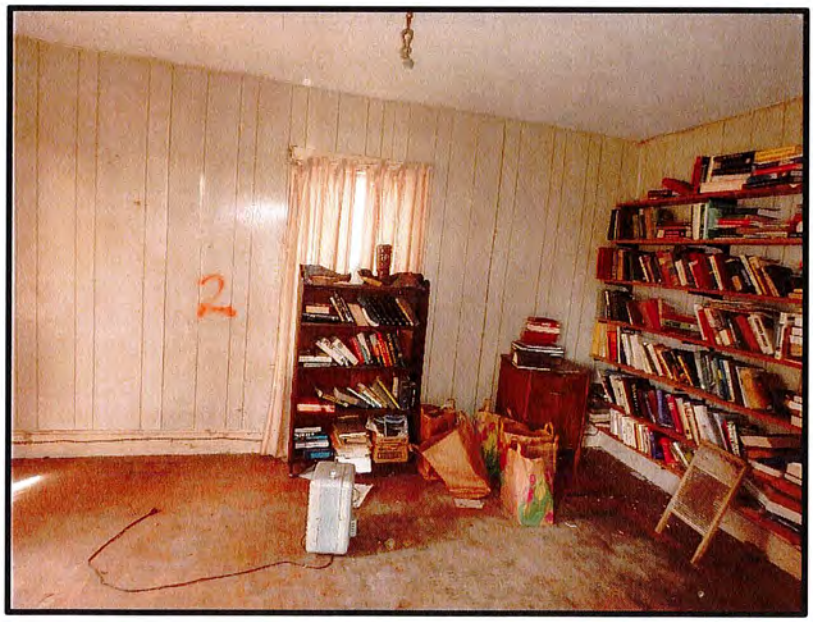
INTERIOR VIEW OF KITCHEN (FS-3)

INTERIOR VIEW OF BASEMENT (FS-13)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 32 ROADHOUSE ROAD, CRYSTAL FALLS, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-1-194



INTERIOR VIEW OF BEDROOM #3 (FS-9)



INTERIOR VIEW OF LIVING ROOM (FS-2)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

32 ROADHOUSE ROAD,
CRYSTAL FALLS, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-1-194

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Appendix B

ACM Laboratory Reports and Chain of Custody

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 32 Roundhouse Rd., Crystal Falls, MI
Project # :15060s-1-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 01 Cust. #: 1-1 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Other - 95%
Lab ID #: 89784 - 02 Cust. #: 1-2 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Other - 95%
Lab ID #: 89784 - 03 Cust. #: 1-3 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Other - 95%

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

Robert T. Letarte Jr., Laboratory Director

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

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 04 Cust. #: 1-4 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Other - 95%
Lab ID #: 89784 - 05 Cust. #: 1-5 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Other - 95%
Lab ID #: 89784 - 06 Cust. #: 2-1 Material: 12" Smooth White Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 90% Other - 10%

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 07 Cust. #: 2-2 Material: 12" Smooth White Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 90% Other - 10%
Lab ID #: 89784 - 08 Cust. #: 2-3 Material: 12" Smooth White Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 90% Other - 10%
Lab ID #: 89784 - 09 Cust. #: 3-1 Material: Window Caulk Location: 1st and 2nd Floors Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 10 Cust. #: 3-2 Material: Window Caulk Location: 1st and 2nd Floors Appearance: Layer: 1 of 1	Asbestos Present: NOT ANALYZED	
Lab ID #: 89784 - 11 Cust. #: 4-1 Material: Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Fiberglass - 10% Synthetic - 10% Other - 80%
Lab ID #: 89784 - 12 Cust. #: 4-2 Material: Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Fiberglass - 10% Synthetic - 10% Other - 80%

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Robert T. Letarte Jr., Laboratory Director

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 13 Cust. #: 5-1 Material: Linoleum Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 89784 - 14 Cust. #: 5-2 Material: Linoleum Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 89784 - 15 Cust. #: 6-1 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 16 Cust. #: 6-2 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89784 - 17 Cust. #: 7-1 Material: Brown Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89784 - 17a Cust. #: 7-1 Material: Green Sheet Floor Location: Appearance: green,fibrous,nonhomogenous Layer: 2 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 17b Cust. #: 7-1 Material: Red Sheet Floor Location: Appearance: red,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89784 - 18 Cust. #: 7-2 Material: Brown Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89784 - 18a Cust. #: 7-2 Material: Green Sheet Floor Location: Appearance: green,fibrous,nonhomogenous Layer: 2 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%

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

Robert T. Letarte Jr., Laboratory Director

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

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Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 18b Cust. #: 7-2 Material: Red Sheet Floor Location: Appearance: red,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89784 - 19 Cust. #: 8-1 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 20 Cust. #: 8-2 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 21 Cust. #: 9-1 Material: Shingle Location: House Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 22 Cust. #: 9-2 Material: Shingle Location: House Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 23 Cust. #: 10-1 Material: Shingle Location: Garage Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 32 Roundhouse Rd., Crystal Falls, MI

Project # :15060s-1-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 24 Cust. #: 10-2 Material: Shingle Location: Garage Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 25 Cust. #: 11-1 Material: Mortar Location: Between Exterior Barn Logs Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 26 Cust. #: 11-2 Material: Mortar Location: Between Exterior Barn Logs Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 27 Cust. #: 12-1 Material: Shingle Location: Outhouse Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 28 Cust. #: 12-2 Material: Shingle Location: Outhouse Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 29 Cust. #: 13-1 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project : 32 Roundhouse Rd., Crystal Falls, MI

Project # :15060s-1-194

Report To:
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214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 30 Cust. #: 13-1 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89784 - 31 Cust. #: 14-1 Material: Mortar Location: Foundation Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 32 Cust. #: 14-2 Material: Mortar Location: Foundation Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Project : 32 Roundhouse Rd., Crystal Falls, MI
Project # :15060s-1-194

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Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 33 Cust. #: 15-1 Material: Cement Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 34 Cust. #: 15-2 Material: Cement Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 35 Cust. #: 16-1 Material: Concrete Location: Garage Floor Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

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Test Method, Polarized Light Microscopy (PLM)

Project : 32 Roundhouse Rd., Crystal Falls, MI

Project # :15060s-1-194

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AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 36 Cust. #: 16-2 Material: Concrete Location: Garage Floor Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 37 Cust. #: 17-1 Material: Mortar Location: Foundation Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89784 - 38 Cust. #: 17-2 Material: Mortar Location: Foundation Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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Project : 32 Roundhouse Rd., Crystal Falls, MI

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Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 39 Cust. #: 18-1 Material: Window Caulk Location: Barn Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 1.75% POINT COUNT RESULT	Other - 98.25%
Lab ID #: 89784 - 40 Cust. #: 18-2 Material: Window Caulk Location: Barn Appearance: Layer: 1 of 1	Asbestos Present: NOT ANALYZED	
Lab ID #: 89784 - 41 Cust. #: 19-1 Material: Window Caulk Location: Basement Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 1.5% POINT COUNT RESULT	Other - 98.5%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project : 32 Roundhouse Rd., Crystal Falls, MI

Project # :15060s-1-194

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AKT Peerless
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Saginaw, MI 48607

ARI Report # 20-89784
Date Collected: 05/13/20
Date Received: 05/15/20
Date Analyzed: 05/19/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89784 - 42 Cust. #: 19-2 Material: Window Caulk Location: Basement Appearance: Layer: 1 of 1	Asbestos Present: NOT ANALYZED	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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Apex # **89784**

APEX Research, Inc.

1 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com. Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: May 13, 2020
Project: 32 Roundhouse Rd., Crystal Falls MI
Project #: 15060s-1-194
Contact Person: Mark Breeden
Email: breedenm@aktpeerless.com

Lab Use Only
Log-In: ____
Report: ____
Fax: ____
Verbal: ____
Email: ____

Turn Around Times:

***Terms and conditions on the other side.*

5 Days TTP YES (Test Till Positive) **Asbestos:** **Bulk** X Wipe ____ PCM ____ **Lead:** **Paint** ____ Wipe ____

Lab ID	Customer ID #	Material/Location	Results
	1-1	Plaster	
	1-2	Plaster	
	1-3	Plaster	
	1-4	Plaster	
	1-5	Plaster	
	2-1	12" Smooth White Ceiling Tile	
	2-2	12" Smooth White Ceiling Tile	
	2-3	12" Smooth White Ceiling Tile	
	3-1	Window Caulk - 1st and 2nd Floors	
	3-2	Window Caulk - 1st and 2nd Floors	
	4-1	White Brick Pattern Flooring	
	4-2	White Brick Pattern Flooring	
	5-1	Brown and Tan Flooring	
	5-2	Brown and Tan Flooring	
	6-1	Brown and Tan Flooring	
	6-2	Brown and Tan Flooring	
	7-1	Multi-Colored Linoleum with Layers	
	7-2	Multi-Colored Linoleum with Layers	
	8-1	Panel Adhesive	
	8-2	Panel Adhesive	
	9-1	Roofing Material - House	
	9-2	Roofing Material - House	
	10-1	Roofing Material - Garage	
	10-2	Roofing Material - Garage	
	11-1	Mortar between Exterior Barn Logs	
	11-2	Mortar between Exterior Barn Logs	
	12-1	Roofing Material - Outhouse	
	12-2	Roofing Material - Outhouse	
	13-1	Red Rolled Tar Paper	
	13-2	Red Rolled Tar Paper	
	14-1	Foundation Block and Mortar	
	14-2	Foundation Block and Mortar	
	15-1	Stack Cement	
	15-2	Stack Cement	
	16-1	Garage Concrete Floor	

RECEIVED
MAY 15 2020

Relinquished By: [signature]
Date: May 14, 2020 1240pm

Received By: ____
Date: ____

Revision Date: June 2011

Apex # **89784**

APEX Research, Inc.

1 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: May 13, 2020
Project: 32 Roundhouse Rd., Crystal Falls MI
Project #: 15060s-1-194
Contact Person: Mark Breeden
Email: breedenm@aktpeerless.com

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

***Terms and conditions on the other side.*

5 Days TTP YES (Test Till Positive) **Asbestos:** **Bulk** X Wipe PCM **Lead:** **Paint** Wipe

Lab ID	Customer ID #	Material/Location	Results
	16-2	Garage Concrete Floor	
	17-1	Foundation Block and Mortar	
	17-2	Foundation Block and Mortar	
	18-1	Window Caulk - Barn	
	18-2	Window Caulk - Barn	
	19-1	Basement Window Caulk	
	19-2	Basement Window Caulk	

RECEIVED
MAY 15 2020
APEX RESEARCH

Relinquished By:
Date: May 14, 2020 1240pm

Received By:
Date:

ATTACHMENT D

PRE-DEMOLITION ASBESTOS AND HAZARDOUS MATERIALS SURVEY

Conducted by AKT Peerless Environmental Services
Date: June 12, 2020
Address: 321 Second St, Caspian MI

AKTPEERLESS

Pre-Demolition and Hazardous Materials Survey

321 East Second Street
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-3-194

PREPARED FOR **Michigan Land Bank Fast Track Authority**
300 North Washington Square
Lansing, Michigan 48913

PROJECT # 15060s-3-194

DATE June 12, 2020

AKTPEERLESS

FUNCTIONAL SPACE FIGURES

APPENDICES

AKTPEERLESS

PRE-DEMOLITION AND HAZARDOUS MATERIALS SURVEY

321 East Second Street
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-3-194

1.0 Introduction

AKT Peerless Environmental Services (AKT Peerless) was retained by the Michigan Land Bank Fast Track Authority (Client) to conduct a Pre-Demolition and Hazardous Materials Survey of 321 East Second Street, Caspian, Michigan. AKT Peerless' scope of work is based on its proposal PS-26016, as well as the terms and conditions of the agreement with the Client. AKT Peerless' Pre-Demolition and Hazardous Materials Survey was performed for the benefit of the Michigan Land Bank Fast Track Authority.

1.1 Purpose

The purpose of AKT Peerless' Pre-Demolition and Hazardous Materials (HazMat) Survey was to identify the location and presence of: (1) asbestos-containing building materials (ACBMs); (2) potential polychlorinated biphenyl (PCB) containing electrical or hydraulic equipment; (3) potentially hazardous or regulated materials/wastes located in containers and drums; (4) potential, mercury or radioactive-containing equipment or materials located in the building; and (5) any other materials that would require special handling or disposal requirements and should be segregated from general construction debris.

1.2 Scope of Work

The scope of work for this survey is specifically designed to support facility demolitions, as identified within proposals PS-26016. AKT Peerless understands that the scope of demolition at the site includes all interior and accessible exterior components of the Subject Building.

Michigan Licensing and Regulatory Affairs (LARA) accredited Asbestos Inspector Mr. Mark Breeden (A44842) of AKT Peerless conducted the Pre-Demolition and Hazardous Materials Survey of the property.

1.2.1 Asbestos Survey

The scope of work for AKT Peerless' asbestos survey is based on the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). The purpose of ASHARA is to extend the Asbestos Hazard Emergency Response Act (AHERA) inspection and management requirements to commercial and industrial buildings. Since the facility is slated for demolition, it is also subject to Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

Asbestos Containing Material (ACM) survey activities were completed according to the following protocol:

1. Functional spaces were identified for the purpose of assessing all suspect materials, as appropriate.
2. The ACM inspection was performed in an effort to determine the extent and location of ACM present in the Subject Buildings. This survey was qualitative and quantitative in that an attempt was made to locate accessible friable and non-friable ACM areas, as well as estimate the amount of ACM. All accessible locations of the survey areas were inspected with exception of inaccessible areas or materials not surveyed that are identified in Section 1.3.
3. Bulk samples of suspect ACMs were collected in accordance with professional standards by a Michigan-accredited Asbestos Building Inspector.
4. Bulk samples were collected in each homogeneous area in accordance with EPA-recommended sampling guidelines.
5. Samples of suspect ACM were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory for analysis, via Polarized Light Microscopy and dispersion staining (PLM) following the EPA Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
6. In an effort to minimize costs, the laboratory analyses were performed using first positive stop analysis methodologies. First positive stop involves analyzing samples by homogeneous area groupings. Laboratory analyses proceeded sample by sample, within each homogeneous area grouping until a sample was determined to be asbestos containing.
7. Upon completion of the field inspection and receipt of laboratory data, this report was prepared and includes: (a) a general description of the suspect ACM identified and non-suspect homogeneous materials that were visually evaluated; (b) quantity of suspect materials observed as able to be determined; and (c) laboratory testing results.

1.2.2 PCB, Mercury, Lead, and Other Hazardous Materials

The survey for PCBs, potential lead/mercury-containing equipment, and containers that may contain universal hazardous wastes or regulated materials/wastes were completed according to the following procedures:

1. The buildings were inspected for potential hazardous materials such as PCB-containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, and mercury light tubes and switches. The survey of lighting/alarm systems comprised a visual inspection of the exterior of accessible emergency, light and exit sign fixtures, panels or components for possible PCB-containing ballast systems, mercury vapor lighting fixtures, batteries, or other hazardous materials. No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. Limited sampling was performed as summarized, and as part of the survey report, an inventory of the materials identified has been included that summarizes the quantities of the hazardous building materials observed.

During execution of this survey, the work was performed using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

1.3 Limitations and Exceptions of the Survey

The following general limitations were encountered during the preparation of this survey:

- AKT Peerless uses trained and licensed inspectors in attempting to locate and identify materials potentially containing some form of hazardous material (i.e., asbestos, lead, PCB, etc.). The possibility exists that AKT Peerless did not identify all hazardous materials within the buildings. Some buildings have hidden spaces that may not be immediately obvious to a surveyor, who is not intimately familiar with the buildings, and who has only a limited time in the buildings. There may be additional hazardous materials that were not found because they were not visible or accessible to the inspection team. Asbestos, PCB, lead, and mercury were used in a variety of building components and in many types of materials in the construction of buildings. In some of these materials, a hazardous material may be present, not as an intentional ingredient, but as a contaminant.

The following building-specific limitations apply to this Pre-Demolition and Hazardous Materials Survey:

- Areas enclosed by fixed wall, ceiling systems, and roofing systems were restricted to limited visual access in identifying materials such as, but not limited to; pipe wrap, mud fittings, roof flashing, caulks, etc. Fixed wall and ceiling systems may include plaster, drywall partitions, ceramic tile finish, concrete, and masonry, and roofing systems, and may potentially contain multiple layers of building materials. These systems are installed throughout the exterior and interior areas of the building(s). Representative intrusive observations were made above drop ceilings, inside walls, and below flooring materials such as carpeting and roofing, whereas applicable. As such, a complete survey and delineation of all hidden materials were not performed. **Due to these limitations, actual quantities of hazardous materials present may be greater than those inventoried as part of this survey.**

- Whereas applicable, access to suspect ACM could potentially be located within restricted areas defined as being within a regulated confined space (i.e., such as pipe chases, pipe trenches, attics, elevator shafts, etc.). These areas require the use of trained confined space professionals, personnel protective equipment, and rescue personnel. AKT Peerless did not access confined space areas.

- The Subject Buildings are currently vacant. AKT Peerless used portable spotlights and flashlights to improve general viewing conditions whereas applicable.

- During the survey, no dismantling of electrical or mechanical equipment was conducted. Since trade personnel was not available (i.e. electricians, plumbers, etc.), no dismantling of equipment was performed to identify the existence of PCB containing components, mercury switches, or asbestos insulation.

- The basement (FS-10) is partially collapsed and could not be fully accessed.

- Estimated and not estimated quantities of materials reported are based on observations and estimates made by AKT Peerless at the time of the inspection. Specific materials including, but not limited to: roof flashing, roofing materials, tar coatings, thermal insulation and fittings, pipe wraps and debris, mud fittings, building caulks, and wall adhesives were located in inaccessible areas such as behind fixed walls or ceilings, unsafe areas, confined spaces, and/or elevated

heights. **Due to these limitations, actual quantities may vary from those estimated as part of this survey.**

Other limitations pertaining to material accessibility or characterization may also be described in the survey data tables contained herein.

Quantities of identified ACM reported in this document are provided for reference only and are not authorized to be relied upon for Contractor abatement bidding purposes. AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing. AKT Peerless recommends that a contingency allowance be used to address estimating method uncertainties for quantified materials.

2.0 Asbestos Survey Methodology

The following sections of this survey outline the approach, procedures, and methods employed by AKT Peerless to complete the ACM Survey of the Subject Property. Photographs of the Subject Property are attached as Appendix A.

2.1 Description of Homogenous Areas

During the asbestos survey, AKT Peerless identified Homogeneous Areas (HA) based on appearances and type of materials observed. As defined under AHERA, a homogeneous area is an area (material) that appears similar throughout in terms of its color, texture, and date of material application.
In addition, building materials suspect for asbestos content are also described based on one of three following material classifications:

Surfacing Materials: A material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. Glued-on ceiling panels are interpreted by the State of Michigan as a surfacing material.

Thermal System Insulation: A material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat lost or gain, or water condensation, or for other purposes.

Miscellaneous Materials: A building material on structural components, structural members or fixtures, such as floor and ceiling panels, and does not include surfacing material or thermal system insulation.

AKT Peerless identified homogeneous suspect ACMs at the Subject Property for sampling. Homogeneous areas were identified based on the site inspection by AKT Peerless. Any materials that were identified but were not sampled due to inaccessibility were recorded.

2.2 Description of Functional Spaces

In general, functional spaces are defined as spatially distinct units or areas within the building, which contain identifiable populations of building occupants. Functional spaces can also include storage spaces, mechanical rooms, closets and services areas, etc. However, a functional space can also be delineated based on general building layout, facility use factors, and can be assigned using various arbitrary factors that were useful in the completion of this survey.

2.3 Bulk Sample Material Inventory

Based on homogeneous and functional areas identified during the survey, AKT Peerless collected bulk samples for analysis. Samples were collected in polyethylene containers and labeled with an identification number. In general, AKT Peerless' sampling protocol consisted of: (a) wetting or misting the sample as appropriate; (b) extracting a sample with a clean knife, chisel, or coring tool; and (c) placing the sample into its properly labeled sample container.

The sampling protocol used to procure the appropriate number of samples for an identified homogeneous area of suspect ACM is based on sampling guidelines outlined under AHERA or as proposed in the approved scope of work.

2.4 Laboratory Analytical Procedures

All samples collected by AKT Peerless were submitted to Apex Research, Inc. (Apex) of Whitmore Lake, Michigan for analysis. Apex is accredited by the American Industrial Hygiene Association (AIHA) and participates in the NVLAP. Samples were submitted under chain-of-custody guidelines to ensure proper handling and delivery of the samples. The samples were analyzed using PLM with dispersion staining in accordance with the following USEPA guidance document *Determination of Asbestos in Bulk Building Materials*: EPA/600/R-93/116, dated July 1993.

The USEPA defines ACM as those materials that contain **greater than one percent** asbestos. Friable materials are defined as those that can be crumbled or reduced to powder by hand pressure. The NESHAP for asbestos, dated November 1990 stipulates that any friable material identified as containing asbestos in concentrations greater than one percent must be considered ACM.

Materials containing one (1) percent or less asbestos are generally considered non-asbestos-containing, and therefore are not regulated by NESHAP. The OSHA definition of ACM is similarly any material containing more than one (1) percent asbestos. However, specific work practices must be followed under OSHA regulations for materials containing less than one percent asbestos if an individual layer exceeds one percent. Under the PLM method, percentages and types of fibrous components in these samples were determined by visual estimation of the amount of fibrous materials versus the total amount of material present.

Current USEPA guidelines specify that when initial laboratory analysis of friable or non-friable materials regulated under NESHAP detects the presence of asbestos in a quantity between less than one percent (or trace) and less than ten percent, a verification analysis using the point counting analytical method should be considered or the material in question should be treated as ACBM as identified by PLM analysis.

AKT Peerless utilized the "positive-stop" method of sample analyses. In this method, the analyses of a homogeneous material is stopped on a group of samples once the first positive (e.g., greater than 1% asbestos) sample is analyzed. According to the USEPA, if one sample of a homogenous material is identified to be asbestos-containing, the entire material must be considered asbestos-containing.

Based on appearances and type of materials, suspect ACMs were grouped into homogeneous areas and functional spaces as appropriate based on apparent age and similarity in texture and color. Upon completion of these activities, representative bulk samples of the suspect materials were collected. A copy of the bulk sample laboratory report and chain-of-custody record is presented in Appendix D.

3.0 Asbestos and Other Hazardous Materials Conclusions and Recommendations

AKT Peerless was retained by the Client to conduct a Pre-Demolition and Hazardous Materials Surveys of 321 East Second Street, Caspian, Michigan. The purpose of the survey was to identify hazardous materials that will require special handling procedures or removal activities prior to demolition activities. The following sections of this report summarize the findings of the Pre-Demolition and Hazardous Materials Survey of the Subject Building.

3.1 Homogeneous Area & Asbestos Containing Materials (ACMs)

Based on the results of the asbestos survey, the following ACMs were identified:

Summary of Homogeneous Areas & Asbestos Containing Materials

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Plaster	**1-1**	**Throughout**	**2,700 SF**	**F**	**1.5% CHR PC**
Tan Flooring with Layers	2-1	FS-1 Sun Porch	190 SF	NF	NAD
Tan and Green Brick Pattern Flooring	**3-1**	**FS-4 Kitchen FS-5 Pantry**	**110 SF**	**NF**	**20% CHR**
Tan and Blue Mottled Flooring	4-1	FS-7 Bedroom #1 (Closet)	45 SF	NF	NAD
Window Caulk – 1st and 2nd Floors	**5-1**	**FS-2 Mud Room**	**14 Windows**	**NF**	**5% CHR**
Black Paper behind Exterior Wood Siding	6-1	FS-3 Bathroom #1	2,950 SF	F	NAD
Tan Panel Adhesive	7-1	FS-3 Bathroom #1	350 SF Panel 35 SF Adhesive	NF	NAD
Tan and Brown Flooring	8-1	FS-6 Living Room	125 SF	NF	NAD
Roofing Material	9-1	FS-12 Bedroom #2 2nd Floor	970 SF	NF	NAD
Foundation Block and Mortar	10-1	FS-13 Bathroom #2 2nd Floor	NE	NF	NAD
Vermiculite	**11-1**	**FS-9 Attic**	**40 CF**	**F**	**Assumed / Not Sampled**

Table Notes:
F = Friable NF = Non-friable FS = Functional Space NAD = No Asbestos Detected CHR = Chrysotile
AMO = Amosite SF = Square Feet LF = Linear Feet PC = Point Count NE = Not Estimated
CRO = Crocidolite ACT = Actinolite T = Tile M = Mastic MF = Mud Fittings CF = Cubic Feet
ACM = Asbestos Containing Material (Greater than 1% Asbestos Content) NS = Not Sampled
ASSUMED = Suspect material that was not sampled, but was assumed asbestos-containing

Asbestos Recommendation:

1. Asbestos containing materials were not identified within the laboratory analytical of suspect materials sampled during this survey.

2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

3.2 Summary of Identified Other Potentially Hazardous Materials

During the Hazardous Material Survey, AKT Peerless observed the existence of various types of potentially hazardous materials within the various buildings. In general, these materials were stored in containers of various capacities. The following materials were identified at the site:

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Thermostats	FS-1 Living Room	1	Possibly Contains Mercury
Smoke Detector	FS-1 Living Room	1	Possibly Contains Radiation
Tires	FS-Bedroom #1	2	Automotive
Television	FS-1 Living Room	1	Miscellaneous Electronics
Automobiles	FS-10 Exterior	2	
Antifreeze	FS-1 Living Room	1	1 Gallon Container / Full
Roofing Tar	FS-1 Living Room	1	5 Gallon Container / ½ Full

The survey was conducted to identify universal hazardous wastes or regulated materials/wastes. The buildings were inspected for potential hazardous materials, such as PCBs or oil containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, mercury light tubes and switches, and underground storage tanks (USTs). No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. No sampling of any hazardous component materials was performed.

AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition activities. Based on the conditions observed it is recommended that unknown waste materials and oil stained concrete, as well as standing water that may be identified during demolition activities within but not limited to cisterns, basements, sump basins, and/or potential storm water discharge pits are appropriately characterized for waste disposal or recycling purposes, whereas applicable.

Hazardous Materials Recommendation:

The following summarizes our recommendations regarding the hazardous materials identified:

1. The materials included in Hazardous / Regulated Materials Summary and other items banned from landfill disposal, identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.

2. AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition. Based on the conditions observed, it is recommended that unknown waste materials, and oil stained concrete be sampled and appropriately characterized for waste disposal or recycling purposes, whereas applicable.

3. During any future demolition activities, in the event of any identified oil stained concrete, the contractor must delineate materials and segregate materials from the recyclable materials.

3.3 Electrical Transformers

AKT Peerless did not identify electrical transformers on the Subject Property.

4.0 Limitations

The information and opinions obtained in this report are for the exclusive use of the Client. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties, who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), agrees to be bound by the original terms and conditions entered into by AKT Peerless and the Client.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by the Client(s) or third parties is complete or accurate.

5.0 Signatures of Environmental Professionals

The following individuals contributed to the completion of this report.

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SITE SKETCH

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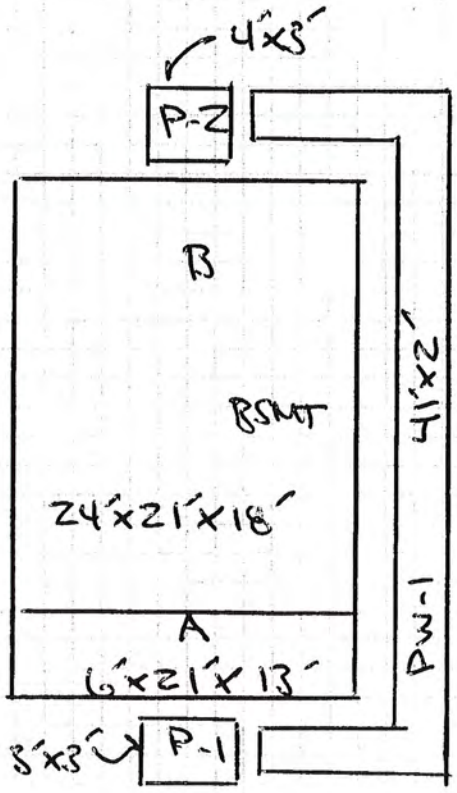
Page ____ of ____

Project Name: 321 E. 2ND ST., CASPIAN, MI

Date: _____

Project No.: 15060-3-194



AKTPEERLESS

Appendix A

Photographs

EXTERIOR VIEW OF HOUSE FACING EAST

EXTERIOR VIEW OF HOUSE FACING NORTHWEST

AKTPEERLESS

PROPERTY PHOTOGRAPHS

321 EAST SECOND STREET,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-3-194

EXTERIOR VIEW OF HOUSE FACING WEST

EXTERIOR VIEW OF BASEMENT (FS-10)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

321 EAST SECOND STREET,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-3-194

EXTERIOR VIEW OF KITCHEN (FS-3)

EXTERIOR VIEW OF BACK ENTRY (FS-5)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 321 EAST SECOND STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-3-194

INTERIOR VIEW OF BEDROOM (FS-4)

INTERIOR VIEW OF 2nd FLOOR (FS-8)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 321 EAST SECOND STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-3-194

INTERIOR VIEW OF LIVING ROOM (FS-1)

INTERIOR VIEW OF ATTIC SHOWING VERMICULITE AND PERLITE INSULATION (FS-9)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 321 EAST SECOND STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-3-194

AKTPEERLESS

Appendix B

ACM Laboratory Reports and Chain of Custody

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 E. Second St., Caspian MI
Project # :15060s-3-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89762
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 1 Cust. #: 1-1 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 1.5% POINT COUNT RESULT	Cellulose - 5% Other - 93%
Lab ID #: 89762 - 2 Cust. #: 1-2 Material: Plaster Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89762 - 3 Cust. #: 1-3 Material: Plaster Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	

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

Robert T. Letarte Jr., Laboratory Director

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

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Saginaw, MI 48607

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Date Received: 05/15/20
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Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 4 Cust. #: 1-4 Material: Plaster Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89762 - 5 Cust. #: 1-5 Material: Plaster Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89762 - 6 Cust. #: 2-1 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO**	Cellulose - 60% Other - 40%

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

Robert T. Letarte Jr., Laboratory Director

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AKT Peerless
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Saginaw, MI 48607

ARI Report # 20-89762
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 6a Cust. #: 2-1 Material: Sheet Floor Location: Appearance: white,fibrous,nonhomogenous Layer: 2 of 3	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89762 - 6b Cust. #: 2-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89762 - 7 Cust. #: 2-2 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%

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Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 7a Cust. #: 2-2 Material: Sheet Floor Location: Appearance: white,fibrous,nonhomogenous Layer: 2 of 3	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89762 - 7b Cust. #: 2-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89762 - 8 Cust. #: 3-1 Material: Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 20%	Other - 80%

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

Robert T. Letarte Jr., Laboratory Director

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Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 9 Cust. #: 3-2 Material: Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89762 - 10 Cust. #: 4-1 Material: Sheet Floor Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89762 - 11 Cust. #: 4-2 Material: Sheet Floor Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 60% Other - 40%

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

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Date Collected: 05/12/20
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Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 12 Cust. #: 5-1 Material: Caulk Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%
Lab ID #: 89762 - 13 Cust. #: 5-2 Material: Caulk Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89762 - 14 Cust. #: 6-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 60% Other - 40%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 15 Cust. #: 6-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89762 - 16 Cust. #: 7-1 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89762 - 17 Cust. #: 7-2 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 18 Cust. #: 8-1 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89762 - 19 Cust. #: 8-2 Material: Sheet Floor Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89762 - 20 Cust. #: 9-1 Material: Shingle Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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

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Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89762 - 21 Cust. #: 9-2 Material: Shingle Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89762 - 22 Cust. #: 10-1 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89762 - 23 Cust. #: 10-2 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Apex # **89762**

APEX Research, Inc.

4 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: May 12, 2020
Project: 321 E. Second St., Caspian MI
Project #: 15060s-3-194
Contact Person: Mark Breeden
Email: preedenm@aktpeerless.com

***Terms and conditions on the other side.*

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

5 Days TTP YES (Test Till Positive)

Asbestos: **Bulk** X Wipe PCM

Lead: **Paint** Wipe

Lab ID	Customer ID #	Material/Location	Results
	1-1	Plaster	
	1-2	Plaster	
	1-3	Plaster	
	1-4	Plaster	
	1-5	Plaster	
	2-1	Tan Flooring with Layers	
	2-2	Tan Flooring with Layers	
	3-1	Tan and Green Brick Pattern Flooring	
	3-2	Tan and Green Brick Pattern Flooring	
	4-1	Tan and Blue Mottled Flooring	
	4-2	Tan and Blue Mottled Flooring	
	5-1	Window Caulk - 1st and 2nd Floors	
	5-2	Window Caulk - 1st and 2nd Floors	
	6-1	Black Paper behind Exterior Wood Siding	
	6-2	Black Paper behind Exterior Wood Siding	
	7-1	Tan Panel Adhesive	
	7-2	Tan Panel Adhesive	
	8-1	Tan and Brown Flooring	
	8-2	Tan and Brown Flooring	
	9-1	Roofing Material	
	9-2	Roofing Material	
	10-1	Foundation Block and Mortar	
	10-2	Foundation Block and Mortar	

RECEIVED
MAY 15 2020
BB 0945
APEX RESEARCH

Relinquished By
Date: May 14, 2020 1235pm

Received By
Date

Revision Date: June 2011

ATTACHMENT E

PRE-DEMOLITION ASBESTOS AND HAZARDOUS MATERIALS SURVEY

Conducted by AKT Peerless Environmental Services
Date: June 12, 2020
Address: 113 E Railroad St, Caspian MI

AKTPEERLESS

Pre-Demolition and Hazardous Materials Survey

113 East Railroad Street
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-2-194

PREPARED FOR **Michigan Land Bank Fast Track Authority**
300 North Washington Square
Lansing, Michigan 48913

PROJECT # 15060s-2-194

DATE June 12, 2020

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AKTPEERLESS

PRE-DEMOLITION AND HAZARDOUS MATERIALS SURVEY

113 East Railroad Street
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-2-194

1.0 Introduction

AKT Peerless Environmental Services (AKT Peerless) was retained by the Michigan Land Bank Fast Track Authority (Client) to conduct a Pre-Demolition and Hazardous Materials Survey of 113 East Railroad Street, Caspian, Michigan. AKT Peerless' scope of work is based on its proposal PS-26016, as well as the terms and conditions of the agreement with the Client. AKT Peerless' Pre-Demolition and Hazardous Materials Survey was performed for the benefit of the Michigan Land Bank Fast Track Authority.

1.1 Purpose

The purpose of AKT Peerless' Pre-Demolition and Hazardous Materials (HazMat) Survey was to identify the location and presence of: (1) asbestos-containing building materials (ACBMs); (2) potential polychlorinated biphenyl (PCB) containing electrical or hydraulic equipment; (3) potentially hazardous or regulated materials/wastes located in containers and drums; (4) potential, mercury or radioactive-containing equipment or materials located in the building; and (5) any other materials that would require special handling or disposal requirements and should be segregated from general construction debris.

1.2 Scope of Work

The scope of work for this survey is specifically designed to support facility demolition, as identified within proposals PS-26016. AKT Peerless understands that the scope of demolition at the site includes all interior and accessible exterior components of the Subject Building.

Michigan Licensing and Regulatory Affairs (LARA) accredited Asbestos Inspector Mr. Mark Breeden (A44845) of AKT Peerless conducted the Pre-Demolition and Hazardous Materials Survey of the property.

1.2.1 Asbestos Survey

The scope of work for AKT Peerless' asbestos survey is based on the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). The purpose of ASHARA is to extend the Asbestos Hazard Emergency Response Act (AHERA) inspection and management requirements to commercial and industrial buildings. Since the facility is slated for demolition, it is also subject to Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

Asbestos Containing Material (ACM) survey activities were completed according to the following protocol:

1. Functional spaces were identified for the purpose of assessing all suspect materials, as appropriate.
2. The ACM inspection was performed in an effort to determine the extent and location of ACM present in the Subject Building. This survey was qualitative and quantitative in that an attempt was made to locate accessible friable and non-friable ACM areas, as well as estimate the amount of ACM. All accessible locations of the survey areas were inspected with exception of inaccessible areas or materials not surveyed that are identified in Section 1.3.
3. Bulk samples of suspect ACMs were collected in accordance with professional standards by a Michigan-accredited Asbestos Building Inspector.
4. Bulk samples were collected in each homogeneous area in accordance with EPA-recommended sampling guidelines.
5. Samples of suspect ACM were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory for analysis, via Polarized Light Microscopy and dispersion staining (PLM) following the EPA Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
6. In an effort to minimize costs, the laboratory analyses were performed using first positive stop analysis methodologies. First positive stop involves analyzing samples by homogeneous area groupings. Laboratory analyses proceeded sample by sample, within each homogeneous area grouping until a sample was determined to be asbestos containing.
7. Upon completion of the field inspection and receipt of laboratory data, this report was prepared and includes: (a) a general description of the suspect ACM identified and non-suspect homogeneous materials that were visually evaluated; (b) quantity of suspect materials observed as able to be determined; and (c) laboratory testing results.

1.2.2 PCB, Mercury, Lead, and Other Hazardous Materials

The survey for PCBs, potential lead/mercury-containing equipment, and containers that may contain universal hazardous wastes or regulated materials/wastes were completed according to the following procedures:

1. The buildings were inspected for potential hazardous materials such as PCB-containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, and mercury light tubes and switches. The survey of lighting/alarm systems comprised a visual inspection of the exterior of accessible emergency, light and exit sign fixtures, panels or components for possible PCB-containing ballast systems, mercury vapor lighting fixtures, batteries, or other hazardous materials. No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. Limited sampling was performed as summarized, and as part of the survey report, an inventory of the materials identified has been included that summarizes the quantities of the hazardous building materials observed.

During execution of this survey, the work was performed using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

1.3 Limitations and Exceptions of the Survey

The following general limitations were encountered during the preparation of this survey:

- AKT Peerless uses trained and licensed inspectors in attempting to locate and identify materials potentially containing some form of hazardous material (i.e., asbestos, lead, PCB, etc.). The possibility exists that AKT Peerless did not identify all hazardous materials within the buildings. Some buildings have hidden spaces that may not be immediately obvious to a surveyor, who is not intimately familiar with the buildings, and who has only a limited time in the buildings. There may be additional hazardous materials that were not found because they were not visible or accessible to the inspection team. Asbestos, PCB, lead, and mercury were used in a variety of building components and in many types of materials in the construction of buildings. In some of these materials, a hazardous material may be present, not as an intentional ingredient, but as a contaminant.

The following building-specific limitations apply to this Pre-Demolition and Hazardous Materials Survey:

- Areas enclosed by fixed wall, ceiling systems, and roofing systems were restricted to limited visual access in identifying materials such as, but not limited to; pipe wrap, mud fittings, roof flashing, caulks, etc. Fixed wall and ceiling systems may include plaster, drywall partitions, ceramic tile finish, concrete, and masonry, and roofing systems, and may potentially contain multiple layers of building materials. These systems are installed throughout the exterior and interior areas of the building(s). Representative intrusive observations were made above drop ceilings, inside walls, and below flooring materials such as carpeting and roofing, whereas applicable. As such, a complete survey and delineation of all hidden materials were not performed. **Due to these limitations, actual quantities of hazardous materials present may be greater than those inventoried as part of this survey.**

- Whereas applicable, access to suspect ACM could potentially be located within restricted areas defined as being within a regulated confined space (i.e., such as pipe chases, pipe trenches, attics, elevator shafts, etc.). These areas require the use of trained confined space professionals, personnel protective equipment, and rescue personnel. AKT Peerless did not access confined space areas.

- The Subject Building is currently vacant. AKT Peerless used portable spotlights and flashlights to improve general viewing conditions whereas applicable.

- Observations of the Attic were limited due to this being a confined space.

- During the survey, no dismantling of electrical or mechanical equipment was conducted. Since trade personnel was not available (i.e. electricians, plumbers, etc.), no dismantling of equipment was performed to identify the existence of PCB containing components, mercury switches, or asbestos insulation.

- Estimated and not estimated quantities of materials reported are based on observations and estimates made by AKT Peerless at the time of the inspection. Specific materials including, but not limited to: roof flashing, roofing materials, tar coatings, thermal insulation and fittings, pipe wraps and debris, mud fittings, building caulks, and wall adhesives were located in inaccessible areas such as behind fixed walls or ceilings, unsafe areas, confined spaces, and/or elevated

heights. **Due to these limitations, actual quantities may vary from those estimated as part of this survey.**

Other limitations pertaining to material accessibility or characterization may also be described in the survey data tables contained herein.

Quantities of identified ACM reported in this document are provided for reference only and are not authorized to be relied upon for Contractor abatement bidding purposes. AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing. AKT Peerless recommends that a contingency allowance be used to address estimating method uncertainties for quantified materials.

2.0 Asbestos Survey Methodology

The following sections of this survey outline the approach, procedures, and methods employed by AKT Peerless to complete the ACM Survey of the Subject Property. Photographs of the Subject Property are attached as Appendix A.

2.1 Description of Homogenous Areas

During the asbestos survey, AKT Peerless identified Homogeneous Areas (HA) based on appearances and type of materials observed. As defined under AHERA, a homogeneous area is an area (material) that appears similar throughout in terms of its color, texture, and date of material application.
In addition, building materials suspect for asbestos content are also described based on one of three following material classifications:

Surfacing Materials: A material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. Glued-on ceiling panels are interpreted by the State of Michigan as a surfacing material.

Thermal System Insulation: A material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat lost or gain, or water condensation, or for other purposes.

Miscellaneous Materials: A building material on structural components, structural members or fixtures, such as floor and ceiling panels, and does not include surfacing material or thermal system insulation.

AKT Peerless identified homogeneous suspect ACMs at the Subject Property for sampling. Homogeneous areas were identified based on the site inspection by AKT Peerless. Any materials that were identified, but were not sampled due to inaccessibility were recorded.

2.2 Description of Functional Spaces

In general, functional spaces are defined as spatially distinct units or areas within the building, which contain identifiable populations of building occupants. Functional spaces can also include storage spaces, mechanical rooms, closets and services areas, etc. However, a functional space can also be

delineated based on general building layout, facility use factors, and can be assigned using various arbitrary factors that were useful in the completion of this survey.
Functional Space Tables are included in Appendix B.

2.3 Bulk Sample Material Inventory

Based on homogeneous and functional areas identified during the survey, AKT Peerless collected bulk samples for analysis. Samples were collected in polyethylene containers and labeled with an identification number. In general, AKT Peerless' sampling protocol consisted of: (a) wetting or misting the sample as appropriate; (b) extracting a sample with a clean knife, chisel, or coring tool; and (c) placing the sample into its properly labeled sample container.

The sampling protocol used to procure the appropriate number of samples for an identified homogeneous area of suspect ACM is based on sampling guidelines outlined under AHERA or as proposed in the approved scope of work.

2.4 Laboratory Analytical Procedures

All samples collected by AKT Peerless were submitted to Apex Research, Inc. (Apex) of Whitmore Lake, Michigan for analysis. Apex is accredited by the American Industrial Hygiene Association (AIHA) and participates in the NVLAP. Samples were submitted under chain-of-custody guidelines to ensure proper handling and delivery of the samples. The samples were analyzed using PLM with dispersion staining in accordance with the following USEPA guidance document *Determination of Asbestos in Bulk Building Materials*: EPA/600/R-93/116, dated July 1993.

The USEPA defines ACM as those materials that contain **greater than one percent** asbestos. Friable materials are defined as those that can be crumbled or reduced to powder by hand pressure. The NESHAP for asbestos, dated November 1990 stipulates that any friable material identified as containing asbestos in concentrations greater than one percent must be considered ACM.

Materials containing one (1) percent or less asbestos are generally considered non-asbestos-containing, and therefore are not regulated by NESHAP. The OSHA definition of ACM is similarly any material containing more than one (1) percent asbestos. However, specific work practices must be followed under OSHA regulations for materials containing less than one percent asbestos if an individual layer exceeds one percent. Under the PLM method, percentages and types of fibrous components in these samples were determined by visual estimation of the amount of fibrous materials versus the total amount of material present.

Current USEPA guidelines specify that when initial laboratory analysis of friable or non-friable materials regulated under NESHAP detects the presence of asbestos in a quantity between less than one percent (or trace) and less than ten percent, a verification analysis using the point counting analytical method should be considered or the material in question should be treated as ACBM as identified by PLM analysis.

AKT Peerless utilized the "positive-stop" method of sample analyses. In this method, the analyses of a homogeneous material is stopped on a group of samples once the first positive (e.g., greater than 1% asbestos) sample is analyzed. According to the USEPA, if one sample of a homogenous material is identified to be asbestos-containing, the entire material must be considered asbestos-containing.

Based on appearances and type of materials, suspect ACMs were grouped into homogeneous areas and functional spaces as appropriate based on apparent age and similarity in texture and color. Upon completion of these activities, representative bulk samples of the suspect materials were collected. A copy of the bulk sample laboratory report and chain-of-custody record is presented in Appendix D.

3.0 Asbestos and Other Hazardous Materials Conclusions and Recommendations

AKT Peerless was retained by the Client to conduct a Pre-Demolition and Hazardous Materials Survey of 113 East Railroad Street, Caspian, Michigan. The purpose of the survey was to identify hazardous materials that will require special handling procedures or removal activities prior to demolition activities. The following sections of this report summarize the findings of the Pre-Demolition and Hazardous Materials Survey of the Subject Building.

3.1 Homogeneous Area & Asbestos Containing Materials (ACMs)

Based on the results of the asbestos survey, the following ACMs were identified:

Summary of Homogeneous Areas & Asbestos Containing Materials

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Red Insulbrick Exterior Siding	1-1	FS-11 Exterior	2,950 SF	NF	NAD
Roofing Material - House	2-1	FS-11 Exterior	950 SF	NF	NAD
Roofing Material - Garage	3-1	FS-11 Exterior	350 SF	NF	NAD
Window Caulk - House	4-1	FS-11 Exterior	11 Windows	NF	NAD
Window Caulk - Garage	**5-1**	**FS-11 Exterior**	**2 Windows**	**NF**	**2% CHR**
Garage Concrete Floor	6-1	FS-9 Garage	250 SF	NF	NAD
Red Rolled Tar Paper on East side of Garage	7-1	FS-11 Exterior	30 SF	NF	NAD
9" Off White with Black and Red Streaks Floor Tile	**8-1**	**FS-5 Utility Room**	**90 SF**	**NF**	**Tile 5% CHR** Glue NAD

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Tan Circular Mosaic Pattern Flooring with Layers	**9-1**	**FS-2 Kitchen**	**110 SF**	**NF**	**Linoleum 20% CHR** Felt NAD Sheet Floor NAD
White, Red and Gray Square Pattern Linoleum with Layers	10-1	FS-3 Bedroom #1	4 SF	NF	NAD
Plaster	11-1	FS-1 Living Room FS-2 Kitchen FS-3 Bedroom #1 FS-4 Bathroom	1,050 SF	F	NAD
12" White Ceiling Tiles with Glue pods	12-1	FS-1 Living Room	90 SF	F	NAD
Drywall and Joint Compound	13-1	FS-1 Living Room FS-5 Utility Room	460 SF	NF	NAD
Tan Bathtub Surround Adhesive	14-1	FS-4 Bathroom	80 SF	NF	NAD
Black Panel Adhesive	15-1	FS-4 Bathroom	200 SF	NF	NAD
12" White with Gray Smudges and Pinholes Ceiling Tile	16-1	FS-4 Bathroom	60 SF	F	NAD
Tan Mosaic Pattern Flooring with Layers	**17-1**	**FS-4 Bathroom**	**45 SF**	**NF**	**Linoleum 15% CHR** Felt NAD
Duct Paper	**18-1**	**FS-7 Basement**	**30 LF**	**F**	**60% CHR**
Basement Concrete Floor	19-1	FS-7 Basement	900 SF	NF	NAD
Window Caulk - Basement	20-1	FS-11 Exterior	2 Windows	NF	NAD
Stack Cement	21-1	FS-2 Kitchen FS-7 Basement	4 LF	NF	NAD
Foundation Block and Mortar	22-1	FS-19 Exterior	NE	F	NAD
Cellulose Insulation	23-1	FS-10 Attic and Walls	NE	F	NAD

Table Notes:
F = Friable NF = Non-friable FS = Functional Space NAD = No Asbestos Detected CHR = Chrysotile
AMO = Amosite SF = Square Feet LF = Linear Feet PC = Point Count NE = Not Estimated
CRO = Crocidolite ACT = Actinolite T = Tile M = Mastic MF = Mud Fittings CF = Cubic Feet
ACM = Asbestos Containing Material (Greater than 1% Asbestos Content) NS = Not Sampled
ASSUMED = Suspect material that was not sampled, but was assumed asbestos-containing

Asbestos Recommendation:

1. Asbestos containing materials were not identified within the laboratory analytical of suspect materials sampled during this survey.

2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

3.2 Summary of Identified Other Potentially Hazardous Materials

During the Hazardous Material Survey, AKT Peerless observed the existence of various types of potentially hazardous materials within the subject building. In general, these materials were stored in containers of various capacities. The following materials were identified at the site:

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Miscellaneous Electronics	FS-1 Living Room	3	Miscellaneous Electronics
Paint	FS-1 Living Room	6	1 Gallon Containers / Various Amts.
Refrigerator	FS-1 Living Room	2	Possibly CFC Containing
Television	FS-1 Living Room	1	Miscellaneous Electronics
Automotive Fluids	FS-1 Living Room	2	1 Gallon Container or Less / Various Amts.
Joint Compound	FS-3 Bedroom #1	1	5 Gallon Container / Various Amts.
	FS-9 Garage	2	
Thermostat	FS-2 Kitchen	1	Possibly Mercury Containing
Tires	FS-7 Basement	10	Automotive
Smoke Detector	FS-7 Basement	1	Possibly Contains Radiation
Air Conditioner	FS-11 Exterior	1	Possibly CFC Containing
Water Heater	FS-7 Basement	1	
Gas Tank	FS-9 Garage	1	15 Gallon / Unknown Amt.
Propane Tank	FS-9 Garage	1	20 Gallon / Unknown Amt.
Roofing Tar	FS-9 Garage	1	5 Gallon Container / ½ Full

The survey was conducted to identify universal hazardous wastes or regulated materials/wastes. The buildings were inspected for potential hazardous materials, such as PCBs or oil containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, mercury light tubes and switches, and underground storage tanks (USTs). No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. No sampling of any hazardous component materials was performed.

AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building

demolition activities. Based on the conditions observed it is recommended that unknown waste materials and oil stained concrete, as well as standing water that may be identified during demolition activities within but not limited to cisterns, basements, sump basins, and/or potential storm water discharge pits are appropriately characterized for waste disposal or recycling purposes, whereas applicable.

Hazardous Materials Recommendation:

The following summarizes our recommendations regarding the hazardous materials identified:

1. The materials included in Hazardous / Regulated Materials Summary and other items banned from landfill disposal, identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.

2. AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition. Based on the conditions observed, it is recommended that unknown waste materials, and oil stained concrete be sampled and appropriately characterized for waste disposal or recycling purposes, whereas applicable.

3. During any future demolition activities, in the event of any identified oil stained concrete, the contractor must delineate materials and segregate materials from the recyclable materials.

3.3 Electrical Transformers

AKT Peerless did not identify electrical transformers on the Subject Property.

4.0 Limitations

The information and opinions obtained in this report are for the exclusive use of the Client. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties, who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), agrees to be bound by the original terms and conditions entered into by AKT Peerless and the Client.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by the Client(s) or third parties is complete or accurate.

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5.0 Signatures of Environmental Professionals

The following individuals contributed to the completion of this report.

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Site Sketch

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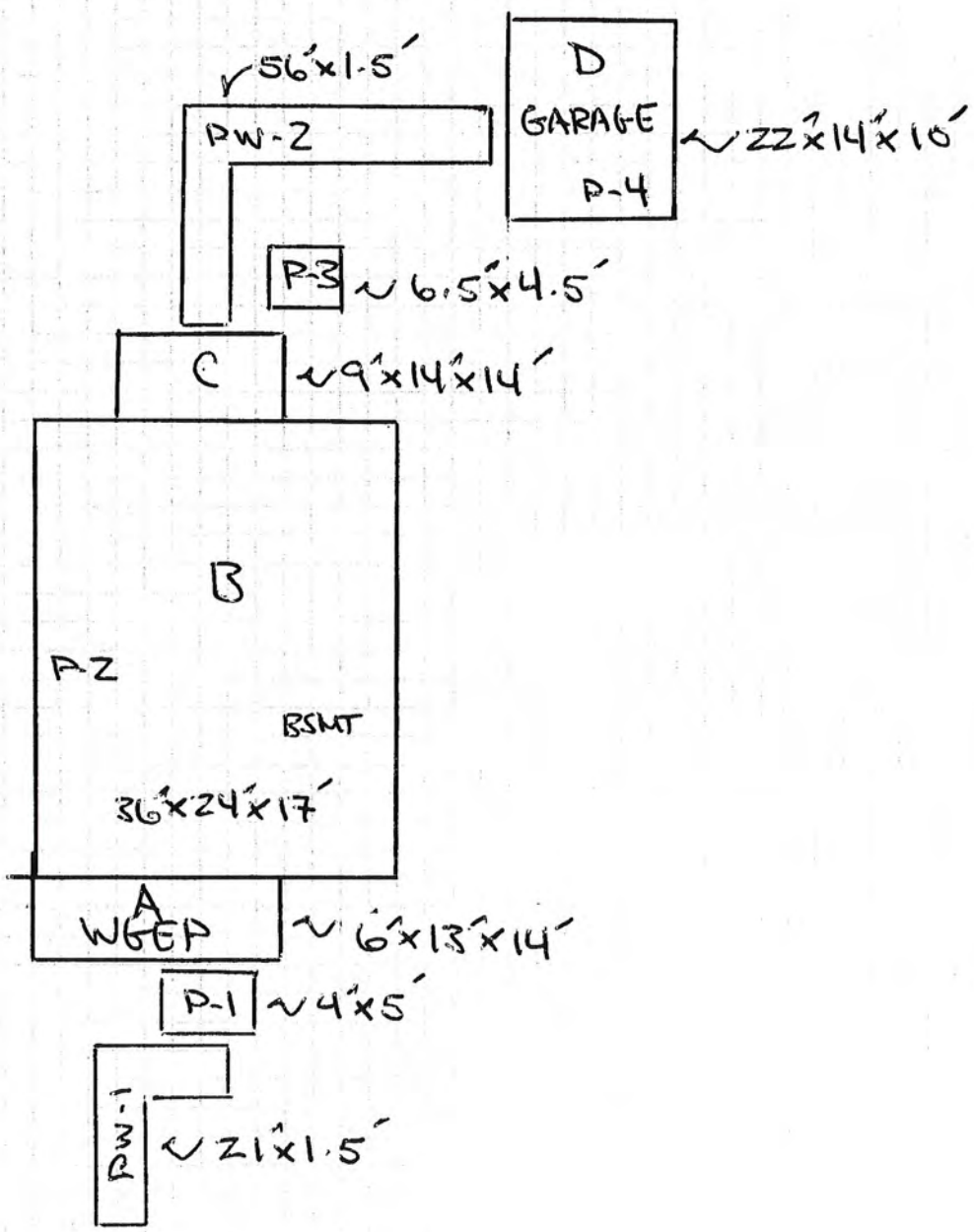
Page ____ of ____

Project Name: 113 E. RAILROAD ST., CASPIAN, MI

Date: _____

Project No.: 150605-Z-194



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Appendix A

Photographs

EXTERIOR VIEW OF HOUSE FACING SOUTH

EXTERIOR VIEW OF HOUSE FACING SOUTHEAST

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PROPERTY PHOTOGRAPHS

113 EAST RAILROAD STREET,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-2-194

EXTERIOR VIEW OF HOUSE FACING NORTH

EXTERIOR VIEW OF GARAGE (FS-9)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

113 EAST RAILROAD STREET,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-2-194

EXTERIOR VIEW OF LIVING ROOM (FS-1)

EXTERIOR VIEW OF KITCHEN (FS-2)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 113 EAST RAILROAD STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-2-194

INTERIOR VIEW OF BASEMENT (FS-7)

INTERIOR VIEW OF CRAWLSPACE (FS-12)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 113 EAST RAILROAD STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-2-194

INTERIOR VIEW OF UTILITY ROOM (FS-5)

INTERIOR VIEW OF LIVING ROOM (FS-1)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 113 EAST RAILROAD STREET, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-2-194

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Appendix B

ACM Laboratory Reports and Chain of Custody

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI

Project # :15060s-2-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89782
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 1 Cust. #: 1-1 Material: Siding Location: Exterior Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 89782 - 2 Cust. #: 1-2 Material: Siding Location: Exterior Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 89782 - 3 Cust. #: 2-1 Material: Shingle Location: Roof Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI
Project # :15060s-2-194

Report To:
Mr. Mark Breeden
AKT Peerless
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Saginaw, MI 48607

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Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 4 Cust. #: 2-2 Material: Shingle Location: Roof Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 5 Cust. #: 3-1 Material: Shingle Location: Roof Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 6 Cust. #: 3-2 Material: Shingle Location: Roof Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI
Project # :15060s-2-194

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Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89782
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 7 Cust. #: 4-1 Material: Caulk Location: House Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 8 Cust. #: 4-2 Material: Caulk Location: House Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 9 Cust. #: 5-1 Material: Caulk Location: Garage Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 2%	Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI

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Date Collected: 05/12/20
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Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 10 Cust. #: 5-2 Material: Caulk Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89782 - 11 Cust. #: 6-1 Material: Concrete Location: Garage Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 12 Cust. #: 6-2 Material: Concrete Location: Garage Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI
Project # :15060s-2-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89782
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 13 Cust. #: 7-1 Material: Shingle Location: Garage Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 14 Cust. #: 7-2 Material: Shingle Location: Garage Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 15 Cust. #: 8-1 Material: Floor Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 15a Cust. #: 8-1 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 16 Cust. #: 8-2 Material: Floor Tile Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89782 - 16a Cust. #: 8-2 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 17 Cust. #: 9-1 Material: Sheet Floor Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 17a Cust. #: 9-1 Material: Linoleum Location: Appearance: yellow,fibrous,nonhomogenous Layer: 2 of 3	Asbestos Present: **YES** Chrysotile - 20%	Other - 80%
Lab ID #: 89782 - 17b Cust. #: 9-1 Material: Felt Location: Appearance: black,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 18 Cust. #: 9-2 Material: Sheet Floor Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 18a Cust. #: 9-2 Material: Linoleum Location: Appearance: Layer: 2 of 3	Asbestos Present: NOT ANALYZED	
Lab ID #: 89782 - 18b Cust. #: 9-2 Material: Felt Location: Appearance: black,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 19 Cust. #: 10-1 Material: Sheet Floor Location: Appearance: multi,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 89782 - 20 Cust. #: 10-2 Material: Sheet Floor Location: Appearance: multi,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 89782 - 21 Cust. #: 11-1 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 21a Cust. #: 11-1 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%
Lab ID #: 89782 - 22 Cust. #: 11-2 Material: Plaster Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Other - 90%
Lab ID #: 89782 - 23 Cust. #: 11-3 Material: Plaster Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 24 Cust. #: 12-1 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%
Lab ID #: 89782 - 24a Cust. #: 12-1 Material: Glue Pod Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 25 Cust. #: 12-2 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 25a Cust. #: 12-2 Material: Glue Pod Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 26 Cust. #: 12-3 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%
Lab ID #: 89782 - 26a Cust. #: 12-3 Material: Glue Pod Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 27 Cust. #: 13-1 Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 89782 - 27a Cust. #: 13-1 Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 89782 - 28 Cust. #: 13-2 Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 29 Cust. #: 13-3 Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 89782 - 29a Cust. #: 13-3 Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 30 Cust. #: 14-1 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 31 Cust. #: 14-2 Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 32 Cust. #: 15-1 Material: Glue Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 33 Cust. #: 15-2 Material: Glue Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 34 Cust. #: 16-1 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 89782 - 35 Cust. #: 16-2 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 89782 - 36 Cust. #: 16-3 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 37 Cust. #: 17-1 Material: Linoleum Location: Appearance: grey,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 15%	Cellulose - 10% Other - 75%
Lab ID #: 89782 - 37a Cust. #: 17-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%
Lab ID #: 89782 - 38 Cust. #: 17-2 Material: Linoleum Location: Appearance: Layer: 1 of 2	Asbestos Present: NOT ANALYZED	

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 38a Cust. #: 17-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%
Lab ID #: 89782 - 39 Cust. #: 18-1 Material: Duct Paper Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 60%	Other - 40%
Lab ID #: 89782 - 40 Cust. #: 18-2 Material: Duct Paper Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 41 Cust. #: 18-3 Material: Duct Paper Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89782 - 42 Cust. #: 19-1 Material: Concrete Location: Basement Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 43 Cust. #: 19-2 Material: Concrete Location: Basement Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 44 Cust. #: 20-1 Material: Caulk Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 89782 - 45 Cust. #: 20-2 Material: Caulk Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 89782 - 46 Cust. #: 21-1 Material: Cement Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification,approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI
Project # :15060s-2-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89782
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 47 Cust. #: 21-2 Material: Cement Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 48 Cust. #: 22-1 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 89782 - 49 Cust. #: 22-2 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification,approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 113 E. Railroad St., Caspian MI
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Saginaw, MI 48607

ARI Report # 20-89782
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/21/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89782 - 50 Cust. #: 23-1 Material: Insulation Location: Appearance: Layer: of	Asbestos Present: NO SAMPLE RECEIVED	
Lab ID #: 89782 - 51 Cust. #: 23-2 Material: Insulation Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

Apex # **89782**

APEX Research, Inc.

1 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: May 12, 2020
Project: 113 E. Railroad St., Caspian MI
Project #: 15060s-2-194
Contact Person: Mark Breeden
Email: breedenm@aktpeerless.com

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

***Terms and conditions on the other side.*

5 Days TTP YES (Test Till Positive) **Asbestos:** **Bulk** X Wipe PCM **Lead:** **Paint** Wipe

Lab ID	Customer ID #	Material/Location	Results
	1-1	Red Insulbrick Exterior Siding	
	1-2	Red Insulbrick Exterior Siding	
	2-1	Roofing Material - House	
	2-2	Roofing Material - House	
	3-1	Roofing Material - Garage	
	3-2	Roofing Material - Garage	
	4-1	Window Caulk- House	
	4-2	Window Caulk- House	
	5-1	Window Caulk- Garage	
	5-2	Window Caulk- Garage	
	6-1	Garage Concrete Floor	
	6-2	Garage Concrete Floor	
	7-1	Red Rolled Tar Paper on East Side of Garage	
	7-2	Red Rolled Tar Paper on East Side of Garage	
	8-1	9" Off White with Black and Red Streaks Floor Tile	
	8-2	9" Off White with Black and Red Streaks Floor Tile	
	9-1	Tan Circular Mosaic Pattern Flooring with Layers	
	9-2	Tan Circular Mosaic Pattern Flooring with Layers	
	10-1	White, Red, and Gray Square Pattern Linoleum	
	10-2	White, Red, and Gray Square Pattern Linoleum	
	11-1	Plaster	
	11-2	Plaster	
	11-3	Plaster	
	12-1	12" White Ceiling Tile with Glue Pods	
	12-2	12" White Ceiling Tile with Glue Pods	
	12-3	12" White Ceiling Tile with Glue Pods	
	13-1	Drywall and Joint Compound	
	13-2	Drywall and Joint Compound	
	13-3	Drywall and Joint Compound	
	14-1	Tan Bathtub Surround Adhesive	
	14-2	Tan Bathtub Surround Adhesive	
	15-1	Black Panel Adhesive	
	15-2	Black Panel Adhesive	
	16-1	12" White with Gray Smudges and Pinholes Ceiling Tile	
	16-2	12" White with Gray Smudges and Pinholes Ceiling Tile	

RECEIVED
MAY 15 2020

Relinquished By:
Date: May 14, 2020 1225pm

Received By:
Date:

Revision Date: June/2011

Apex # **89782**

APEX Research, Inc.

54 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com. Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Date of Survey: May 12, 2020
Project: 113 E. Railroad St., Caspian MI
Project #: 15060s-2-194
Contact Person: Mark Breeden
Email: breedenm@aktpeerless.com

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

***Terms and conditions on the other side.*

5 Days **TTP YES** (Test Till Positive) **Asbestos:** **Bulk** X Wipe PCM **Lead:** **Paint** Wipe

Lab ID	Customer ID #	Material/Location	Results
	16-3	12" White with Gray Smudges and Pinholes Ceiling Tile	
	17-1	Tan Mosaic Pattern Flooring with Layers	
	17-2	Tan Mosaic Pattern Flooring with Layers	
	18-1	Duct Paper	
	18-2	Duct Paper	
	18-3	Duct Paper	
	19-1	Basement Concrete Floor	
	19-2	Basement Concrete Floor	
	20-1	Window Caulk - Basement	
	20-2	Window Caulk - Basement	
	21-1	Stack Cement	
	21-2	Stack Cement	
	22-1	Foundation Block and Mortar	
	22-2	Foundation Block and Mortar	
	23-1	Cellulose Insulation	
	23-2	Cellulose Insulation	

RECEIVED
MAY 15 2020
APEX RESEARCH

Relinquished By
Date: May 14, 2020 1228pm

Received By:
Date:

ATTACHMENT F

PRE-DEMOLITION ASBESTOS AND HAZARDOUS MATERIALS SURVEY

Conducted by AKT Peerless Environmental Services
Date: June 12, 2020
Address: 321 Brady Ave, Caspian MI

AKTPEERLESS

Pre-Demolition and Hazardous Materials Survey

321 Brady Avenue
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-4-194

PREPARED FOR **Michigan Land Bank Fast Track Authority**
300 North Washington Square
Lansing, Michigan 48913

PROJECT # 15060s-4-194

DATE June 12, 2020

AKTPEERLESS

FUNCTIONAL SPACE FIGURES

APPENDICES

AKTPEERLESS

PRE-DEMOLITION AND HAZARDOUS MATERIALS SURVEY

321 Brady Avenue
Caspian, Michigan 49915
AKT Peerless Project No. 15060s-4-194

1.0 Introduction

AKT Peerless Environmental Services (AKT Peerless) was retained by the Michigan Land Bank Fast Track Authority (Client) to conduct a Pre-Demolition and Hazardous Materials Survey of 321 Brady Avenue, Caspian, Michigan. AKT Peerless' scope of work is based on its proposal PS-26016, as well as the terms and conditions of the agreement with the Client. AKT Peerless' Pre-Demolition and Hazardous Materials Survey was performed for the benefit of the Michigan Land Bank Fast Track Authority.

1.1 Purpose

The purpose of AKT Peerless' Pre-Demolition and Hazardous Materials (HazMat) Survey was to identify the location and presence of: (1) asbestos-containing building materials (ACBMs); (2) potential polychlorinated biphenyl (PCB) containing electrical or hydraulic equipment; (3) potentially hazardous or regulated materials/wastes located in containers and drums; (4) potential, mercury or radioactive-containing equipment or materials located in the building; and (5) any other materials that would require special handling or disposal requirements and should be segregated from general construction debris.

1.2 Scope of Work

The scope of work for this survey is specifically designed to support facility demolitions, as identified within proposals PS-26016. AKT Peerless understands that the scope of demolition at the site includes all interior and accessible exterior components of the Subject Building.

Michigan Licensing and Regulatory Affairs (LARA) accredited Asbestos Inspector Mr. Mark Breeden (A44842) of AKT Peerless conducted the Pre-Demolition and Hazardous Materials Survey of the property.

1.2.1 Asbestos Survey

The scope of work for AKT Peerless' asbestos survey is based on the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). The purpose of ASHARA is to extend the Asbestos Hazard Emergency Response Act (AHERA) inspection and management requirements to commercial and industrial buildings. Since the facility is slated for demolition, it is also subject to Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

Asbestos Containing Material (ACM) survey activities were completed according to the following protocol:

1. Functional spaces were identified for the purpose of assessing all suspect materials, as appropriate.
2. The ACM inspection was performed in an effort to determine the extent and location of ACM present in the Subject Buildings. This survey was qualitative and quantitative in that an attempt was made to locate accessible friable and non-friable ACM areas, as well as estimate the amount of ACM. All accessible locations of the survey areas were inspected with exception of inaccessible areas or materials not surveyed that are identified in Section 1.3.
3. Bulk samples of suspect ACMs were collected in accordance with professional standards by a Michigan-accredited Asbestos Building Inspector.
4. Bulk samples were collected in each homogeneous area in accordance with EPA-recommended sampling guidelines.
5. Samples of suspect ACM were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory for analysis, via Polarized Light Microscopy and dispersion staining (PLM) following the EPA Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
6. In an effort to minimize costs, the laboratory analyses were performed using first positive stop analysis methodologies. First positive stop involves analyzing samples by homogeneous area groupings. Laboratory analyses proceeded sample by sample, within each homogeneous area grouping until a sample was determined to be asbestos containing.
7. Upon completion of the field inspection and receipt of laboratory data, this report was prepared and includes: (a) a general description of the suspect ACM identified and non-suspect homogeneous materials that were visually evaluated; (b) quantity of suspect materials observed as able to be determined; and (c) laboratory testing results.

1.2.2 PCB, Mercury, Lead, and Other Hazardous Materials

The survey for PCBs, potential lead/mercury-containing equipment, and containers that may contain universal hazardous wastes or regulated materials/wastes were completed according to the following procedures:

1. The buildings were inspected for potential hazardous materials such as PCB-containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, and mercury light tubes and switches. The survey of lighting/alarm systems comprised a visual inspection of the exterior of accessible emergency, light and exit sign fixtures, panels or components for possible PCB-containing ballast systems, mercury vapor lighting fixtures, batteries, or other hazardous materials. No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. Limited sampling was performed as summarized, and as part of the survey report, an inventory of the materials identified has been included that summarizes the quantities of the hazardous building materials observed.

During execution of this survey, the work was performed using commercially reasonable best efforts consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

1.3 Limitations and Exceptions of the Survey

The following general limitations were encountered during the preparation of this survey:

- AKT Peerless uses trained and licensed inspectors in attempting to locate and identify materials potentially containing some form of hazardous material (i.e., asbestos, lead, PCB, etc.). The possibility exists that AKT Peerless did not identify all hazardous materials within the buildings. Some buildings have hidden spaces that may not be immediately obvious to a surveyor, who is not intimately familiar with the buildings, and who has only a limited time in the buildings. There may be additional hazardous materials that were not found because they were not visible or accessible to the inspection team. Asbestos, PCB, lead, and mercury were used in a variety of building components and in many types of materials in the construction of buildings. In some of these materials, a hazardous material may be present, not as an intentional ingredient, but as a contaminant.

The following building-specific limitations apply to this Pre-Demolition and Hazardous Materials Survey:

- Areas enclosed by fixed wall, ceiling systems, and roofing systems were restricted to limited visual access in identifying materials such as, but not limited to; pipe wrap, mud fittings, roof flashing, caulks, etc. Fixed wall and ceiling systems may include plaster, drywall partitions, ceramic tile finish, concrete, and masonry, and roofing systems, and may potentially contain multiple layers of building materials. These systems are installed throughout the exterior and interior areas of the building(s). Representative intrusive observations were made above drop ceilings, inside walls, and below flooring materials such as carpeting and roofing, whereas applicable. As such, a complete survey and delineation of all hidden materials were not performed. **Due to these limitations, actual quantities of hazardous materials present may be greater than those inventoried as part of this survey.**

- Whereas applicable, access to suspect ACM could potentially be located within restricted areas defined as being within a regulated confined space (i.e., such as pipe chases, pipe trenches, attics, elevator shafts, etc.). These areas require the use of trained confined space professionals, personnel protective equipment, and rescue personnel. AKT Peerless did not access confined space areas.

- The Subject Buildings are currently vacant. AKT Peerless used portable spotlights and flashlights to improve general viewing conditions whereas applicable.

- During the survey, no dismantling of electrical or mechanical equipment was conducted. Since trade personnel was not available (i.e. electricians, plumbers, etc.), no dismantling of equipment was performed to identify the existence of PCB containing components, mercury switches, or asbestos insulation.

- Observations of the Attic (FS-11) were limited due to this area being a confined space

- Estimated and not estimated quantities of materials reported are based on observations and estimates made by AKT Peerless at the time of the inspection. Specific materials including, but not limited to: roof flashing, roofing materials, tar coatings, thermal insulation and fittings, pipe wraps and debris, mud fittings, building caulks, and wall adhesives were located in inaccessible areas such as behind fixed walls or ceilings, unsafe areas, confined spaces, and/or elevated

heights. **Due to these limitations, actual quantities may vary from those estimated as part of this survey.**

Other limitations pertaining to material accessibility or characterization may also be described in the survey data tables contained herein.

Quantities of identified ACM reported in this document are provided for reference only and are not authorized to be relied upon for Contractor abatement bidding purposes. AKT Peerless strongly cautions against utilizing the reported material quantities without field verification. It is expected that contractors will utilize their own quantities when preparing bid pricing. AKT Peerless recommends that a contingency allowance be used to address estimating method uncertainties for quantified materials.

2.0 Asbestos Survey Methodology

The following sections of this survey outline the approach, procedures, and methods employed by AKT Peerless to complete the ACM Survey of the Subject Property. Photographs of the Subject Property are attached as Appendix A.

2.1 Description of Homogenous Areas

During the asbestos survey, AKT Peerless identified Homogeneous Areas (HA) based on appearances and type of materials observed. As defined under AHERA, a homogeneous area is an area (material) that appears similar throughout in terms of its color, texture, and date of material application.
In addition, building materials suspect for asbestos content are also described based on one of three following material classifications:

Surfacing Materials: A material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. Glued-on ceiling panels are interpreted by the State of Michigan as a surfacing material.

Thermal System Insulation: A material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat lost or gain, or water condensation, or for other purposes.

Miscellaneous Materials: A building material on structural components, structural members or fixtures, such as floor and ceiling panels, and does not include surfacing material or thermal system insulation.

AKT Peerless identified homogeneous suspect ACMs at the Subject Property for sampling. Homogeneous areas were identified based on the site inspection by AKT Peerless. Any materials that were identified but were not sampled due to inaccessibility were recorded.

2.2 Description of Functional Spaces

In general, functional spaces are defined as spatially distinct units or areas within the building, which contain identifiable populations of building occupants. Functional spaces can also include storage spaces, mechanical rooms, closets and services areas, etc. However, a functional space can also be delineated based on general building layout, facility use factors, and can be assigned using various arbitrary factors that were useful in the completion of this survey.

2.3 Bulk Sample Material Inventory

Based on homogeneous and functional areas identified during the survey, AKT Peerless collected bulk samples for analysis. Samples were collected in polyethylene containers and labeled with an identification number. In general, AKT Peerless' sampling protocol consisted of: (a) wetting or misting the sample as appropriate; (b) extracting a sample with a clean knife, chisel, or coring tool; and (c) placing the sample into its properly labeled sample container.

The sampling protocol used to procure the appropriate number of samples for an identified homogeneous area of suspect ACM is based on sampling guidelines outlined under AHERA or as proposed in the approved scope of work.

2.4 Laboratory Analytical Procedures

All samples collected by AKT Peerless were submitted to Apex Research, Inc. (Apex) of Whitmore Lake, Michigan for analysis. Apex is accredited by the American Industrial Hygiene Association (AIHA) and participates in the NVLAP. Samples were submitted under chain-of-custody guidelines to ensure proper handling and delivery of the samples. The samples were analyzed using PLM with dispersion staining in accordance with the following USEPA guidance document *Determination of Asbestos in Bulk Building Materials*: EPA/600/R-93/116, dated July 1993.

The USEPA defines ACM as those materials that contain **greater than one percent** asbestos. Friable materials are defined as those that can be crumbled or reduced to powder by hand pressure. The NESHAP for asbestos, dated November 1990 stipulates that any friable material identified as containing asbestos in concentrations greater than one percent must be considered ACM.

Materials containing one (1) percent or less asbestos are generally considered non-asbestos-containing, and therefore are not regulated by NESHAP. The OSHA definition of ACM is similarly any material containing more than one (1) percent asbestos. However, specific work practices must be followed under OSHA regulations for materials containing less than one percent asbestos if an individual layer exceeds one percent. Under the PLM method, percentages and types of fibrous components in these samples were determined by visual estimation of the amount of fibrous materials versus the total amount of material present.

Current USEPA guidelines specify that when initial laboratory analysis of friable or non-friable materials regulated under NESHAP detects the presence of asbestos in a quantity between less than one percent (or trace) and less than ten percent, a verification analysis using the point counting analytical method should be considered or the material in question should be treated as ACBM as identified by PLM analysis.

AKT Peerless utilized the "positive-stop" method of sample analyses. In this method, the analyses of a homogeneous material is stopped on a group of samples once the first positive (e.g., greater than 1% asbestos) sample is analyzed. According to the USEPA, if one sample of a homogenous material is identified to be asbestos-containing, the entire material must be considered asbestos-containing.

Based on appearances and type of materials, suspect ACMs were grouped into homogeneous areas and functional spaces as appropriate based on apparent age and similarity in texture and color. Upon completion of these activities, representative bulk samples of the suspect materials were collected. A copy of the bulk sample laboratory report and chain-of-custody record is presented in Appendix D.

3.0 Asbestos and Other Hazardous Materials Conclusions and Recommendations

AKT Peerless was retained by the Client to conduct a Pre-Demolition and Hazardous Materials Surveys of 321 East Second Street, Caspian, Michigan. The purpose of the survey was to identify hazardous materials that will require special handling procedures or removal activities prior to demolition activities. The following sections of this report summarize the findings of the Pre-Demolition and Hazardous Materials Survey of the Subject Building.

3.1 Homogeneous Area & Asbestos Containing Materials (ACMs)

Based on the results of the asbestos survey, the following ACMs were identified:

Summary of Homogeneous Areas & Asbestos Containing Materials

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Plaster	1-1	Throughout	1,950 SF	F	NAD
12" White Smooth Ceiling Tile	2-1	FS-4 Dining Room	100 SF	F	NAD
White with Red Flooring with Layers	3-1	FS-3 Bedroom #1	90 SF	NF	NAD
14" White Ceiling Tile	4-1	FS-6 Kitchen	120 SF	F	NAD
Tan Square Pattern Flooring	5-1	FS-6 Kitchen	105 SF	NF	NAD
Tan with White Lines Square Pattern Flooring	6-1	FS-10 Bathroom	60 SF	F	NAD
Suspect Exterior Transite Siding	**7-1**	**FS-13 Exterior**	**2,250 SF**	**NF**	**15% CHR**
Off White Flooring with Layers	8-1	FS-2 Living Room FS-4 Dining Room	220 SF	NF	NAD
Black Paper under Exterior Suspect Transite Panels	9-1	FS-13 Exterior	1,950 SF	NF	NAD
Window Caulk - House	**10-1**	**FS-13 Exterior**	**9 Windows**	**NF**	**5% CHR**
Stack Cement	11-1	FS-6 Kitchen	2 SF	NF	NAD
Brown Panel Adhesive	**12-1**	**FS-10 Bathroom**	**250 SF Panel 25 SF Adhesive**	**NF**	**5% CHR**

Material Description	HA	Identified Locations	Estimated Quantity	F/NF	Asbestos Content
Roofing Material - House	13-1	FS-13 Exterior	920 SF	NF	NAD
Roofing Material - Garage	14-1	FS-13 Exterior	275 SF	NF	NAD
Multi-Colored Insulbrick Exterior Siding	15-1	FS-13 Exterior	1,700 SF	NF	NAD
Off White with Gray Flooring with Layers	16-1	FS-5 Bedroom	90 SF	NF	NAD
Duct Paper	**17-1**	**FS-9 Basement**	**4 LF**	**F**	**60% CHR**
Foundation Brick and Mortar	18-1	FS-13 Exterior	NE	NF	NAD
Basement Concrete Floor	19-1	FS-9 Basement	900 SF	NF	NAD

Table Notes:
F = Friable NF = Non-friable FS = Functional Space NAD = No Asbestos Detected CHR = Chrysotile
AMO = Amosite SF = Square Feet LF = Linear Feet PC = Point Count NE = Not Estimated
CRO = Crocidolite ACT = Actinolite T = Tile M = Mastic MF = Mud Fittings CF = Cubic Feet
ACM = Asbestos Containing Material (Greater than 1% Asbestos Content) NS = Not Sampled
ASSUMED = Suspect material that was not sampled, but was assumed asbestos-containing

Asbestos Recommendation:

1. Asbestos containing materials were not identified within the laboratory analytical of suspect materials sampled during this survey.

2. Suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with state and federal regulations unless determined through laboratory testing identifying them as non-asbestos containing.

3.2 Summary of Identified Other Potentially Hazardous Materials

During the Hazardous Material Survey, AKT Peerless observed the existence of various types of potentially hazardous materials within the various buildings. In general, these materials were stored in containers of various capacities. The following materials were identified at the site:

Material Description	Location	Number of Units	Approximate Quantity/ Comments
Spray Cans	FS-8 Stairs to Basement	1	Aerosol
Oil Tank	FS-9 Basement	1	350 Gallon / Qty. Unknown
Water Heater	FS-9 Basement	1	
Thermostat	FS-4 Dining Room	1	Possibly Contains Mercury

The survey was conducted to identify universal hazardous wastes or regulated materials/wastes. The buildings were inspected for potential hazardous materials, such as PCBs or oil containing light ballasts, batteries, chlorofluorocarbon-containing equipment, smoke detectors, exit signs, mercury light tubes and switches, and underground storage tanks (USTs). No intrusive examination or contact with manufacturers, sample collection, or testing of this equipment was performed. No sampling of any hazardous component materials was performed.

AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition activities. Based on the conditions observed it is recommended that unknown waste materials and oil stained concrete, as well as standing water that may be identified during demolition activities within but not limited to cisterns, basements, sump basins, and/or potential storm water discharge pits are appropriately characterized for waste disposal or recycling purposes, whereas applicable.

Hazardous Materials Recommendation:

The following summarizes our recommendations regarding the hazardous materials identified:

1. The materials included in Hazardous / Regulated Materials Summary and other items banned from landfill disposal, identified during the demolition should be properly removed and disposed of in accordance with applicable regulations.

2. AKT Peerless recommends that qualified contractors perform the removal of these materials and follow appropriate special handling and disposal measures, which are required before general building demolition. Based on the conditions observed, it is recommended that unknown waste materials, and oil stained concrete be sampled and appropriately characterized for waste disposal or recycling purposes, whereas applicable.

3. During any future demolition activities, in the event of any identified oil stained concrete, the contractor must delineate materials and segregate materials from the recyclable materials.

3.3 Electrical Transformers

AKT Peerless did not identify electrical transformers on the Subject Property.

4.0 Limitations

The information and opinions obtained in this report are for the exclusive use of the Client. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties, who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), agrees to be bound by the original terms and conditions entered into by AKT Peerless and the Client.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by the Client(s) or third parties is complete or accurate.

5.0 Signatures of Environmental Professionals

The following individuals contributed to the completion of this report.

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MIOSHA LARA CSHD Asbestos Inspector
Accreditation No. A44842

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AKTPEERLESS

SITE SKETCH

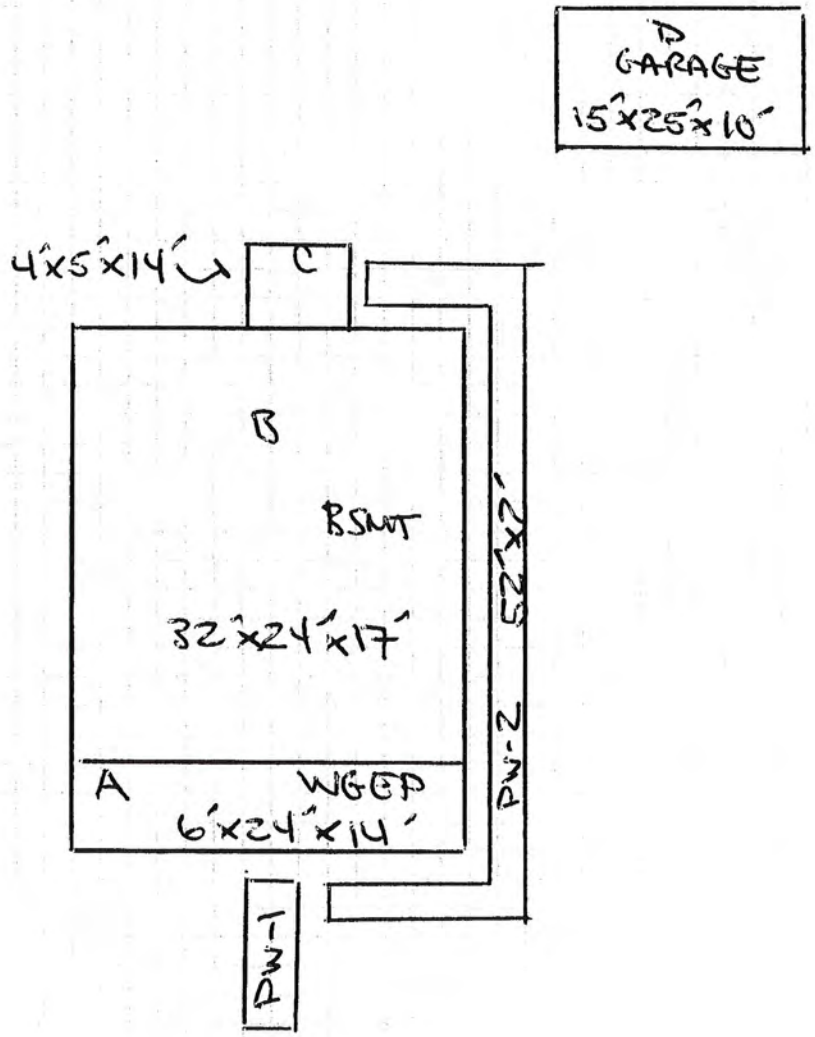
AKTPEERLESS

Page ____ of ____

Project Name: 321 BRADY AVE., CASPIAN, MI

Date: _____

Project No.: 150605-4-194



Appendix A

Photographs

EXTERIOR VIEW OF HOUSE FACING WEST

EXTERIOR VIEW OF HOUSE FACING SOUTHWEST

AKTPEERLESS

PROPERTY PHOTOGRAPHS

321 BRADY AVENUE,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-4-194

EXTERIOR VIEW OF HOUSE FACING EAST

EXTERIOR VIEW OF GARAGE (FS-12)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

321 BRADY AVENUE,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-4-194

INTERIOR VIEW OF DINING ROOM (FS-4)

INTERIOR VIEW OF WOOD, GLASS ENCLOSED PORCH (FS-1)

AKTPEERLESS

PROPERTY PHOTOGRAPHS

321 BRADY AVENUE,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-4-194

INTERIOR VIEW OF BEDROOM #1 (FS-3)

INTERIOR VIEW OF BASEMENT (FS-9)

AKT PEERLESS

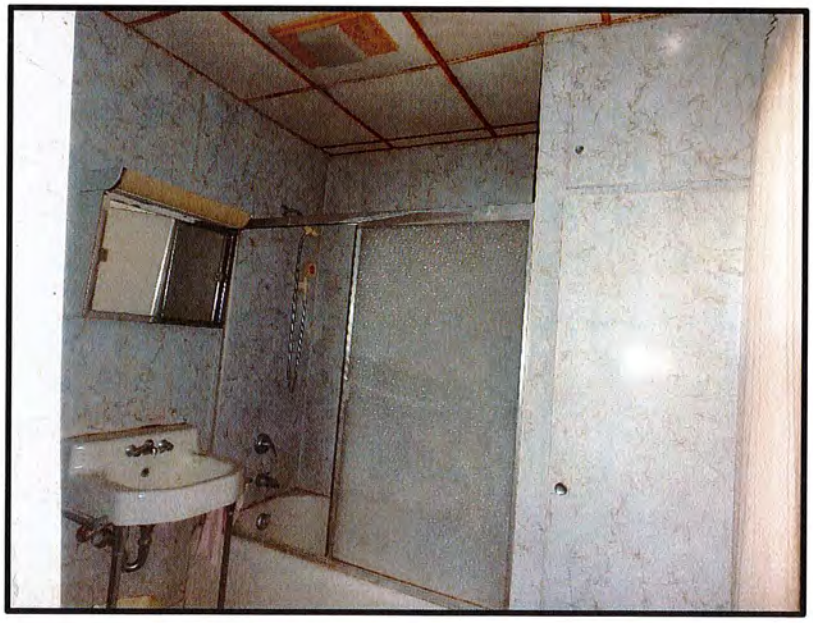
PROPERTY PHOTOGRAPHS

321 BRADY AVENUE,
CASPIAN, MICHIGAN

TAKEN BY: AKT
DATE: 05-14-2020

PROJECT NUMBER:
15060s-4-194

INTERIOR VIEW OF BASEMENT (FS-9) SHOWING OIL TANK



INTERIOR VIEW OF BATHROOM (FS-10)

AKTPEERLESS	*PROPERTY PHOTOGRAPHS* 321 BRADY AVENUE, CASPIAN, MICHIGAN	TAKEN BY: AKT DATE: 05-14-2020 PROJECT NUMBER: 15060s-4-194

AKTPEERLESS

Appendix B

ACM Laboratory Reports and Chain of Custody

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 Brady Ave., Caspian MI

Project # :15060s-4-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89783
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 1 Cust. #: 1-1 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 1a Cust. #: 1-1 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 2% Other - 98%
Lab ID #: 89783 - 2 Cust. #: 1-2 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 Brady Ave., Caspian MI
Project # :15060s-4-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89783
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 2a Cust. #: 1-2 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 2% Other - 98%
Lab ID #: 89783 - 3 Cust. #: 1-3 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 3a Cust. #: 1-3 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 5% Other - 95%

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Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 4 Cust. #: 1-4 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 4a Cust. #: 1-4 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 2% Other - 98%
Lab ID #: 89783 - 5 Cust. #: 1-5 Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%

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ARI Report # 20-89783
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Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 5a Cust. #: 1-5 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 2% Other - 98%
Lab ID #: 89783 - 6 Cust. #: 2-1 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 80% Other - 20%
Lab ID #: 89783 - 7 Cust. #: 2-2 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 80% Other - 20%

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Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 8 Cust. #: 2-3 Material: Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 90% Other - 10%
Lab ID #: 89783 - 9 Cust. #: 3-1 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89783 - 9a Cust. #: 3-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 60% Other - 40%

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Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 10 Cust. #: 3-2 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89783 - 10a Cust. #: 3-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89783 - 11 Cust. #: 4-1 Material: Ceiling Tile Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 80% Other - 20%

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

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Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 12 Cust. #: 4-2 Material: Ceiling Tile Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 80% Other - 20%
Lab ID #: 89783 - 13 Cust. #: 4-3 Material: Ceiling Tile Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 80% Other - 20%
Lab ID #: 89783 - 14 Cust. #: 5-1 Material: Linoleum Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 10% Fiberglass - 10% Other - 80%

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 15 Cust. #: 5-2 Material: Linoleum Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 89783 - 16 Cust. #: 6-1 Material: Linoleum Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Fiberglass - 10% Other - 85%
Lab ID #: 89783 - 17 Cust. #: 6-2 Material: Linoleum Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 5% Fiberglass - 10% Other - 85%

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 18 Cust. #: 7-1 Material: Transite Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 15%	Other - 85%
Lab ID #: 89783 - 19 Cust. #: 7-2 Material: Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89783 - 20 Cust. #: 8-1 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 50% Other - 50%

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 Brady Ave., Caspian MI

Project # :15060s-4-194

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214 Janes Ave.
Saginaw, MI 48607

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Date Collected: 05/12/20
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Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 20a Cust. #: 8-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89783 - 21 Cust. #: 8-2 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 50% Other - 50%
Lab ID #: 89783 - 21a Cust. #: 8-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 60% Other - 40%

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 22 Cust. #: 9-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89783 - 23 Cust. #: 9-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 60% Other - 40%
Lab ID #: 89783 - 24 Cust. #: 10-1 Material: Caulk Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 25 Cust. #: 10-2 Material: Caulk Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89783 - 26 Cust. #: 11-1 Material: Finish Coat Location: Appearance: white,nonfibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 26a Cust. #: 11-1 Material: Base Coat Location: Appearance: grey,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 27 Cust. #: 11-2 Material: Finish Coat Location: Appearance: white,nonfibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 27a Cust. #: 11-2 Material: Base Coat Location: Appearance: grey,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 28 Cust. #: 12-1 Material: Glue Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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

Robert T. Letarte Jr., Laboratory Director

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 29 Cust. #: 12-2 Material: Glue Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89783 - 30 Cust. #: 13-1 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 31 Cust. #: 13-2 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

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Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 32 Cust. #: 14-1 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 33 Cust. #: 14-2 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 34 Cust. #: 15-1 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 35 Cust. #: 15-2 Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 36 Cust. #: 16-1 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 36a Cust. #: 16-1 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification,approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 Brady Ave., Caspian MI

Project # :15060s-4-194

Report To:
Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89783
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 37 Cust. #: 16-2 Material: Sheet Flooring Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 37a Cust. #: 16-2 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO**	Cellulose - 40% Other - 60%
Lab ID #: 89783 - 38 Cust. #: 17-1 Material: Duct Paper Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 60%	Cellulose - 20% Other - 20%

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Robert T. Letarte Jr., Laboratory Director

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Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 39 Cust. #: 17-2 Material: Duct Paper Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 89783 - 40 Cust. #: 18-1 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 41 Cust. #: 18-2 Material: Mortar Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : 321 Brady Ave., Caspian MI

Project # :15060s-4-194

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Mr. Mark Breeden
AKT Peerless
214 Janes Ave.
Saginaw, MI 48607

ARI Report # 20-89783
Date Collected: 05/12/20
Date Received: 05/15/20
Date Analyzed: 05/21/20
Date Reported: 05/22/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89783 - 42 Cust. #: 19-1 Material: Concrete Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: 89783 - 43 Cust. #: 19-2 Material: Concrete Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO**	Other - 100%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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Apex # **89783**

APEX Research, Inc.

Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com. Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
City, St., Zip: Saginaw, MI 48607
Phone: 989-754-9896 Fax: 989-754-3804

Page 1 of 2

Date of Survey: May 12, 2020
Project: 321 Brady Ave., Caspian MI
Project #: 15060s-4-194
Contact Person: Mark Breeden
Email: preedenm@aktpeerless.com

***Terms and conditions on the other side.*

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

5 Days TTP **YES** (Test Till Positive)

Asbestos: **Bulk** X Wipe PCM

Lead: **Paint** Wipe

Lab ID	Customer ID #	Material/Location	Results
	1-1	Plaster	
	1-2	Plaster	
	1-3	Plaster	
	1-4	Plaster	
	1-5	Plaster	
	2-1	12" White Smooth Ceiling Tile	
	2-2	12" White Smooth Ceiling Tile	
	2-3	12" White Smooth Ceiling Tile	
	3-1	White with Red Flooring with Layers	
	3-2	White with Red Flooring with Layers	
	4-1	14" White Ceiling Tile	
	4-2	14" White Ceiling Tile	
	4-3	14" White Ceiling Tile	
	5-1	Tan Sqaure Pattern Flooring	
	5-2	Tan Sqaure Pattern Flooring	
	6-1	Tan with White Lines Square Pattern Flooring	
	6-2	Tan with White Lines Square Pattern Flooring	
	7-1	Suspect Transite Exterior Siding	
	7-2	Suspect Transite Exterior Siding	
	8-1	Off White Flooring with Layers	
	8-2	Off White Flooring with Layers	
	91	Black Paper under Exterior Suspect Transite Siding	
	9-2	Black Paper under Exterior Suspect Transite Siding	
	10-1	Window Caulk - House	
	10-2	Window Caulk - House	
	11-1	Stack Cement	
	11-2	Stack Cement	
	12-1	Brown Panel Adhesive	
	12-2	Brown Panel Adhesive	
	13-1	Roofing Material - House	
	13-2	Roofing Material - House	
	14-1	Roofing Material - Garage	
	14-2	Roofing Material - Garage	
	15-1	Multi-Colored Insulbrick Exterior Siding	
	15-2	Multi-Colored Insulbrick Exterior Siding	

RECEIVED
MAY 15 2020

Relinquished By
Date: May 14, 2020 1205pm

Received By
Date

Revision Date: June 2011

89783

APEX Research, Inc.

54 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: (734) 449 - 9990, Fax (734) 449 - 9991
Web Site: http://apexresearch-inc.com Email: Robert.Letarte@apexresearchlab.com

Customer Name: AKT Peerless
Address: 214 Janes Avenue
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Phone: 989-754-9896 Fax: 989-754-3804

Page 2 of 2

Date of Survey: May 12, 2020
Project: 321 Brady Ave., Caspian MI
Project #: 15060s-4-194
Contact Person: Mark Breeden
Email: breedenm@aktpeerless.com

***Terms and conditions on the other side.*

Lab Use Only
Log-In:
Report:
Fax:
Verbal:
Email:

Turn Around Times:

5 Days TTP YES (Test Till Positive)

Asbestos: Bulk X Wipe PCM

Lead: Paint Wipe

Lab ID	Customer ID #	Material/Location	Results
	16-1	Off White with Gray Flooring with Layers	
	16-2	Off White with Gray Flooring with Layers	
	17-1	Duct Paper	
	17-2	Duct Paper	
	18-1	Foundation Block and Mortar	
	18-2	Foundation Block and Mortar	
	19-1	Basement Concrete Floor	
	19-2	Basement Concrete Floor	

RECEIVED
MAY 15 2020
APEX RESEARCH

Relinquished By:
Date: May 14, 2020 1211pm

Received By:
Date