

ABATEMENT AND DEMOLITION TECHNICAL SPECIFICATIONS

These specifications describe the nature and extent of the Lorain County Land Reutilization Corporations program to demolish vacant, abandoned and blighted residential properties that detract from existing home values in Lorain County. Each individual project will be assessed by an environmental engineer, abated, if necessary and demolished. The finish product will be a vacant, mow able lot with no drive apron, continuous curb and a new public sidewalk. Contractors shall keep a photo diary documenting conditions; before, during and after construction.

ASBESTOS ABATEMENT

Abatement Contractor must be a State of Ohio Licensed/Certified Asbestos Abatement/Removal contractor. The abatement contractor will be required to submit to the Lorain County Port Authority (LCPA) a "Method of Work Statement" prior to starting work on this Project. The Contractor is responsible to provide clearance samples at the end of the project and to turn over all documentation including transportation and disposal methods, air monitoring and all other associated test results to LCPA. The abatement contractor is responsible to provided an itemized statement of removal (what, where, when) and also a final statement that the structure is clear of friable asbestos.

Abatement contractor must comply with all applicable state and local regulations, laws and polices in effect regarding Lead-Based Paint.

Abatement Contractor's proposal shall be for the complete removal/remediation of asbestos as outlined in the attached report for property located at _____, in accordance with the specifications now on file in the office of the Lorain County Port Authority, Lorain County Administration Building; 226 Middle Avenue; Elyria, Ohio 44035.

The signer of this proposal declares that the only persons, company, or parties interested in this proposal, as principals, are named herein; that he/she has carefully examined the contract documents and understands that he/she must have a State of Ohio license/ certification to perform removal/remediation of asbestos containing materials. All work must be in compliance with local, state and federal laws and guidelines in effect as of the date of this proposal, said laws and guidelines are incorporated herein as fully and completely as if attached hereto and made a part hereof; that he/she has made all investigations necessary to determine the location, character, and extent of the work, and agrees to furnish all labor, material, and equipment necessary to complete the above mentioned improvement within the time mentioned herein, for the stated price.

**SPECIAL CONDITIONS FOR REMOVAL/REMEDICATION
OF ASBESTOS CONTAINING MATERIALS**

(A) Successful contractor will be required to submit to the LCPA a “Method of Work Statement” prior to starting any work on the project. Said “Method of Work Statement” shall outline the methods for removing asbestos containing materials, when said work will be started and completed, and where the asbestos containing material will be taken.

(B) Successful contractor will be required to provide clearance samples at the end of the project and turn over all documentation including: Transportation and Disposal Records, Air Monitoring Tests and any and all other associated test results.

(C) Successful contractor will be required to provide an itemized statement of what has been removed and the location of each removal site along with a statement that the structure is clear of friable asbestos.

1. Successful contractor must be a State of Ohio licensed/certified asbestos removal company.
2. All work must be done in full compliance with all local, state and federal laws.
3. Asbestos removal shall meet State and Federal EPA standards prior to demolition.
4. All persons working on the project are required to be licensed or certified.

(D) All project clearance levels and sampling shall be in accordance with the following:

1. All clearance air-sampling to be analyzed by phase contrast microscopy (PCM) shall be conducted in accordance with the National Institute of Occupational Safety and Health (NIOSH) method 7400 entitled “Fibers” published in the NIOSH manual of analytical methods, 3rd edition, second supplement, August 1987. A minimum of three samples shall be taken and show that the concentration of fibers for each sample is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter of air); and
2. All clearance air-sampling to be analyzed by Transmission Electron Microscopy (TEM) shall be conducted in accordance with the regulations established by the United States environmental protection agency, 40 C.F.R. Part 763, Subpart E, Appendix A;

(E) All clearance air sampling be conducted by an asbestos hazard abatement air-monitoring technician, or asbestos hazard evaluation specialist certified by the department or a certified industrial hygienist or industrial hygienist in training as certified by the American board of industrial hygiene;

(F) A detailed description of the project activities, including the amount, indicated in linear or square feet, of asbestos-containing material to be abated, the exact location and type of that material and whether or not a contained work site will be established as required by regulations of the United States occupational safety and health administration, 29 C.F.R. Part 1926.1101; and

(G) All asbestos hazard abatement activities be done in accordance with all applicable federal, state, and local asbestos regulations.

(H) The LCPA shall be given copies of all required EPA and ODHP notifications and disposal manifests. Asbestos surveys are attached and made a part of this document.

(I) Any asbestos hazard abatement activities must include proper disposal. Record of disposal must be documented to fully complete the demolition activities. A waste Shipment Record is available at www.epa.state.oh.us.

(J) Abatement contractor is responsible to obtain any and all necessary permits prior to starting work.

SPECIAL CONDITIONS FOR DEMOLITION AND SITE CLEARANCE SCOPE OF WORK

These specifications describe the nature and extent of the demolition and removal of buildings, appurtenances and other improvements, together with site clearance, all of which are required by this Contract to be completed down to bare land, with no exceptions other than those specifically permitted herein. THE PROJECT INCLUDES ALL AREAS (STRUCTURES, CONCRETE WALKS, DRIVEWAYS, DRIVE APRONS & CURBS) located within the parcels boundaries. CONTRACTOR IS RESPONSIBLE TO PREPARE THE ENTIRE SITE FOR HYDROSEEDING. There are also established herein certain limitations and requirements regulating the Contractor's methods of operation which are specifically intended to secure the results described. Minimum acceptable safety measures are to be employed by the Contractor at all times. At any time during the performance of this Contract the Port Authority may require, and shall be empowered, to enforce such other measures as may be reasonably necessary for the protection of the public, the Contractor's workmen, streets, public and private utilities or other properties. THE FINISHED PROJECT WILL BE A VACANT, MOW ABLE LOT WITH NO DRIVE APRON (CONTINUOUS CURB) AND A NEW PUBLIC SIDEWALK. CONTRACTOR IS TO KEEP A PHOTO DIARY DOCUMENT CONDITIONS BEFORE, DURING AND AFTER CONSTRUCTION.

Demolition Contractor's proposal shall be for the complete demolition of property located at _____, in accordance with the specifications now on file in the office of the Lorain County Port Authority, Lorain County Administration Building; 226 Middle Avenue; Elyria, Ohio 44035.

The signer of this proposal declares that the only persons, company, or parties interested in this proposal, as principals, are named herein; that he/she has carefully examined the contract documents and understands that he/she must perform all work in compliance with local, state and federal laws and guidelines in effect as of the date of this proposal, said laws and guidelines are incorporated herein as fully and completely as if attached hereto and made a part hereof; that he/she has made all investigations necessary to determine the location, character, and extent of the work, and agrees to furnish all labor, material, and equipment necessary to complete the above mentioned improvement within the time mentioned herein, for the stated price.

METHOD OF WORK

(A) The method of demolition and site clearance shall be in full compliance with all applicable Federal, State and Local laws and with these specifications. The method employed must be such as to avoid hazards to persons and property, and no interference with the use of adjacent buildings, or interruption of the free passage to and from such buildings. Care must also be taken to prevent the spread of dust and flying particles by periodic sprinkling, as directed by the local jurisdiction, Port Authority or its designated representative.

(B) Demolition shall not begin until a demolition permit has been secured from the local authority, if required. Fees for permits shall be paid in accordance with the fee schedule currently in effect at the local jurisdiction.

(C) During a demolition project, the Contractor discovers any suspect asbestos containing material that had been previously certified as being of negative presence; the Contractor shall immediately suspend all demolition operations and notify the LCPA. After completion of the demolition, the Contractor shall remove and dispose of all trash, lumber, and other materials to an approved dumping site in accordance with all federal, state and local regulations.

(D) Reduction of Fire Hazards. During the demolition and site clearance program, the Contractor shall carry-out the following requirements:

1. BURNING OF WASTE LUMBER AND OTHER BUILDING MATERIALS OR TRASH SHALL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
2. Before removing any part of a building, all volatile or inflammable materials, such as gasoline, kerosene, benzene, cleaning fluids, and other similar substances, shall be removed. ANY REMAINING FURNISHINGS, CLOTHING, APPLIANCES OR RUBBISH MUST BE REMOVED/HANDLED AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY AND OHIO DEPARTMENT OF HEALTH.
3. No materials, obstructions or debris shall be placed or allowed to accumulate within fifteen (15) feet of any fire hydrant. All fire hydrants shall be accessible at all times.
4. Debris shall not be allowed to accumulate on roof, floors, or in areas outside of and around any building being removed. Excess debris and material shall be removed from the site as the work progresses.
5. It shall be the Contractor's responsibility to keep approved fire extinguishers near the area and ready for instant use.

(E) The Contractor is prohibited from using any part of the land outside of the demolition area for his operations, for storage of material or equipment; for disposal of waste or any other purpose whatsoever. Disposition of rubble, salvage and waste material, debris and trash, from within the Demolition Areas shall be strictly in accordance with these specifications. Public streets, alleys or other thoroughfares anywhere in the County used by the Contractor in carrying out this Contract shall at all times be kept free of litter attributable to him and his trucks. Other vehicles shall be loaded and equipped as to prevent leakage, blowing or other escape of any portion of whatever is being hauled. Any cost incurred by the Port Authority in cleaning up such

litter will be charged to the Contractor, and shall be deducted from funds due, or to become due, him under this Contract.

(F) The Contractor shall furnish and erect all temporary sidewalks, barricades, covers and other temporary structures and night warning lights, necessary for the proper and safe conduct of the work, and shall remove all temporary structures upon the completion of work under this Contract, all without additional compensation.

(G) Before starting demolition or removal, it shall be the responsibility of the Contractor to verify that all utility service connections such as water, gas, electrical and telephone to buildings have been disconnected in accordance with the regulations of the utility concerned. In the event any are still operating, the Contractor shall notify the PORT AUTHORITY at once before proceeding with the work.

(H) The Contractor will at the time of, or prior to, demolition of each structure, be required to seal with stoneware stoppers properly cemented into place (or other stoppers as may be approved by the local authority) all storm and sanitary sewers leading from structures to be demolished in the following manner:

1. Fully expose sanitary and storm laterals at the right-of-way or property line.
2. Call the appropriate local jurisdiction at least twenty-four (24) hours prior to breaking or disconnecting a pipe to inspect the excavation. An excavation permit may be required and contractor is responsible to verify with appropriate local authority.
3. The pipe shall be sealed at the direction of the appropriate local authority.
4. SPECIAL BACKFILL consisting of granular material as approved by the appropriate local authority, shall be placed over the sealed pipe and the same brought up to grade.
5. The location of the ends of the sealed drains shall be marked with wood stakes not less than 2 inches by 2 inches in cross section and extending vertically from the end of the drain to a point 24 inches above grade. After exact locations of said stakes are determined by the appropriate local authority, these stakes shall be cut off 2 inches below the finished grade.

(I). The water service shall be properly removed as determined by the appropriate local authority. If no preference is given:

1. Services of 1" diameter or smaller and made of lead, galvanized steel, plastic, or any other material that does not meet the local authority's requirements. Remove the corporation or fitting from the water main and install a repair clamp of not less than ten (10) inches in length. Repair clamps shall be stainless steel with all stainless steel parts and retainers.

All work must be tested for leaks and wrapped with a polyethylene sheeting to protect it from the elements.

2. Services larger than 1" diameter and made of lead, galvanized steel, plastic, or any other material that does not meet the local authority's requirements. Cut out the corporation, tee, or fitting from the water main. Install a new section of Class 52 or greater ductile iron pipe, at least 16" in length to replace that which was cut out. The new section of pipe shall be held in place with transition couplings using stainless steel fasteners of epoxy-coated type or better. All work must be tested for leaks and wrapped with a polyethylene sheeting to protect it from the elements.
 3. If the existing service is copper and to be reused, it may be capped at the curb stop with a flared fitting (compression fittings are not permitted). The existing curb stop rod must be replaced with a new stainless steel rod, the curbed box shall be replaced with a new Mueller curb box at the proper grade, and the lid must be painted blue and staked.
 4. Concrete water mains shall have the service valve removed and capped with a ductile iron cap and stainless steel fasteners. All ductile iron components must be wrapped with polyethylene sheeting. A corporation that is installed into the concrete main may be shut off and left in the main, as long as it is of the copper type and can be flared and capped.
 5. Work shall be completed, whenever possible, during normal working hours. Contractor shall pay for overtime costs required as a result of inspectors being held over beyond their normal shift. Depressurization of water lines shall be scheduled with the local authority's water department or utilities department. Notification of affected customers is the sole responsibility of the contractor. A minimum of twenty-four (24) hours notice must be given to affected residential customers and forty-eight (48) hours notice to business or industrial customers prior to depressurization. Shutdown shall be at the most convenient time for the customer. If multiple corporations or fittings need to be removed during the same shut-down area, the contractor must be prepared to make multiple repairs during each shutdown. After repairs have been completed, ample time must be allocated for the proper flushing and testing by the appropriate local authority.
- (J). The contractor shall preserve in operating condition all active utilities traversing the project site. The contractor shall pay for all damage to any such utility due to work under the contract to the satisfaction of the utility company concerned and the appropriate local authority. All such repairs shall be done at no expense to the Port Authority.

DEMOLITION AND SITE CLEARANCE WITHIN PARCELS

- (A) Structural parts of the buildings, such as columns, beams and joists, supporting the floor of any story, shall be left in place until the walls, flooring and partitions of that story are completely removed, beginning at the top and working downward. Exception to this requirement will be made in the case of wood-frame buildings, non-rigid frame masonry, or concrete buildings, if the Contractor elects to use an approved alternate procedure for progressive or simultaneous wrecking of all parts of the building, providing the type and location of the building and the Contractor's proposed methods are all such that danger to personnel, the public, or to adjacent properties will not be increased thereby. No wall, or part thereof, shall be permitted to fall outwardly from any building except through chutes or by other controlled means or methods which will insure safety and minimize dust, noise and other nuisance.
- (B) The use of chutes shall be provided in all such parts of demolition operations that are more than 2 ½ stories high, or 20 feet above the point where the removal of material is affected. Outside chimneys, or outside portions of chimneys, shall be razed in advance of general demolition of each building. Any portion of a chimney inside a building shall be razed as soon as it becomes unsupported by reason of removal of other parts of the building.
- (C) No unstable portions of any building shall be left freestanding or inadequately braced against all reasonable cause of collapses at the end of a day's work.
- (D) At the close of each day's work, the Contractor shall be required to take any action necessary to leave the streets and sidewalks adjacent to the demolition and site clearance area in a condition satisfactory to the Port Authority and local authority.
- (E) Mean grade, when referred to in these specifications, shall be defined as that grade existing adjacent to the foundation prior to demolition or site clearance operations.
- (F) Building foundation walls, including cross walls, columns, or piers, and foundations of such accessory parts, interior or exterior stairwells, chimneys, porches, docks, entrance steps, platforms, fuel storage supports, fire cisterns, privy holes and coal holes, whether inside or outside the property line, shall be completely removed.
- (G) Foundation walls shall be defined as any and all projecting walls, piers, columns, or supporting measures above the underside of the lowest basement floor. The Contractor shall be wholly responsible for the adequate support of all adjacent buildings, sidewalks, pavement, overhead and underground utilities, and supporting poles until proper back filling and compaction has been completed.
- (H) Concrete, brick or masonry floors and foundations shall be broken up and removed from the site. Removal shall be demonstrated to the Inspector's satisfaction.

(I) Concrete, brick or asphaltic slabs on ground, including floors of basementless buildings, entrance slabs, patios, walks, garages, or shed floors and similar exterior slabs, regardless of composition, shall be broken up and removed from the site.

(J) Paved driveways, alleys, sidewalks, tree lawns, survey monuments, curbs and street pavements, outside the property lines which become broken up, unsightly or hazardous through the Contractor's operations, as determined by the Port Authority's representative, shall be removed and replaced at the contractor's expense.

(K) Wood timbering, beams, sills, columns, piers, shores or bracing occurring above ground, exposed in basements, or protruding from the exterior ground surface, shall be removed and disposed of. Tables, benches, cabinets shelving and all other wooden articles in whatsoever condition, salvageable or not, shall be removed from basements or other areas required to be filled.

(L) All objects of metal shall be removed from basement of areas to be filled and shall be disposed of.

(M) Filling of basements and excavations to mean grade:

1. The Contractor shall backfill basement and below grade areas with clean fill, properly graded to prevent soil saturation and permit the surface to properly drain. Fill material required to fill the basement and foundation cavities shall consist of clean soil or bank run material, and be subject to the Geotechnical Engineer's approval. Submit a bucket of the proposed material for approval. Material shall be free from organics and have a moisture content within 2% of the optimum. Contractor shall add or remove moisture as required. No slag, no shale or rubble is allowed.
2. Suitable embankment fill in accordance with ODOT Item 203 shall be used and compaction to ODOT specification as outlined in the State of Ohio Department of Transportation Construction and Material Specifications.
3. All necessary granular fill material is to be provided by the contractor at no expense to the LCPA.
4. **No debris** of any kind shall be used for fill in the demolition area.
5. All debris, trash, rubbish and perishable matter shall be removed.
6. Testing of compacted fill materials will be performed by an **independent testing laboratory employed and paid for by the Contractor**. The independent testing laboratory shall furnish the Port Authority certified test results of tests taken for each basement filled. Costs of additional

testing, as required due to improper performance of work, will be at the expense of the Contractor.

7. The fill shall be spread in horizontal lifts not exceeding 6" in loose thickness and compacted to at least 100% of the material's standard Proctor (ASTM D698) maximum dry density. Contractor shall hire and utilize a qualified testing laboratory to obtain the Proctor data and perform a minimum of 2 compaction tests each performed on 2 separate occasions at locations selected by the County.
8. All backfill material shall be placed free of voids and objectionable wastes and decomposable material. The foundation walls and all footers shall be completely removed.

(N) Disposition of materials shall be the responsibility of the Contractor. The Contractor shall secure suitable location in compliance with all laws for the disposal of all construction debris; garbage, rubbish, and asbestos contaminated debris, if any.

(O) The contractor or his subcontractors shall not use explosives under any circumstances in any phase of the demolition and site clearance operation.

(P) All storage tanks, fuel or otherwise, above or below ground, shall be pumped empty of fluid contents and, at the discretion of the Port Authority or its representative, may be required to be flushed with water in the presence of a representative of the Fire Department. All tanks will be carefully and completely removed and disposed of to the satisfaction of the Port Authority and local jurisdiction. The holes excavated shall be filled in the same manner as set forth for basements.

(Q) Wells, or similar cavities related to improvements to be demolished, shall be completely removed to a depth of eight (8) feet below the mean grades. All such cavities shall be filled to their entire depth with suitable fill material and the opening capped with the minimum of twelve (12) inches of reinforced concrete expanding beyond the opening on all sides not less than twenty-four (24) inches, all to the satisfaction of the local jurisdiction, Port Authority or its representative.

SITE PREPARATION

(A) Site Preparation – see ODOT Item 659 Seeding & Mulching. Use seed mix identified in ODOT Table 659.09-1 lawn mixture. **HYDRO SEEDING ONLY.**

(B) Newly hydro seeded lawns should be watered as much as 2-3 times a day. Special care should be taken to ensure that the lawn is NOT saturated during watering and puddles DO NOT form on the lawn. The goal is to have a consistently moist area for the best germination results.

(C) Final payment will be withheld at least four (4) weeks after hydroseeding to ensure proper lawn growth and that the Port Authority is satisfied with the appearance of lawn.

RESTORATION OF AREA

(A) Contractor is responsible for restoration of any damage caused by his operations to streets, curbs, or sidewalks, retaining walls, or other existing soil retention facilities on public or private properties.

(B) Start of demolition activities shall be considered as acceptance of streets, sidewalks, and curbs in good condition except where documented by the contractor with notice to the local jurisdiction.

(C) Unless otherwise specified, leave site in a clean, uniformly graded, and free draining condition, free of all surface stone and brick.

ABATEMENT AND/OR DEMOLITION CONTRACTOR SAFETY REQUIREMENTS

1. Except as otherwise specified or provided, the method of demolition is not restricted; however, in all circumstances, safe and workman-like methods must be employed to protect life and property. The Contractor shall observe the safety provisions of all applicable laws at all times. No work shall be undertaken without the consent of the LCPA.
2. The Contractor shall whenever necessary, barricade any area until such area is properly secured.
3. The Contractor shall maintain, whenever or wherever necessary, sufficient red warning lights to protect the public from damage and injury.
4. The Contractor shall be entirely responsible for all apparatus, equipment, and appurtenances furnished by him in connection with this work and extreme care shall be taken to protect all parts thereof in such manner as may be necessary or as directed by the LCPA or its representative.
5. In the event of failure or refusal of the Contractor or subcontractors to comply immediately with all applicable safety requirements and all other provisions as set forth in the Contract and/or instructions and directives of the County in relation to the manner, method or work performance, work under this contract shall be ordered “stopped” by the County. Work shall not recommence until full compliance has been assured.

ABATEMENT AND/OR DEMOLITION CONTRACTOR
EXTENT OF WORK-PERMITS

(A) Should any local building permits be required, it will be the responsibility of each discipline or contractor. The particular contractor whose work is involved shall pay for all other permits required.