



**REQUEST FOR BID:**

**ASBESTOS ABATEMENT AND  
DEMOLITION  
FOR  
228 MCGILL AVENUE  
&  
234- 240 MCGILL AVENUE**

**Project No. 2024-001 Bid # 2612**

ENGINEERING DEPARTMENT  
635 ALFRED BROWN JR. COURT SW, POST OFFICE BOX  
CONCORD, NORTH CAROLINA 28026-0308

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## **BID ADVERTISEMENT/INVITATION TO BID**

**January 04, 2024**

**Project Title: ASBESTOS ABATEMENT AND DEMOLITION FOR  
228 MCGILL AVE. & 234 - 240 MCGILL AVE.**

**Project No. 2024-001**

**Project Description:** The City of Concord proposes to abate all asbestos from the structures located at 228 McGill Avenue and 234 – 240 McGill Avenue. Structures are to be demolished with all debris removed from the site once asbestos removal is complete. All abatement and demolition are to be performed per plans furnished by TD Environmental, dated April 11<sup>th</sup> 2023.

Sealed Bids will be received by the City of Concord (Owner) at the address below. Please submit notarized bids in a sealed envelope by the bid opening time and date. All Bids must be in accordance with the Bidding Documents on file with the City of Concord Engineering Department. Bidders must be licensed contractors in the State of North Carolina. Bids will be received on a unit price basis. A five percent (5%) Bid security must accompany each Bid. The Successful Bidder will be required to furnish a Construction Performance Bond and a Construction Payment Bond as security for the faithful performance and the payment of all bills and obligations arising from the performance of the Contract if the total bid amount is greater than \$300,000 (see Section 16 of the Contract). Contractor and all Subcontractors will be required to conform to the labor standards set forth in the Contract Documents. Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Bids, and will award to lowest responsible Bidder taking into consideration quality, performance, and time specified in Bid Form for performance of Work. Owner also reserves the right to waive informalities. **TO BE CONSIDERED AS A BIDDER FOR THIS PROJECT, CONTRACTORS MUST REGISTER WITH THE CITY OF CONCORD BY SENDING AN EMAIL THAT INCLUDES YOUR NAME AND COMPANY CONTACT INFORMATION TO [BUTLERJL@CONCORDNC.GOV](mailto:BUTLERJL@CONCORDNC.GOV)**

Engineer: Enrique A. Blat, P.E.  
City of Concord Engineering Department  
Alfred M. Brown Operations Center  
635 Alfred Brown Jr. Court SW: P O Box 308, Concord,  
NC 28026-0308

For **TECHNICAL QUESTIONS OR CONTRACT DOCUMENTS:** Jimmy Butler 704.920.5422

Bid Opening Date: **Tuesday January 30, 2024 at 2:00 PM**

Location: Alfred M. Brown Operations Center  
635 Alfred Brown Jr. Court SW: Conference Room "C"  
Concord, NC 28026

*Alfred M. Brown Operations Center*

City of Concord ● 635 Alfred Brown Jr. Court SW. ● P.O. Box 308 ●  
Concord, North Carolina 28026 ● (704) 920-5425 ● Fax (704) 786-4521 ●  
TDD 1-800-735-8262 ● [www.concordnc.gov](http://www.concordnc.gov)

# MAP AND DIRECTIONS TO CITY OF CONCORD ALFRED M BROWN OPERATIONS CENTER



## Directions from Charlotte

Take I-77 north to I-85 north from Charlotte to Concord  
From I-85 north, take exit 49 to the right towards Lowe's Motor Speedway  
At the Lowe's Motor Speedway, turn left onto Highway 29 (Concord Pkwy) north  
Keep going north while you pass the Wal-Mart shopping center on your right  
Turn right at the light at the Chevrolet dealership onto Cabarrus Avenue  
Turn right at the next traffic light at the Walgreens onto Hwy 601 South (bypass)  
(Hwy 601 S is also Warren C. Coleman Boulevard)  
Go straight through two traffic lights at Old Charlotte Road and Wilshire Avenue  
Turn right at the next traffic light at Manor Avenue (blue & white sign on right  
for the City of Concord Alfred M. Brown Operations Center)  
You will be on the entrance road into our complex.  
Follow signs to the left to Visitor Parking.  
Proceed to the front desk at the Administration Building and sign in with the  
Receptionist

# INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS. Terms used in these Instructions to Bidders are meanings assigned to them in the General Conditions and the Supplementary Conditions. An additional term is defined as follows:

Successful Bidder - The lowest, qualified, responsible, and responsive Bidder to whom Owner (based on Owner's evaluation as herein provided) makes an award.

2. COPIES OF BID DOCUMENTS. Bid Documents which include all front-end documents may be obtained free of charge from the City of Concord's Engineering Department.

## **ASBESTOS ABATEMENT AND DEMOLITION FOR 228 MCGILL AVE. & 234 - 240 MCGILL AVE.**

### **Project # 2024-001**

Complete sets of Bid Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misrepresentations resulting from the use of incomplete sets of Quoting Documents.

Owner and Engineer, in making copies of Quoting Documents available on the above terms, do so only for obtaining Bids for the Work and do not confer a license or grant for any other use.

3. QUALIFICATIONS OF Bidders. To demonstrate qualifications to perform the Work, Bidder may be required to submit written evidence on financial data, previous experience, present commitments, and other such data as may be requested by Owner or Engineer. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located, or Bidder must agree to obtain such qualification prior to award of the Contract.

**TO BE CONSIDERED AS A BIDDER FOR THIS PROJECT, CONTRACTORS MUST REGISTER WITH THE CITY OF CONCORD BY SENDING AN EMAIL THAT INCLUDES YOUR NAME AND COMPANY CONTACT INFORMATION TO [butlerjl@concordnc.gov](mailto:butlerjl@concordnc.gov).**

EXAMINATION OF CONTRACT DOCUMENTS AND SITE. It is the responsibility of each Bidder, before submitting a Bid, to (a) thoroughly examine the Contract Documents, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work, (c) consider federal, state, and local laws and regulations that may affect cost, progress, performance, or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors, or discrepancies discovered by Bidder in the Contract Documents.

3.2. Underground Facilities. Information and data reflected in the Contract Documents with respect to underground facilities at or contiguous to the site are based upon information and data furnished to Owner and

Engineer by owners of such underground facilities or others, and Owner and Engineer disclaim responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

3.3. Additional Information. Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in

accordance with the time, price, and other terms and conditions of the Contract Documents.

On request 24 hours in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the site to its former condition upon completion of such explorations. Arrangements for site visits shall be made by calling the office of the Deputy Director of Engineering for the City of Concord at 704.920.5425.

3.4. Easements. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by Owner unless otherwise specified in the Contract Documents.

3.5. Unit Price Contracts. Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid schedule by examination of the site and a review of the drawings and the specifications, including the addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or the nature of the work to be done.

3.6. Bidder's Representation. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement concerning examination of the Contract Documents and the site, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

4. INTERPRETATIONS AND ADDENDA. All questions about the meaning or intent of the Quoting Documents and the Contract Documents shall be submitted to Owner in writing. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Quoting Documents. Questions received less than 10 days prior to the date for opening of Bids may not be answered. Only answers issued by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5. **BID SECURITY**. Each Proposal must be accompanied by a deposit equal to 5% of the net price bid. This deposit may consist of cash, or a Cashier's Check issued by, or a Certified Check drawn on a Bank or Trust Company authorized to do business in North Carolina, or on a Bank insured by the Federal Deposit Insurance Corporation, or a U.S. Money Order, payable to the City of Concord or 5% Bid Bond in the form required by G.S. 143-129 as amended, issued by an Insurance Company authorized to do business in North Carolina, said deposit to be retained in the event of failure of the successful bidder to execute a formal contract within ten (10) days after award or to give satisfactory surety required. The Bid security of the Successful Bidder (if so required) will be retained until such Bidder has executed the Agreement, furnished the required contract security (if so required), and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within the number of days set forth in the Bid Form, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security (if so required) of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Agreement or the day after the last day the Bid remain subject to acceptance as set forth in the Bid Form, whereupon Bid security furnished by such Bidders will be returned. Bid security accompanying Bid which are deemed by Owner to be noncompetitive will be returned within 7 days after the designated Bid opening.

6. CONTRACT TIMES. The numbers of calendar days within which, or the dates by which, the Work is to be substantially completed and completed and ready for final payment (the Contract Times) are set forth in the Bid Form.

7. LIQUIDATED DAMAGES. Provisions for liquidated damages, if any, are set forth in the Agreement.

8. SUBSTITUTES OR "OR-EQUAL ITEMS. Bidder's attention is directed to Article 6.5 of the General Conditions concerning substitutes and "or-equal" items. Where an item or material is specified by a proprietary name, it is done for the purpose of establishing a basis of quality and not for the purpose of limiting competition. The Engineer's intent is to consider alternative products which have the desired essential characteristics. The Engineer will consider any such products offered. Requests for acceptance of alternative products shall be made through Bidders quoting as prime Contractors. Acceptances for substitutions will not be granted directly to suppliers, distributors, or subcontractors. Pursuant to Section 133-3, General Statutes of North Carolina, the following procedures shall be used:

Bidders desiring to submit alternative product proposals for prior acceptance of the Engineers shall submit, in writing, such proposals from 1/8/2024, until 1/19/2024. Applications received after this time will not be reviewed. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute, including drawings, cuts, performance and test data, and other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment, or other work that incorporation of the substitute would require shall be included. The Engineer shall consider and either accept or reject all alternative product proposals submitted.

If, by the close of the fifth day prior to the deadline for receiving the Bid, the Engineer has accepted any alternative product proposals, the Quoting Documents shall be modified to include the alternative products. The Engineer shall publish the modification in an Addenda at least 5 days prior to the deadline for receiving Bids. The Engineer's decision of acceptance or rejection of a proposed substitute shall be final.

9. SUBCONTRACTORS, SUPPLIERS, AND OTHERS. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within 3 days after the opening submit to Owner the List of Subcontractors completed with all such Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work for which such identification is required. The list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person, or organization, if requested by Owner. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, Supplier, or other person or organization, Owner may, before the Notice of Award is given, request the apparent Successful Bidder to submit an acceptable substitute without an increase in the Bid. All Subcontractors shall be licensed utility contractor in the State of North Carolina.

10. BID FORM. The Bid Form is bound in the Contract Documents and shall not be removed therefrom. Bid Form must be completed in ink.

Bids by corporations must be executed in the corporate name by the president or vice-president (or other corporate officer accompanied by evidence of authority to sign for the corporation). Bids by partnerships must be executed in the partnership name and signed by a partner. Bids by joint ventures shall be signed by each participant in the joint venture or by a representative of the joint venture accompanied by evidence of authority to sign for the joint venture.

The names of all the persons signing shall be legibly printed below the signature. A Bid by a person who affixes to his signature the word "president", "secretary", "agent", or other designation without disclosing his principal may be held to be the Bid of the individual signing. When requested by Owner, evidence of the authority of the person signing shall be furnished.

All blanks in the Bid Form shall be filled. A Bid price shall be indicated for each unit price item listed therein, or the words "No Bid", "No Charge", "No Change", or another appropriate phrase shall be entered.

The Bid shall contain an acknowledgment of receipt of all Addenda; the numbers and dates of which shall be filled in on the Bid Form.

No alterations in Bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder; if initialed, Owner may require the Bidder to identify any alteration so initialed.

11.01. Contingency. The Contingency is to be added to the Bid price and is to be used for minor change order items. If the Contingency is to be used, the scope of work and price will be negotiated. **The Contingency is for the sole use of the Owner.** A change order will be issued to delete any unauthorized portion of the Contingency.

11. SUBMISSION OF BIDS. Bids shall be submitted at the time and place indicated in the Invitation to Bid, or the modified time and place indicated by Addendum. Bids shall be enclosed in a sealed envelope or wrapping, addressed to:

The City of Concord  
c/o Enrique A. Blat, P.E.  
Deputy City Engineer  
P.O. Box 308  
635 Alfred Brown Jr. Court SW  
Concord, North Carolina 28026-0308

Bids shall be marked with the name, license number, and address of the Bidder and shall be accompanied by the Bid security (if required) and other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

Each Bid envelope shall be identified on the outside with the words **'ASBESTOS ABATEMENT AND DEMOLITION FOR 228 MCGILL AVE. & 234 - 240 MCGILL AVE. – 2024-001'**

Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

**One copy of the bound documents containing the Bid Form must be submitted with the Bid.**

Oral, telephone, facsimile, or telegraph Bids are invalid and will not receive consideration.

No Bidder may submit more than one Bid. Multiple Bids under different names will not be accepted from one firm or association.

A conditional or qualified Bid will not be accepted.

12. MODIFICATION AND WITHDRAWAL OF BIDS. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

If, within 24 hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security (if any)



will be returned. Thereafter, that Bidder will be disqualified from further quoting on the Work to be provided under the Contract Documents.

13. OPENING OF BIDS. Bids will be opened at the office and at the discretion of the Director of Engineering and read aloud.

The procedure for opening Bids will follow guidelines issued by the State Building Commission dated December 10, 1990, and endorsed by the Consulting Engineers Council of North Carolina.

14. BIDS TO REMAIN SUBJECT TO ACCEPTANCE. All Bids will remain subject to acceptance for the number of days set forth in the Bid Form, but the Owner may, in its sole discretion, release any Bid and return the security (if any) prior to that date.

15. AWARD OF CONTRACT. Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Bids, and will award to lowest responsible Bidder taking into consideration quality, performance, and time specified in Bid Form for performance of Work. The owner also reserves the right to waive informalities.

In evaluating Bids, Owner will consider the qualifications of the Bidders, whether the Bids comply with the prescribed requirements, and such alternatives, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time. If the Contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of Owner. If the Contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within the number of days set forth in the Bid Form. The evaluation of Suppliers' or manufacturers' data submitted with the Bid, or submitted upon request prior to the Notice of Award, will include consideration of the following:

Owner-required inventory of spare parts. Building design changes which would be required to accommodate the proposed materials and equipment. Installation requirements and related engineering, training, and operating costs. Experience and performance record of the Supplier or the manufacturer. Maintenance and frequency of inspections required to assure reliable performance of the equipment. Suppliers' or manufacturers' service facilities and availability of qualified field service personnel. Efficiency and related operating expense during the anticipated useful life of the equipment.

16. CONTRACT SECURITY. The General Conditions set forth Owner's requirements as to Performance and Payment Bonds (required). These Bonds shall be delivered to Owner with the executed Agreement.

17. SIGNING OF AGREEMENT. When the Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by two unsigned counterparts of the Agreement with all other written Contract Documents attached. Within the number of days set forth in the Bid Form, the Successful Bidder shall sign, leaving the dates blank, and deliver the required number of counterparts of the Agreement and attached

documents to Owner with the required Bonds and power of attorney. Within 30 days thereafter, Owner shall execute all copies of the Agreement and other Contract Documents submitted by Contractor (Successful Bidder); shall insert the date of contract on the Agreement, Bonds, and power of attorney; and shall distribute signed copies as stipulated in the Agreement.

Should the Owner not execute the Contract within the period specified, the Successful Bidder may, by written notice, withdraw his signed Contract. Such notice or withdrawal shall be effective upon receipt of the notice by the Owner.

18. SALES AND USE TAXES. Provisions for sales and use taxes, if any, are set forth in the Supplementary Conditions.

19. RETAINAGE. Provisions concerning retainage are set forth in the Agreement.

20. LAWS AND REGULATIONS. Modifications, if any, to the General Conditions concerning Laws and Regulations are set forth in the Supplementary Conditions. Additional provisions, if any, concerning Laws and Regulations are set forth in the Agreement.

21.01. Collusive Bidding. In accordance with Section 112(c) of Title 23 USC, and G.S. 75-5(b)(7) of the State of North Carolina, the Contractor (Bidder), by submission and execution of this bid or Bid, certifies that he has not entered any agreement, participated in any collusion, or project.

**DEBARRED FIRMS CERTIFICATION FORM**  
**[MUST BE COMPLETED & SUBMITTED WITH BID]**

**Asbestos Abatement and Demolition for  
228 MCGILL AVE. & 234 - 240 MCGILL AVE.**

**Project No. 2024-001**

The undersigned hereby certifies that the firm of \_\_\_\_\_ has not been suspended by the State of North Carolina or any agency or department thereof for conviction or indictment or any of the offenses enumerated in G.S. 133-27 nor will award subcontracts of any tier to firms that have been suspended for conviction or indictment of any of the offenses enumerated in G.S. 133-27.

\_\_\_\_\_  
Name of Firm

ATTEST \_\_\_\_\_ (SEAL)

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Title

Sworn and subscribed before me this

\_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Notary Public

**EXHIBIT 'A' BID FORM**

**City of Concord Asbestos Abatement and Demolition for  
228 McGill Ave. & 234 - 240 McGill Ave.**

**Project No. 2024-001**

THIS BID IS SUBMITTED TO:

City of Concord  
c/o Enrique A. Blat, P.E.  
Deputy City Engineer  
635 Alfred Brown Jr. Court SW, P.O. Box  
308 Concord, North Carolina 28026-0308

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter an agreement with Owner in the form included in the Contract/BID Documents to perform and furnish all Work as specified or indicated in the Contract/BID Documents within the specified time and for the amount indicated in this Bid and in accordance with the other terms and conditions of the Contract/BID Documents.

2. Bidder accepts all the terms and conditions of the Invitation to Bid and the Instructions to Bid, including without limitation those dealing with the disposition of the Bid security (if security is required by the City Manager). This Bid will remain subject to acceptance for 60 days after the day designated for reception of Bids. Bidder will sign and submit the Agreement with the Bonds and other documents required by the Quoting Documents within 10 days after the date of Owner's Notice of Award.

3. In submitting this Bid, Bidder represents that:

- a. Bidder has examined copies of all the Quoting Documents and of the following Addenda (receipt of all which is hereby acknowledged):

No. \_\_\_\_\_ Dated \_\_\_\_\_

No. \_\_\_\_\_ Dated \_\_\_\_\_

No. \_\_\_\_\_ Dated \_\_\_\_\_

- b. Bidder has visited the site and become familiar with and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Work.

- c. Bidder is familiar with and has satisfied itself as to all Federal, State, and Local Laws and Regulations that may affect cost, progress, performance, and furnishing of Work.

- d. Bidder has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except underground facilities) which have provided by the owner and under the conditions normally used and identified in the Supplementary Conditions and Special Conditions as provided in Paragraph 4.2.1 of the General Conditions. Bidder accepts the determination set forth in the Supplementary Conditions and Special Conditions of the extent of the "technical data" contained in such reports and drawings upon which Bidder is entitled to rely as provided in Paragraph 4.2 of the General Conditions. The Bidder acknowledges that such reports and drawings are not Contract Documents and may not be complete for Bidder's purposes. Bidder acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or

- e. indicated in the Quoting Documents with respect to underground facilities at or contiguous to the site. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.
- f. The Bidder is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.
- g. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- h. Bidder has given Engineer written and verbal notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- i. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid Bidder has not solicited or induced any person, firm, or corporation to refrain from quoting; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

4. The terms used in this BID, which are defined in the General Conditions, have the meanings assigned to them in the General Conditions.

**DATE:** \_\_\_\_\_

**NAME OF BIDDER:** \_\_\_\_\_

**BUSINESS ADDRESS:** \_\_\_\_\_

**PHONE:** \_\_\_\_\_

**FAX:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_

**NC CONTRACTOR NO.:** \_\_\_\_\_

In compliance with the Instructions to Bidders, the undersigned, having carefully examined the Bidding Documents, Scope of Work, Special Provisions, Drawings and Specifications, all subsequent Addenda as prepared by the Owner, visited the site and being familiar with all conditions and requirements of the work, hereby agrees to furnish all labor, materials, equipment and services, etc., to complete the work required in accordance with the Contract/BID Documents for the consideration of the following amount/amounts.

**LUMP SUM BASE BID** (Fill in amount in words and figures, words to govern in case of conflict) includes amount shown hereinafter in Performance and Payment Bonds:

The undersigned Bidder, having carefully investigated the existing conditions at the project site, and having thoroughly familiarized himself with the Contract Documents, hereby proposes to provide all necessary labor, permits, equipment, materials, services and etc. to complete the installation of the:

**City of Concord City of Concord Asbestos Abatement and Demolition for  
228 McGill Ave. & 234 - 240 McGill Ave.**

**Project No. 2024-001**

All in accordance with the aforementioned Contract Documents and the  
attached drawings for the lump sum price of:

**228 McGill Avenue**

Abatement Cost = \$ \_\_\_\_\_

Demolition Cost = \$ \_\_\_\_\_

228 McGill Ave. Total = \$ \_\_\_\_\_

**234-240 McGill Avenue**

Abatement Cost = \$ \_\_\_\_\_

Demolition Cost = \$ \_\_\_\_\_

234-240 McGill Ave. Total = \$ \_\_\_\_\_

**Provide a price for importing, placing and compacting borrow material necessary to level the sites.**

Borrow material unit price per ton = \$ \_\_\_\_\_ X 50 tons = Borrow Material Total \$ \_\_\_\_\_

BASE BID (228 McGill Total + 234-240 McGill Total + Borrow Material Total) = \$ \_\_\_\_\_

10% CONTINGENCY \$ \_\_\_\_\_

TOTAL BID \$ \_\_\_\_\_

*(Total Bid should be the addition of the Base Bid and 10% Contingency)*

**Please price a supplemental quote per lineal and square foot for the following for any additional ACM that may be present in walls, ceilings, chases, or tunnels:**

Friable ACM ----- per Square Foot = \$ \_\_\_\_\_

per Lineal Foot = \$ \_\_\_\_\_

Non-Friable ACM - per Square Foot = \$ \_\_\_\_\_

per Lineal Foot = \$ \_\_\_\_\_

**TIME OF COMPLETION**

The undersigned further agrees to begin work within fourteen (14) days after a "Notice to Proceed" with an adequate work force, carry the work forward as rapidly as possible and complete the work within 60 Calendar Days from Notice to Proceed.

**LIQUIDATED DAMAGES**

If the "Time of Completion" is not met, the City of Concord will charge liquidated damages to the contractor. Liquidated damages for failure to meet the "Time of Completion" as described in this section shall be \$250.00 per calendar day.

**SIGNATURE OF BIDDER:** \_\_\_\_\_

Contractor's License Number \_\_\_\_\_

License Expiration Date \_\_\_\_\_

**If an Individual**

By \_\_\_\_\_  
(signature of individual)

doing business as \_\_\_\_\_

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 2024

ATTEST \_\_\_\_\_ TITLE

**If a Partnership**

By \_\_\_\_\_  
(firm name)

\_\_\_\_\_

(signature of general partner)

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 2024

ATTEST \_\_\_\_\_ TITLE

**If a Corporation**

By \_\_\_\_\_  
(corporation name)

By \_\_\_\_\_  
(signature of authorized person)

(title) \_\_\_\_\_

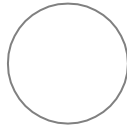
Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 2024

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

(Seal)



**If a Joint Venture (Other party must sign below.)**

By (name) \_\_\_\_\_

Contractor's License Number \_\_\_\_\_

License Expiration Date \_\_\_\_\_



**STANDARD FORM OF  
PERFORMANCE BOND**

Date of Execution of this Bond \_\_\_\_\_

Name and Address of  
Principal (Contractor) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and Address  
of Surety \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and Address of  
Contracting Body \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Amount of Bond \_\_\_\_\_  
\_\_\_\_\_

Contract That certain contract by and between the Principal and the  
Contracting Body above named dated \_\_\_\_\_  
for \_\_\_\_\_  
\_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above-named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered a certain contract with the Contracting Body, identified as shown above and hereto attached;

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise, to remain in full force and virtue.

**PERFORMANCE BOND: (Continued)**

THIS PERFORMANCE BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Section 129 of Chapter 143 and in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part hereof, and deemed to be conclusively written into this Bond.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals as of the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned and representative, pursuant to authority of its governing body.

WITNESS: \_\_\_\_\_

Principal (Name of individual and trade name, partnership, corporation, or joint venture)

\_\_\_\_\_  
(Proprietorship or Partnership)

Printed Name \_\_\_\_\_

BY \_\_\_\_\_ (SEAL)

Printed Name \_\_\_\_\_

TITLE \_\_\_\_\_  
(Owner, Partner, Office held in corporation, joint venture)

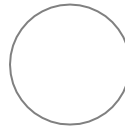
ATTEST: (Corporation)

**(Corporate Seal of Principal)**

BY \_\_\_\_\_

Printed Name \_\_\_\_\_

TITLE \_\_\_\_\_  
(Corporation Secretary or Assistant Secretary Only)



WITNESS:

\_\_\_\_\_  
Surety (Name of Surety Company)

BY \_\_\_\_\_

Printed Name \_\_\_\_\_

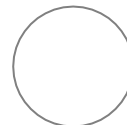
TITLE \_\_\_\_\_ Attorney in Fact

COUNTERSIGNED:

**(Corporate Seal of Surety)**

\_\_\_\_\_  
N.C. Licensed Resident Agent

\_\_\_\_\_  
(Address of Attorney in Fact)



# **CITY OF CONCORD PROJECTS**

## **SPECIAL CONDITIONS**

1. Please email Jimmy Butler at [butlerjl@concordnc.gov](mailto:butlerjl@concordnc.gov) to arrange all site visits.
2. The Contractor will provide all materials unless otherwise noted.
3. Bidders must possess a General Contractors License in the State of North Carolina.
4. Contractor will be responsible for all permits and associated fees. This also includes water and sewer tap fees and a low voltage permit for City of Concord data being run. Every fee charged by the City of Concord can be viewed online at [www.concordnc.gov/Departments/Finance/Adopted-Fees-Schedule](http://www.concordnc.gov/Departments/Finance/Adopted-Fees-Schedule). Contact Cabarrus County for all other required project associated fees.
5. All contractors working on Federally Funded Projects (typically housing projects) MUST be registered in the SAM. They need to be active in the system to complete a debarment check; this was previously done in the database for Excluded Parties List System (EPLS). The mandatory registration is free and takes about 10 days to obtain but the contractor must have a DUNS number also which is a unique nine-digit identification number for each physical location of your business. D-U-N-S Number assignment is also free for all businesses required to register with the federal government for contracts or grants. Federally Funded Projects also require that all Davis-Bacon guidelines are followed.
6. All work shall meet the following standards, rules, and procedures applicable to each project:

**NC State Building Code – 2018**

**NC Administrative Code and Policies – 2018**

**NC Fire Prevention Code – 2018**

**NC Mechanical Code – 2018**

**NC Plumbing Code – 2018**

**NEC – National Electrical Code**

**NC Electrical Code – 2014**

**NC Energy Conservation Code – 2018**

**NC Fuel Gas Code – 2018**

**NC Existing Building Code – 2018**

**NC Rehabilitation Code – 2012**

**NC DOT Standard Specifications for Roads and Structures - 2018**

**AA** – Aluminium Association

**AAMA** – American Architectural Manufacturers Association

**ACI** – American Concrete Institute

**AF&PA** – American Forest & Paper Association

**AISC** – American Institute of Steel Construction

**AISI** – American Iron and Steel Institute

**AITC** – American Institute of Timber Construction

**ANSI** – American National Standards Institute

**APA** – Engineered Wood Association

**ASCE/SEI** – American Society of Civil Engineers Structural Engineering Institute

**ASME** – American Society of Mechanical Engineers

**ASTM** – ASTM International

**AWCI** – Association of the Wall and Ceiling Industry

**AWPA** – American Wood Protection Association

<b>AWS</b>	– American Welding Society
<b>BHMA</b>	– Builders Hardware Manufacturer’s Association
<b>CPA</b>	– Composite Panel Association
<b>CPSC</b>	– Consumer Product Safety Commission
<b>CSA</b>	– Canadian Standards Associations
<b>CSSB</b>	– Cedar Shake and Shingle Bureau
<b>DASMA</b>	– Door and Access Systems Manufactures Association International
<b>DOC</b>	– US Dept. of Commerce – National Institute of Standards and Technology
<b>DOJ</b>	– US Department of Justice
<b>DOL</b>	– US Department of Labor
<b>GA</b>	– Gypsum Association
<b>HPVA</b>	– Hardwood Plywood Veneer Association
<b>HUD</b>	– US Department of Housing and Urban Development
<b>ICC</b>	– International Code Council
<b>NAAMM</b>	– National Association of Architectural Metal Manufacturers
<b>NCDOT</b>	– North Carolina Department of Transportation
<b>NCMA</b>	– National Concrete Masonry Association
<b>NFPA</b>	– National Fire Protection Association
<b>PCI</b>	– Precast Pre-Stressed Concrete Institute
<b>PTI</b>	– Post-Tensioning Institute
<b>RMI</b>	– Rack Manufacturers Institute
<b>SDI</b>	– Steel Deck Institute
<b>SJI</b>	– Steel Joist Institute
<b>SPRI</b>	– Single-Ply Roofing Institute
<b>TIA</b>	– Telecommunications Industry Association
<b>TMS</b>	– The Masonry Society
<b>TPI</b>	– Truss Plate Institute
<b>UL</b>	– Underwriters Laboratories, Inc.
<b>WDMA</b>	– Window and Door Manufacturers Association
<b>WRI</b>	– Wire Reinforcement Institute

7. After demolition is completed and all debris and foundations are removed as indicated on the bid documents the contractor shall grade the site in such a way as to match the existing sidewalk elevation and to provide positive grade towards McGill Ave. as shown on the attached Drawing No.1 and No.2.
8. The on-site soil may be used to grade the site and any additional material needed to balance the site shall comply with NCDOT 1018 Borrow Material and shall be paid by the Ton. Weight Tickets from the borrow pit will be required for payment.
9. All fill materials shall be compacted to 95% percent of the maximum dry density of the material as obtained in the standard proctor ASTM D-698.
10. There will be a Mandatory Prebid meeting at the project site on January 12, 2024, at 9:00 AM. Bidders that do not attend the Prebid meeting will not be allowed to bid on the project.

## SITE PHOTOS

SITE PHOTO



## SITE PHOTOS





SITE PHOTO





SITE PHOTO



## SITE PHOTOS



## CITY OF CONCORD CONTRACT

## STANDARD FORM CONSTRUCTION CONTRACT

This contract (together with all exhibits and valid amendments, the "Agreement" or the "Contract") is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the City of CONCORD ("City") and \_\_\_\_\_ ("Contractor"), ( ) a corporation, ( ) a professional corporation, ( ) a professional association, ( ) a limited partnership, ( ) a sole proprietorship, or ( ) a general partnership; organized and existing under the laws of the State of \_\_\_\_\_.

**Sec. 1. Background and Purpose.** The City of Concord proposes to abate all asbestos from the structures located at 228 McGill Avenue and 234 – 240 McGill Avenue. Structures are to be demolished with all debris removed from the site once asbestos removal is complete. All abatement and demolition are to be performed per plans furnished by TD Environmental, dated April 11th 2023.

**Sec. 2. Services and Scope to be Performed.** The Contractor shall provide the services at the charges set forth either in this paragraph or in Exhibit "A". Additional exhibits may be used to further define this Agreement when the Contractor and City so agree. Any additional exhibits shall be designated as exhibits to the Agreement with capitalized, sequential letters of the alphabet, shall be attached hereto and incorporated herein by reference as if the same were fully recited, and shall become terms of this Agreement upon execution by both parties.

In this Contract, "services" means the services that the Contractor is required to perform pursuant to this Contract and all of the Contractor's duties to the City that arise out of this Contract. Any amendments, corrections, or change orders by either party must be made in writing signed in the same manner as the original. (This form may be used for amendments and change orders.) The City reserves the right to refuse payment for any work outside that authorized herein or pursuant to a duly approved amendment or change order.

**Sec. 3. Complete Work without Extra Cost.** Unless otherwise provided, the Contractor shall obtain and provide, without additional cost to the City, all labor, materials, equipment, transportation, facilities, services, permits, and licenses necessary to perform the Work.

**Sec. 4. Compensation.** The City shall pay the Contractor for the Work as described in this paragraph below OR as described in Exhibit "A" attached. In the event of a conflict, the provisions of this paragraph shall control. Any additional expenses or charges shall only be paid after both the City and the Contractor agree to and execute a written change order. The City shall not be obligated to pay the Contractor any fees, payments, expenses or compensation other than those authorized in this Contract or in a duly-approved change order. All payments shall be deemed inclusive of tax and other obligations.

**Sec. 4a. Retainage.** The City shall withhold no retainage on Contracts having a "total project cost" of less than \$100,000.00. The City may withhold retainage on contracts having a total project cost between \$100,000 and \$200,000. The City shall withhold retainage on contracts whose total project cost exceeds \$300,000. When withheld, retainage shall equal no more than five percent of each progress payment. When the project is fifty per cent complete, the City shall not retain anything from future project payments provided that (i) the surety concurs in writing, (ii) the Contractor continues to perform satisfactorily, (iii) any non-conforming work identified in writing by the architect, engineer(s) or City has been corrected by the Contractor and accepted by the architect, engineer(s) or City. However, if the City determines that the Contractor's performance is unsatisfactory, the City may withhold up to five percent retainage from each project payment. The City may withhold additional amounts above five percent for unsatisfactory job progress, defective construction not remedied, disputed work, third party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

\_\_\_\_\_  
Definitions:

"Total Project Cost": Total value of the Contract and any approved change orders or amendments.

"Project is Fifty Percent Complete": When the Contractor's validly-issued gross project invoices (excluding the value of the materials stored off-site) equal or exceed fifty percent of the value of the Contract, except that the value of

materials stored on-site shall not exceed twenty percent of the Contractor's gross project invoices for the purpose of determining whether the project is fifty percent complete.

**Sec. 5. Term.** The Contractor shall commence work within \_\_\_\_\_ ( ) days of the date of its receipt of written Notice to Proceed from the City. The date that is \_\_\_\_\_ ( ) days from the date of the Contractor's receipt of the Notice to Proceed shall be the "Commencement Date." All work as set forth in the Scope of Services in Exhibit "A" shall be completed within \_\_\_\_\_ ( ) calendar days of the Commencement Date. The date that is \_\_\_\_\_ ( ) calendar days from the Commencement Date shall be the "Completion Date." Time is of the essence with regard to this Project. If Contractor's obligations are not completed by the Completion Date, the City reserves the right to nullify this Agreement, order the Contractor to immediately cease all work under this Agreement and vacate the premises, and to seek professional services equivalent to those outlined in Exhibit "A." The Contractor shall be held accountable for all damages incurred by the City as a consequence of the missed Completion Date. The exercise of any of these rights by the City shall not be interpreted to prejudice any other rights the City may have under this Agreement or in law or equity. This Contract shall not be automatically extended unless agreed to in writing by the City or as provided in Exhibit "A".

**Sec. 6. Contractor's Billings to City.** Payments will be made in accordance with the schedule found in this section below OR attached at Exhibit "A". Contractor shall submit an original pay request (invoice) to the City Purchasing Agent by the first of each month in order to expedite payment. Upon receipt of the request the City Purchasing Agent shall verify the amounts and if correct forward the request to the Accounts Receivable Division of the Finance Dept. Final payment on the Contract shall be made in 45 days, except in the case of retainage. Within 60 days after the submission of the final pay request, the City (with the written consent of the surety) shall release to the Contractor all retainage payments IF the City receives a certificate of substantial completion from the architect, engineer or designer-in-charge of the project OR the City receives beneficial occupancy and use of the project. In either case, the City may retain up to 2.5 times the estimated value of the work to be completed or corrected.

**Sec. 7. Insurance.** Contractor shall maintain and cause all sub-contractors to maintain insurance policies at all times with minimum limits as follows:

<u>Coverage</u>	<u>Minimum Limits</u>
Workers' Compensation	\$500,000 each accident, \$500,000 bodily injury by disease each employee, \$500,000 bodily injury by disease policy limit
General Liability	\$1,000,000 per occurrence regardless of the contract size
Automobile Liability	\$1,000,000 per occurrence regardless of the contract size
Umbrella	<input type="checkbox"/> \$1,000,000 per occurrence if contract does not exceed 180 days and does not exceed \$500,000; otherwise, <input type="checkbox"/> \$2,000,000 per occurrence

Contractor shall provide a Certificate of Insurance to the City listing the City as an additional insured. Such Certificate shall be in a form acceptable to the City.

**Sec. 8. Documentation Requirements:**

A. Contractor shall provide the City with a **Certificate of Insurance** for review prior to the issuance of any contract or Purchase Order. All Certificates of Insurance will require written notice by the insurer or Contractor's agent in the event of cancellation, reduction or other modifications of coverage by the insurer. Such notice shall be not less than 30 days for nonrenewal by the insurer, not less than 10 days for cancellation due to nonpayment of the premium and as soon as possible for all other types of modifications. In addition to the notice requirement above, Contractor shall provide the City with written notice of cancellation, reduction, or other modification of coverage of insurance whether instigated by the insurer or by the Contractor immediately upon Contractor's receipt of knowledge of such modifications. Upon failure of the Contractor to provide such notice, Contractor assumes sole responsibility for all

loses incurred by the City for which insurance would have provided coverage. The insurance certificate shall be for the insured period in which the initial contract period begins and shall be renewed by the Contractor for each subsequent renewal period of the insurance for so long as the contract remains in effect.

The City shall be named as an **additional insured** on all policies except Workers' Compensation and it is required that coverage be placed with "A" rated insurance companies acceptable to the City. Statement should read, "City of Concord is added as an additional insured as evidenced by an endorsement attached to this certificate." Failure to maintain the required insurance in force may be cause for termination of this Agreement. In the event that the Contractor fails to maintain and keep in force the insurance herein required, the City has the right to cancel and terminate the Agreement without notice.

B. Contractor shall provide a completed W-9 form to the City prior to execution by the City of this Agreement.

#### **Sec. 9. Performance of Work by Contractor.**

(a) The Contractor warrants that all work performed under this Contract conforms to the Contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of 1 year from the date of issuance by the City of written final completion of the work.

(b) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to City - owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(c) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(d) The City shall notify the Contractor, in writing, within a reasonable time, not to exceed 30 days, after the discovery of any failure, defect, or damage.

(e) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time, not to exceed 30 days unless otherwise agreed in writing and signed by the City Manager or his designee, after receipt of notice, the City shall have the right to replace repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(f) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this Contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice,

(2) Require all warranties to be executed, in writing, for the benefit of the City, if directed to do so by the City; and

(3) Enforce all warranties for the benefit of the City, if directed to do so by the City

(g) In the event the Contractor's warranty has expired, the City may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(h) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the City nor for the repair of any damage that results from any defect in City-furnished material or design.

**Sec. 10. Performance of Work by City.** If the Contractor fails to perform the Work in accordance with the schedule referred to in Exhibit "A", the City may, in its discretion, perform or cause to be performed some or all of the Work, and doing so shall not waive any of the City's rights and remedies. Before doing so, the City shall give the Contractor reasonable notice of its intention. The Contractor shall reimburse the City for all costs incurred by the City in exercising its right to perform or cause to be performed some or all of the Work pursuant to this section.

**Sec. 11. Attachments.** Additional exhibits may be used to further define this Agreement when the Contractor and City so agree. Any additional exhibits shall be designated as exhibits to the Agreement with capitalized, sequential letters of the alphabet, shall be attached hereto and incorporated herein by reference as if the same were fully recited, and shall become terms of this Agreement upon execution by both parties.

*The following attachments are made a part of this Contract and incorporated herein by reference:*

- (a) Exhibit "A" – Scope of Services / Fee for Scope of Services.
- (b) Exhibit "B" – Contractor must execute the Affidavit attached as Exhibit "B", attesting to compliance with state and federal laws related to E-Verify.
- (c) Exhibit "C" – Tax Form(s).
- (d) Exhibit "D" - Certificate of Insurance.

In case of conflict between an attachment and the text of this contract excluding the attachment, the text of this contract shall control. Any attachment that materially alters the standard terms contained herein must be reviewed by the City Attorney and approved by the City in writing.

**Sec. 12. Notice.** (a) All notices and other communications required or permitted by this Contract shall be in writing and shall be given either by personal delivery, fax, or certified United States mail, return receipt requested, addressed as follows:

To the City:

Jacklyn Deal, Director of  
Engineering City of Concord  
P.O. Box 308  
Concord, NC 28026  
Fax Number: (704) 786-4521

To the Contractor:

VaLerie Kolczynski, Esq.  
City Attorney  
PO Box 308  
Concord, NC 28026  
Fax Number: (704) 784-1791

(b) **Change of Address, Date Notice Deemed Given:** A change of address, fax number, or person to receive notice may be made by either party by notice given to the other party. Any notice or other communication under this Contract shall be deemed given at the time of actual delivery, if it is personally delivered or sent by fax. If the notice or other communication is sent by US Mail, it shall be deemed given upon the third calendar day following the day on which such notice or other communication is deposited with the US Postal Service or upon actual delivery, whichever first occurs.

**Sec. 13. Indemnification.** To the maximum extent allowed by law, the Contractor shall defend, indemnify, and save harmless the City of Concord, its agents, officers, and employees, from and against all charges that arise in any manner from, in connection with, or out of this Contract as a result of the acts or omissions of the Contractor or subcontractors or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable except for damage or injury caused solely by the negligence of the City its agents, officers, or employees. In performing its duties under this section, the Contractor shall at its sole expense defend the City of Concord, its agents, officers, and employees with legal counsel reasonably acceptable to City. As used in this subsection – "Charges" means claims, judgments, costs, damages, losses, demands, liabilities, duties, obligations, fines, penalties, royalties, settlements, expenses, interest, reasonable attorney's fees, and amounts for alleged violations of sedimentation pollution, erosion control, pollution, or other environmental laws, regulations, ordinances, rules, or orders. Nothing in this section shall affect any warranties in favor of the City that are otherwise provided in or arise out of this Contract. This section is in addition to and shall be construed separately from any other indemnification provisions that may be in this Contract.



This section shall remain in force despite termination of this Contract (whether by expiration of the term or otherwise) and termination of the services of the Contract under this Contract.

**Sec. 14. Corporate Status.** If the Contractor is dissolved or suspended and the Contractor does not notify the City of such dissolution within three (3) business days from date of dissolution or suspension, and/or the corporate status is not reinstated within thirty (30) days, this Contract, at the sole option of the City and without prejudice to City's other remedies, shall be declared null and void or the Contractor shall execute a new contract showing the Contractor's correct legal entity.

**Sec. 15. Miscellaneous.**

(a) Choice of Law and Forum. This Contract shall be deemed made in Cabarrus County, North Carolina. This Contract shall be governed by and construed in accordance with the laws of North Carolina. The exclusive forum and venue for all actions arising out of this Contract shall be the appropriate division of the North Carolina General Court of Justice, in Cabarrus County. Such actions shall neither be commenced in nor removed to federal court. This section shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this section.

(b) Waiver. No action or failure to act by the City shall constitute a waiver of any of its rights or remedies that arise out this Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

(c) Performance of Government Functions. Nothing contained in this Contract shall be deemed or construed so as to in any way estop, limit, or impair the City from exercising or performing any regulatory, policing, legislative, governmental, or other powers or functions.

(d) Severability. If any provision of this Contract shall be unenforceable, the remainder of this Contract shall be enforceable to the extent permitted by law.

(e) Assignment, Successors and Assigns. Without the City's written consent, the Contractor shall not assign (which includes to delegate) any of its rights (including the right to payment) or duties that arise out this Contract. Unless the City otherwise agrees in writing, the Contractor and all assigns shall be subject to all of the City's defenses and shall be liable for all of the Contractor's duties that arise out of this Contract and all of the City's claims that arise out of this Contract. Without granting the Contractor the right to assign, it is agreed that the duties of the Contractor that arise out of this Contract shall be binding upon it and its heirs, personal representatives, successors, and assigns.

(f) Compliance with Law. In performing all of the Work, the Contractor shall comply with all applicable law. Without limitation, Contractor shall comply with the requirements of Article 2, Chapter 64 (Verification of Work Authorization) of the North Carolina General Statutes relating to E-Verify. Further, if Contractor utilizes a subcontractor, Contractor shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the General Statutes. Pursuant to the requirements of the Iran Divestment Act, N.C.G.S. § 143C-6A-1, et. seq., Contractor certifies that that as of the Effective Date of this Agreement, Contractor is not on the Final Divestment List as created by the State Treasurer in compliance with N.C.G.S. § 143-6A-4 and located at [www.nctreasurer.com/Iran](http://www.nctreasurer.com/Iran). Furthermore, Contractor agrees that it will not enter into any subcontracts for the performance of this Agreement with any entity on the Final Divestment List.

(g) City Policy. THE CITY OPPOSES DISCRIMINATION ON THE BASIS OF RACE AND SEX AND URGES ALL OF ITS CONTRACTORS TO PROVIDE A FAIR OPPORTUNITY FOR MINORITIES AND WOMEN TO PARTICIPATE IN THEIR WORK FORCE AND AS SUBCONTRACTORS AND VENDORS UNDER CITY CONTRACTS.

(h) EEO Provisions. During the performance of this Contract the Contractor agrees as follows:  
(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or disability. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or disability. The Contractor shall post in conspicuous places available to employees and applicants for employment, notices setting forth these EEO provisions.  
(2) The Contractor in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or disability.

(i) No Third Party Right Created. This Contract is intended for the benefit of the City and the Contractor and not any other person.

(j) Principles of Interpretation. In this Contract, unless the context requires otherwise the singular includes the plural and the plural the singular. The pronouns "it" and "its" include the masculine and feminine. Reference to statutes or regulations include all statutory or regulatory provisions consolidating, amending, or replacing the statute or regulation. References to contracts and agreements shall be deemed to include all amendments to them. The word



“person” includes natural persons, firms, companies associations, partnerships, trusts, corporations, governmental agencies and units, and any other legal entities.

(k) Modifications, Entire Agreement. A modification of this Contract is not valid unless signed by both parties and otherwise in accordance with requirements of law. Further, a modification is not enforceable against the City unless the City Manager or other duly authorized official signs it for the City. This Contract contains the entire agreement between the parties pertaining to the subject matter of this Contract. With respect to that subject matter, there are no promises, agreements, conditions, inducements, warranties, or understandings, written or oral, expressed or implied, between the parties, other than as set forth or referenced in this Contract.

(l) Corporate Seal. If a corporate seal is included by any party to this Contract, it is only for authentication purposes. This Contract is not signed under seal.

(m) No Employment Relationship. For all matters relating to this Agreement, Contractor shall be deemed an Independent Contractor. Nothing in this Agreement shall be construed in such a manner as to create an employee-employer relationship between City and Contractor.

**(The following section applies to construction contracts only if the total amount of contracts awarded for the project is \$300,000 or more.)**

**Sec. 16. Bonding.** Both performance and payment bonds for the full amount of this Contract are required to be attached. Instead of bonds, you may submit a deposit of money, certified check or government securities for the full amount of the Contract. The performance bond shall have a value equal to 100% of this Contract. This bond shall be conditioned upon faithful performance of the Contract in accordance with the plans, specifications and conditions of the Contract. The performance bond shall be solely for the protection of the City. The payment bond shall be in an amount equal to 100% of the Contract, and conditioned upon the prompt payment for all labor or materials for which a contractor or subcontractor is liable. The payment bond shall be solely for the protection of the persons furnishing materials or performing labor for which a contractor, subcontractor or construction manager at risk is liable.

When the total amount of contracts awarded for any project exceeds three hundred thousand dollars (\$300,000), performance and payment bonds are required from any contractor or construction manager at risk with a contract amount of or exceeding fifty thousand dollars (\$50,000).

**Sec. 17. Dispute Resolution.** It is understood and agreed that NCGS 143-128(f1-g) requires that disputes arising under an agreement for the erection, construction, alteration or repair of a building be subject to a dispute resolution process specified by the City. The amount in controversy shall be at least \$15,000.00 before this dispute resolution procedure may be used. In compliance with this statutory provision, the City specifies this Section as the dispute resolution process to be used on this Project. It is further understood and agreed that this dispute resolution process is based on non-binding mediation and will only be effective to the extent that the Parties to any mediated dispute participate in the mediation in good faith. It is also understood and agreed that the City is under no obligation under any circumstance to secure or enforce the participation of any other Party in the mediation of any dispute subject to this Section and NCGS 143-128(f1-g).

**This Section 17 does not apply to:**

- (a) The purchase and erection of prefabricated or relocatable buildings or portions of such buildings, except that portion of the work that must be performed at the construction site; or**
- (b) The erection, construction alteration or repair of a building when the cost of such building is \$300,000 or less.**

17.1 Any dispute arising between or among the Parties listed in Section 17.3 that arises from an agreement to construct the Project, including without limitation a breach of such agreement, shall be subject to non-binding mediation administered by the American Arbitration Association under its Construction Industry Mediation Rules (“Rules”), except as otherwise expressly set forth in this Section. To the extent any provision of the Rules is inconsistent with the provisions of this Section, the provisions of this Section shall control. The mediation provided in this Section shall be used pursuant to this Agreement and NCGS 143-128(f1-g) and is in lieu of any dispute resolution process adopted by the North Carolina State Building Commission, which process shall not apply to this Project.

17.2 For purposes of this Section the following definitions shall apply:

- a. *Agreement to construct the Project* means an agreement to construct the Project that is subject to the requirements of NCGS 143-128 and does not include any agreement related to the Project that is not subject to said statute.
- b. *Construct or construction* refers to and includes the erection, construction, alteration or repair of the Project.
- c. *Party or Parties* refers to the parties listed in Section 16.4.
- d. *Project* means the building to be erected, constructed, altered or repaired pursuant to this Agreement.

17.3 The City and any Party contracting with the City or with any first-tier or lower-tier subcontractor for the construction of the Project agree to participate in good faith in any mediation of a dispute subject to this Section and NCGS 143-128(f1-g), including without limitation the following Parties (if any): architect(s), engineer(s), surveyor(s), construction manager, construction manager at risk, prime contractor(s), surety(ies), subcontractor(s), and supplier(s).

17.4 In order to facilitate compliance with NCGS 143-128(f1-g), the Contractor and all other Parties shall include this Section 17 in every agreement to which it (any of them) is a Party for the construction of the Project without variation or exception. Failure to do so will constitute a breach of this Agreement, and the Contractor or other Party failing to include this Section in any agreement required by this Section shall indemnify and hold harmless the remaining Parties from and against any and all claims, including without limitation reasonable attorney fees and other costs of litigation, arising in any manner from such breach. Notwithstanding the foregoing provisions of this Section, it is expressly understood and agreed that the Parties are intended to be and shall be third-party beneficiaries of the provisions of this Section and can enforce the provisions hereof.

17.5 The following disputes are not subject to mediation: (i) a dispute seeking a non-monetary recovery; and (ii) a dispute seeking a monetary recovery of \$15,000 or less.

17.6 A dispute seeking the extension of any time limit set forth in an agreement to construct the Project shall be subject to mediation pursuant to this Section and NCGS 143-128(f1-g), but only if the damages which would be suffered by the Party seeking the extension would exceed \$15,000 if the disputed extension is denied. To the extent that liquidated damages are set forth in such agreement as the measurement of damages for failure by such Party to meet such time limit, such liquidated damages shall be the exclusive standard for determining the amount of damages associated with such dispute.

17.7 For purposes of this Section, a dispute is limited to the recovery of monetary damages from the same transaction or occurrence against a single Party or two or more Parties alleged to be liable jointly, severally or in the alternative. Two or more disputes may not be consolidated or otherwise combined without the consent of all Parties to such disputes.

17.8 In addition to such matters as are required by the Rules, a request for mediation shall include the amount of the monetary relief requested.

17.9 Prior to requesting mediation, a Party must form a good faith belief that it is entitled under applicable law to recover the monetary amount to be included in the request from one or more of the remaining Parties. Such belief must be based on a reasonable and prudent investigation into the dispute that is the subject of the request. The request for mediation must be based on such investigation and may not include any amount or the name of any remaining Party, unless supported by such investigation and good faith belief by the Party requesting the mediation.

17.10 If a Party breaches any provision of Section 17.9, it shall indemnify and hold harmless all other Parties from any costs, including reasonable attorney fees and other costs of litigation, and damages incurred by such other Parties that arise from such breach.

17.11 All expenses incurred by a Party to a dispute in preparing and presenting any claim or defense at the

mediation shall be paid by the Party. Such expenses include without limitation preparation and production of witnesses and exhibits and attorney fees. All other expenses of the mediation, including filing fees and required traveling and other expenses of the mediator, shall be borne as follows: one half by the Party requesting the mediation, with the remaining parties paying equal shares of the remaining expenses and costs; provided that, if the City is named as a party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties. If more than one Party to a dispute requests a mediation, the mediation expenses and costs to be divided among the Parties shall be borne equally by the Parties to the dispute; provided that, if the City is named as a Party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties.

17.12 The mediation shall be held at a location agreeable to the mediator and all of the Parties; provided that, if no agreement can be reached, the mediation will be held at such location in Cabarrus County as the mediator shall determine.

17.13 The provisions of this Section are subject to any other provision of this Agreement concerning the submission, documentation and/or proof of any claim or dispute. Such other provisions shall apply in full force and shall be satisfied as a condition precedent to mediation pursuant to this Section.

17.14 The Parties understand and agree that mediation in accordance with this Section shall be a condition precedent to institution of any legal or equitable proceeding seeking monetary recovery based on any dispute that is subject to mediation pursuant to this Section.

**Sec. 18. Breach.** In the event of a violation of any material term of this Agreement, the non-violating party may terminate the Agreement upon written notice. Such notice shall state the violation with specificity and shall give ten (10) days to cure the violation. The cure period shall be measured as ten (10) days from the date of receipt of notice by the violating party, or, if the date is not known, then thirteen (13) days from the date the notice is placed in the United States Post. If the violation remains uncorrected at the end of the cure period, the Agreement shall be terminated without any further action by the non-violating party. Any remaining disputes shall be subject to the dispute resolution procedure set forth above, if applicable.

[Signature Page to Follow]

IN WITNESS WHEREOF, the City of Concord and the Contractor have caused this Contract to be executed by their respective duly authorized agents or officers.

CITY OF CONCORD:

(Typed or Printed Legal Name of Contractor)

By: \_\_\_\_\_  
City Manager

By: \_\_\_\_\_  
Signature of President/Vice President/Manager/Partner

Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST BY:

Date: \_\_\_\_\_

\_\_\_\_\_  
City Clerk

ATTEST:

BY: \_\_\_\_\_  
Signature of Vice President, Secretary, or other officer

Printed Name: \_\_\_\_\_

APPROVED AS TO FORM:

Title \_\_\_\_\_

\_\_\_\_\_  
Attorney for the City of Concord

SEAL

**APPROVAL BY CITY FINANCE OFFICER**

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

\_\_\_\_\_  
Signature

EXHIBIT "B"

E-VERIFY

STATE OF NORTH CAROLINA

AFFIDAVIT

COUNTY OF CABARRUS

\*\*\*\*\*

I, \_\_\_\_\_ (the individual signing below), being duly authorized by and on behalf of  
\_\_\_\_\_ (the legal name of the entity entering the contract, "Employer") after first being  
duly sworn hereby swears or affirms as follows:

1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-26.
  2. Employer understands that Employers Must Use E-Verify. Each employer (as such term is defined in NCGS § 64-25), after hiring an employee (as such term is defined in NCGS § 64-25) to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS §64-26(a). Employer attests that Employer is following the requirements of the federal and state laws relevant to E-verify.
  3. Employer is a person, business entity, or other organization that transacts business in the State of North Carolina. Employer employs 25 or more employees in this State. (mark Yes or No)  
a. YES\_\_\_\_\_, or b. NO\_\_\_\_\_.
  4. Employer attests that all subcontractors employed by it as part of this contract comply with the requirements of E-Verify, and Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer as part of any contract with the City of Concord.
  5. Employer shall have a continuing duty to inform the City of Concord of any changes to this sworn information.
- This\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Signature of Affiant  
Print or Type Name: \_\_\_\_\_

State of North Carolina County of Cabarrus

Signed and sworn to (or affirmed) before me, this the \_\_\_\_\_  
day of \_\_\_\_\_, 2024.

My Commission Expires:

\_\_\_\_\_  
Notary Public

(Affix Official/Notarial Seal)

**EXHIBIT “C”**

**TAX FORM(S)**

**EXHIBIT “D”**

**CERTIFICATE OF INSURANCE**

## **NOTICE OF AWARD**

TO:

FROM: City of Concord City Council (OWNER)  
P.O. Box 308  
26 Union Street, South  
Concord, North Carolina 28026-0308

PROJECT: **City of Concord City of Concord Asbestos Abatement and Demolition for  
228 McGill Ave. & 234 - 240 McGill Ave.**

### **City Project No. 2024-001**

You are hereby notified that the bid submitted by you for the above-named project in response to the City of Concord's Invitation to Bid dated **January 4, 2024**, in the amount of

\_\_\_\_\_ And \_\_\_\_\_/100 DOLLARS

(\$\_\_\_\_\_) has been accepted.

You are hereby required to execute the formal AGREEMENT with the City of Concord City Council and to furnish all Contractor's Bond(s), Certificate of Insurance and Power of Attorney(s) along with other documents pertaining to the work as designated by the City of Concord.

If you fail to execute said AGREEMENT and to furnish this and any other required documents pertaining to the work within ten (10) days from the date of delivery of this NOTICE OF AWARD, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your bid as abandoned and to award the work covered by your proposal to another, or to re-bid the work or otherwise dispose thereof as the Owner may see fit.

Dated this the \_\_\_\_\_ day of \_\_\_\_\_, 2024

**City of Concord, North Carolina**

By: \_\_\_\_\_  
Title: City Manager

### **ACCEPTANCE OF NOTICE OF AWARD**

Receipt of the above NOTICE OF AWARD is hereby acknowledged this the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

By: \_\_\_\_\_  
Title: \_\_\_\_\_



## **NOTICE TO PROCEED**

TO:

FROM: City of Concord City Council (OWNER)  
P.O. Box 308  
26 Union Street, South  
Concord, North Carolina 28026-0308

PROJECT: **City of Concord City of Concord Asbestos Abatement and Demolition for  
228 McGill Ave. & 234 - 240 McGill Ave.**

**City Project No. 2024-001**

Contract Amount: \_\_\_\_\_ DOLLARS ( \$ \_\_\_\_\_ ).

You are hereby notified to commence work on or before the \_\_\_\_\_ of \_\_\_\_\_, 2024, and are to fully complete the work by the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

Your project completion date is therefore the \_\_\_\_\_ day of \_\_\_\_\_, 2024, and as set forth in the above-named project's schedule unless an extension is granted by the City of Concord Director of Engineering in writing.

**City of Concord, North Carolina**

By: \_\_\_\_\_  
Title: City Manager

Dated this the day of \_\_\_\_\_, 2024.

# City of Concord

Post Office Box 308  
Concord, North Carolina 28026-0308

For Office Use Only:

Charge to P.O. #

Due:

## PROJECT:

Date Notice to Proceed: ==>

Completion Date: =====>

Days Remaining in Contract ->

Percent Work Complete: ==>

Percent Time Complete: ==>

Percent Payment Complete: ->

APPLICATION FOR PAYMENT NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

PERIOD FROM: \_\_\_\_\_ TO: \_\_\_\_\_

## CERTIFICATE OF THE CONTRACTOR

To the best of my knowledge and belief, I certify that this periodical estimate is correct and all work has been performed and materials supplied in full accordance with the terms and conditions of the contract documents between the undersigned contractor and the City of Concord.

### GROSS AMOUNT OF PARTIAL PAYMENT - \$

LESS: RETAINAGE AT PERCENT -----\$

PREVIOUS PAYMENT -----\$

LIQUIDATION DAMAGES

\_\_\_\_DAYS @ \$\_\_\_\_\_-----\$

OTHER DEDUCTIONS:

-----\$

-----\$

TOTAL DEDUCTIONS ----- \$

NET AMOUNT DUE THIS ESTIMATE ----- \$

Name of Contractor: \_\_\_\_\_ Address: \_\_\_\_\_

Signed: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

## CERTIFICATE OF CONSTRUCTION ADMINISTRATOR/ENGINEER

I certify that I have verified this periodical estimate and that to the best of my knowledge and belief, it is a true and correct statement of work performed and materials supplied under the contract.

Consultant Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

Construction Administrator: \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED AND PAYMENT RECOMMENDED:

CITY OF CONCORD

Signed: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_



# PAY REQUEST

ITEM	DESCRIPTION	QUANTITY		UNIT PRICE	TOTAL PRICE	QUANT. THIS EST.	TOTAL THIS EST.	QUANT. PREV. EST.	TOTAL PREVIOUS	QUANT. TO DATE	TOTAL TO DATE	QUANT. DIFF.	TOTAL DIFF.
1			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
2			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
3			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
4			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
5			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
6			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
7					\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
8			EA		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
9			LBS		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
10			SF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
11			SF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
12			LF		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
13													
a			EA		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
b			EA		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
c			EA		\$ -		\$ -		\$ -	0.00	\$ -	0.00	\$0.00
Add 1			EA				\$ -		\$ -	0.00	\$ -	0.00	\$0.00
Add 2			LS				\$ -		\$ -	0.00	\$ -	0.00	\$0.00
Add 3			LF				\$ -		\$ -	0.00	\$ -	0.00	\$0.00
Add 4			SY				\$ -		\$ -	0.00	\$ -	0.00	\$0.00
Add 5			SY				\$ -		\$ -	0.00	\$ -	0.00	\$0.00
	Base Bid	\$			\$ -		\$ -		\$ -		\$ -		\$0.00
	10 % Contingency	\$			\$ -								\$ -
	Total Base Bid	\$			\$ -								\$0.00

**CITY OF CONCORD**  
**CONCORD, NORTH CAROLINA**  
**CONTRACT CHANGE ORDER**

**Project:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
\_\_\_\_\_

**Owner:** City of Concord **Change Order No.** \_\_\_\_\_

**To:** (CONTRACTOR)

**Account No.** \_\_\_\_\_  
**Purchase Order No.** \_\_\_\_\_

**You are hereby requested to make the following changes in this Contract to comply with the provisions of the attached and/or the original Contract Documents.**

Item No.	Description of Changes	Additions	Deductions
		\$0.00	\$0.00

**Original Contract Amount**

**Net Changes by Previous Change Orders**

**Net Changes This Change Order** \_\_\_\_\_ **\$0.00**

**New Contract Amount**

<b>\$0.00</b>
---------------

**The Contract Time will be \_\_\_\_\_ by \_\_\_\_\_ calendar days.**

**The Completion Date as of this Change Order is:** \_\_\_\_\_

**Accepted:** (Contractor) \_\_\_\_\_

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Accepted:** CITY OF CONCORD

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**This instrument has been pre-audited in the manner required by Local Government Budget and Fiscal Control Act.**

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Finance Director**

**CITY OF CONCORD FIELD**  
**ORDER**  
***ENGINEERING DEPARTMENT***

FIELD ORDER NO \_\_\_\_\_ CONTRACT \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT \_\_\_\_\_

LOCATION \_\_\_\_\_

TO: \_\_\_\_\_

\_\_\_\_\_  
=====

THIS ORDER AUTHORIZES YOU TO PROCEED WITH THE ALTERATIONS AND/OR ADDITIONS TO THE WORK AS DESCRIBED HEREIN, IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF OUR STANDARD FORM OF CONTRACT.

DESCRIPTION OF WORK: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- ☐ QUOTATION RECEIVED AND APPROVED BY THE CITY OF CONCORD.
- ☐ QUOTATION NOT RECEIVED. PLEASE FURNISH QUOTATION IMMEDIATELY TO THE CITY OF CONCORD FOR CHECK AND APPROVAL.
- ☐ TIME AND MATERIAL BASIS. FURNISH TIME AND MATERIAL REPORTS DAILY TO THE CITY OF CONCORD FOR VERIFICATION AND SIGNATURE.
- ☐ OTHER \_\_\_\_\_

AUTHORIZED BY: \_\_\_\_\_

**NORTH  
CAROLINA  
SALES TAX  
REPORT**

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

PROJECT: \_\_\_\_\_

PURCHASE ORDER: \_\_\_\_\_

DATE	VENDOR NAME	INVOICE NO.	NET INVOICE AMOUNT	STATE TAX AMOUNT	COUNTY TAX AMOUNT	SPECIAL COUNTY TAX	COUNTY PAID
TOTAL							

I certify that the above listed vendors were paid sales tax upon purchases of materials during the period covered by the Construction Estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract. No tax on purchases or rentals of tools and/or equipment is included in the above list. All the materials above became a part of or is annexed to the building or structure being erected, altered or repaired.

\_\_\_\_\_  
Contractor or Subcontractor Name (PRINT)  
Signature  
: \_\_\_\_\_  
Name  
(print): \_\_\_\_\_  
Title: \_\_\_\_\_

SWORN AND SUBSCRIBED BEFORE  
ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2024.

\_\_\_\_\_  
NOTARY  
PUBLIC

MY COMMISSON EXPIRES ON: \_\_\_\_\_

# **North Carolina 811, Inc.**

North Carolina One Call Center, Inc., a non-profit organization funded by participating utility companies and municipalities in the interest of community and job safety and improved service through damage reduction to the utilities.

**A ONE CALL TOLL FREE TELEPHONE NUMBER, 1-800-632-4949, PROVIDES AN AVENUE TO ALL THE PARTICIPATING MEMBERS FROM ANY POINT WITHIN THE STATE OF NORTH CAROLINA.**

Anyone proposing to excavate, dig, bore, tunnel, blast or disturb the earth in any way buried utilities may be damaged is requested to call the toll-free number between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, three working days before starting the proposed work.

Within minutes of your telephone call, the participating members will be made aware of your plans and will be given pertinent information that has been provided by you about your planned work. You will be told the names of the participating members from whom you can expect a response - if there are buried facilities in the path of your activity, the route of the utilities will be staked and/or marked at no expense to you. If there are no facilities around the planned work, you will be called or notified by a representative of a participating company accordingly.

Should a non-participating utility operator be serving your area, we recommend that you call them on an individual basis. All utility operators, whether company or municipality, will be provided an opportunity to become a member of North Carolina One Call Center, Inc.

Naturally, knowing the route of utilities, the excavator is expected to exercise caution and to avoid damage as the project progresses.

Damage prevention does not just happen – it is a planned and orderly process through which each of us can participate - **YES, WE CAN AND WE WILL DRAMATICALLY REDUCE DAMAGES TO THE UTILITIES IN THE STATE OF NORTH CAROLINA!! THANKS FOR YOUR HELP.**

**BEFORE YOU DIG**  
**IN THE INTEREST OF COMMUNITY AND JOB SAFETY AND IMPROVED SERVICE**

**CALL NORTH CAROLINA ONE CALL CENTER, INC.**

**1-800-632-4949 OR 811**



## **SECTION II**

# **GENERAL CONDITIONS**

**Please reference online at**

See City Webpage – Engineering Department – Forms & Downloads – Standard Details & Specifications

[PART A - SECTION II \(concordnc.gov\)](#)

[ARTICLE 1 \(concordnc.gov\)](#)

**SECTION III**  
**TD ENVIRONMENTAL ABATEMENT**  
**PLANS AND DEMOLITION & ABATEMENT**  
**BID SHEET**



**Environmental**

A DBA OF T.D. RIGGS ENTERPRISES

336-701-5332

tdenv.com

PO Box 1480

Welcome, NC 27374

---

# **Asbestos Abatement Project Design for Class I,II, and III Regulated Asbestos Removal for Demolition**

Location:

**234 - 240 McGill Ave.**

Concord, NC 28025

Prepared for:

**City of Concord**

35 Cabarrus Avenue West

Concord, NC 28025

Project Design in reference to:

**One Source Environmental NESHAP Survey #S23-1011**

**Dated April 11<sup>th</sup> 2023**

**NC Asbestos Inspector:**

**Kathryn Hubicki**

**NC Accreditation # 12783**

**NC Asbestos Project Designer:**

**Richard Riggs**

**NC Accreditation #40531**

**Expires 2/24/2023**

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## Introduction Statements:

- The purpose of the following asbestos abatement project design is to comply with OSHA 29 CFR 1926.1101 Asbestos in Construction Regulations, EPA regulations including AHERA 40 CFR Chapter 1 Subchapter R, Part 763 Subpart E, ASHARA 40 CFR Appendix C to Subpart E of Part 763, and NESHAP 40 CFR Subpart M.
- *This project design is for the disturbance of friable and non-friable asbestos containing materials (>1%).*
- The purpose of this removal is to prepare the structure at 228 McGill Ave for demolition
- The provided project design is based on OSHA Class I and Class II regulated work practices for both regulated (friable) and non-regulated (non-friable) removals of Non-Friable Category 1 and 2 Asbestos Containing Materials. These work practices utilize standard Wet Methods, HEPA filtration, and Prompt Cleanup while under Negative pressure containment, three chamber decontamination shower system with air locks and load out, while donned in appropriate PPE and Respiratory protection, then providing Proof of proper disposal of Asbestos Containing Materials.
- This project will fall under North Carolina rules for public space. Quantity rules apply as identified materials are greater >3000 sq ft, 1500 ln ft, or 656 cu ft. As this project is for the purposes of immediate demolition, the Supervising Air Monitor (Michael D Zavislak, CIH) will provide the necessary SAM written Air Monitoring Plan separate from this project design as required by North Carolina Health Hazard Control to TD Environmental prior to the start of the project.
- Any material disturbed yielding friability in quantities greater than 160 sq ft, 260 ln ft, or 35 cu ft will be included on the required NCHHCU 10-day notification (permit).
- Notifications of working schedules should be given to the local Fire Department, Police, and EMS Services.
- All asbestos regulations through OSHA, EPA, and NC Health Hazard Control will apply.
- A local demolition permit through Cabarrus County will be required for the final demolition activities in addition to the NC Health Hazard Control Unit permit for Abatement and Demolition
- The City of Concord will require an affidavit, including the names of all employee's who will be working on City of Concord property, to have successfully passed the NC Sexual Predator Registry Check, and a NC Criminal Background check. Personnel working on this project should be free from Felonious or serious misdemeanor convictions involving violence, weapons, domestic abuse, narcotic distribution, larcenies, or predatory acts including sexual or stalking activities. In the event an incident occurs, the City of Concord will retain the right to request the original copy of those background checks which should be dated prior to personnel working on the project site. Background checks that are not dated prior to the start of work will be considered a breach of contract, falsifying of government documentation with the potential of being treated as a fraudulent criminal act, and potentially the forfeiture of the contractor's performance bond.

- The contractor will be required to provide a 6 ft tall construction fence around the working area at all times with the capability of securing the premises while work is not being performed.
- Demolition of the structure is to take place immediately (generally 48 to 72 hours after or within the agreed upon time frame with TD Environmental and The City of Concord upon the receiving notification of a successful abatement clearance for the structure from TD Environmental.
- All contractors will be vetted through public information sources to validate capabilities stated on the bid sheet. This includes the stated dependency on in-house and subcontracted work forces. Do not understate subcontractor use or overstate your company's inhouse capabilities. Be honest. Low bidder is not guaranteed the award. The lowest qualified, fully vetted bidder will be recommended for award.
- The City of Concord reserves the right to refuse or reject any and all bids for any reason without notice. Submitted bids cannot be retracted for 30 days after the bid opening.
- Any contractor being considered for AWARD will also be vetted through for EPA and OSHA violations and citations. Contractors with active violations or citations within the past 3 years will not be considered for award.
- Contractors involved with a current civil or criminal litigation must provide an acceptable explanation and discloser to the City of Concord before submitting a bid and enduring the vetting process. Undisclosed litigations will result in a bid being discarded and not considered for award.
- Minority and local subcontractor participation goals are highly encouraged and set at 20%. The City of Concord is dedicated to utilizing, if available, qualified local and minority owned business to support the local and surrounding communities. While local and Minority subcontractors may not always be available, efforts will be considered in leu for the scoring and vetting processes. There is a log provided in the bid packet for showing efforts in using Minority and Local contractors.
- The Abatement portion should be properly staffed to be completed in less than 10 working days.
- Contractors should review the separate Bid packet and make sure all pages are initialed and complete including any addendum acknowledgements.
- Contractor must maintain the minimum insurance requirements for the City of Concord. An example and the required verbiage is included in the separate bid packet.
- Contractors will be requires to submit a bid bond from a bonding company in the amount equal to 5% of the total price of the bid. A performance and payment bond from a NC bonding company will be required for the full amount of the project.

## **Definitions:**

### **Acoustical Plaster**

Sound absorbing finishing material mill formulated for application in areas where a reduction in sound reverberation or noise intensity is desired. These materials usually are applied in a minimum thickness of ½" (13 mm). The finish material is applied over gypsum plaster, plaster brown coat or other base plaster. The surface material is usually friable and has a rough surface appearance.

### **Acoustic Tile**

Tile-shaped blocks of sound absorbent material used for ceilings or as wall facing. May be glued to substrate or laid in a rigid grid work.

### **ACM (ACBM)**

Asbestos-Containing Material (Asbestos-containing Building Material). Any material containing more than one percent asbestos.

### **Adequately Wet**

Adequately Wet means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

### **AHERA**

Asbestos Hazard Emergency Response Act

### **AIA**

American Institute of Architects Air Monitoring The process of measuring the fiber content of a specific volume of air.

### **Amended Water**

Water to which a surfactant has been added for use in wetting ACM to control asbestos fibers.

### **APM**

Asbestos Program Manager

### **Asbestos**

Chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that has been chemically treated and/or altered.

### **Asbestos-Containing Waste Material**

Mill tailings or any waste that contains commercial asbestos and is generated by a source regulated under NESHAP. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing waste and materials contaminated with asbestos including disposable equipment and clothing.

### **Asbestos debris**

Pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

### **Asbestos Hazard Emergency Response Act (AHERA)**

An EPA regulation published in the October 30, 1987 Federal Register covering asbestos-containing materials in schools. AHERA requires local education agencies to identify ACM in their school buildings, develop an asbestos management plan and implement this plan. An O&M program is one permitted response action, where appropriate.

## **Asbestos O&M Work**

Cleaning, maintenance, repair or renovation work involving asbestos containing materials where the intent of the activity is not to remove asbestos. NESHAP requires that the owner or operator of a demolition or renovation activity conduct a thorough inspection of the affected facility or part of the facility where demolition or renovation will occur.

## **Asbestos Program Manager (APM)**

A building owner or **D2** # Appendix D # Glossary # © NIBS 1996 # Page 160 designated representative who supervises all aspects of the facility asbestos management and control program.

## **Breathing Zone**

A hemisphere forward of the shoulders with a radius of approximately 6" to 9" (150-250 mm).

## **Bridging encapsulant**

An encapsulant that forms a discrete layer on the surface of an asbestos matrix.

## **CFR**

Code of Federal Regulations

## **Clerk-of-the-works**

A representative of the architect or owner who oversees construction, handles administrative matters, and ensures that the construction is in accordance with the contract documents.

## **Competent Person**

means, in addition to the definition in 29 CFR 1926.32 (f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work one who is

specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR part 763) for supervisor, or its equivalent and, for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92 (a)(2).

## **Compliance Instruction (Compliance Directive)**

Instruction issued by OSHA to establish policies and provide clarification to ensure uniform enforcement of OSHA standards.

## **Concealed Suspension or Concealed Spline Ceiling System**

Presents a monolithic ceiling surface, unobstructed by the crosshatching of exposed grid members. Tiles are typically 12" x 12" (300 x 300mm) or 12" x 24" (300 x 600 mm) with slots or kerfs cut into the edges of tiles for the purposes of accepting flat or "T" splines to support the tiles.

## **Confined Space**

A space that has limited openings for entry and exit, unfavorable natural ventilation and/or a space not designed for continuous worker occupancy. Examples include boilers, furnaces, pits, septic tanks, manholes, silos and utility vaults.

## **Critical Barrier**

One or more layers of polyethylene taped in place over openings into a work area. Openings to be covered include doors, windows, diffusers, and any other opening that could allow outside air into a work area.

## **CSRF**

Construction Sciences Research Foundation

**Decorative Acoustic Finish:**

Finishing material mill-formulated and spray applied up to about 3/8" (10 mm) thick over gypsum wallboard. Material has a rough surface and is similar in appearance to acoustic plaster but is not designed for sound absorption.

**Delamination**

Separation of one layer from another.

**Disposal Bag**

Properly labeled 6 mil (0.15 mm) thick (or thicker) leak-tight plastic bags used for transporting asbestos waste from work and to disposal site.

**Drop Cloth**

A layer of polyethylene on the floor of a work area to protect the floor below from contamination and to facilitate the clean-up of dust or debris generated during the work.

**EJCDC**

Engineers Joint Contract Documents Committee

**EL**

Excursion Limit

**Encapsulant**

A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

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**Enclosure**

The construction of an air-tight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

**EPA**

U.S. Environmental Protection Agency

**Excursion Limit (EL)**

The OSHA term used to define a maximum airborne concentration of asbestos in fibers per cubic centimeter as averaged over a sampling period of thirty minutes.

**Fiber Release**

Any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

**Fireproofing**

Material applied to structural elements or systems which provides increased fire resistance, usually serving no structural function. This material is typically applied using spray equipment.

**Friable Asbestos**

(See "Regulated ACM").

**Glove-bag**

A polyethylene or polyvinyl chloride bag-like enclosure affixed around an asbestos-containing source (most often, TSI) so that the material may be removed while minimizing release of airborne fibers to the surrounding atmosphere.

**HEPA Filter**

High-Efficiency Particulate Air Filter. Such filters are rated to trap at least 99.97% of all particles 0.3 microns (0.3 :m) in diameter or larger.

**HMR**

Hazardous Material Rules under Dept of Transportation regulations.

**MAP**

EPA Interim Final Model Accreditation Plan (MAP) for asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).



## **Medical Surveillance**

A periodic comprehensive review of a worker's health status. The required elements of an acceptable medical surveillance program are listed in the Occupational Safety and Health Administration standards for asbestos.

## **Mini-Enclosure**

An enclosure constructed of polyethylene sheeting used for small scale, short duration asbestos maintenance or renovation work. Mini-enclosures can be small enough to restrict entry to the asbestos work area to one worker. Appendix G to OSHA regulation 29 CFR 1926.58 discusses mini-enclosures and recommends that a change room be constructed contiguous to the mini-enclosure.

## **Miscellaneous ACM**

Interior asbestos-containing building material on structural components, structural members or fixtures, such as floor and ceiling tiles; does not include surfacing material or thermal system insulation.

## **NEA**

Negative Exposure Assessment

## **Negative Exposure Assessment**

A demonstration by the employer which complies with criteria in paragraph (f)(2)(iii) of 29 CFR 1926.1101, that employee exposure during an operation is expected to be consistently below the PELs. Negative Pressure System A local exhaust system intended to prevent the escape of contaminated air to the surrounding environment. It utilizes HEPA filtration capable of maintaining a pressure differential with a lower pressure inside the Work Area than in any adjacent area. This system recirculates clean air and/or generates a constant flow of air from adjacent areas into the work area.

## **Negative Pressure Respirator**

A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.

## **NESHAP**

National Emission Standard for Hazardous Air Pollutants – EPA Rules under the Clean Air Act (40 CFR Part 61). **D4** # Appendix D # Glossary # © NIBS 1996 # Page 162

## **NIOSH**

The National Institute for Occupational Safety and Health, which was established by the Occupational Safety and Health Act of 1970. Primary functions of NIOSH are to conduct research, issue technical information, and certify respirators.

## **O&M**

Operations & Maintenance

## **Operations & Maintenance**

(O&M) Program A program of work practices to maintain ACM in good condition, ensure clean-up of asbestos fibers previously released, and prevent further release by minimizing and controlling ACM disturbance or damage.

## **Occupied Area**

An area where personnel are present and are performing their normal activities intended for the area (such as in a typical office area from 8:00 to 5:00p.m., Monday through Friday).

## **OSHA**

Occupational Health & Safety Administration.

## **PAPR**

Powered Air Purifying Respirator.

## **Penetrating Encapsulant**

An encapsulant that is absorbed by the in situ asbestos matrix without leaving a discrete surface layer.

## **PELs**

Permissible Exposure Limits.

## **Personal Air Samples**

An air sample taken with a sampling pump directly attached to the worker with the collecting filter and cassette placed in the worker's breathing zone. These samples are required by the OSHA asbestos standards and the EPA Worker Protection Rule.

## **PCM**

Phase Contrast Microscopy

## **Phase Contrast Microscopy (PCM)**

A method of analysis using a light microscope, used to find the concentration of airborne fibers. Does not distinguish among asbestos and other fibers. Used by OSHA to find personal exposures, and by EPA to find area levels for AHERA project clearance.

## **Plenum**

Any space to convey air in a building or structure. The space above a suspended ceiling is often used as an air plenum. This term is also used in the work practices to refer to spaces above a ceiling not used to convey air.

## **PLM**

Polarized Light Microscopy (PLM) A method of analysis using a light microscope to find the chemical or mineral types of samples, including the concentration of asbestos in bulk materials. Used by EPA for AHERA and NESHAP, and by OSHA to see if asbestos is involved in a project.

## **Project Representative**

Architect's representative at the project site who assists in the administration of the construction contract.

## **Protection Factor**

The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

## **RCRA**

Resource Conservation and Recovery Act.

## **RACM**

Regulated ACM

## **Regulated ACM (RACM)**

As defined by NESHAP in the November 20, 1990 Federal Register, **regulated asbestos-containing material (RACM)** means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart. (**Note:** Regulated ACM is an EPA NESHAP concept. OSHA makes no **D5** # Appendix D # Glossary # © NIBS 1996 # Page 163 distinction between friable and non-friable asbestos). "Cutting" means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing or punching. "Grinding" means to reduce powder or small fragments and includes mechanical clipping or drilling.

**Friable asbestos material**

means any material containing more than 1 percent asbestos as determined using the method specified under AHERA (40 CFR Part 763, Sub-part F, Appendix A , section 1, Polarized Light Microscopy) that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

**Category I nonfriable asbestos-containing material (ACM)**

means asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified under AHERA.

**Category II nonfriable ACM**

means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Remove**

For Operations and Maintenance work on ACM, "remove" refers to the removal of ACM as needed to perform a maintenance or repair O & M activity.

**Removal Encapsulant**

A penetrating encapsulant specifically designed to minimize fiber release during removal of asbestos-containing materials rather than for in situ encapsulation.

**Repair**

Returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

**Respirator**

A device designed to protect the wearer from the inhalation of harmful particulates.

**Small-scale, Short-duration**

Term formerly used by OSHA to describe O&M work activities (in the previous OSHA construction standard). This term has been superseded by the work class definitions in the current OSHA standard.

**Surfacing ACM**

Asbestos-containing material that is sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural member, or other materials on surfaces for acoustical, fireproofing, or other purposes.

**Survey**

An asbestos survey is what EPA calls an inspection in the AHERA regulation. It consists of a visual and tactile inspection of a building to identify, quantify and assess the accessibility and condition of the ACM and suspected ACM present.

**Suspended "T" Bar Ceiling System**

A false or dropped ceiling composed of acoustic tiles laid into an inverted metal "T" bar grid frame suspended by wires from building framing members.

**Surfactant**

A chemical wetting agent added to water to improve penetration, thus, reducing the quantity of water required for a given operation or area.

**TEM**

Transmission Electron Microscopy Temporary Barriers One or more layers of 6 mil polyethylene installed to isolate a work area from other portions of a facility.

## **Thermal System Insulation (TSI)**

Thermal system insulation -asbestos-containing material applied to pipes, fittings, boilers, breeching, tanks, ducts or other interior structural components to prevent heat loss or gain or water condensation.

## **Time Weighted Average (TWA)**

In air sampling, this refers to the average air concentration of contaminants during a particular time period.

## **TSI**

Thermal System Insulation

## **Transmission Electron Microscopy (TEM)**

A method of analysis using an electron microscope, used to find and analyze the concentration of airborne or bulk asbestos fibers and structures. Distinguishes among asbestos and other materials; can detect smaller asbestos fibers than does PCM. Used by EPA to find area concentrations for large AHERA project clearance.

## **TSCA**

Toxic Substances Control Act

## **TWA**

Time Weighted Average.

## **Work Area**

The area where asbestos related work or removal operations are performed which is defined and/or isolated to prevent the spread of asbestos dust, fibers or debris, and entry by unauthorized personnel.

## **Work Practices**

Procedures designed to be followed to avoid or minimize fiber release during activities affecting ACM.

- The OSHA construction standard for asbestos (29 CFR 1926.1101) establishes four classes of asbestos work.

- Class 1 - Disturbance of Friable, Surfacing, or TSI materials
- Class 2 - Disturbance of non-friable miscellaneous materials being removed mostly intact
- Class 3 - Inspections, Operations and Maintenance activities
- Class 4 - Custodial activities

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## **SECTION 01043**

### **PROJECT COORDINATION**

#### **1.01 GENERAL**

- A. All asbestos abatement contractors will be licensed general contractors in either the specialty interior, building, unclassified or asbestos categories by the North Carolina Licensing Board of General Contractors and limited for the bid amount. The example would be a Specialty "S" endorsement for asbestos.
- B. The contractor shall be responsible for inspecting the site prior to bidding to confirm the scope of the work. Any quantities listed by the designer in the plans, specifications or survey are done so as approximations. The actual quantities of asbestos-containing material to be encountered is the responsibility of the contractor.
- C. The contractor shall furnish and is responsible for all costs including, but not limited to: permit fees, containment preparation, labor, materials, services, insurance, bonding, and equipment necessary to carry out the abatement operations and disposal of all asbestos material in accordance with the plans and specifications, the EPA and OSHA regulations, and any applicable state and local government regulations.
- D. The contractor/employer has and assumes the responsibility of proceeding in such a manner that he offers his employees a workplace free of recognized hazards causing or likely to cause death or serious injury. The contractor shall be responsible for performing this abatement and disposal so that airborne asbestos fiber levels do not exceed established levels.
- E. The contractor will be responsible for all costs associated with employee monitoring to meet the OSHA requirements.
- F. The contractor is responsible for all costs, including additional visits, should the designer and/or the industrial hygiene firm determine that the contractor failed a final inspection. Notification and scheduling of the final inspection during the project is the responsibility of the contractor. The contractor will allow a minimum notice of 48 hours unless a different time frame is agreed upon by the designer and the contractor.

## **1.02 PERSONNEL**

### **A. Supervisor**

1. All supervisors shall be accredited by the NC Health Hazards Control Unit (NCHHCU).
2. All supervisors on the project shall have two years of experience in the administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc.
3. One supervisor shall be provided for every 10 workers inside the containment. A minimum of one supervisor shall be provided per project.
4. The contractor shall have at least one employee on the job site in either a foreman or supervisor's position who is bilingual in the appropriate languages when employing workers who do not speak fluent English.
5. A minimum of one supervisor onsite per company shall hold a current OSHA 30-hour certificate

### **B. Worker**

1. All workers shall be accredited by the NCHHCU.
2. All workers shall hold an OSHA 10-hour certificate

### **C. Competent Person**

1. A competent person, as defined in the OSHA asbestos standard 29 CFR 1926.1101, employed by the contractor must be outside the work area at all times to monitor activity, ensure containment security, provide information to visitors, and provide access to the work area.

**D. Employees**

1. The contractor is responsible for the behavior of workers within his employment. If at any time during the contracted work, any of his employees are judged to exhibit behavior unfitting for the area or judged to be a nuisance by the owner or designer, the contractor shall remove them immediately from the project.
2. The contractor shall be responsible for compliance with the following concerning employee behavior:
  - a. Under no circumstances will alcohol, drugs or any other type of controlled substances be permitted on City of Concord property.
  - b. All workers are restricted to the construction project site only.
  - c. All vehicles must be parked in areas prearranged with the owner.
  - d. All workers must conform to the following basic dress code when in public areas of the project confines: long pants, shirts, no tank tops, no shorts, no bare backs.
  - e. The contractor is responsible for disposal of all trash brought on state property by his employees, including drink cans, bottles or other food containers and wrappers.
3. Failure to adhere to these rules could result in criminal prosecution and/or removal from the City of Concord property.

**1.03 MEETINGS**

**A. Prebid**

1. A mandatory pre-bid conference will be held by the TD Environmental and the City of Concord at the project site. All contractors submitting a bid are required to attend, visit the site and ask questions concerning the plans and specifications. The date and time will be specified in the bid packet.
2. TD Environmental will review the contractors intended workplans along with the design specifications, present techniques and safeguards allowed for the removal of the asbestos. The contractor will be required to provide their own water and power.
3. Any minutes, new points or clarifications raised during the meeting will be issued by the designer in an addendum at least 24 hours prior to the bid submission deadline.



#### 1.04 PRE-JOB SUBMITTALS

- A. Submit three complete, bound sets of pre-job submittals to the designer at least within 5 business days of the contingent offer of award. Work is prohibited until submittal package has been reviewed and approved by designer. A copy of the approved submittals shall be kept in a three-ring binder (project log) by the contractor at the project site in the clean room or in the on-site office of the contractor.
1. Notifications: Provide copies of Asbestos Permit Application and Notification for Demolition/Renovation (DEQ 3768), which provide written notice to all required agencies, including North Carolina HHCU. Provide notification letters to local EMS, fire and police departments.
  2. Employee List: Provide copies of lists of supervisors and workers, along with their accreditation, most recent training certificate, and any other pertinent training certifications to be utilized on the project. *(No one shall work onsite without proper documentation present and approval of the background and sexual predator affidavit by the City of Concord) As it is understood the workforce may rotate during the project, the contractor will need to provide the updated affidavit to TD Environmental with the names of those persons 24 hours prior to being onsite.*
  3. Permits: Provide copies of approval of a waste disposal site in compliance with 40 CFR 61.154.
  4. Medical: Include individually signed and witnessed forms by each worker to be utilized on the project documenting that each is actively involved in a company employee medical surveillance program. *( Please do not include personal medical information such as the OSHA questionnaire, PFT, Physical Examination report. Only provide an affidavit signed by the employee that they are actively involved in your company medical surveillance and respiratory program in accordance to OSHA 1910.134)*
  5. Respirator Training: Letter from the most recent medical evaluation listing no restriction or the restriction/ limitations for the employees use of a negative pressure respirator. Copies of most recent fit testing records, individually signed for each worker to be utilized on the project. *(Only provide the forms showing the type of respirator that was fitted properly to the worker, and the letter documenting the workers restricted or unrestricted use of that respirator)*
  6. Project Schedule: Time schedule for the project, outlining the proposed start, setup, clearances, etc. for the various phases of the project.

7. Initial Exposure Assessment: As required by the OSHA construction asbestos standard 29 CFR 1926.1101. ( If not provided work will begin with the use of PAPR as respiratory protection.)
8. Any other programs or training as outlined by the OSHA and EPA standards.

#### **1.05 POST-JOB SUBMITTALS**

- A. Submit three complete, bound sets of post-job submittals to the designer following the final completion of the work. Requests for final payment will not be approved until the submittal package has been reviewed and approved by the designer.
  1. Affidavits: Contractor's affidavit of payment of debts and claims, affidavit of release of liens, and consent of surety company to final payment.
  2. Manifest: North Carolina Asbestos Waste Shipment Record (DEHNR 3787) receipt from landfill operator which acknowledges the contractor's delivery(s) of waste material. Include date, quantity of material delivered and signature of authorized representative of landfill. Also, include name of waste transporter.
  3. Daily Log: A signed copy of all daily logs showing the following: name, date, entering and leaving time, company or agency represented, reason for entry for all persons entering the work area, employee's daily air monitoring data as required by the OSHA standard and written comments by inspectors, industrial hygienists, designers and visitors.
  4. Medical: Copies of worker release forms, asbestos training certification forms and respirator training documentation of all new employees hired during the project.
  5. Special Reports: All documents generated under Section 01043.1.06.
  6. This project will also require a JHA (Job Hazard Analysis) for each scope of work performed daily. A Standard OSHA form is acceptable.

#### **1.06 SPECIAL REPORTS**

- A. General: Except as otherwise indicated, submit special reports to designer within one day of occurrence requiring special report, with copies to others affected by occurrence. Also keep a copy in the project log book.
- B. Reporting Unusual Events: When an event of unusual and significant nature occurs at site (examples: failure of negative pressure system, rupture of temporary enclosures), prepare and submit a special report to the designer immediately, listing chain of events, persons participating, response by contractor's personnel, evaluation of results or effects, and similar pertinent information. When such events are known or predictable in advance, advise designer in advance at earliest possible date.

- C. Reporting Accidents: Prepare and submit reports of significant accidents, at site and anywhere else work is in progress. Record and document date and actions; comply with industry standards for reporting accidents. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury.

#### **1.07 CONTINGENCY PLAN**

- A. Contingency Plan: Prepare a contingency plan for emergencies including fire, accident, power failure, negative pressure system failure, supplied air system failure (if applicable), evacuation of injured persons for both life threatening and non-life threatening, or any other event that may require modification or abridgment of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. Keep these plans in the on-site office.
- B. Post outside/in clean room of Personnel Decontamination Unit:
  - 1. Telephone numbers and locations of emergency services including but not limited to, fire, ambulance, doctor, hospital, police, power company, telephone company and the North Carolina HHCB.
  - 2. A copy of Material Safety Data Sheets (SDS) for any chemicals used during the asbestos project.
  - 3. The contractor shall post asbestos signs in each appropriate language as per the OSHA 29 CFR 1926.1101 standard.

## **SECTION 01092**

### **CODES AND REGULATIONS**

#### **1.01 REFERENCE SPECIFICATIONS**

The contractor shall assume full responsibility and liability for compliance with all applicable federal, state and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

Unless modified by these project specifications, all specifications for stripping, removal, repair and disposal work shall conform to the following specifications and standards, as applicable, as if completely reproduced herein.

- A. The following regulations published by the Environmental Protection Agency (EPA):
  - 1. "National Emissions Standards for Hazardous Air Pollutants Asbestos," 40 CFR Part 61, Subpart M.
  - 2. "General Provisions," 40 CFR Part 61, Subpart A.
  - 3. "Guidance for Controlling Asbestos-Containing Materials in Buildings" June 1985. (EPA # 560/5-85-024).
  - 4. "Asbestos-Containing Materials in Schools," 40 CFR Part 763, Subpart E including appendices.
- B. The following regulations published by the U.S. Department of Labor, OSHA:
  - 1. "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules," Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations.
  - 2. "Respiratory Protection," Title 29, Part 1910, Section 134 of the Code of Federal Regulations.
  - 3. Construction Industry, Title 29, Part 1926, of the Code of Federal Regulations.
  - 4. "Access to Employee Exposure and Medical Records," Title 29, Part 1910, Section 20 of the Code of Federal Regulations.
  - 5. "Hazard Communication," Title 29, Part 1926, Section 59 of the Code of Federal Regulations.

6. "Specifications for Accident Prevention Signs and Tags," Title 29, Part 1910, Section 145 of the Code of Federal Regulations.
- C. The following regulations published by North Carolina state agencies:
1. North Carolina Asbestos Hazard Management Program Rules as adopted by 15A NCAC 19C .0600.
  2. "North Carolina Occupational Safety and Health Standards for the Construction Industry," 29 CFR Part 1926 as adopted by T13 NCAC 07F .0201, and shipyard T13:07F.0500.
  3. North Carolina General Statutes, Chapter 95, 97, 130.
- D. The following documents published by the American National Standards Institute:
1. "Fundamentals Governing the Design and Operation of Local Exhaust Systems," Z9.2-1979.
  2. "American National Standard for Respiratory Protection Respiratory Use - Physical Qualifications for Personnel," Z88.6-1984.
  3. "Practices for Respiratory Protection," Z88.2-1992.

## 1.02 NOTICES

- A. The contractor shall notify the following offices in writing within the time frame specified by the NESHAP regulations prior to beginning any asbestos removal operations.

### 1. State Agencies

North Carolina Health Hazards Control Unit  
Occupational & Environmental Epidemiology Section  
N.C. DHHS

*(Regular Mail)*

P.O. Box 27687

Raleigh, N.C. 27611-7687

Telephone: (919) 733-0820

Fax: (919) 733-8493

*(UPS, Fed Ex, etc.)*

2728 Capital Blvd

Parker Lincoln Bldg.

Second Floor / 2A210

Raleigh, N.C. 27604

N.C. Department of Labor  
Division of Occupational Safety and Health  
319 Chapanoke Road, Suite 105  
Raleigh, N.C. 27603-3432  
Telephone: 1-800-LABOR-NC or (919) 662-4602  
Fax: (919) 662-4625

2. Local Programs

When work is performed in Buncombe/Haywood, Mecklenburg or Forsyth counties, the air quality programs in these counties must be notified and their regulations shall be adhered to. Addresses of these agencies can be found on page 3 of DEQ (3768) form. Phone numbers are listed below.

Buncombe/Haywood Counties (704) 255-5710

Forsyth County (910) 727-8064

Mecklenburg County (704) 336-5599

3. Emergency Departments

Notify the local emergency medical services, police and fire departments in writing of the type and scope of work being performed and request these departments make an inspection prior to beginning the work.

4. Licenses

Maintain current licenses for contractor and accreditation for workers and supervisors as required by applicable State or local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the work of this contract.

5. A courtesy notification for any amount of asbestos, regulated or non-regulated, to be removed shall be sent to the HHCB 10 working days prior to the start date of the asbestos removal.

## **SECTION 01410**

### **AIR MONITORING - INDUSTRIAL HYGIENE FIRM**

#### **1.01 GENERAL**

- A. The industrial hygiene firms (TD Environmental) services firm will be paid by the owner.
- B. Air monitoring shall be done under the direct supervision of a North Carolina accredited supervising air monitor (SAM) (Michael D Zavislak, CIH), except for sampling performed by the contractor to satisfy OSHA requirements.
- C. The SAM shall be accredited per the Asbestos Hazard Management Program rules.
- D. Air monitor shall be accredited as per the Asbestos Hazard Management Program rules and work under the direct supervision of a SAM.
- E. The SAM representing each firm shall be a CIH accredited through the AIHA.
- F. If specific project activities are assigned to an air monitor, the SAM is expected to be in direct control and responsible for industrial hygiene work completed on the project. The SAM shall approve and sign all air monitoring results performed by the air monitor.
- F. Employees of the NCHHCU shall have right of entry into the project as long as they hold a current accreditation for Class 1 and 2 work under OSHA guidelines.



## **1.02 DESCRIPTION OF WORK**

- A. TD Environmental, the designer/industrial hygiene firm, will provide guidance and consulting to the contractor as necessary throughout the project.

TD Environmental, a dba of TD Riggs Enterprises LLC, is contracted by the owner to provide the Industrial Hygiene services, Abatement project design, Project monitoring, and SAM services. TD Environmental is under the direct supervision of NC accredited Supervising Air Monitor Michael D Zavislak, CIH.

- B. At the job site, TD Environmental will observe, be aware, and comment on general work site conditions and activities as they relate to the specifications and profession of industrial hygiene, and make recommendations in writing to the contractor.
- C. The industrial hygiene firm is responsible for overseeing the protection of the environment from contamination, protection of persons in adjacent areas, and assurance that the areas are acceptable for occupancy upon the completion of work, prior to the demolition of the structure.
- D. The industrial hygiene firm has the authority to direct the contractor relative to safety and environmental concerns. This includes stopping the work if necessary. All directions and comments made by the industrial hygiene firm to the contractor shall be written with a copy to the designer and owner.
- E. The industrial hygiene firm shall furnish the contractor and the City of Concord a copy of his field report within 24 hours of the visit. Copies of field notes and reports of observations shall be kept in project log book.
- F. The SAM shall review and make comments to the designer on the submittals listed in Section 01043.
- G. The SAM shall approve any change in contractor's respiratory protection. This includes a review of the historical data.
- H. TD Environmental will conform to the contractor's schedule and shall respond to necessary changes, provided an advance notice is given as outlined in Section 01043.
- I. The TD Environmental's project monitor shall furnish the contractor with mobile phone number where he can be reached quickly at all times.
- J. The TD Environmental shall notify the designer and contractor, in writing, of any failed clearance visits.

- K. At the completion of the project, the TD Environmental shall prepare a report describing the assessment of the project, all air monitoring data, acceptance letters, and a description of the project as it proceeded to completion and submit a digital copy to the City of Concord.

### 1.03 AIR MONITORING

- A. Ambient Air Monitoring: The purpose of ambient air monitoring by the industrial hygiene firm will be to detect discrepancies in the work area isolation such as:
  - 1. Contamination of the building outside of the work area with airborne asbestos fibers.
  - 2. Failure of filtration or rupture in the negative pressure system.
  - 3. Confirm the work practices established by the contractor and respiratory protection provided for employees are adequate.
- B. Work Area Airborne Fiber Levels: TD Environmental will monitor airborne fiber levels in the work area. The purpose of this air monitoring will be to detect airborne fiber levels which may challenge the ability of the work area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.
- C. Work Area Clearance: To determine if the elevated airborne fiber levels encountered during abatement operations have been reduced to an acceptable level, TD Environmental will sample and analyze air per Section 01714. All Samples will be sent to a third party, Summit-Companies Laboratory, for final validation and quality control.
- D. In accordance with AHMB Program Rules, the SAM shall develop an Abatement Project Air Monitoring Plan which complies with EPA and OSHA analytical criteria and will provide a valid representation of airborne fiber concentrations both inside and outside the work area. This program is not intended to satisfy the contractor's requirement for sampling under the OSHA regulation. All area sampling conducted by the TD Environmental, and personnel sampling performed by the contractor firm shall be personally observed by the TD Environmental Project Monitor onsite. Air sampling pumps shall not be left unattended for extended periods of time.
  - 1. The SAM shall submit a written project monitoring plan to the designer with a copy to the contractor. The following information shall be required for the submittal.
    - a. The name, address and telephone number of the industrial hygiene firm.
    - b. The name, address, telephone number and NIOSH's PAT designation and proficiency data for the laboratory analyzing the air samples. Analysis of all samples collected shall be by a laboratory currently proficient in NIOSH's "Proficiency Analytical Testing Program for Laboratory Quality Control" for asbestos. The acceptable sampling and analysis method is NIOSH 7400, latest revision.

- c. A proposed air sampling strategy which shall include: a projected number of air samples, locations, the types of air samples to be collected (personal, area, ambient), how the air samples are to be collected (TWA, ceiling, other), the equipment to be used (pumps, calibration equipment, filters, other), and how the samples will be transported to the laboratory.
1. All personal air samples will be collected in such a manner as to comply with OSHA collection and analytical regulations and to provide a valid representation of airborne fiber levels. The samples collected by the industrial hygiene firm on personnel do not satisfy the contractor's responsibility under OSHA.
  2. All final area air sampling will comply with all State and Federal requirements in measuring airborne asbestos following an abatement action.
  3. Air samples will be analyzed and results made available as per the AHMB Program Rules. Copies of all air sampling results shall be signed by the SAM and a copy posted at the job site. These copies shall include the following: sample number, sample location, activity represented by sample, flow rate, sample time, comments and sample results. A statement will be included on each submission that the requirements of this contract have been met as they apply to the activities of the SAM.
  4. If TWA samples are being collected by the contractor for the purpose of reducing respiratory protection requirements, the industrial hygiene firm shall directly observe the conditions and work practices represented by each sample and make appropriate notes in the bound book on site. The SAM shall review all TWA air sampling results which are used for reducing respiratory protection requirements before accepting the results.

**SECTION 01503**  
**TEMPORARY FACILITIES**

**1.01 GENERAL**

- A. Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work.
- B. Use qualified tradesmen for installation of temporary services and facilities. Locate, modify and extend temporary services and facilities where they will serve the project adequately and result in minimum interference with the performance of the work.
- C. In occupied buildings, the owner's maintenance personnel shall lock and tag out all electrical and HVAC equipment in the asbestos abatement area. The contractor shall verify that the power and HVAC have been locked and tagged out prior to beginning work.
- D. In unoccupied buildings, the contractor is responsible for the lock and tag out of all power sources and HVAC equipment.
- E. The owner shall move all furniture, books, computers, records, equipment, etc. prior to the contractor's arrival date as specified.

**1.02 WATER SERVICE**

- A. The Contractor shall supply a source of water. Contractor bears all expense of heating and getting water to the work and decontamination areas.
- B. The Contractor shall supply hot and cold water to the decontamination unit in accordance with Section 01563. Hot water shall be supplied at a minimum temperature of 100 degrees Fahrenheit.

**1.03 ELECTRICAL SERVICE**

**The contractor shall provide their own temporary power service such as a portable generator. The contractor will also be responsible for any fuel used to generate temporary power.**

- A. General: Comply with applicable NEMA, NEC and UL standards and governing state and local regulations for materials and layout of temporary electric service.

- B. Ground Fault Protection: Provide receptacle outlets equipped with ground fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.
- C. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity and power characteristics to accommodate performance of work during the construction period.
- D. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every area of work.
- E. Provide services of an electrician, on a standby basis, to service electrical needs during the abatement process.
- F. Provide additional power service and distribution service, consisting of individual dedicated 15 amp 120 volt circuits to electrical drops with receptacle outlets equipped with ground fault interrupt protection, color coded for the exclusive use of the industrial hygiene firm.

#### **1.04 FIRST AID**

- A. A minimum of one first aid kit shall be located in the clean room. Additional first aid kits as the contractor feels is adequate or is required by law shall be located throughout the work area.

#### **1.05 FIRE EXTINGUISHERS**

- A. Comply with the applicable recommendations of NFPA Standard 10 - "Standard for Portable Fire Extinguishers." Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher in each work area equipment room and one in the clean room of the personnel decontamination unit.

#### **1.06 TOILET FACILITIES**

- A. Provide temporary toilet facilities to be used by contractor's employees. The contractor will be responsible for providing temporary facilities and securing them daily.

#### **1.07 PARKING**

- A. Park only in areas designated by the owner.

**1.08 BUILDING SECURITY**

- A. Maintain personnel on-site at all times any portion of the work areas are open or not properly secured. Secure work areas completely at the end of each day.

**1.09 STORAGE**

- A. Supply temporary storage required for storage of equipment and materials for duration of project. Trailer and storage dumpsters will be maintained in areas designated by the owner/designer. Asbestos Waste storage containers kept onsite must be fully enclosed, properly demarcated, lined with 6 mil poly, and locked to prevent unauthorized entry.

## **SECTION 01513**

### **NEGATIVE PRESSURE SYSTEM**

#### **1.01 GENERAL**

- A. High efficiency particulate air (HEPA) filter exhaust systems equipped with new HEPA filters for each project shall be used. Exhaust equipment and systems shall comply with ANSI Z9.2-79 and used according to manufacturer's recommendations.
- B. A system of HEPA-equipped air filtration devices shall be configured so that a pressure differential is established between the work area and the surrounding area (-0.02 to -0.04" water column). A continuous chart-recorded manometer shall be used to confirm this condition.
- C. Additional air filtration devices shall be provided inside the work area for emergency standby as well as for circulation of dead air spaces.
- D. The pressure differential is maintained at all times after preparation is complete and until the final visual inspection and air tests confirm the area is clean and acceptable for occupancy and the designer confirms verbally with written follow-up to discontinue the use of the negative pressure system.
- E. Air shall be exhausted outside the building.
- F. The contractor shall check daily for leaks and log his checks in the bound log book. This includes checks internal to air-moving devices.
- G. There shall be a minimum of four air changes per hour in any containment.



## **SECTION 01526**

### **WORK AREA PREPARATION**

#### **1.01 GENERAL**

- A. Before work begins in an area, a decontamination unit must be in operation as outlined in Section 01563.
- B. Completely isolate the work area from other parts of the building so as to prevent contamination beyond the isolated area.
- C. Temporary facilities shall be addressed as outlined in Section 01503.
- D. The contractor shall set up a work area, load out, and decontamination area as shown in the plans and specifications. Any variations must be approved by the designer. The decontamination facility outside of the work area shall consist of a change room, shower room and equipment room as described in Section 01563.
- E. The contractor shall wet clean and/or HEPA vacuum all items and equipment in the work area suspected of being contaminated with asbestos, but not in direct contact with the asbestos material and either secure these items in place with polyethylene sheeting or have them removed from the work area.
- F. Critical Barriers: The contractor shall thoroughly seal the work area for the duration of the work by completely sealing off all individual openings and fixtures in the work area, including, but not limited to, heating and ventilation ducts, doorways, corridors, windows, skylights and lighting, with polyethylene sheeting taped securely in place. If the contractor is using sealant materials to fill in small holes or cracks, the material shall have appropriate fire ratings.
- G. Floors (if required): Apply one or more layers of 6 mil (minimum) polyethylene plastic sheeting with joints overlapped 24 inches and taped securely. Plastic shall be carried up walls a minimum of 12 inches and secured.
- H. Walls (if required): Apply one or more layers of 4 mil (minimum) polyethylene plastic sheeting with joints lapped 24 inches and taped securely. Plastic shall be lapped over floor coverings and taped securely.
- I. Floors and walls shall be installed in such a manner that they may be removed independently of the critical barriers.

- J. Entrances and exits from the work area will have triple barriers of polyethylene plastic sheeting so that the work area is always closed off by one barrier when workers enter or exit.
- K. No water may be left standing on the floor at the end of the work day.
- L. Interior debris and contents not contaminated by asbestos must be removed or protected prior to abatement activities.
- M. Any costs associated with physical damage caused by water or securing polyethylene sheeting to areas inside or outside the abatement area shall be the contractor's responsibility. For example, rain tearing down the containment and equipment being damaged by water.
- N. The contractor shall establish and mark emergency and fire exits from the work area. Emergency procedures shall have priority over established decontamination entry and exit procedures. Audible and visible fire and emergency evacuation alarms shall be installed so as to be heard and seen throughout the entire work area.
- O. Integrity of these seals shall be regularly checked and maintained by the contractor.
- P. After work area preparation, the contractor shall notify the designer verbally with written follow-up that he is ready for a prework inspection.

## **SECTION 01560**

### **WORKER PROTECTION**

#### **1.01 GENERAL**

- A. Provide worker protection as required by OSHA, state and local standards applicable to the work. Contractor is solely responsible for enforcing worker protection requirements at least equal to those specified in this Section.
- B. Each time the work area is entered the contractor shall require all persons to remove all street clothes in the changing room of the personnel decontamination unit and put on new disposable coverall, new head cover, and a clean respirator. Proceed through shower room to equipment room and put on work boots.
- C. Workers shall not eat, drink, smoke, chew gum or chew tobacco in the work area, the equipment room, the load out area, or the clean room.

#### **1.02 WORKER TRAINING**

- A. Train all workers in accordance with 29 CFR 1926 and North Carolina state regulations regarding the dangers inherent in handling asbestos, breathing asbestos dust, proper work procedures and personal and area protective measures.

#### **1.03 MEDICAL EXAMINATIONS**

- A. Provide medical examinations for all workers. Examination shall as a minimum to meet OSHA requirements as set forth in 29 CFR 1926 and N.C. Workmen's Compensation Act Dusty Trades Examination Record (DEHNR Form 2796).

#### **1.04 PROTECTIVE CLOTHING**

- A. Provide disposable full-body coveralls and disposable head covers, and require that they be worn by all workers in the work area. Provide a sufficient number for all required changes, for all workers in the work area.
- B. Boots: Provide work boots with non-skid soles and, where required by OSHA, foot protection for all workers.
- C. Gloves: Provide work gloves to all workers and require that they be worn at the appropriate times. Do not remove gloves from work area. Dispose of work gloves as asbestos-contaminated waste at the completion of the project.

#### **1.05 ADDITIONAL PROTECTIVE EQUIPMENT**

- A. Type C respirators, disposable coveralls, head covers and footwear covers shall be provided by the contractor for the owner, the designer, Industrial hygiene firm and other authorized representatives who may inspect the job site.

#### **1.06 DECONTAMINATION PROCEDURES**

- A. Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area:
  - 1. Remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.
  - 2. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:
    - a. Thoroughly wet body including hair and face.
    - b. With respirator still in place thoroughly wash body, hair, respirator face piece, and all exterior parts of the respirator.
    - c. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face and respirator. While still holding breath, remove respirator and hold it away from face before starting to breathe.
    - d. Carefully wash face piece of respirator inside and out.
    - e. Shower completely with soap and water; rinse thoroughly.
    - f. Rinse shower room walls and floor prior to exit.
    - g. Proceed from shower to changing (clean) room and change into street clothes or new disposable work items.
  - 3. After showering, each employee shall inspect, clean and repair his respirator as needed. The respirator shall be dried, placed in a suitable storage bag and properly stored.

## **SECTION 01562**

### **RESPIRATORY PROTECTION**

#### **1.01 DESCRIPTION OF WORK**

- A. Instruct and train each worker involved in asbestos abatement in proper respirator use and require that each worker always wear a respirator, properly fitted on the face, in the work area from the start of any operation which may cause airborne asbestos fibers until the work area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the workplace or as required for other toxic or oxygen-deficient situations encountered.

#### **1.02 GENERAL**

- A. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and MSHA and suitable for the asbestos exposure level in the work areas according to OSHA Standard 29 CFR 1926.1101 and other possible contaminants employees might be exposed to during the project.
- B. Provide respiratory protection from the time the first operation involved in the project requires contact with asbestos-containing materials (including construction of decontamination units, construction of airtight barriers/barricades, and placing of plastic sheeting on walls) until acceptance of final air clearance test results by TD Environmental.
- C. The minimum respiratory protection for the project during gross removal shall be powered air purifying respirators (PAPR) unless prior approval of the SAM is granted because the contractor provided an acceptable Negative Exposure Assessment.
- D. During gross removal of sprayed-on asbestos surfacing materials, the contractor shall stay in PAPR air purifying respirators as described in 29 CFR 1926.1101 until all gross asbestos materials have been removed.
- E. The Project Monitor may, under certain circumstances, allow the contractor to use a half-face respirator with replaceable HEPA filters during the final cleaning phase. However, the eight-hour TWA air sampling data must document the exposure level, and the SAM must write a letter to the TD Environmental allowing the contractor to reduce respiratory protection.

- F. Respirator fit testing documentation shall be provided to TD Environmental prior to the beginning of the project, at any change in respiratory protection equipment, and at any time during the project if requested by the employee or SAM. Fit testing is to be performed by one of the methods listed in the 29 CFR 1926.1101, Appendix C.
- G. If supplied air respirators are used, the contractor shall provide a minimum of Grade "D" breathing air as set forth in the Compressed Gas Association's "Commodity Specifications for Air," G-7.1. The contractor shall test for Grade "D" breathing air initially and daily thereafter. Daily testing is not needed if the contractor has an air purification system which has CO and organic purging capabilities as well as a continuous CO monitor and alarm calibrated at 10 ppm. The system must be calibrated at least once a week or when it is moved.
- H. Provide emergency backup air supply, egress SCBA or egress HEPA filters for each worker in work area at all times when Type-C (supplied air) respirators are required. Breathing air system shall provide one hour of reserve air, calculated for maximum crew size for emergency evacuation.
- I. Where Type C respirators are utilized, the contractor is required to have an employee in the vicinity of the source of air. The contractor shall take into account the location of the fresh air intake to ensure no pollutant source is in the vicinity. The audible alarm shall be located where the employees inside and outside containment can hear the alarm.
- J. This project **does not** allow the use of single-use, disposable or quarter-face respirators for any purpose.
- K. The contractor may submit a new exposure assessment (as per 29 CFR 1926.1101) to the SAM with a request to downgrade to less protective respirators. The SAM will make a recommendation to the designer, who will issue a decision in writing to the contractor approving or denying his request. If the contractor disagrees with the decision, then the representative air sampling data may be reviewed by the HHCU for a final decision.

## SECTION 01563

### DECONTAMINATION UNITS

#### 1.01 DESCRIPTION OF WORK

- A. Provide separate personnel and equipment/loadout decontamination facilities. Require that the personnel decontamination unit be the only means of ingress and egress for the work area. Require that all materials exit the work area through the equipment/loadout decontamination unit. Contractor shall comply with 29 CFR 1926.1101, specifically paragraph (j) Hygiene facilities and practices for employees.
- B. **Visual Barrier:** *Where the decontamination area is immediately adjacent to and within view of occupied areas or the exterior of the building, provide a visual barrier of opaque or black plastic sheeting so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting.*

#### 1.02 GENERAL

Provide separate personnel decontamination units and equipment/loadout decontamination units when practical.

- A. Personnel Decontamination Unit
  - 1. Provide a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, changing room, shower room, equipment room. Each shall be separated by a minimum of three curtain doorways. Require all persons without exception to pass through this decontamination unit for entry into and exiting from the work area for any purpose. Do not allow parallel routes for entry or exit. Do not remove equipment or materials through Personnel Decontamination Unit.
  - 2. Provide temporary lighting within decontamination units as necessary to reach an adequate lighting level.
  - 3. Maintain floor of changing room dry and clean at all times. Do not allow the overflow water from the shower to escape the shower room.
  - 4. Damp-wipe all surfaces twice after each shift change with a disinfectant solution.

5. Provide hot and cold water, drainage and standard fixtures including an elevated shower head as necessary for a complete and operable shower. A water hose and bucket is not an acceptable shower.
6. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
7. Pump shower waste water to drain. Provide 20-micron and 5-micron waste water filters in line to drain. Change filters as necessary for proper waste drain flow.
8. If the decontamination area is located within an area containing friable asbestos on overhead ceilings, ducts, piping, etc., provide the area with a minimum 3/8 inch plywood "ceiling" with two layers of polyethylene sheeting covering the top of the "ceiling."
9. Visual Barrier: Where the decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque plastic sheeting so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct a solid barrier with wood or metal studs, max. 16 inches on center, covered with minimum 3/8 inch plywood.

B. Equipment Decontamination Units:

1. Provide an equipment decontamination unit consisting of a serial arrangement of rooms, clean room, holding area, and washroom, each room separated by a minimum of three curtain doorways, for removal of equipment and material from work area. Do not allow personnel to enter or exit work area through equipment decontamination unit.
2. Washroom: Provide washroom for cleaning of bagged or drummed asbestos-containing waste materials passed from the work area.
3. Holding Area: Provide holding area as a drop location for sealed drums and bagged asbestos-containing materials passed from the washroom.
4. Clean Room: Provide clean room to isolate the holding area from the building exterior or occupied areas.



5. Equipment or Material: Obtain all equipment or material from the work area through the equipment decontamination unit according to the following procedure:
  - a. When passing contaminated equipment, sealed plastic bags, drums or containers into the washroom, close all doorways of the equipment decontamination unit, other than the doorway between the work area and the washroom. Keep all outside personnel clear of the equipment decontamination unit.
  - b. Once inside the washroom, wet-clean the bags and/or equipment.
  - c. When cleaning is complete, insert bagged material into a clean bag/drum during the pass between the washroom and holding area. Close all doorways except the doorway between the washroom and holding area.
  - d. Workers from the building exterior enter the clean room then the holding area to remove decontaminated equipment and/or containers for disposal. Require these workers to wear full protective clothing and respiratory protection as described in Section 01562.

D. Decontamination Unit Contamination:

1. If the air quality in the decontamination unit exceeds 0.01 fibers per cc analyzed by PCM or 70 structures per mm squared analyzed by TEM or its integrity is diminished through use as determined by the designer or industrial hygiene firm, no employee shall use the unit until corrective steps are taken and approved by the designer and industrial hygiene firm.

## **SECTION 01711**

### **PROJECT DECONTAMINATION**

#### **1.01 GENERAL**

- A. Carry out a first cleaning of all surfaces of the work area including plastic sheeting, tools, scaffolding and/or staging by use of damp-cleaning and mopping and/or a high efficiency particulate air (HEPA) filter vacuum until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces. Do not perform dry-dusting or dry-sweeping.
- B. Equipment shall be cleaned and all contaminated materials removed before removing polyethylene from the walls and floors.
- C. The contractor shall replace all prefilters and clean the inside and outside of the HEPA exhaust units.
- D. After polyethylene sheets have been removed from walls and floors, but are still remaining on all windows, doors and the critical components, the contractor shall clean all surfaces in the work area, including ducts, electrical conduits, steel beams, roof deck, etc., with amended water and/or HEPA-filtered vacuum.
- E. After cleaning the work area, the contractor shall allow the area to thoroughly dry and then wet-clean and/or HEPA vacuum all surfaces in work area again.
- F. At the completion of the cleaning operation, the contractor's supervisor shall perform a complete visual inspection of the work area to ensure that the work area is dust- and fiber-free. If the supervisor believes he is ready for a final project decontamination inspection, he shall notify the designer.
- G. The designer shall contact the industrial hygiene firm and advise the firm of the final project decontamination inspection requested by the contractor.
- H. Final project decontamination inspection includes the visual inspection and air monitoring clearance.
- I. Visual inspection for acceptance shall be performed after all areas are dry.
- J. TD Environmental shall perform the final visual inspection and conduct the final air clearance. Any discrepancies found shall be documented in the form of a punch list.

- K. Final air sampling shall not commence until the visual inspection is completed and passed.
- L. If TD Environmental finds that the work area has not been adequately decontaminated, cleaning and/or air monitoring shall be repeated at the contractor's expense, including additional industrial hygiene fees, until the work area is in compliance.
- M. After the work area is found to be in compliance, all entrances and exits shall be unsealed and the plastic sheeting, tape and any other trash and debris shall be disposed of in sealable plastic bags (6 mil minimum) and disposed of as outlined in Section 02084.
- N. All HEPA unit intakes and exhausts shall be wrapped with six mil polyethylene before leaving the work area.
- O. After TD Environmental has approved the final project decontamination and the contractor has completed the tear down for occupancy by others, TD Environmental shall perform the project final inspection as outlined in the general conditions.
- P. Any residual asbestos that may be present after removing critical barriers, that in the designer's judgment should have been cleaned during the precleaning phase prior to installing critical barriers, shall be cleaned and cleared at the contractor's expense.
- Q. There shall be appropriate seals totally enclosing the inspection area to keep it separate from clean areas or other areas where abatement is or will be in progress. Once an area has been accepted and passed air tests, loss of the critical barrier integrity or escape of asbestos into an already clean area shall void previous acceptance and tests. Additional visual and final air clearance sampling shall be required at the contractor's expense.

## SECTION 01714

### WORK AREA CLEARANCE

#### 1.01 GENERAL

- A. Notification and scheduling of the final inspection with TD Environmental during the project is the responsibility of the contractor.

#### 1.02 FINAL CLEARANCE TESTING

- A. After the second cleaning operation and after the area is completely dry, the following procedure test shall be performed:
  - 1. A final visual inspection shall be conducted by TD Environmental. The inspection shall be conducted following the guidelines set forth in the American Society for Testing and Materials, Standard Practices for Visual Inspection of Asbestos Abatement Projects, Designation: E1368.90. If the work area is found visibly clean, air samples will be collected by TD Environmental.
  - 2. During the air testing, the accredited air monitor shall cause disruptive air currents as described in the EPA-AHERA regulations (40 CFR Part 763, Subpart E, Appendix A).
  - 3. If samples are to be analyzed using PCM (minimum of five samples using NIOSH 7400 method), then the maximum flow rate is 12 liters per minute, with a minimum sample size of 1200 liters for each sample. Clearance criteria shall be less than 0.01 F/cc for all samples analyzed.
  - 4. If samples are to be analyzed using TEM, the Mandatory Transmission Electron Microscopy Method described in 40 CFR Part 763, Subpart E, Appendix F shall be used. Clearance criteria shall be an arithmetic mean less than or equal to 70 structures per square millimeter or a z-test less than or equal to 1.65.
  - 5. Final clearance criteria shall be in accordance with AHMB Program Rules. **As the structures are intended for immediate demolition PCM air clearances will be performed with the requirements of meeting industry standards for clean air which are 0.01 f/cc.**
  - 6. TD Environmental shall immediately report the final air sampling clearance results to the designer.
  - 7. The use of the negative pressure system may be discontinued after the industrial hygiene firm instructs the contractor that he has passed the final project decontamination inspection.

**SECTION 02080**  
**ASBESTOS REMOVAL**

**1.01 GENERAL**

- A. Prior to starting asbestos removal, the contractor's equipment, work area and decontamination units will be inspected and approved by TD Environmental.
- B. All loose asbestos material removed in the work area shall be adequately wet, bagged, sealed and labeled properly before personnel breaks or end of shift.
- C. All plastic sheeting, tape, cleaning material, clothing and all other disposable material or items used in the work area shall be packed into sealable plastic bags (6 mil minimum) and treated as contaminated material.
- D. All material shall be double-bagged.
- E. All excess water (except shower water) shall be combined with removed material or other absorptive material and properly disposed of as per EPA regulations. Contractor shall not place water in storm drains, onto lawns, or into ditches, creeks, streams, rivers or oceans.

**1.02. SCOPE OF WORK**

**Base Bid**

The Base Bid scope of work for this project includes the removal and disposal of identified ACM. All quantities provided in these documents are estimates. The Abatement Contractor is responsible for verifying actual quantities of all materials prior to bidding. Additional compensation for removal of additional materials will not be considered.

Interior materials are to be removed as regulated ACM inside negative pressure containment. Abatement Contractor shall coordinate scheduling and phasing with Owner, and Abatement Designer. Refer to accompanying inspection reports and specifications for further details.

The following Asbestos Containing Materials Summary are included in the Base Bid. Quantities and scope of necessary disturbances may be modified by the owner, engineer, designer, or architect:

Material	Location	Percentage/ Type	Quantity	Material Condition	NESHAP Category
9"x9" Black w/ White Streaks Vinyl Floor Tile	236 Main Room	10% Chrysotile	700 SF	Sig. Damaged	CAT I NF ACM
9"x9" Red w/ White Streaks Vinyl Floor Tile	236 Main Room	10% Chrysotile	700 SF	Sig. Damaged	CAT I NF ACM
Black Flooring Mastic	236 Main Room*	3% Chrysotile	1,450 SF	Sig. Damaged	CAT I NF ACM
Ceiling Texture	236 Ceiling Tiles	2% Chrysotile	1,450 SF	Sig. Damaged	RACM
9"x9" Red Vinyl Floor Tile	240 Middle Room (Beneath Vinyl Sheet)	7% Chrysotile	370 SF	Good	CAT I NF ACM
9"x9" White Vinyl Floor Tile	240 Middle Room (Beneath Vinyl Sheet)	10% Chrysotile	370 SF	Good	CAT I NF ACM
Black Flooring Mastic	240 Middle Room (Beneath Vinyl Sheet)	3% Chrysotile	740 SF	Good	CAT I NF ACM
Yellow/Black Flooring Mastic (probably Yellow Mastic contaminated with ACM Black Mastic)	240 Front Room (Beneath Carpet)	2% Chrysotile	260 SF	Good	CAT I NF ACM
Flashing Caulking	236 & 240 Roof Flashing	10% Chrysotile	220 LF	Damaged	CAT I NF ACM
Silver/Aluminum Paint	236 & 240 Roof Core	2% Chrysotile	3,000 SF	Damaged	CAT II NF ACM
Silver/Aluminum Paint	234 Roof at Parapet	2% Chrysotile	140 SF	Damaged	CAT II NF ACM
Black Tar	234 Roof at Parapet	5% Chrysotile	140 SF	Damaged	CAT I NF ACM
Black/Gray Caulking	234 Roof Front Parapet	15% Chrysotile	20 SF	Damaged	CAT I NF ACM
Roofing Materials beneath Black Membrane Roofing	234 Roof	Assumed ACM**	1,200 SF	Unknown	CAT I NF ACM

\*due to site conditions, extremely difficult to determine if present in back room or bathroom of unit; it didn't appear to be.

\*\*As 234 is still an occupied space, the decision was made not to puncture the lower membrane layer to inspect what materials may lay beneath them.

### 1.03 ACM PRODUCTS TO BE REMOVED

**ALL asbestos containing materials shall be handled at a minimum utilizing approved wet methods, HEPA vacuuming and air filtration, and prompt cleanup. Prompt cleanup for the purposes of this project is described as cleaning up as you remove it, or bag it as it is removed. Do Not create a big pile of friable material to bag later. The industrial hygiene firm will consider footprints outside of the containment as a visible emission and stop work until corrective action takes place.**

#### A. Roofing Materials

1. The contractor will meet the requirements listed under the OSHA standard 29 CFR 1926.1101 for roofing.
2. Contact the HHCB concerning the need for permit, fees and accredited roofing workers and supervisors when removing regulated roofing material.
3. The roofing contractor shall use the state's Waste Shipment Record for a waste manifest and shall include a copy of the manifest to the designer before final payment.
4. Transport materials to a permitted landfill approved to accept asbestos, in a covered truck. Materials will be disposed of as asbestos-containing construction waste. Landfills must be notified in advance when such materials are to be disposed.

#### B. Asbestos Floor Tile and Mastic, vinyl cove base,

1. The designer may elect to design the removal using non-traditional, non-regulated methods such as the infrared heat machine, etc. If these methods are used the designer shall require the contractor to provide documentation showing that his employees have been thoroughly trained in how to use the equipment and provide a copy of personnel air monitoring data from previous jobs to document fiber exposure levels.
2. When removing asbestos-containing mastic from the floor surface, the contractor shall use a product that meets the following criteria:
  - a. The product shall not create a hazardous waste as a byproduct.
  - b. The product shall be "low to no odor."
  - c. The product shall not contain any carcinogenic or chlorinated hydrocarbons.
3. When the contractor is using a mastic remover, he shall protect the walls and any adjacent areas. He shall be responsible for any damage that occurs and for the complete repair of the damage.
4. When the contractor is collecting the asbestos solution, the contractor shall add cat litter, oil-sorb or equivalent so that no free standing liquid will be left in the asbestos bag.

5. After the contractor completes the asbestos mastic removal, the contractor shall use a cleaning solution to neutralize the mastic remover and mop and rinse the floor so that no residue of the product may be left on the floor surface. This cleanser shall be compatible with any new adhesive to be installed.
  6. Potential health problems associated with the mastic remover in buildings that are occupied by the general public shall be addressed. A negative pressure enclosure with a specified number of air changes per hour or some other means may be needed because of vapor concentrations or odor considerations.
- E. TSI Glovebag/Glovebox
1. The negative pressure glovebag/glovebox system shall follow 29 CFR 1926.1101.



## **SECTION 02084**

### **DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL**

#### **1.01 GENERAL**

- A. All asbestos materials and miscellaneous contaminated debris shall be properly sealed and protected, and the loadout vehicle/dumpster shall be locked, while located on the facility site and then transported to a predesignated disposal site in accordance with 40 CFR 61.150 and DOT 49 CFR Parts 100-399.
- B. An enclosed vehicle will be used to haul waste material to the disposal site. No rental vehicles or trailers shall be used. Vehicle selection, vehicle covers and work practices shall assure that no asbestos becomes airborne during the loading, transport and unloading activity, and that material is placed in the waste site without breaking any seals.
- C. Waste disposal polyethylene bags (6 mil) and containers, non-porous (steel/plastic) drums or equivalent, with labels, appropriate for storing asbestos waste during transportation to the disposal site shall be used. In addition to the OSHA labeling requirements, all containers shall be labeled with the name of the waste generator and the location at which the waste was generated.
- D. The contractor shall transport the containers and bags of waste material to the approved waste disposal site. The sealed plastic bags shall be placed into the burial site unless the bags have been broken or damaged. Upon the landfill's approval damaged bags shall be left in the non-porous containers and the entire contaminated package shall be buried. Uncontaminated containers may be reused.
- E. Workers loading and unloading the asbestos will wear respirators and disposable clothing when handling material. Asbestos warning signs shall be posted during loading and unloading of asbestos waste.
- F. The contractor shall use the HHCU's Waste Shipment Record for disposal records as per 40 CFR 61.150 and distribute a copy of all waste shipment records to the designer after the completion of the project.

## APPENDIX A

## PREWORK ASBESTOS INSPECTION CHECKLIST

Location of Facility: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project ID Number: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_ Pass: \_\_\_\_\_ Fail: \_\_\_\_\_

## A. DOCUMENTS

**YES**

**NO**

- 1) Asbestos Removal Permit/NESHAP Notification
- 2) Accreditation Documents for Workers & Supervisors
- 3) Asbestos Plans and Specifications
- 4) Air Monitoring Data
- 5) Waste Shipment Records
- 6) Sign-in Sheets and Bound Book for Comments
- 7) Calibration Record for Grade "D" Air
- 8) Items listed in Section 01043 of Specification

[illegible]

## B. PPE SUPPLIES

- 1) Tyvek Clothing
- 2) Rubber Boots
- 3) Respirators with HEPA Filters

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### C. CLEAN ROOM

- 1) Entry Curtains
- 2) Emergency Phone Numbers Posted
- 3) First Aid Kit
- 4) Asbestos Signs
- 5) Decontamination Procedures Posted
- 6) Fire Extinguisher

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#### D. SHOWER ROOM

- 1) Polyethylene Curtains
- 2) Hot/Cold Water & Operational
- 3) Soap & Towels
- 4) Waste Water Filter Pump Operational
- 5) Extra Five Micron Size Filters
- 6) Filtered Waste Water to Sanitary Sewer

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E.	<b>WORK AREA</b>	<b>YES</b>	<b>NO</b>
1)	Removable Items Out of Area	_____	_____
2)	Non-removable Items Protected	_____	_____
3)	Critical Barriers Installed	_____	_____
4)	Polyethylene Curtains	_____	_____
5)	Polyethylene on Walls/Floors as Specified	_____	_____
6)	HVAC off	_____	_____
7)	Air Filtration Devices in Place and Operational	_____	_____
8)	Air Exhausted to Outside	_____	_____
9)	Electricity Locked and Tagged Out	_____	_____
10)	Temporary Power Installed with GFCI	_____	_____
11)	Fire Extinguishers	_____	_____
12)	Emergency and Fire Exits Marked	_____	_____
13)	Audible Alarms Operational	_____	_____
14)	Toilet Available	_____	_____
F.	<b>EQUIPMENT</b>		
1)	Safety Equipment	_____	_____
2)	HEPA Vacuums	_____	_____
3)	Waste Disposal Bags	_____	_____
4)	Airless Sprayer with Water Source	_____	_____
5)	Cleaning Equipment	_____	_____
6)	Glove Bags	_____	_____
7)	Emergency Power Generator (if required)	_____	_____
8)	Temporary Lighting	_____	_____
G.	<b>OTHER</b>		
1)	_____	_____	_____
2)	_____	_____	_____
3)	_____	_____	_____
4)	_____	_____	_____

\_\_\_\_\_

*Asbestos Design Consultant*

\_\_\_\_\_

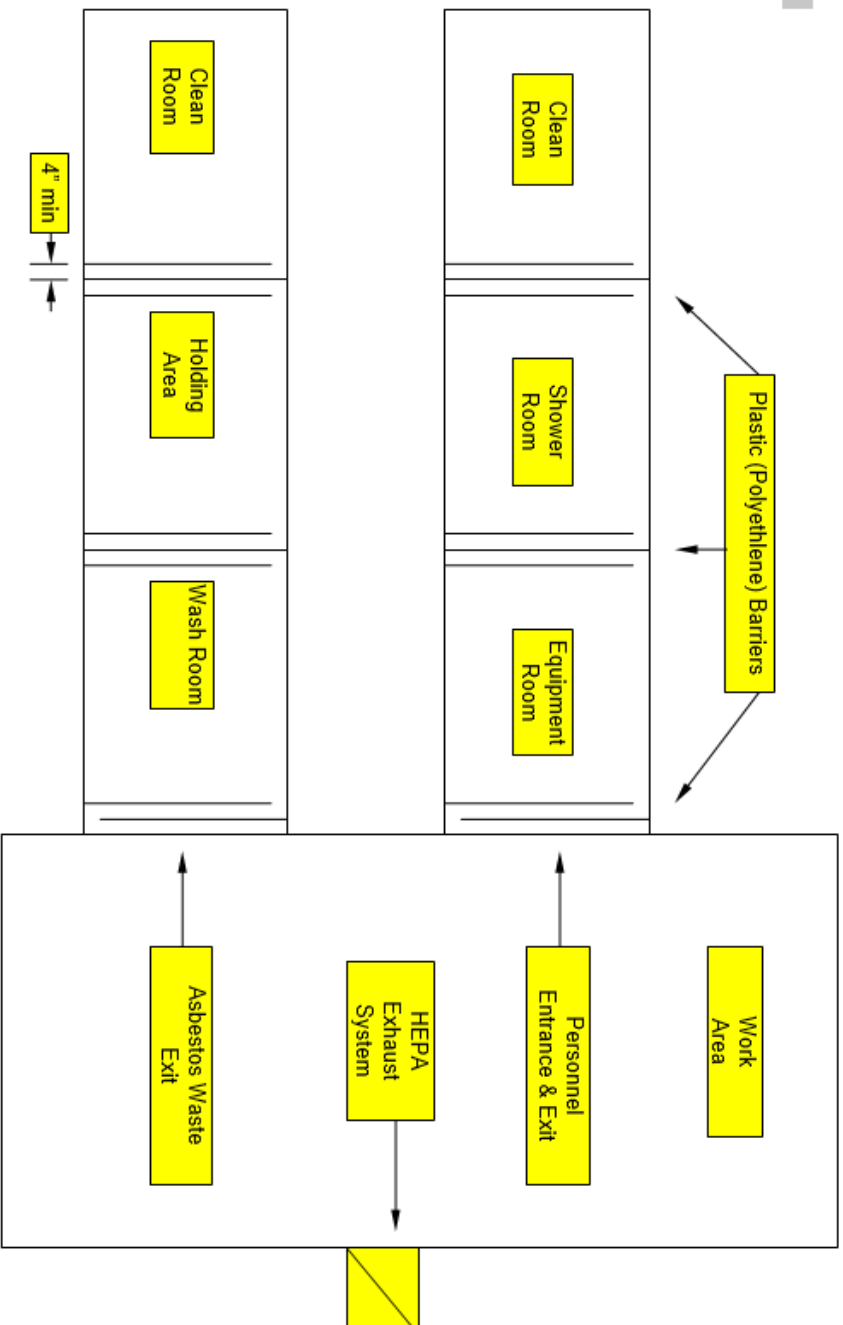
*Date*

\_\_\_\_\_

*Asbestos Contractor's Representative*

\_\_\_\_\_

*Date*



### Decontamination Area Arrangement - Plan View

Drawn By:  
GAD

Date:  
01/02/96

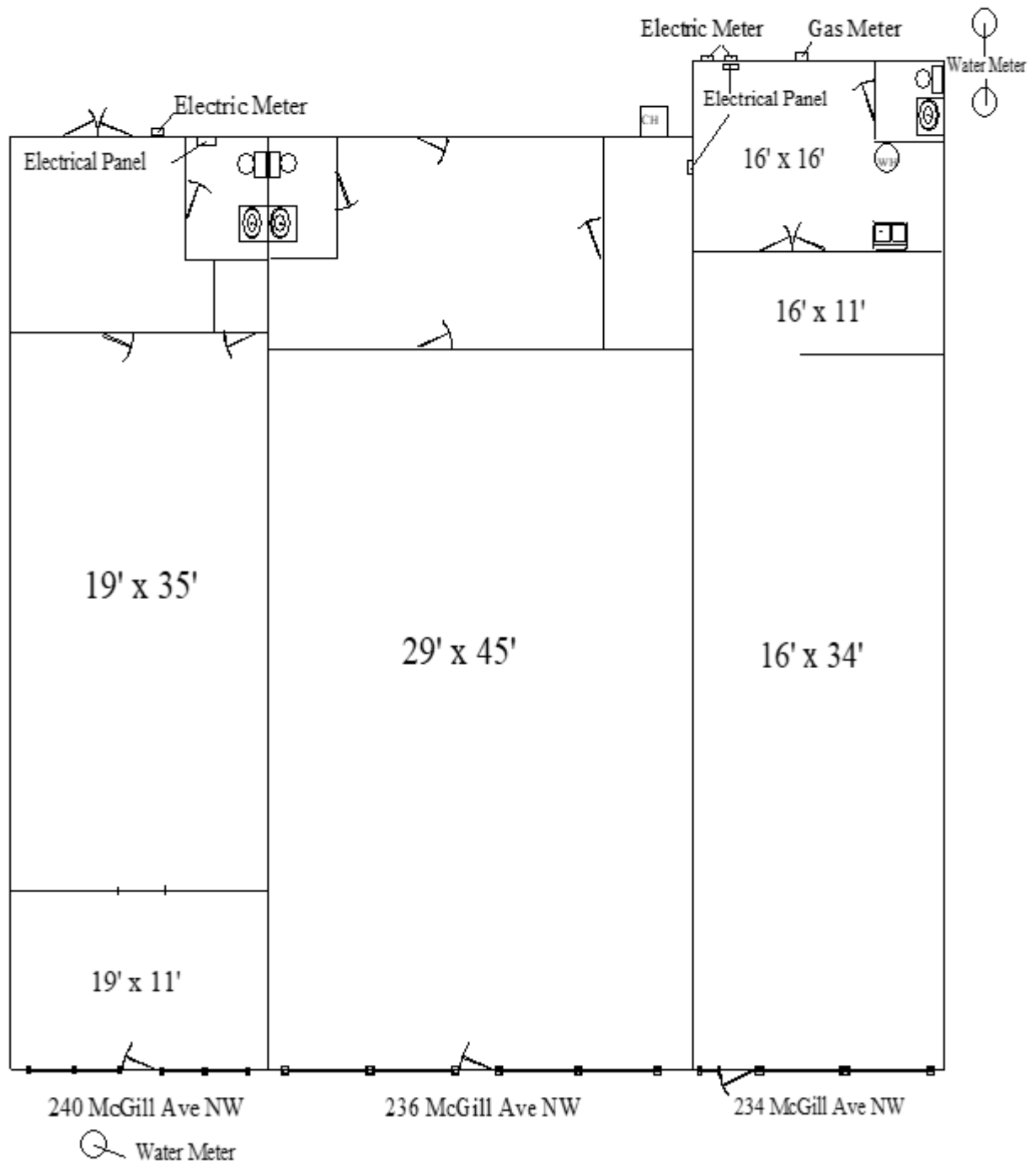
N.C. Department of Administration  
State Construction Office  
Raleigh, N.C. 27601

Appi

234 – 240 McGill Ave NW

Concord, NC 28025

Not to scale









**Environmental**

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Welcome, NC 27374

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# **Asbestos Abatement Project Design for Class I,II, and III Regulated Asbestos Removal for Demolition**

Location:

**228 McGill Ave.**

Concord, NC 28025

Prepared for:

**City of Concord**

35 Cabarrus Avenue West

Concord, NC 28025

Project Design in reference to:

**One Source Environmental NESHAP Survey #S23-1011**

**Dated April 11<sup>th</sup> 2023**

**NC Asbestos Inspector:**

**Kathryn Hubicki**

**NC Accreditation # 12783**

**NC Asbestos Project Designer:**

**Richard Riggs**

**NC Accreditation #40531**

**Expires 2/24/2023**

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## Introduction Statements:

- The purpose of the following asbestos abatement project design is to comply with OSHA 29 CFR 1926.1101 Asbestos in Construction Regulations, EPA regulations including AHERA 40 CFR Chapter 1 Subchapter R, Part 763 Subpart E, ASHARA 40 CFR Appendix C to Subpart E of Part 763, and NESHAP 40 CFR Subpart M.
- *This project design is for the disturbance of friable and non-friable asbestos containing materials (>1%).*
- The purpose of this removal is to prepare the structure at 228 McGill Ave for demolition
- The provided project design is based on OSHA Class I and Class II regulated work practices for both regulated (friable) and non-regulated (non-friable) removals of Non-Friable Category 1 and 2 Asbestos Containing Materials. These work practices utilize standard Wet Methods, HEPA filtration, and Prompt Cleanup while under Negative pressure containment, three chamber decontamination shower system with air locks and load out, while donned in appropriate PPE and Respiratory protection, then providing Proof of proper disposal of Asbestos Containing Materials.
- This project will fall under North Carolina rules for public space. Quantity rules apply as identified materials are greater >3000 sq ft, 1500 ln ft, or 656 cu ft. As this project is for the purposes of immediate demolition, the Supervising Air Monitor (Michael D Zavislak, CIH) will provide the necessary SAM written Air Monitoring Plan separate from this project design as required by North Carolina Health Hazard Control to TD Environmental prior to the start of the project.
- Any material disturbed yielding friability in quantities greater than 160 sq ft, 260 ln ft, or 35 cu ft will be included on the required NCHHCU 10-day notification (permit).
- Notifications of working schedules should be given to the local Fire Department, Police, and EMS Services.
- All asbestos regulations through OSHA, EPA, and NC Health Hazard Control will apply.
- A local demolition permit through Cabarrus County will be required for the final demolition activities in addition to the NC Health Hazard Control Unit permit for Abatement and Demolition
- The City of Concord will require an affidavit, including the names of all employee's who will be working on City of Concord property, to have successfully passed the NC Sexual Predator Registry Check, and a NC Criminal Background check. Personnel working on this project should be free from Felonious or serious misdemeanor convictions involving violence, weapons, domestic abuse, narcotic distribution, larcenies, or predatory acts including sexual or stalking activities. In the event an incident occurs, the City of Concord will retain the right to request the original copy of those background checks which should be dated prior to personnel working on the project site. Background checks that are not dated prior to the start of work will be considered a breach of contract, falsifying of government documentation with the potential of being treated as a fraudulent criminal act, and potentially the forfeiture of the contractor's performance bond.



- The contractor will be required to provide a 6 ft tall construction fence around the working area at all times with the capability of securing the premises while work is not being performed.
- Demolition of the structure is to take place immediately (generally 48 to 72 hours after or within the agreed upon time frame with TD Environmental and The City of Concord upon the receiving notification of a successful abatement clearance for the structure from TD Environmental.
- All contractors will be vetted through public information sources to validate capabilities stated on the bid sheet. This includes the stated dependency on in-house and subcontracted work forces. Do not understate subcontractor use or overstate your company's inhouse capabilities. Be honest. Low bidder is not guaranteed the award. The lowest qualified, fully vetted bidder will be recommended for award.
- The City of Concord reserves the right to refuse or reject any and all bids for any reason without notice. Submitted bids cannot be retracted for 30 days after the bid opening.
- Any contractor being considered for AWARD will also be vetted through for EPA and OSHA violations and citations. Contractors with active violations or citations within the past 3 years will not be considered for award.
- Contractors involved with a current civil or criminal litigation must provide an acceptable explanation and discloser to the City of Concord before submitting a bid and enduring the vetting process. Undisclosed litigations will result in a bid being discarded and not considered for award.
- Minority and local subcontractor participation goals are highly encouraged and set at 20%. The City of Concord is dedicated to utilizing, if available, qualified local and minority owned business to support the local and surrounding communities. While local and Minority subcontractors may not always be available, efforts will be considered in leu for the scoring and vetting processes. There is a log provided in the bid packet for showing efforts in using Minority and Local contractors.
- The Abatement portion should be properly staffed to be completed in less than 10 working days.
- Contractors should review the separate Bid packet and make sure all pages are initialed and complete including any addendum acknowledgements.
- Contractor must maintain the minimum insurance requirements for the City of Concord. An example and the required verbiage is included in the separate bid packet.
- Contractors will be requires to submit a bid bond from a bonding company in the amount equal to 5% of the total price of the bid. A performance and payment bond from a NC bonding company will be required for the full amount of the project.

## **Definitions:**

### **Acoustical Plaster**

Sound absorbing finishing material mill formulated for application in areas where a reduction in sound reverberation or noise intensity is desired. These materials usually are applied in a minimum thickness of ½" (13 mm). The finish material is applied over gypsum plaster, plaster brown coat or other base plaster. The surface material is usually friable and has a rough surface appearance.

### **Acoustic Tile**

Tile-shaped blocks of sound absorbent material used for ceilings or as wall facing. May be glued to substrate or laid in a rigid grid work.

### **ACM (ACBM)**

Asbestos-Containing Material (Asbestos-containing Building Material). Any material containing more than one percent asbestos.

### **Adequately Wet**

Adequately Wet means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

### **AHERA**

Asbestos Hazard Emergency Response Act

### **AIA**

American Institute of Architects Air Monitoring The process of measuring the fiber content of a specific volume of air.

### **Amended Water**

Water to which a surfactant has been added for use in wetting ACM to control asbestos fibers.

### **APM**

Asbestos Program Manager

### **Asbestos**

Chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that has been chemically treated and/or altered.

### **Asbestos-Containing Waste Material**

Mill tailings or any waste that contains commercial asbestos and is generated by a source regulated under NESHAP. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing waste and materials contaminated with asbestos including disposable equipment and clothing.

### **Asbestos debris**

Pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

### **Asbestos Hazard Emergency Response Act (AHERA)**

An EPA regulation published in the October 30, 1987 Federal Register covering asbestos-containing materials in schools. AHERA requires local education agencies to identify ACM in their school buildings, develop an asbestos management plan and implement this plan. An O&M program is one permitted response action, where appropriate.

## **Asbestos O&M Work**

Cleaning, maintenance, repair or renovation work involving asbestos containing materials where the intent of the activity is not to remove asbestos. NESHAP requires that the owner or operator of a demolition or renovation activity conduct a thorough inspection of the affected facility or part of the facility where demolition or renovation will occur.

## **Asbestos Program Manager (APM)**

A building owner or **D2** # Appendix D # Glossary # © NIBS 1996 # Page 160 designated representative who supervises all aspects of the facility asbestos management and control program.

## **Breathing Zone**

A hemisphere forward of the shoulders with a radius of approximately 6" to 9" (150-250 mm).

## **Bridging encapsulant**

An encapsulant that forms a discrete layer on the surface of an asbestos matrix.

## **CFR**

Code of Federal Regulations

## **Clerk-of-the-works**

A representative of the architect or owner who oversees construction, handles administrative matters, and ensures that the construction is in accordance with the contract documents.

## **Competent Person**

means, in addition to the definition in 29 CFR 1926.32 (f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work one who is

specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR part 763) for supervisor, or its equivalent and, for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92 (a)(2).

## **Compliance Instruction (Compliance Directive)**

Instruction issued by OSHA to establish policies and provide clarification to ensure uniform enforcement of OSHA standards.

## **Concealed Suspension or Concealed Spline Ceiling System**

Presents a monolithic ceiling surface, unobstructed by the crosshatching of exposed grid members. Tiles are typically 12" x 12" (300 x 300mm) or 12" x 24" (300 x 600 mm) with slots or kerfs cut into the edges of tiles for the purposes of accepting flat or "T" splines to support the tiles.

## **Confined Space**

A space that has limited openings for entry and exit, unfavorable natural ventilation and/or a space not designed for continuous worker occupancy. Examples include boilers, furnaces, pits, septic tanks, manholes, silos and utility vaults.

## **Critical Barrier**

One or more layers of polyethylene taped in place over openings into a work area. Openings to be covered include doors, windows, diffusers, and any other opening that could allow outside air into a work area.

## **CSRF**

Construction Sciences Research Foundation

**Decorative Acoustic Finish:**

Finishing material mill-formulated and spray applied up to about 3/8" (10 mm) thick over gypsum wallboard. Material has a rough surface and is similar in appearance to acoustic plaster but is not designed for sound absorption.

**Delamination**

Separation of one layer from another.

**Disposal Bag**

Properly labeled 6 mil (0.15 mm) thick (or thicker) leak-tight plastic bags used for transporting asbestos waste from work and to disposal site.

**Drop Cloth**

A layer of polyethylene on the floor of a work area to protect the floor below from contamination and to facilitate the clean-up of dust or debris generated during the work.

**EJCDC**

Engineers Joint Contract Documents Committee

**EL**

Excursion Limit

**Encapsulant**

A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

D3 # Appendix D # Glossary # © NIBS 1996 # Page 161

**Enclosure**

The construction of an air-tight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

**EPA**

U.S. Environmental Protection Agency

**Excursion Limit (EL)**

The OSHA term used to define a maximum airborne concentration of asbestos in fibers per cubic centimeter as averaged over a sampling period of thirty minutes.

**Fiber Release**

Any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

**Fireproofing**

Material applied to structural elements or systems which provides increased fire resistance, usually serving no structural function. This material is typically applied using spray equipment.

**Friable Asbestos**

(See "Regulated ACM").

**Glove-bag**

A polyethylene or polyvinyl chloride bag-like enclosure affixed around an asbestos-containing source (most often, TSI) so that the material may be removed while minimizing release of airborne fibers to the surrounding atmosphere.

**HEPA Filter**

High-Efficiency Particulate Air Filter. Such filters are rated to trap at least 99.97% of all particles 0.3 microns (0.3 :m) in diameter or larger.

**HMR**

Hazardous Material Rules under Dept of Transportation regulations.

**MAP**

EPA Interim Final Model Accreditation Plan (MAP) for asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).

## **Medical Surveillance**

A periodic comprehensive review of a worker's health status. The required elements of an acceptable medical surveillance program are listed in the Occupational Safety and Health Administration standards for asbestos.

## **Mini-Enclosure**

An enclosure constructed of polyethylene sheeting used for small scale, short duration asbestos maintenance or renovation work. Mini-enclosures can be small enough to restrict entry to the asbestos work area to one worker. Appendix G to OSHA regulation 29 CFR 1926.58 discusses mini-enclosures and recommends that a change room be constructed contiguous to the mini-enclosure.

## **Miscellaneous ACM**

Interior asbestos-containing building material on structural components, structural members or fixtures, such as floor and ceiling tiles; does not include surfacing material or thermal system insulation.

## **NEA**

Negative Exposure Assessment

## **Negative Exposure Assessment**

A demonstration by the employer which complies with criteria in paragraph (f)(2)(iii) of 29 CFR 1926.1101, that employee exposure during an operation is expected to be consistently below the PELs. Negative Pressure System A local exhaust system intended to prevent the escape of contaminated air to the surrounding environment. It utilizes HEPA filtration capable of maintaining a pressure differential with a lower pressure inside the Work Area than in any adjacent area. This system recirculates clean air and/or generates a constant flow of air from adjacent areas into the work area.

## **Negative Pressure Respirator**

A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.

## **NESHAP**

National Emission Standard for Hazardous Air Pollutants – EPA Rules under the Clean Air Act (40 CFR Part 61). **D4** # Appendix D # Glossary # © NIBS 1996  
# Page 162

## **NIOSH**

The National Institute for Occupational Safety and Health, which was established by the Occupational Safety and Health Act of 1970. Primary functions of NIOSH are to conduct research, issue technical information, and certify respirators.

## **O&M**

Operations & Maintenance

## **Operations & Maintenance**

(O&M) Program A program of work practices to maintain ACM in good condition, ensure clean-up of asbestos fibers previously released, and prevent further release by minimizing and controlling ACM disturbance or damage.

## **Occupied Area**

An area where personnel are present and are performing their normal activities intended for the area (such as in a typical office area from 8:00 to 5:00p.m., Monday through Friday).

## **OSHA**

Occupational Health & Safety Administration.

## **PAPR**

Powered Air Purifying Respirator.

## **Penetrating Encapsulant**

An encapsulant that is absorbed by the in situ asbestos matrix without leaving a discrete surface layer.

## **PELs**

Permissible Exposure Limits.

## **Personal Air Samples**

An air sample taken with a sampling pump directly attached to the worker with the collecting filter and cassette placed in the worker's breathing zone. These samples are required by the OSHA asbestos standards and the EPA Worker Protection Rule.

## **PCM**

Phase Contrast Microscopy

## **Phase Contrast Microscopy (PCM)**

A method of analysis using a light microscope, used to find the concentration of airborne fibers. Does not distinguish among asbestos and other fibers. Used by OSHA to find personal exposures, and by EPA to find area levels for AHERA project clearance.

## **Plenum**

Any space to convey air in a building or structure. The space above a suspended ceiling is often used as an air plenum. This term is also used in the work practices to refer to spaces above a ceiling not used to convey air.

## **PLM**

Polarized Light Microscopy (PLM) A method of analysis using a light microscope to find the chemical or mineral types of samples, including the concentration of asbestos in bulk materials. Used by EPA for AHERA and NESHAP, and by OSHA to see if asbestos is involved in a project.

## **Project Representative**

Architect's representative at the project site who assists in the administration of the construction contract.

## **Protection Factor**

The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

## **RCRA**

Resource Conservation and Recovery Act.

## **RACM**

Regulated ACM

## **Regulated ACM (RACM)**

As defined by NESHAP in the November 20, 1990 Federal Register, **regulated asbestos-containing material (RACM)** means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart. (**Note:** Regulated ACM is an EPA NESHAP concept. OSHA makes no **D5** # Appendix D # Glossary # © NIBS 1996 # Page 163 distinction between friable and non-friable asbestos). "Cutting" means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing or punching. "Grinding" means to reduce powder or small fragments and includes mechanical clipping or drilling.

**Friable asbestos material**

means any material containing more than 1 percent asbestos as determined using the method specified under AHERA (40 CFR Part 763, Sub-part F, Appendix A , section 1, Polarized Light Microscopy) that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

**Category I nonfriable asbestos-containing material (ACM)**

means asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified under AHERA.

**Category II nonfriable ACM**

means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Remove**

For Operations and Maintenance work on ACM, "remove" refers to the removal of ACM as needed to perform a maintenance or repair O & M activity.

**Removal Encapsulant**

A penetrating encapsulant specifically designed to minimize fiber release during removal of asbestos-containing materials rather than for in situ encapsulation.

**Repair**

Returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

**Respirator**

A device designed to protect the wearer from the inhalation of harmful particulates.

**Small-scale, Short-duration**

Term formerly used by OSHA to describe O&M work activities (in the previous OSHA construction standard). This term has been superseded by the work class definitions in the current OSHA standard.

**Surfacing ACM**

Asbestos-containing material that is sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural member, or other materials on surfaces for acoustical, fireproofing, or other purposes.

**Survey**

An asbestos survey is what EPA calls an inspection in the AHERA regulation. It consists of a visual and tactile inspection of a building to identify, quantify and assess the accessibility and condition of the ACM and suspected ACM present.

**Suspended "T" Bar Ceiling System**

A false or dropped ceiling composed of acoustic tiles laid into an inverted metal "T" bar grid frame suspended by wires from building framing members.

**Surfactant**

A chemical wetting agent added to water to improve penetration, thus, reducing the quantity of water required for a given operation or area.

**TEM**

Transmission Electron Microscopy Temporary Barriers One or more layers of 6 mil polyethylene installed to isolate a work area from other portions of a facility.

## **Thermal System Insulation (TSI)**

Thermal system insulation -asbestos-containing material applied to pipes, fittings, boilers, breeching, tanks, ducts or other interior structural components to prevent heat loss or gain or water condensation.

## **Time Weighted Average (TWA)**

In air sampling, this refers to the average air concentration of contaminants during a particular time period.

## **TSI**

Thermal System Insulation

## **Transmission Electron Microscopy (TEM)**

A method of analysis using an electron microscope, used to find and analyze the concentration of airborne or bulk asbestos fibers and structures. Distinguishes among asbestos and other materials; can detect smaller asbestos fibers than does PCM. Used by EPA to find area concentrations for large AHERA project clearance.

## **TSCA**

Toxic Substances Control Act

## **TWA**

Time Weighted Average.

## **Work Area**

The area where asbestos related work or removal operations are performed which is defined and/or isolated to prevent the spread of asbestos dust, fibers or debris, and entry by unauthorized personnel.

## **Work Practices**

Procedures designed to be followed to avoid or minimize fiber release during activities affecting ACM.

- The OSHA construction standard for asbestos (29 CFR 1926.1101) establishes four classes of asbestos work.

- |           |  |
|-----------|--|
| Class 1 - | Disturbance of Friable, Surfacing, or TSI materials                            |
| Class 2 - | Disturbance of non-friable miscellaneous materials being removed mostly intact |
| Class 3 - | Inspections, Operations and Maintenance activities                             |
| Class 4 - | Custodial activities   |



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## **SECTION 01043**

### **PROJECT COORDINATION**

#### **1.01 GENERAL**

- A. All asbestos abatement contractors will be licensed general contractors in either the specialty interior, building, unclassified or asbestos categories by the North Carolina Licensing Board of General Contractors and limited for the bid amount. The example would be a Specialty "S" endorsement for asbestos.
- B. The contractor shall be responsible for inspecting the site prior to bidding to confirm the scope of the work. Any quantities listed by the designer in the plans, specifications or survey are done so as approximations. The actual quantities of asbestos-containing material to be encountered is the responsibility of the contractor.
- C. The contractor shall furnish and is responsible for all costs including, but not limited to: permit fees, containment preparation, labor, materials, services, insurance, bonding, and equipment necessary to carry out the abatement operations and disposal of all asbestos material in accordance with the plans and specifications, the EPA and OSHA regulations, and any applicable state and local government regulations.
- D. The contractor/employer has and assumes the responsibility of proceeding in such a manner that he offers his employees a workplace free of recognized hazards causing or likely to cause death or serious injury. The contractor shall be responsible for performing this abatement and disposal so that airborne asbestos fiber levels do not exceed established levels.
- E. The contractor will be responsible for all costs associated with employee monitoring to meet the OSHA requirements.
- F. The contractor is responsible for all costs, including additional visits, should the designer and/or the industrial hygiene firm determine that the contractor failed a final inspection. Notification and scheduling of the final inspection during the project is the responsibility of the contractor. The contractor will allow a minimum notice of 48 hours unless a different time frame is agreed upon by the designer and the contractor.

## **1.02 PERSONNEL**

### **A. Supervisor**

1. All supervisors shall be accredited by the NC Health Hazards Control Unit (NCHHCU).
2. All supervisors on the project shall have two years of experience in the administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc.
3. One supervisor shall be provided for every 10 workers inside the containment. A minimum of one supervisor shall be provided per project.
4. The contractor shall have at least one employee on the job site in either a foreman or supervisor's position who is bilingual in the appropriate languages when employing workers who do not speak fluent English.
5. A minimum of one supervisor onsite per company shall hold a current OSHA 30-hour certificate

### **B. Worker**

1. All workers shall be accredited by the NCHHCU.
2. All workers shall hold an OSHA 10-hour certificate

### **C. Competent Person**

1. A competent person, as defined in the OSHA asbestos standard 29 CFR 1926.1101, employed by the contractor must be outside the work area at all times to monitor activity, ensure containment security, provide information to visitors, and provide access to the work area.

**D. Employees**

1. The contractor is responsible for the behavior of workers within his employment. If at any time during the contracted work, any of his employees are judged to exhibit behavior unfitting for the area or judged to be a nuisance by the owner or designer, the contractor shall remove them immediately from the project.
2. The contractor shall be responsible for compliance with the following concerning employee behavior:
  - a. Under no circumstances will alcohol, drugs or any other type of controlled substances be permitted on City of Concord property.
  - b. All workers are restricted to the construction project site only.
  - c. All vehicles must be parked in areas prearranged with the owner.
  - d. All workers must conform to the following basic dress code when in public areas of the project confines: long pants, shirts, no tank tops, no shorts, no bare backs.
  - e. The contractor is responsible for disposal of all trash brought on state property by his employees, including drink cans, bottles or other food containers and wrappers.
3. Failure to adhere to these rules could result in criminal prosecution and/or removal from the City of Concord property.

**1.03 MEETINGS**

**A. Prebid**

1. A mandatory pre-bid conference will be held by the TD Environmental and the City of Concord at the project site. All contractors submitting a bid are required to attend, visit the site and ask questions concerning the plans and specifications. The date and time will be specified in the bid packet.
2. TD Environmental will review the contractors intended workplans along with the design specifications, present techniques and safeguards allowed for the removal of the asbestos. The contractor will be required to provide their own water and power.
3. Any minutes, new points or clarifications raised during the meeting will be issued by the designer in an addendum at least 24 hours prior to the bid submission deadline.

#### 1.04 PRE-JOB SUBMITTALS

- A. Submit three complete, bound sets of pre-job submittals to the designer at least within 5 business days of the contingent offer of award. Work is prohibited until submittal package has been reviewed and approved by designer. A copy of the approved submittals shall be kept in a three-ring binder (project log) by the contractor at the project site in the clean room or in the on-site office of the contractor.
1. Notifications: Provide copies of Asbestos Permit Application and Notification for Demolition/Renovation (DEQ 3768), which provide written notice to all required agencies, including North Carolina HHC. Provide notification letters to local EMS, fire and police departments.
  2. Employee List: Provide copies of lists of supervisors and workers, along with their accreditation, most recent training certificate, and any other pertinent training certifications to be utilized on the project. *(No one shall work onsite without proper documentation present and approval of the background and sexual predator affidavit by the City of Concord) As it is understood the workforce may rotate during the project, the contractor will need to provide the updated affidavit to TD Environmental with the names of those persons 24 hours prior to being onsite.*
  3. Permits: Provide copies of approval of a waste disposal site in compliance with 40 CFR 61.154.
  4. Medical: Include individually signed and witnessed forms by each worker to be utilized on the project documenting that each is actively involved in a company employee medical surveillance program. *( Please do not include personal medical information such as the OSHA questionnaire, PFT, Physical Examination report. Only provide an affidavit signed by the employee that they are actively involved in your company medical surveillance and respiratory program in accordance to OSHA 1910.134)*
  5. Respirator Training: Letter from the most recent medical evaluation listing no restriction or the restriction/ limitations for the employees use of a negative pressure respirator. Copies of most recent fit testing records, individually signed for each worker to be utilized on the project. *(Only provide the forms showing the type of respirator that was fitted properly to the worker, and the letter documenting the workers restricted or unrestricted use of that respirator)*
  6. Project Schedule: Time schedule for the project, outlining the proposed start, setup, clearances, etc. for the various phases of the project.

7. Initial Exposure Assessment: As required by the OSHA construction asbestos standard 29 CFR 1926.1101. ( If not provided work will begin with the use of PAPR as respiratory protection.)
8. Any other programs or training as outlined by the OSHA and EPA standards.

#### **1.05 POST-JOB SUBMITTALS**

- A. Submit three complete, bound sets of post-job submittals to the designer following the final completion of the work. Requests for final payment will not be approved until the submittal package has been reviewed and approved by the designer.
  1. Affidavits: Contractor's affidavit of payment of debts and claims, affidavit of release of liens, and consent of surety company to final payment.
  2. Manifest: North Carolina Asbestos Waste Shipment Record (DEHNR 3787) receipt from landfill operator which acknowledges the contractor's delivery(s) of waste material. Include date, quantity of material delivered and signature of authorized representative of landfill. Also, include name of waste transporter.
  3. Daily Log: A signed copy of all daily logs showing the following: name, date, entering and leaving time, company or agency represented, reason for entry for all persons entering the work area, employee's daily air monitoring data as required by the OSHA standard and written comments by inspectors, industrial hygienists, designers and visitors.
  4. Medical: Copies of worker release forms, asbestos training certification forms and respirator training documentation of all new employees hired during the project.
  5. Special Reports: All documents generated under Section 01043.1.06.
  6. This project will also require a JHA (Job Hazard Analysis) for each scope of work performed daily. A Standard OSHA form is acceptable.

#### **1.06 SPECIAL REPORTS**

- A. General: Except as otherwise indicated, submit special reports to designer within one day of occurrence requiring special report, with copies to others affected by occurrence. Also keep a copy in the project log book.
- B. Reporting Unusual Events: When an event of unusual and significant nature occurs at site (examples: failure of negative pressure system, rupture of temporary enclosures), prepare and submit a special report to the designer immediately, listing chain of events, persons participating, response by contractor's personnel, evaluation of results or effects, and similar pertinent information. When such events are known or predictable in advance, advise designer in advance at earliest possible date.

- C. Reporting Accidents: Prepare and submit reports of significant accidents, at site and anywhere else work is in progress. Record and document date and actions; comply with industry standards for reporting accidents. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury.

#### **1.07 CONTINGENCY PLAN**

- A. Contingency Plan: Prepare a contingency plan for emergencies including fire, accident, power failure, negative pressure system failure, supplied air system failure (if applicable), evacuation of injured persons for both life threatening and non-life threatening, or any other event that may require modification or abridgment of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. Keep these plans in the on-site office.
- B. Post outside/in clean room of Personnel Decontamination Unit:
  - 1. Telephone numbers and locations of emergency services including but not limited to, fire, ambulance, doctor, hospital, police, power company, telephone company and the North Carolina HHCB.
  - 2. A copy of Material Safety Data Sheets (SDS) for any chemicals used during the asbestos project.
  - 3. The contractor shall post asbestos signs in each appropriate language as per the OSHA 29 CFR 1926.1101 standard.

## **SECTION 01092**

### **CODES AND REGULATIONS**

#### **1.01 REFERENCE SPECIFICATIONS**

The contractor shall assume full responsibility and liability for compliance with all applicable federal, state and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

Unless modified by these project specifications, all specifications for stripping, removal, repair and disposal work shall conform to the following specifications and standards, as applicable, as if completely reproduced herein.

- A. The following regulations published by the Environmental Protection Agency (EPA):
  - 1. "National Emissions Standards for Hazardous Air Pollutants Asbestos," 40 CFR Part 61, Subpart M.
  - 2. "General Provisions," 40 CFR Part 61, Subpart A.
  - 3. "Guidance for Controlling Asbestos-Containing Materials in Buildings" June 1985. (EPA # 560/5-85-024).
  - 4. "Asbestos-Containing Materials in Schools," 40 CFR Part 763, Subpart E including appendices.
- B. The following regulations published by the U.S. Department of Labor, OSHA:
  - 1. "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules," Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations.
  - 2. "Respiratory Protection," Title 29, Part 1910, Section 134 of the Code of Federal Regulations.
  - 3. Construction Industry, Title 29, Part 1926, of the Code of Federal Regulations.
  - 4. "Access to Employee Exposure and Medical Records," Title 29, Part 1910, Section 20 of the Code of Federal Regulations.
  - 5. "Hazard Communication," Title 29, Part 1926, Section 59 of the Code of Federal Regulations.



6. "Specifications for Accident Prevention Signs and Tags," Title 29, Part 1910, Section 145 of the Code of Federal Regulations.
- C. The following regulations published by North Carolina state agencies:
1. North Carolina Asbestos Hazard Management Program Rules as adopted by 15A NCAC 19C .0600.
  2. "North Carolina Occupational Safety and Health Standards for the Construction Industry," 29 CFR Part 1926 as adopted by T13 NCAC 07F .0201, and shipyard T13:07F.0500.
  3. North Carolina General Statutes, Chapter 95, 97, 130.
- D. The following documents published by the American National Standards Institute:
1. "Fundamentals Governing the Design and Operation of Local Exhaust Systems," Z9.2-1979.
  2. "American National Standard for Respiratory Protection Respiratory Use - Physical Qualifications for Personnel," Z88.6-1984.
  3. "Practices for Respiratory Protection," Z88.2-1992.

## 1.02 NOTICES

- A. The contractor shall notify the following offices in writing within the time frame specified by the NESHAP regulations prior to beginning any asbestos removal operations.

### 1. State Agencies

North Carolina Health Hazards Control Unit  
Occupational & Environmental Epidemiology Section  
N.C. DHHS

*(Regular Mail)*

P.O. Box 27687

Raleigh, N.C. 27611-7687

Telephone: (919) 733-0820

Fax: (919) 733-8493

*(UPS, Fed Ex, etc.)*

2728 Capital Blvd

Parker Lincoln Bldg.

Second Floor / 2A210

Raleigh, N.C. 27604

N.C. Department of Labor  
Division of Occupational Safety and Health  
319 Chapanoke Road, Suite 105  
Raleigh, N.C. 27603-3432  
Telephone: 1-800-LABOR-NC or (919) 662-4602  
Fax: (919) 662-4625

2. Local Programs

When work is performed in Buncombe/Haywood, Mecklenburg or Forsyth counties, the air quality programs in these counties must be notified and their regulations shall be adhered to. Addresses of these agencies can be found on page 3 of DEQ (3768) form. Phone numbers are listed below.

Buncombe/Haywood Counties (704) 255-5710

Forsyth County (910) 727-8064

Mecklenburg County (704) 336-5599

3. Emergency Departments

Notify the local emergency medical services, police and fire departments in writing of the type and scope of work being performed and request these departments make an inspection prior to beginning the work.

4. Licenses

Maintain current licenses for contractor and accreditation for workers and supervisors as required by applicable State or local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the work of this contract.

5. A courtesy notification for any amount of asbestos, regulated or non-regulated, to be removed shall be sent to the HHCB 10 working days prior to the start date of the asbestos removal.

## **SECTION 01410**

### **AIR MONITORING - INDUSTRIAL HYGIENE FIRM**

#### **1.01 GENERAL**

- A. The industrial hygiene firms (TD Environmental) services firm will be paid by the owner.
- B. Air monitoring shall be done under the direct supervision of a North Carolina accredited supervising air monitor (SAM) (Michael D Zavislak, CIH), except for sampling performed by the contractor to satisfy OSHA requirements.
- C. The SAM shall be accredited per the Asbestos Hazard Management Program rules.
- D. Air monitor shall be accredited as per the Asbestos Hazard Management Program rules and work under the direct supervision of a SAM.
- E. The SAM representing each firm shall be a CIH accredited through the AIHA.
- F. If specific project activities are assigned to an air monitor, the SAM is expected to be in direct control and responsible for industrial hygiene work completed on the project. The SAM shall approve and sign all air monitoring results performed by the air monitor.
- G. Employees of the NCHHCU shall have right of entry into the project as long as they hold a current accreditation for Class 1 and 2 work under OSHA guidelines.

## **1.02 DESCRIPTION OF WORK**

- A. TD Environmental, the designer/industrial hygiene firm, will provide guidance and consulting to the contractor as necessary throughout the project.

TD Environmental, a dba of TD Riggs Enterprises LLC, is contracted by the owner to provide the Industrial Hygiene services, Abatement project design, Project monitoring, and SAM services. TD Environmental is under the direct supervision of NC accredited Supervising Air Monitor Michael D Zavislak, CIH.

- B. At the job site, TD Environmental will observe, be aware, and comment on general work site conditions and activities as they relate to the specifications and profession of industrial hygiene, and make recommendations in writing to the contractor.
- C. The industrial hygiene firm is responsible for overseeing the protection of the environment from contamination, protection of persons in adjacent areas, and assurance that the areas are acceptable for occupancy upon the completion of work, prior to the demolition of the structure.
- D. The industrial hygiene firm has the authority to direct the contractor relative to safety and environmental concerns. This includes stopping the work if necessary. All directions and comments made by the industrial hygiene firm to the contractor shall be written with a copy to the designer and owner.
- E. The industrial hygiene firm shall furnish the contractor and the City of Concord a copy of his field report within 24 hours of the visit. Copies of field notes and reports of observations shall be kept in project log book.
- F. The SAM shall review and make comments to the designer on the submittals listed in Section 01043.
- G. The SAM shall approve any change in contractor's respiratory protection. This includes a review of the historical data.
- H. TD Environmental will conform to the contractor's schedule and shall respond to necessary changes, provided an advance notice is given as outlined in Section 01043.
- I. The TD Environmental's project monitor shall furnish the contractor with mobile phone number where he can be reached quickly at all times.
- J. The TD Environmental shall notify the designer and contractor, in writing, of any failed clearance visits.

- K. At the completion of the project, the TD Environmental shall prepare a report describing the assessment of the project, all air monitoring data, acceptance letters, and a description of the project as it proceeded to completion and submit a digital copy to the City of Concord.

### 1.03 AIR MONITORING

- A. Ambient Air Monitoring: The purpose of ambient air monitoring by the industrial hygiene firm will be to detect discrepancies in the work area isolation such as:
  - 1. Contamination of the building outside of the work area with airborne asbestos fibers.
  - 2. Failure of filtration or rupture in the negative pressure system.
  - 3. Confirm the work practices established by the contractor and respiratory protection provided for employees are adequate.
- B. Work Area Airborne Fiber Levels: TD Environmental will monitor airborne fiber levels in the work area. The purpose of this air monitoring will be to detect airborne fiber levels which may challenge the ability of the work area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.
- C. Work Area Clearance: To determine if the elevated airborne fiber levels encountered during abatement operations have been reduced to an acceptable level, TD Environmental will sample and analyze air per Section 01714. All Samples will be sent to a third party, Summit-Companies Laboratory, for final validation and quality control.
- D. In accordance with AHMB Program Rules, the SAM shall develop an Abatement Project Air Monitoring Plan which complies with EPA and OSHA analytical criteria and will provide a valid representation of airborne fiber concentrations both inside and outside the work area. This program is not intended to satisfy the contractor's requirement for sampling under the OSHA regulation. All area sampling conducted by the TD Environmental, and personnel sampling performed by the contractor firm shall be personally observed by the TD Environmental Project Monitor onsite. Air sampling pumps shall not be left unattended for extended periods of time.
  - 1. The SAM shall submit a written project monitoring plan to the designer with a copy to the contractor. The following information shall be required for the submittal.
    - a. The name, address and telephone number of the industrial hygiene firm.
    - b. The name, address, telephone number and NIOSH's PAT designation and proficiency data for the laboratory analyzing the air samples. Analysis of all samples collected shall be by a laboratory currently proficient in NIOSH's "Proficiency Analytical Testing Program for Laboratory Quality Control" for asbestos. The acceptable sampling and analysis method is NIOSH 7400, latest revision.

- c. A proposed air sampling strategy which shall include: a projected number of air samples, locations, the types of air samples to be collected (personal, area, ambient), how the air samples are to be collected (TWA, ceiling, other), the equipment to be used (pumps, calibration equipment, filters, other), and how the samples will be transported to the laboratory.
1. All personal air samples will be collected in such a manner as to comply with OSHA collection and analytical regulations and to provide a valid representation of airborne fiber levels. The samples collected by the industrial hygiene firm on personnel do not satisfy the contractor's responsibility under OSHA.
  2. All final area air sampling will comply with all State and Federal requirements in measuring airborne asbestos following an abatement action.
  3. Air samples will be analyzed and results made available as per the AHMB Program Rules. Copies of all air sampling results shall be signed by the SAM and a copy posted at the job site. These copies shall include the following: sample number, sample location, activity represented by sample, flow rate, sample time, comments and sample results. A statement will be included on each submission that the requirements of this contract have been met as they apply to the activities of the SAM.
  4. If TWA samples are being collected by the contractor for the purpose of reducing respiratory protection requirements, the industrial hygiene firm shall directly observe the conditions and work practices represented by each sample and make appropriate notes in the bound book on site. The SAM shall review all TWA air sampling results which are used for reducing respiratory protection requirements before accepting the results.



**SECTION 01503**  
**TEMPORARY FACILITIES**

**1.01 GENERAL**

- A. Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work.
- B. Use qualified tradesmen for installation of temporary services and facilities. Locate, modify and extend temporary services and facilities where they will serve the project adequately and result in minimum interference with the performance of the work.
- C. In occupied buildings, the owner's maintenance personnel shall lock and tag out all electrical and HVAC equipment in the asbestos abatement area. The contractor shall verify that the power and HVAC have been locked and tagged out prior to beginning work.
- D. In unoccupied buildings, the contractor is responsible for the lock and tag out of all power sources and HVAC equipment.
- E. The owner shall move all furniture, books, computers, records, equipment, etc. prior to the contractor's arrival date as specified.

**1.02 WATER SERVICE**

- A. The Contractor shall supply a source of water. Contractor bears all expense of heating and getting water to the work and decontamination areas.
- B. The Contractor shall supply hot and cold water to the decontamination unit in accordance with Section 01563. Hot water shall be supplied at a minimum temperature of 100 degrees Fahrenheit.

**1.03 ELECTRICAL SERVICE**

**The contractor shall provide their own temporary power service such as a portable generator. The contractor will also be responsible for any fuel used to generate temporary power.**

- A. General: Comply with applicable NEMA, NEC and UL standards and governing state and local regulations for materials and layout of temporary electric service.

- B. Ground Fault Protection: Provide receptacle outlets equipped with ground fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.
- C. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity and power characteristics to accommodate performance of work during the construction period.
- D. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every area of work.
- E. Provide services of an electrician, on a standby basis, to service electrical needs during the abatement process.
- F. Provide additional power service and distribution service, consisting of individual dedicated 15 amp 120 volt circuits to electrical drops with receptacle outlets equipped with ground fault interrupt protection, color coded for the exclusive use of the industrial hygiene firm.

#### **1.04 FIRST AID**

- A. A minimum of one first aid kit shall be located in the clean room. Additional first aid kits as the contractor feels is adequate or is required by law shall be located throughout the work area.

#### **1.05 FIRE EXTINGUISHERS**

- A. Comply with the applicable recommendations of NFPA Standard 10 - "Standard for Portable Fire Extinguishers." Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher in each work area equipment room and one in the clean room of the personnel decontamination unit.

#### **1.06 TOILET FACILITIES**

- A. Provide temporary toilet facilities to be used by contractor's employees. The contractor will be responsible for providing temporary facilities and securing them daily.

#### **1.07 PARKING**

- A. Park only in areas designated by the owner.

**1.08 BUILDING SECURITY**

- A. Maintain personnel on-site at all times any portion of the work areas are open or not properly secured. Secure work areas completely at the end of each day.

**1.09 STORAGE**

- A. Supply temporary storage required for storage of equipment and materials for duration of project. Trailer and storage dumpsters will be maintained in areas designated by the owner/designer. Asbestos Waste storage containers kept onsite must be fully enclosed, properly demarcated, lined with 6 mil poly, and locked to prevent unauthorized entry.

## **SECTION 01513**

### **NEGATIVE PRESSURE SYSTEM**

#### **1.01 GENERAL**

- A. High efficiency particulate air (HEPA) filter exhaust systems equipped with new HEPA filters for each project shall be used. Exhaust equipment and systems shall comply with ANSI Z9.2-79 and used according to manufacturer's recommendations.
- B. A system of HEPA-equipped air filtration devices shall be configured so that a pressure differential is established between the work area and the surrounding area (-0.02 to -0.04" water column). A continuous chart-recorded manometer shall be used to confirm this condition.
- C. Additional air filtration devices shall be provided inside the work area for emergency standby as well as for circulation of dead air spaces.
- D. The pressure differential is maintained at all times after preparation is complete and until the final visual inspection and air tests confirm the area is clean and acceptable for occupancy and the designer confirms verbally with written follow-up to discontinue the use of the negative pressure system.
- E. Air shall be exhausted outside the building.
- F. The contractor shall check daily for leaks and log his checks in the bound log book. This includes checks internal to air-moving devices.
- G. There shall be a minimum of four air changes per hour in any containment.

## **SECTION 01526**

### **WORK AREA PREPARATION**

#### **1.01 GENERAL**

- A. Before work begins in an area, a decontamination unit must be in operation as outlined in Section 01563.
- B. Completely isolate the work area from other parts of the building so as to prevent contamination beyond the isolated area.
- C. Temporary facilities shall be addressed as outlined in Section 01503.
- D. The contractor shall set up a work area, load out, and decontamination area as shown in the plans and specifications. Any variations must be approved by the designer. The decontamination facility outside of the work area shall consist of a change room, shower room and equipment room as described in Section 01563.
- E. The contractor shall wet clean and/or HEPA vacuum all items and equipment in the work area suspected of being contaminated with asbestos, but not in direct contact with the asbestos material and either secure these items in place with polyethylene sheeting or have them removed from the work area.
- F. Critical Barriers: The contractor shall thoroughly seal the work area for the duration of the work by completely sealing off all individual openings and fixtures in the work area, including, but not limited to, heating and ventilation ducts, doorways, corridors, windows, skylights and lighting, with polyethylene sheeting taped securely in place. If the contractor is using sealant materials to fill in small holes or cracks, the material shall have appropriate fire ratings.
- G. Floors (if required): Apply one or more layers of 6 mil (minimum) polyethylene plastic sheeting with joints overlapped 24 inches and taped securely. Plastic shall be carried up walls a minimum of 12 inches and secured.
- H. Walls (if required): Apply one or more layers of 4 mil (minimum) polyethylene plastic sheeting with joints lapped 24 inches and taped securely. Plastic shall be lapped over floor coverings and taped securely.
- I. Floors and walls shall be installed in such a manner that they may be removed independently of the critical barriers.

- J. Entrances and exits from the work area will have triple barriers of polyethylene plastic sheeting so that the work area is always closed off by one barrier when workers enter or exit.
- K. No water may be left standing on the floor at the end of the work day.
- L. Interior debris and contents not contaminated by asbestos must be removed or protected prior to abatement activities.
- M. Any costs associated with physical damage caused by water or securing polyethylene sheeting to areas inside or outside the abatement area shall be the contractor's responsibility. For example, rain tearing down the containment and equipment being damaged by water.
- N. The contractor shall establish and mark emergency and fire exits from the work area. Emergency procedures shall have priority over established decontamination entry and exit procedures. Audible and visible fire and emergency evacuation alarms shall be installed so as to be heard and seen throughout the entire work area.
- O. Integrity of these seals shall be regularly checked and maintained by the contractor.
- P. After work area preparation, the contractor shall notify the designer verbally with written follow-up that he is ready for a prework inspection.

## **SECTION 01560**

### **WORKER PROTECTION**

#### **1.01 GENERAL**

- A. Provide worker protection as required by OSHA, state and local standards applicable to the work. Contractor is solely responsible for enforcing worker protection requirements at least equal to those specified in this Section.
- B. Each time the work area is entered the contractor shall require all persons to remove all street clothes in the changing room of the personnel decontamination unit and put on new disposable coverall, new head cover, and a clean respirator. Proceed through shower room to equipment room and put on work boots.
- C. Workers shall not eat, drink, smoke, chew gum or chew tobacco in the work area, the equipment room, the load out area, or the clean room.

#### **1.02 WORKER TRAINING**

- A. Train all workers in accordance with 29 CFR 1926 and North Carolina state regulations regarding the dangers inherent in handling asbestos, breathing asbestos dust, proper work procedures and personal and area protective measures.

#### **1.03 MEDICAL EXAMINATIONS**

- A. Provide medical examinations for all workers. Examination shall as a minimum to meet OSHA requirements as set forth in 29 CFR 1926 and N.C. Workmen's Compensation Act Dusty Trades Examination Record (DEHNR Form 2796).

#### **1.04 PROTECTIVE CLOTHING**

- A. Provide disposable full-body coveralls and disposable head covers, and require that they be worn by all workers in the work area. Provide a sufficient number for all required changes, for all workers in the work area.
- B. Boots: Provide work boots with non-skid soles and, where required by OSHA, foot protection for all workers.
- C. Gloves: Provide work gloves to all workers and require that they be worn at the appropriate times. Do not remove gloves from work area. Dispose of work gloves as asbestos-contaminated waste at the completion of the project.

#### **1.05 ADDITIONAL PROTECTIVE EQUIPMENT**

- A. Type C respirators, disposable coveralls, head covers and footwear covers shall be provided by the contractor for the owner, the designer, Industrial hygiene firm and other authorized representatives who may inspect the job site.

#### **1.06 DECONTAMINATION PROCEDURES**

- A. Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area:
  - 1. Remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.
  - 2. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:
    - a. Thoroughly wet body including hair and face.
    - b. With respirator still in place thoroughly wash body, hair, respirator face piece, and all exterior parts of the respirator.
    - c. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face and respirator. While still holding breath, remove respirator and hold it away from face before starting to breathe.
    - d. Carefully wash face piece of respirator inside and out.
    - e. Shower completely with soap and water; rinse thoroughly.
    - f. Rinse shower room walls and floor prior to exit.
    - g. Proceed from shower to changing (clean) room and change into street clothes or new disposable work items.
  - 3. After showering, each employee shall inspect, clean and repair his respirator as needed. The respirator shall be dried, placed in a suitable storage bag and properly stored.



## **SECTION 01562**

### **RESPIRATORY PROTECTION**

#### **1.01 DESCRIPTION OF WORK**

- A. Instruct and train each worker involved in asbestos abatement in proper respirator use and require that each worker always wear a respirator, properly fitted on the face, in the work area from the start of any operation which may cause airborne asbestos fibers until the work area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the workplace or as required for other toxic or oxygen-deficient situations encountered.

#### **1.02 GENERAL**

- A. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and MSHA and suitable for the asbestos exposure level in the work areas according to OSHA Standard 29 CFR 1926.1101 and other possible contaminants employees might be exposed to during the project.
- B. Provide respiratory protection from the time the first operation involved in the project requires contact with asbestos-containing materials (including construction of decontamination units, construction of airtight barriers/barricades, and placing of plastic sheeting on walls) until acceptance of final air clearance test results by TD Environmental.
- C. The minimum respiratory protection for the project during gross removal shall be powered air purifying respirators (PAPR) unless prior approval of the SAM is granted because the contractor provided an acceptable Negative Exposure Assessment.
- D. During gross removal of sprayed-on asbestos surfacing materials, the contractor shall stay in PAPR air purifying respirators as described in 29 CFR 1926.1101 until all gross asbestos materials have been removed.
- E. The Project Monitor may, under certain circumstances, allow the contractor to use a half-face respirator with replaceable HEPA filters during the final cleaning phase. However, the eight-hour TWA air sampling data must document the exposure level, and the SAM must write a letter to the TD Environmental allowing the contractor to reduce respiratory protection.

- F. Respirator fit testing documentation shall be provided to TD Environmental prior to the beginning of the project, at any change in respiratory protection equipment, and at any time during the project if requested by the employee or SAM. Fit testing is to be performed by one of the methods listed in the 29 CFR 1926.1101, Appendix C.
- G. If supplied air respirators are used, the contractor shall provide a minimum of Grade "D" breathing air as set forth in the Compressed Gas Association's "Commodity Specifications for Air," G-7.1. The contractor shall test for Grade "D" breathing air initially and daily thereafter. Daily testing is not needed if the contractor has an air purification system which has CO and organic purging capabilities as well as a continuous CO monitor and alarm calibrated at 10 ppm. The system must be calibrated at least once a week or when it is moved.
- H. Provide emergency backup air supply, egress SCBA or egress HEPA filters for each worker in work area at all times when Type-C (supplied air) respirators are required. Breathing air system shall provide one hour of reserve air, calculated for maximum crew size for emergency evacuation.
- I. Where Type C respirators are utilized, the contractor is required to have an employee in the vicinity of the source of air. The contractor shall take into account the location of the fresh air intake to ensure no pollutant source is in the vicinity. The audible alarm shall be located where the employees inside and outside containment can hear the alarm.
- J. This project **does not** allow the use of single-use, disposable or quarter-face respirators for any purpose.
- K. The contractor may submit a new exposure assessment (as per 29 CFR 1926.1101) to the SAM with a request to downgrade to less protective respirators. The SAM will make a recommendation to the designer, who will issue a decision in writing to the contractor approving or denying his request. If the contractor disagrees with the decision, then the representative air sampling data may be reviewed by the HHCU for a final decision.

## SECTION 01563

### DECONTAMINATION UNITS

#### 1.01 DESCRIPTION OF WORK

- A. Provide separate personnel and equipment/loadout decontamination facilities. Require that the personnel decontamination unit be the only means of ingress and egress for the work area. Require that all materials exit the work area through the equipment/loadout decontamination unit. Contractor shall comply with 29 CFR 1926.1101, specifically paragraph (j) Hygiene facilities and practices for employees.
- B. **Visual Barrier:** *Where the decontamination area is immediately adjacent to and within view of occupied areas or the exterior of the building, provide a visual barrier of opaque or black plastic sheeting so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting.*

#### 1.02 GENERAL

Provide separate personnel decontamination units and equipment/loadout decontamination units when practical.

- A. Personnel Decontamination Unit
  - 1. Provide a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, changing room, shower room, equipment room. Each shall be separated by a minimum of three curtain doorways. Require all persons without exception to pass through this decontamination unit for entry into and exiting from the work area for any purpose. Do not allow parallel routes for entry or exit. Do not remove equipment or materials through Personnel Decontamination Unit.
  - 2. Provide temporary lighting within decontamination units as necessary to reach an adequate lighting level.
  - 3. Maintain floor of changing room dry and clean at all times. Do not allow the overflow water from the shower to escape the shower room.
  - 4. Damp-wipe all surfaces twice after each shift change with a disinfectant solution.

5. Provide hot and cold water, drainage and standard fixtures including an elevated shower head as necessary for a complete and operable shower. A water hose and bucket is not an acceptable shower.
6. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
7. Pump shower waste water to drain. Provide 20-micron and 5-micron waste water filters in line to drain. Change filters as necessary for proper waste drain flow.
8. If the decontamination area is located within an area containing friable asbestos on overhead ceilings, ducts, piping, etc., provide the area with a minimum 3/8 inch plywood "ceiling" with two layers of polyethylene sheeting covering the top of the "ceiling."
9. Visual Barrier: Where the decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque plastic sheeting so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct a solid barrier with wood or metal studs, max. 16 inches on center, covered with minimum 3/8 inch plywood.

B. Equipment Decontamination Units:

1. Provide an equipment decontamination unit consisting of a serial arrangement of rooms, clean room, holding area, and washroom, each room separated by a minimum of three curtain doorways, for removal of equipment and material from work area. Do not allow personnel to enter or exit work area through equipment decontamination unit.
2. Washroom: Provide washroom for cleaning of bagged or drummed asbestos-containing waste materials passed from the work area.
3. Holding Area: Provide holding area as a drop location for sealed drums and bagged asbestos-containing materials passed from the washroom.
4. Clean Room: Provide clean room to isolate the holding area from the building exterior or occupied areas.

5. Equipment or Material: Obtain all equipment or material from the work area through the equipment decontamination unit according to the following procedure:
  - a. When passing contaminated equipment, sealed plastic bags, drums or containers into the washroom, close all doorways of the equipment decontamination unit, other than the doorway between the work area and the washroom. Keep all outside personnel clear of the equipment decontamination unit.
  - b. Once inside the washroom, wet-clean the bags and/or equipment.
  - c. When cleaning is complete, insert bagged material into a clean bag/drum during the pass between the washroom and holding area. Close all doorways except the doorway between the washroom and holding area.
  - d. Workers from the building exterior enter the clean room then the holding area to remove decontaminated equipment and/or containers for disposal. Require these workers to wear full protective clothing and respiratory protection as described in Section 01562.

D. Decontamination Unit Contamination:

1. If the air quality in the decontamination unit exceeds 0.01 fibers per cc analyzed by PCM or 70 structures per mm squared analyzed by TEM or its integrity is diminished through use as determined by the designer or industrial hygiene firm, no employee shall use the unit until corrective steps are taken and approved by the designer and industrial hygiene firm.

## **SECTION 01711**

### **PROJECT DECONTAMINATION**

#### **1.01 GENERAL**

- A. Carry out a first cleaning of all surfaces of the work area including plastic sheeting, tools, scaffolding and/or staging by use of damp-cleaning and mopping and/or a high efficiency particulate air (HEPA) filter vacuum until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces. Do not perform dry-dusting or dry-sweeping.
- B. Equipment shall be cleaned and all contaminated materials removed before removing polyethylene from the walls and floors.
- C. The contractor shall replace all prefilters and clean the inside and outside of the HEPA exhaust units.
- D. After polyethylene sheets have been removed from walls and floors, but are still remaining on all windows, doors and the critical components, the contractor shall clean all surfaces in the work area, including ducts, electrical conduits, steel beams, roof deck, etc., with amended water and/or HEPA-filtered vacuum.
- E. After cleaning the work area, the contractor shall allow the area to thoroughly dry and then wet-clean and/or HEPA vacuum all surfaces in work area again.
- F. At the completion of the cleaning operation, the contractor's supervisor shall perform a complete visual inspection of the work area to ensure that the work area is dust- and fiber-free. If the supervisor believes he is ready for a final project decontamination inspection, he shall notify the designer.
- G. The designer shall contact the industrial hygiene firm and advise the firm of the final project decontamination inspection requested by the contractor.
- H. Final project decontamination inspection includes the visual inspection and air monitoring clearance.
- I. Visual inspection for acceptance shall be performed after all areas are dry.
- J. TD Environmental shall perform the final visual inspection and conduct the final air clearance. Any discrepancies found shall be documented in the form of a punch list.

- K. Final air sampling shall not commence until the visual inspection is completed and passed.
- L. If TD Environmental finds that the work area has not been adequately decontaminated, cleaning and/or air monitoring shall be repeated at the contractor's expense, including additional industrial hygiene fees, until the work area is in compliance.
- M. After the work area is found to be in compliance, all entrances and exits shall be unsealed and the plastic sheeting, tape and any other trash and debris shall be disposed of in sealable plastic bags (6 mil minimum) and disposed of as outlined in Section 02084.
- N. All HEPA unit intakes and exhausts shall be wrapped with six mil polyethylene before leaving the work area.
- O. After TD Environmental has approved the final project decontamination and the contractor has completed the tear down for occupancy by others, TD Environmental shall perform the project final inspection as outlined in the general conditions.
- P. Any residual asbestos that may be present after removing critical barriers, that in the designer's judgment should have been cleaned during the precleaning phase prior to installing critical barriers, shall be cleaned and cleared at the contractor's expense.
- Q. There shall be appropriate seals totally enclosing the inspection area to keep it separate from clean areas or other areas where abatement is or will be in progress. Once an area has been accepted and passed air tests, loss of the critical barrier integrity or escape of asbestos into an already clean area shall void previous acceptance and tests. Additional visual and final air clearance sampling shall be required at the contractor's expense.

## SECTION 01714

### WORK AREA CLEARANCE

#### 1.01 GENERAL

- A. Notification and scheduling of the final inspection with TD Environmental during the project is the responsibility of the contractor.

#### 1.02 FINAL CLEARANCE TESTING

- A. After the second cleaning operation and after the area is completely dry, the following procedure test shall be performed:
  - 1. A final visual inspection shall be conducted by TD Environmental. The inspection shall be conducted following the guidelines set forth in the American Society for Testing and Materials, Standard Practices for Visual Inspection of Asbestos Abatement Projects, Designation: E1368.90. If the work area is found visibly clean, air samples will be collected by TD Environmental.
  - 2. During the air testing, the accredited air monitor shall cause disruptive air currents as described in the EPA-AHERA regulations (40 CFR Part 763, Subpart E, Appendix A).
  - 3. If samples are to be analyzed using PCM (minimum of five samples using NIOSH 7400 method), then the maximum flow rate is 12 liters per minute, with a minimum sample size of 1200 liters for each sample. Clearance criteria shall be less than 0.01 F/cc for all samples analyzed.
  - 4. If samples are to be analyzed using TEM, the Mandatory Transmission Electron Microscopy Method described in 40 CFR Part 763, Subpart E, Appendix F shall be used. Clearance criteria shall be an arithmetic mean less than or equal to 70 structures per square millimeter or a z-test less than or equal to 1.65.
  - 5. Final clearance criteria shall be in accordance with AHMB Program Rules. **As the structures are intended for immediate demolition PCM air clearances will be performed with the requirements of meeting industry standards for clean air which are 0.01 f/cc.**
  - 6. TD Environmental shall immediately report the final air sampling clearance results to the designer.
  - 7. The use of the negative pressure system may be discontinued after the industrial hygiene firm instructs the contractor that he has passed the final project decontamination inspection.



**SECTION 02080**  
**ASBESTOS REMOVAL**

**1.01 GENERAL**

- A. Prior to starting asbestos removal, the contractor's equipment, work area and decontamination units will be inspected and approved by TD Environmental.
- B. All loose asbestos material removed in the work area shall be adequately wet, bagged, sealed and labeled properly before personnel breaks or end of shift.
- C. All plastic sheeting, tape, cleaning material, clothing and all other disposable material or items used in the work area shall be packed into sealable plastic bags (6 mil minimum) and treated as contaminated material.
- D. All material shall be double-bagged.
- E. All excess water (except shower water) shall be combined with removed material or other absorptive material and properly disposed of as per EPA regulations. Contractor shall not place water in storm drains, onto lawns, or into ditches, creeks, streams, rivers or oceans.

**1.02. SCOPE OF WORK**

**Base Bid**

The Base Bid scope of work for this project includes the removal and disposal of identified ACM. All quantities provided in these documents are estimates. The Abatement Contractor is responsible for verifying actual quantities of all materials prior to bidding. Additional compensation for removal of additional materials will not be considered.

Interior materials are to be removed as regulated ACM inside negative pressure containment. Abatement Contractor shall coordinate scheduling and phasing with Owner, and Abatement Designer. Refer to accompanying inspection reports and specifications for further details.

The following Asbestos Containing Materials Summary are included in the Base Bid. Quantities and scope of necessary disturbances may be modified by the owner, engineer, designer, or architect:

Material	Location	Percentage/ Type	Quantity	Material Condition	NESHAP Category
3" Black Cove Baseboard	Perimeter of Original Main Room	5% Chrysotile	250 LF	Good	CAT II NF ACM
Cove Baseboard Mastic	Perimeter of Original Main Room	2% Chrysotile	250 LF	Good	CAT II NF ACM
9"x9" Green Vinyl Floor Tile	Throughout Building (except Loading Dock)	10% Chrysotile	1750 SF	Good	CAT I NF ACM
9"x9" White Vinyl Floor Tile	Throughout Building (except Loading Dock)	10% Chrysotile	1750 SF	Good	CAT I NF ACM
Black Flooring Mastic	Throughout Building (except Loading Dock)	10% Chrysotile	3500 SF	Good	CAT I NF ACM
Black Roofing Tar	Roof	10% Chrysotile	3950 SF	Damaged	CAT I NF ACM
Joint Compound (Original)	Original Drywall Walls at Rear of Main Room, in Loading Dock, in Office, and Bathrooms	2% Chrysotile	2,440 SF	Damaged	RACM

### 1.03 ACM PRODUCTS TO BE REMOVED

**ALL asbestos containing materials shall be handled at a minimum utilizing approved wet methods, HEPA vacuuming and air filtration, and prompt cleanup. Prompt cleanup for the purposes of this project is described as cleaning up as your remove it, or bag it as it is removed. Do Not create a big pile of friable material to bag later. The industrial hygiene firm will consider footprints outside of the containment as a visible emission and stop work until corrective action takes place.**

#### A. Roofing Materials

1. The contractor will meet the requirements listed under the OSHA standard 29 CFR 1926.1101 for roofing.
2. Contact the HHCB concerning the need for permit, fees and accredited roofing workers and supervisors when removing regulated roofing material.
3. The roofing contractor shall use the state's Waste Shipment Record for a waste manifest and shall include a copy of the manifest to the designer before final payment.

4. Transport materials to a permitted landfill approved to accept asbestos, in a covered truck. Materials will be disposed of as asbestos-containing construction waste. Landfills must be notified in advance when such materials are to be disposed.

B. Asbestos Floor Tile and Mastic, vinyl cove base,

1. The designer may elect to design the removal using non-traditional, non-regulated methods such as the infrared heat machine, etc. If these methods are used the designer shall require the contractor to provide documentation showing that his employees have been thoroughly trained in how to use the equipment and provide a copy of personnel air monitoring data from previous jobs to document fiber exposure levels.
2. When removing asbestos-containing mastic from the floor surface, the contractor shall use a product that meets the following criteria:
  - a. The product shall not create a hazardous waste as a byproduct.
  - b. The product shall be "low to no odor."
  - c. The product shall not contain any carcinogenic or chlorinated hydrocarbons.
3. When the contractor is using a mastic remover, he shall protect the walls and any adjacent areas. He shall be responsible for any damage that occurs and for the complete repair of the damage.
4. When the contractor is collecting the asbestos solution, the contractor shall add cat litter, oil-sorb or equivalent so that no free standing liquid will be left in the asbestos bag.
5. After the contractor completes the asbestos mastic removal, the contractor shall use a cleaning solution to neutralize the mastic remover and mop and rinse the floor so that no residue of the product may be left on the floor surface. This cleanser shall be compatible with any new adhesive to be installed.
6. Potential health problems associated with the mastic remover in buildings that are occupied by the general public shall be addressed. A negative pressure enclosure with a specified number of air changes per hour or some other means may be needed because of vapor concentrations or odor considerations.

E. TSI Glovebag/Glovebox

1. The negative pressure glovebag/glovebox system shall follow 29 CFR 1926.1101.

## **SECTION 02084**

### **DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL**

#### **1.01 GENERAL**

- A. All asbestos materials and miscellaneous contaminated debris shall be properly sealed and protected, and the loadout vehicle/dumpster shall be locked, while located on the facility site and then transported to a predesignated disposal site in accordance with 40 CFR 61.150 and DOT 49 CFR Parts 100-399.
- B. An enclosed vehicle will be used to haul waste material to the disposal site. No rental vehicles or trailers shall be used. Vehicle selection, vehicle covers and work practices shall assure that no asbestos becomes airborne during the loading, transport and unloading activity, and that material is placed in the waste site without breaking any seals.
- C. Waste disposal polyethylene bags (6 mil) and containers, non-porous (steel/plastic) drums or equivalent, with labels, appropriate for storing asbestos waste during transportation to the disposal site shall be used. In addition to the OSHA labeling requirements, all containers shall be labeled with the name of the waste generator and the location at which the waste was generated.
- D. The contractor shall transport the containers and bags of waste material to the approved waste disposal site. The sealed plastic bags shall be placed into the burial site unless the bags have been broken or damaged. Upon the landfill's approval damaged bags shall be left in the non-porous containers and the entire contaminated package shall be buried. Uncontaminated containers may be reused.
- E. Workers loading and unloading the asbestos will wear respirators and disposable clothing when handling material. Asbestos warning signs shall be posted during loading and unloading of asbestos waste.
- F. The contractor shall use the HHCU's Waste Shipment Record for disposal records as per 40 CFR 61.150 and distribute a copy of all waste shipment records to the designer after the completion of the project.

## APPENDIX A

## PREWORK ASBESTOS INSPECTION CHECKLIST

Location of Facility: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project ID Number: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_ Pass: \_\_\_\_\_ Fail: \_\_\_\_\_

## A. DOCUMENTS

**YES**

**NO**

- 1) Asbestos Removal Permit/NESHAP Notification
- 2) Accreditation Documents for Workers & Supervisors
- 3) Asbestos Plans and Specifications
- 4) Air Monitoring Data
- 5) Waste Shipment Records
- 6) Sign-in Sheets and Bound Book for Comments
- 7) Calibration Record for Grade "D" Air
- 8) Items listed in Section 01043 of Specification

[illegible]

## B. PPE SUPPLIES

- 1) Tyvek Clothing
- 2) Rubber Boots
- 3) Respirators with HEPA Filters

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### C. CLEAN ROOM

- 1) Entry Curtains
- 2) Emergency Phone Numbers Posted
- 3) First Aid Kit
- 4) Asbestos Signs
- 5) Decontamination Procedures Posted
- 6) Fire Extinguisher

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#### D. SHOWER ROOM

- 1) Polyethylene Curtains
- 2) Hot/Cold Water & Operational
- 3) Soap & Towels
- 4) Waste Water Filter Pump Operational
- 5) Extra Five Micron Size Filters
- 6) Filtered Waste Water to Sanitary Sewer

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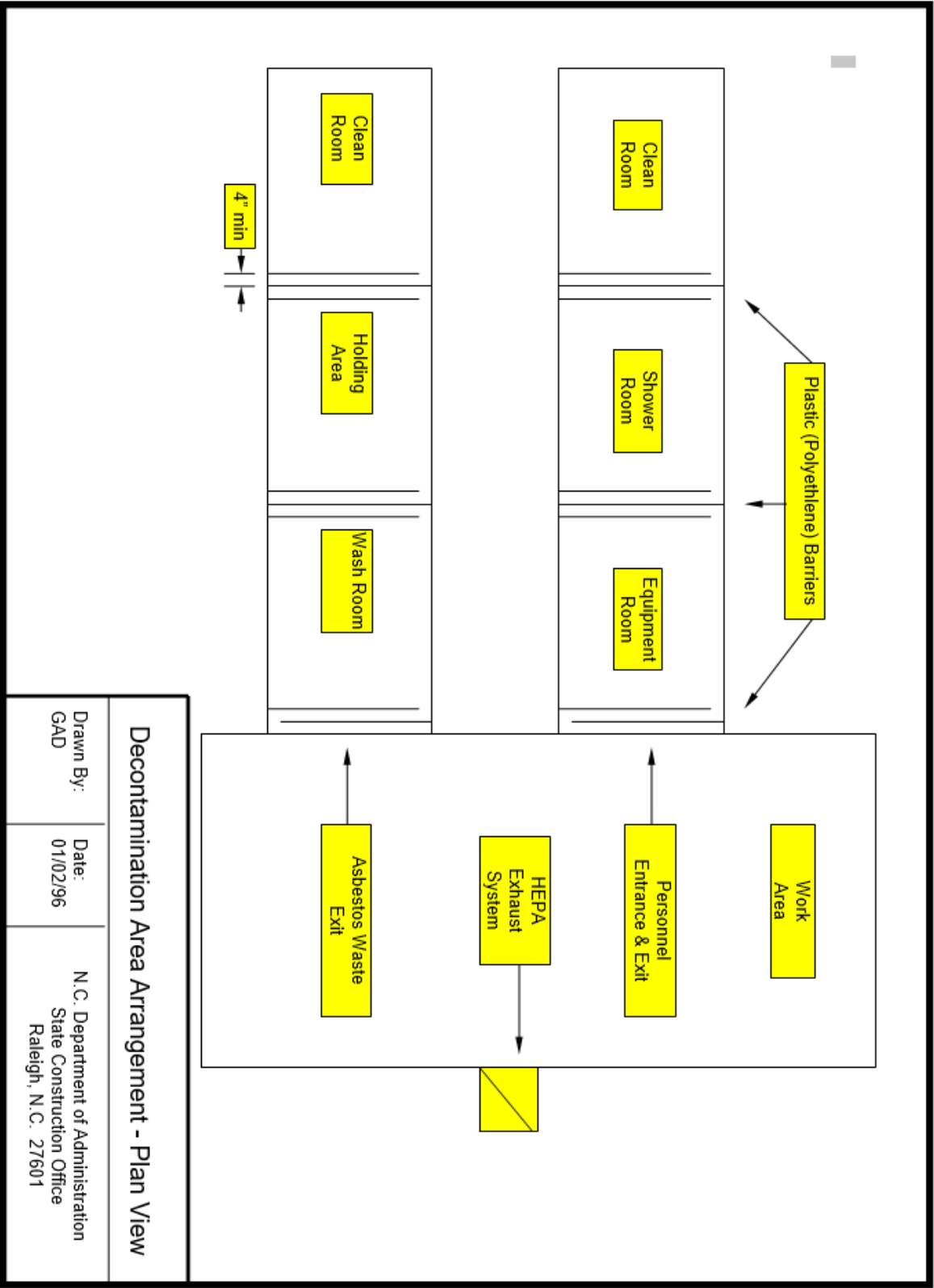
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E.	<b>WORK AREA</b>	<b>YES</b>	<b>NO</b>
1)	Removable Items Out of Area	_____	_____
2)	Non-removable Items Protected	_____	_____
3)	Critical Barriers Installed	_____	_____
4)	Polyethylene Curtains	_____	_____
5)	Polyethylene on Walls/Floors as Specified	_____	_____
6)	HVAC off	_____	_____
7)	Air Filtration Devices in Place and Operational	_____	_____
8)	Air Exhausted to Outside	_____	_____
9)	Electricity Locked and Tagged Out	_____	_____
10)	Temporary Power Installed with GFCI	_____	_____
11)	Fire Extinguishers	_____	_____
12)	Emergency and Fire Exits Marked	_____	_____
13)	Audible Alarms Operational	_____	_____
14)	Toilet Available	_____	_____
F.	<b>EQUIPMENT</b>		
1)	Safety Equipment	_____	_____
2)	HEPA Vacuums	_____	_____
3)	Waste Disposal Bags	_____	_____
4)	Airless Sprayer with Water Source	_____	_____
5)	Cleaning Equipment	_____	_____
6)	Glove Bags	_____	_____
7)	Emergency Power Generator (if required)	_____	_____
8)	Temporary Lighting	_____	_____
G.	<b>OTHER</b>		
1)	_____	_____	_____
2)	_____	_____	_____
3)	_____	_____	_____
4)	_____	_____	_____

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<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <i>Asbestos Contractor's Representative</i>	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <i>Date</i>

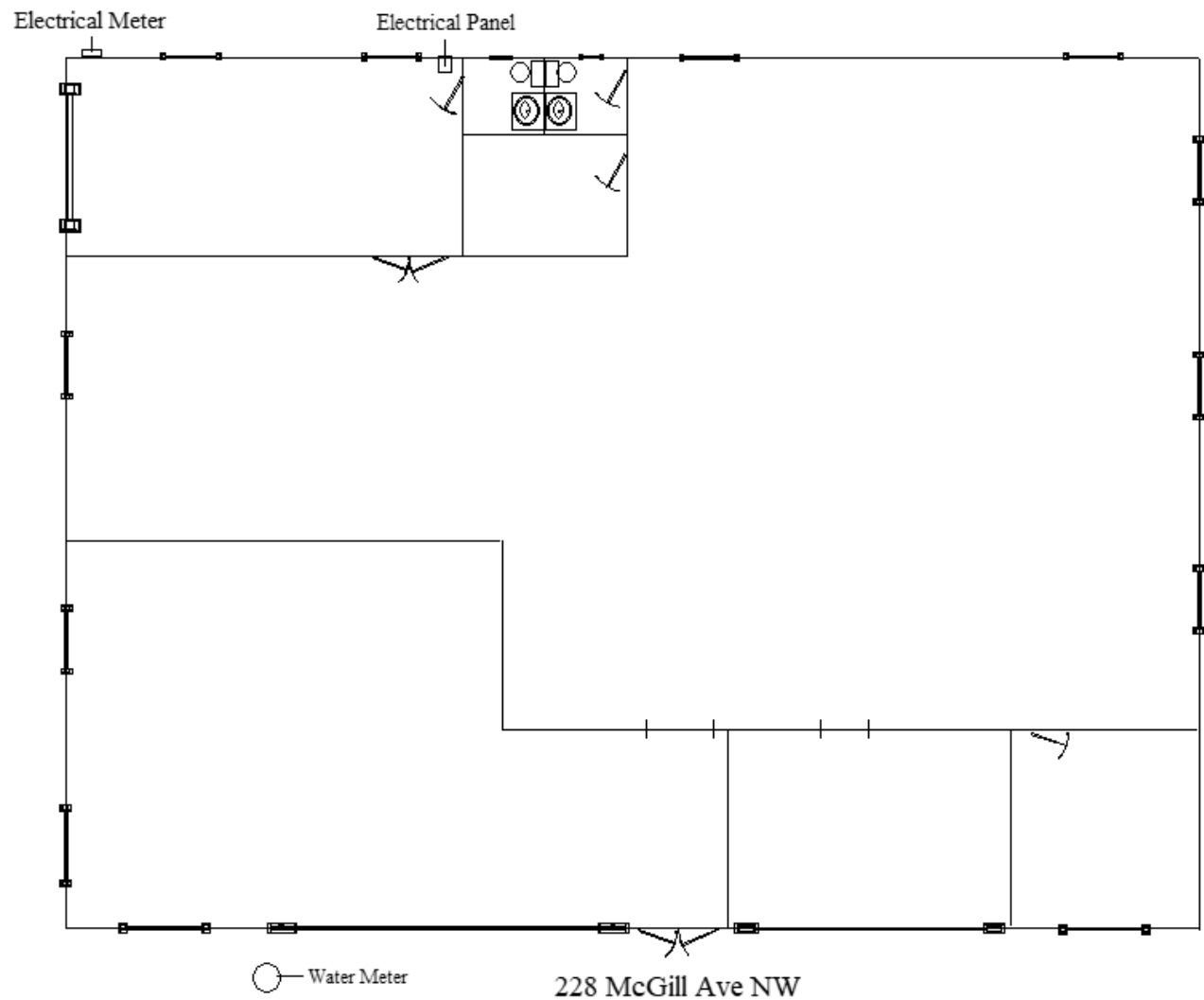
Appendix B-1



228 McGill Ave NW

Concord, NC 28025

Not to scale







## Demolition and Abatement Bid Sheet

Location:

**228 and 234-240 McGill Ave  
Concord, NC 28025**

Prepared for:

**City of Concord**

35 Cabarrus Avenue West  
Concord, NC 28025

Bid pack in reference to:

**One Source Environmental NESHAP Survey  
#S23-1011**

**Dated April 11<sup>th</sup> 2023**

**NC Asbestos Inspector:**

**Kathryn Hubicki**

**NC Accreditation # 12783**

**NC Asbestos Project Designer:**

**Richard Riggs**

**NC Accreditation #40531**

**Expires 2/24/2023**

Initials \_\_\_\_\_



Initial for Acknowledgement of Addendum 1 \_\_\_\_\_

Initial for Acknowledgement of Addendum 2 \_\_\_\_\_

**Please read and/or provide all of the following:**

The following bid submission is for a lump sum Abatement and Demolition Combination. All quantities of IDENTIFIED materials in the NESHAP survey #S23-1011 by One Source Environmental and Project Design by TD Environmental should be verified by the contractor prior to submitting the bid. Change orders based on lack of quantity verification other than the disclosed undiscovered potentials will not be accepted.

The intended Demolition of the structures will be performed removing all debris including footings. All debris and waste shall be hauled off and disposed of at the contractor's expense. Landfill tickets with quantities and Asbestos waste manifest shall be submitted with final documentation. The disturbed ground from demolition will need to be seed/straw upon completion of project and prior to final billing. Additional engineering details/design for demolition specifications will be provided by the City of Concord.

Noted as a safety concern. Any pits, holes or basements should be backfilled to a minimum 45 degree or gentler slope to prevent potential fall injury or as specified by the demolition engineering plans. Your price should include screened backfill dirt. Dirt added should be packed down to the specifications of the engineered demolition plan, not loose fill.

The front of the structures are extremely close to the active road. The traffic on that road will need to be protected during the demolition process. Please be prepared to provide a workplan for ensuring the safety and health of the community addressing this concern.

Part of the foundation wall appears to double as a retaining wall for the adjacent properties. The contractor will follow all EPA, OSHA, NC HHCU, and City of Concord regulations, guidelines, and specified protocols for preventing damage to adjacent properties.

The City of Concord is responsible for disconnection of power, gas and other utilities onsite. The contractor is responsible for contacting NC811 to locate and mark utility lines on the property and provide copies of locate ticket and updated marking requests for duration of project. The contractor is also responsible for providing their own power and water.

The Contractor will have salvage/scrap rights of the remaining structure and contents once project is awarded.

The City of Concord reserves the right to refuse or reject any and all Bids for this project for any reason. Qualifications and Contractor capabilities will be considered prior to award. Public information sources will be utilized for vetting purposes. The lowest bidder is not guaranteed award based simply on price. The City of Concord will perform due diligence to vet all bidders in the same manner. The lowest "Qualified and Vetted" bidder will be recommended for award.

Three Business References of similar projects in North Carolina should be listed and attached with your bid packet. Include contact name, telephone, and email.

Incomplete submissions will not be accepted. The Initial offer of award will be contingent on completion and timely submission of required documentation within 3 business days of verbal notification. Offer may be rescinded if appropriate documentation is not provided in the time allotted. Offer would then be made to the next qualified bidder or either re-bid at the discretion of The City of Concord.

Initials \_\_\_\_\_

## **The City of Concord has the following minimum Insurance requirements:**

Certificates of insurance must be submitted on an Acord Form (revised 2010/05), and the City (not a specific individual or department) must be named as additional insured on all lines of coverage (*General Liability, Auto, Umbrella, etc.*), except Professional Liability and *Workers' Compensation*.

### **ADDL INSR Column:**

On the certificate of insurance, the ADDL INSR column should be marked with an "X" to indicate the City is additional insured for specific lines of coverage.

### **Description of Operations Section:**

The following wording must be entered into this section:

*The City of Concord is named as all additional insured as required by written contract. Waiver of Subrogation is granted in favor of the City of Concord on the GL and WC policies.*

The following address should be used for certificates:

City of Concord  
Attn: Risk Management  
Post Office Box 308  
Concord, NC 28026-0308  
Contract Insurance Requirements

### **Construction and Service Contracts - \$2,000 or greater**

#### **Coverage must include:**

Workers' Compensation

General Liability

Automobile Liability

Minimum Limits

\$ 500,000 each accident

\$500,000 bodily injury by disease each employee

\$500,000 bodily injury by disease policy limit

\$1,000,000 per occurrence regardless of the contract size.

\$1,000,000 per occurrence regardless of the contract size.

Umbrella \$1,000,000 per occurrence if contract does not exceed 180 days;  
otherwise,

\$2,000,000 per occurrence

**NC Workers' Compensation insurance mandatory statutory limits must be met for employers with three or more employees.**

**Each proposal shall provide a bid bond of five percent (5%) of the total bid executed by a bond company licensed under the laws of North Carolina to execute the contract in accordance with the bid bond. Said bid bonds shall be retained by the owner as liquidated damages in event of failure of the successful bidder to execute the contract within ten days after the award or to give satisfactory surety as required by law.**

**A performance bond and a payment bond will be required for one hundred percent (100%) of the contract price from a licensed NC bonding company.**

**The notice to proceed and final executed contract will not be issued until all of the pre-submittals and the City of Concord Vendor Packet have been approved by the Owner, Architect/Engineer and Project Designer.**

**A Sex Offender Registry Check Certification Form, Attachment A, is Included in the Bid Documents and will need to be provided with list of personnel to be working on project site.**

**No bid may be withdrawn after the scheduled closing time for the receipt of bids for a period of 30 days. The City of Concord also reserves the right to cancel the project at any time, for any reason and settle financial debts incurred to the contractor within 30 days.**

**A reminder that unit quantities are being considered in the determination.**

**Bids will be accepted in person until .....  
Make sure the bid is complete with all pages and requested information sealed in an envelope. Doors will be locked at 2pm for the bid opening.**

**Once the doors are shut no further bids can be accepted. Bid amounts will be announced as opened but a final determination of award will not be made until validation of low bidder information, including references, appropriate licensing, signatures, appropriate due diligence, ect.**

**Once the the initial validation has been completed, the City of Concord Administrative Team, will announce which bidder will be recommended to the City Council for final award.**

**Initials\_\_\_\_\_**

**In the event of an extremely low bid, i.e. 20% or more, lower than the majority bidders, an interview, project workplan, and schedule of values will be requested and will need to be provided to the City of Concord within 24 hours of the request by the City of Concord justifying the appropriate scope of work, subcontracted resources, and the contractor ability to complete the project in the time stated.**

**The interview will be conducted with the contractors to give them the opportunity to justify the workplan and pricing. If the administrative team does not find adequate and appropriate resources and financial allotments in place to execute a complete project in the estimated time stated, the bid will be dismissed and the next highest bidder will be taken into consideration.**

**The City of Concord is dedicated to a thorough and fair bidding process. With this being said, The City of Concord will perform due diligence as necessary until the administrative team is confident a bid is complete with all costs and resources considered. Even though a performance and payment bond is being required, The City of Concord does not want a major delay in the completion of the project by having to file a claim. They want to the winning contractor be successful and not un-intentionally allow a contractor to be set up for failure.**

**The City of Concord appreciates your time, participation, and interest in this project.**

**Initials\_\_\_\_\_**

**In good faith, Please list the Minority Participation and Local companies you intend to subcontract/utilize for this project along with a percentage of the total project work they will be performing. If you are a local or Minority Contractor you may list yourself as well. Leave this section blank if not intending to use minority/local business' and complete the effort documentation page Exhibit 2.**

**LIST INFORMATION FOR THE S/MBEs YOU INTEND TO UTILIZE**  
(Use additional sheets if necessary and mark "Exhibit 3 Attachment")

Name of S/MBE	Firm Type	Address	Telephone Number	Point of Contact	Trade/Commodity	Contract / PO Amount

Total Anticipated Small Business Enterprise Participation Dollar Value: \$ \_\_\_\_\_

Total Anticipated Minority Business Enterprise Participation Dollar Value: \$ \_\_\_\_\_

**References:**

**Contact Name:** \_\_\_\_\_

**Project reference:** \_\_\_\_\_

**Contact information:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Project reference:** \_\_\_\_\_

**Contact information:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Project reference:** \_\_\_\_\_

**Contact information:** \_\_\_\_\_

**Initials** \_\_\_\_\_

**EXHIBIT 2**  
**Outreach Documentation Log**



### EXHIBIT 3 Proposed Utilization Plan

Bidder/Proposer Name: \_\_\_\_\_

IFB/RFP No.: \_\_\_\_\_

IFB/RFP Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

#### LIST INFORMATION FOR THE SMBES YOU INTEND TO UTILIZE (Use additional sheets if necessary and mark "Exhibit 3 Attachment")

Name of SMBE	Firm Type	Address	Telephone Number	Point of Contact	Trade/Commodity	Contract / PO Amount

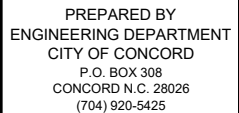
Total Anticipated Small Business Enterprise Participation Dollar Value: \$ \_\_\_\_\_

Total Anticipated Minority Business Enterprise Participation Dollar Value: \$ \_\_\_\_\_

The undersigned proposes to enter into a formal agreement with the SMBEs identified herein for work, schedule and value listed in this schedule conditioned upon execution of a contract with Beaufort County.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Title: \_\_\_\_\_

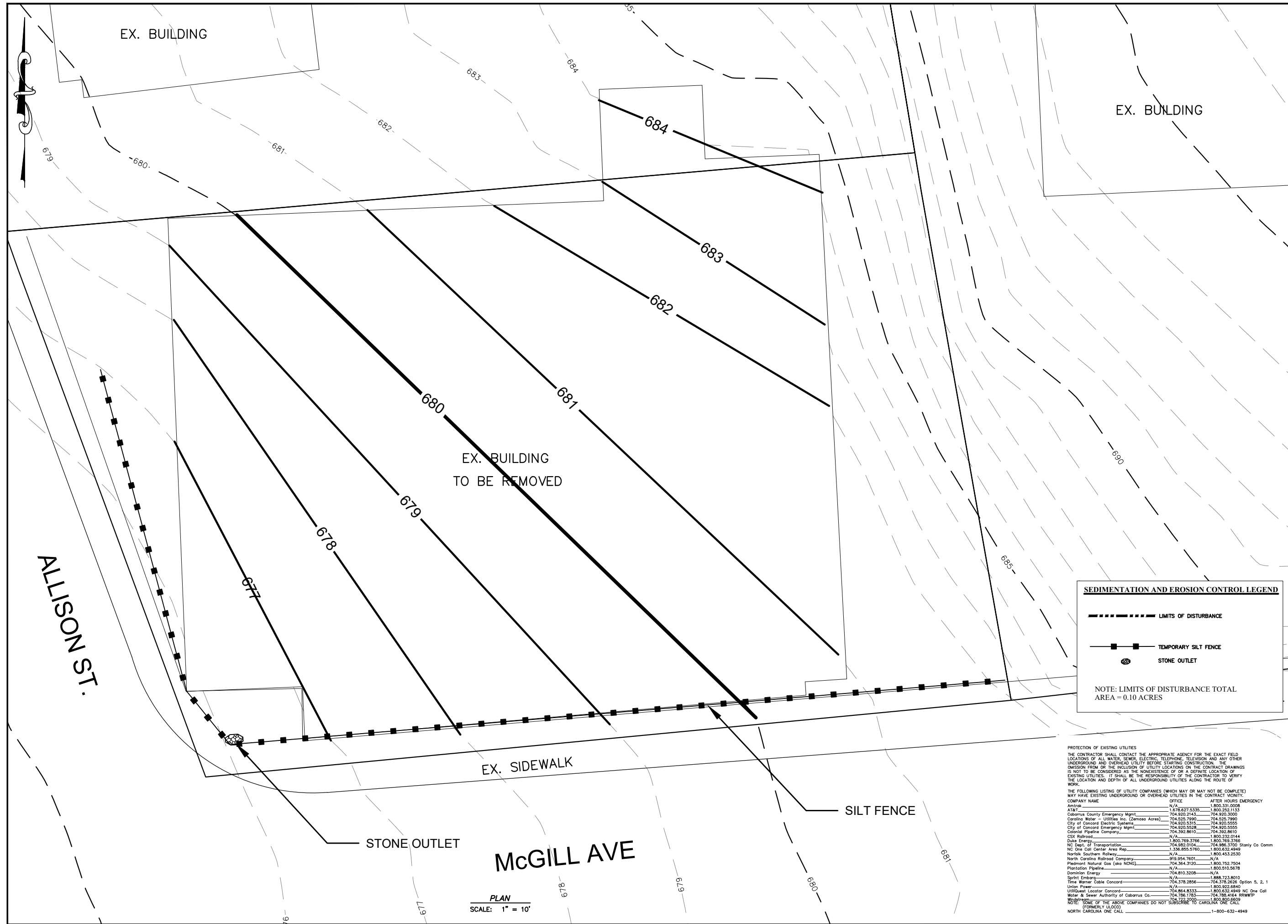
**SECTION IV**  
**CITY OF CONCORD GRADING PLANS**

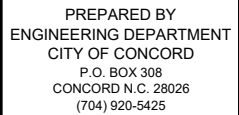


Engineer's Seal

Surveyor's Seal

228 MCGILL AVE  
BUILDING REMOVAL  
GRADING PLAN 1  
PROJECT #: 2024-001

[illegible]



Engineer's Seal

Surveyor's Seal

234-240 MCGILL AVE  
BUILDING REMOVAL  
GRADING PLAN 2  
PROJECT #: 2024-001

REV.	#	DATE	DESCRIPTION	BY
DESIGNED BY: EAB				
DRAWN BY: BCC				
CHECKED BY: EAB				
SCALE: AS SHOWN				
DATE: 01/05/24				
PROJECT NUMBER: 2024-001				
SHEET: 2 OF: 2				

