# CITY OF ANN ARBOR REQUEST FOR PROPOSAL



### AIR MONITORING AND PROJECT OVERSIGHT DURING ASBESTOS ABATEMENT PROJECT LARCOM CITY HALL FLOORS 3, 4 AND 5

RFP #878

Due Date: Wednesday, November 6, 2013 On or Before 10:30 A.M.

Fleet and Facility Unit, Public Services Area Administering Service Unit

Issued By
City of Ann Arbor, Michigan
Larcom City Hall
301 E. Huron St.
Ann Arbor, MI 48104

### TABLE OF CONTENTS

SECTION 1: General Information and Instructions to Respondents	3
SECTION 2: Scope of Work	10
SECTION 3: Information Required From All Respondents	12
SECTION 4: Attachments	15
Attachment A - Legal Status of Respondent	17
SECTION 5: Appendices	27
Appendix A – Example of Professional Service Agreement	28 36

### Section 1

### **General Information and Instructions to Respondents**

### A. OBJECTIVE

The purpose of this Request for Proposal (RFP) is to select a firm to provide Air Monitoring and Project Oversight During the Asbestos Abatement of Floors 3, 4 and 5 of Larcom City Hall in the City of Ann Arbor.

### **B. PRE-PROPOSAL MEETING**

A pre-proposal meeting will be held on Tuesday, October 29, 2013 at 9:00 am in the 6<sup>th</sup> Floor Conference Room of City Hall, 301 E. Huron Street, Ann Arbor, MI. The pre-proposal meeting is for information only. Any answers furnished will not be official until verified in writing by the Financial Services Area, Procurement Unit. Answers that change or substantially clarify the bid will be affirmed in writing. Copies will be posted online at the BidNet.com web site.

An agency may not bring more than two persons to the pre-proposal meeting. It is strongly suggested that one of the two people in attendance for an agency be the intended primary contact for the agency if the contract is awarded to that agency.

#### C. QUESTIONS OR CLARIFICATIONS OF RFP REQUIREMENTS

All questions regarding this RFP shall be submitted via email. Emailed questions and inquiries will be accepted from any and all prospective Respondent's in accordance with the terms and conditions of this RFP.

All questions or requests for clarification shall be submitted on, or before 10:00 A.M. (Local Time), Friday, November 1, 2013 and should be addresses as follows:

RFP #878 Process and HR Compliance questions to Karen Lancaster, Finance Director at klancaster@a2gov.org

The person making the request shall be held responsible for delivery and verification of receipt.

Should any prospective Respondent be in doubt as to the true meaning of any portion of this Request for Proposal, or should a prospective Respondent find any ambiguity, inconsistency or omission therein, the Respondent shall make a written request for an official interpretation or correction. Such requests must be submitted via email to klancaster@a2gov.org.

#### D. ADDENDUM

All interpretation or correction, as well as any additional RFP provisions that the City may decide to include, will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the Respondent's responsibility to ensure they have received all addenda before submitting a Proposal. Any addendum issued by the City shall become part of the RFP and will be incorporated in the Proposal.

Each Respondent must in its Proposal, to avoid any miscommunications, acknowledge all addenda which it has received, but the failure of a Respondent to receive, or acknowledge receipt of any addenda shall not relieve the Respondent of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

#### E. PROPOSAL REQUIREMENTS

To be considered, each Respondent must submit a response to this RFP using the format provided in Section III (Information Required and Evaluation criteria). No other distribution of Proposals is to be made by the Respondent. The Proposal must be signed in ink by an official authorized to bind the Respondent to its provisions. Each Proposal must remain valid for at least ninety (90) days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward and concise description of the Respondent's ability to meet the requirements of the RFP. Proposals shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the Proposal.

Each person signing the Proposal certifies that he/she is the person in the Respondent's firm/organization responsible for the decision as to the fees being offered in the Proposal and has not and will not participated in any action contrary to the terms of this provision.

Respondents must submit three (3) copies of the sealed Proposal including the fee proposal in the manner specified in subsection F below. The proposal shall be no more than 25 pages in length (50 sides), printed in a double-sided format. Fee proposals must be submitted in a separate sealed envelope at the same time. All envelopes for proposals and/or separate fee proposals must be marked "RFP # 878 – Air Monitoring & Project Oversight" in bold type.

### F. SEALED PROPOSAL SUBMISSION

All Proposals are due and must be delivered to the City Procurement Unit on or before **Wednesday**, **November 6, 2013 by 10:30 a.m. (local time).** Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Respondent must submit one (1) original Proposal, and two (2) additional Proposal copies in a sealed envelope and three (3) copies of the Fee Proposal in a separate sealed envelope marked fee proposal contained within the Respondent's sealed Proposal.

Proposal submitted must be clearly marked: "RFP # 878 – Air Monitoring & Project Oversight" and then list Respondent's name and address.

Proposals must be addressed and delivered to:

City of Ann Arbor Procurement Unit, 5th Floor 301 East Huron Street P.O. Box 8647 Ann Arbor, MI 48107

All Proposals received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

Hand delivered Proposals will be date/time stamped/signed by the Procurement Unit at the address above in order to be considered. Normal business hours are 9:00 a.m. to 3:00 p.m. Monday through Friday, excluding Holidays.

The City will not be liable to any Respondent for any unforeseen circumstances, delivery or postal delays. Postmarking on the Due Date will not substitute for receipt of the Proposal. Each Respondent is responsible for submission of their Proposal.

Additional time will not be granted to a single Respondent; however, additional time may be granted to all Respondents when the City determines that circumstances warrant it.

### A Proposal will be disqualified if:

- 1. If the Fee Proposal is not contained within a separate sealed envelope.
- 2. If the Fee Proposal is submitted as part of the digital copy. Provide Fee Proposal in hardcopy only.

### **G. SELECTION CRITERIA**

Responses to this RFP will be evaluated on Professional Qualifications & Experience, Statement of Approach & Proposed Quality Assurance Plan, and Fee Schedule using a point system, described in Section 3. The evaluation will be completed by a Selection Committee composed of staff members from various units of the City.

The Selection Committee will initially evaluate responses to the RFP, based on criteria included in Section 3, to decide which Respondent(s), if any, they will interview. For the initial evaluation, they will not consider the fee proposals. The fee proposal(s) of the Respondent(s) selected will be opened and reviewed before the interview(s). The selected Respondent(s) will have the opportunity to discuss in more detail their qualifications, their experience and fee proposal during the interview process. To decide the most qualified, capable and cost-effective Respondent, the Selection Committee will evaluate the proposal(s) and interview(s) using the point system described in Section 3 of this RFP.

### H. TYPE OF CONTRACT

A sample of the standard Professional Services Agreement (PSA) is included as Appendix A. Those who wish to submit a Proposal to the City are required to carefully review the Professional Services Agreement. The City will not entertain changes to the terms of the standard Professional Services Agreement except where necessary to incorporate the scope of services and compensation for same as awarded. Respondents must base their response on the assumption that, if selected, they will execute the City's standard Professional Services Agreement.

Respondent's should specifically note that the Insurance requirements under a City contract are listed in the sample PSA in Appendix A.

### I. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the consultant prior to the execution of a Professional Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a Proposal, Respondent agrees to bear all costs incurred or related to the preparation, submission and selection process for the Proposal.

### J. PROPOSAL PROTEST

All Proposal protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The Respondent must clearly state the reasons for the protest. If a Respondent contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the Respondent to the Purchasing Agent. The Purchasing Agent will provide the Respondent with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

### K. SCHEDULE

The Proposals submitted should define an appropriate schedule in accordance with the requirements of the Proposed Work Plan in Section III.

The following is the anticipated schedule for this RFP and PSA procurement.

Activity/Event	Anticipated Date
Advertise RFP #878	October 21, 2013
Written Question Deadline	November 1, 2013
Proposal Due Date	November 6, 2013
Possible Interview Consultants	November 12-15, 2013
Tentative Selection	November 19, 2013

Expected City Council Authorization of PSA	December 16, 2013
PSA Execution	January 6, 2014

Note: The above schedule is for information purposes only and is subject to change at the City's discretion.

### L. DISCLOSURES

All information in a Respondent's Proposal is subjected to disclosure under the provisions of Public Act No. 442 of 1976 know as the "Freedom of Information Act". This act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted under the Freedom of Information Act.

### M. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

### N. SUBCONTRACTORS

No contract may be sublet without the written consent of the City of Ann Arbor. Any subcontractor, so approved, shall be bound by the terms and conditions of this contract. The Respondent shall be fully liable for all acts and omissions of its subcontractor(s) and shall indemnify the City of Ann Arbor for such acts or omissions.

### O. HUMAN RIGHTS INFORMATION

The City's standard PSA outlines the requirements for fair employment practices under City of Ann Arbor contracts. To establish compliance with this requirement, the Respondent should complete and return with its Proposal completed contract compliance forms. In event they are not, the Respondent will have 24 hours from the City's request to return completed forms. Contract compliance forms are found in Section IV, Attachment B.

### P. LIVING WAGE

All Respondent's proposing to do business with the City of Ann Arbor, except those specifically exempted by regulations promulgated by the Administrator and approved by City Council, agree to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code and, if a "covered employer" as defined therein to pay those employees providing services to the City under this agreement a "living wage" as defined in Chapter 23 of the Ann Arbor City Code; and, if requested by

the City, provide documentation to verify compliance. The Respondent agrees to comply with the provisions of Section 1:1815 of Chapter 23 of the Ann Arbor City Code.

The Living Wage form should be submitted with Proposal. In event they are not, the Respondent will have 24 hours from the City's request to return completed forms. Living wage forms are found in Section IV. Attachment C.

### Q. IRS FORM W9

The selected Respondent will be required to provide the City of Ann Arbor an IRS form W-9.

### R. NON-DISCLOSURE AGREEMENT

The consultant selected for this work will sign a Non-Disclosure Agreement. Attached as Appendix B is the City standard Non-Disclosure Agreement.

### S. INDEPENDENT FEE DETERMINATION

- 1. By submission of a proposal, the submitter certifies, and in the case of joint proposal, each party thereto certifies as to its own organization, that in connection with this proposal:
  - a) They have arrived at the fees in the proposal independently, without consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such fees with any other proposal submitter or with any competitor.
  - b) Unless otherwise required by law, the fees which have been quoted in the proposal have not been knowingly disclosed by the submitter and will not knowingly be disclosed by the submitter prior to award directly or indirectly to any other prospective submitter or to any competitor.
  - c) No attempt has been made or shall be made by the proposal submitter to induce any other person or firm to submit or not submit a proposal for the purpose of restricting competition.
  - d) Each person signing the proposal certifies that she or he is the person in the proposal submitter's organization responsible within that organization for the decision as to the fees being offered in the proposal and has not participated (and will not participate) in any action contrary to 1.a), b), or c) above.
- 2. A proposal will not be considered for award if the sense of the statement required in the Fee Analysis portion of the proposal has been altered so as to delete or modify 1.a), c), or 2 above. If 1.b) has been modified or deleted, the proposal will not be considered for award unless the submitter furnishes with the proposal a signed statement which sets forth in detail the circumstances of the disclosure and the Issuing Office determines that such disclosure was not made for the purpose of restricting competition.

### T. RESERVATION OF RIGHTS

- 1. The City reserves the right in its sole and absolute discretion to accept or reject any or all Proposals or alternative Proposals, in whole or in part, with or without cause.
- 2. The City reserves the right to waive, or not waive, informalities or irregularities in bids or bidding procedures, and to accept or further negotiate cost, terms, or conditions of any bid determined by the City to be in the best interests of the City even though not the lowest bid.
- 3. The City reserves the right to request additional information from any or all Respondent's.
- 4. The City reserves the right not to consider any Proposal which it determines to be unresponsive and deficient in any of the information requested within RFP.
- 5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope to be implemented.
- 6. The City reserves the right to select one or more Respondent's to perform services.
- 7. The City reserves the right to retain all Proposals submitted and to use any ideas in a Proposal regardless of whether that Proposal is selected. Submission of a Proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals, unless clearly and specifically noted in the Proposal submitted.
- 8. The City reserves the right to disqualify Proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within the RFP.

### Section 2

### **Scope of Work**

### A. Background

The Asbestos Abatement Project consists of the removal of asbestos containing materials from the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> floors of the Guy C. Larcom Jr. Municipal Building (City Hall). The abatement work is scheduled to begin in mid-January 2014 and be ongoing through the end of May, 2014. The three floors consist of traditional office space of the following approximate sizes:

The restrooms, stairwells and elevator towers on each floor are not included in the scope of the proposed asbestos abatement work.

The proposed sequence of work will begin with the entire 5<sup>th</sup> floor being made available for abatement activities. Once the 5<sup>th</sup> floor is restored, the 4<sup>th</sup> floor will be made available for abatement activities. Once the 4<sup>th</sup> floor is restored, the 3<sup>rd</sup> floor will be made available for abatement activities. Existing City functions, including public and staff access, will remain operational throughout the project on all floors other than the floor then being actively abated/restored.

An Asbestos Inspection Report was completed in 2004 by Nova Environmental Inc. and determined the presence of asbestos containing materials, primarily in spray-on fireproofing, floor tiles and tile mastic. A copy of the report is available upon request.

### B. Scope of Services

Appendix B of this document includes portions of the Asbestos Abatement Project Specifications that the abatement contractor will be required to comply with. The portions include General Specifications, Scope of Work and Technical Specifications for Asbestos Abatement. The Contractor selected for that project, besides demolition and asbestos abatement work, will be responsible for insulation, reapplication of fireproofing, installation of new ceilings and floor coverings. The full specification for the Asbestos Abatement Project (ITB #4310) is available online at <a href="http://www.a2gov.org/government/financeadminservices/procurement/Pages/OpenBidsandProposals.aspx">http://www.a2gov.org/government/financeadminservices/procurement/Pages/OpenBidsandProposals.aspx</a>.

While all of the information in Appendix B is important to understanding the work, we draw your particular attention to:

Abatement, Re-Insulation, Restoration Activities – Scope of Work (pg. SW-2);

Sequence of Work - Scope of Work (pg. SW-3);

Project Time Schedule - Scope of Work (pg. SW-5);

Post Abatement PCM Clearance Testing – Scope of Work (pg. SW-6);

Post Abatement TEM Clearance Testing – Scope of Work (pg. SW-6);

Section 15 Acceptance Criteria for Area Re-Occupancy – Technical Specs (pg. TS-16); and

Section IV Air Monitoring – Technical Specs (pg. TS-19).

The firm selected shall perform all necessary daily air monitoring and clearance sampling, both post abatement and non-post abatement during the asbestos abatement work in the Larcom building. This shall also include all required background sampling. This work should coincide with Phase 1 work on each floor as shown in the sequence of work. This includes all monitoring and project oversight services needed to support, control, document, and assure the safety of workers and building occupants during the abatement operations.

The proposer may also propose and quote unit prices for additional service items in your proposal as deemed necessary, or suggest alternative tests. If additional or alternative items are presented, the proposer shall describe in detail their justifications for such alternatives.

All sampling, testing, and other services shall be performed in compliance with all applicable state and federal standards. All testing and inspection shall be performed by certified personnel.

Assignment of testing personnel (temporary or permanent) to the project is subject to approval by the City. Once approved, assigned personnel shall remain on the project until their services are no longer needed. Replacement of assigned personnel (temporary or permanent) with those who are not familiar with the project, or with City personnel, is not permitted, and may be considered cause to terminate the Professional Services Agreement. Due to the nature of the project, multiple testing personnel may need to be assigned to the project at any given time in order to adequately perform the required tasks.

Field time verification forms will be required to be signed daily by a designated City representative.

The City does not guarantee either a minimum volume of work or a specific volume of work if a contract is awarded.

### **SECTION 3**

### INFORMATION REQUIRED FROM ALL PROPOSAL SUBMITTERS

Submitters should organize Proposals into the following Sections:

- A. Professional Qualifications
- B. Past Involvement with Similar Projects
- C. Proposed Work Plan
- D. Fee Proposal (include in a separate sealed envelope)
- E. Authorized Negotiator
- F. Attachments

The following Section describes the elements that should be included in each of these proposal sections and the weighted point system that will be used for evaluation of the proposals.

### A. <u>Professional Qualifications – 30 points</u>

- 1. State the full name and address of your organization and, if applicable, the branch office or other subordinate element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, or corporation. If as a corporation, include whether it is licensed to operate in the State of Michigan.
- 2. Include the name of executive and professional personnel by skill and qualification that will be employed in the work. Show where these personnel will be physically located during the time they are engaged in the work. Indicate which of these individuals you consider key to the successful completion of the project. Identify only individuals who will do the work on this project by name and title. Resumes and qualifications are required for all proposed project personnel (max. of 2 pages per individual). Copies of applicable license/certification documentation for personnel should also be provided.
- 3. State history of the firm, in terms of length of existence, types of services provided, etc. Identify the technical details which make the firm qualified for this work.

### B. Past Involvement with Similar Projects - 30 points

- 1. The written proposal must include a list of similar work experiences by the proposed project team members within the past five (5) years.
- 2. The proposal must also indicate proven ability to complete similar projects within the budgeted amounts. A summary of related projects with the original deadline and cost estimate versus the actual completion date and final cost of the design is to be included in this section.
- 3. A list of references for all projects described in this section must be included. The list shall include contact name, owner name, address, and phone number.

### C. Proposed Work Plan - 10 points

A detailed work plan is to be presented which lists all tasks determined to be necessary to accomplish the work of this project. The work plan shall define resources needed for each task (title and person hours) and the firm's staff person completing the project task. In addition, the work plan shall include a time line schedule depicting the sequence and duration of tasks showing how the work will be organized and executed.

- 1. The work plan shall be sufficiently detailed and clear to identify the progress steps and the extent and timing of the City personnel involvement. Additional project elements suggested by the Proposer are to be included in the work plan and identified as Proposer suggested elements.
- 2. The work plan must identify information the Proposer will need from City staff in order to complete the project. Indicate the procedure and timeframes for providing testing data to the Contractor and the City.
- 3. The work plan shall include any other information that the Respondent believes to be pertinent but not specifically asked for elsewhere.
- 4. Construction safety is a primary concern. Your work will involve testing in and around asbestos removal/abatement areas. How does your company address the safety of its workers when working in the field, and what in particular is done to insure your workers are safe on this project? Please detail your firm's safety record.
- 5. Also include in the work plan proposed steps, if any, to expedite completion of the project. This will be given due consideration during evaluation of proposals.

### D. Fee Proposal - 30 points

- 1. Fee quotations shall be submitted in a separate sealed envelope as part of the proposal. Fee quotations are to include the names, title, hourly rates, overhead factors, and any other details by which the overall and project element costs have been derived. The fee quotation is to relate in detail to each item of the proposed work plan. Consultants shall be capable of justifying the details of the fee proposal relative to personnel costs, overhead, how the overhead rate is derived, material and time.
- 2. Proposals must include quantities estimated by the proposer and quotes of unit prices for the various service items. For each specific area please break down your price into each element that contributes to the cost, such as number of tests, number of hours at the site, etc. so that we can see clearly the cost of the efforts that go into the cost of that area. The fee proposal should also include each of the following elements:
  - a) provide your preliminary fee structure based on the scope of work indicated above, including anticipated reimbursable costs for each of the following components:
  - b) submit a schedule of hourly rates by employee classification, including terms and rates of overtime for additional work if requested

- 3. Unit prices for all technician service items shall include all vehicle costs, equipment costs, and office support, including supervisory review and secretarial services. No minimum hour charge will be paid, unless work for the day is cancelled by the City without advance notice. Minimum "cancellation charges" will be limited to four hours.
- 4. Please define your firms policy on the application of overtime rates and double time rates. This should include any holidays that require overtime/double time rates. Are work hours tracked "on the jobsite" or "portal to portal"?
- 5. The fee proposed must include the total estimated cost for the project when it is 100% complete.

### E. <u>Authorized Negotiator</u>

1. Include the name and phone number of persons(s) in your organization authorized to negotiate the Scope of Work with the City.

### F. Attachments

1. <u>Attachment A (Legal Status of Respondent)</u>, <u>Attachment B (Contract Compliance Forms) and Attachment C (Living Wage Compliance Form) must be completed and returned with the proposal</u>. These elements should be included as attachments to the proposal submission.

### G. Proposal Evaluation

- 1. The Selection Committee will evaluate each proposal by the above described criteria and point system (A through C) to select a short list of firms for further consideration. The City reserves the right to not consider any proposal which it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for an interview. The Committee may contact references to verify material submitted by the Proposers. The City will determine whether the final scope of the project to be negotiated will be entirely as described in this RFP, a portion of the scope, or a revised scope.
- 2. The Committee then will schedule the interview(s) with the selected firm(s). The selected firm(s) will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan and fee proposal. The interview must include the project team members expected to complete a majority of work on the project, but no more than 4 members total. The interview shall consist of a short presentation of less than twenty (20) minutes by the Proposer, followed by questions and answers. Audiovisual aids may be used during the oral interviews. The oral interviews may be recorded on tape by the Committee.
- 3. The firm will be re-evaluated by the above criteria (A through D) after the interview. After evaluation of the fee proposals, further negotiation with the selected candidate firm will be pursued leading to the award of a contract by City Council.

### **SECTION 4**

### **ATTACHMENTS**

Attachment A - Legal Status of Respondent

Attachment B - Contract Compliance Instructions and Forms

Attachment C - Living Wage Declaration Form and Poster

### **ATTACHMENT A**

### **LEGAL STATUS OF RESPONDENT**

(The Respondent shall fill out the appropriate form and strike out the other two.)

By signing below the authorized representative of the Respondent hereby certifies that:

The Decomplish
The Respondent is:  • A corporation organized and doing business under the laws of the state of
*If not incorporated in Michigan, please attach the corporation's Certificate of Authority
A limited liability company doing business under the laws of the state of, whom bearing the title of whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.
<ul> <li>A partnership organized under the laws of the state of and filed with the county of, whose members are (attach list including street and mailing address for each.)</li> </ul>
An individual, whose signature with address, is affixed to this RFP.
Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.
Date:,
Signature
(Print) Name Title
Firm:
Address:
Contact Phone Fax
Email

# ATTACHMENT B CONTRACT COMPLIANCE INSTRUCTIONS AND FORMS

### Section 9:161 of Ann Arbor City Code

The consultant, its agents or sub-contractors, shall comply with all requirements of Chapter 112 of Title IX of the Code of the City of Ann Arbor and in particular the following excerpts therefrom:

### 9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All contractors shall receive approval from the Director prior to entering into a contract with the City, unless specifically exempted by administrative policy. All City contractors shall take affirmative action to insure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon race, national origin or sex.
- (2) Each prospective contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the contractor's labor recruitment area, i.e., the area from which the contractor can reasonably be expected to recruit, said contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which time the Director shall conduct another review. Other contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the contractor's labor recruitment area. In the case of construction contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.
- (3) In hiring for construction projects, contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All contracts shall include provisions through which the contractor agrees, in addition to any other applicable Federal or State labor laws:
  - (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;
  - (b) To provide periodic reports concerning the progress the contractor has made in meeting the affirmative action goals it has agreed to;
  - (c) To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each contractor with the nondiscrimination provisions of each contract. The Director shall develop procedures and regulations consistent

with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of contractors not in compliance.

- (6) All City contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the contract for which the City shall be entitled, at its option, to do any or all of the following:
  - (a) To cancel, terminate, or suspend the contract in whole or part and/or refuse to make any required periodic payments under the contract;
  - (b) Declare the contractor ineligible for the award of any future contracts with the City for a specified length of time;
  - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached;
  - (d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

	Assessed Damages
Contract Amount	Per Day of Non-Compliance
\$ 10,000 - 24,999	\$25.00
25,000 - 99,999	50.00
100,000 - 199,999	100.00
200,000 - 499,999	150.00
500,000 - 1,499,999	200.00
1,500,000 - 2,999,999	250.00
3,000,000 - 4,999,999	300.00
5,000,000 - and above	500.00

(e) In addition the contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this contract.

### **City of Ann Arbor Procurement Office**

## INSTRUCTIONS FOR CONTRACTORS FOR COMPLETING CONTRACT COMPLIANCE FORM

### City Policy

The "non discrimination in contracts" provision of the City Code, (Chapter 112, Section 9:161) requires contractors/vendors/grantees doing business with the City not to discriminate on the basis of actual or perceived race, color, religion, national origin, sex, age, condition of pregnancy, marital status, physical or mental limitations, source of income, family responsibilities, educational association, sexual orientation, gender identity or HIV status against any of their employees, any City employee working with them, or any applicant for employment. It also requires that the contractors/vendors/grantees include a similar provision in all subcontracts that they execute for City work or programs.

This Ordinance further requires that each prospective contractor/vendor submit employment data to the City showing current total employee breakdown by occupation, race and gender. This allows the Human Rights Office to determine whether or not the contractor/vendor has a workforce that is reflective of the availability of women and under-represented minorities within the contractor's labor recruitment area (the area where they can reasonably be expected to recruit employees). *This data is provided to the City on the Human Rights Contract Compliance Forms (attached).* 

### To complete the form:

- 1) If a company has more than one location, then that company must complete 2 versions of the form.
  - Form #1 should contain the employment data for the entire corporation.
  - Form #2 should contain the employment data for those employees:
    - who will be working on-site;
    - in the office responsible for completing the contract; or,
      - in the case of non-profit grantees, those employees working on the project funded by the City grant(s).
- 2) If the company has only one location, fill out Form #1 only.
- 3) Complete all data in the upper section of the form including the name of the person who completes the form and the name of the company/organization's president.
- 4) Complete the Employment Data in the remainder of the form. Please be sure to complete all columns including the Total Columns on the far right side of the form, and the Total row and Previous Year Total row at the bottom of the form.
- 5) Return the completed form(s) to <u>your contact</u> in the City Department for whom you will be conducting the work.

### For assistance in completing the form, contact:

Procurement Office of the City of Ann Arbor 734/794-6500

If a contractor is determined to be out of compliance, the Procurement Office will work with them to assist them in coming into compliance.

nstructions for contractors 4/13

### CITY OF ANN ARBOR PROCUREMENT OFFICE HUMAN RIGHTS CONTRACT COMPLIANCE FORM

Form #1

Entire Organization (Totals for All Locations where applicable)

Name of Company/Organization			Date Form Completed					
Name and Title of Person Completi	ng this Form	<del></del>	Name	of President				
Address(Street address)	(City)	(State)	(Zip)	County	Phone #(Area Code)			
Fax#(Area Code)		Email Address						

#### EMPLOYMENT DATA

1/12

EMPLOYMENT						Nu	mber of	Employe	es				
Job Categories	Number of Employees (Report employees in only one category)												
983	Male									Fei	male		
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	TOTAL COLUMNS A-L
	Α	В	С	D	E	F	G	Н	I	J	K	L	A-L
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians			Y						,				
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													2
Laborers/Helper													
Apprentices													
Other									,				1
TOTAL													
PREVIOUS YEAR TOTAL									,				

Questions about this form? Call the Procurement Office: (734)794-6576

AAF-1

#### Form #2

### CITY OF ANN ARBOR PROCUREMENT OFFICE HUMAN RIGHTS CONTRACT COMPLIANCE FORM Local Office (Only those employees that will do local or on-site work, if applicable)

Name of Company/0	Organization								Date F	orm Completed	L		11 11 11 11 11
Name and Title of P	erson Comp	leting this Fo	rm	N 0 0 0	<u> </u>	<u> </u>	Na	ame of Presid	dent	7 - 17 - 15 - N	v2 24 35 V	<u> </u>	<del>2                                    </del>
Address								County		Pho	ne#	Code)	
(Street ad	ldress)		(City)		(State)		(Zip)		<del></del>		(Area C	ode)	
Fax#				Em	ail Address								
(Area Coc													
EIVIFLOTIVIENT	DATA					Nu	mber of	Employe	es				
Job Categories		Number of Employees (Report employees in only one category)											
				Male						Fema			
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	TOTAL COLUMNS A-L
	Α	В	С	D	E	F	G	H	<u> </u>	J	К	L	A MA
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians				1									
Sales													
Admin. Support				4					3				
Craftspeople													
Operatives													
Service Workers			2										
Laborers/Helper													
Apprentices													
Other			2										
TOTAL													
PREVIOUS YEAR TOTAL													

Questions about this form? Call Procurement Office: (734) 794-6576

1/12

AAF-2

# ATTACHMENT C LIVING WAGE DECLARATION AND POSTER

### Section 1:813 of Ann Arbor City Code

The Consultant, its agents or sub-contractors, shall comply with all requirements of Chapter 23 of Title I of the Code of the City of Ann Arbor and in particular the following excerpts therefrom:

### 1:813. Definitions.

For purposes of this Chapter, the following definitions shall apply:

- (1) "Contractor/vendor" is a person or entity that has a contract with the City primarily for the furnishing of services where the total amount of the contract or contracts with the City exceeds \$10,000 for any 12-month period. "Contractor/vendor" does not include a person or entity that has a contract with the City primarily for the purchase of goods or property, or for the lease of goods or property to or from the City.
- (2) "Covered Employee" means a person employed by a covered employer to perform services which are covered or funded by the contract with or grant from the City; provided, however, that persons who are employed pursuant to federal, state or local laws relating to prevailing wages shall be exempt from this Chapter.
- (3) "Covered Employer" means a contractor/vendor or grantee that has not been granted an exemption from this Chapter pursuant to Section 1:817.
- (4) "Employee" means an individual who provides personal services performed for wages under any contract calling for the performance of personal services, whether written or oral, express or implied. The term "employee" does not include any individual who volunteers to perform services for an employer if
  - (a) The individual receives no compensation or is paid expenses, reasonable benefits, or a nominal fee to perform the services for which the individual volunteered; and
  - (b) Such services are not the same type of services which the individual is employed to perform for such employer.
- (5) "Employee Health Benefits" or "Health Benefits" means providing health care benefits for employees (or employees and their dependents) at employer cost or making an employer contribution toward the purchase of such health care benefits for employees (or employees and their dependents), provided that the employer cost or contribution equals no less than \$1 an hour for the average work week of such employee, and provided further that any employee payment or contribution toward health care shall not exceed 50 cents an hour for the average work week for such employee.
- (6) "Grant" means any form of financial assistance to a "Grantee" as set forth and defined in Section 1:813(7). "Grant" does not include financial assistance used for the purchase or lease of property or other non-personnel costs.
- (7) "Grantee" is a person or entity that is a recipient of any financial assistance from the City in the form of any federal, state or local grant program administered by the City, revenue bond financing, tax increment financing, tax abatement, tax credit, direct grant, or any other form of

financial assistance that exceeds \$10,000 for any 12-month period, including any contractors, subcontractors, or leaseholders of the grantee whose contract, subcontract or lease with the grantee exceeds \$10,000 for any 12-month period.

- (8) "Living Wage" means a wage equal to the levels established in Section 1:815.
- (9) "Person" means any individual, co-partnership, corporation, association, club, joint adventure, estate, trust, and any other group or combination acting as a unit, and the individuals constituting such group or unit.
- (10) "\$10,000 for any 12 month period" is computed by taking the total amount of the contract, grant or loan and dividing it by the number of months the contract, grant or loan covers.

### 1:814. Applicability.

- (1) This Chapter shall apply to any person that is a contractor/vendor or grantee as defined in Section 1:813 that employs or contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a non-profit contractor/vendor or non-profit grantee unless it employs or contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, contract, or subcontract or other form of financial assistance awarded to or entered into with a contractor/vendor or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, contract, or subcontract or other form of financial assistance with a contractor/vendor or grantee.

### 1:815. Living Wages Required.

- (1) Every contractor/vendor or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
- (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$8.70 an hour, or the adjusted amount hereafter established under Section 1:815(3).
  - (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$10.20 a hour, or the adjusted amount hereafter established under Section 1:815(3).
- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefor to the City Administrator or his/her designee.
- (3) The amount of the living wage established in this Section shall be adjusted upward no later than April 30, 2002, and every year thereafter by a percentage equal to the percentage increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the years 2001 and 2002. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by

posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

# ATTACHMENT C CITY OF ANN ARBOR LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that employers providing services to the City or recipients of grants for financial assistance (in amounts greater than \$10,000 in a twelve-month period of time) pay their employees who are working on the City project or grant, a minimum level of compensation known as the **Living Wage**. This wage must be paid to the employees for the length of the contract/project.

	Companies employing fewer than 5 persons and non-profits employee Ordinance. If this exemption applies to your firm, please check  This company is exempt due to the fact that we this non-profit agency is exempt due to the fact.	below:							
	employees.	act that the employ of contract than letter than 10							
The	he Ordinance requires that all contractors/vendors and/or grantees	s agree to the following terms:							
a)	To pay each of its employees performing work on any covered contract or grant with the City, no less than the living wage, which is defined as \$12.52/hour when health care is provided, or no less than \$13.96/hour for those employers that do <i>not</i> provide health care. It is understood that the Living Wage will be adjusted each year on April 30, and covered employers will be required to pay the adjusted amount thereafter. The rates stated above include any adjustment for 2013.								
b)	) Please check the boxes below which apply to your workforce:								
<b>0</b> 5	☐ Employees who are assigned to <i>any covered</i> City project or grant will be paid at or above the applicable living wage <u>without health benefits</u> Yes No								
OR	☐ Employees who are assigned to <i>any covered</i> City project or grant will be paid at or above the applicable living wage with health benefits Yes No								
c)	To post a notice approved by the City regarding the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.								
d)	To provide the City payroll records or other documentation as requested; and,								
e)	e) To permit access to work sites to City representatives for the purposes of monitoring compliance, investigating complaints or non-compliance.								
	he undersigned authorized representative hereby obligates the conditions under penalty of perjury and violation of the Ordinance.	ontractor/vendor or grantee to the above stated							
Comp	ompany Name Ad	dress, City, State, Zip							
Signa	Signature of Authorized Representative Phone (area code)								
Туре	/pe or Print Name and Title En	nail address							
Date :	ate signed								
	Questions about this form? Plea	se contact:							

Procurement Office City of Ann Arbor Phone: 734/794-6500

Revised 3/2013 LW-2

# CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2013 - ENDING APRIL 29, 2014

\$12.52 per hour

\$13.96 per hour

If the employer provides health care benefits\*

If the employer does **NOT** provide health care benefits\*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

### **ENFORCEMENT**

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

For Additional Information or to File a Complaint Contact Karen Lancaster at 734/794-6500 or Klancaster@a2gov.org

Revised 3/2013 LW-1

<sup>\*</sup> Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

### **SECTION 5**

### **APPENDICES**

Appendix A – Specimen Standard City Contract

Appendix B - Asbestos Abatement Project Specs (General Specifications, Scope of Work, Technical Specs for Asbestos Abatement)

### **APPENDIX A**

### SPECIMEN STANDARD CITY CONTRACT

The following attachment is a specimen contract agreement for the services identified in this Request for Proposal. The Selected Respondent will be required to execute a contract containing the terms and conditions of the specimen contract except where noted in the proposal. No changes, modifications, alteration or deletions to the terms and conditions of the specimen contract will be accepted.

### **AGREEMENT BETWEEN**

AND
CITY OF ANN ARBOR
FOR
CONTRACTED SERVICES

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 East Huro Street, Ann Arbor, Michigan 48104 ("City"), and, with an address at(State where organized) (Partnership, LLC, Corporation)
(State where organized) (Partnership, LLC, Corporation)
("Contractor"), agree as follows:
The Contractor agrees to provide professional services to the City under the following terms an conditions:
I. DEFINITIONS
Administering Service Area/Unit means
Contract Administrator means, acting personally or through an assistants authorized by the Administrator of the Administering Service Area/Unit.
Project means "RFP"
II. DURATION
This Agreement shall become effective on, 2013, and shall remain i effect until satisfactory completion of the Services specified below unless terminated a provided for in this Agreement.
III. SERVICES
A. The Contractor agrees to provide consulting services as described in RFand its response proposal dated, 2013, which ar incorporated here by reference.
B. The Contractor's standard of service under this agreement shall be of the level of qualit

acceptable quality shall be made solely by the Contract Administrator.

performed by professionals regularly rendering this type of service. Determination of

C. The Contractor shall perform its Services for the Project in compliance with all laws, ordinances and regulations and contractual requirements now hereafter in effect as may be applicable to the rights and obligations under the Agreement.

### IV. COMPENSATION OF CONTRACTOR

- A. The Contractor shall be paid in the manner set forth in Exhibit B. Payment shall be made monthly, unless another payment term is specified in Exhibit B, following receipt of invoices submitted by Contractor and approved by the Contract Administrator. It is understood and agreed between the parties that the compensation stated in Exhibit B is inclusive of any and all remuneration to which the Contractor may be entitled. Total compensation to be paid to Contractor during the term of this Agreement shall not exceed \_\_\_\_\_\_(\$\_\_\_\_\_).
- B. The Contractor shall keep complete records of time spent in providing contract services so that the Administering Service Area/Unit may verify invoices submitted by the Contractor. Records shall be made available to the City upon request.

### V. INSURANCE/INDEMNIFICATION

- A. The Contractor shall procure and maintain during the life of this contract, such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage which may arise under this contract; whether the acts were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the Contractor shall provide to the City, before the commencement of any work under this contract, documentation satisfactory to the City Attorney demonstrating it has obtained the insurance coverage required by Exhibit C.
- B. Any insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-"Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- E. To the fullest extent permitted by law, for any loss not covered by insurance under this contract, the Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, to its proportionate extent, from any negligent, grossly negligent, reckless and/or intentional wrongful or tortious acts or omissions by the Contractor or its employees and agents occurring in the performance of this Agreement.

### VI. COMPLIANCE REQUIREMENTS

A. <u>Nondiscrimination</u>. The Contractor agrees to comply, and to require it subcontractor(s) to comply with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

B. <u>Living Wage</u>. The Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code and agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

### VII. WARRANTIES BY THE CONTRACTOR

- A. The Contractor warrants that the quality of its Services under this agreement shall conform to the level of professional quality performed by professionals regularly rendering this type of service.
- B. The Contractor warrants that it has all the skills, experience necessary to perform the Services it is to provide pursuant to this agreement.
- B. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this agreement
- C. The Contractor warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes.

### VIII. RELATIONSHIP OF THE PARTIES

- A. The parties to this Agreement agree that it is not a contract of employment but is a contract to accomplish a specific result. Contractor is an independent contractor performing services for the City. Nothing contained in this Agreement shall be deemed to constitute any other relationship between the City and the Contractor.
- B. The Contractor does not have any authority to execute any contract or agreement on behalf of the City, and is not granted any authority to assume or create any obligation or liability on the City's behalf, or to bind the City in any way.

### IX. TERMINATION OF AGREEMENT

- A. This agreement may be terminated by either party without further notice in the case of a breach of this agreement by the other party, if the breaching party has not corrected the breach within 15 days after notice of the breach.
- B. The City may terminate this agreement, on at least sixty (60) days advance notice, for any reasons, including convenience, without incurring any penalty, expense or liability to the Contractor except the obligation to pay for services actually performed under the Agreement before the termination date.
- C. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If

funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to the Contractor. The Contract Administrator shall give the Contractor written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.

D. The remedies provided in this Agreement will be cumulative, and the assertion by a party of any right or remedy will not preclude the assertion by such party of any other rights or the seeking of any other remedies.

### X. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Contractor access to the Project area and other City owned properties as required to perform the necessary Services under this agreement.
- B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.

### XI. ASSIGNMENT

- A. The Contractor shall not subcontract or assign any portion of the services without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Contractor shall retain the right to pledge payment(s) due and payable under this agreement to third parties.

### XII. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the Contractor, it shall be addressed and sent to:

If Notice is sent to the City, it shall be addressed and sent to:

#### XIII. CHOICE OF LAW

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

### XIV. REMEDIES

- A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
- B. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.
- C. The following provision(s) shall survive the termination of this Agreement: Article V.

### XV. CONFLICT OF INTEREST

The Contractor certifies it has no financial interest in the Services to be provided under this agreement other than the compensation specified herein. Contractor further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this agreement. The Contractor further covenants that in the performance of this Agreement no person having any such interest shall be employed.

Further, the Contractor covenants that no officer, member or employee of the Contractor or its subcontractors who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of the Agreement has any personal or financial interest, direct or indirect, in this Agreement or in the proceeds thereof.

#### XVI. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this agreement or the application of the provision to other parties and circumstances.

### XVII. CONFIDENTIALITY

The Services to be performed by Contractor shall be at the direction of Contract Administrator or authorized designee and the Contractor shall report to the Contract Administrator, or authorized designee, regarding the Services performed. In order that the Contractor may effectively fulfill its obligations to the City under this Agreement, it may be necessary or desirable for the City to disclose confidential and proprietary information pertaining to the City's past, present, and future activities. Since it is difficult to separate confidential and proprietary information from that which is not, the Firm and all employees shall regard all information gained as a result of the Services to be performed hereunder as information which is proprietary to the City and not to be disclosed to any organization or individual without the prior written consent of the City.

The Contractor shall take appropriate action to insure that all employees and subcontractors comply with this policy of nondisclosure. Further, the Contractor shall take appropriate action to ensure that all employees and subcontractors protect from improper disclosure all information obtained or produced, all communications made or received, and all work under this Agreement that are covered by this provision. This duty shall be continuing and shall survive the termination or expiration of this Agreement.

"Confidential Information" means information (in tangible or intangible form) belonging to or in the possession or control of City or its agents that is of a confidential or proprietary nature that is furnished or disclosed to the Contractor in the performance of the services under this Agreement.

"Confidential Information" will be deemed to exclude any particular information that, as evidenced by written documentation: (i) is already known to the receiving party without restrictions at the time of its disclosure to the furnishing party; (ii) after its disclosure by the furnishing party, is made known to the receiving party without restrictions by a third party having the right to do so; (iii) is or becomes publicly known without violation of this Agreement; or (iv) is independently developed by the receiving party without reference to the furnishing party's "Confidential Information." If the receiving party receives a subpoena or other validly issued administrative or judicial notice requesting the disclosure of the furnishing party's Confidential Information, the receiving party will promptly notify the furnishing party. The receiving party will be entitled to comply with any binding subpoena or other process to the extent required by law.

At the expiration or termination of the agreement, the receiving party at the furnishing party's sole option, will return the Confidential Information provided by the furnishing party.

### XVIII. EXTENT OF AGREEMENT

This agreement represents the entire understanding between the City and the Contractor and it supersedes all prior representations or agreements whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this agreement. This agreement may be altered, amended or modified only by written amendment signed by the Contractor and the City.

FOR CONTRACTOR	FOR THE CITY OF ANN ARBOR
Ву	By John Hieftje, Mayor
Its:	By
	Approved as to substance
	By Steven D. Powers, City Administrator
	By Craig Hupy, Public Service Administrator
	Approval as to form and content
	By Stephen K. Postema, City Attorney

### SAMPLE AGREEMENT EXHIBITS

### EXHIBIT A SCOPE OF SERVICES (FINAL SCOPE BASED ON PROPOSAL)

# EXHIBIT B (COMPENSATION BASED ON PROPOSAL)

## EXHIBIT C INSURANCE REQUIREMENTS

Effective the date of this Agreement, and continuing without interruption during the term of the Agreement, the Contractor shall procure and maintain such insurance policies, including those set forth below, as will protect itself from all claims for bodily injuries, death or property damage which may arise under this Contract; whether the acts were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:

1. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident Bodily Injury by Disease - \$500,000 each employee Bodily Injury by Disease - \$500,000 each policy limit

- 2. Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.
- 3. Commercial General Liability Insurance on an "occurrence basis" with limits of liability not less than \$1,000,000 per occurrence and/or aggregate combined single limit, personal injury, bodily injury and property damage. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy.

All insurance required under the Agreement shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.

Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Consultant supplies a copy of the endorsements required on the policies. Upon request, the Consultant shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this contract, the Consultant shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.

### APPENDIX B

### ASBESTOS ABATEMENT PROJECT SPECIFICATIONS

#### **GENERAL SPECIFICATIONS**

### 1. Description

- 1.1 This project consists of alterations to the existing City of Ann Arbor's City Hall located at 301 E. Huron Street, Ann Arbor, Michigan 48107. The project involves demolition, asbestos abatement and restoration of floors 3, 4 & 5 in City Hall.
- 1.2 The Base Bid shall include all work described and required by the General Specifications, Scope-of-Work and Technical Specifications. This Base Bid also includes all miscellaneous and incidental items such as overhead, insurance, all building permits, dust and noise control, access maintenance during non-working hours, coordination with others, dust enclosure maintenance, all mobilizations and demobilizations, all costs incurred by the Contractor for all "minor" delays in the construction progress due to City's direct actions, and the like.
- 1.3 Coordination with others shall include City departments, air monitoring consultants and manufacturers.
- 1.4 The presence of ducts, conductors, conduits, pipes, beams, supports and any other installations which are not in conflict with the proposed work, and which do not present a hazard to the public or an extraordinary hazard to the Contractor's operations, will not be required to be moved. When such installations which are, or are not, shown on the plans must be moved to new locations to allow for reasonable installation of improvements, no additional compensation will be paid to the Contractor. The Contractor is directed to review available building blueprints for additional information regarding building features. Stoppages created solely by the relocation or repair of existing conditions as noted above which delay any portion of the project, may be considered as a basis of claim for an extension of time only, for project completion.

### 2. Permits

2.1 The Contractor shall be responsible for the procurement of all permits required in connection with the work, and to arrange for all necessary inspections and to pay for all fees in connection therewith.

### Contract Limits

- 3.1 The Contractor shall limit activities within the areas shown on the Floor Plans. The Contractor shall make reasonable effort to disturb as little as possible existing operations and activities in the building. Dust-tight enclosures shall be maintained at all times particularly during demolition work and asbestos abatement.
- 3.2 The Contractor shall clearly label and separate the construction area by means of pedestrian control items such as tape, signs, and barricades.

### 4. Standards, Codes and Regulations

4.1 Reference to standards, codes and regulations shall mean the latest that have been approved or adopted at the date of acceptance.

### 5. Protection of Existing Facilities

5.1 The Contractor is responsible for protection of the City's property. Any areas damaged as a result of the Contractor's actions, operations, and equipment shall be restored and/or repaired to a condition equal to or better than the original.

#### 6. Site Limitations

6.1 Limited parking is available on site. Parking is available at 721 N. Main Street, Ann Arbor with approval from the Representative of the City. The Contractor will be limited to an onsite dumpster and truck access for loading and unloading materials.

# 7. Measurement and Payment

7.1 Forty (40) percent of the cost of the General Conditions item shall be paid on the first request for payment. Thirty (30) percent of the cost of the General Conditions item shall be paid when over 50% of the value of the total project is complete. Thirty (30) percent of the cost of the General Conditions shall be paid when over 85% of the value of the total project is complete. The General Conditions shall be paid on a lump sum (LS) basis.

## **GENERAL SPECIFICATIONS FOR DEMOLITION**

## 8. Description

- 8.1 This work consists of removal and legal disposal of all demolition materials. The Contractor shall provide all labor, materials, tools, and equipment necessary to complete all the demolition work, whether specifically indicated or not, in the Contract drawings.
- 8.2 The contractors are cautioned to thoroughly familiarize themselves with all portions of demolition work. The building must be protected from weather hazards at all times. Prevent the spread of dust and debris when accomplishing work by dust-tight enclosures between construction areas and areas not affected by demolition or construction. The Contractor shall promptly clean up all work areas during each day of such work.
- 8.3 All bracing, shoring, or similar operations, required to accomplish this work shall be included herein as the responsibility of the Contractor.
- 8.4 Demolition work includes, but is not necessarily limited to, the following: Removal of all ceilings and flooring products.
- 8.5 Any damage to existing construction resulting from demolition, service relocation, or related work beyond that specified herein or in the Floor Plans, shall be made good promptly by the Contractor at his own expense to the satisfaction of the Representative of the City.

#### GENERAL SPECIFICATIONS FOR ASBESTOS ABATEMENT

# 9. Description

- 9.1 This work consists of the removal of asbestos or asbestos fiber containing materials, in accordance with guidelines and regulations of federal, state and local agencies, EPA and MIOSHA.
- 9.2 The Contractor is hereby notified of the presence of asbestos fiber insulation, flooring and fireproofing in the building. Federal and state laws concerning asbestos abatement, and the handling and disposal of hazardous materials will be applicable to perform demolition and construction work in the building.

# 10. Work Schedule

- 10.1 The Contractor shall so arrange his work to conform to the completion schedule specified by the Representative of the City for the work phases as specified below:
  - 10.1.1 All the items performed under this contract must be completed in a timely manner, according to the schedule agreed to between the Representative of the City and the Contractor.
  - 10.1.2. Work shall not commence until the Contractor has received a Notice to Proceed from the Representative of the City. The Representative of the City shall not issue a Notice to Proceed until all required submittals from the Contractor have been submitted within the time schedule for submittal of required Contractor's documentation.
  - 10.1.3. Work shall not commence until a fully executed contract is received by the Contractor from the Representative of the City. Work commenced prior to receipt of both a fully executed contract and a written notice to proceed shall be unauthorized and such work will progress solely at Contractor's risk.

#### 11. Terms

11.1 The time schedule agreed to between the Representative of the City and the Contractor for completion of work is an essential part of this specification and contract. If the Contractor shall neglect, fail or refuse to complete the work within the time schedule agreed to between the Representative of the City and the Contractor, or any proper extension therefore granted by the Representative of the City, this shall be a breach of contract and the Contractor shall be in default after the day stipulated in the completion schedule agreed to between the Representative of the City and the Contractor for completion of the work. In this event, the Contractor will be required to reimburse the City for cost of air monitoring, industrial hygiene services and administrative services for work which progresses beyond the allotted time specified in the completion schedule due to Contractor's failure to complete the work on time.

### 12. Submittals

- 12.1 General This section specifies administrative and procedural requirements for submittals required for performance of the work, including:
  - -Plan of Action
  - -Inspection

- -Contractor's construction schedule
- -Submittal schedule
- -Daily construction reports
- -Product data
- -Samples
- -Miscellaneous submittals

### 12.2 Submittal Procedures

- 12.2.1 Coordination: Coordinate preparation and processing of submittals with performance of project activities. Transmit each submittal sufficiently in advance of performance of related project activities to avoid delay.
- 12.2.2 The Representative of the City reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 12.2.3 No extension of contract time will be authorized because of failure to transmit submittals to the Representative of the City sufficiently in advance of the work to permit processing.
- 12.2.4 Submit two copies of each required submittal. The Representative of the City will retain one, and will return the one marked with action taken and corrections or modifications required.
- 12.2.5 Unless noncompliance with contract document provisions is observed, the submittal may serve as the final submittal.
- 12.2.6 Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities.
- 12.2.7 Do not proceed with installation until an applicable copy of product data is in the installer's possession.
- 12.2.8 Do not permit use of unmarked copies of product data in connection with construction.
- 12.2.9 Except for submittals for record, information or similar purposes, where action and return is required or requested, the Representative of the City will review each submittal, mark to indicate action taken, and return promptly.
- 12.2.10 Compliance with specified characteristics is the Contractor's responsibility.

### 12.3 Plan of Action

- 12.3.1 The Contractor is required to submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. He shall include in the plan the location and layout of decontamination areas. The sequencing of asbestos work, work methods and engineering controls to be used to assure the safety of building occupants and visitors to the site, disposal plan including location of approved disposal site, a detailed description of the methods to be employed to perform work, and a list of all personnel state-required asbestos worker licensing, medical evaluations, respirator fit test, and certification proposed to be employed on this project.
- 12.3.2 The Contractor shall further explain his intent for use of portable HEPA ventilation system and exhaust, closing out and sealing of the building's HVAC system, method of removal to prohibit visible emissions in work areas, asbestos worker protection, packaging of removed asbestos debris and any other pertinent items necessary to complete an AHERA (type) project. The plan must be approved by the Representative of the City prior to commencement of work.

# 12.4 Inspection

12.4.1 Prior to commencement of work, the Contractor shall perform the following: inspect the area in which work will be performed; prepare a listing of damage to structure, surfaces, equipment or of surrounding properties which could be misconstrued as damage resulting from the work; photograph or videotape existing conditions as necessary to document conditions; submit to Representative of the City prior to starting work.

## 12.5 Contractor's Construction Schedule

- 12.5.1 Provide proposed detailed schedule including work dates, work shift times, number of employees, dates of start and completion, including dates of preparation work, removals and final inspection dates.
- 12.5.2 Indicate clearance of each work area in advance of the dates established for clearance. Allow time for testing and other procedures necessary for certification of clearance.

### 12.6 Submittal Schedule

12.6.1 Listing: At the end of this section is a listing of the principal submittals required for the work. this listing is not necessarily complete, nor does the listing reflect the significance of each submittal requirement or will all items listed by required. The listing is included only for the convenience of users of the contract documents.

## 12.7 Product Data

- 12.7.1 Collect product data into a single submittal. Product data includes printed information such as manufacturer's installation instructions, catalog cuts, and performance curves. Where product data must be specifically prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
- 12.7.2 Mark each copy to show applicable choices and options. Where printed product data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
  - -Manufacturer's printed recommendations.
  - -Compliance with recognized trade association standards.
  - -Compliance with recognized testing agency standards.
  - -Application of testing agency labels and seals.
  - -Notation of dimensions verified by field measurement.
  - -Notation of coordination requirements.
- 12.7.3 Do not submit product data until compliance with requirements of the contract documents has been confirmed.

## 12.8 Samples

- 12.8.1 Submit full-size, fully fabricated samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials.
  - -Generic description of the sample.

- -Sample source.
- -Product name or name of manufacturer.
- -Compliance with recognized standards.
- -Availability and delivery time.
- 12.8.2 Submit samples for review of kind, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

### 12.9 Miscellaneous Submittals

- 12.9.1 Material Safety Data Sheets: Process material safety and data sheets as "product data".
- 12.9.2 Records of Actual Work: Furnish two copies of records of actual work:, one of which will be returned.
- 12.9.3 Standards: Where submittal of a copy of standards is indicated, and except where copies of standards are specified as an integral part of a "Product Data" submittal, submit a single copy of standards for the use of the Representative of the City. Where workmanship, whether at the project site or elsewhere, is governed by a standard, furnish additional copies of the standard to fabricators, installers and other involved in the performance of the work.

### GENERAL SPECIFICATIONS FOR RESTORATION

## 13. Description

- 13.1 This work consists of the installation of the suspended ceiling system and the installation of flooring materials. The Contractor shall provide all labor, materials, tools, and equipment necessary to complete all the restoration work, whether specifically indicated or not, in the Contract drawings.
- 13.2 The products listed in the technical specifications <u>shall</u> be the products bid and installed. No substitutions will be allowed unless a product is no longer available.

## 14. Suspended Ceiling System

- 14.1 The contractor shall provide a ceiling plan for each floor that shall be approved by the Owner prior to the start of ceiling installation.
- 14.2 The existing light fixtures shall be integrated into the suspended ceiling system as close to their existing location as possible to provide ample and even lighting throughout the work area.
- 14.3 Exit lights, smoke detectors and other ceiling mounted fixtures shall be integrated into the suspended ceiling system as close to their existing locations as possible.
- 14.4 Adjustment or replacement of mounting boxes for ceiling mounted fixtures is the responsibility of the Contractor.

## 15. Floor Covering

15.1 Floor covering will consist of either carpet tiles or linoleum floor covering. The flooring plan is provided as part of the technical specifications.

- 15.2 The Contractor will be responsible for all flooring and transition accessories. All flooring and transition accessories should be included with submittals.
- 15.3 Access covers for the in floor conduit system shall integrated with the floor coverings. The Contractor shall work with the Owner to identify covers that can be eliminated and covered over. The Contractor shall be responsible to cover these identified openings.

#### SCOPE OF WORK

### Demolition Activities

This section identifies requirements, in addition to the Technical Specification, that the awarded Contractor must follow during the course of the demolition activities.

- 1.1 The entire floor shall be appropriately sealed and protected to ensure a safe and contained environment for demolition activities.
- 1.2 Contractor shall modify HVAC systems and seal supply and return ducts at floor level. This work must be done on a weekend or after normal business hours so the HVAC system can be shut down by Facilities staff.
- 1.3 All light fixtures and other ceiling mounted fixtures should be cleaned of residual asbestos, protected and secured as need.
- 1.4 Smoke and fire alarms should be properly bagged and secured to avoid false alarms from the fire alarm system.
- All ceiling materials should be demolished and treated as hazardous materials due to their long-term exposure to friable ACM above the ceiling. All chemical mastic removers utilized should consist of "no-odor" or "low-odor" type removers. All floors where chemical mastic removers are to be utilized shall be evaluated prior to the use of chemical mastic removers to ensure the integrity of the floors and to ensure leakage of mastic remover and asbestos will not occur.
- 1.6 All flooring materials, including tile mastics, should be removed and treated as hazardous materials since many of these products contain asbestos.
- 1.7 All floors should be cleaned of all mastic and prepared for new flooring.
- 1.8 East Elevator Area: Prior to demolition activities, the Contractor shall construct plywood/polyethylene barriers on the face of the elevator. Three (3) holes shall be cut out of the barrier and "slinky" duct placed flush into the wood and fire rated polyethylene barriers and connect to a wood barrier placed in a window/breech. These ducts shall remain in place for the duration of the project and are used to control the piston effects of the elevators. The contractor shall ensure that the elevator is "locked out" to the floor under renovation. Warning signs shall be placed on the elevator sides of the barriers. Barrier shall remain until abatement activities all completed.
- 1.9 West Elevator Area: Prior to demolition activities, the Contractor shall box in the west elevator lobby (wood frame and plywood) and supply outside air to control the piston effects of the elevators if needed. The contractor shall ensure that the elevator is "locked out" to the floor under renovation. Warning signs shall be placed on the elevator sides of the barriers. Barrier shall remain until abatement activities all completed.
- 1.10 Warning signs and barrier tape shall be installed at each stairway entrance to the floor undergoing abatement activities.

2. Abatement, Re-insulation and Restoration Activities

This section identifies requirements, in addition to the Technical Specification, that the awarded Contractor must follow during the course of the abatement, re-insulation and restoration activities.

- 2.1 Contractor shall re-insulate all abated Thermal System Insulation (TSI) to satisfaction of Owner. See Technical Specifications for Mechanical Insulation.
- 2.2 Contractor shall reapply all abated Spray-on Fireproofing to satisfaction of Owner. See Cementitious Fireproofing.
- 2.3 The restrooms on all floors have been abated previously and are not included in this scope of work. The lobby areas for elevators #7 and #8 do not contain ACM and must be properly protected.
- 2.4 Restoration work includes new ceilings and flooring installations to satisfaction of the Owner.
- 2.5 All ACM and non-ACM designated dumpsters shall be rigid on all six (6) sides. The access door shall be locked when not in view of a worker. Dumpsters must be removed from the premises within two (2) days of project completion.
- 2.6 All spray-on and associated over spray and hardware shall be removed and disposed of as ACM. The Contractor is responsible for removing all spray-on and removing pipe insulation containing ACM or impacted by over-spray, whether identified on the maps or not, and whether measurements are identified or not. All cavities exposed when the spray-on is removed shall be decontaminated. Any and all locations where decontamination is not possible shall be sealed with an U/L approved fire rated foam.
- 2.7 The Contractor shall remove and dispose of all tank insulation, pipe insulation and pipe fitting insulation as ACM. The Contractor shall "VIAC" any ACM TSI in walls, floors, chases or ceilings not accessible without damage to areas not identified for removal or demolition.
- 2.8 If a Vac Loader is used, the personnel operating the Vac Loader, it's placement and standard operating procedures must be approved by the Owner and Owner's Representative. Sound suppression shall be constructed to the satisfaction of the Owner. The Owner reserves the right to prohibit Vac Loader use at any time, for any reason.
- 2.9 The Contractor is responsible for all measurements. Measurements for bidding purposes as well as material procurement are the sole responsibility of the Contractor. Any maps or drawings included within this specification may not identify all materials listed in the Scope-of-Work. The Scope-of-Work may not identify all materials. The Contractor is responsible for abatement of all materials whether identified in the Scope-of-Work or not.
- 2.10 The Contractor shall be responsible for the security and safety of the building. Wood with cut outs for exhaust duct shall be placed in doors and windows and shall be vented to the immediate outdoor environment unless otherwise approved in writing by the Owner. The Contractor shall secure the wood in the doors and windows to ensure a secure work area.

- 2.11 The Contractor is responsible for any damage to surfaces, electrical and mechanical equipment. The Contractor shall be responsible for repairing (painting) surfaces: walls, ceilings, floors, windows, doors etc. The Contractor is responsible for all damage resulting from removal operations. All wires shall be properly adhered with cable ties to appropriate hangers.
- 2.12 The Workers shall wear PAPR's, at a minimum.
- 2.13 No bladder bags may be used.
- 2.14 The Contractor shall provide utility lighting for all work areas.
- 2.15 No salvaging, by the Contractor or their employees, of any item.
- 2.16 The Contractor shall spray-back with clean encapsulant upon acceptable visual clearance.

# 3. Sequence of Work

- 3.1 5<sup>th</sup> FLOOR PHASE 1
  - 3.1.1 Remove all spray-on insulation (deck, wall, I-beam) and overspray from the 5<sup>th</sup> floor of City Hall.
  - 3.1.2 Remove all ACM pipe insulation and pipe fitting insulation (including that covered by over-spray) from the 5<sup>th</sup> floor of City Hall.
  - 3.1.3 Remove all ACM floor tiling and mastic from the 5<sup>th</sup> floor of City Hall.
- 3.2 5<sup>th</sup> FLOOR PHASE 2
  - 3.2.1 Re-insulate all abated pipes and fittings to satisfaction of the Owner.
  - 3.2.2 Re-apply all abated spray-on fireproofing to satisfaction of the Owner.
- 3.3 5<sup>th</sup> FLOOR PHASE 3 (OWNER WORK)
  - 3.3.1 The Owner will require a seven (7) calendar day period, immediately after completion of the Phase 2 work, to allow for the installation of new cabling infrastructure by the Owner.
- 3.4 5<sup>th</sup> FLOOR PHASE 4
  - 3.4.1 Contractor shall install a new 2' x 2' lay-in grid ceiling, utilizing the <u>same</u> ceiling products as the 6<sup>th</sup> floor of City Hall.
  - 3.4.2 The new ceiling should be at the same height as the removed ceiling and integrate the existing light fixtures and lighting configuration. Other ceiling mounted fixtures shall be re-installed and their operation verified.
  - 3.4.3 Contractor shall install new flooring which will consist of carpet tiles and resilient flooring per the flooring schedule provided with these specifications.
  - 3.4.4 In areas where the in-floor conduit system access is located, the Contractor shall work with the Owner to verify which access points can be covered and which ones shall remain.
  - 3.4.5 Contractor shall provide a final cleaning of all surfaces to the satisfaction of the Owner.

# 3.5 5<sup>th</sup> FLOOR - PHASE 5 (OWNER WORK)

3.5.1 The Owner will require a seven (7) calendar day period, immediately after completion of the Phase 4 work, to allow for the 4<sup>th</sup> floor operations of City Hall to be relocated to the 5<sup>th</sup> floor space. This work will be done by the Owner.

## 4.1 4<sup>th</sup> FLOOR - PHASE 1

- 4.1.1 Remove all spray-on insulation (deck, wall, I-beam) and overspray from the 4<sup>th</sup> floor of City Hall.
- 4.1.2 Remove all ACM pipe insulation and pipe fitting insulation (including that covered by over-spray) from the 4<sup>th</sup> floor of City Hall.
- 4.1.3 Remove all ACM floor tiling and mastic from the 4<sup>th</sup> floor of City Hall.

## 4.2 4<sup>th</sup> FLOOR - PHASE 2

- 4.2.1 Re-insulate all abated pipes and fittings to satisfaction of the Owner.
- 4.2.2 Re-apply all abated spray-on fireproofing to satisfaction of the Owner.

# 4.3 4<sup>th</sup> FLOOR - PHASE 3 (OWNER WORK)

4.3.1 The Owner will require a seven (7) calendar day period, immediately after completion of the Phase 2 work, to allow for the installation of new cabling infrastructure by the Owner.

# 4.4 4<sup>th</sup> FLOOR - PHASE 4

- 4.4.1 Contractor shall install a new 2' x 2' lay-in grid ceiling, utilizing the <u>same</u> ceiling products as the 6<sup>th</sup> floor of City Hall.
- 4.4.2 The new ceiling should be at the same height as the removed ceiling and integrate the existing light fixtures and lighting configuration. Other ceiling mounted fixtures shall be re-installed and their operation verified.
- 4.4.3 Contractor shall install new flooring which will consist of carpet tiles and resilient flooring per the flooring schedule provided with these specifications.
- 4.4.4 In areas where the in-floor conduit system access is located, the Contractor shall work with the Owner to verify which access points can be covered and which ones shall remain.
- 4.4.5 Contractor shall provide a final cleaning of all surfaces to the satisfaction of the Owner.

# 4.5 4<sup>th</sup> FLOOR - PHASE 5 (OWNER WORK)

4.5.1 The Owner will require a seven (7) calendar day period, immediately after completion of the Phase 4 work, to allow for the 3<sup>rd</sup> floor operations of City Hall to be relocated to the 4<sup>th</sup> floor space. This work will be done by the Owner.

# 5.1 3<sup>rd</sup> FLOOR - PHASE 1

- 5.1.1 Remove all spray-on insulation (deck, wall, I-beam) and overspray from the 3<sup>rd</sup> floor of City Hall.
- 5.1.2 Remove all ACM pipe insulation and pipe fitting insulation (including that covered by over-spray) from the 3<sup>rd</sup> floor of City Hall.
- 5.1.3 Remove all ACM floor tiling and mastic from the 3<sup>rd</sup> floor of City Hall.

# 5.2 3<sup>rd</sup> FLOOR - PHASE 2

- 5.2.1 Re-insulate all abated pipes and fittings to satisfaction of the Owner.
- 5.2.2 Re-apply all abated spray-on fireproofing to satisfaction of the Owner.

# 5.3 3<sup>rd</sup> FLOOR - PHASE 3 (OWNER WORK)

5.3.1 The Owner will require a seven (7) calendar day period, immediately after completion of the Phase 2 work, to allow for the installation of new cabling infrastructure by the Owner.

# 5.4 3<sup>rd</sup> FLOOR - PHASE 4

- 5.4.1 Contractor shall install a new 2' x 2' lay-in grid ceiling, utilizing the <u>same</u> ceiling products as the 6<sup>th</sup> floor of City Hall.
- 5.4.2 The new ceiling should be at the same height as the removed ceiling and integrate the existing light fixtures and lighting configuration. Other ceiling mounted fixtures shall be re-installed and their operation verified.
- 5.4.3 Contractor shall install new flooring which will consist of carpet tiles and resilient flooring per the flooring schedule provided with these specifications.
- 5.4.4 In areas where the in-floor conduit system access is located, the Contractor shall work with the Owner to verify which access points can be covered and which ones shall remain.
- 5.4.5 Contractor shall provide a final cleaning of all surfaces to the satisfaction of the Owner.

# 6. Meeting Requirements

- 6.1 All Contractors submitting bids will be required to attend the following meetings if requested by the Owner:
  - 6.1.1 Pre-Start Scheduling Meeting: The awarded Contractor will be required to attend a pre-start meeting on-site with the Owner to schedule the logistics of the project in accordance with Section 2 of the Technical Specifications for Asbestos Abatement.
  - 6.1.2 Progress Meetings: The awarded Contractor will be required to attend regular progress meeting every other week to discuss the project progress and any related issues.

## 7. Notification

7.1 All regulatory agencies including, but not limited to, the Environmental Protection Agency, the Michigan Department of Licensing and Regulatory Affairs, the Michigan Department of Public Health, and all other applicable Federal, State, County or City municipalities should be notified within 7 days of the signed contract and at least in a period allowable for the project to begin on the start date given below. The Contractor shall also be solely responsible for payment of all applicable fees and charges. Failure to notify in a timely manner will not excuse the awarded Contractor(s) from liquidated damages.

# 8. Project Time Schedule

8.1 The following time schedule must be adhered to by the awarded Contractor(s). This schedule will be made part of the contract documents and will be strictly

enforced by the Owner. Any and all variances to this schedule must be cleared by the Owner prior to the commencement of the project(s). If the project(s) is/are not completed within the time period outlined below, the Owner may impose liquidated damages as described below.

8.2 The Contractor will commence and complete all projects according to the following calendar:

5 <sup>th</sup> Floor – Phases 1-4	Start:	January 20, 2014
	Completion:	February 28, 2014
5 <sup>th</sup> Floor – Phase 5 (Relocation)		March 3-10, 2014
4 <sup>th</sup> Floor – Phases 1-4	Start:	March 10, 2014
	Completion:	April 18, 2014
4 <sup>th</sup> Floor – Phase 5 (Relocation)		April 21-28, 2014
3 <sup>rd</sup> Floor – Phases 1-4	Start:	April 28, 2014
	Completion:	June 6, 2014

- 8.3 Phase 3 work for each floor, which includes seven (7) calendar days of work by the Owner per floor, is included in the schedule above.
- 8.4 Liquidated damages, as described below, shall be assessed after the Completion Dates.
- 8.5 All projects will be considered complete for schedule purposes when the project site has passed required clearance testing, the Contractor has completed removal of all supplies and equipment and the Contractor has returned the building to the Owner in a condition that satisfies the Owner and Owner's Representative.
- 9. Post Abatement PCM (Phase Contrast Microscopy) Clearance Testing
  - 9.1 Post Abatement PCM Clearance Samples will be collected, analyzed and results verbally expressed to the Owner and to the Contractor within twenty-four (24) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.
  - 9.2 It will be in the judgment of the Owner's Representative as to when Post Abatement PCM Clearance Samples will be collected. All Post Abatement PCM Clearance Samples will be collected on-site.
- 10. Post Abatement TEM (Transmission Electron Microscopy) Clearance Testing
  - 10.1 Post Abatement TEM Clearance Samples will be collected, analyzed and results verbally expressed to the Owner and to the Contractor within forty-eight (48) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.
  - 10.2 It will be in the judgment of the Owner's Representative as to when Post Abatement TEM Clearance Samples will be collected. The Owner will not authorize any turn-around time of less than twenty-four (24) hours. The Contractor may request turn-around times of less than twenty-four hours and incur any additional costs.

# 11. Site Availability

- 11.1 The Contractor shall be allowed to work evening and weekend hours with approval of the Owner's Representative.
- 11.2 The Contractor shall only remove waste containers from the floor under abatement between the hours of 5:30 PM and 7:00 AM on normal business days.

## TECHNICAL SPECIFICATIONS FOR ASBESTOS ABATEMENT

The following are technical specifications which shall be strictly enforced by the City of Ann Arbor, hereafter referred to as the "Owner" or "Building Owner". The Asbestos Abatement Contractor will hereinafter be referred to as the "Contractor" for the asbestos abatement project and the Air Monitors will hereinafter be referred to as the "Owner's Consultant" or "Owners Representative".

# I. INITIAL REQUIREMENTS

## 1. General Terms

- 1.1 By submitting a bid, the Contractor acknowledges that he has investigated and satisfied himself as to:
  - 1.1.1 The conditions affecting the work, including but not limited to the physical conditions of the site which may bear upon site access, handling and storage of tools and materials, access to water, electricity or other utilities that otherwise may affect performance of required activities.
  - 1.1.2 The character and quantity of all surface and sub-surface material or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Building Owner or a designated Consultant, as well as information presented in drawings and specifications included with this specification. Any failure by the Contractor to acquaint himself with available information will not relieve him of the responsibility of determining properly the difficulty, safety concerns or cost of successfully performing the work. The Building Owner and/or the Owner's Consultant is not responsible for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Building Owner and/or the Owner's Consultant.
  - 1.1.3 The methods and procedures detailed within the technical specifications of this bid package are merely illustrative of the procedures to be utilized on the asbestos abatement projects for the Owner. Other procedures, which are the equivalent of those described, are encouraged at the option of the Contractor but are always subject to the Owner and/or the Owner's Consultant approval.
- 1.2 The Contractor shall furnish all labor, materials, services, insurance, and equipment necessary to perform the asbestos abatement activities contemplated by this specification.
- 1.3 Additional work in the form of change orders, written or verbal agreements must also be completed in accordance with these Technical Specifications for Asbestos Abatement as well as all other sections of this specification document.

# 2. Pre-Start Meeting

2.1 Prior to commencement of work, the Contractor shall meet with the Owner and Owner's Consultant to present and review the items listed below. At that time, the Contractor shall designate at least one "competent" (as described by OSHA 1926.1101 {o}) individual who shall be on-site throughout the project with full authority to act on the Contractor's behalf and this person shall attend the pre-start job meeting. This meeting is arranged to discuss and set procedures to be followed throughout the performance of

the contract. At this meeting and to be included in the logbook, the Contractor shall provide:

- 2.1.1 Proof of Contractor licensing to conduct asbestos abatement activities in the State of Michigan in accordance with Act 135 P.A. 1986, as amended, (Asbestos Abatement Licensing Act) and any subsequent State of Michigan Acts.
- 2.1.2 A list of all employees who will participate in the project, including delineation of experience and assigned responsibilities (including subcontractors' employees who may enter the work area).
- 2.1.3 Proof that the "competent person" to be responsible for the execution of this project has had training in accordance with 29 CFR, 1926.1101 and the Michigan Department of Consumer & Industry Services. THIS PERSON SHALL BE ON SITE AT ALL TIMES.
- 2.1.4 Proof that employees who will work on this project have had a minimum of twenty-four (24) hours of training in accordance with 40 CFR, Part 763, Subpart E.
- 2.1.5 Proof that employees who work on this project have had proper medical screening as required by OSHA 29 CFR, Part 1926.1101 (M) (1) (2) (3) (4) and (N) (3) and 29 CFR 1910.20.
- 2.1.6 Proof that employees who work on this project have had proper respirator fit testing for all personnel who wear negative pressure respirators (when allowed).
- 2.1.7 Copies of all worker's Michigan State Accreditation "Cards" must be provided to the Owner's Consultant prior to being allowed within the project area. For any employee(s) who have approval but do not yet have cards in their possession; the Contractor must provide a signed statement (on company letterhead) stating that state approval has been given to that/those employee(s). This statement must include the name of the state employee who granted verbal approval. In addition to this letter, the Contractor must provide a copy of the employee's training certificate, appropriate fit test(s) and doctor's written opinion.
- 2.1.8 A detailed written explanation of the following items:
  - 2.1.8.1 Preparation of the work area, including all engineering controls to be utilized.
  - 2.1.8.2 Decontamination procedure for personnel, work area and equipment.
  - 2.1.8.3 Abatement methods and procedures to be utilized.
  - 2.1.8.4 Procedures for handling and disposing of waste materials including the name and address of the landfill to be used.
  - 2.1.8.5 Emergency Planning Procedures (see Section 8.0 of these specifications).
  - 2.1.8.6 A sequence of work and a performance schedule. The items discussed in this section must be presented at the Pre-Start Meeting and a copy must also be kept in a log book which will be in view at the job site at all times. The items listed in the "Regulations" section of this specification must also be included in this log book. Proof of Contractor Licensing and Emergency Procedures as outlined above must also be posted in view near the decontamination chamber entrance as well as the notification addressed in Item 5 and the signin sheet addressed in Item 10 of these specifications.
- 2.2 At this meeting the Contractor and Owner shall agree on the existing conditions of the work area and the areas immediately surrounding this area.

# 3. Log Book/Regulations

- 3.1 The Contractor shall have the following items in view at the job site at all times. These items must be kept in a log book (three (3) ring binder) as described in the "Pre-Start Meeting" section and include all items stated in 2.1.
  - 3.1.1 OSHA Regulation 29 CFR, Part 1926.1101.
  - 3.1.2 Environmental Protection Agency 40 CFR, Part 61 Subpart M: (National Emission Standard for Hazardous Air Pollutants).
  - 3.1.3 Environmental Protection Agency 40 CFR, Part 763.
  - 3.1.4 A complete set of these specifications.
  - 3.1.5 Appropriate MSDS's.
- 3.2 Whenever during the course of this contract the Contractor, his subcontractor or his employees encounter asbestos, the Contractor shall handle, remove, and dispose of the asbestos strictly in accordance with the rules, guidelines, and regulations specified by EP A, OSHA, the Michigan Department of Licensing and Regulatory Affairs, the Department of Environmental Health, and all other applicable regulatory agencies. The most recent edition or revision of any relevant regulation, standard, document or code shall be controlling. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be utilized.

## 4. Submittals to Owner's Representative/Consultant

- 4.1 The following shall be submitted for all employees who will participate in the project, to the Owner's Representative before project begins.
  - 4.1.1 Copy of Employee Training Certificates.
  - 4.1.2 Copy of MDLEG accreditation cards or letter by Contractor with verbal acceptance from MDPH (see 2.1.7).
  - 4.1.3 Copy of dated fit test.
  - 4.1.4 Copy of doctors written opinion.

## 5. Notification Procedures

- 5.1 The Contractor will make all necessary notifications to the appropriate federal, state and local agencies.
- The National Emission Standards for Hazardous Air Pollutants (NESHAP), Asbestos regulation 40 CFR 61, Subpart M, requires that in a facility being renovated, if the combined amount of regulated asbestos containing materials being removed is at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or is at least I cubic meter (35 cubic feet) off of facility components where the length or area could not be measured previously, a ten (10) working day notification must be submitted to the EP A and the Michigan Department of Environmental Quality. All the requirements of 40 CFR 61.145 apply, including but not limited to the following:
  - 5.2.1 An indication of whether the notice is an original or a revised notification.
  - 5.2.2 Name, address, and telephone number of the facility Owner and operator and the Owner or operator of the asbestos removal firm.

- 5.2.3 Type of operation: demolition or renovation.
- 5.2.4 Facility description including at least the following:
  5.2.4.1 Size (square meters (or square feet) and number of floors).
  5.2.4.2 Age.
  5.2.4.3 Present and prior uses.
- 5.2.5 Procedure, including analytical methods, employed to detect the presence of asbestos-containing material.
- 5.2.6 Estimate of the approximate amount of regulated asbestos-containing material to strip using the appropriate units, either linear meters (linear feet) for pipes, square meters (square feet) for other facility components, or cubic meters (cubic feet), if the asbestos-containing material will be stripped from the facility components without being measured.
- 5.2.7 Estimate of the amount of Category I and Category II non-friable asbestoscontaining materials in the affected part of the facility that will not be removed before demolition.
- 5.2.8 Location and address, including building number or name and floor or room number, if appropriate, street address, city, county, and state of the facility being demolished or renovated.
- 5.2.9 Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition (with the exception of government ordered demolitions) or renovation, and scheduled starting and completion dates of the demolition or renovation.
- 5.2.10 The beginning and ending dates of the report period for planned renovation operations involving individual non-scheduled operations.
- 5.2.11 Description of planned demolition or renovation work including the demolition and renovation techniques to be used and description of the affected facility components.
- 5.2.12 Description of work practices and engineering controls to be used to comply with the requirements of this standard.
- 5.2.13 Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.
- 5.2.14 Certification that only persons trained as required in paragraph (C) (8) will supervise the stripping and removal of asbestos-containing material (effective one (1) year after promulgation).
- 5.2.15 Description of procedures for handling the finding of unexpected regulated asbestos containing material or Category II non-friable asbestos-containing material that has been crumbled, pulverized, or reduced to powder.
- 5.2.16 For government ordered demolitions, include the name, title, and authority of the government representative ordering the demolition, the date the order was issued, and the date the demolition was ordered to begin by the State or local government representative. Attach a copy of the order to the notification.
- 5.2.17 For emergency renovations, include the date and hour the emergency occurred, a description of the event and an explanation of how the event has caused unsafe conditions or would cause equipment damage or unreasonable financial burden.
- 5.2.18 Name, address, and telephone number of the waste transporter.
- 5.3 Section 220(1)(c) of Act 135 of the Public Acts of1986, as amended, requires an asbestos abatement Contractor provide the Michigan Department of Licensing and Regulatory Affairs a minimum ten (10) day prior notification which includes items under

- 5.2 (above), in accordance with their requirements for any project that exceeds ten (10) linear feet or 15 square feet or both of friable asbestos-containing material.
- 5.4 All other agency notifications must be made on a timely basis as deemed necessary by those agencies.
- 5.5 Payments of all applicable regulatory required fees and/or charges are the sole responsibility of the Contractor.

## **II. ABATEMENT REQUIREMENTS**

- 6. Worker's Dress and Safety Equipment
  - 6.1 Worker's clothing shall be provided by the Contractor as required by current OSHA regulation. Rips and tears in the coveralls shall be repaired, or else the coveralls shall be replaced.
  - 6.2 The Contractor shall provide protective clothing for the Owner's Consultant, and inspection personnel.
  - 6.3 Worker's clothing shall consist of disposable full body coveralls (coveralls should be of Tyvek material disposable paper), underwear, head covers, gloves, and boots. The Contractor shall supply whatever safety gear is necessary to protect those people authorized to enter the work site, including if necessary, hard hats and eye protection. OSHA approved footwear is mandatory while at the project site (inside and outside of the enclosure). No street clothing shall be worn under coveralls.
  - 6.4 The Contractor shall have an appropriately rated fire extinguisher in the dirty room and clean room of each enclosure.
  - 6.5 The Contractor shall adhere to all OSHA and other regulatory agency requirements regarding the safety of the employees, including but not limited to:
    - 6.5.1 Fire Safety
    - 6.5.2 Ladders
    - 6.5.3 Scaffolding
    - 6.5.4 Confined Spaces

# 7. Respiratory Protection

- 7. I Respirator protection for workers shall be provided by the Contractor as required by current OSHA regulation.
- 7.2 Respiratory protection consisting of powered air purifying respirators (P.A.P.R.) with full-face piece and HEPA filters will be provided and used by all asbestos abatement workers. Half-face cartridge respirators may be used for setting up, tearing down, Precleaning and post cleaning work area(s) with the approval and/or at the discretion of the Owner's representative. Workers will always wear a respirator when in the work area. While wearing the respirator, workers will not pull the respirator away from his/her face to talk, smoke, eat, or drink. No workers will be permitted to wear a half-face respirator unless clean shaven. If half-face cartridge respirators are used as described above, then

- a qualitative fit test for each employee engaged in this work must be completed. These fit tests must be completed in accordance with OSHA regulations.
- 7.3 Combination cartridges (Asbestos and Organic vapor) are required during the removal of mastic materials using chemical mastic removers.
- 7.4 An adequate supply of cartridges and respirators must be on-site and available for workers (regardless of respirator type).

# 8. Emergency Planning

- 8.1 Emergency planning shall be developed prior to abatement initiation and agreed to by the Contractor and the Owner or Owner's Representative. All plans must be detailed in writing and posted at the job site (in view near the decontamination chamber entrance).
- 8.2 Emergency planning shall include written procedures for the following emergencies:
  - 8.2.1 The Contractor must explain his contingency plan for the possibility of the negative air filtration devices blowing a fuse, tripping a circuit breaker, or losing power.
  - 8.2.2 The Contractor must explain his contingency plan for the possibility that a disposal bag may break or leak.
  - 8.2.3 The Contractor must explain his contingency plan for the possibility of an injury.
  - 8.2.4 For non-life-threatening situations employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the work place to obtain proper medical treatment
  - 8.2.5 For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove him/her from the work place and secure proper medical treatment.
  - 8.2.6 The Contractor must detail emergency evacuation routes in case of fire, explosion, or toxic atmosphere, etc.
- 8.3 The Contractor shall take all necessary precautions and actions to protect his employees, subcontractors, Owner's Representatives, Owner's Consultants, government inspectors, general public, and the building and structure from exposure to asbestos.

# 9. Preparation of Work Area for Asbestos Abatement

- 9.1 The Owner shall attempt to furnish utility services for the Contractor's use, including electrical outlets (25 ampere) and water taps in or adjacent to the work area in sufficient quantities and located such that the Contractor can use them for equipment and abatement/decontamination practices. However, should such utility access not be available, the Contractor is solely responsible for the provision of the same. In the event of power failure (regardless of fault), the Contractor is responsible for continuing work using adequate generator power.
- 9.2 Danger signs will be posted at a distance sufficiently far enough from the asbestos abatement work area to permit an employee to read the sign and take necessary protective measures to avoid exposure. Signs shall be in accordance with EP A and

- OSHA regulations. All possible entrances to the work area shall be posted. Additional signs will be placed at areas designated by the Owner's Consultant.
- 9.3 The building personnel shall attempt to shut down and lock out all heating, cooling, and air conditioning system components that are in, supply, or pass through the work areas. Should building personnel be unavailable or unable to so do., it is the sole responsibility of the Contractor to do so. The Contractor will seal all intake and exhaust vents in the work area with tape and 6-mil polyethylene, as well as any seams in system components that pass through the work area. All affected heating, ventilation and air conditioning system filters will be removed and placed in 6-mil polyethylene bags for disposal as asbestos waste.
- 9.4 The Contractor may be required to Pre-clean all movable objects within the work area using a HEPA filtered vacuum and/or wet cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or the Owner's Consultant. After cleaning, these objects shall be removed from the work area by the Contractor and carefully stored in an uncontaminated location as designated by the Owner's Consultant. (Carpeting, drapes, clothing, furniture, and other fabric items contaminated with asbestos may be required to be disposed of as asbestos contaminated waste.)
- 9.5 The Contractor may be required to Pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or the Owner's Consultant. The extent of the Pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.
- 9.6 Where doors or other such building fixtures are removed by the Contractor prior to abatement activities, the Contractor is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by the Contractor to insure replacement in the proper location.
- 9.7 The Contractor shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at a minimum, 6-mil polyethylene sheeting.
- 9.8 Walls will be covered with at least one layer of 6-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and the Contractor shall comply with the method chosen.
- 9.9 Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.
- 9.10 Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used for this purpose.

- 9.11 The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that the Contractor will use for the movement of supplies and personnel.
- 9.12 Equipment storage, bathroom usage designation, foreman's office and designated break areas (if available) will be determined by the Owner or the Owner's Consultant. Only project areas and designated areas are to be used.
- 9.13 No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.

### 10. Decontamination

- 10.1 The Contractor will construct decontamination facilities in a pre-designated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. It air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.
- 10.2 The Contractor may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the

bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

- 10.3 All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each day's work. Lockers or acceptable substitutes will be provided by the Contractor for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.
- 10.4 At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by the Contractor.
- 10.5 Adequate toilet facilities may be located outside of the work area and decontamination for this purpose will be employed. Where such facilities do not exist, the Contractor will provide portable service.
- 10.6 No smoking, eating or drinking is to take place in the work area. Prior to smoking, eating, drinking or using toilet facilities, workers will fully decontaminate by showering. A new coverall will then be used to re-enter the work area.
- 10.7 Procedures developed for evacuation of injured workers (see 6.3, Emergency Planning) will be used. Aid for a seriously injured worker will not be delayed for reasons of decontamination.
- 10.8 Worker's footwear will remain inside the work area until the completion of the job.
- 10.9 All waste water must be passed through a HEPA filter or collected in an air tight container and disposed of as asbestos waste.
- 10.10 All Contractor's tools and supplies, including large items such as ladders and scaffolding must be properly decontaminated when removing them from the project area.

### 11. Methods of Asbestos Abatement

NOTE: The use of supplies, equipment, tools, etc., owned, rented or otherwise in the possession of the Building Owner is strictly prohibited.

11.1 The asbestos material will be sprayed with either removal encapsulant or "amended water" (which contains an additive to enhance penetration). A fine spray of either solution will be applied to prevent fiber disturbance preceding the removal of the

asbestos material. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the OSHA standards referenced in these specifications. The Contractor shall not, however, allow excessive water to accumulate in the work area. If removal encapsulant water is not used, surrounding areas will be periodically sprayed and kept wet to facilitate removal with minimum fiber release. A high humidity will be maintained in the work area to assist in fiber settling. If at any time the Owner's Consultant determines the material is not kept adequately wet, misters and/or sprinklers will be mandatory.

- 11.2 Removal of asbestos material will be done in manageable sections with two-person teams (if needed). Material will be removed as intact sections or components whenever possible and carefully lowered to the floor.
- 11.3 The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. All waste bags shall have a sufficient amount of amended water added to each bag. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.
- 11.4 Large components removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.
- 11.5 When removal of building materials (electrical, light, duct work, etc.) is necessary, the Contractor shall develop drawings indicating existing materials and their exact locations.
- 11.6 Personnel knowledgeable and experienced in electrical work must be used when installing or making connections to any electrical components within the facility, as well as when removing and/or replacing lights.
- All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.
- 11.8 No bags shall be thrown or dropped at any time.
- 11.9 All containerized asbestos waste that is stored on-site (if allowed) shall be properly labeled and placed in a locked or secured location until ready for final disposal. Labels shall be of sufficient size and contrast to be readily visible and legible. The sign shall read:
  - "Danger Contains Asbestos Fibers Avoid Creating Dust Cancer and Lung Disease Hazard"
- 11.10 All asbestos abatement projects will be completed with the use of HEPA air filtration devices. Each unit must have three filters, including a HEPA filter capable of removing minute asbestos fibers. Each unit has ducts that must be exhausted to the outside air.

Inlet and outlet ports of the air filtration devices must be covered with tape and 4-inil polyethylene sheeting when not in use. HEPA air filtration devices will be set up so that the air in the enclosure is drawn away from the abatement worker. Removal and cleaning operations will always move towards the air filtration devices. HEPA air filtration devices will be run until the completion of the project. A sufficient number of "backup" HEPA air filtration devices shall remain on the project site until the completion of the project.

- 11.10.1 The Contractor will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.
- 11.10.2 A minimum reading of 0.020 inches of water on a differential pressure gauge shall be maintained at all parts of the enclosure.
- 11.10.3 Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).
- 11.10.4 Smoke tubes shall be used daily by the Contractor to test for leaks and breeches in the containment.
- 11.11 All air filtration devices must be ducted to the outside of the building from a position that is securable. Flexible duct will be used and placed at a location approved by the Owner's Representative.
- 11.12 All gross amounts of asbestos debris shall be cleaned up, bagged, and sealed at the end of each working day.
- 11.13 The Contractor shall transport materials to the ground via leak-tight chutes or such other containers if the material is being removed or stripped more than 50 feet above ground level and not removed as units or in sections.
- 11.14 A thick encapsulant such as "VIAC" shall be applied to any exposed pipe insulation ends leading away from the enclosure area, regardless of material make-up.
- 11.15 Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs", homemade hybrid vacuums or air filtration devices will be allowed on site.

### 12. Non-Friable Material

- 12.1 Under certain circumstances, asbestos-containing materials may be removed in a nonfriable state. The circumstances which will allow such removal will be determined by and at the sole discretion of the Owner and/or the Owner's Representative.
- 12.2 Non-friable asbestos-containing floor tile may be removed utilizing infra-red heat machines. The following procedures shall be strictly adhered to.
  - 12.2.1 Critical barriers will be established over all vents, doors or other openings between the work area and other areas of the facility. These barriers shall be constructed so as to prevent any objectionable smoke or odor from penetrating outside the work area.

- The removal of the asbestos-containing floor tile will be conducted with the use of HEPA air filtration devices. Each unit must have three filters including a HEPA filter. Each unit shall be exhausted to the outside air. Inlet and outlet ducts of the air filtration devices must be covered with tape and at least 4-mil polyethylene when not in use. The HEPA air filtration devices will be activated prior to any removal operations being commenced and will remain running 24 hours per day until the completion of the project.
- All air filtration devices must be ducted to the outside of the building. The area where the duct leaves the building must be made so as to be secure and protected from vandalism and the elements. Flexible ductwork will be used and shall be placed at locations approved by the Owner and/or the Owner's Representative.
- 12.2.4 The Contractor has sole responsibility to arrange for the arrival and placement of the infrared heat machine(s) within the facility. Additionally, the Contractor shall have at least one individual experienced in electrical work who can make whatever electrical connections to power the machines. It is not the Owner's responsibility to make any electrical connections. Any involvement by the Owner's personnel will result in back charges to the Contractor.
- 12.2.5 The Contractor is responsible for the provision of charged and suitably rated fire extinguishers within the work area(s). The number necessary shall be determined in part by the size of the work area and the number of infra-red heat machines in use. The Owner and/or the Owner's Representative may require additional extinguishers at their sole discretion.
- 12.2.6 The Contractor shall take special care to ensure that the infra-red heat machine(s) are not left on one area of floor tile so as to bum the floor tile and cause excessive odor and smoke.
- The floor tile will be carefully scraped up off the underlying flooring utilizing such methods as necessary. Special care should be taken so as to be sure that the floor tile is removed in whole pieces. Chipping the floor tile is strictly forbidden. The floor tile must remain in a non-friable state at all times.
- 12.2.8 As the floor tile is removed, the Contractor's personnel shall carefully place the tile into fiberboard barrels. Other types of materials for the barrels will be considered at the discretion of the Owner's Representative. However, barrels shall be required to hold the tile being removed. Exceptions to this policy will not be considered or allowed
- 12.2.9 Each barrel shall be labeled and disposed of in strict compliance with all applicable requirements as set forth in Section 16 et. seq. of these Technical Specifications. The Owner and/or the Owner's Representative shall make the decision in its/their sole discretion whether a requirement is applicable.
- 12.3 Non-friable asbestos-containing transite material may be removed at times utilizing, at a minimum, the following procedures. The circumstances under which such removal will be allowed and exactly which procedures shall be utilized shall be determined by and at the sole discretion of the Owner and/or the Owner's Representative.
  - 12.3.1 The transite must remain in a non-friable state throughout the removal process. special care must be utilized when removing the material from either the underlying substrate or from whatever type of frame is holding the material.

- 12.3.2 The material should be wetted thoroughly. Special care should be taken with the edges and/or other protrusions through the material (i.e. screw holes, nail holes, etc.) as soon as they are exposed. The wetting process needs to be repeated as necessary to maintain the wetted condition and to prevent fibers from being released.
- 12.3.3 Polyethylene drop cloths should be utilized whenever possible to enable material to be more easily cleaned.
- 12.3.4 Any items removed from the transite material shall be disposed of as asbestos waste. Such items would include but not be limited to screws, nails and other such fasteners
- 12.3.5 The material shall be wrapped in 6-mil plastic and securely sealed with waterproofed duct tape. This wrapped "package" shall then be wrapped again and securely sealed.
- 12.3.6 Certain transite materials may be more economically wrapped by utilizing 6-mil polyethylene asbestos disposal bags. In such instances, the material shall be double-bagged with each bag being sealed individually with high quality duct tape.
- 12.3.7 Any polyethylene drop cloths or other plastic shall be wrapped and sealed as indicated in Section 12.3.6 of these Technical Specifications.
- 12.3.8 Should the removal or the transite material be conducted within the confines of a facility, critical barriers may have to be established over all vents, doors or other openings between the work area and other areas of the facility.
- 12.3.9 The Contractor shall ensure that its employees strictly comply with Sections 6, 7, and 8 of these Technical Specifications regarding worker protection, respiratory protection, and emergency planning. Should additional steps need to be taken so as to prevent the exposure to asbestos fibers for the facility, facility occupants or other workers at the site, the Contractor shall promptly comply with the requests of the Owner and/or the Owner's Representative. The decision to require any additional measures to be taken will be at the sole discretion of the Owner and/or the Owner's Representative.
- 12.3.10 Each "package", bag or other container with transite material within shall be labeled and disposed of in strict compliance with all applicable requirements as set forth in Section 16 et. seq. of these Technical Specifications. The Owner and/or the Owner's Representative shall make the decision in its/theirs sole discretion whether a particular requirement is applicable.
- 12.3.11 Any areas that may be exposed between the outside and inside of the facility or any areas within the facility shall be sealed by plywood or such other material so as to secure the building both from the elements and vandalism. The Contractor shall be responsible for the security of the area where the work was performed or is being performed.

## 13. Glove Bag Technique

- 13.1 A solution of amended water shall be prepared (according to manufacturer's instructions) for the air-less sprayer.
- 13.2 The glove bag should be fitted to the size of the pipe by cutting the top and the top sides of the glove bag. A polyethylene drop cloth shall be placed under the glove bag work area.

- 13.3 The following tools and supplies at a minimum shall be placed inside the glove bag in the tool pouch: utility knife, wire brush, rags, container with thick encapsulate (such as Childer's VIAC). Additional items or tools shall be placed inside dependent on the particular job.
- 13.4 The glove bag is then attached to the pipe by folding the open edges together (making a top seam above the pipe) and securely sealing them with duct tape, as well as sealing both cut sides around the pipe.
- 13.5 The bottom seam of the glove bag may be sealed with duct tape to prevent any leakage from a defective bag.
- 13.6 Insert the wand of the airless sprayer through the glove bag by making a small hole in a location that allows the wand to move freely in the bag, and tape the polyethylene tightly. (There may be a prefabricated hole, especially for the sprayer.)
- 13.7 Insert the nozzle of the HEPA vacuum through the appropriate opening (prefabricated hole) and tape the polyethylene tightly around the nozzle. The vacuum (turned on), in association with a flap, will be used throughout the duration of the glove bag removal project in order to establish proper negative pressure within the glove bag.
- 13.8 Place your arms into the glove bag appendages and thoroughly wet the pipe insulation.
- 13.9 Using the knife, cut through the asbestos at each end of the section to be removed. The section to be removed is then slit from end to end (keeping material wet while cutting).
- 13.1 0 The insulation is then lifted off the pipe and lowered carefully to the bottom of the glove bag.
- 13.11 Using the wire brush, towels and water, the pipe shall be thoroughly cleaned.
- 13.12 Wet the entire inside of the bag with specific attention to the polyethylene around the pipe and the arms and sockets.
- 13.13 Following a visual by the Owner's Consultant, the exposed end of the insulation remaining on the pipe shall be encapsulated, as well as the bare pipe.
- 13.14 Put all tools and supplies into wet cleaned arm socket by pulling socket inside out.
- 13.15 Tape the flap and collapse the bag by sucking all of the air out of the bag using the HEPA vacuum.
- 13 .16 Tape the arm close to the tools (tape it in two locations with a one-inch space between the taped spots). Cut between the taped spots and put the enclosed tools into a bucket of water.
- 13.17 Remove the sprayer wand and seal the opening.
- 13.18 Remove the vacuum nozzle and seal the opening.

- 13.19 The glove bag should be squeezed tightly (as close to the top as possible) twisted, and sealed with duct tape.
- 13.20 Cut the bag off the pipe above the taped area and put the glove bag and drop cloth into an asbestos disposal bag, as well as the remaining portion of the bag on the pipe.
- 13.21 Clean the tools in the bucket of water and dispose of the water and glove bag remains in the asbestos disposal bag. The clean tools should be placed inside a polyethylene bag for future use.

## UNACCEPTABLE PRACTICE USING THE GLOVE BAG TECHNIQUE

- 13.22 Glove bags shall not be slid down the length of the pipe. Only insulation within the dimensions of the glove bag may be removed.
- 13.23 The Owner's Consultant shall determine when the glove bag technique to be used is acceptable.
- 13.24 Glove bag removal shall be a two-person removal process. Single-person glove bag removal is prohibited.

## 14. Post Abatement Clean-Up

- 14.1 After completion of all removal and stripping, all surfaces within the work area will be wire-brushed and/or wet-wiped to remove all visible residue.
- 14.2 All visible accumulations of asbestos-containing materials and asbestos-contaminated debris will be removed and containerized. Durable plastic shovels must be used in place of metal shovels in order to minimize damage to floor sheeting.
- 14.3 Tools will be decontaminated by removing any gross amounts of asbestos from them in the work area. Following this, they will be wiped off in the dirty room and then sprayed down with water in the shower area. All hand tools will then be sealed in plastic bags. Workers will wear protective equipment throughout this process. (Where space allows, a separate equipment room will be built inside the enclosure. This will eliminate the accumulation of gross asbestos on tools and equipment and will facilitate decontamination of these items.) No tools or equipment will be allowed to leave the work area without being decontaminated.
- 14.4 Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until clearance testing and analytical results are completed and communicated to the contractor.
- 14.5 Following clean up of visible accumulations of asbestos waste, the entire area will be wet-wiped. During setting/drying periods no entry, activity, or ventilation into the work area will be allowed. However, the HEPA air filtration devices will continue to operate.

- 14.6 All removed polyethylene, tape, cleaning material, and contaminated clothing will be placed in 6-mil polyethylene bags or polyethylene lined drums, sealed and labeled as described above for disposal as asbestos waste material.
- 14.7 Only clear drying encapsulants and amended solutions may be used.
- 14.8 Prior to final clearance sampling, all items will be removed from the dirty room.
- 15. Acceptance Criteria for Area Re-Occupancy
  - 15.1 The Contractor will clean all work site surfaces in a proper manner with appropriate equipment in accordance with Item 13 of these specifications.
  - 15.2 After completion of the cleaning operations, the following activities shall be performed:
    - A complete visual inspection to insure dust free conditions. The Contractor shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany the Contractor during the inspection and determine if additional cleaning is necessary.
    - 15.2.2 A clear drying encapsulant will be used to seal all surfaces of the work area. Non-clear drying encapsulants can only be used upon approval by the Owner and/or Owner's Consultant.
  - 15.3 Air samples will be collected following completion of all cleaning operations as specified in 14.1 14.7, following encapsulation as specified in 15.2.2, and after the work area is completely dry.
  - 15.4 Post-abatement air samples collected from an area in which less than or equal to 160 square feet, or 260 linear feet of ACBM have been removed, enclosed or encapsulated, may be analyzed using Phase Contrast Microscopy (PCM). If more than 160 square feet, or 260 linear feet of ACBM are removed, or encapsulated the post-abatement air samples collected must be analyzed by Transmission Electron Microscopy (TEM).
    - Transmission Electron Microscopy (TEM) Clearance
      When the work site has become completely dry, the Owner's Consultant shall collect at least ten post-abatement air samples according to 40 CFR, Part 763 (AHERA Regulations). At least five samples shall be taken in the abatement site; and five samples shall be taken at locations representative of air entering the abatement site. A minimum of 1,200 liters per air sample and a maximum of 1,800 liters per air sample shall be collected using aggressive sampling techniques. If the post-abatement test reveals fiber levels in excess of 0.01 fibers/cc, and/or if the Z-Test analysis in accordance with AHERA does not pass, the cleaning and measurement operations specified in Sections 13 and 14 of these specifications will be repeated until the area is in compliance. Performing the Z-Test analysis is solely at the discretion of the Owner's Consultant.

- 15.4.2 Phase Contrast Microscopy (PCM) Clearance
  When the work site has become completely dry, the Owner's Consultant shall collect at least five post-abatement air samples according to 40 CPR, Part 763 (AHERA Regulations). Five samples shall be taken in the abatement site. A minimum of 2,000 liters per air sample shall be collected using aggressive sampling techniques. If the post-abatement test reveals fiber levels in excess of 0.01 fibers/cc, the cleaning and measurement operations specified in Sections 13 and 14 of these specifications will be repeated until the area is in compliance.
- After the work area is found to be in compliance, all entrances and exits are unsealed, and the polyethylene sheeting, tape and any other trash and debris shall be placed in double sealed polyethylene bags (6-mil minimum) or barrels lined with one polyethylene bag (6-mil minimum), and properly labeled and disposed of.

# 16. Disposal of Asbestos Material and Related Debris

- 16.1 All asbestos materials and miscellaneous debris in properly labeled polyethylene bags (double bagged) or other containers will be transported to the predesignated disposal site in accordance with the guidelines of the U.S. Environmental Protection Agency and the Department of Environmental Quality. Asbestos disposal forms will be completed to document proper disposal of asbestos waste. (These must be submitted before final payment will be made.)
- 16.2 All containers bagged or wrapped materials with asbestos-containing materials shall be labeled with the name and address at which the waste was generated, prior to materials being transported off the facility site.
- 16.3 Workers unloading the polyethylene bags and machinery operators will wear respirators when handling material at the disposal site.
- 16.4 All pertinent DOT rules and regulations will be followed when transporting asbestos.
- 16.5 All containers or wrapped materials shall be posted with Class 9 hazardous waste signs.
- 16.6 All asbestos-containing materials shall be transported in covered vehicles.
- 16.7 All dumpsters, trucks or other containers used to transport asbestos contained materials shall be properly labeled during the loading and unloading of waste.

## 17. Submittals Prior To Contractor Release & Final Payment

- 17.1 Damages: The Contractor shall promptly repair any and all damages caused to facilities at no cost to the Owner.
- 17.2 The following must be submitted prior to final payment:
  - 17.2.1 Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation.
  - 17.2.2 All documentation requested in Submittals to Owner's Representative, Section 4.1.

## **III. WORK/CONDUCT REQUIREMENTS**

- 18. Supervision, Personnel and Misconduct
  - 18.1 A "competent person" as defined in 29 CFR 1926.1101 must be on-site at all times throughout the duration of the project(s). This competent person, as designated prior to the start of said project(s) must remain the same throughout the duration of the project(s).
  - 18.2 The Owner's Consultant IS NOT THE CONTRACTOR'S OUT -MAN. The Contractor must provide one out-man for each enclosure (unless the decontamination chambers are within "talking" distance of each other). The out-man must always remain within talking distance of the enclosure they are assigned to.
  - 18.3 A Foreman with competent-person training must remain within the enclosure at all times during the project.
  - 18.4 Contractors employees are subject to immediate dismissal if any of the following, but not limited to the following, occurs:
    - 18.4.1 Failure to follow proper abatement procedures, including but not limited to respiratory protection and the throwing of asbestos disposal bags outside of the enclosure.
    - 18.4.2 Physical threats and violence to the Owner's Consultant or any other person.
    - 18.4.3 Property damage or theft.
    - 18.4.4 Reckless driving on Owner's property.
    - 18.4.5 Discourteous and ill-mannered statements made to the Owner, Owner's employees or Owner's Consultant.
    - 18.4.6 Consumption of alcohol on Owner's premises.

# 19. Site Security/Site Cleanliness

- 19.1 The work area is restricted to only authorized, trained and protected personnel. These personnel may include the Contractor's employees, employees of subcontractors, Owner's employees and Representatives, state and local inspectors, and any other designated individuals. The list of employees who will participate in the project as defined in 2.1.2 of these specifications will be the only employees allowed to enter the work area. Additional employees assigned to this project **must** be cleared through the Owner or the Owner's Consultant. Documentation of all training, medical, and other pertinent requirements are needed before the employees participation.
  - 19.1.1 An employee shall not remain on the Owner's premises if he/she is prohibited from participating in the project as a result of insufficient paperwork or if the Owner's Consultant determines the employee, in any manner, is detrimental to the safe completion of the project.
  - 19.1.2 The Contractor shall record the names and social security numbers of all people on a sign-in sheet who enter the work site, and maintain this record for thirty years.
- 19.2 Entry into the work area by unauthorized individuals shall be strictly prohibited.

- 19.3 Access to the work area shall be through a single worker decontamination system. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exceptions for this rule are the waste pass-out airlock which shall be sealed except during the removal of containerized asbestos waste from the work area, and emergency exits in case of fire or accident. Emergency exits shall not be locked from the inside; instead, they shall be sealed with polyethylene sheeting and tape until needed.
- 19.4 The Contractor shall designate one worker to remain outside each enclosure throughout the duration of the project in order to regulate ingress and egress to the work areas as well as to provide needed supplies and equipment. The worker outside the enclosure will be within hearing range at all times. At least one person, at all times, inside the enclosure must have had "competent person" training.
- 19.5 All areas occupied or used in any way by the Contractor (all employees), outside the enclosure(s) but within the building shall be kept in an acceptable condition and thoroughly cleaned at the end of each day, to the satisfaction of the Owner's Consultant. If at any time, food containers or debris is found not properly disposed of, eating on premises shall be terminated.
- 19.6 The Contractor is responsible for maintaining areas outside the building in a condition acceptable to the Owner or the Owner's Consultant. This includes but is not limited to: sanitation, supplies and equipment, and employee driving and substance abuse.

# 20. Stop Work Orders

- 20.1 If at any time, the Owner or the Owner's Consultant decide that work practices are in violation of the contract specifications or endangering workers, he/she or they will immediately notify the Contractor's on-site Representative of such and operations are to cease until corrective action is taken.
- 20.2 The Contractor shall cooperate fully with the Owner and Owner's Consultant.

## IV. AIR MONITORING

# 21. Sampling Requirements

- 21.1 The Owner's Consultant shall conduct all air sampling for the Owner throughout all phases of the contract.
- 21.2 All non-post-abatement air samples shall be analyzed using the NIOSH 7400 Method. All post-abatement air samples collected in situations involving removal, repair, enclosure, or encapsulation of more than 160 square feet or 260 linear feet of ACBM shall be analyzed under the "Mandatory Transmission Electron Microscopy Method" defined in 40 CFR, Part 763 (AHERA rules). Post abatement air samples collected in situations involving removal, repair, enclosure, or encapsulation of less than 160 square feet or 260 linear feet of ACBM shall be analyzed using the NIOSH 7400 Method, at the discretion of the Owner and/or the Owner's Consultant.

# 22. Sampling Types

- 22.1 Throughout the abatement and cleaning operations, air sampling will be conducted to ensure that the Contractor is complying with all codes, regulations, and ordinances. The following are representative sampling which may take place at the discretion of the Owner and the Owner's Consultant.
  - 22.1.1 Baseline Collected in various/numerous locations prior to abatement to determine ambient interior fiber levels.
  - 22.1.2 Contiguous Collected in various/numerous locations outside of the work area in order to detect elevated fiber levels during abatement.
  - 22.1.3 Work Area Collected in various locations inside the work area to ensure compliance with proper procedures and specifications.
  - 22.1.4 Personal Collected in the breathing zone of the asbestos abatement personnel according to 1926.11 01, Appendix A, as amended, of the OSHA regulations. These samples will be placed on employees who are exposed to representative concentrations of airborne asbestos fibers. Personal sampling will ensure that the workmen performing the asbestos abatement projects are not exposed to asbestos contamination exceeding STEL (short term excursion limit) requirements and levels which exceed their respirator protection or otherwise endanger their health. Personal air samples will be collected on individuals as designated by the Owner's Consultant.
  - 22.1.5 Post Abatement Collected inside and/or outside the work area after the project is completed and .the area has been cleaned and dried. This will determine if the job has been done correctly and whether the cleanup process must be repeated. Quantities are determined by all applicable regulations.
  - 22.1.6 Field Blanks Field blanks are collected to ensure that contamination of cassettes has not occurred. Each set of samples collected will include ten percent (10%) blanks or a minimum of two blanks.