

SALEM AND BEVERLY WATER SUPPLY BOARD

**CONTRACT NO. 2022-1:
FACILITIES UPGRADES**

ADDENDUM NO. 1

TO ALL PROSPECTIVE BIDDERS OF RECORD:

Prospective Bidders are hereby informed that the Contract Documents for the above-referenced contract are modified, corrected and/or supplemented as follows and that this Addendum is hereby made a part of the Contract Documents, except for any items identified herein as for information only.

Bidders shall acknowledge receipt of this Addendum in the space designated on the Bid Form. Failure to do so may subject the Bidder to disqualification.

A. CHANGES TO THE CONTRACT DOCUMENTS:

1. In Volume 1 of 2 of the Contract Documents, Notice to Bidders, first paragraph, **DELETE** the date and time for opening General Bids: "1:00 p.m., local time, on July 18, 2024" and **REPLACE** with the following:

"11:00 a.m., local time, on July 30, 2024"

2. In Volume 1 of 2 of the Contract Documents, Notice to Bidders, second paragraph, **DELETE** the date and time for opening Sub-Bids: "11:00 a.m., local time, on June 27, 2024" and **REPLACE** with the following:

"11:00 a.m., local time, on July 9, 2024"

3. In Volume 1 of 2 of the Contract Documents, Information for Bidders, Section IB.1.A.(1), **DELETE** the date and time for opening General Bids: "July 18, 2024 at 1:00 p.m., local time" and **REPLACE** with the following:

"July 30, 2024 at 11:00 a.m., local time"

4. In Volume 1 of 2 of the Contract Documents, Information for Bidders, Section IB.1.A.(2), **DELETE** the date and time for opening Sub-Bids: "June 27, 2024 at 11:00 a.m., local time" and **REPLACE** with the following:

"July 9, 2024 at 11:00 a.m., local time"

5. In Specification Section 01900 - SEISMIC AND WIND REQUIREMENTS, -1, **INSERT** at the end of the Section, insert Page 01900-3 included in this Addendum No. 1 as Attachment A-1.

6. On Drawing 30 A-102, **DELETE** the last sentence of General Note 5 and **REPLACE** with the following:

"Walkways to be sealed in accordance with the manufacturer's application instructions."

7. In Volume 1 of 2 of the Contract Documents, Section FSB, Forms for Sub-Bids, **DELETE** the FORM FOR SUB-BID for Item 2b Painting and **REPLACE** with FORM FOR SUB-BID for Item 2b Painting included in this Addendum No. 1 as Attachment A-2.

8. In Volume 1 of 2 of the Contract Documents, Section FS, Form for Subcontract, **DELETE** the SUBCONTRACT for PAINTING **REPLACE** with SUBCONTRACT for PAINTING included in this Addendum No. 1 as Attachment A-3.

9. In Volume 1 of 2 of the Contract Documents, Appendix G, **DELETE** the FORM FOR SUB-BID for Painting and **REPLACE** with the FORM FOR SUB-BID for Painting included in this Addendum No. 1 as Attachment A-4.

10. In Volume 2 of 2 of the Contract Documents, Section 00015, page i, **DELETE** Section 02090 - Lead Based Paint Removal.

11. In Volume 2 of 2 of the Contract Documents, Section 00015, page ii, **INSERT** Section 09999 - Lead Based Paint Removal.

12. In Volume 2 of 2 of the Contract Documents, **DELETE** Section 02080 - Lead Based Paint Removal.

13. In Section 09941 - Field Painting and Pipe Identification, Paragraph 1.00.A, **INSERT** the following after bullet 1.00.A.2:

"3. 09999 - Lead Based Paint Removal"

14. In Volume 2 of 2 of the Contract Documents, **INSERT** Section 09999 - Lead Based Paint Removal included in this Addendum No. 1 as Attachment A-5.

15. On Sheet 30 A-102, General Notes, **INSERT** the following after Note 5:

"6. CONTRACTOR SHALL PREPARE AND COAT A TOTAL OF NINE (9) EXISTING STEEL WINDOW LINTELS ADJACENT TO FILTERS 1, 3, 5 AND 7.

7. CONTRACTOR SHALL PREPARE AND PAINT THIRTY TWO (32) WINDOW OPERATOR MOUNTING BRACKETS AND TWENTY (20) RAIN LEADER MOUNTING BRACKETS CONNECTED TO THE WALL ADJACENT TO FILTERS 1, 3, 5 AND 7."

B. ANSWERS TO QUESTIONS RECEIVED

Question: *Is this project subject to liquidated damages and if so what is the value?*

Response: See Paragraph CA.27 of the Agreement section.

Question: *Please confirm sections 02080 Asbestos Removal and Disposal and 02090 Lead Based Paint Removal are owned by the General Contractor.*

Response: Section 02080 - Asbestos Removal and Disposal is in the Scope of Work of the General Contractor. Lead Based Paint Removal is now part of the scope of work of the Painting Filed Sub-bid. Please see changes made in this Addendum.

Question: *Please confirm Potassium Permanganate Containment area is NOT part of this contract.*

Response: Correct. The Potassium Permanganate Containment area is not part of this Contract.

Question: *Reference drawing 10 A-101 Room Finish Schedule Notes 1. "...Seal and polish floor between filter bays." Is the intent to polish the concrete floors?*

Response: The concrete floors between the filter bays should be sealed. See changes made in this Addendum.

Question: *Please advise if any doors, door frames, or window frames are to be painted.*

Response: The scope of this Contract does not include the painting of any doors, door frames, or window frames.

Question: *Please advise if metal window operators in the Filter Building are to be painted.*

Response: The scope of this Contract does not include the painting of the metal window operators.

Question: *Please advise if the following principals would be an accepted manufacturer for the associated sections listed below, and if they can be added via addendum.*

- 11324 Chemical Metering Pumps (Peristaltic Type) - Flomotion Systems
- 11356 Sludge Collection Equipment - Chain and Flight - Fairfield Service Company
- 13350 Fiberglas Washwater Troughs - Midwestern Fabricators
- 13530 Filter Underdrain System - Layne

- 13540 Filter Media and Gravel - Layne

Response: Substitute products will not be evaluated during the bidding period. Substitute products may be considered in accordance with the requirements of Section 01000, Paragraph 1.03 after award and execution of the Contract as part of the shop drawing process.

III. FOR INFORMATION ONLY

1. Bidders are reminded of the requirements in the Contract Documents in Section IB. INFORMATION FOR BIDDERS at subsection IB.14 BLANK FORMS FOR BIDS, and at subsection IB.16 BID DEPOSIT. See also the copies of the blank Bid Form and the blank form of Bid Bond in Appendices F through I of the Contract Documents that are to be used in submitting a bid.
2. Please find a copy of the pre-bid conference attendance list attached to this addendum as Attachment A-6.

END OF ADDENDUM NO. 1

Engineer:

AECOM Technical Services, Inc.
250 Apollo Drive
Chelmsford, Massachusetts 01824

Salem and Beverly Water Supply Board
Alan F. Taubert, Jr., P.E.
Executive Director

Date of Addendum:

June 21, 2024

Attachment A-1
To Addendum No. 1

Section 01900 Seismic and Wind Requirements Page 01900-3

1. Certification, signed and sealed by a Professional Structural Engineer registered in the jurisdiction in which the project is located stating that all systems, equipment, and other elements, including supporting structures, attachments and connections are designed to withstand the required seismic and wind forces and displacements.
2. Codes and specifications to which structural design conforms.

1.06 SPECIFIC COMPONENTS:

- A. Compound Equipment: Connecting elements for equipment combinations such as pumps and motors, valves and operators, engines and generators, etc. which are not capable of transferring seismic and/or wind loads or accommodating seismic and wind displacements shall be protected by appropriate design.
- B. Storage Tanks: Tanks, supporting structures and anchorages shall be designed for the weight of the tank, appurtenances and the tank contents at the maximum capacity. Tank contents shall not be considered in resistance to seismic and wind loads.
- C. Ductwork: Equipment installed within ductwork shall be independently supported and braced. Support and bracing of heating and cooling coils shall account for the weight of the contents.
- D. Piping Systems: Support and bracing of piping systems shall account for the weight and hydrodynamic effects of the contents.
- E. Pressure Piping: Pressure piping support and bracing shall conform to ASME B 31 in addition to the force and displacement requirements of the reference code.
- F. Sprinkler Systems: Sprinkler system support and bracing shall conform to NFPA 13 in addition to the force and displacement requirements of the reference code.
- G. General Supports: Pipe, duct, raceways, and cable tray supports and bracing shall conform to the AISC Manual of Steel Construction and MSS SP-58 in addition to the force and displacement requirements of the reference code.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

(Not Used)

END OF SECTION

Attachment A-2
To Addendum No. 1

Form for Sub-Bid for Item 2b Painting

FORM FOR SUB-BID
FOR
SALEM AND BEVERLY WATER SUPPLY BOARD
CONTRACT NO. 2022-1: FACILITIES UPGRADES

ITEM 2b PAINTING

To All General Bidders Except Those Excluded:

- A. The undersigned proposes to furnish all labor and materials required for the completing, in accordance with the hereinafter described plans, specifications and addenda, all the work specified in Sections

09800 - Protective Coatings
09941 - Field Painting and Pipe Identification
09999 - Lead Based Paint Removal

of the specifications and in any plans specified in such section by AECOM Technical Services, Inc. for Contract No. 2022-1: Facilities Upgrades for the Salem and Beverly Water Supply Board, Salem, Massachusetts, for the contract sum of _____ dollars (words)

(\$ _____) (figures.)

- B. This sub-bid includes addenda numbered _____

- C. This sub-bid

() may be used by any general bidder except:

() may only be used by the following general bidders:

(To exclude general bidders, insert "X" in one box only and fill in blank following that box. Do not answer C if no general bidders are excluded.)

* All entries must be made clearly and in ink.

- D. The undersigned agrees that, if he is selected as a sub-bidder, he will, within five days, Saturdays, Sundays, and legal holidays excluded, after presentation of a subcontract by the general bidder selected as the general contractor, execute with such general bidder a subcontract in accordance with the terms of this sub-bid, and contingent upon the execution of the general contract, and, if requested so to do in the general bid by such general bidder, who shall pay the premiums therefor, furnish a performance and payment bond of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the awarding authority, in the full sum of the subcontract price.
- E. The names of all persons, firms and corporations furnishing to the undersigned labor or labor and materials for the class or classes or part thereof of work for which the provisions of the section of the specifications for this sub-trade require a listing in this paragraph, including the undersigned if customarily furnished by persons on his own payroll and in the absence of a contrary provision in the specifications, the name of each such class of work or part thereof and the bid price for each such class of work or part thereof are:

Name	Class of Work	Bid Price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

[Do not give bid price for any class or part thereof furnished by the undersigned.]

- F. The undersigned agrees that the above list of bids to the undersigned represents bona fide bids based on the hereinbefore described plans, specifications and addenda and that, if the undersigned is awarded the contract, they will be used for the work indicated at the amounts stated,

if satisfactory to the Owner (awarding authority).

G. The undersigned further agrees to be bound to the general contractor by the terms of the hereinbefore described plans, specifications, including all general conditions stated therein, and addenda, and to assume toward him all the obligations and responsibilities that he, by those documents, assumes toward the Owner (awarding authority).

H. The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications:

1. Have been in business under present business name _____ years.
2. Ever failed to complete any work awarded? _____
3. List one or more recent buildings with names of general contractor and engineer/architect on which you served as subcontractor for work of similar character as required for the above-named building

Building	Engineer/ Architect	General Contractor	Amount of Contract
(a) _____	_____	_____	_____
(b) _____	_____	_____	_____
(c) _____	_____	_____	_____
(d) _____	_____	_____	_____

4. Bank reference _____

I. The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in

duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section forty-four F.

The undersigned further certifies under penalties of perjury that there have been no substantial changes in his financial position or business organization other than those changes noted within this sub-bid since the undersigned's most recent update statement and that this sub-bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity which sells materials, equipment or supplies used in or for, or engages in the performance of, the same or similar construction, reconstruction, installation demolition, maintenance or repair work or any part thereof. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

If the bidder is a foreign corporation (incorporated or organized under laws other than laws of the Commonwealth of Massachusetts), is the corporation registered with the Secretary of State of Massachusetts?

Yes ☐ No ☐.

Under M.G.L. Chapter 30, Section 39L the awarding authority may not enter into a contract unless the bidder has furnished to the awarding authority a certificate of the Secretary of State stating that the corporation has complied with M.G.L. Chapter 156D, Part 15, Subdivision A, Section 15.03 and Part 16, Subdivision B, Section 16.22, concerning registration of foreign corporations, and the date of such compliance.

[SIGNATURE ON FOLLOWING PAGE]

Date _____

Social Security Number or
Federal Identification Number

(Name of Sub-bidder)

By _____*
(Title and Name of Person Signing Bid)

(Business Address)

(City and State)

(State of Incorporation)

CORPORATE SEAL

*Note: Give first and last names in full. In the case of a corporation: Bids by corporations shall be executed in the corporate name by the president or vice-president or other corporate officer; a certificate of the secretary evidencing authority to sign shall be attached; the corporate seal shall be affixed and attested by the secretary; and the corporate address and state of incorporation shall be shown below the signature. In the case of a partnership: Bids by partnerships shall be executed in the partnership name and signed by a general partner, whose title shall appear under the signature. The official address of the partnership shall be shown below the signature. In the case of an individual: Bids by individuals shall be signed by the individual; and residential and business addresses shall be given.

CERTIFICATE OF VOTE

I, _____, Clerk of _____,
(Name of Clerk) (Name of Corporation)
Organized under the laws of the State of _____, and
(Name of State)

having a usual place of business at _____
(Address or Corporation's

_____ do hereby certify that the
Principal Office)

following is a true copy of a resolution adopted by the Board of Directors
of said Corporation at a meeting thereof duly called and held on the
_____ day of _____, 20____, a quorum being present and voting,
and that said resolution has been entered upon the regular minute book
of the Corporation:

"RESOLVED, that _____,
(Name of Corporate Officer[s]) (Title)
of _____ is hereby authorized,
(Name of Corporation)
empowered, and directed by and on behalf of the Corporation
to enter into a contractual agreement with the Salem and
Beverly Water Supply Board, for _____ and to
execute and sign any and all documents in connection with
such contractual agreement; and, it was

FURTHER RESOLVED, that all prior actions of the officers of
the Corporation relating to, arising from, or in connection
with the subject matter of the foregoing Resolution are hereby
ratified and confirmed."

I further certify that I am the Clerk of said corporation, that
_____ is its duly elected _____, and that the
foregoing resolution has not been modified or repealed, but that is in
full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of the
Corporation this _____ day of _____, 20____.

Clerk

WITNESS:

FSB-12

Attachment A-3
To Addendum No. 1
Subcontract for Painting

SUBCONTRACT

PAINTING

Pursuant to M.G.L. Chapter 149, Section 44F

THIS AGREEMENT MADE THIS _____ DAY OF _____
20____, by and between _____ a
corporation organized and existing under the laws of
_____ an individual doing business as
_____ hereinafter called the
"Contractor" and _____ a
corporation organized and existing under the laws of
_____ an individual doing business as
_____ hereinafter called the
"Subcontractor."

WITNESSETH that the Contractor and the Subcontractor
for the considerations hereafter named, agree as follows:

1. The Subcontractor agrees to furnish all labor and
materials required for the completion of all work
specified in Sections No.

09800 - Protective Coatings

09941 - Field Painting and Pipe Identification

09999 - Lead Based Paint Removal

of the specifications for Painting and the plans
referred to therein and Addenda No.____,____,____, and

___ for the SALEM AND BEVERLY WATER SUPPLY BOARD CONTRACT NO. 2022-1: FACILITIES UPGRADES all as prepared by AECOM Technical Services, Inc. for the sum of _____ (\$ _____) and the Contractor agrees to pay the Subcontractor said sum for said work. This price includes the following alternates (and other items set forth in the sub-bid): Alternate No(s). ___, ___, ___, ___, ___, ___, ___, ___, ___.

(a) The Subcontractor agrees to be bound to the Contractor by the terms of the hereinbefore described plans, specifications (including all general conditions stated therein) and Addenda No. ___, and ___, and ___, and to assume to the Contractor all the obligations and responsibilities that the Contractor by those documents assumes to the SALEM AND BEVERLY WATER SUPPLY BOARD (Awarding Authority) hereinafter called the "Awarding Authority," except to the extent that provisions contained therein are by their terms or by law applicable only to the Contractor.

(b) The Contractor agrees to be bound to the Subcontractor by the terms of the hereinbefore

described documents and to assume to the Subcontractor all the obligations and responsibilities that the Awarding Authority by the terms of the hereinbefore described documents assumes to the Contractor, except to the extent that provisions contained therein are by their terms or by law applicable only to the Awarding Authority.

2. The Contractor agrees to begin, prosecute and complete the entire work specified by the Awarding Authority in an orderly manner so that the Subcontractor will be able to begin, prosecute and complete the work described in this Subcontract; and, in consideration thereof, upon notice from the Contractor, either oral or in writing, the Subcontractor agrees to begin, prosecute and complete the work described in this Subcontract in an orderly manner and with due consideration to the date or time specified by the Awarding Authority for the completion of the entire work.

3. The Subcontractor agrees to furnish to the Contractor within a reasonable time after the execution of this Subcontract, evidence of workers' compensation insurance as required by law and evidence of public liability and property damage insurance of the type and in

limits required to be furnished to the Awarding Authority by the Contractor.

4. The Contractor agrees that no claim for services rendered or materials furnished by the Contractor to the Subcontractor shall be valid unless written notice thereof is given by the Contractor to the Subcontractor during the first ten (10) days of the calendar month following that in which the claim originated.

5. This agreement is contingent upon the execution of a general contract between the Contractor and the Awarding Authority for the complete work.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the date and year first above written.

SEAL
ATTEST _____

(Name of Subcontractor)

By: _____

SEAL
ATTEST _____

(Name of Contractor)

By: _____

Attachment A-4

To Addendum No. 1

Form for Sub-Bid for Item 2b Painting

FORM FOR SUB-BID
FOR
SALEM AND BEVERLY WATER SUPPLY BOARD
CONTRACT NO. 2022-1: FACILITIES UPGRADES

ITEM 2b PAINTING

To All General Bidders Except Those Excluded:

- A. The undersigned proposes to furnish all labor and materials required for the completing, in accordance with the hereinafter described plans, specifications and addenda, all the work specified in Sections

09800 - Protective Coatings
09941 - Field Painting and Pipe Identification
09999 - Lead Based Paint Removal

of the specifications and in any plans specified in such section by AECOM Technical Services, Inc. for Contract No. 2022-1: Facilities Upgrades for the Salem and Beverly Water Supply Board, Salem, Massachusetts, for the contract sum of _____ dollars (words)
(\$ _____) (figures.)

- B. This sub-bid includes addenda numbered _____

- C. This sub-bid

() may be used by any general bidder except:

() may only be used by the following general bidders:

(To exclude general bidders, insert "X" in one box only and fill in blank following that box. Do not answer C if no general bidders are excluded.)

* All entries must be made clearly and in ink.

- D. The undersigned agrees that, if he is selected as a sub-bidder, he will, within five days, Saturdays, Sundays, and legal holidays excluded, after presentation of a subcontract by the general bidder selected as the general contractor, execute with such general bidder a subcontract in accordance with the terms of this sub-bid, and contingent upon the execution of the general contract, and, if requested so to do in the general bid by such general bidder, who shall pay the premiums therefor, furnish a performance and payment bond of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the awarding authority, in the full sum of the subcontract price.
- E. The names of all persons, firms and corporations furnishing to the undersigned labor or labor and materials for the class or classes or part thereof of work for which the provisions of the section of the specifications for this sub-trade require a listing in this paragraph, including the undersigned if customarily furnished by persons on his own payroll and in the absence of a contrary provision in the specifications, the name of each such class of work or part thereof and the bid price for each such class of work or part thereof are:

Name	Class of Work	Bid Price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

[Do not give bid price for any class or part thereof furnished by the undersigned.]

- F. The undersigned agrees that the above list of bids to the undersigned represents bona fide bids based on the hereinbefore described plans, specifications and addenda and that, if the undersigned is awarded the contract, they will be used for the work indicated at the amounts stated,

if satisfactory to the Owner (awarding authority).

G. The undersigned further agrees to be bound to the general contractor by the terms of the hereinbefore described plans, specifications, including all general conditions stated therein, and addenda, and to assume toward him all the obligations and responsibilities that he, by those documents, assumes toward the Owner (awarding authority).

H. The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications:

1. Have been in business under present business name _____ years.
2. Ever failed to complete any work awarded? _____
3. List one or more recent buildings with names of general contractor and engineer/architect on which you served as subcontractor for work of similar character as required for the above-named building

Building	Engineer/ Architect	General Contractor	Amount of Contract
(a) _____	_____	_____	_____
(b) _____	_____	_____	_____
(c) _____	_____	_____	_____
(d) _____	_____	_____	_____

4. Bank reference _____

I. The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in

duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section forty-four F.

The undersigned further certifies under penalties of perjury that there have been no substantial changes in his financial position or business organization other than those changes noted within this sub-bid since the undersigned's most recent update statement and that this sub-bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity which sells materials, equipment or supplies used in or for, or engages in the performance of, the same or similar construction, reconstruction, installation demolition, maintenance or repair work or any part thereof. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

If the bidder is a foreign corporation (incorporated or organized under laws other than laws of the Commonwealth of Massachusetts), is the corporation registered with the Secretary of State of Massachusetts?

Yes ____ No ____.

Under M.G.L. Chapter 30, Section 39L the awarding authority may not enter into a contract unless the bidder has furnished to the awarding authority a certificate of the Secretary of State stating that the corporation has complied with M.G.L. Chapter 156D, Part 15, Subdivision A, Section 15.03 and Part 16, Subdivision B, Section 16.22, concerning registration of foreign corporations, and the date of such compliance.

[SIGNATURE ON FOLLOWING PAGE]

Date _____

Social Security Number or
Federal Identification Number

(Name of Sub-bidder)

By _____ *
(Title and Name of Person Signing Bid)

(Business Address)

(City and State)

(State of Incorporation)

CORPORATE SEAL

*Note: Give first and last names in full. In the case of a corporation: Bids by corporations shall be executed in the corporate name by the president or vice-president or other corporate officer; a certificate of the secretary evidencing authority to sign shall be attached; the corporate seal shall be affixed and attested by the secretary; and the corporate address and state of incorporation shall be shown below the signature. In the case of a partnership: Bids by partnerships shall be executed in the partnership name and signed by a general partner, whose title shall appear under the signature. The official address of the partnership shall be shown below the signature. In the case of an individual: Bids by individuals shall be signed by the individual; and residential and business addresses shall be given.

CERTIFICATE OF VOTE

I, _____, Clerk of _____,
(Name of Clerk) (Name of Corporation)
Organized under the laws of the State of _____, and
(Name of State)
having a usual place of business at _____
(Address or Corporation's

_____ do hereby certify that the
Principal Office)

following is a true copy of a resolution adopted by the Board of Directors
of said Corporation at a meeting thereof duly called and held on the
_____ day of _____, 20____, a quorum being present and voting,
and that said resolution has been entered upon the regular minute book
of the Corporation:

"RESOLVED, that _____,
(Name of Corporate Officer[s]) (Title)
of _____ is hereby authorized,
(Name of Corporation)
empowered, and directed by and on behalf of the Corporation
to enter into a contractual agreement with the Salem and
Beverly Water Supply Board, for _____ and to
execute and sign any and all documents in connection with
such contractual agreement; and, it was

FURTHER RESOLVED, that all prior actions of the officers of
the Corporation relating to, arising from, or in connection
with the subject matter of the foregoing Resolution are hereby
ratified and confirmed."

I further certify that I am the Clerk of said corporation, that
_____ is its duly elected _____, and that the
foregoing resolution has not been modified or repealed, but that is in
full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of the
Corporation this _____ day of _____, 20____.

Clerk

WITNESS:

FSB-12

Attachment A-5

To Addendum No. 1

Section 09999-Lead Based Paint Removal

SECTION 09999
(Filed Sub-bid required)

LEAD BASED PAINT REMOVAL

PART 1 - GENERAL

1.01 FILED SUB-BID REQUIREMENTS:

- A. This section is part of the field sub-bid for Division 9 – Painting. See Section 09941.

1.02 RELATED WORK:

- A. Division 0: Bidding Requirements and Contract Forms
- B. Division 1: General Requirements

1.03 DESCRIPTION:

- A. Refer to Appendix B of the Contract Documents for sampling results and location(s) of lead based paint detected.
- B. Work under this item shall include activities impacting various materials containing or covered by lead-based paint (LBP) and associated work by persons who are knowledgeable, qualified, and trained in the removal and handling of lead-contaminated materials, including the transportation and disposal of non-hazardous and hazardous lead-containing construction and demolition waste, the recycling of metallic components covered with LBP, and the subsequent cleaning of the affected environment. LBP includes paint found to contain any detectable amount of lead by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).
- C. Note that LBP removal is expected on this project if items are demolished as bulk waste. However, means and methods are not specified herein. Therefore, in the event the Contractor chooses methods that generate LBP debris or airborne particles, the following precautions shall be required.
- D. All activities shall be performed in accordance with, but not limited to, the current revision of the OSHA Lead in Construction Regulations (29 CFR 1926.62), the USEPA RCRA Hazardous Waste Regulations (40 CFR Parts 260 through 274), and the MassDEP Hazardous Waste Regulations.
- E. The requirements of 454 CMR 22.11 shall apply to all Renovation Work which results, or may result, in the disturbance of paint, paint debris, plaster or other materials containing Dangerous Levels of Lead. Because the requirements of 454 CMR 22.11 shall apply to all such Renovation Work, whether or not a lead paint inspection or determination has been performed, Renovation Work conducted in residences constructed prior to 1978 should be carried out as if Dangerous Levels of Lead were present, in accordance with the provisions of 454 CMR 22.11, unless

testing performed in accordance with 105 CMR 460.000 or using another scientifically valid method has indicated the absence of Dangerous Levels of Lead.

- F. The LBP activity shall include the demolition/renovation, removal and/or disposal of building components coated with LBP surfaces as identified on the Contract Plans and Specifications.
- G. Deviations from these Specifications require the written approval of the Engineer.
- H. The following details the extent of each phase of operation designated for this project. Phase areas may be combined or divided at the direction of the Engineer.

1. Non-metallic Components to be Impacted

- a. Lead paint has been identified on various non-metallic surfaces and components throughout the interior and exterior of the site building (See Appendix B to the Contract Documents). All renovation or demolition work specified in other areas of these Contract Documents impacting those materials shall be conducted within an established lead control (regulated) area with a remote hand wash facility/decontamination system in accordance with OSHA Lead in Construction Standards. Engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the work area and limit the generation of airborne lead. Lead painted debris generated from the renovation/demolition of those materials, shall be containerized and stored on-site with the remainder of the non-metallic building waste materials. Building structures where the waste stream characterized as non-hazardous shall be disposed of as non-hazardous construction and demolition (C&D) bulky waste at an approved MassDEP Solid Waste landfill.

2. Metal Components to be Impacted

- a. Lead paint has been identified on various metallic surfaces and components throughout the interior and exterior of the site building (See Appendix B to the Contract Documents). All renovation/demolition work specified in other areas of these Specifications impacting those materials shall be conducted within an established lead control (regulated) area with a remote hand wash facility/decontamination system in accordance with OSHA Lead in Construction Standards. Engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the work area and limit the generation of airborne lead. Lead painted debris generated from the renovation/demolition of those materials, shall be containerized and stored on-site with the remainder of the non-metallic building waste materials. All steel and metal generated from the renovation/demolition of the building shall be segregated and recycled as scrap metal at an approved facility. The recycling of scrap metal (regardless of LBP concentration) is exempt from USEPA RCRA and MassDEP Hazardous Waste Regulation.

- 3. Segregate all steel and metal components generated from the renovation/demolition of the buildings, regardless of lead content, for recycling as scrap metal. Recycling of LBP metal is exempt from regulation by the USEPA and MassDEP as hazardous waste.

4. Contractors should be made aware of the presence of lead-based paint so that they can properly protect their workers, address the testing and disposal of this material (as required), and properly comply with all applicable regulations. Specifically, Contractors are required to comply with all applicable OSHA regulations including 29 CFR 1926.62, "Lead Exposure in Construction: Interim Final Rule" and 29 CFR 1926.59, "Hazard Communication for the Construction Industry".
5. Regulated Area
 - a. Remove everything from the work area, including furniture, so these items do not get covered with lead dust.
 - b. Any items, such as bookcases, large furniture, or equipment that can't be taken out of the room should be covered with one-mil polyethylene (poly) plastic sheeting and sealed.
 - c. Turn off all the heating, air conditioning, and ventilation systems in the work area inside the facility.
 - d. Close, cover, and seal the registers to prevent lead dust from settling in the ducts.
 - e. Turn off window unit air conditioners and fans in the work area.
 - f. Cover and seal the window units with one-mil poly.
 - g. Close, cover, and seal any unused doorways in the work area with a layer of one-mil poly.
 - h. Cover the doorways you will be using by hanging a layer of six-mil poly over the doorway. Seal this poly to the doorway with duct tape. Then use a utility knife to cut a six-inch foot vertical slit in the middle of the poly piece to provide access to the work area.
 - i. Attach a second piece of poly to the top of the doorway with duct tape to act as a flap to limit the airflow between the work area and the rest of the facility
6. The Contractor shall conduct exposure assessments for the tasks required which impact LBP in accordance with OSHA 29 CFR 1926.62(d) and shall implement appropriate personal protective equipment until negative exposure assessments are developed.

1.04 SUBMITTALS:

Submit the following in accordance with Division 1:

- A. Prior to the start of any work that will generate hazardous lead waste above conditionally exempt small quantities, the Contractor shall obtain a temporary EPA Hazardous Waste Generators ID.

- B. A copy of the USEPA permits for disposal and transport of hazardous lead bearing waste for each proposed hauler/disposal facility. A licensed hazardous waste transporter and a licensed hazardous waste treatment/disposal facility shall be secured in conformance with all federal and state regulations and be approved by the Engineer.
- C. Fifteen (15) working days prior to beginning work that impacts LBP, the Contractor shall submit the following to the Engineer:
1. For projects when the intent is to mitigate lead hazards and provide lead-safe conditions for building occupants, a valid DOS Lead Abatement Contractor License and copies of employee certifications/licenses as DOS Lead Abatement Supervisors or Workers.
 2. Copies of all employee certificates, dated within the previous twelve (12) months, relating to OSHA lead awareness and hazard communication training and training in the use of lead-safe work practices.
 3. Documentation dated within the previous twelve (12) months, from a physician certifying that all employees who may be exposed to lead in excess of the background level have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, document that personnel have received medical monitoring required in 29 CFR 1926.62. They shall also be informed of the specific types of respirators the employee shall be required to wear and the work he/she will be required to perform as well as special workplace conditions such as high temperature, high humidity and chemical contaminants to which he/she may be exposed. A copy of the medical records of each employee shall be available on the jobsite.
 4. Documentation dated within the previous six (6) months of biological monitoring including initial blood lead level and zinc protoporphyrin level test results prior to the workers first entry into the Work Areas.
 - a. Workers with blood lead levels in excess of fifty (50) micrograms/deciliter will not be permitted in the Regulated Area. The Contractor shall follow management of employee's blood lead levels in accordance with OSHA 29 CFR 1926.62.
 - b. The Contractor shall submit semi-annual blood lead level and zinc protoporphyrin level test documentation to the Engineer for all workers that enter the Regulated Area for projects in excess of six (6) months in duration.
 5. Documentation dated within the previous twelve (12) months of respiratory fit testing for all employees who must don a tight-fitting face piece respirator in order to perform activities impacting lead. This fit testing shall be in accordance with qualitative procedures as detailed in 29 CFR 1910.134.
 6. An exposure assessment for each specific lead job which will be performed during the course of this project. The data must meet the requirements of OSHA 29 CFR 1926.62. If data from prior lead project(s) is submitted (i.e. a negative exposure assessment), the following information is required:

- a. Date of project
 - b. Description of monitoring, analysis and work operations and practices
 - c. Type of activity conducted concentration and application of lead
 - d. Engineering controls
 - e. Experience of workers and supervisors
7. Project time schedule for each phase of work.
 8. Copies of state-approved certificates for the proposed non-hazardous construction and demolition (C&D) lead debris disposal facility and any concrete/wood or scrap metal recycling facilities.
 9. The name and qualifications of the individual acting as the Competent Person for the duration of project activities impacting lead. This individual shall act as the Contractor's OSHA Competent Person during activities impacting lead, shall have a minimum of three years working experience performing activities that impact LBP, shall be capable of identifying existing lead hazards and shall have the authority to implement corrective measures to eliminate such hazards. The Competent Person shall be on-site at all times during activities impacting lead, shall comply with applicable Federal, State and Local regulations which mandate work practices, and shall be capable of performing the work of this contract. No other individual shall later be substituted as Competent Person without prior approval by the Engineer.
- D. No activity shall commence until a copy of all required submittals have been received and found acceptable to the Engineer. Those employees added to the Contractor's original list will be allowed to perform work only upon submittal of all required paperwork to, and review by, the Engineer.
- E. Provide the Engineer, within thirty (30) days of completion of the project site work, a compliance package, which shall include, but not be limited to, the following:
1. Copies of the abatement contractor's license (if applicable);
 2. Worker licenses, training certificates, medical clearance and respiratory fit testing documentation.
 3. Competent persons (supervisor) job log.
 4. OSHA-compliant personnel air sampling data and exposure assessments;
 5. Completed waste shipment papers for non-hazardous lead construction and demolition (C&D) bulky waste and/or concrete/wood/scrap metal recycling
 6. Completed certified hazardous waste manifests for hazardous lead debris.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. All materials shall be delivered to the job site in the original packages, containers, or bundles bearing the name of the manufacturer, the brand name and product technical description.
- B. No damaged or deteriorating materials shall be used. If material becomes contaminated with lead, the material shall be decontaminated or disposed of as lead-containing waste material. The cost to decontaminate and dispose of this material shall be at the expense of the Contractor.
- C. Fire retardant polyethylene sheet shall be in roll size to minimize the frequency of joints, with factory label indicating four (4) or six (6) mil thickness.
- D. Six (6) mil polyethylene disposable bags shall have pre-printed OSHA/EPA/DOT labels and shall be transparent.
- E. Tape (or equivalent) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.
- F. The cleaning agent detergent shall be lead specific, such as Trisodium Phosphate (TSP).
- G. Any chemical stripper and chemical neutralizer to be utilized shall be compatible with the substrate as well as with each other.
- H. Labels and warning signs shall conform to OSHA 29 CFR 1926.62, USEPA 40 CFR 260 through 274 and USDOT 49 CFR 172 as appropriate.
- I. Any planking, bracing, shoring, barricades and/or temporary sheet piling, necessary to appropriately perform work activities shall conform to all applicable Federal, State and local regulations.
- J. Air filtration devices and vacuum units shall be equipped with HEPA filters.

2.02 TOOLS AND EQUIPMENT:

- A. The Contractor shall provide tools and equipment that are suitable for LBP-related activity:
 - 1. Air monitoring equipment of the type and quantity required to monitor operations and conduct personnel exposure surveillance in accordance with OSHA requirements.
 - 2. Electrical equipment, protective devices and power cables shall conform to all applicable codes.
 - 3. Where lead exposures are above the OSHA Action Level or PEL, the Contractor shall provide wash facilities/shower stalls and plumbing that include sufficient hose length and drain system or an acceptable alternate. One shower stall shall be provided for each eight workers.

4. Where lead exposures are above the OSHA PEL, the Contractor shall provide exhaust air filtration units that are equipped with HEPA filters to provide local exhaust ventilation at the work area to reduce airborne lead emissions.
5. The Contractor shall provide vacuum units of suitable size and capabilities for the project which have HEPA filters capable of trapping and retaining at least 99.97 percent of all monodispersed particles of three micrometers in diameter or larger.
6. The Contractor shall provide ladders and/or scaffolds of adequate length, strength and sufficient quantity to support the work schedule. Scaffolds shall be equipped with safety rails and kick boards in compliance with OSHA requirements.
7. Protective clothing, respirators, and HEPA P100 filter cartridges shall be provided in sufficient quantities for the project.
8. Equipment suitable for building renovation/demolition and proper waste/debris collection/packing/removal, (e.g. excavators, grapples, backhoes, roll-offs, etc.) shall be provided by the Contractor as required.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS:

- A. All employees of the Contractor who perform work impacting LBP shall be properly trained to perform such duties.
- B. All labor, materials, tools, equipment, services, testing, insurance, and incidentals which are necessary or required to perform the work in accordance with applicable government regulations, industry standards and codes, and these Specifications shall be provided by the Contractor.
- C. Prior to beginning work, the Engineer and Contractor shall perform a visual survey of each work area and review conditions at the site for safety reasons. In addition, the Contractor shall instruct all workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this project.
- D. The Contractor shall:
 1. Shutdown and isolate heating, cooling, and ventilating air systems to prevent contamination and particulate dispersal to the other areas of the building.
 2. Shut down and lock out electrical power, including all receptacles and light fixtures, when feasible. The use or isolation of electrical power will be coordinated with all other ongoing uses of electrical power at the site.
 3. Coordinate all power and fire alarm isolation with the appropriate representatives.

4. When necessary, provide temporary power and adequate lighting and ensure safe installation of electrical equipment, including ground fault protection and power cables, in compliance with applicable electrical codes and OSHA requirements. The Contractor is responsible for proper connection and installation of electrical wiring.
 - E. Ladders and/or scaffolds to be utilized throughout this project shall be in compliance with OSHA requirements, and of adequate length, strength and sufficient quantity to support the scope of work. Use of ladders/scaffolds shall be in conformance with OSHA 29 CFR 1926 Subpart L and X requirements.
 - F. Work performed at heights exceeding six feet (6') shall be performed in accordance with the OSHA Fall Protection Standard 29 CFR 1926 Subpart M including the use of fall arrest systems as applicable.
 - G. Electrical service may not be available at the site. Costs for supplying electrical service shall be the responsibility of the Contractor.
 - H. Water service is not available at the site. The Contractor shall supply sufficient water for each shift to operate the wash facility/decontamination shower units in addition to the water needed at the work area.
 - I. Data for random lead testing conducted on surfaces throughout the buildings as well as hazardous waste characterization results are available from the Engineer for informational purposes only. Under no circumstances shall this information be the sole means used by the Contractor for determining the extent of LBP materials. The Contractor shall be responsible for verification of all field conditions affecting performance of the work as described in these Specifications in accordance with OSHA, USEPA, USDOT, DOS, MDPH, and MassDEP standards. Compliance with the applicable requirements is solely the responsibility of the Contractor.
 - J. Activity impacting LBP surfaces shall be performed in a manner which minimizes the spread of lead dust contamination and generation of airborne lead.
 - K. The Contractor shall provide a Project Monitor to oversee the LBP abatement activities. No activity impacting LBP shall be performed until the Project Monitor is on-site. Environmental sampling, including ambient air sampling, TCLP waste stream sampling and/or dust wipe sampling, shall be conducted throughout the project as deemed necessary.
- 3.02 ESTABLISHMENT OF REGULATED WORK AREAS
- A. Note that LBP removal is not expected to be required on this project if material is demolished as bulk waste. Therefore, means and methods are not specified herein. However, in the event those Contractor chooses methods that generate LBP debris or airborne particles, the following precautions shall be required. The Contractor shall prepare a Regulated Area as follows:
 1. In all areas where airborne exposures may exceed the OSHA PEL, post warning signs meeting the requirements of OSHA 29 CFR 1926.62 at each regulated area.

2. In addition, signs shall be posted at all approaches to regulated areas so that an employee may read the sign and take the necessary protective steps before entering the area. These signs shall read:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

3. Establish a Regulated Area, through the use of appropriate barrier tape, etc. and control unauthorized access into the area throughout the LBP related activity.
4. Implement appropriate engineering controls such as critical barriers, poly drop cloths, negative pressure, local exhaust ventilation, wet dust suppression methods, etc. to prevent the spread of lead contamination from the Regulated Area.
5. For exterior work areas, the Contractor shall use a High Efficiency Particulate Air (HEPA) filtered vacuum dust collection system to remove any visible existing paint chips from the ground to a distance of 20 feet out from the base of the exterior surface scheduled for LBP activity prior to commencement of work and extend a 6 millimeter polyethylene sheet drop cloth on the ground adjacent to the exterior surface scheduled for LBP activity to contain debris/contamination.

3.03 WORKER DECONTAMINATION AREAS:

- A. The Contractor shall provide handwash facilities in compliance with 29 CFR 1926.51(f) and 29 CFR 1926.62 regardless of airborne lead exposure. This wash facility will consist, at least, of potable water, towels, soap, and a HEPA vacuum. Do not damage rebar when drilling holes for injection ports. If rebar is encountered during drilling, abandon the hole and patch immediately with epoxy mortar flush with the surface of the existing concrete.

3.04 PERSONNEL PROTECTION:

- A. Exposure Assessments: The Contractor shall initially determine if any employee performing construction tasks impacting LBP may be exposed to lead at or above the OSHA Action Level of 30 micrograms per cubic meter (30 $\mu\text{g}/\text{m}^3$). Assessments shall be based on initial air monitoring results as well as other relevant information. The Contractor may rely on historical air monitoring data obtained within the past 12 months under workplace conditions closely resembling the process, type of material, control methods, work practices and environmental conditions used and prevailing in the Contractors current operations to satisfy the exposure assessment requirements. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.
- B. Until a negative exposure assessment is developed for the required tasks impacting LBP, the Contractor shall ensure that all workers and authorized persons entering the regulated area wear protective clothing and respirators in accordance with OSHA 29 CFR 1926.62. Protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings. Sufficient quantities shall be provided to last throughout the duration of the project.

- C. Protective clothing provided by the Contractor and used during chemical removal operations shall be impervious to caustic materials. Gloves provided by the Contractor and used during chemical removal shall be of neoprene composition with glove extenders.
- D. Respiratory protective equipment shall be provided, and selection shall conform to 30 CFR Part 11, 29 CFR Part 1910.134, and 29 CFR Part 1926.62. A formal respiratory protection program must be implemented in accordance with 29 CFR Part 1926.62 and Part 1910.134.

3.05 LEAD-BASED PAINT ACTIVITY PROCEDURES:

- A. Ensure that the Competent Person is always on the job.
- B. Do not begin demolition or abatement work of LBP materials until authorized by the Engineer, following a pre-abatement visual inspection by the Project Monitor.
- C. The Contractor shall ensure proper entry and exit procedures for workers and authorized persons who enter and leave the Regulated Area. All workers and authorized persons shall leave the Regulated Area and proceed directly to the wash or shower facilities where they will HEPA vacuum gross debris from work suit, remove and dispose of work suit, wash and dry face and hands, and vacuum clothes. Do not remove lead chips or dust by blowing or shaking of clothing. Wash water shall be collected, filtered, and disposed of in accordance with federal, state and local water discharge standards.
- D. No one shall eat, drink, smoke, chew gum or tobacco, or apply cosmetics while in the Regulated Area.
- E. Utilize appropriate engineering controls (e.g. wet methods) as directed by 29 CFR 1926.62 to control lead emissions and contamination.
- F. Properly contain wastes containing LBP for appropriate transport/disposal.
- G. Stop all work in the regulated area and take steps to decontaminate non-work areas and eliminate causes of such contamination should lead contamination be discovered in areas outside of the regulated area.
- H. Special Requirements:
 - 1. Staging and Access:
 - a. Contractor shall note that areas to be abated are located over open filter bays. Decking and/or staging shall be provided as required to conduct the abatement work.
 - 2. Demolition/Renovation:
 - a. Demolish/renovate in a manner which minimizes the spread of lead contamination and generation of lead dust.

- b. Implement dust suppression controls, such as misters, local exhausts ventilation, etc. to minimize the generation of airborne lead dust.
 - c. Segregate work areas from non-work areas through the use of barrier tape, poly critical barriers, etc.
 - d. Clean up immediately after renovation/demolition every day.
3. Chemical Removal:
- a. Apply chemical stripper in quantities and for durations specified by manufacturer.
 - b. Scrape LBP from surface down to bare substrate with no trace of residual pigment. Use sanding, hand scraping, and dental picks to supplement chemical methods as required to remove residual pigment.
 - c. Apply neutralizer compatible with substrate and chemical agent to substrate following removal in accordance with manufacturer's instructions.
 - d. Protect adjacent surfaces from damage from chemical removal.
 - e. Maintain a portable eyewash station in the work area.
 - f. Wear respirators that will protect workers from chemical vapors.
 - g. Do not apply caustic agents to aluminum surfaces.
4. Paint Stabilization/Liquid Encapsulation:
- a. Remove surface dust, dirt, mildew, scale, rust or other debris by scrubbing with detergent (lead-specific detergent solution) and rinsing. Remove loose paint using wet scraping methods until a sound surface is achieved. Remove unsound substrate not firmly adhered and repair with an appropriate patching material.
 - b. Remove and reinstall or protect electrical receptacles, hardware, and wall mounted objects from being painted over by encapsulant. Protect adjacent finishes from paint splatter or other damage.
 - c. Apply encapsulant in a continuous coat. Number of coats is as specified in the manufacturer's instructions for application. Encapsulant shall be approved by the MDPH for use. Use encapsulants only on substrates and locations approved for use in the manufacturer's instructions.
 - d. Do not use new coats of paint or primer, wallpaper cover and contact paper as encapsulants.
 - e. Do not apply encapsulants to friction or impact surfaces.

- f. Prior to application of encapsulants, perform the tape, X-cut tape and patch tests in accordance with the MDPH regulations on Applying Liquid Encapsulants to Interior Surfaces for Property Owners and Lead Professionals to determine if the surface is suitable for encapsulation.

5. Mechanical Paint Removal:

- a. Provide sanders, grinders, rotary wire brushes, or needle gun removers equipped with a HEPA filtered vacuum dust collection system. Cowling on the dust collection system for orbital-type tools must be capable of maintaining a continuous tight seal with the surface being abated. Cowling on the dust collection system for reciprocating-type tools shall promote an effective vacuum flow of loosened dust and debris. Inflexible cowlings may be used on flat surfaces only. Flexible contoured cowlings are required for curved or irregular surfaces.
- b. Provide HEPA vacuums that are high performance designed to provide maximum static lift and maximum vacuum system flow at the actual operating vacuum condition with the shroud in use. The HEPA vacuum shall be equipped with a pivoting vacuum head.
- c. Remove all LBP from surface down to bare substrate with no trace of residual pigment. Use chemical methods, hand scraping, and dental picks to supplement abrasive removal methods as required to remove residual pigment.
- d. Protect adjacent surfaces from damage from abrasive removal techniques.
- e. "Sandblasting" type removal techniques should be performed within full containment negative pressure enclosures.

6. Component Removal/Replacement:

- a. Wet down components which are to be removed to reduce the amount of dust generated during the removal process.
- b. Remove components utilizing hand tools and follow appropriate safety procedures during removal. Remove the building components by approved methods which will provide the least disturbance to the substrate material. Do not damage adjacent surfaces.
- c. Clean up immediately after component removals have been completed. Remove any dust located behind the component removed.

3.06 PROHIBITED REMOVAL METHODS:

- A. Note that LBP removal is not expected to be required by the Engineer. However, means and methods are not specified herein. Therefore, in the event those Contractor chooses methods that generate LBP debris or airborne particles, the following precautions shall be required:

1. The use of heat guns in excess of 700 degrees Fahrenheit to remove LBP is prohibited.
2. The use of sand, steel grit, water, air, CO₂, baking soda, or any other blasting media to remove lead or LBP without the use of a HEPA ventilated contained negative pressure enclosure is prohibited.
3. Power tool assisted grinding, sanding, cutting, or wire brushing of LBP without the use of cowled HEPA vacuum dust collection systems is prohibited.
4. Lead paint burning, busting of rivets painted with LBP, welding of materials painted with LBP, and torch cutting of materials painted with LBP is prohibited. Where cutting, welding, busting, or torch cutting of materials is required, pre-remove the LBP in the area affected.
5. Use of chemical strippers containing Methylene Chloride is prohibited.
6. Compressed air shall not be utilized to remove LBP.

3.07 AIR MONITORING REQUIREMENTS:

A. The Contractor shall:

1. Provide air monitoring equipment including sample filter cassettes of the type and quantity required to properly monitor operations and personnel exposure surveillance throughout the duration of the project.
2. Conduct initial exposure monitoring to determine if any employee performing construction tasks impacting LBP may be exposed to lead at or above the OSHA Action Level of 30 micrograms per cubic meter. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.
3. Conduct personnel exposure assessment air sampling, as necessary, to assure that workers are using appropriate respiratory protection in accordance with OSHA Standard 1926.62. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and shall be available for review until the job is complete.

B. The Project Monitor will:

1. Collect air samples in accordance with the current revision of the NIOSH 7082 or 7702 Method of Air Sampling for Airborne Lead while overseeing the activities of the Contractor. Frequency and duration of the air sampling during abatement will be representative of the actual conditions at the site. The size and configuration of the project will be a factor in the number of samples required to monitor the activities and shall be determined by the Project Monitor.

C. As determined by AAS, XRF, or equivalent analysis, if air samples collected outside of the Regulated Area during abatement activities indicate airborne lead concentrations greater than original background levels or greater than 30 ug/m³, whichever is larger, an examination of the

Regulated Area perimeter shall be conducted and the integrity of barriers shall be restored. Cleanup of surfaces outside the Regulated Area using HEPA vacuum equipment or wet cleaning techniques shall be done prior to resuming abatement activities.

- D. Abatement outside the initial designated work area(s) will not be paid for by the Engineer. The Contractor will be responsible for all costs incurred from these abatement activities.

3.08 CLEANUP AND VISUAL INSPECTION:

- A. Remove and containerize all lead waste material and visible accumulations of debris, paint chips and associated items.
- B. During clean up the Contractor shall utilize rags and sponges wetted with lead-specific detergent and water as well as HEPA filtered vacuum equipment.
- C. The Engineer will conduct a visual inspection of the work areas in order to document that all surfaces have been maintained as free as practicable of accumulations of lead in accordance with OSHA 29 CFR 1926.62(h). If visible accumulations of waste, debris, LBP chips or dust are found in the work area, the Contractor shall repeat the cleaning, at the Contractor's expense, until the area is in compliance. The visual inspection will detect incomplete work, damage caused by the abatement activity, and inadequate cleanup of the work site.
- D. Dust wipe clearance testing, in accordance with DOS/USEPA/HUD protocols, will also be performed by the Project Monitor if so detailed in the Scope of Work; Construction Methods – Lead Abatement Provisions – Lead Abatement Procedures. If lead dust wipe levels are above DOS/USEPA/HUD clearance criteria, the Contractor shall re-clean the work area and retesting shall be conducted at the Contractor's expense. The testing and cleaning sequence shall be repeated until the clearance criteria levels have been achieved.

3.09 POST ABATEMENT WORK AREA DEREGULATION:

- A. Following the visual inspection, (and clearance testing if appropriate,) any engineering controls implemented may be removed and the Work Area deregulated.
- B. A final visual inspection of the work area shall be conducted by the Competent Person and the Project Monitor to ensure that all visible accumulations of suspect materials have been removed and that no equipment or materials associated with the abatement project remain.
- C. The Contractor shall restore all work areas and auxiliary areas utilized during work to conditions equal to or better than original. Any damage caused during the performance of the work activity shall be repaired by the Contractor at no additional expense to the Owner.

3.10 NON-HAZARDOUS WASTE DISPOSAL/RECYCLING:

- A. Non-metallic building debris waste materials tested and found to be non-hazardous Construction and Demolition (C&D) bulky waste shall be disposed of properly at a MassDEP approved Solid Waste landfill.

- B. Metallic debris shall be segregated and recycled as scrap metal at an approved metal recycling facility. The Contractor shall submit to the Owner and/or Engineer all documentation necessary to demonstrate the selected recycling facility is able to accept lead-painted scrap metal.
- C. Concrete, brick, etc. coated with any amount of LBP cannot be crushed, recycled or buried on-site to minimize waste disposal. Only MassDEP defined "clean fill" can be recycled on-site or sent to a recycling facility.

3.11 HAZARDOUS LEAD WASTE DISPOSAL:

- A. Note that LBP waste generation by the Contractor shall require the following precautions:
 - 1. If required to dispose of any hazardous waste, the Contractor shall utilize a certified/permitted transporter for hazardous waste in compliance with DOT 49 CFR Part 172 and USEPA 40 CFR 260-274 and a permitted hazardous waste treatment storage disposal facility (TSDF) in compliance with USEPA 40 CFR 260-274.
 - 2. Hazardous lead bearing material must be offered for transportation and transported in compliance with the Code of Federal Regulations, Title 49, Chapter 1, Part 173, Subparts A, B, C, and D and Paragraph 178.118. Transport vehicles (hopper or dump type) must be free from leaks and discharge openings must be securely closed during transportation. All storage containers (roll offs or drums) shall have a protective liner and removable lid. These containers shall not have any indentations or damage that would allow seepage of the contained material.
 - 3. The disposal of hazardous lead bearing material must be in compliance with the requirements of, and authorized by, the Office of Solid Waste Management, Department of Environmental Protection, State of Massachusetts, and the USEPA.
 - 4. The disposal of hazardous lead bearing waste shall comply with the requirements of RCRA.
 - 5. Unless previous waste characterizations have been completed by the Engineer, all generated waste shall be containerized and stored on-site for hazardous waste determination via TCLP testing. TCLP testing and analysis shall be the responsibility of the Engineer.
 - 6. The Contractor shall collect the wash water generated by the worker shower, wash facilities, or steam cleaning operations in 55-gallon drums and filter the water using a 2-stage filtration system composed of a 5-micron porosity in-line cartridge particulate filter followed by an activated carbon filter in-line cartridge. Hold the filtered water for testing by the Engineer prior to discharge to the sanitary sewer.
 - 7. The dumpsters/containers containing hazardous waste are to be kept covered and locked when not in active use for the loading of materials.
 - 8. All containers of hazardous lead bearing material shall be labeled in accordance with 29 CFR 1926.62 and EPA 40 CFR 260-270.

9. All hazardous lead-bearing waste removed from the site by the Contractor shall be containerized in lined roll-offs or barrels. Store waste materials in U.S. Department of Transportation (49 CFR 178) approved containers. Properly label and placard each container to identify the type of waste (49 CFR 172) and the date the container was filled. The disposal containers shall be labeled with a six-inch square, yellow, weatherproof, hazardous waste sticker in accordance with USDOT regulations, by the Contractor.
10. The Contractor may not store containerized hazardous lead waste on the job site for in excess of 30 calendar days from the accumulation start date.
11. When required to dispose of hazardous waste, the Contractor shall utilize a certified/permitted transporter for hazardous waste in compliance with USDOT 49 CFR Part 172 and USEPA 40 CFR 260-274 and a permitted hazardous waste treatment storage disposal facility (TSDF) in compliance with USEPA 40 CFR 260-274.
12. The Contractor shall complete a Uniform Hazardous Waste Manifest, EPA Form 8700-22, and submit to the Engineer for review and generator sign-off prior to each load of hazardous waste scheduled to leave the site. Completed copies of the manifest shall be delivered by the Contractor to the Engineer within 30 calendar days following the date the load leaves the site.
13. When all necessary procedures have been completed, then the hazardous waste shall be shipped to the hazardous waste disposal facility.
14. Any spillage of debris during disposal operation, i.e., loading, transport and unloading, shall be cleaned up in accordance with the Code of Federal Regulations, Title 40, Chapter 1, Part 25, Subparts C and D, at the Contractor's expense.
15. The Contractor is liable for any fines, costs or remediation costs incurred as a result of the failure to be in compliance with this special provision and all federal, state and local laws.
16. Final payment requisitions for the contract will not be processed until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned and a copy is furnished to the Engineer.

3.12 CONTRACT CLOSEOUT:

- A. Provide in accordance with Division 1.

END OF SECTION

Attachment A-6

To Addendum No. 1

Pre-Bid Conference Attendance List

SALEM AND BEVERLY WATER SUPPLY BOARD
FACILITIES UPGRADES
CONTRACT 2022-1
PRE-BID CONFERENCE
THURSDAY, JUNE 20, 2024, 10:00 AM
PAGE __ OF __

NAME	REPRESENTING	TELEPHONE	EMAIL
Ryan InLoud	Associated Contractors Company	800-547-421	rji@accgc.com
Jarrod Fowler	RH White Construction	508-832-3295	jfowler@rhwhite.com
Mina Abraham	RH White Construction	508-250-8501	Mabraham@RHWhite.com
Ralph Dumke	Waterline Inc	603-474-7477	estimates@waterlinesid.com
Erik Doyon	" "	978-290-3772	" "
Kevin Roche	" "	603-682-5800	" "
Danien Ricci	John W Egan Co Inc	617-244-6390	cluckisz@JohnWegans.com
Vito Caramitara	Weston & Sampson (MR)	(978) 265-0340	ciaramitarov@wseinc.com
Matthew Ribeiro	AECOM	978-905-2366	matthew.ribeiro@aecom.com

SALEM AND BEVERLY WATER SUPPLY BOARD
 FACILITIES UPGRADES
 CONTRACT 2022-1
 PRE-BID CONFERENCE
 THURSDAY, JUNE 20, 2024, 10:00 AM
 PAGE __ OF __

NAME	REPRESENTING	TELEPHONE	EMAIL
John Fortin	SBWSB	781-801-8831	john.fortin@sbwsb.net
James Langley	SBWSB	781-710-7410	BJLangley@gmail.com
Bradley Perrin	SBWSB	978-927-2600	BJPERRIN@SBWSB.NET