

**ADDENDUM NO. 1
TO
DOCUMENTS AND SPECIFICATIONS
FOR
GREENSAND FILTRATION FACILITY FOR WELL NO. 5
HOLLISTON, MASSACHUSETTS**

This Addendum No. 1 forms a part of the Contract Documents and modifies the Bidding Documents dated December 2020 as noted below. Acknowledge receipt of this Addendum in the space provided in DOCUMENT 00300, FORM FOR GENERAL BID and DOCUMENT 00350, FORM FOR SUBBID, as applicable. Failure to do so may subject the Bidder to disqualification. This Addendum consists of nine (9) pages.

CHANGES MADE TO CONTRACT DOCUMENTS:

1. DOCUMENT 00003 – TABLE OF CONTENTS

A. Page 00003-2. Section 07900 – Joint Sealants. Revise to read:

“Section 07900 – Joint Sealants (Filed Sub-Bid Required)”

2. DOCUMENT 00010 – ADVERTISEMENT FOR BIDS

A. Page 00010-1. Second paragraph: Delete in its entirety and replace with the following new paragraph:

“General Contract Bid opening will be held virtually. All interested parties can observe the General Contract Bid opening using the following information:

By Computer: <https://us02web.zoom.us/j/89313400463>

By Phone: Dial 1-646-558-8656

Meeting ID: 893 1340 0463

B. Page 00010-1. Third paragraph. Second line: Delete subtrade “Waterproofing” and replace with subtrade “Waterproofing, Damp-proofing, and Caulking”.

C. Page 00010-1. Fourth paragraph: Delete in its entirety and replace with the following new paragraph:

“Filed Subbids opening will be held virtually. All interested parties can observe the Filed Subbids opening using the following information:

By Computer: <https://us02web.zoom.us/j/89313400463>

By Phone: Dial 1-646-558-8656

Meeting ID: 893 1340 0463

D. Page 00010-2. Revise **DCAMM Sub-trades Categories** column, by deleting Sub-trade “Waterproofing” and replacing with Sub-trade “Waterproofing, Damp-proofing, and Caulking”. Revise the corresponding **Contract Specifications** column by deleting “Section 07113, Waterproofing” and replacing with “Section 07113, Waterproofing and Section 07900, Joint Sealants”.

3. DOCUMENT 00100 – INSTRUCTIONS AND INFORMATION FOR BIDDERS

A. Article 1.01 RECEIPT OF BIDS AND SUBBIDS.

1. Page 00100-1. Paragraph B. Second line: Delete Sub-trade “Waterproofing” and replace with Sub-trade “Waterproofing, Damp-proofing, and Caulking”.

2. Page 00100-2. Paragraph G: Revise **DCAMM Subtrades Categories** column, by deleting Sub-trade “Waterproofing” and replacing with Sub-trade “Waterproofing, Damp-proofing, and Caulking”; and revising the corresponding row under **Contract Specifications** column by deleting “Section 07113, Waterproofing” and replacing with “Section 07113, Waterproofing and Section 07900, Joint Sealants”.
- B. Article 1.03 EXAMINATION OF CONTRACT DOCUMENTS AND SITE
1. Page 00100-3. Add the following new Paragraph E to the end of Article 1.03:
 “E. The Bidders must examine the existing structures to determine for themselves as to existence of hazardous or special materials, if any, that may require special handling and disposal as part of the demolition Work. All associated costs for proper handling and legal disposal shall be included under Bid price for Item 1.”
- C. Article 1.10 LAWS AND REGULATIONS
1. Page 00100-6. Add the following new Paragraph F to the end of Article 1.10:
 “F. The Bidders are advised that the Project is funded locally by the Town of Holliston and that the requirements associated with the American Iron and Steel (AIS) is not applicable to this Project. Certain sections of these Contract Specifications have American made products requirements, which remain unaffected.”
4. DOCUMENT 00300 – FORM FOR GENERAL BID
- A. Page 00300-2. Revise **Subbid Description** column by deleting Subbid Category “SECTION 07113, WATERPROOFING” and replacing with Subbid Category “SECTION 07113, WATERPROOFING, AND SECTION 07900, JOINT SEALANTS”.
5. SECTION 01025 – MEASUREMENT AND PAYMENT
- A. Page 01025-1. Article 1.02 PAYMENT ITEMS. Item 2: Revise Row c. under **DCAMM Sub-trades Categories** column, by deleting Sub-trade “Waterproofing” and replacing with Sub-trade “Waterproofing, Damp-proofing, and Caulking”; and revise the corresponding row under **Contract Specifications** column by deleting “Section 07113, Waterproofing” and replacing with “Section 07113, Waterproofing and Section 07900, Joint Sealants”.
 - B. Page 01025-2. Article 1.04 BASIS OF MEASUREMENT AND PAYMENT. **Item 2. FILED SUB-BIDS.** Subparagraph c.: Delete “Section 07113, Waterproofing” and replace with “Section 07113, Waterproofing and Section 07900, Joint Sealants”.
6. SECTION 01030 – SPECIAL REQUIREMENTS
- A. Page 01030-3. Article 1.06. SCOPE OF WORK AND SEQUENCE OF CONSTRUCTION. Paragraph L: Add the following new Subparagraph 2:
 “2. Eversource will be responsible for disconnecting the old/existing primary power at the existing pole and removal of pole-mounted transformer. Verizon is responsible for disconnecting the phone service and removal of Pole #8-86/3X. Direct charges for decommissioning work by Eversource and Verizon shall also be paid for from the allowance specified in SECTION 16400, SERVICE ENTRANCE.”

B. Page 01030-12. Add the following new Article 1.29 at the end of Article 1.28:

“1.29 ZONE 1 - WELL RESTRICTION

- A. The Contractor shall not perform any maintenance work on construction equipment within 400 feet of Well No. 5. Any construction equipment used that leaks any fluids shall be removed immediately from the Project site.
- B. All portable equipment containing oil, grease, fuel or other hazardous materials shall be protected by a means of a secondary containment.
- C. All construction equipment containing oil, grease, fuel or other hazardous substances shall be stored or parked at least 400 feet from the well.”

7. SECTION 01310 – SCHEDULES AND REPORTS

A. Page 01310-3. Article 1.04. SUBSURFACE SOIL DATA. Paragraph D: Add the following new sentence to the end of Paragraph D:

“Contractors interested to examine the jar samples and or visit the Project site and existing buildings shall contact the Engineer for appointment at (508) 376-2670 or at ali.parand@ap-associates.com.”

8. SECTION 07113 – WATERPROOFING (FILED SUBBID REQUIRED)

A. Page 07113-1. Article 1.00 FILED SUBBID REQUIREMENTS

1. Paragraph A: Delete Paragraph A in its entirety and replace with the following new Paragraph A:

“A. The Work of SECTION 07113, WATERPROOFING and SECTION 07900, JOINT SEALANTS require a filed Subbid in accordance with M.G.L. C.149, S.44A through 44, inclusive, as amended. This Section 07113, WATERPROOFING and SECTION 07900, JOINT SEALANTS will be covered under a single filed Subbid for the Waterproofing, Damp-proofing, and Caulking category of Work.”

2. Paragraphs C and D: Delete both Paragraphs C and D and replace with the following new Paragraphs C and D:

“C. Requirement of Submitting Subbids:

- 1. Subbids for Work under this Section shall be for the complete Work of this Section 07113 and Section 07900 and shall be filed in a form furnished by the Awarding Authority, in a sealed envelope, at the time and place stipulated in the DOCUMENT 00010, ADVERTISEMENT FOR BIDS and as specified in DOCUMENT 00100, INSTRUCTIONS AND INFORMATION FOR BIDDERS; and shall be accompanied by a Bid Deposit in the amount of five percent of the sub-bid price complying with the requirements of M.G.L. C.149, S.44B. The following should appear on the upper left-hand corner of the envelope:

Name of Subbidder:_____

Subbid for: SECTION 07113, WATERPROOFING and SECTION 07900, JOINT SEALANTS

Project: GREENSAND FILTRATION FACILITY FOR WELL NO. 5

Contract No.: 2020-01

D. The Work of SECTION 07113, WATERPROOFING and SECTION 07900, JOINT SEALANTS requires the filed Subbidder to perform all Work specified under these sections.”

B. Page 07113-3. Article 2.01 MEMBRANE WATERPROOFING

1. Paragraph A. Subparagraph 1: Add the following new sentence to the end of Subparagraph 1:

“The exterior of below-grade foundation walls at around the stairs on north side of the building and at Pipe Gallery on south side, as shown on the Structural Drawings shall receive Type III waterproofing. In addition, Type III waterproofing is required at all foundation walls construction joints, according to Detail 3 on Contract Drawing S-9.”

2. Paragraph B. Subparagraph 1: Add the following new sentence to the end of Subparagraph 1:

“The submerged (interior) side of wet basins (Clearwell and Backwash Waste) common walls with (dry areas) stairs and pipe gallery shall receive NSF approved Type II waterproofing, as shown on Structural Drawings.”

C. Page 07113-3. Article 2.02 CEMENTITIOUS WATERPROOFING.

1. Paragraph A. Subparagraph 1. Add the following new sentence to the end of Subparagraph 1:

“Pipe Gallery floor shall receive cementitious waterproofing as shown on Contact Drawing S-1.”

9. SECTION 07900 – JOINT SEALANTS

- A. Page 07900-1. Revise section title by adding: (FILED SUBBID REQUIRED)

- B. Page 07900-1. Insert the following new Article 1.0 before Article 1.1 SCOPE:

“1.0 FILED SUBBID REQUIREMENTS

- A. This section is part of the filed Subbid for SECTION 07113, WATERPROOFING to be covered under a single filed Subbid for the Waterproofing, Damp-proofing, and Caulking category of Work.”

- C. Page 07900-1. Article 1.1 SCOPE. Paragraph B: Add the following new Subparagraph 6:

“6. Polyurethane joint sealants.”

- D. Page 07900-4. Add the following new Article 2.7 after Article 2.6:

“2.7 POLYURETHANE JOINT SEALANTS

- A. Polyurethane, S, NS, 50, NT: Single component, medium-modulus, low-VOC, UV-stable, non-sag polyurethane sealant: ASTM C920, Type S, Grade NS, Class 50, Use NT. Polyurethane joint sealants shall be Dymonic 100 by Tremco or approved equal products by Dow or Hilti.
- B. Polyurethane joint sealant shall be applied to all exterior side of below-grade construction joints on cast-in-place concrete foundation walls.”

10. SECTION 08100 – HOLLOW METAL DOORS AND FRAMES

- A. Page 08100-1. Article 1.1 SCOPE: Add the following new Paragraph C:

“C. The Contractor is advised that no Fire-Rated openings are required on this Project.”

11. SECTION 08700 –DOOR HARDWARE

- A. Page 08700-3. Article 2.4 MECHANICAL LOCKS AND LATCHES. Paragraph F: Add the following new sentence to the end of Paragraph F:

“Locks shall be Mortise Schlage L Series or approved equal.”

B. Page 08700-4. Article 2.6 EXIT DEVICES AND AUXILIARY ITEMS.

Paragraph A: Delete Subparagraph 1 in its entirety and replace with the following new Subparagraph 1:

“1. Provide Von-Duprin 9975L mortise lock exit device with 996L lever trim or approved equal.”

C. Page 08700-6. Article 2.16 FINISHES. Delete Paragraph A in its entirety and replace with the following new Paragraph A:

“A. Provide finishes complying with BHMA A156.18. All hardware shall have a US 32D satin stainless steel finish, except as otherwise noted. Metallic parts of the weatherstripping shall be duranodic aluminum where available, stainless steel elsewhere, except as otherwise noted.”

12. SECTION 09900 – HIGH-PERFORMANCE COATINGS (FILED SUBBID REQUIRED)

A. Page 09900-2, Article 1.1 SCOPE: Add the following new Paragraph E:

“E. Concrete surfaces in the submerged/wet basins (clearwell and backwash waste) will not require painting.”

13. SECTION 11218 – CHEMICAL TRANSFER PUMPS

A. Page 11218-2, Article 2.01 TRANSFER PUMPS, Paragraph C: Delete in its entirety and insert the following new Paragraph C:

“C. Each transfer shall be controlled by a momentary push-button switch located on transfer pump control panel as shown on the Contract Drawings. Starters, switches, lights, all related controls and non-metallic NEMA 4X enclosures are all furnished, installed and wired by Electrical Contractor under DIVISION 16, ELECTRICAL.”

14. SECTION 15600 – HVAC (FILED SUBBID REQUIRED)

A. Page 15600-42. Paragraph O Controls: Add the following new Subparagraph 5:

“5. Duct smoke detector furnished with the Make-Up Air Unit shall be photoelectric, analog addressable, with integral communication and device identification. It shall initiate a supervisory signal for wiring by Electrical Contractor to the fire alarm control panel and be provided with 120V rated form C contacts that open/close upon sensing of smoke or detector failure.”

B. Page 15600-64. Paragraph J: Delete Subparagraph 1 in its entirety and replace with the following new Subparagraph 1:

“1. Install duct smoke detector furnished with the Make-Up Air Unit. ATC Contractor shall wire the detector for fan shut down. Wiring to fire alarm system shall be part of work by Division 16, ELECTRICAL.”

15. SECTION 16000 – ELECTRICAL (FILED SUBBIDS REQUIRED)

A. Article 1.01 FILED SUBBID REQUIREMENTS. Page 16000-1. Paragraph D: Delete Paragraph D in its entirety and replace with the following new Paragraph D:

“D. All instrumentations are furnished by DIVISION 13 and shall be installed and wired by the Electrical Contractor except for the magnetic flow elements (meters) which will be installed by the General Contractor and wired by the Electrical Contractor. Magnetic flow indicator-transmitters will be installed and wired by the Electrical Contractor. All instrumentation power and signal conduits and wirings shall be by the Electrical Contractor as shown on the Electrical Drawings (E-1 through E-20) and the Instrumentation Drawings (I-1 through I-11).”

16. SECTION 16110 – RACEWAYS

A. Page 16110-1. Article 1.01 SCOPE: Add the following new Paragraph D:

“D. It is the intent of this Project that all conduits within building construction shall be concealed, unless otherwise specified.”

17. SECTION 16400 – SERVICE ENTRANCE

A. Page 16400-3, Article 3.02 ALLOWANCE. Change Paragraph “F” to “A”, and add the following Subparagraph 1 to the end:

“1. Eversource will be responsible for disconnecting the old/existing primary service and overhead wires. Verizon will be responsible for disconnecting the old/existing phone service and removal of existing Pole #8-86/3X. Payments to Eversource for disconnection of old primary service and to Verizon for disconnection of old phone service and removal of existing Pole #8-86/3X shall also be paid from the allowance. All other work shall be included as part of the price bid for this Project.”

18. SECTION 16670 – LIGHTNING PROTECTION SYSTEMS

A. Page 16700-1. Article 1.1 SCOPE. Insert the following new Paragraph B after Subparagraph 2:

“B. The Contractor shall design the lightning protection system, furnish and install a complete and approved system in conformance with the requirements of this SECTION 16670, LIGHTNING PROTECTION SYSTEMS, and shall be grounded per the grounding detail shown on the Electrical Drawing.”

19. SECTION 16700 – FIRE ALARM SYSTEMS

A. Page 16700-4. Article 2.03 DEVICES.

1. Paragraph B. Heat Detectors. Subparagraph 1: Delete Subparagraph 1 in its entirety and replace with the following new Subparagraph 1:

“1. Fixed Temperature.”

2. Paragraph C. Area Smoke Detectors. Subparagraph 1: Delete in its entirety and replace with the following new Subparagraph 1:

“1. Area Smoke Detectors
Area smoke detectors are furnished by Fire Protection Contractor. Installation and wiring to pre-action alarm panel and fire alarm control panel is by the Electrical Contractor.”

3. Paragraph D. Duct Smoke Detectors: Delete in its entirety and replace with the following new Paragraph D:

“D. Duct Smoke Detector

One duct smoke detector is furnished with the Make-Up Air Unit. Installed by HVAC Contractor and wired for fan shut down by ATC Contractor. Wiring to fire alarm control panel is by the Electrical Contractor.”

CHANGES MADE TO THE CONTRACT DRAWINGS:

1. DRAWING HV-2, Sheet 48 of 90. MAKE-UP AIR UNIT SCHEDULE. Note 6(circle): Delete in its entirety and replace with the following new Note 6(circle):

“Install the factory furnished duct smoke detector. ATC Contractor shall wire for fan shut down. Wiring to FACP by EC under Division 16, Electrical.”

2. DRAWING FP-1, Sheet 57 of 90. LEGEND: HD(circle): Revise to read "Heat Detection"; and SD(circle): Revise to read "Smoke Detection".
3. DRAWING FP-3, Sheet 59 of 90: Add the following new Notes to this Drawing FP-3:
 "Notes:
 1. Quantity and locations for heat detectors shown (HD(circle)) vary from quantity and locations shown on Drawing E-11. Heat detectors are all furnished, installed and wired by the Electrical Contractor. Exact locations will be determined in the field.
 2. Smoke detectors shown (SD(circle)) shall be furnished by Fire Protection Contractor. Installed and wired by Electrical Contractor. Quantity and locations shown vary from smoke detectors shown on Drawing E-11. Fire Protection Contractor should anticipate quantity as shown on this Drawing FP-3 and Drawing FP-2. (Total of 21 units: 18 shown on this Drawing FP-3 and 3 shown on Drawing FP-2). Exact locations will be determined in the field."
4. DRAWING I-3, Sheet 62 of 90. Incorporate the following revisions:
 - a) Loop ID tag# 58: Change the content to loops-476, 477, 478, 479, 480.
 - b) Loop ID tag# 59: Change the content to loops-481, 482, 483, 484, 485, 486.
 - c) Loop ID tag# 21: Change the content to loops-645, 646, 647, 648, 649. Tag is located at MCC-A.
 - d) Loop ID tag# 22: Change the content to loops-650, 651, 652, 653, 654. Tag is located at MCC-A.
 - e) Loop ID tag# 23: Change the content to loops-655, 656, 657, 658. Tag is located at MCC-A.
 - f) Loop ID tag# 24: Change the content to loops-659, 660, 661, 662. Tag is located at MCC-A.
 - g) Loop ID tag# 74: Change the content to loops-472, 473, 474, 475.
 - h) Loop ID tag# 54: Change the content to loops-300 thru 337.
 - i) Add LSH-711 (loop #719) in the Fluoride Room identical to LSH-701.
 - j) **Clarification:** The location of 776, 777 DAHU-1 (loops 776, 777) and 780 Pre-Action Alarm Panel (loop 780) are shown on sheet E-7.
5. DRAWING E-3, Sheet 73 of 90. ELECTRICAL DUCT BANK SCHEDULE. Delete any reference to Panel "LPA" and replace with Panel "PPA".
6. DRAWING E-5, Sheet 75 of 90. KEY NOTES: Delete Note 1(diamond) in its entirety and replace with the following new Note 1(diamond):
 "Well Pump #5 shall be the only pump motor requiring VFD rated cable. The VFD rated cable shall be UL listed manufactured by General Cable or equal, flame-retardant Cross-linked Polyethylene (XLPE), 90°C, One full-sized green insulated ground, Metallic Shield: Overall aluminum /polyester/aluminum shield with 25% minimum overlap in conjunction with overall tinned copper braid with 85% coverage and full sized tinned copper drain wire(s)"
7. DRAWING E-7, Sheet 77 of 90.
 - A. Delete any reference to Panel "LPB" and replace with Panel "PPB".
 - B. Delete filter face piping valve numbering designations for G.S Filter TK-100 shown as FCV 200, FCV 201, FCV 202, FCV 203, FCV 204, ACV 205, ACV 206, FCV 207 and FCV 208(all in circles). Replace with new valve numbering designations FCV 100, FCV 101, FCV 102, FCV 103, FCV 104, ACV 105, ACV 106, FCV 107, and FCV 108(all in circles), respectively.
 - C. Disconnect switch for MAU-1 is labeled as NEMA 12. Delete "12" and replace with "4X".
 - D. KEY NOTES: Delete Note 12(diamond) in its entirety and replace with the following Note 12(diamond):
 "(3) 2" +/- spare empty conduits for future Filter TK-400. Two conduits to Filter Control Panel and one for power source. Cut conduits flush with finished floor and cap as required."

8. DRAWING E-11, Sheet 81 of 90.

1. There are two (2) detectors shown with symbol HD(circle) with subscript D. These are space heat detectors. Delete subscript D.

2. KEY NOTES

1. Delete Note 6(diamond) in its entirety and replace with the following new Note 6(diamond):

“SD(double circle) are smoke detectors to be wired to Pre-Action Alarm Panel by Electrical Contractor (3/4” Conduit with 4 #14).”

2. Add the following new Notes 8 through 11:

- “8. All smoke detectors (18 for Upper Level and 3 for Lower Level) are furnished by Fire Protection Contractor. Quantity and locations shown on this Drawing E-11 vary from quantity and locations shown on Drawing FP-3. Electrical Contractor is required to install and wire all smoke detectors according to locations shown on FP Drawings.
9. Heat detectors quantity and locations shown on this Drawing E-11 vary from quantity and locations shown on Drawing FP-3. Heat detectors are all furnished, installed and wired by Electrical Contractor according to quantity and locations shown on this Drawing E-11.
10. Heat detectors shall be Fixed Temperature type.
11. A duct smoke detector is furnished with the Make-Up Air Unit, installed by HVAC Contractor and wired for fan shut down by ATC Contractor. Exact location as determined in the field per HVAC Contractor. Electrical Contractor shall install conduit and wiring between duct smoke detector and FACP.”

9. DRAWING E-12, Sheet 82 of 90. KEY NOTES: Delete Notes 4 and 5(diamond) and replace with the following new Note 4(diamond):

“SD in double circle are smoke detectors to be wired to Pre-Action Alarm Panel (3/4” Conduit with 4 #14).”

10. DRAWING E-18, Sheet 88 of 90. Detail 4: ELECTRIC & SIGNAL CONNECTION @ FILL PANEL (TYP. OF 3). KEY NOTES: Remove Note 1(diamond) in its entirety and replace with the following new Note 1(diamond):

“Ultrasonic Level Sensor/ Transmitter (Chem Tank High level alarm), (120VAC, 2-wire).”

11. DRAWING E-19, Sheet 89 of 90. Detail 2: FIRE & SECURITY ALARM RISER DIAGRAM. SYSTEM NOTES: Add the following new Notes 5 and 6 to the end:

- “5. Fire alarm control panel shall be NEMA 1. All related outdoor devices/boxes shall be NEMA 4/4X.
6. Fire alarm control panel to provide three (3) separate relays, DPDT, 10 amps rated contacts for HVAC interlocks. Each relay to be activated with the designated zone.”

12. DRAWING E-20, Sheet 90 of 90. Add the following new Notes (1 through 5) to this Drawing:

“NOTES:

1. This in-slab conduit drawing is diagrammatic only and is intended to show general routing of permitted 2”+/- conduits within the slab. The Contractor shall submit dimensioned drawings showing these conduits in strict conformance to the conduit spacing (3x conduit diameter) and

other requirements specified in Paragraph 3.01C of SECTION 16110, RACEWAYS, and additional requirements specified herein. In case of discrepancies, the most stringent requirements apply.

2. The in-slab conduits shall be a minimum of 12 inches away from any thru-slab opening.
3. The in-slab conduits placed in south-north direction shall be positioned at mid-depth of slab.
4. Provide a minimum of ½-inch clearance between conduits where crossing.
5. Electrical Contractor shall bid the Project assuming that no in-slab conduits are allowed, except for those shown on this Drawing E-20. The Structural Engineer may consider additional smaller conduits if proposed by the Electrical Contractor. This consideration will be at the discretion of the Structural Engineer only and conditional that the Electrical Contractor has prepared a well-designed dimensioned layout and has considered all spacing and related requirements.”

END OF ADDENDUM NO. 1

AP Associates, Inc.