

# CITY OF SOMERVILLE, MASSACHUSETTS Department of Procurement and Contracting Services KATJANA BALLANTYNE MAYOR

To: All Parties on Record with the City of Somerville as Holding IFB #25-77 Replacement of DPW Boiler No. 2 From: Logan J. Carroll Date: 6/26/2025 Re: Changes to Schedule, Addition to Scope, Questions and Answers, and Revised Price Form Addendum No. 2 to IFB #25-77 Please acknowledge receipt of this Addendum by signing below and including this form in your proposal package. Failure to do so may subject the proposer to disqualification. NAME OF COMPANY / INDIVIDUAL: ADDRESS: CITY/STATE/ZIP: TELEPHONE/FAX/EMAIL: SIGNATURE OF AUTHORIZED INDIVIDUAL: **ACKNOWLEDGEMENT OF ADDENDA:** 

Addendum #1 #2 #3 #4

## **Changes to the Scope of Work:**

Due to the visibly poor external and unknown internal conditions of the masonry chimney, the chimney flue lining installation section of the Scope of Work (Bullet Point 5.k.) will be replaced with the following-

Extend boiler flue horizontally through the existing window opening in the west-facing exterior wall of the boiler room. On the exterior of the building, transition the flue to vertical and extend to a code compliant height above the flat roof surface. Provide crane service, staging, etc., as needed for external flue installation.

#### **Updated Schedule:**

Second site visit: 6/30/2025 @ DPW water and Sewer Building 1 Franey Rd, Somerville will be followed by Brown School Site visit at 10:45

Questions due by end of day Tuesday 7/1/2025

Addendum 3 will release Wednesday 7/2

Bids due Tuesday 7/8 at 3:00 PM

Note this site visit is not mandatory if you have already attend the first sight visit but you will have the opportunity to take measurements and ask questions about the updated flue work.

## **Additional Alternate Pricing**

**Add Alternate 1**: If required by code, replace the existing boiler feed tank with a new boiler feed tank sized appropriately for the boiler system.

#### **Revised Price Form**

| Lump Sum Price:   |   |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| This Lump Sum Price Covers all items in the original scope of work: |   |  |  |  |  |  |  |
| Lump Sum Price:   | <u>\$</u>   |  |  |  |  |  |  |
| Lump Sum Price in words:  |   |  |  |  |  |  |  |
|   | Price for Alternates:   |  |  |  |  |  |  |
| In the event the Boiler F replacement:                              | Geed Tank does not meet code requirements or is not reusable, provide price for |  |  |  |  |  |  |
| Alternative 1- Replacen   | nent of Boiler Feed Tank, if it doesn't meet code or unusable:                  |  |  |  |  |  |  |
| Price:  | <u>\$</u>   |  |  |  |  |  |  |
| Alternative 1 Price in words:                                       |   |  |  |  |  |  |  |

## Questions & Answers Received During Site Visit 6/18/2025

**Question**: Can the metal fence at the top of the stairs in the parking lot be removed? **Answer**: Yes. The DPW will remove the fence prior to the contractor starting the project. The DPW will reinstall the fence upon completion of the boiler project.

**Question**: Is the Contractor expected to use the existing boiler flue trunk?

**Answer**: No, none of the existing boiler flue trunk will be reused.

Question: Will the boiler feed tank (BFT) be replaced?

**Answer**: The DPW believes that the existing BFT is in good condition and reusable. The Contractor should bid the cost of a replacement tank as Add Alternate #1. Please see attached photo of the boiler feed tank data plate.

**Question**: If the BFT needs to be replaced, will that be a Change Order?

**Answer**: No. The DPW believes that the existing BFT is in good condition and reusable. The Contractor should bid the cost of a replacement tank as Add Alternate #1. Please see attached photo of the boiler feed tank data plate.

**Question**: Will the Contractor be responsible for supplying the new controls?

**Answer**: DPW is supplying the replacement boiler. All controls will be shipped with the new boiler. The Contractor will salvage existing controls and prepare for them storage in DPW's inventory.

**Question**: Will you please provide cut sheets of the new boiler?

**Answer**: Yes, please see attached.

**Question**: Has there been asbestos testing, including the flue?

**Answer**: Yes, asbestos testing was performed by an independent firm/lab. No ACM was found in/on the boiler or pipe insulation, but the steel flue piping was not sampled. It was installed with the existing boiler and is assumed to be negative for ACM. Please see attached report.

Question: Does the existing combustion fresh air intake's duct size meet code?

**Answer**: The existing fresh air intake is 12"x36" and has no damper. The new boiler is a Burnham model V1112 boiler with a new natural gas Power Flame model CR3-G-20 power burner. The boiler spec/cutsheet is attached. The power burner specifications are available here: Power Flame C3-G 20. If larger fresh air intake is required, the City will execute a change order.

**Question:** Are electrical upgrades included in the scope of work?

**Answer:** The City will upgrade the boiler room breaker panel prior to the beginning of the boiler project. If new/additional boiler or BFT service disconnect switches are required, contractor will supply and install as part of their base bid.

**Question:** What are the existing BMS/building controls to the boiler?

**Answer:** The existing BMS is a Honeywell system. It monitors outside air temp and utilizes that along with a thermostat's call for heat to enable the boiler. Once enabled, the boiler is then controlled by the boiler's internal steam pressure.

**Question:** Who is the controls contractor?

**Answer**: Honeywell. The City has a BMS maintenance contract with Honeywell. DPW will coordinate any adjustments to BMS if needed.

**Question:** Can you provide information on the new burner?

Answer: Please see attached cut sheet.

**Question:** Contractor to provide new gas train components – which components specifically?

**Answer**: The new gas train components will be provided by the City with the new power burner. Contractor will install, leak test, and startup with the boiler.

**Question**: The scope says the chimney is 50 ft. Where does that 50 ft. start?

**Answer**: Building plan elevations indicate that 50' starts at the boiler room floor and ends at the concrete chimney cap at the top of the chimney. Referenced building plans are not as-builts.

**Question**: Is the Contractor responsible for supplying safeties, low water cut-off controls, etc.?

**Answer**: Those components will be included with the new boiler and supplied by the City.

**Question**: The chimney looks like it's in very poor condition. Will it be replaced?

**Answer**: Due to the visibly poor external and unknown internal conditions of the masonry chimney, the chimney flue lining installation (Scope of Work Bullet Point 5.k.) will be replaced with the following:

Extend boiler flue horizontally through the existing window opening in the west-facing exterior wall of the boiler room. On the exterior of the building, transition the flue to vertical and extend to a code compliant height above the flat roof surface. Provide crane service, staging, etc., as needed for external flue installation.

**Question**: Are there any offsets in the chimney?

**Answer**: No. DPW verified via flexible camera. Please see attached photo(s).

#### **Questions Received via Email**

**Question**: Is there a specific Control (BMS) contractor that the city utilizes? Who is the contact? **Answer**: The City has an on-call controls contract with Honeywell. DPW will coordinate any adjustments to the BMS if needed.

**Question**: Will town permit fees be waived?

Answer: Contractor is responsible for pulling all permits, but the City will waive the permit fees.

**Question**: Are Mega press fittings acceptable?

**Answer**: According to the Somerville Inspectional Services Department, MegaPress fittings are acceptable as long as they are properly rated for the specific application (i.e. steam for steam supply/return lines, gas for natural gas, etc.).

**Question**: Is contractor required to install unions in the gas train?

**Answer**: Yes. To facilitate future gas train serviceability, the contractor is to supply/install two (2) unions, one at the beginning and one at the end of the gas train.

**Question**: Are the existing electrical disconnects being reused or will the project require an updated electrical panel?

**Answer**: The City will upgrade the boiler room breaker panel prior to the beginning of the boiler project. If new/additional boiler or BFT service disconnect switches are required, contractor will supply and install as part of their base bid.

**Question**: Is there asbestos in the boiler room?

**Answer**: Yes, asbestos testing was performed by an independent firm/lab. No ACM was found in/on the boiler or pipe insulation, but the steel flue piping was not sampled. It was installed with the existing boiler and is assumed to be negative for ACM. Please see attached report.

**Question**: Should permanent supports be installed for the boiler header?

**Answer**: The header should be properly supported according to building code and/or manufacturer recommendation and/or best practice. If existing supports are not adequate, contractor to supply and install the proper number and type of supports.

Question: There will be a considerable amount of Automatic Temperature Control Work required to meet the sequence of operation for the new steam boiler system (Safety controls, new alternating pump panel, interlock with the combustion air damper). Please identify who is the current Automatic Controls Manufacturer /Contractor for the DPW Building?

Answer: The City has a BMS maintenance contract with Honeywell. DPW will coordinate adjustments to BMS if needed.

**Question**: The scope of work requires that we obtain all required building permits from the City's Inspectional Services Department. **Please clarify if the permit Fees will be waived by the City?** 

**Answer**: The Contractor is responsible for pulling the permits, the City will waive the permit fees.

Question: At the site visit it was observed that the current combustion air intake ductwork does not have an automatic damper installed. It is still unknown if the current combustion air duct is sufficient for the new boiler system. Please provide a narrative describing what is required to bring the combustion air up to current code requirements so that all bidders are including the same scope of work?

**Answer**: The existing combustion air supply duct measures 12"x36". The new boiler is a Burnham model V1112 boiler with a new natural gas Power Flame model CR3-G-20 power burner. Boiler specifications are attached below. The power burner specifications are available here: Power Flame C3-G 20. If a larger fresh are intake is required, The City will execute a change order.

Question: The scope of work instructs the bidders to provide and install new gas train components. Typically the gas train components are furnished with the boiler / burner package (gas regulators, high/ low gas pressure switches, solenoid valve). Please clarify if these gas train components are being furnished by the City for installation by the HVAC bidders? Answer: The new gas train components will be provided by the City with the new power burner. Contractor will install, leak test, and startup with the boiler.

**Question**: The scope of work requires a new code compliant chimney flue liner. During the site visit it was observed that the top portion of the existing brick chimney is damaged and in need of repair. Lining the existing brick chimney could cause additional damage.

Will bidders be required to include the repair of the existing brick chimney (new brick, chimney cap, repointing) in their bid? An alternate scope of work would be remove the existing chimney to +/- 4 feet above the existing roof level and line the chimney with a rigid liner extending 6 ft. above the chimney top. Please advise if this is an acceptable alternate method so that all bidders are including the same scope of work?

**Answer**: Due to the visibly poor external and unknown internal conditions of the masonry chimney, the chimney flue lining installation (Scope of Work Bullet Point 5.k.) will be replaced with the following:

Extend boiler flue horizontally through the existing window opening in the west-facing exterior wall of the boiler room. On the exterior of the building, transition the flue to vertical and extend to a code compliant height above the flat roof surface. Provide crane service, staging, etc., as needed for external flue installation.

**Question**: One of the key assumptions by the city is that the existing boiler feed tank is still serviceable. There was discussion at the site walk through about possibly replacing the existing boiler feed tank. Please clarify if we are to include replacing the existing boiler feed pumps & tank? If yes, provide the Manufacturer, Model Number and performance requirements for the new boiler feed unit?

**Answer**: The DPW believes that the existing BFT is in good condition and reusable. The Contractor should bid the cost of a replacement tank as Add Alternate #1. Please see attached photo of the boiler feed tank data plate.

Question: Typically a new boiler would include the required Mass. Code safety devices for a steam boiler. Are these boiler controls, safeties and limits coming with the new boiler for installation by the HVAC bidders?

**Answer**: The required safeties, pump controls, etc., will be supplied by the City with the new boiler.

**Question**: Is a DCAMM Update Statement required to be uploaded on www.bidexpress.com? If yes, how will the Update Statement be kept confidential? The DCAMM Update Statement is not for Public Viewing and typically has a separate download tab from the public bid package documents

**Answer:** Yes a DCAMM Update Statement is required to be uploaded. Bid prices will be read in the bid opening however no bid package documents will be shared at this time. Before any public records are posted the Procurement office will make sure all confidential information is redacted I.E. Tax ID numbers and DCAMM Update statement.

Photo of DPW Boiler Room 2 Boiler Feed Tank



Photo of DPW Boiler Room 2 Boiler Feed Tank Data Plate

STERLING

NEW BERLIN

NEW BERLIN

A STERLING

NEW BERLIN

NEW BERLIN

A STERLING

NEW BERLIN

Photo of Chimney looking up from Boiler Room

## V11H Series

CAST IRON COMMERCIAL WATER OR STEAM BOILER







UP TO 85% THERMAL EFFICIENCY

> 837 TO 5733 MBH INPUT

OIL, GAS OR OIL/GAS COMBINATION

30, 50 OR 80 PSI

CAST IRON SECTIONAL DESIGN

WATER OR STEAM

TOP OR REAR VENTING

MAXIMIZE EFFICIENCY WITH SBC™ INTEGRATED BOILER CONTROL









## V11H Series cast iron commercial water or steam boiler

#### **Your Commercial Heating Solution!**

Available in twenty sizes with gross output ratings from 674 to 4763 MBH, the V11H Series is commonly used in schools, hospitals, and other large commercial applications where comfort and reliability are critical. The product meets the energy efficiency requirements of ASHRAE 90.1 with thermal efficiencies up to 85%.

Cast iron construction, ease of assembly, two venting options, and stringent testing methods make the V11H Series boiler by Burnham Commercial your commercial heating solution.

#### **American-Made Cast Iron Construction**

Burnham Commercial's unique cast iron formula has an extremely high silicon content, making it stronger and more flexible. It offers better thermal shock resistance and greater heat transfer capabilities than other cast iron products.



#### MANUFACTURED WITH QUALITY

Casting Solutions operates a state-ofthe-art foundry, in Zanesville, Ohio, ensuring quality and availability of boiler sections.

#### CAST IRON NIPPLE DIFFERENCE

V11H sections are held together using cast iron nipples, which are well known as being of the highest standard for boiler construction. Unlike gaskets used by many other boiler manufacturers, cast iron nipples are impervious to flue gases, oils, petroleum-based chemicals and other contaminants, which means fewer costly repairs and a longer lasting boiler.





#### Installation & Service Flexibility

The cast iron sectional design of the V11H boiler makes it easy to maneuver through doorways and into the boiler room. In addition to being shipped as loose sections, the boiler is available with factory-assembled sections or as a completely packaged and fire-tested unit.

#### HASSLE-FREE SECTION ASSEMBLY

V11H boiler sections have reinforced lugs that are used to assemble the sections with individual draw rods resulting in fast, strain-free assembly.



The sections can be assembled using two common tools—a 3/4" drive ratchet with a 1-1/16" deep socket and wrench. The sections are surface ground



to ensure smooth surface mating. An elastic sealant and fiberglass rope are used on all section joints for a completely sealed and pressure-tight assembly.

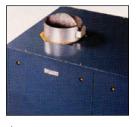
#### EXTENSIVE TESTING METHODS — ASME APPROVED

Each boiler section is hydrostatically tested at 2-1/2 times the rated working pressure at the foundry. Factory-assembled sections are tested a second time at 1-1/2 times the rated working pressure.

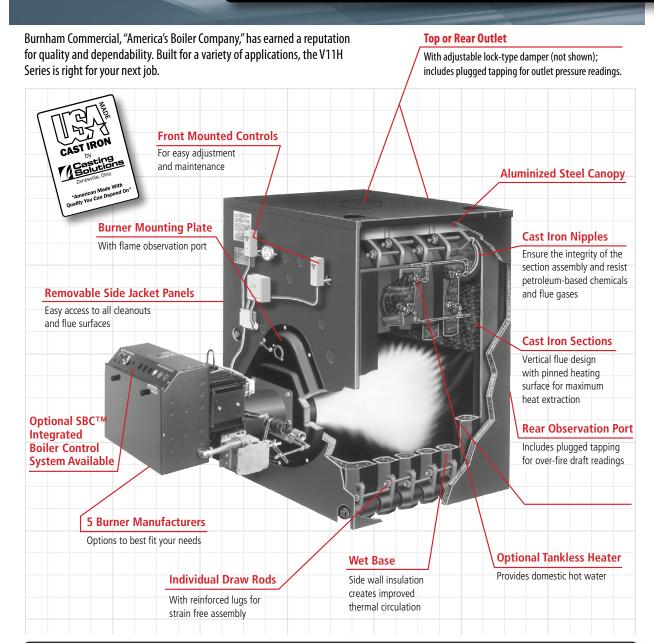
#### REAR OR TOP VENTING

As a forced draft boiler, the V11H provides optimum draft for controlled efficiency, eliminating the need for high chimneys or induced draft fans. A unique feature of the V11H boiler is that it can be vented from the rear or the top. This enables easy chimney or sidewall venting for maximum installation flexibility. Top outlet venting saves floor space and reduces installation time and materials. A plugged tapping is





provided to make flue outlet pressure readings.



|  | :  | GAS EFFI   | CIENCIES   | :   | OIL EFFI   | CIENCIES   |   |   |
|--|--|--|--|---|--|--|---|---|
| Boiler   | Water  |  | Ste  | am  | Wa   | ter  | Ste   | am  |
| Model (1)  | Combustion Efficiency  | Thermal Efficiency   | Combustion Efficiency  | Thermal Efficiency  | Combustion Efficiency  | Thermal Efficiency   | Combustion Efficiency   | Thermal Efficiency  |
| V1104H<br>V1105H<br>V1106H<br>V1107H<br>V1108H<br>V1109H<br>V1111H<br>V1112H<br>V1113H<br>V1114H<br>V1115H<br>V1116H<br>V1117H<br>V1117H<br>V1118H<br>V1119H<br>V1120H<br>V1120H<br>V1122H | 82.7%<br>82.7%<br>82.7%<br>82.7%<br>82.7%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6%<br>82.6% | 81.5%<br>81.6%<br>81.7%<br>81.8%<br>81.9%<br>82.0%<br>82.1%<br>82.2%<br>82.2%<br>82.3%<br>82.3%<br>82.3%<br>82.3%<br>82.4%<br>82.4%<br>82.4%<br>82.4%<br>82.4% | 82.5%<br>82.5%<br>82.4%<br>82.4%<br>82.33%<br>82.33%<br>82.23%<br>82.29%<br>82.29%<br>82.29%<br>82.29%<br>82.29%<br>82.19%<br>82.11%<br>82.11%<br>82.11%<br>82.11%<br>82.11%<br>82.11% | 80.5%<br>80.7%<br>80.9%<br>81.1%<br>81.3%<br>81.5%<br>81.7%<br>82.0%<br>82.0%<br>82.0%<br>81.9%<br>81.9%<br>81.8%<br>81.8%<br>81.7%<br>81.6%<br>81.6% | 85.4%<br>85.5%<br>85.5%<br>85.5%<br>85.6%<br>85.6%<br>85.7%<br>85.7%<br>85.7%<br>85.6%<br>85.6%<br>85.6%<br>85.6%<br>85.5%<br>85.5%<br>85.5% | 84.4%<br>84.5%<br>84.7%<br>84.8%<br>84.99%<br>85.0%<br>85.2%<br>85.3%<br>85.4%<br>85.4%<br>85.4%<br>85.4%<br>85.4%<br>85.4%<br>85.4%<br>85.4%<br>85.4% | 85.7%<br>85.6%<br>85.6%<br>85.6%<br>85.5%<br>85.5%<br>85.4%<br>85.3%<br>85.3%<br>85.3%<br>85.3%<br>85.3%<br>85.3%<br>85.2%<br>85.2%<br>85.2%<br>85.2% | 83.5%<br>83.7%<br>83.9%<br>84.19%<br>84.33%<br>84.5%<br>84.7%<br>84.99%<br>85.19%<br>85.09%<br>84.89%<br>84.48%<br>84.45%<br>84.45%<br>84.45%<br>84.45%<br>84.49%<br>84.3%<br>84.2%<br>84.11% |

## **V11H Series Specifications**







|                  | GROSS OUTPUTS : I=B=R NET RATING (3) : INPUTS : |                 |                 |                 |                         |                 |                         |                |                      |                     |                      |                |                           |
|------------------|---|-----------------|-----------------|-----------------|-------------------------|-----------------|-------------------------|----------------|----------------------|---------------------|----------------------|----------------|---------------------------|
| Boiler           | Wa  | ter             | Ste             | am              | Ste                     | am              | Water                   | Gas            | 0il                  | Net Firebox         | Pressure in          | Vent           | Approx. Shipping          |
| Model (1)        | Output<br>(MBH)                                 | Output<br>(BHP) | Output<br>(MBH) | Output<br>(BHP) | MBH                     | Sq. Ft.         | MBH                     | Input<br>(MBH) | Input<br>(GPH)       | Volume<br>(Cu. Ft.) | Firebox<br>(In. Wc.) | Dia.<br>(In.)  | & Lifting Weight<br>(Lb.) |
| V1104H           | 682   | 20.4            | 674             | 20.1            | 505                     | 2,106           | 593                     | 837            | 5.8                  | 7.9                 | 0.48                 | 8              | 2,105                     |
| V1105H           | 871   | 26.0            | 862             | 25.7            | 647                     | 2,694           | 758                     | 1,068          | 7.4                  | 10.6                | 0.48                 | 8              | 2,510                     |
| V1106H           | 1,085   | 32.4            | 1,074           | 32.1            | 806                     | 3,358           | 943                     | 1,328          | 9.2                  | 13.2                | 0.49                 | 8              | 2,920                     |
| V1107H           | 1,298   | 38.8            | 1,288           | 38.5            | 969                     | 4,036           | 1,129                   | 1,588          | 10.9                 | 15.9                | 0.50                 | 10             | 3,325                     |
| V1108H           | 1,536   | 45.9            | 1,525           | 45.6            | 1,166                   | 4,857           | 1,335                   | 1,876          | 12.9                 | 18.5                | 0.50                 | 10             | 3,733                     |
| V1109H           | 1,750   | 52.3            | 1,741           | 52.0            | 1,345                   | 5,604           | 1,522                   | 2,136          | 14.7                 | 21.1                | 0.48                 | 10             | 4,147                     |
| V1110H           | 1,965   | 58.7            | 1,958           | 58.5            | 1,520                   | 6,333           | 1,709                   | 2,396          | 16.5                 | 23.8                | 0.50                 | 12             | 4,557                     |
| V1111H           | 2,181   | 65.2            | 2,175           | 65.0            | 1,689                   | 7,037           | 1,896                   | 2,656          | 18.3                 | 26.5                | 0.48                 | 12             | 4,964                     |
| V1112H           | 2,373   | 70.9            | 2,370           | 70.8            | 1,840                   | 7,668           | 2,064                   | 2,887          | 19.8                 | 29.1                | 0.49                 | 12             | 5,374                     |
| V1113H           | 2,552   | 76.2            | 2,546           | 76.1            | 1,977                   | 8,236           | 2,219                   | 3,103          | 21.3                 | 31.8                | 0.47                 | 12             | 5,771                     |
| V1114H           | 2,790   | 83.3            | 2,781           | 83.1            | 2,159                   | 8,997           | 2,426                   | 3,392          | 23.3                 | 34.4                | 0.44                 | 14             | 6,184                     |
| V1115H<br>V1116H | 3,028<br>3,208                                  | 90.5<br>95.8    | 3,015<br>3,191  | 90.1<br>95.3    | 2,139<br>2,341<br>2,477 | 9,754<br>10,323 | 2,420<br>2,633<br>2,789 | 3,680<br>3,897 | 25.3<br>25.3<br>26.8 | 37.1<br>39.7        | 0.43<br>0.44         | 14<br>14<br>14 | 6,601<br>7,008            |
| V1117H           | 3,447   | 103.0           | 3,425           | 102.3           | 2,659                   | 11,081          | 2,997                   | 4,186          | 28.8                 | 42.4                | 0.46                 | 14             | 7,417                     |
| V1118H           | 3,685   | 110.1           | 3,659           | 109.3           | 2,840                   | 11,835          | 3,204                   | 4,474          | 30.8                 | 45.0                | 0.44                 | 16             | 7,823                     |
| V1119H           | 3,865   | 115.5           | 3,833           | 114.5           | 2,976                   | 12,401          | 3,361                   | 4,691          | 32.3                 | 47.7                | 0.43                 | 16             | 8,231                     |
| V1120H           | 4,104   | 122.6           | 4,066           | 121.5           | 3,157                   | 13,154          | 3,568                   | 4,979          | 34.3                 | 50.3                | 0.43                 | 16             | 8,638                     |
| V1121H           | 4,343   | 129.7           | 4,299           | 128.4           | 3,338                   | 13,908          | 3,777                   | 5,268          | 36.3                 | 53.0                | 0.44                 | 16             | 9,053                     |
| V1122H           | 4,524   | 135.1           | 4,473           | 133.6           | 3,473                   | 14,471          | 3,934                   | 5,485          | 37.8                 | 55.6                | 0.44                 | 18             | 9,456                     |
| V1123H           | 4,763   | 142.3           | 4,705           | 140.6           | 3,653                   | 15,221          | 4,142                   | 5,773          | 39.8                 | 58.3                | 0.45                 | 18             | 9,865                     |

- 1. Suffix "S" indicates steam boiler, "W" indicates water boiler. Suffix "G" indicates gas-fired, "O" indicates oil-fired and "GO" indicates combination gas/oil-fired.
- 2. Boiler ratings are based on 13% CO, on oil; 10% CO, on gas and + 1/10" water column pressure at boiler flue outlet.
- $3.\,I = B = R \,net\,ratings\,shown\,are\,based\,on\,piping\,and\,pick\,up\,allowances\,which\,vary\,from\,1.333\,to\,1.288\,for\,steam\,and\,1.15\,for\,water.$

Consult manufacturer for installations having unusual piping and pick up requirements, such as intermittent system operation, extensive piping systems, etc.

 $4. The I \! = \! B \! = \! R \ burner \ capacity \ in \ GPH \ is \ based \ on \ oil \ having \ a \ heat \ value \ of \ 140,000 \ BTU \ per \ gallon.$ 

Ratings shown above apply to altitudes up to 1000 feet for oil and 2000 feet for gas. For altitudes above those indicated, the ratings should be reduced at the rate of 4% for each 1000 feet above sea level.

Note: Maximum allowable working pressure (MAWP):

Steam: 15 PS

Water: 80 PSI (Standard relief valve provided is 50 PSI) (80 PSI/30 PSI Optional)

#### Standard Equipment

ALL BOILERS: Sections unassembled, flush insulated jacket, burner mounting plate, rear observation port cover, fire wall plates, target wall (V11H04–11H06 only),

rear flue outlet damper (top outlet optional), flue canopy, trim, and miscellaneous plugs, bushing and fitting.

STEAM TRIM: 15 PSI safety valve, L404F pressuretrol, gauge glass assembly, steam gauge.

WATER TRIM: 50 PSI safety valve. L4006A high limit, pressure temperature gauge.

**OIL BURNER:** Flange mounted flame retention oil burner furnished with 2 stage fuel unit, primary control and dual oil valves.

GAS BURNER: Flange mounted gas burner with standard controls meeting the latest UL requirements, dual gas valves, gas-electric ignition with proven gas

pilot, flame rod on JR burner, ultra violet flame detector on others, electronic programming controls and components are factory wired in a burner

mounted control panel (except JR—panel available as an option).

GAS/OIL BURNERS: Flange mounted combination gas/oil burner with standard controls meeting latest UL requirements, manually operated fuel transfer switch for dual fuel

changeover, dual gas valves and oil valves, electric ignition with proven gas pilot on both fuels (direct spark ignition of oil is optional), ultra-violet flame

detector, electronic programming controls and components are factory wired in a burner mounted control panel.

#### **Optional Equipment**

Assembled sections; completely packaged (including manual reset high limit and manual reset low water cutoff); packaged and fire-tested; top outlet flue damper; tankless heaters; side inspection tappings with brass plugs; pressure relief door; 30 PSI and 80 PSI safety relief valves; combustion and hydronic controls to meet special applications including F.M., I.R.I, and ASME CSD-1.

PLEASE CONSULT BURNHAM COMMERCIAL WEBSITE FOR BOILER DIMENSIONAL DATA, PIPING CONFIGURATIONS AND BURNER MODELS/SPECIFICATIONS.

All Burnham Commercial products are currently in compliance with the Energy Policy and Conservation Act and are registered with the Department of Energy (DOE) in accordance with Federal Register 10 CFR Parts 429, 430, & 431.

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June 16, 2025

MAIN OFFICE:

50 Salem Street, Suite 103B Lynnfield, MA 01940 (781) 213-9198

#### **BRANCH OFFICES:**

215 Roosevelt Road Weymouth, MA 02188 310 West Road Hampstead, NH 03841

www.axiomenv.com

Deb Mitrano
City of Somerville
1 Franey Road
Somerville, Massachusetts 02144

VIA EMAIL

AXIOM Project 01396.015

RE: Targeted Asbestos Inspection, DPW Building,1 Franey Road, Boiler Room, Somerville, MA

Dear Ms. Mitrano:

Axiom Partners, Inc. (AXIOM) performed a targeted survey for Asbestos-Containing Materials (ACMs) at the above referenced location. The sampling was performed on June 12, 2025, by experienced Massachusetts-licensed Asbestos Inspector Geoff Gerace (License #AI 034620). The purpose of the inspection and testing was to identify the presence or absence of ACMs in the suspect boiler materials (Targeted Survey Area") at the above referenced property.

#### 1. ASBESTOS SURVEY

Representative bulk samples of each material were collected following NESHAPs¹ protocols. Bulk samples were collected using hand tools and immediately placed in labeled containers (e.g., Whirlpak™ sample bags) which were assigned a unique sample number and sealed for submission to the laboratory for analysis.

Bulk samples were submitted to and analyzed by EMSL Analytical, Inc. (EMSL) located in Woburn, MA. EMSL is a Massachusetts-licensed asbestos bulk sample laboratory (License #AA000188). Samples were analyzed for asbestos content using EPA Method 600/R-93/116.

Materials containing greater than one percent (>1%) asbestos are regulated ACMs<sup>2</sup>. Asbestos <u>was</u> **not detected** in boiler materials sampled which are summarized in Table 1.

TABLE 1
SUMMARY OF ASBESTOS BULK SAMPLE RESULTS

| Sample Number     | Sample Description | Location     | Analytical<br>Results <sup>3</sup> | Quantity |
|-------------------|--------------------|--------------|------------------------------------|----------|
| 061225-57-01A-01C | Boiler Insulation  | Boiler       | 3 @ NAD                            | 250 SF   |
| 061225-57-02A&B   | High Temp Caulking | Boiler Ribs  | 2 @ NAD                            | 4 EA     |
| 061225-57-03A-03C | Boiler Gaskets     | Boiler Doors | 3 @ NAD                            | 3 EA     |

<sup>&</sup>lt;sup>1</sup> National Emissions Standard for Hazardous Air Pollutants

<sup>&</sup>lt;sup>2</sup> Note that Massachusetts DEP defines an ACM as ≥1% asbestos.

<sup>&</sup>lt;sup>3</sup> NAD = No Asbestos Detected, CHR=Chrysotile, NAD= No Asbestos Detected, SF= Square Feet, LF= Linear Feet

| Sample Number     | Sample Description        | Location        | Analytical<br>Results <sup>3</sup> | Quantity |
|-------------------|---------------------------|-----------------|------------------------------------|----------|
| 061225-57-04A-04C | End Cap Sealant           | Fiberglass Pipe | 3 @ NAD                            | 50 SF    |
| 061225-57-05A&B   | Insulation on Boiler Door | Boiler Interior | 2 @ NAD                            | 2 EA     |
| 061225-57-06A&B   | Debris Boiler Interior    | Boiler Interior | 2 @ NAD                            | 24 SF    |

**NOTES:** The building materials denoted above correlate to the targeted area investigated during this inspection. For the purposes of the table above, the phrase "Targeted Survey Area" refers to the definition of the targeted survey area described on page 1.

Based on bulk sample analytical results, none of the samples collected were determined to be ACMs.

The potential remains that additional suspect ACMs may be encountered. If other suspected ACMs not described herein are encountered and will be impacted by planned renovations, work should be suspended until the material(s) can be evaluated and tested by a properly qualified and licensed person.

#### 2. LIMITATIONS AND EXCLUSIONS

This NESHAPs hazardous building materials survey involved an investigation for ACMs in preparation for targeted renovation activities. Although we attempted to identify and sample all suspect building materials, the potential remains that concealed ACMs may be encountered at the site. If other suspect materials are encountered during renovations, work should be stopped until the material can be evaluated by a Massachusetts-licensed Asbestos Inspector and tested if deemed appropriate.

Please don't hesitate to contact me if you have any questions or require additional assistance.

Sincerely,

Geoff Gerace Project Manager

Attachment: Asbestos Bulk Sample Analysis Report & Chain of Custody Forms (EMSL)





**EMSL Order:** 132503318 **Customer ID:** AXIO80

**Collected Date:** 06/12/2025

Customer PO: Project ID:

Attention: Geoff Gerace Phone: (781) 213-9198

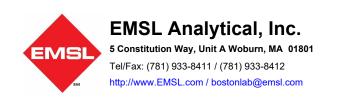
Axiom Partners, Inc. **Fax:** (781) 213-6992

Project: 01396.015 - City of Somerville - DPW - 1 Franey Road; Somerville, MA

#### Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

|   |  | <u>Asbestos</u>   |  |   |
|---|--|---|--|---|
| Description                               | Appearance   | % Fibrous   | % Non-Fibrous  | % Type  |
| Boiler Room E -<br>Boiler Insulation      | Gray<br>Fibrous  | 98% Glass   | 2% Non-fibrous (Other)   | None Detected   |
|   | Homogeneous  |   |  |   |
| Boiler Room N -<br>Boiler Insulation      | White<br>Fibrous<br>Homogeneous  | 98% Glass   | 2% Non-fibrous (Other)   | None Detected   |
| Boiler Room W -                           |  | 08% Glass   | 2% Non-fibrous (Other)   | None Detected   |
| Boiler Insulation                         | Fibrous<br>Homogeneous   | 90 % Class  | 270 Non-Hibious (Other)  | None Detected   |
| Boiler Room NE -<br>High Temp Caulking    | Red<br>Non-Fibrous   |   | 100% Non-fibrous (Other)   | None Detected   |
|   | Homogeneous  |   |  |   |
| Boiler Room NW -<br>High Temp Caulking    | Red<br>Non-Fibrous   |   | 100% Non-fibrous (Other)   | None Detected   |
| Boiler Room F                             |  | 98% Glass   | 2% Non-fibrous (Other)   | None Detected   |
| Boiler Gaskets                            | Fibrous  | 90 /0 Glass   | 270 Noti-fibious (Ottlet)  | None Detected   |
| Boiler Room Middle -                      |  | 98% Glass   | 2% Non-fibrous (Other)   | None Detected   |
| Boiler Gaskets                            | Fibrous<br>Homogeneous   | 0070 0.000  |  | .10.10 20100100   |
| Boiler Room W - End<br>Cap Sealant        | White<br>Non-Fibrous   |   | 100% Non-fibrous (Other)   | None Detected   |
| о-гр                                      | Homogeneous  |   |  |   |
| Boiler Room E - End<br>Cap Sealant        | White<br>Non-Fibrous   |   | 100% Non-fibrous (Other)   | None Detected   |
|   | Homogeneous  |   |  |   |
| Boiler Room N - End<br>Cap Sealant        | White<br>Non-Fibrous   |   | 100% Non-fibrous (Other)   | None Detected   |
|   | -  |   |  |   |
| Boiler Room N -<br>Insulation on Doors    | Fibrous  | 95% Min. Wool   | 5% Non-fibrous (Other)   | None Detected   |
|   |  |   |  |   |
| Boiler Room S -<br>Insulation on Doors    | Fibrous  | 95% Min. Wool   | 5% Non-fibrous (Other)   | None Detected   |
|   | -  |   |  |   |
| Boiler Room N -<br>Debris Boiler Interior | Non-Fibrous  |   | 100% Non-fibrous (Other)   | None Detected   |
| Pailar Daam C                             |  |   | 1000/ Non fibratio (Others)  | None Detected   |
| Boller Room S -<br>Debris Boiler Interior | Non-Fibrous  |   | 100% Non-Tibrous (Other)   | None Detected   |
|   | Boiler Room E - Boiler Insulation  Boiler Room N - Boiler Insulation  Boiler Room W - Boiler Insulation  Boiler Room NE - High Temp Caulking  Boiler Room NW - High Temp Caulking  Boiler Room E - Boiler Gaskets  Boiler Room Middle - Boiler Gaskets  Boiler Room W - End Cap Sealant  Boiler Room E - End Cap Sealant  Boiler Room N - End Cap Sealant  Boiler Room N - Insulation on Doors  Boiler Room N - Insulation on Doors  Boiler Room N - Debris Boiler Interior  Boiler Room S - | Boiler Room E - Boiler Insulation  Boiler Room N - Boiler Insulation  Boiler Room N - Boiler Insulation  Boiler Room W - Boiler Insulation  Boiler Room W - Boiler Insulation  Boiler Room NE - High Temp Caulking  Boiler Room NW - High Temp Caulking  Boiler Room E - Boiler Gaskets  Boiler Room Middle - Boiler Gaskets  Boiler Room W - End Cap Sealant  Boiler Room E - End Cap Sealant  Boiler Room N - End Cap Sealant  Boiler Room | Boiler Room E - Boiler Room N - Boiler Room N - Boiler Room W - Boiler Insulation  Boiler Room N - Boiler Room N - Boiler Room W - Boiler Insulation  Boiler Room W - Boiler Insulation  Boiler Room W - Boiler Insulation  Boiler Room NE - High Temp Caulking  Boiler Room NW - High Temp Caulking  Boiler Room E - Boiler Gaskets  Boiler Room Middle - Boiler Gaskets  Boiler Room W - End Cap Sealant  Cap Sealant  Boiler Room N - Insulation On Doors  Boiler Room S - Insulation On Doors  Boiler Room N - Boiler Room N - Boiler Room N - Boiler Room M - Boiler Room N - Boiler Room S - Boiler Room N - Boiler Room S - Boiler Room N - Boiler Room N - Boiler Room N - Boiler Room N - Boiler Room S - Boiler Room N - Boiler Room N - Boiler Room N - Boiler Room S - Boiler Room N - Boiler Room S - Boiler Room | Boiler Room E - Gray 98% Glass 2% Non-fibrous (Other) Fibrous Homogeneous  Boiler Room N - White 98% Glass 2% Non-fibrous (Other) Fibrous Homogeneous  Boiler Room W - Black/Yellow 98% Glass 2% Non-fibrous (Other) Fibrous Homogeneous  Boiler Room W - Black/Yellow 98% Glass 2% Non-fibrous (Other) Fibrous Homogeneous  Boiler Room NE - Red 100% Non-fibrous (Other) High Temp Caulking Non-Fibrous Homogeneous  Boiler Room NW - Red 100% Non-fibrous (Other) High Temp Caulking Non-Fibrous Homogeneous  Boiler Room MW - Boiler Room MW - Tan 98% Glass 2% Non-fibrous (Other) Boiler Room Middle - Tan 98% Glass 2% Non-fibrous (Other) Boiler Room Middle - Boiler Gaskets Fibrous Homogeneous  Boiler Room W - End White Non-Fibrous Homogeneous  Boiler Room W - End Non-Fibrous Homogeneous  Boiler Room B - End Non-Fibrous Homogeneous  Boiler Room N - Red Non-Fibrous Homogeneous  Boiler Room S - Red Non-Fibrous Homogeneous |

(Initial report from: 06/14/2025 11:02:32



EMSL Order: 132503318 Customer ID: AXIO80

Customer PO: Project ID:

Analyst(s)

Kevin Pine (14)

Steve Grise, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI PLM00139, VT AL998919, ME LB-0039

Initial report from: 06/14/2025 11:02:32

OrderID: 132503318

|  | A                                | sbestos Bu   | k Sample -   | Chain of C                      | ustody Form   | 1325                   | 03318    |
|--|----------------------------------|--------------|--|---------------------------------|---|------------------------|----------|
| Sampled by: Project Name: Project Site: Special Lab Instruc          | Geoff Gerac<br>City of Some      | Positive St  | UITE 103B A 01940 13.9198  nerville MA  top See Attached | Project Num  Turnaround  48 hrs | Date Collected:   | Analyze 🗆              | Other    |
| Asbestos Analysis  |                                  |              | 00/R-93/116 □<br>orte@axiomenv.                          |                                 | axiomenv.com  | ☐ TEM/NO               | В□       |
| Email Results To:  |                                  |              |  |                                 |   |                        |          |
| SAMPLE NO.   | SA                               | MPLE DESCRIP | TION   |                                 | SAMPLE LOCATION   | 1                      | COMMENTS |
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| Received:  | F Gerace  TON JUN 1              |              | Page 1 Of  | Date: Date:                     | 6-12-25   | Time:<br><br>Time:<br> | 1;00     |

#### IFB #25-77 Replacement of DPW Boiler No. 2 Mandatory Pre-Bid/Site Visit Attendance Sheet June 18, 2025, at 10:00 AM

| Company                  | Phone Number | Email Address                     | Name of Representative at Pre- Bid | Signature |
|--------------------------|--------------|-----------------------------------|------------------------------------|-----------|
| FRASER ENG               | 8572703875   | KLYSIKO FRASER<br>Engineering Con | exer Lysix                         | Alis te   |
| GT Wilkonson             | 781-844-3655 | bwilkins@grwillcinso              | Rebert Wilkier                     | Fall will |
| Boston Mechanical<br>Inc | 978-604-7484 | joe@ boston mechanical inc. com   | Joe Pastore                        | Januaghur |
| J.C. CANNSTONANS         | 417-458-2198 | P. GCON AON CONMITTED             | - PAUL SCONION                     | Shoon     |
| J.C. CANNISTRAZO         | 617 571 3875 | pchristian@cannistruso.           | PETE Sean Renea<br>CHUISTIAN       | 10        |
| 15 B 41,000              | 978594 7236  | gress o<br>15\$55\$VICES.Com      | GREG                               | Hall.     |

J.C. Cansistrano 781-392.9068 bhawerecannistrano. Bran Hawer //

### IFB #25-77 Replacement of DPW Boiler No. 2 Mandatory Pre-Bid/Site Visit Attendance Sheet June 18, 2025, at 10:00 AM

|                               |                  |                                  |                           | <u> </u>  |
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