IFB # 27-27

SOLICITATION FOR: HVAC Preventative Maintenance and Repairs

CITY OF SOMERVILLE, MASSACHUSETTS

Jake Wilson, Mayor

Procurement and Contracting Services Department
Angela M. Allen, Chief Procurement Officer

RELEASE DATE: 11/04/2026
QUESTIONS DUE: 11/17/2026 **by 2PM EST**
DUE DATE AND TIME: 12/02/2026 **by 2PM EST**
PRE-BID MEETING DATE AND TIME: 11/12/2026 **at 9 AM EST**

DELIVER TO:
City of Somerville
Procurement & Contracting Services
Attn: Logan Carroll
Procurement Manager
Lcarroll@somervillema.gov
93 Highland Avenue
Somerville, MA 02143

IFB # 27-27
HVAC Preventative Maintenance and Repairs

Key Project Information

Project Address	Various locations around Somerville, MA
Estimated Construction Cost	$3,500,000.00 for initial 16 month term
Anticipated Contract Award	12/15/2026
Date of Substantial Completion	06/30/2028
Date of Final Completion	06/30/2028 With the option for 1 12 month renewal exercisable at the sole discretion of the City
Est. Contract Commencement Date	03/01/2027
Est. Contract Completion Date	06/30/2028
Governing Bid Law	**MGL C. 149 (Vertical Construction)**
Wage Requirements	**State Prevailing Wages**
Payment Bond Requirements	**100% of Contract Value**
Performance Bond Requirements	**100% of Contract Value**
Liquidated Damages ($ per Day)	**NA**

Managing Department Information

Managing City Department	Department of Public Works
Project Manager	Matthew Bennett/Andy Rieder
Project Manager Email	Mbennett@somervillema.gov Arieder@somervillema.gov

TABLE OF CONTENTS

- **PART 1: INVITATION FOR BID DOCUMENTS**

Section 1: GENERAL INFORMATION ON BID PROCESS

1.1	General Instructions
1.2	Bid Schedule
1.3	Submission Instructions
1.4	Questions
1.5	General Terms

Section 2: RULE FOR AWARD, QUALITY REQUIREMENTS, AND PROJECT BACKGROUND

2.1	Rule For Award
2.2	Project Background
2.3	Minimum Quality Requirements

Section 3: BID PRICING

3.0	Form for General Bid
	Bid Form for Alternates (if applicable)
	Unit Price Form (if applicable)

Section 4: REQUIRED BID FORMS / BIDDERS' CHECKLIST

4.1 (***required with bid***)	Signed Cover Letter
	Somerville Living Wage Form
	Quality Requirements Form (Section 2.0)
	Certificate of Non-Collusion & Tax Compliance
	Certificate of Signature Authority
	Reference Form (or equivalent may be attached)
	5% Bid Deposit
	Prevailing / Davis Bacon Wages, Statement of Compliance Form
	DCAMM Certification and Update Statement (General Bidders > $150K/ Filed Sub-Bidders > $25K)
	OSHA Form
	Vulnerable Road Users Ordinance
	Somerville Wage Theft Ordinance
	Responsible Employer Ordinance (if applicable)
	Acknowledgement of Addenda (if applicable)
	Byrd Anti-Lobbying Certificate (federally funded contracts over $100,000)
	Signed W9
4.2 (***required post bid***)	Certificate of Good Standing (will be required of awarded Vendor; please furnish with bid if available)
	Insurance Specifications (will be required of awarded Vendor; furnish sample certificate with bid, if possible)
	Performance Bond (see specification for details)
	Statement of Management (if applicable)
	Payment Bond (if applicable, see specification for details)

- **PART 2: SAMPLE CONSTRUCTION CONTRACT / CITY's GENERAL TERMS AND CONDITIONS**
- **PART 3:TECHNICAL SPECIFICATIONS, PLAN AND DETAILS**

PART 1: INVITATION FOR BID DOCUMENTS

1.1 General Instructions

This solicitation will be publicly available on the Procurement & Contracting Services (PCS) Department webpage https://www.somervillema.gov/procurement on and after 11/04/2026 . Interested parties can also contact the PCS department during the below-noted City Hall hours of operation.

City Hall Hours of Operation:	
Monday – Wednesday	8:30 a.m. to **4:30** p.m.
Thursday	8:30 a.m. to **7:30** p.m.
Friday	8:30 a.m. to **12:30** p.m.

All Responses Must be Sealed and Delivered To:

Procurement & Contracting Services Department
City of Somerville
93 Highland Avenue
Somerville, MA 02143

It is the sole responsibility of the Offeror to ensure that the bid arrives on time at the designated place. Late bids will not be considered and will be rejected and returned.

Bid Format:

Submit one, original (1) sealed bid package; it must be marked with the solicitation title and number. Online submission procedures are described below in Section 1.3.

BIDS SUBMITTED MUST BE AN ORIGINAL.
The completion of the following forms is necessary for consideration of a potential contract award. submitting bid documents, please retain the order of documents as provided below:

1) Form for General Bid
2) Bid Form for Alternates (if applicable)
3) Unit Price Form (if applicable)
4) Somerville Living Wage Form
5) Quality Requirements Form
6) Certificate of Non-Collusion & Tax Compliance
7) Certificate of Signature Authority
8) Reference Form
9) 5% Bid Deposit
10) Prevailing / Davis Bacon Wages Statement of Compliance Form
11) OSHA Form
12) Responsible Employer Ordinance (if applicable)
13) Somerville Vulnerable Road Users Ordinance Form
14) Somerville Wage Theft Ordinance
15) Byrd Anti-Lobbying Certificate (federally funded contracts over $100,000)
16) DCAMM Certification and Update Statement (Required for 149 and 149A General Bidders if more than $150K and Filed Sub-Bidders if more than $25K)

If all required documents are not present, the bid may be deemed non-responsive and may result in disqualification of the bid unless the City determines that such failure(s) constitute(s) a minor

informality, as defined in Chapter MGL 30B.
A complete bid must also include a cover letter signed by an official authorized to bind the Offeror contractually and contain a statement that the proposal is firm for ninety (90) days. **An unsigned letter, or one signed by an individual not authorized to bind the Offeror, may be disqualified.**
The Offeror's authorized official(s) must sign all required bid forms.
The Price Form in **Section 3.0** must be completed. No substitute form will be accepted. Pricing must remain firm for the entire contract period.
All information in the Offeror's response should be clear and concise. The successful response will be incorporated into a contract as an exhibit; therefore, Offerors should not make claims to which they are not prepared to commit themselves contractually.
The successful Offeror must be an Equal Opportunity Employer.
The City of Somerville values a diverse workforce and believes it contributes to a work product and customer experience that best reflects the community in our city. Applicants are highly encouraged to include any certifications and documents that recognize the diversity of the Offeror's work force, including ownership of the offering firm/organization, executive leadership, management, and employees proposed for the work in Somerville, including diversity of sub-consultants. **Please use the supplier diversity form (see Section 4.0) with supporting documentation to share your diversity data with the City.**

1.2 Bid Schedule

Key dates for this Invitation for Bids:	
IFB Issued	11/04/2026
Deadline for Submitting Questions to IFB	11/17/2026 by **2PM EST**
Bids Due	12/02/2026 **by 2PM EST**
Anticipated Contract Award	12/15/2026
Est. Contract Commencement Date	03/01/2027
Est. Contract Completion Date	06/30/2028

Responses must be delivered by 12/02/2026 by 2PM EST to:	City of Somerville Procurement & Contracting Services Department Attn: Logan Carroll 93 Highland Avenue Somerville, MA 02143

1.3 Submission Instructions

If you submitting your bid online via Bidexpress.com , then you do not need to also submit a sealed bid package as instructed below. Email is not an acceptable method of submission of bids.

Please submit ***one sealed bid package*** with the following contents and marked in the following manner:

Contents of Sealed Bid Package	**Marked As**
Envelope 1: Sealed Bid: Shall Include (1) original and one (1) electronic copy. [Electronic copies are to be submitted on USB drives and are to be saved in Adobe Acrobat format. ("Read only" files are acceptable.)]	**To Be Marked:** IFB # 27-27 HVAC Preventative Maintenance and Repairs
Please send the complete sealed package to the attention of :	Logan Carroll Procurement Manager Procurement & Contracting Services Department Somerville City Hall 93 Highland Avenue Somerville, MA 02143
Live Bid Opening Link	Join Zoom Meeting https://us02web.zoom.us/j/85871277810?pwd=UvXl3rsd728FZYpK5a5wLgsaFZpZ0G.1 Meeting ID: 858 7127 7810 Passcode: 885326

Methods of Bid Submission

Bidders may submit bids in any of the following ways. All bids will be timestamped and must be received no later than due date and time.

1) Sealed bids can be sent to City Hall through the US Postal Service or other delivery service (e.g. FedEx, UPS).

2) BidExpress.com is an online bidding platform where bidders can submit all required documents. The fee to use this service is approximately $50.00 unless your company has a subscription with BidExpress. You can access the bid package and forms via the City of Somerville BidExpress page at: https://www.bidexpress.com/businesses/33100/home A user guide is attached for your reference.

3) For any technical assistance while submitting the online bid, please contact the BidExpress Customer support team at www.bidexpress.com. Bidders may submit bids in any of the following ways. All bids will be timestamped and must be received no later than due date and time.

Bid Format

Responses shall be prepared on standard 8.5 x 11 inch paper (charts may be landscaped but must be on 8.5 x 11 inch paper) and shall be in a legible font size (12). All pages of each response shall be appropriately numbered (and with consecutive page numbering across tabs). **In an effort to reduce waste, we discourage the use of 3-ring binders.**

Elaborate format and binding are neither necessary nor desirable.

Qualifications & Experience
The Offeror may include any additional literature and product brochures. The Quality Requirements Form (Section 2), or set of basic business standards, must be submitted with bid.

References
The Offeror shall list at least three relevant references, which the City may contact. The City of Somerville reserves the right to use ourselves as a reference. References shall include the following information:

●The name, address, telephone number, and email address of each client listed above.	
●A description of the work performed under each contract.	●The amount of the contract.
●A description of the nature of the relationship between Offeror and the customer.	
●The dates of performance.	●The volume of the work performed.

1.4 Questions

Questions are due: 11/17/2026 **by 2PM EST**

Questions concerning this solicitation must be delivered in writing to:

Logan Carroll
Procurement Manager
Somerville City Hall
Procurement & Contracting Services Department
93 Highland Avenue
Somerville, MA 02143
Or emailed to:
Lcarroll@somervillema.gov
Or faxed to:
617-625-1344

Answers will be sent via an addendum to all Offerors who have registered as bid holders. Bidders are encouraged to contact the Procurement & Contracting Services Department to register as a bid document holder to automatically be alerted as to addenda as they are issued. It is the responsibility of the Offeror to also monitor the bid portal on the City's website for any updates, addenda, etc. regarding that specific solicitation. The web address is:

https://www.somervillema.gov/procurement.

Any bidders that contact City personnel outside of the Procurement & Contracting Services Department regarding this bid may be disqualified.

1.5 General Terms

Estimated Quantities

The City of Somerville has provided estimated quantities, which will be ordered/purchased over the course of the contract period. These estimates are estimates only and not guaranteed.

Bid Signature

A response must be signed as follows: 1) if the Offeror is an individual, by her/him personally; 2) if the Offeror is a partnership, by the name of the partnership, followed by the signature of each general partner; and 3) if the Offeror is a corporation, by the authorized officer, whose signature must be attested to by the clerk/secretary of the corporation (& with corporate seal).

Time for Bid Acceptance and City Contract Requirements

The contract will be awarded within 90 days after the bid opening. The time for award may be extended for up to 45 additional days by mutual agreement between the City and the apparent lowest responsive and responsible bidder. The Offeror's submission will remain in effect for a period of 90 days from the response deadline or until it is formally withdrawn, a contract is executed, or this solicitation is canceled, whichever occurs first. The Offeror will be required to sign a standard City contract per the City's general terms included herein as Part 2.

Holidays are as follows:

New Year's Day	Martin Luther King Day	Presidents' Day	Patriots' Day
Memorial Day	Juneteenth Independence Day	Independence Day	Labor Day
Indigenous Peoples' Day	Veterans' Day	Thanksgiving Day	Thanksgiving Friday
Christmas Eve (half day)	Christmas Day		

Please visit http://www.somervillema.gov/ for the City's most recent calendar. *Under State Law, all holidays falling on Sunday must be observed on Monday.

If the awarded Offeror for their convenience desires to perform work during other than normal working hours or on other than normal work days, or if the Offeror is required to perform work at such times, the Offeror shall reimburse the City for any additional expense occasioned the City, thereby, such as, but not limited to, overtime pay for City employees, utilities service, etc. UNLESS otherwise specified in these provisions, services will be performed during normal work hours. When required services occur on holidays, work will be performed on either the previous or following work day, unless specified otherwise.

Unforeseen Office Closure

If, at the time of the scheduled bid opening, the Procurement & Contracting Services Department is closed due to uncontrolled events such as fire, snow, ice, wind, or building evacuation, the bid due date will be postponed until 2:00 p.m. on the next normal business day. Bids will be accepted until that date and time. In the event of inclement weather, the Offeror is responsible for listening to the media to determine if the City has been closed due to weather.

Changes & Addenda

If any changes are made to this solicitation, an addendum will be issued. All proposers on record as having picked up the solicitation will be alerted via email as to the posting of all addenda. The City will also post addenda on its website (https://www.somervillema.gov/procurement). No changes may be made to the solicitation documents by the Offerors without written authorization and/or an addendum from the Procurement & Contracting Services Department.

Modification or Withdrawal of Bids, Mistakes, and Minor Informalities

An Offeror may correct, modify, or withdraw a bid by written notice received by the City of Somerville prior to the time and date set for the bid opening. Bid modifications must be submitted in a sealed envelope clearly labeled "Modification

No.__" to the address listed in Section 1. Each modification must be numbered in sequence and must reference the original solicitation. After the bid opening, an Offeror may not change any provision of the bid in a manner prejudicial to the interests of the City or fair competition. Minor informalities will be waived or the proposer will be allowed to correct them. If a mistake and the intended bid are clearly evident on the face of the bid document, the mistake will be corrected to reflect the intended correct bid, and the proposer will be notified in writing; the proposer may not withdraw the bid. A proposer may withdraw a bid if a mistake is clearly evident on the face of the bid document, but the intended correct bid is not similarly evident.

Right to Cancel/Reject Bids

The City of Somerville may cancel this solicitation, or reject in whole or in part any and all bids, if the City determines that cancellation or rejection serves the best interests of the City.

Unbalanced Bids

The City reserves the right to reject unbalanced, front-loaded, and conditional bids.

Brand Name "or Equal"

Any references to any brand name or proprietary product in the specifications shall require the acceptance of an equal or better brand. The City has the right to make the final determination as to whether an alternate brand is equal to the brand specified.

Electronic Funds Transfer (EFT)

For EFT payment, the following shall be included with invoices to the point of contact:

- Contract/Order number; Contractor's name & address as stated in the contract;
- The signature (manual or electronic, as appropriate) title, and telephone number of the Offeror's representative authorized to provide sensitive information;
- Name of financial institution; Financial institution nine (9) digit routing transit number;
- Offeror's account number; Type of account, i.e., checking or saving.

Project Schedule

Bidders are instructed to note the firmness of the dates of: Substantial Completion, and Final Completion. For the purpose of meeting these deadlines, the City may be prepared to authorize extended work hours beyond those prescribed by City ordinance, to include work on Sundays with the prior permission of the City.

Contractor submission of all paperwork required for the Construction Contract, including but not limited to insurance certificates, performance and payment bonds, a certificate of good standing from the Secretary of Corporations, and signature pages shall be submitted to the Chief Procurement Officer no later than 5 working days from award of the contract.

The successful bidder shall be required to submit a preliminary construction schedule within 10 days of the established date of award of the Contract and a more detailed Gantt-type construction schedule within 15 days of the established award of the contract, which shows the dates of substantial and final completion.

Sales Tax Exemption

Materials, equipment, and supplies for this project are exempt from sales tax in accordance with M.G.L. Chapter 64H, Section 6 (d). The city will furnish the successful bidder with its sales tax exemption number.

Permit Fees **(Contractor responsible obtaining permits/City of Somerville permit fees waived)**

DPW permits to obstruct or excavate the public streets and/or sidewalks; ISD building code permits; and Traffic and Parking permits; are waived by the City of Somerville. However, license fees are not waived by the City of Somerville. The Contractor shall pay all license fees (e.g., drain layer's license fee). The City of Somerville Traffic and Parking Department must be contacted directly for all required permits. The vendor must also provide the City of Somerville Traffic and Parking Department with a traffic management plan, prior to the start of all work.

If water usage is required in the commitment of this project, the Contractor needs to contact the DPW Water Dept., and make arrangements for a water meter. There will be a charge for the water meter and the water usage.

The Contractor is responsible for obtaining EVERSOURCE work orders and for all costs and fees associated with EVERSOURCE.

Permits to excavate the public way cannot be issued until the applicant has notified the appropriate utility companies, as required by Massachusetts General Laws, Chapter 370 of the Acts of 1963. The applicant must either: 1) obtain written receipts from the affected utilities,and provide copies of same to the owner; or 2) utilize the Dig-Safe System for the required notifications, and also submit written notifications for those utilities not participating in the Dig-Safe System. Written notifications must state that utility companies have been notified and the contractor cleared to begin work.

The following utility companies must be notified in writing:		
M.B.T.A. Engineering and Maintenance Division **617-722-5454** Attn: Chief Engineer 500 Arborway Jamaica Plain, MA 02130	**M.W.R.A. Sewer Division** **617-242-6000** 100 First Avenue Charlestown Navy Yard Boston, MA 02129	**M.W.R.A. Water Division** **617-242-6000** 100 First Avenue Charlestown Navy Yard Boston, MA 02129
The following utility companies must be notified in writing or through Dig-Safe:		
Algonquin Gas Transmission Corp. **617-254-4050** Manager of Land and Public Relations 1284 Soldiers Field Road Brighton, MA 02135	**Verizon** **781-290-5154** 460 Totten Pond Road Waltham, MA 02154	**Boston Edison** **617-541-5730** Right of Way 1165 Massachusetts Avenue Dorchester, MA 02125
Boston Gas Company **617-323-9210** 201 Rivermoor Street West Roxbury, MA 02132	**EVERSOURCE** **617-497-1236, x4195** 46 Blackstone Street Somerville, MA 02139	**EVERSOURCE Steam** **617-225-4568** Attn: Supervisor of Maintenance 265 First Street Somerville, MA 02142
EVERSOURCE Gas **617-369-5591** 303 Third Street Somerville, MA 02142	**A T & T Broadband** **981-658-0400** 760 Main Street Malden, MA 01887	**Somerville Public Works Dept.** **617-625-6600, x5200** One Franey Road Somerville, MA 02145
Somerville Fire Department **617-625-6600, x8100** 266 Broadway Somerville, MA 02143	**Dig-Safe** **1-800-322-4844**	

The contractor shall have all utilities marked out along the course of this work by such means as the Engineer shall approve and shall preserve such marked locations until the work has progressed to the point where the encountered utility is fully exposed and protected as required. It shall be the contractor's responsibility to notify utilities at least 48 hours prior to the start of any excavation.

The contractor is responsible for contacting any other utilities that are not listed herein.

Rodent Control

The Contractor shall retain the services of a licensed rodent exterminator to conduct an inspection of the work and laydown areas and report on the presence of rodents and take any necessary measures to eliminate rodent populations prior to start

of work. All rodent control to be in place and approved prior to any equipment delivery or demolition.

A. Within ten (10) days after Notice to Proceed, submit to the Landscape Architect or Owners Representative a written description of rodent control measures to be used and the areas to be included.

B. Provide the names and background of the licensed rodent exterminator retained to provide any necessary rodent eradication measures prior to the start of work. The licensed rodent exterminator must be approved by the City Director of Inspectional Services.

C. Containers: Use metal or heavy-duty plastic refuse containers with tight fitting lids for disposal of all garbage, or trash associated with food. These containers shall not have opening that allow access by rodents.

Schedule of Values

Bidders do NOT need to include a Schedule of Values with their bid package. The successful bidder will be required to submit a refined and detailed schedule of values for review and approval by the design professional prior to signing the construction contract.

5% Bid Guaranty

All bids shall be accompanied by a bid bond or bank certified check or bank treasurer's check in the amount of 5% of the bid price, which shall become the property of the City of Somerville if the bid is accepted and the bidder neglects or refuses to comply with the terms of the bid.

Prevailing Wage Rate Requirements

The contractor shall pay Mass. Prevailing Wage Rates. The applicable prevailing wage rates are attached as part of this bid package and will be included in the resulting contract. Notwithstanding anything to the contrary, the City may, in its sole discretion withhold payment unless the City has in its possession payroll records that are complete, accurate, and current as of the date of said application for payment. A signed Compliance Form must be included with the bid package (form included).

a) **The Contractor shall:**
   - Pay wages at least once a week;
   - Submit payroll information on a weekly basis in a format approved by the City, numbered in numerical sequence and signed by the Contractor (including forms for weeks when the Contractor is not on the Project Site, in which case there shall be a notation to the effect "no work this payroll period" and a date anticipated for resuming work).

b) **The Contractor shall submit to the City within the first week of construction:**
   - A list of apprenticeship programs with which the Contractor is affiliated;
   - The number of apprentices that will be employed by the Contractor on the Project;
   - A list of the Contractor's employee fringe benefits;
   - A copy of each project schedule, including the anticipated commencement date for each Subcontractor; and
   - A list of each Subcontractor's suppliers and material men.

c) **The Contractor shall include language similar to the above in all subcontracts.**

DCAMM Certification

General bidders must provide documentation certifying that they are DCAMM certified in **HVAC**

Reservation of Rights

The City reserves the right to extend the deadline for submission of bids, to waive minor informalities, and to reject any and all bids, if in its sole judgment, the best interests of the City of Somerville would be served by doing so.

Maintenance Manual and As-Built Drawing Requirements

Upon Final Completion of all construction, the contractor shall submit: two complete copies of a maintenance manual, and two copies of an as-built drawing set, with two USB copies of the as-built drawings. The City will not issue the final check for retainage until the submittal and approval of the maintenance manual and as-built drawings.

1) The Maintenance Manual shall be in the form of a three ring binder, organized and tabbed into appropriate sections, and shall include the following items:
   - A complete maintenance plan with recommended maintenance schedules and procedures for all systems including: HVAC, security (card access/cameras), fire suppression, irrigation, fertilization, and water systems shut-down procedures, etc., and all other applicable systems and procedures;
   - A letter from the contractor stating the period of warranty for all parts, materials, and workmanship, from the date of Final Completion;
   - A letter from the contractor stating the period of warranty for all systems (HVAC, irrigation, fire suppression, etc.);
   - All product information, product directions, and warranties;
   - List of all materials and sizes, etc.;
   - Copies of City permits with signatures of inspectors;
   - Contact information for all subcontractors including email addresses; and,
   - A record of all submittals and dates of approvals.

2) As-Built drawings shall be a complete and accurate record that incorporates any and all changes to the construction plan set issued at the time of contract initiation. As-built drawings shall be clearly marked and annotated and shall include but not be limited to: all field changes, change orders, and supplemental drawing provided by the architect/designer.

3) The USB hard drive shall include an electronic copy of all as-built drawings.

Police Details

Unless otherwise noted in the specifications, the Contractor will be responsible for requesting and paying for all necessary police details. These costs should be incorporated into the base bid amount. If use of the public way is required for staging, parking or deliveries, the Contractor is responsible for obtaining a Street Occupancy Permit, including a Traffic Management Plan (TMP) and for the cost of all police details.

Period of Performance

The period of performance for this contract begins on or about 03/01/2027 and ends on or about 06/30/2028. If applicable, optional renewal years may be exercised by the sole discretion of the City (see cover page for anticipated contract term).

Place of Performance

All services, delivery, and other required support shall be conducted in Somerville and other locations designated by the Department point of contact. Meetings between the Vendor and City personnel shall be held at the City of Somerville, Massachusetts, unless otherwise specified.

Vendor Conduct

The Vendor's employees shall comply with all City regulations, policies, and procedures. The Vendor shall ensure that their employees present professional work attire at all times. The authorized contracting body of the City may, at his/her sole discretion, direct the Vendor to remove any Vendor employee from City facilities for misconduct or safety reasons. Such rule does not relieve the Vendor of their responsibility to provide sufficient and timely service. The City will provide the Vendor with immediate written notice for the removal of the employee. Vendors must be knowledgeable of the conflict of interest law found on the Commonwealth's website https://www.mass.gov/info-details/gl-c-268a-the-conflict-of-interest-law-as-amended-by-c-248-acts-of-2024. Vendors may be required to take the Conflict of Interest exam.

Vendor Personnel

The Vendor shall clearly state the name of the proposed project manager. All proposed staff must demonstrate the ability to carry out the specified requirements.

Confidentiality

The Vendor agrees that it will ensure that its employees and others performing services under this contract will not use or disclose any non-public information unless authorized by the City. That includes confidential reports, information, discussions, procedures, and any other data that are collected, generated or resulting from the performance of this scope of work. All documents, photocopies, computer data, and any other information of any kind collected or received by the Vendor in connection with the contract work shall be provided to the City upon request at the termination of the contract (i.e., the date on which final payment is made on the contract or at such other time as may be requested by the City or as otherwise agreed by City and the Vendor). The Vendor may not discuss the contract work in progress with any outside party, including responding to media and press inquiries, without the prior written permission of the City. In addition, the Vendor may not issue news releases or similar items regarding contract award, any subsequent contract modifications, or any other contract-related matter without the prior written approval of the City. Requests to make such disclosures should be addressed in writing to the Vendor's point of contact.

OSHA

Pursuant to M.G.L. c. 30, sec. 395 (a)(2) all employees to be employed on the project must have successfully completed a course in construction safety and health approved by OSHA and of at least 10 hours in duration. The vendor shall comply with all applicable OSHA standards, guidance, and rules and regulations relative to providing a safe working environment, in connection with the performance of its agents, servants, employees, contractors, and subcontractors under the terms of this contract.

Other Applicable Laws

In addition to applicable federal and state laws, the City has several ordinances that apply to the services requested in this contract. Such ordinances include but are not limited to: living wage ordinance, ordinance to protect vulnerable road users, responsible employer ordinance, and ordinance to protect against wage theft. Workplace safety is of paramount importance to all workers who perform services on City contracts and all bidders must certify that they will disclose any citations they may have received for OSHA violations.

Notice and Certification Pursuant to Somerville Wage Theft Ordinance

All Offerors, bidders, respondents have an affirmative duty to report to the Procurement & Contracting Services Department and provide a copy of any criminal or civil judgment, administrative citation, or final administrative determination, order, or debarment, relating to wage theft, against the bidder or any of its subcontractors entered within the five years prior to bid submission.

If you are the successful bidder, you and any of your subcontractors have an affirmative duty to report any criminal or civil judgment, administrative citation, final administrative determination, order, or debarment against the bidder or any its subcontractors while your contract with the City is in effect, within five business days of receipt.

You may not contract with the City if you have been either voluntarily or involuntarily debarred by the federal government, any agency of the Commonwealth of Massachusetts or any other state for the entire term of the debarment.

You may not use any subcontractor who has been debarred by the federal government or any state government during the period of that subcontractor's debarment.

You must post notices in accordance with M.G.L. c. 151 § 16 in a conspicuous location accessible to all of their employees in English and the primary language of the employee(s) at the particular workplace.

If not all employees would have reasonable access to the notice if posted in a single location, then you must inform the purchasing agent or other City Department of the number and location of postings in order to ensure that you provide reasonable notice to all of your employees.

As a condition of this bid, the bidder (a.k.a. Offeror, respondent) hereby certifies that neither the bidder nor any of the bidder's subcontractors have been subject to a criminal or civil judgment, administrative citation, final administrative determination, order, or debarment resulting from a violation of M.G.L. c. 149, M.G.L. c. 151, or 29 U.S.C. § 201 et seq. within five years prior to bid submission.

In the alternative, the Bidder hereby discloses a criminal or civil judgment, administrative citation, administrative determination, or debarment, within five years prior to bid submission. Included with the Bid is a copy of the same, in addition to documentation demonstrating that all damages, fines, costs, and fees have been paid.

IFB # 27-27

SECTION 2.0
RULE FOR AWARD / PROJECT INFORMATION

2.1 Rule For Award

The contract shall be awarded to the responsible and eligible Bidder submitting the lowest total price. The contract will be awarded within ninety (90) days after the bid opening. The time for award may be extended for up to 45 additional days by mutual agreement between the City and the apparent lowest responsive and responsible bidder.

2.2 Background

Project Information	
Managing City Department:	Department of Public Works
Project Manager:	Matthew Bennett/Andy Rieder
Project Manager Email:	Mbennett@somervillema.gov
Designer:	NA
Designer Contact:	NA
Project Address:	Various locations around Somerville, MA
Brief Project Description:	Labor & materials for preventative maintenance and repairs to HVAC mechanical systems at City and school buildings in the City of Somerville.
Estimated Project Cost:	$3,500,000 for initial 16 month term $6,300,000 for 28 months
Liquidated Damages	NA
Project Schedule	
Estimated Award Date:	12/15/2026
Estimated Start Date:	03/01/2027
Date of Substantial Completion:	06/30/2028
Date of Final Completion:	06/30/2028 with one (1) one-year option to renew

2.3 Minimum Quality Requirements

2.3 Minimum Quality Requirements

Quality requirements, or basic business requirements, are the minimum set of standards that an entity must meet and certify to be considered responsible and responsive. **Please complete the Quality Requirements form, below, and submit it with your completed bid.** The City of Somerville will disqualify any response that does not meet the minimum quality requirements. A "No" response to items 1 through 8, or a failure to respond to any of the following minimum standards, will result in disqualification of your bid.

QUALITY REQUIREMENTS		YES	NO
1.	Have you been in the business of providing commercial HVAC Installation, Maintenance, Repair and temperature control services for at least ten (10) years?		
2.	Are you able to provide fully licensed technicians and all transportation, tools, and any equipment required to inspect, test and repair HVAC equipment/systems? Note: The Contractor shall only use trained and properly licensed personnel who are directly employed and supervised by the Contractor unless prior approval is obtained.		
3.	Will you dedicate a minimum of five (5) full time, on-site, qualified technicians to work only on the City's systems? Do these individuals have the technical expertise to maintain the mechanical and temperature control for all the City's systems, including associated pneumatic, electric, and electronic controls?		
4.	Will dedicated service technicians be available to work on the City's systems during normal working hours, defined as 6:00 AM–4:00 PM, Monday through Saturday?		
5.	Are you able to respond within one (1) hour and begin work within two (2) hours for emergency services and within one (1) normal work day for routine services?		
6.	Are you able to maintain an engineering department staffed with three (3) full time professionals (including 1 licensed mechanical engineer) in the fields of refrigeration, boilers, pneumatic, electric, and electronic controls, as required?		
7.	Do you use work order tracking software to manage the Annual Maintenance Plan, schedule service, and report outcomes?		
8.	Can you certify that all your workers have successfully completed at least ten (10) hours of OSHA approved training in Construction Safety and Health?		
9.	Optional: Are you a Mass. Supplier Diversity Office MBE/WBE certified minority or woman owned business? Additional minority designations may be submitted by attaching supporting documentation.		

In order to provide verification of affirmative responses to items 1 through 8 under the quality requirements listed in the Quality Requirements Form, Offeror must submit written information that details the general background, experience, and qualifications of the organization. Subcontractors, if applicable, must be also included.

IFB # 27-27

SECTION 3.0
FORM FOR GENERAL BID

The undersigned proposes to furnish all labor and materials required for: HVAC Preventative Maintenance and Repairs

In accordance with the accompanying plans and specifications prepared by **Error! Reference source not found.** (**Error! Reference source not found.**) and specified below, subject to additions and deductions according to the terms of the specifications.

The bidder certifies the following bulleted statements and offers to supply and deliver the materials and services specified below in full accordance with the Contract Documents supplied by the City of Somerville

- The bids will be received at the office of the Chief Procurement Officer, Somerville City Hall, 93 Highland Avenue, Somerville, MA 02143 no later than **12/02/2026 by 2PM EST**
- If the **awarded** vendor is a Corporation a "Certificate of Good Standing" (produced by the Mass. Sec. of State) must be furnished with the resulting contract (see Section 4.0.)
- **Awarded Vendor** must comply with Living Wage requirements (see Section 4.0; only for services)
- **Awarded Vendor** must comply with all applicable laws, including but not limited to the Somerville Wage Theft Ordinance.
- **Awarded Vendor** must comply with insurance requirements as stated in Section 4.0.
- The Chief Procurement Officer reserves the right to accept or reject any or all bids and/or to waive any informalities if in her/his sole judgment it is deemed to be in the best interest of the City of Somerville.
- The following prices shall include delivery, the cost of fuel, the cost of labor, and all other charges.
- This form to be enclosed in sealed bid package.

Section A – Preventative Maintenance Services				
	Initial Term (16 months) (3/1/2027-6/30/2028)		**Renewal Term** (12 months) (7/1/2028-6/30/2029)	
	Number of Months	Fixed Monthly Fee	Number of Months	Fixed Monthly Fee
Monthly Cost of PM Program	16	$	12	$
Annual Totals: Number of Months × Fixed Monthly Fee	$		$	
Subtotal Section A: Sum of Annual Totals for both terms	$			

	Section B –Repair & Replacement Services					
Labor Category	**Initial Term** (16 months) 3/1/2027-6/30/2028			**Renewal Term** (12 months) 7/1/2028-6/30/2029		
	Est. Hours	Hourly Rate	Total Cost Hourly Rate × Est. Hours	Est. Hours	Hourly Rate	Total Cost Hourly Rate × Est. Hours
Regular Hours: Monday–Saturday, 6:00 AM–4:00 PM	2,400	$	$	1800	$	$
Emergency/After Hours: Mon.–Sat. 4:01 PM–5:59 AM; Sundays & Holidays	260	$	$	200	$	$
Annual Totals: Sum of Total Cost of all labor rates for each term	$			$		
Subtotal Section B: Sum of Annual Subtotals for both terms	$					

Section C – Parts & Materials Vendor will provide materials according to one of the following cost structures: (1) at Cost, (2) a flat percentage Discount, or (3) a flat percentage Mark-up.		
	Initial Term (16 mo.) (3/1/2027-6/30/2028)	**Renewal Term** (12 mo.) (7/1/2028-6/30/2029)
Estimated Annual Budget for Parts & Materials	$ 320,000.00	$ 250,000.00
Markup/Discount Rate	%	%
Markup/Discount Amount Est. Annual Budget × Markup/Discount Rate	$	$
Estimated Annual Totals for Supplies at Markup/Discount Est. Annual Budget **plus** Markup Amount OR **minus** Discount Amount	$	$
Subtotal Section C: Sum of Annual Totals for both terms	**$**	

Bid Grand Totals		
	Initial Term (16 months) (3/1/2027-6/30/2028)	**Renewal Term** (12 months) (7/1/2028-6/30/2029)
Annual Bid Totals: Annual Total Section A + Annual Total Section B + Annual Total Section C for each term	$	$
Bid Grand Total: Sum of Annual Bid Totals for both terms	**$**	

The proposed contract price is (total bid in figures)**:**	
$	
Total in words:	

(***If applicable***) The contract price does not include the items listed on the attached "Bid Form for Alternates;" the bidder understands that the project construction cost estimate provided by the City is inclusive of all the work described in this form.

The undersigned agrees that, if he is selected as general contractor, he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials or payment bond (as indicated in the "Key Project Information" section on the 2nd page of this bid), each of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority and each in the sum of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price; provided, however, that if there is more than one surety company, the surety companies shall be jointly and severally liable.

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 made subject to section 44A.

The undersigned further certifies under the penalties of perjury that this 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. 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.

The Undersigned Bidder certifies under the penalties of perjury that:

(1) Pursuant to M.G.L. c. 62C, §49A, to the best of the signatories knowledge and belief, that the Undersigned Bidder is in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, §19A(b); and,

(2) the Federal Employer Identification Number (EIN) of the Bidder is: --

The Undersigned Bidder certifies under penalties of perjury that the Bidder is not presently debarred from doing federal or state public construction work, that the Bidder has not had its low bid rejected by any municipality in the previous two years, except:

in which case the reasons for rejection were as follows:

The Undersigned Bidder certifies under penalties of perjury that the Bidder will comply with all applicable laws, including City of Somerville ordinances that include but are not limited to: living wage ordinance, ordinance to protect vulnerable road users, responsible employer ordinance, and ordinance to protect against wage theft.

As a condition of this bid, the bidder hereby certifies that neither the bidder nor any of the bidder's subcontractors have been subject to a criminal or civil judgment, administrative citation, final administrative determination, order, or debarment resulting from a violation of M.G.L. c. 149, M.G.L. c. 151, or 29 U.S.C. § 201 et seq. within five years prior to bid submission.

In the alternative, the Bidder hereby discloses a criminal or civil judgment, administrative citation, administrative determination, or debarment, within five years prior to bid submission. Included with the Bid is a copy of the same, in addition to documentation demonstrating that all damages, fines, costs, and fees have been paid.

The Undersigned Bidder has submitted all requested referenced information on the Reference Form.

The Undersigned Bidder understands that the contractor and subcontractors will be required to pay prevailing wages to laborers and mechanics, and that if the Undersigned's bid is significantly below the average bid, the Awarding Authority may require the Bidder to substantiate that the bid is based on payment of wages at prevailing rates.

The Undersigned Bidder certifies that it can achieve substantial and final completion by the dates notes in Section 2.2, herein, unless otherwise noted in the Notice to Proceed as delivered to the awarded vendor.

Should certain additional work be required, or should the quantities of certain classes of work be increased or decreased from those required by the Contract Documents, by authorization of the City, unit prices listed on the attached "Unit Price Form" shall at the option of the City be the basis of payment to the Contractor or credit to the City, for such increase or decrease in the work. The unit prices shall represent the exact net amount per unit to be paid the Contractor (in the case of addition or increase) or to be refunded the City (in the case of decrease). Contractually noted adjustments will be allowed for overhead, profit, insurance or other direct or indirect expenses of the Contractor or Subcontractors.

The unit prices shall include cost of fuel, all labor, materials, equipment, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the provisions of the General Conditions governing changes in the work.

Executed this day of , 20 .

Name of Company/Individual:

Address, City, State, Zip:

Tel #	**Email:**
Name and Title of Person Signing	

Signature of Authorized Individual

Please acknowledge receipt of any and all Addenda (if applicable) by signing below and including this form in your bid package. Failure to do so may subject the proposer to disqualification.

ACKNOWLEDGEMENT OF ADDENDA:
Addendum #1 ____ #2 ____ #3____ #4____ #5____ #6____ #7____ #8____ #9____ #10____

IFB # 27-27

SECTION 4.0

HVAC Preventative Maintenance and Repairs

REQUIRE BID FORMS / BIDDERS' CHECKLIST

Please ensure all documents listed on this checklist are included with your bid. Failure to do so may subject the proposer to disqualification.

Required with Sealed Bids

	Signed Cover Letter
	Form for General Bid
	Bid Form for Alternates (if applicable)
	Unit Price Form (if applicable)
	Somerville Living Wage Form
	Quality Requirements Form (Section 2.0)
	Certificate of Non-Collusion & Tax Compliance
	Certificate of Signature Authority
	Reference Form (or equivalent may be attached)
	5% Bid Deposit
	Prevailing / Davis Bacon Wages Statement of Compliance Form
	Wage Theft Certification Form
	DCAMM Certification and Update Statement - HVAC (Required of General Bidders if more than $150,000 and of Filed Sub-Bidders if more than $25,000)
	OSHA Form
	Vulnerable Road Users Ordinance
	Responsible Employer Ordinance (if applicable)
	Acknowledgement of Addenda (if applicable)
	Signed W9

Required with Contract, *Post Award*

	Certificate of Good Standing from Secretary of State (furnish with bid if available)
	Certificate of Insurance (furnish sample certificate with bid, if possible)
	Statement of Management (if applicable)
	Performance Bond (see specification for details)
	Payment Bond (if applicable, see specification for details)

SOMERVILLE LIVING WAGE ORDINANCE CERTIFICATION FORM

CITY OF SOMERVILLE CODE OF ORDINANCES SECTION 2-397 et seq*.

Instructions: This form shall be included in all Invitations for Bids and Requests for Proposals which involve the furnishing of labor, time or effort (with no end product other than reports) by vendors contracting or subcontracting with the City of Somerville, where the contract price meets or exceeds the following dollar threshold: $10,000. If the undersigned is selected, this form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract. **Complete this form and sign and date where indicated below on page 2.**

Purpose: The purpose of this form is to ensure that such vendors pay a "Living Wage" (defined below) to all covered employees (i.e., all employees except individuals in a city, state or federally funded youth program). In the case of bids, the City will award the contract to the lowest responsive and responsible bidder paying a Living Wage. In the case of RFP's, the City will select the most advantageous proposal from a responsive and responsible offeror paying a Living Wage. In neither case, however, shall the City be under any obligation to select a bid or proposal that exceeds the funds available for the contract.

Definition of "Living Wage": For this contract or subcontract, as of **7/1/2026** "Living Wage" shall be deemed to be an hourly wage of no less than **$18.85** per hour. From time to time, the Living Wage may be upwardly adjusted and amendments, if any, to the contract or subcontract may require the payment of a higher hourly rate if a higher rate is then in effect.

CERTIFICATIONS

1. The undersigned shall pay no less than the Living Wage to all covered employees who directly expend their time on the contract or subcontract with the City of Somerville.

2. The undersigned shall post a notice, (copy enclosed), to be furnished by the contracting City Department, informing covered employees of the protections and obligations provided for in the Somerville Living Wage Ordinance, and that for assistance and information, including copies of the Ordinance, employees should contact the contracting City Department. Such notice shall be posted in each location where services are performed by covered employees, in a conspicuous place where notices to employees are customarily posted.

3. The undersigned shall maintain payrolls for all covered employees and basic records relating hereto and shall preserve them for a period of three years. The records shall contain the name and address of each employee, the number of hours worked, the gross wages, a copy of the social

*Copies of the Ordinance are available upon request to the Procurement & Contracting Services Department.

Online at: https://www.somervillema.gov/departments/finance/procurement-and-contracting-services

security returns, and evidence of payment thereof and such other data as may be required by the contracting City Department from time to time.

4. The undersigned shall submit payroll records to the City upon request and, if the City receives information of possible noncompliance with the provisions the Somerville Living Wage Ordinance, the undersigned shall permit City representatives to observe work being performed at the work site, to interview employees, and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

5. The undersigned shall not fund wage increases required by the Somerville Living Wage Ordinance by reducing the health insurance benefits of any of its employees.

6. The undersigned agrees that the penalties and relief set forth in the Somerville Living Wage Ordinance shall be in addition to the rights and remedies set forth in the contract and/or subcontract.

CERTIFIED BY:

Signature: _____
(Duly Authorized Representative of Vendor)

Title: _____

Name of Vendor:_____

Date: _____

INSTRUCTIONS: PLEASE POST

NOTICE TO ALL EMPLOYEES REGARDING PAYMENT OF LIVING WAGE

Under the Somerville, Massachusetts' Living Wage Ordinance (Ordinance No. 1999-1), any person or entity who has entered into a contract with the City of Somerville is required to pay its employees who are involved in providing services to the City of Somerville no less than a "Living Wage".

The Living Wage as of **7/1/2026** is **$18.85** per hour.

For assistance and information regarding the protections and obligations provided for in the Living Wage Ordinance and/or a copy of the Living Wage Ordinance, all employees should contact the City of Somerville's Procurement & Contracting Services Department directly.

Non-Collusion Form and Tax Compliance Certification

Instructions: Complete each part of this two-part form and sign and date where indicated below.

A. NON-COLLUSION FORM

I, the undersigned, hereby certify under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person.

As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Signature: _____
(Individual Submitted Bid or Proposal)
Duly Authorized

Name of Business or Entity:_____

Date: _____

B. TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, §19A(b).

Signature: _____
(Duly Authorized Representative of Vendor)

Name of Business or Entity:_____

Social Security Number or Federal Tax ID#:_____

Date: _____

Print

Certificate of Authority
(Corporations Only)

Instructions: Complete this form and sign and date where indicated below.

1. I hereby certify that I, the undersigned, am the duly elected Clerk/Secretary of

_____.
(Insert Full Name of Corporation)

2. I hereby certify that the following individual _____
(Insert the Name of Officer who Signed the Contract and Bonds)

is the duly elected_____ of said Corporation.
(Insert the Title of the Officer in Line 2)

3. I hereby certify that on _____
(Insert Date: Must be *on or before* Date Officer Signed Contract/Bonds)

at a duly authorized meeting of the Board of Directors of said corporation, at which a quorum was present, it was voted that

_____ _____
(Insert Name of Officer from Line 2) (Insert Title of Officer from Line 2)

of this corporation be and hereby is authorized to make, enter into, execute, and deliver contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

4. **ATTEST**:
Signature: _____ ***AFFIX CORPORATE SEAL HERE***
(**Clerk or Secretary)**
Printed Name: _____

Printed Title:_____

Date: _____
(Date Must Be *on or after* Date Officer Signed Contract/Bonds)

Print

Certificate of Authority
(Limited Liability Companies Only)

Instructions: Complete this form and sign and date where indicated below.

1. I, the undersigned, being a member or manager of

_____,
(Complete Name of Limited Liability Company)

a limited liability company (LLC) hereby certify as to the contents of this form for the purpose of contracting with the City of Somerville.

2. The LLC is organized under the laws of the state of: _____.

3. The LLC is managed by **(check one)** a ☐ Manager or by its ☐ Members.

4. I hereby certify that each of the following individual(s) is:
   - a member/manager of the LLC;
   - duly authorized to execute and deliver this contract, agreement, and/or other legally binding documents relating to any contract and/or agreement on behalf of the LLC;
   - duly authorized to do and perform all acts and things necessary or appropriate to carry out the terms of this contract or agreement on behalf of the LLC; and
   - that no resolution, vote, or other document or action is necessary to establish such authority.

Name	Title

5. **Signature**:_____

Printed Name: _____

Printed Title:_____

Date: _____

Print

REFERENCE FORM

Bidder: _____

BID#/ Title: _____

Reference:_____ Contact:_____

Address:_____ Phone:_____

_____ Email:_____

Description and date(s) of supplies or services provided:_____

_____

_____

Reference:_____ Contact:_____

Address:_____ Phone:_____

_____ Email:_____

Description and date(s) of supplies or services provided:_____

_____

_____

Reference:_____ Contact:_____

Address:_____ Phone:_____

_____ Email:_____

Description and date(s) of supplies or services provided:_____

_____

_____

City of Somerville Department of Public Works
Communication Form

Name/Business Name of Contact for Service During Business Hours (M-F 7am -3pm)

_____

Please Print

Direct phone number to request service During Business Hours (M-F 7am-3pm)

(_____)_____

- **Emergency, on call service contact (if applicable)**

  Phone number after business hours, holidays, and weekends

  (_____)_____

Accounts Payable/Receivable Information

Name of Contact: Accounts processing

Name:_____

Phone:_(_____)_____

E-mail:_____

Please Print

WEEKLY PAYROLL RECORDS REPORT
& STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form is available from the Department of Labor Standards (DLS) at www.mass.gov/dols/pw and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

On a weekly basis, every contractor and subcontractor is required to submit a certified copy of their weekly payroll records to the awarding authority; this includes the payroll forms and the Statement of Compliance form. The certified payroll records must be submitted either by regular mail or by e-mail to the awarding authority. Once collected, the awarding authority is required to preserve those records for three years from the date of completion of the project.

Each such contractor and subcontractor shall furnish weekly **and** within 15 days after completion of its portion of the work, to the awarding authority directly by first-class mail or e-mail, a statement, executed by the contractor, subcontractor or by any authorized officer thereof who supervised the payment of wages, this form, accompanied by their payroll:

STATEMENT OF COMPLIANCE

_____, 20_____

I,_____,_____
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

_____ on the _____
(Contractor, subcontractor or public body) (Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

WEEKLY CERTIFIED PAYROLL REPORT AND WORKFORCE PARTICIPATION FORM

CERTIFIED PAYROLL REPORT: Pursuant to MGL c. 149, s. 27B, **every contractor and subcontractor is required to submit a true and accurate copy of their certified weekly payroll records** to the awarding authority by first-class mail or e-mail. In addition, each weekly payroll must be accompanied by a statement of compliance signed by the employer. Failure to comply may result in the commencement of a criminal action or the issuance of a civil citation.

WORKFORCE PARTICIPATION GOALS: The Commonwealth of Massachusetts has set the following goals for workforce participation for minorities and women. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The Contractor shall strive to achieve on this project the labor workforce participation goals contained herein. **The Contractor shall enter the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority below.**

Company Name:	Address:	Phone No.:		Payroll No.:
Employer's Signature:	**Title:**	**Contract No:**	**Tax Payer ID #:**	**Work Week Ending:**
Awarding Authority Name:	**Public Works Project Name:**	**Public Works Project Location:**		**Min. Wage Rate Sheet Number:**
General / Prime Contractor's Name:	**Subcontractor's Name:**	**Employer Hourly Fringe Benefit Contributions**		
		(B+C+D+E)	(A x F)	

Employee Name & Complete Address	Work Classification	Project Hours Non-Minority	Project Hours Minority	Project Hours Women	Employee is OSHA 10 certified (?)	Appr. Rate (%)	Hours Worked							Project Hours (A)	Hourly Base Wage (B)	Health & Welfare Insurance (C/)	ERISA Pension Plan (D)	Supp. Unemp. (E/)	Total Hourly Prev. Wage (F)	Project Gross Wages	Check No. (H)
							Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.	All Other Hours						Total Gross Wages	

APPRENTICESHIP DOCUMENTATION: **Please answer the questions below.**

(1) Are any apprentice employees identified above? **YES** ☐ **NO** ☐

(2) If yes, are all apprentice employees identified above currently registered with the MA DLS Division of Apprentice Standards? **YES** ☐ **NO** ☐

(3) If yes, is a copy of the apprentice ID card issued by the MA DLS Division of Apprentice Standards included for all apprentice employees identified above? **YES** ☐ **NO** ☐

Bid ref.: Contract Number:

WAGE THEFT ORDINANCE CERTIFICATION FORM

CITY OF SOMERVILLE CODE OF ORDINANCES / 2019 / ORDINANCE NO. 2019-24 et seq[*].

Instructions: **Contractors shall complete this form and sign and date where indicated below.** This form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract.

Purpose: The purpose of this form is to ensure that such vendors comply with applicable federal and state wage laws, treat their employees fairly and ensure that wage theft does not occur on their projects.

Definition of "Wage Theft": an action by an Employer, their officers, agents or employees causing an Employer not to make a timely and/or complete payment of Wages, not to pay the Minimum Wage or Prevailing Wage, or not to pay Overtime earned and owing to an Employee.

CERTIFICATIONS

Whenever the City of Somerville is procuring construction services subject to the provisions of M.G.L. c. 149, c. 149A or c. 30, §39M, the terms of the Somerville Wage Theft Ordinance shall be incorporated into the procurement documents and made part of the specifications and contract. Any person, company or corporation shall acknowledge, in writing, receipt of said requirements with their bid or proposal and/or contract.

The undersigned bidder, proposer, contractor, subcontractor and/or trade contractor hereby acknowledges receipt of the below referenced requirements and verifies under oath that they will comply with the conditions set forth in the Somerville Wage Theft Ordinance 2019-24, which shall be incorporated into any contract entered into between the City and contractor.

The contractor shall not have been found within the past five years by a court or governmental agency in violation of any law relating to providing workers compensation insurance coverage, misclassification of employees as independent contractors, payment of employer payroll taxes, employee income tax withholding, earned sick time, wage and hour laws, prompt payment laws, or prevailing wage laws.

The contractor shall maintain appropriate industrial accident insurance sufficient to provide coverage for all the employees on the project in accordance with M.G.L. c. 152 and provide documentary proof of such coverage included with the contractor's submitted bid to the inspectional services department to be maintained as a public record.

---

[*]Read entire ordinance online at: https://library.municode.com/ma/somerville/ordinances/code_of_ordinances?nodeId=1001376 or request from the Procurement & Contracting Services Department.

The contractor shall properly classify employees as employees rather than independent contractors and treat them accordingly for purposes of prevailing wages and overtime, workers compensation insurance coverage, social security taxes and state and federal income tax withholding. (M.G.L. c. 149, § 148B on employee classification).

The contractor shall comply with M.G.L. c. 151, § 1A and M.G.L. c. 149, § 148 with respect to the payment of wages.

The city contractor must make arrangements to ensure that each employee of every contractor and subcontractor of any tier entering or leaving the project individually completes the appropriate entries in a daily sign-in/out log. The sign in/out log shall include: the location of the project; current date; printed employee name; signed employee name; name of employee's employer and the time of each entry or exiting. The log shall contain a prominent notice that employees are entitled under state law to receive the prevailing wage rate for their work on the project. Such sign-in/out logs shall be provided to the city on a weekly basis with the certified payrolls and shall be a public record.

Each contractor of any tier, prior to performing any work on the project, shall sign under oath and provide to the city contractor a certification that they are not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the city.

The contractor must comply with state and, where applicable, federal prevailing wage laws. Contractor shall submit weekly certified payrolls to the City for all employees working on the contract including subcontracted workers at all tiers. Contractor shall use the current standard Massachusetts weekly certified payroll report form. Each contractor shall provide a copy of the OSHA 10 card for every employee attached to the first certified payroll they submit on which the employee appears.

Each payment requisition shall include the following certification:

I certify under oath that each payment requisition is in full compliance with all obligations forth in the Wage Theft Ordinance.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY,

Signature: _____
(Duly Authorized Representative of Contractor)

Title: _____

Name of Contractor:_____

Date: _____

Bid ref.: Contract Number:

WAGE THEFT ORDINANCE CERTIFICATION FORM

CITY OF SOMERVILLE CODE OF ORDINANCES / 2019 / ORDINANCE NO. 2019-24 et seq[*].

Instructions: **Contractors shall complete this form and sign and date where indicated below.** This form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract.

Purpose: The purpose of this form is to ensure that such vendors comply with applicable federal and state wage laws, treat their employees fairly and ensure that wage theft does not occur on their projects.

Definition of "Wage Theft": an action by an Employer, their officers, agents or employees causing an Employer not to make a timely and/or complete payment of Wages, not to pay the Minimum Wage or Prevailing Wage, or not to pay Overtime earned and owing to an Employee.

CERTIFICATIONS

Whenever the City of Somerville is procuring construction services subject to the provisions of M.G.L. c. 149, c. 149A or c. 30, §39M, the terms of the Somerville Wage Theft Ordinance shall be incorporated into the procurement documents and made part of the specifications and contract. Any person, company or corporation shall acknowledge, in writing, receipt of said requirements with their bid or proposal and/or contract.

The undersigned bidder, proposer, contractor, subcontractor and/or trade contractor hereby acknowledges receipt of the below referenced requirements and verifies under oath that they will comply with the conditions set forth in the Somerville Wage Theft Ordinance 2019-24, which shall be incorporated into any contract entered into between the City and contractor.

The contractor shall not have been found within the past five years by a court or governmental agency in violation of any law relating to providing workers compensation insurance coverage, misclassification of employees as independent contractors, payment of employer payroll taxes, employee income tax withholding, earned sick time, wage and hour laws, prompt payment laws, or prevailing wage laws.

The contractor shall maintain appropriate industrial accident insurance sufficient to provide coverage for all the employees on the project in accordance with M.G.L. c. 152 and provide documentary proof of such coverage included with the contractor's submitted bid to the inspectional services department to be maintained as a public record.

---

[*]Read entire ordinance online at: https://library.municode.com/ma/somerville/ordinances/code_of_ordinances?nodeId=1001376 or request from the Procurement & Contracting Services Department.

The contractor shall properly classify employees as employees rather than independent contractors and treat them accordingly for purposes of prevailing wages and overtime, workers compensation insurance coverage, social security taxes and state and federal income tax withholding. (M.G.L. c. 149, § 148B on employee classification).

The contractor shall comply with M.G.L. c. 151, § 1A and M.G.L. c. 149, § 148 with respect to the payment of wages.

The city contractor must make arrangements to ensure that each employee of every contractor and subcontractor of any tier entering or leaving the project individually completes the appropriate entries in a daily sign-in/out log. The sign in/out log shall include: the location of the project; current date; printed employee name; signed employee name; name of employee's employer and the time of each entry or exiting. The log shall contain a prominent notice that employees are entitled under state law to receive the prevailing wage rate for their work on the project. Such sign-in/out logs shall be provided to the city on a weekly basis with the certified payrolls and shall be a public record.

Each contractor of any tier, prior to performing any work on the project, shall sign under oath and provide to the city contractor a certification that they are not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the city.

The contractor must comply with state and, where applicable, federal prevailing wage laws. Contractor shall submit weekly certified payrolls to the City for all employees working on the contract including subcontracted workers at all tiers. Contractor shall use the current standard Massachusetts weekly certified payroll report form. Each contractor shall provide a copy of the OSHA 10 card for every employee attached to the first certified payroll they submit on which the employee appears.

Each payment requisition shall include the following certification:

I certify under oath that each payment requisition is in full compliance with all obligations forth in the Wage Theft Ordinance.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY,

Signature: _____
(Duly Authorized Representative of Contractor)

Title: _____

Name of Contractor:_____

Date: _____

OSHA GENERAL CONTRACTOR CERTIFICATION FORM

Pursuant to Chapter 306 of the Acts of 2004
An Act Relative to the Health and Safety on Construction Projects

GENERAL CONTRACTOR'S CERTIFICATION – BID FORM

I, the undersigned, hereby certify under penalties of perjury that I, and all subcontractors who are not filed sub-bidders, shall:

> (1) certify 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 a 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.

As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Signature: _____
(Individual Submitting Bid)
Duly Authorized

Name of Business or Entity:_____

Date: _____

RETURN THIS FORM WITH YOUR BID

SOMERVILLE SUPPLIER DIVERSITY CERTIFICATION FORM

Background

The City of Somerville is an equal opportunity employer and encourages businesses to apply to work with the City that are representative of the City's diverse community. In an effort to increase the opportunities for disadvantaged and small businesses within Somerville and surrounding communities, the City recognizes Massachusetts' Operational Services Division's Supplier Diversity Office certification program.

Application Process

Applicable parties may learn more about the Commonwealth's supplier diversity certification process and apply here https://www.mass.gov/supplier-diversity-office. During the certification process, which takes approximately 30 days, the SDO investigates applicant companies to make sure they meet applicable legal requirements. Under SDO regulations, the applicant firm must prove it is at least 51% owned and dominantly controlled by adult minority, women, Portuguese, or veteran principals who are U.S. citizens or lawful permanent residents. Firms also must be ongoing and independent.

Certifications

Check all those that apply:

- ☐ **Minority Business Enterprises (MBE)**
- ☐ **Women Business Enterprises (WBE)**
- ☐ **Veteran Business Enterprises (VBE)**
- ☐ **Portuguese Business Enterprises (PBE)**
- ☐ **Other _____**

The undersigned certifies that the applicant has received certification from the Massachusetts Supplier Diversity Office for the SDO category/categories listed above and has provided the City of Somerville with a copy of the SDO certification letter.

CERTIFIED BY:

Signature: _____
(Duly Authorized Representative of Vendor)

Title: _____

Name of Vendor:_____

Date: _____

SOMERVILLE ORDNINANCE TO SAFEGUARD VULNERABLE ROAD USERS
CITY OF SOMERVILLE CODE OF ORDINANCES ARTICLE VIII, SEC. 12-117 et seq.

Prospective contractors must familiarize themselves with the City of Somerville's Ordinance to Protect Vulnerable Road Users. The full text of this local law can be found here.

1. **Request for Inspection:** Inspections are conducted on Thursdays from 4pm-7pm at the Somerville Department of Public Works, located at 1 Franey Road. Each inspection takes approximately 20 minutes.
a. Any vendor covered by this Ordinance shall complete an inspection request form and email it to fleetinspections@somervillema.gov.
b. Please submit request form no later than 3pm on the Tuesday before the requested inspection date.
2. **Fee:** The fee for the initial inspection is $100. The fee for a renewal inspection (every two years) is $50.
a. Payment of the fee is due upon scheduling of the inspection. The fee can be paid via check or credit card. Checks should be made out to the City of Somerville and include the vendor's phone number.
3. **Approval:** Vehicles inspected and approved by the Fleet Division will have an inspection approval sticker affixed to the windshield of the vehicle. A copy of the inspection report and certificate of inspection shall be issued to the vendor.
a. Inspection stickers are not transferable.
b. Any major overhaul of safeguard equipment shall be required to be re-inspected.
4. **Rejection:** If a vehicle is rejected for failing to comply with any of the technical specifications outlined in the ordinance, it shall be corrected and henceforth re-inspected within 30 days at no additional fee.
a. If a second inspection results in a rejection, a fee of $50 will be required for any subsequent inspections.
b. Any vendor who fails to comply within 60 days of their first inspection may be subject to having their contract cancelled.
5. **Questions:** Please direct questions about vehicle inspections to Department of Public Works, at: fleetinspections@somervillema.gov or call 617-625-6600 ext. 5100

Acknowledgement

In accordance with Sec. 12-119 "Requirements" in the Ordinance, bidders must sign the following:
Unless certified that the Ordinance is not applicable to this contract or otherwise waived by the City, I acknowledge that my company has installed (or will install prior to commencing work for the contract) side guards, cross-over mirrors or equivalent blind spot countermeasures, convex mirrors or equivalent blind spot countermeasures, side-visible turn signals, and appropriate warning signage, in accordance with SCO Chapter 12, Article VII on all large vehicles it uses or will use within the City of Somerville in connection with any contract.

_____
Authorized Signatory's Name Date

_____
Company Name

I certify that the Ordinance does not apply to this contract for the following reason:

- ☐ Vehicles do not meet or exceed Class 3 GVWR
- ☐ Vehicles do not exceed 15 MPH
- ☐ No vehicles on project
- ☐ Other: _____

ORDINANCE REQUIREMENTS

Lateral Protective Devices (Side Guards)

- Vehicles must have device installed between the front & rear wheels to help prevent injuries to vulnerable road users, particularly from falling underneath the vehicle.



Side-Visible Turn Signals

- Vehicles must have at least one turn signal lamp on each side of the vehicle that is visible from any point to the left and right side along the full length of the vehicle.



Convex Mirrors

- Vehicles must have mirrors which enable the driver to see anything that is three feet above the road and one foot in feet of or along side of the vehicle.

Cross-Over Mirrors

- Vehicles must have mirrors that enable the driver to see anything at least three feet tall passing one foot in front of the vehicle and the area in front of the bumper where direct vision is not possible.



Safety Decals

- Vehicles must have a minimum of three reflective decals on the rear and sides.
- The decals must be "safety yellow" in color and include language or images that warn of blind spots.

COMMON QUESTIONS

What types of vehicles does this ordinance apply to? This ordinance applies to Class 3 or above vehicles with a gross vehicle weight rating exceeding 10,000 lbs., except for an ambulance, fire apparatus, low-speed vehicle with max speed under 15 mph, or agricultural tractors.

Can tool boxes be used as side guards? Yes, as long as the tool box meets all of the required measurements in the ordinance.

If I rent trucks for a job, do those vehicles need to be inspected and permitted? Yes.

Do subcontractors' trucks working on a City contract need to be inspected & permitted? Yes.

Will the City do an off-site inspection for larger fleets? Yes, depending on the availability of inspectors and the distance to the site.

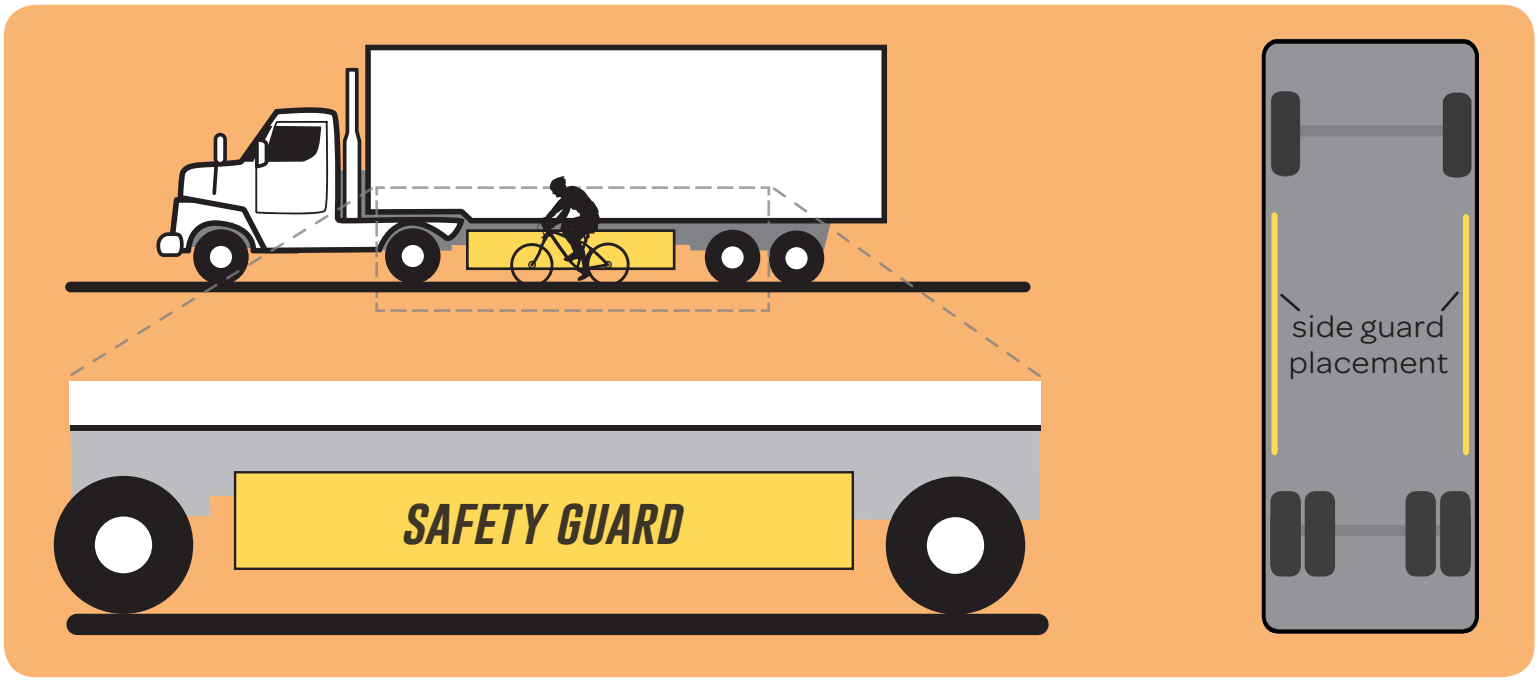
Register for an Inspection

Email inspection forms to: FleetInspections@SomervilleMA.gov

CITY OF SOMERVILLE
TRUCK SIDE GUARD ORDINANCE

Collisions with large vehicles are disproportionately likely to result in cyclist and pedestrian fatalities. The City of Somerville's Ordinance to Safeguard Vulnerable Road Users aims to prevent cyclists and pedestrians from the risk of being struck by a large vehicle because of limited driver visibility and lack of side-visible turn signals, as well as falling under the sides of large vehicles and being caught under the wheels.

The ordinance applies to large motor vehicles that are Class 3 or above with a gross vehicle weight rating (GVWR) exceeding 10,000 pounds, except for an ambulance, fire apparatus, low-speed vehicle with a maximum speed under 15 mph, or an agricultural tractor.



CITY OF SOMERVILLE
ORDINANCE NO. 2008-08
IN THE BOARD OF ALDERMEN: June 12, 2008

Be it ordained by the Board of Aldermen, in session assembled, that the Code of Ordinances of the City of Somerville, is hereby amended by adding a new Section 2-355 as follows:

Sec. 2-355. Responsible Employer Ordinance.

(a) The Board of Aldermen hereby finds and determines that the failure of certain construction firms awarded contracts funded by the City to include and enforce provisions requiring compliance with state laws governing the payment of prevailing wages, the provision of workers compensation coverage, and the proper classification of individuals as employees and not as independent contractors, as well as provisions concerning health insurance coverage and state-certified apprenticeship programs, is injurious to the life, health and happiness of individuals employed by such firms and is deleterious to the quality of life in the City where most of such individuals reside.

(b) Every contract awarded by the City under G. L. c. 149, § 44A (2) where the amount of the contract is more than one-hundred thousand dollars, and any subcontract awarded in connection with any such general contract where the amount of such subcontract is more than twenty-five thousand dollars, shall be deemed to incorporate by reference the provisions of sub-parts (1) through (5) of this subsection together with the provisions of subsections (c), (d) and (e) of this section.

1. The bidder and all subcontractors under the bidder shall comply with the requirements of G. L. c. 149 concerning the payment of prevailing wage rates to their employees;
2. The bidder and all subcontractors under the bidder must maintain and participate in a bona fide apprentice training program as defined by G. L. c. 23, §§ 11H & 11I for each apprenticeable trade or occupation represented in its workforce that is approved by the division of apprentice training of the department of labor and workforce development of the Commonwealth and must abide by the apprentice to journeymen ratio for each trade prescribed therein in the performance of the contract;
3. The bidder and all subcontractors under the bidder must offer, at its expense, hospitalization and medical benefits for all individuals employed on the project or coverage which is comparable to the hospitalization and medical benefits provided by the health and welfare plans in the applicable craft recognized by G. L. c. 149, § 26, in establishing minimum wage rates. All such plans shall meet or exceed state requirements for such plans.
4. The bidder and all subcontractors under the bidder must maintain appropriate industrial accident insurance coverage in accordance with G. L. c. 152 for all individuals employed on the project;
5. The bidder and all subcontractors under the bidder must properly classify individuals employed on the project as employees rather than independent contractors and comply with all laws concerning workers' compensation insurance coverage, unemployment taxes, social security taxes and income taxes as respects all such employees.

(c) All bidders and all subcontractors under such bidders who are awarded, or otherwise obtain, contracts from the city on projects governed by G. L. c. 149, § 44A (2), shall comply with the obligations described in sub-parts (1) through (5) of subsection (b) of this section for the entire duration of their work on the project, and an officer of each such bidder or subcontractor under the

bidder shall certify under oath and in writing on a weekly basis that they are in compliance with these obligations.

(d) Any bidder or subcontractor under the bidder who fails to comply with any of the obligations described in sub-parts (1) through (5) of subsection (b) of this section for any period of time, or fails to comply with the weekly certification obligations described in subsection (c) of this subsection shall be subject to any or all of the following sanctions:

1. temporary suspension of work on the project until compliance is obtained; or,
2. withholding by the City of payment due under the contract until compliance is obtained; or,
3. permanent removal from any further work on the project; or,
4. recovery by the city from the general contractor of 1/10 of 1% of the general contract or $ 1,000.00, whichever sum is greater, in the nature of liquidated damages assessed for each week that the general contractor is in non-compliance or, if a subcontractor is in non-compliance, the recovery by the city from the general contractor as a back charge against the subcontractor of 1/10 of 1% of the subcontract price, or $ 400.00, whichever sum is greater, in the nature of liquidated damages assessed for each week that the subcontractor is in non-compliance.

(e) In addition to these sanctions a general bidder or contractor shall be equally liable for any violation of the obligations described in sub-parts (l) through (5) of subsection (b) of this section committed by any of its subcontractors or sub bidders, excepting only those violations which arise from work performed by subcontractors with subcontracts governed by G. L. c. 149, § 44F. Any contractor or subcontractor who has been determined to have violated any of the provisions of subsections (b) or (c) of this section shall be barred from performing any work on any future contracts awarded by the City for six months for the first violation, three years for the second violation, and permanently for a third violation.

(f) The provisions of this section shall not apply to construction projects for which the low general bid was less than one-hundred thousand dollars, or to work performed pursuant to subcontracts governed by G. L. 149, § 44F where the bid for such subcontract was less than twenty-five thousand dollars.

Receipt Acknowledged _____day of _____,_____.

_____
Name of Vendor

By: _____
Name

Its: _____
Title

_____
Signature

CITY OF SOMERVILLE
Responsible Employer Ordinance

WEEKLY COMPLIANCE FORM

In accordance with the Code of Ordinances of the City of Somerville, Section 2-355, all general contractors and all subcontractors under such general contractors who are awarded, or otherwise obtain, contracts from the city on projects governed by G. L. c. 149, § 44A (2), shall comply with the obligations described in sub-parts (1) through (5) of subsection (b) of this section for the entire duration of their work on the project, and an officer of each such general contractor or subcontractor under the general contractor where the amount of such subcontract is more than $25,000.00, shall certify under oath and in writing on a weekly basis that they are in compliance with these obligations.

STATEMENT OF COMPLIANCE

Date _____

Period _____

1, _____, _____
(Print Name) (Title)

Do hereby state that _____ is in compliance with all
(Contractor or Subcontractor)

requirements of the City of Somerville's Responsible Employer Ordinance, City Ordinance Section 2-355, for the duration of all work performed on the

_____ by this general contractor or
(Building or Project)

subcontractor.

_____
(Signature)
Signed under the pains and penalties of perjury

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

		–							

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	**Signature of U.S. person** ►	**Date** ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting,* later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code,* later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships,* earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code,* later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2—The United States or any of its agencies or instrumentalities

3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4—A foreign government or any of its political subdivisions, agencies, or instrumentalities

5—A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

7—A futures commission merchant registered with the Commodity Futures Trading Commission

8—A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10—A common trust fund operated by a bank under section 584(a)

11—A financial institution

12—A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over $600 required to be reported and direct sales over $5,000[1]	Generally, exempt payees 1 through 5[2]
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code,* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account[1]
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor[2]
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee[1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner[1]
6. Sole proprietorship or disregarded entity owned by an individual	The owner[3]
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	**Give name and EIN of:**
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity[4]
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships,* earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov.* You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint.* You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.IdentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

SECRETARY OF THE COMMONWEALTH'S

CERTIFICATE OF GOOD STANDING

CERTIFICATE OF GOOD STANDING as provided by the Secretary of the Commonwealth

The **Awarded Vendor** must comply with our request for a **CURRENT "Certificate of Good Standing" provided by the Secretary of the Commonwealth's Office**

NOTE: A Certificate of Good Standing provided by the Department of Revenue will NOT be accepted. The Certificate *must* be provided by the Secretary of the Commonwealth's Office.

If you require information on how to obtain the "Certificate of Good Standing" or Certificate of Registration (Foreign Corporations) from the Commonwealth of Massachusetts, please call the

Secretary of The Commonwealth's Office at (617) 727-2850 (Press #1) located at One (1) Ashburton Place, 17 Floor, Boston, MA 02133 or you may access their web site at: http://corp.sec.state.ma.us/CorpWeb/Certificates/CertificateOrderForm.aspx

If your company is incorporated outside of Massachusetts and therefore is a "foreign corporation", but is registered to do business in Massachusetts, please comply with our request for the Certificate of Registration from the Commonwealth of Massachusetts. If your company is a foreign corporation, but is not registered to do business in Massachusetts, please provide the Certificate of Good Standing from your state of incorporation.

Please note that without the above certificate (s), the City of Somerville cannot execute your contract.

IMPORTANT NOTICE

Requests for Certificates of Good Standing by mail may take a substantial amount of time. A certificate may be obtained immediately in person at the Secretary's Office at the address above. Also, at this time, the Secretary of State's Office may not have your current annual report recorded. If this is the case, and you are therefore unable to obtain the Certificate of Good Standing, please forward a copy of your annual report filing fee check with your signed contracts. Please forward your original Certificate of Good Standing to the Purchasing Department upon receipt.

INSURANCE SPECIFICATIONS
INSURANCE REQUIREMENTS FOR AWARDED VENDOR ONLY:

Prior to commencing performance of any work or supplying materials or equipment covered by these specifications, the contractor shall furnish to the Office of the Chief Procurement Officer a Certificate of Insurance evidencing the following:

A. GENERAL LIABILITY - Comprehensive Form

Bodily Injury Liability.....….....$ One Million

Property Damage Liability.....$ One Million

B. COVERAGE FOR PAYMENT OF WORKER'S COMPENSATION BENEFIT PURSUANT TO CHAPTER 152 OF THE MASSACHUSETTS GENERAL LAWS IN THE AMOUNT AS LISTED BELOW:

WORKER'S COMPENSATION.….....$Statutory

EMPLOYERS' LIABILITY..….....…….$ Statutory

C. AUTOMOBILE LIABILITY INSURANCE AS LISTED BELOW:

BODILY INJURY LIABILITY.....$ STATUTORY

l. A contract will not be executed unless a certificate (s) of insurance evidencing above-described coverage is attached.
2. Failure to have the above-described coverage in effect during the entire period of the contract shall be deemed to be a breach of the contract.
3. All applicable insurance policies shall read:
"CITY OF SOMERVILLE" as a certificate holder and as an additional insured for general liability only along with a description of operation in the space provided on the certificate.

Certificate Should Be Made Out To:
City Of Somerville
c/o Procurement and Contracting Services Department
93 Highland Avenue
Somerville, MA 02143

Note: If your insurance expires during the life of this contract, you shall be responsible to submit a new certificate(s) covering the period of the contract. No payment will be made on a contract with an expired insurance certificate.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO-JECT ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ **(Mandatory in NH)**	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

ADD "X" HERETO CERTIFY THAT THE CITY OF SOMERVILLE IS AN ADDITIONAL INSURED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

DESCRIPTION OF PROJECT, SOLICITATION NUMBER AND THAT THE CITY OF SOMERVILLE IS A CERTIFICATE HOLDER AND ADDITIONAL INSURED

CERTIFICATE HOLDER

CERTIFICATES SHOULD BE MADE OUT TO:

CITY OF SOMERVILLE
c/o PURCHASING DEPARTMENT
93 HIGHLAND AVE
SOMERVILLE, MA 02143

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2010 ACORD CORPORATION. All rights reserved.

STATEMENT OF MANAGEMENT
For Contracts over $100,000

In accordance with M.G.L. Chapter 30, Section 39R, the undersigned successful bidder states that its system of internal accounting controls and that of its subsidiaries reasonably assure (1) that transactions are executed in accordance with management's general and specific authorization; (2) that transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets; (3) that access to assets is permitted only in accordance with management's general or specific authorization, and (4) that the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Executed this _____day of _____ , _____

On behalf of _____
(Name of Successful Bidder)

_____
(Address and telephone of Successful Bidder)

_____
(Name and title of person signing statement)

By:_____
(Signature)

CERTIFIED PUBLIC ACCOUNTANT STATEMENT

In accordance with M.G.L. 30, Section 39R I, _____
a certified public accountant, state that I have examined the above Statement of Management on internal accounting controls, and that in my opinion (1) the representations of management are consistent with the result of management's evaluation of the system of internal accounting controls; and (2) that such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the above referenced successful bidder's financial statements.

_____
(Signature)

_____

_____

_____
(Business name, address and telephone number)

PART 2: SAMPLE CONSTRUCTION CONTRACT / CITY's GENERAL TERMS AND CONDITIONS

APPENDIX D
General Conditions

GENERAL TERMS AND CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, RECONSTRUCTION, ALTERATIONS, REMODELING, OR REPAIR OF ANY PUBLIC BUILDING OR PUBLIC WORKS IN THE CITY OF SOMERVILLE

TABLE OF CONTENTS

Article 1: DEFINITIONS
Article 2: ABOUT THE CONTRACT DOCUMENTS
Article 3: THE CITY
Article 4: THE DESIGN PROFESSIONAL
Article 5: THE CONTRACTOR
Article 6: SUBCONTRACTORS
Article 7: PERFORMANCE AND PAYMENT BONDS
Article 8: INSURANCE REQUIREMENTS
Article 9: TESTS AND INSPECTIONS
Article 10: UNCOVERING AND CORRECTING WORK
Article 11: CHANGES IN THE WORK
Article 12: CHANGE IN THE CONTRACT TIME
Article 13: PAYMENTS
Article 14: SUBSTANTIAL COMPLETION
Article 15: GUARANTEES AND WARRANTIES
Article 16: CLAIMS
Article 17: EMERGENCIES
Article 18: TERMINATION OR SUSPENSION OF THE CONTRACT
Article 19: AMERICANS WITH DISABILITIES ACT
Article 20: WRITTEN NOTICE TO THE PARTIES
Article 21: MISCELLANEOUS PROVISIONS

ARTICLE 1
DEFINITIONS

1.1. In General.

1.1.1. Well-known meanings. When words or phrases that have a well-known technical, or construction industry, or trade meaning are used in the Contract Documents, such words or phrases shall be interpreted in accordance with that meaning, unless otherwise stated.

1.1.2. Capitalization. The words and terms defined in this Article are capitalized in these General Terms and Conditions of the Contract. Other capitalized words may refer to a specific document found in the Contract Documents.

1.1.3. Persons. Whenever the word person or persons is used, it includes, unless otherwise stated, entity or entities, respectively, including, but not limited to, corporations, partnerships, and joint venturers.

1.1.4. Singular and Plural. The following terms have the meanings indicated which are applicable to both the singular and the plural thereof.

1.2. Definitions.

1.2.1. Agreement. The Agreement is the written document between the **City** and the **Contractor** which is titled: Owner-Contractor Public Construction Agreement, which is the executed portion of the Contract, and which forms a part of the Contract. The Agreement also includes all documents required to be attached thereto, including, but not limited to, these general conditions, the performance bond, the labor and materials or payment bonds, certificates of insurance, and all Modifications of the Agreement.

1.2.2. Change Order. A Change Order is a document which is signed by the **Contractor**, the **Design Professional**, and the **City;** which is directed to the **Contractor;** which authorizes the **Contractor** to make an addition to, a deletion from or a revision in the Work, or an adjustment in the Contract Sum or in the Contract Time; and which is issued on or after the date of the Agreement between the **Contractor** and the **City.**

1.2.3. City. The **City** refers to the City of Somerville, which is the owner of the Project and is the public awarding authority with whom the **Contractor** has entered into the Contract and for whom the Work is to be provided.

1.2.4. Claim. A Claim is a dispute, demand, or assertion by one of the parties arising out of or relating to the Contract for which such party is seeking relief.

1.2.5. Contract. The Contract consists of all the Contract Documents. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations**,** representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification to the Contract signed by both parties.

1.2.6. Contract Documents. The Contract Documents consist of the Agreement; the notice of award of the Contract; the Notice to Proceed; the entire Project Manual; Change Orders; Construction Change Directives; the **Contractor's** Bid and all accompanying documents; and the **Design Professional's** written interpretations and clarifications issued on or after the issuance of the Notice to Proceed. Shop Drawing submittals and reports or drawings utilized by the **Design Professional** in preparing the Contract Documents are not Contract Documents.

1.2.7. Contractor. The **Contractor** is the person who is awarded the Contract for the Project herein pursuant to M.G.L. c. 149, §44A or M.G.L. c. 39, §39M; and is identified in the Agreement as such. The term "**Contractor**" is intended to include the **Contractor** as well as its authorized representative(s).

1.2.8. Contract Sum. The Contract Sum is the total amount stated in the Agreement payable by the **City** to the **Contractor** for the completion of the Work in accordance with the Contract Documents.

1.2.9. Contract Time. Unless otherwise provided, the Contract Time is the number of days allotted in the Contract Documents or the dates stated in the Agreement, including authorized adjustments, for Substantial Completion.

1.2.10. Coordination Drawings. Coordination Drawings are those drawings, which are prepared by the **Contractor** or a Subcontractor that show the exact alignment, physical locations, and configuration of the mechanical, electrical, and fire protection installations.

1.2.11. Day. The term "day" shall mean calendar day unless otherwise stated.

1.2.12. Design Professional. The **Design Professional** is the person lawfully licensed to practice architecture, engineering, or landscape architecture and has been selected by the **City** to administer the Contract. The term "**Design Professional**," while referred to in the singular, means the **Design Professional** and/or the **Design Professional's** representative.

1.2.13. Field Order. A Field Order is a written order issued by the **Design Professional** which orders minor changes in the Work, but which does not involve a change in the Contract Sum or the Contract Time.

1.2.14. Final Completion. Final Completion is the point in time when the Design Professional finds that the Work has been fully completed in accordance with the Contract Documents. Final Completion shall be no later than thirty (30) days after Substantial Completion.

1.2.15. General Requirements. General Requirements refer to Sections of Division 1 of the Specifications.

1.2.16. Modification. A Modification is a written instrument that amends the Contract after execution of the Agreement.

1.2.17. Notice to Proceed. A Notice to Proceed is a written notice given by the **City,** or the **Design Professional**, to the **Contractor** fixing the date on which the Contract Time will begin to run and on which the **Contractor** shall start to perform its obligations under the Contract Documents.

1.2.18. Plans. The Plans are the drawings which are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location, dimensions, scope, extent, and character of the Work to be furnished and performed by the **Contractor** and which have been prepared or approved by the **Design Professional**.

1.2.19. Product Data. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the **Contractor** to illustrate materials or equipment for some portion of the Work. Product Data are not considered part of the Contract Documents.

1.2.20. Project. The Project is the total Work to be provided under the Contract Documents and may be the whole or a part as indicated elsewhere in the Contract Documents and may include construction by the **City** or by separate contractors. The Project is the Work described in the invitation to bid (advertisement) and Specifications and illustrated by the Plans, including any Modifications.

1.2.21. Project Manual. The Project Manual is the entire set of bidding documents which includes, but is not limited to, the invitation to bid (advertisement), the instructions to bidders, all of the forms, the wage rates, all City and state requirements, the General Terms and Conditions of the Contract, any supplementary conditions thereto, the Plans, the Specifications, and all addenda.

1.2.22. Proposed Change Order. A Proposed Change Order is a Change Order that has been submitted by the **Contractor** to the **Design Professional,** is under review, and has not been approved by the **City**.

1.2.23. Samples. Samples are physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged. Samples are not considered part of the Contract Documents.

1.2.24. Shop Drawings. Shop Drawings are all drawings, diagrams, illustrations, schedules, and other information that are specifically prepared or assembled by or for the **Contractor** and submitted by the **Contractor** to illustrate some portion of the Work. Shop Drawings are not considered part of the Contract Documents.

1.2.25. Site. The Site is the location of the Project and of the Work.

1.2.26. Specifications. Specifications are those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

1.2.27. Subcontractor. A Subcontractor is a person who contracts directly with the **Contractor**, unless otherwise stated.

1.2.28. Submittals. Submittals are those Shop Drawings, Product Data, Samples, or any other required document that are provided to the Design Professional for review and approval.

1.2.29. Substantial Completion. Substantial Completion means that the Work has been completed and the Site or the facility is opened for full and intended public use, except for minor incomplete or unsatisfactory items that do not materially impair the usefulness of the Work. The **Design Professional** shall decide what constitutes "minor," "incomplete," "unsatisfactory," and "materially" and the **Design Professional's** decision shall be final.

1.2.30. Sub-subcontractor. A Sub-subcontractor is a person who has contracted directly with a Subcontractor.

1.2.31. Supplier. A Supplier is a manufacturer, fabricator, distributor, material person, or vendor having a direct contract with the Contractor or with any Subcontractor to furnish materials or equipment to be incorporated into the Work by the Contractor or any Subcontractor.

1.2.32. Work. Work refers to the services and the entire completed construction or the various separately identifiable parts thereof required by the Contract Documents, including all labor, materials, and equipment furnished, furnished and incorporated into the Project, or to be provided by the **Contractor** to fulfill the **Contractor's** obligations. The Work may constitute the whole or a part of the Project.

1.2.33. Construction Change Directive. A **Construction Change** Directive is a written directive to the **Contractor** ordering an addition to, a deletion from, or a revision to the Work issued on or after the date of the Agreement, signed by the **City**, and recommended by the **Design Professional**.

ARTICLE 2

ABOUT THE CONTRACT DOCUMENTS

2.1. Priority;/Conflict.

2.1.1. Priority Among Contract Documents. In the event of conflict among the Contract Documents, the Contract Documents shall be construed according to the following priorities:

Highest Priority: Modifications
Second Priority: Agreement
Third Priority: Addenda-later date to take precedence
Fourth Priority: Supplementary General Conditions
Fifth Priority: General Conditions
Sixth Priority: Plans and Specifications

2.1.1.1. If there is a conflict between the Plans and Specifications, the figured dimensions shall govern over the scaled dimensions. Detailed Plans shall govern over the general Plans. Larger scale Plans shall take precedence over smaller scale Plans. Plans shall govern over Shop Drawings. Whenever notes, specifications, dimensions, details, or schedules in the Specifications or in the Plans, or between the Specifications and the Plans, or in all other instances not specifically noted above, the **Contractor** shall provide, unless otherwise directed by a Modification of the Contract, the better quality or greater quantity of Work at no increase in the Contract Sum or in the Contract Time.

2.1.1.2. Compliance with these priority conditions shall not justify any changes in the Work or any increase in the Contract Sum or Contract Time, unless any such compliance results in Work that may not be reasonably inferred from the Contract Documents as being required to produce the intended result as determined by the **Design Professional**.

2.1.2. Review of the Contract Documents and Field Conditions and Discovery of Conflict, Error, Ambiguity, or Discrepancy. Before starting the Work, and during the progress thereof, the **Contractor** shall carefully study and compare the Contract Documents with each other and with the information furnished by the **City** pursuant to Article 3 and shall at once report to the **Design Professional** any error, inconsistency, or omission the **Contractor** may discover. Any necessary change shall be ordered as provided in Article 11, subject to the requirements of any other provisions of the Contract Documents. The **Contractor** shall not proceed with the Work affected thereby (except in an emergency) until a Modification has been issued. If the **Contractor** proceeds with the Work having discovered such errors, inconsistencies, or omissions contrary to the provisions contained herein, or if by reasonable study of the Contract Documents the **Contractor** could have discovered such, the **Contractor** shall bear all costs arising therefrom. The **Contractor** shall be liable to the **City** for failure to report any conflict, error, ambiguity, or discrepancy of which it knew or should have known.

2.1.3. Field Measurements. The **Contractor** shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the **Contractor** with the Contract Documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the **Design Professional** at once.

2.1.4. Statutory Provisions. The **City** and the **Contractor** recognize that other rights duties and obligations with respect to public construction contracts are provided for by statute, notwithstanding the fact that they may not be provided for in the Contract Documents. In case of conflict between the statutory provisions and other provisions of the Contract Documents and the provisions of any applicable statute, the statutory provisions shall govern.

2.1.5. Voided or Unlawful Provisions. In the event any provision in the Contract is voided or deemed unlawful, such provision shall be deleted without affecting the remainder of the Contract.

2.2. Execution.

2.2.1. Execution of the Agreement by the **Contractor** is a representation that the **Contractor** has visited the Site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

2.3. Intent.

2.3.1. Entire Agreement. The Contract Documents comprise the entire agreement between the **City** and the **Contractor** concerning the Work**.** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the **Contractor**. The Contract Documents are complementary; what is required by one shall be as binding as if required by all. Performance by the **Contractor** shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results. All Work mentioned or indicated in the Contract Documents shall be performed by the **Contractor** as part of this Contract unless it is specifically indicated in the Contract Documents that such Work is to be done by others.

2.3.2. Statutory Provisions. Each and every provision of law, code, and regulation, required by law to be inserted

in these Contract Documents shall be deemed to be inserted herein, and they shall be read and enforced as though it were included herein, and if through mistake or otherwise, any such provision is not inserted, or if not correctly inserted, then upon the application of either party, the Contract Documents shall forthwith be physically amended to make such insertion.

2.3.3. Functionally Complete Project. It is the intent of the Contract Documents to describe a functionally complete Project. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the **Contractor**. Any Work, materials, or equipment that may be reasonably inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed by the **Contractor** whether or not specifically called for in the Contract Documents.

2.3.4. Indications or Notations. All indications or notations which apply to one of a number of similar situations, materials, or processes shall be deemed to apply to all such situations, materials, or processes wherever they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.

2.3.5. Standards or Quality of Materials or Workmanship. Where no explicit quality or standards for materials or workmanship are established for Work, such Work is to be of good quality for the intended use and consistent with the quality of the surrounding Work and of the construction of the Project generally.

2.3.6. Manufactured Products. All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.

2.3.7. Mechanical, Electrical, and Fire Protection Plans. The mechanical, electrical, and fire protection Plans are diagrammatic only and are not intended to show the alignment, physical locations, or configurations of such Work. Such Work shall be installed without additional cost to the **City** to clear all obstructions, permit proper clearances for the Work of other trades, and present an orderly appearance where exposed. Prior to beginning such Work, the **Contractor** shall prepare Coordination Drawings and demonstrate to the **Design Professional's** satisfaction that the installations will comply with the preceding sentence. The **Contractor** shall be solely liable and responsible for any costs and/or delays resulting from the **Contractor's** failure to prepare such Coordination Drawings.

2.3.8. Locations of Fixtures and Outlets. Exact locations of fixtures and outlets shall be obtained from the **Design Professional** as provided in Article 5 before the Work is roughed in. Work installed without such information from the **Design Professional** shall be relocated at the **Contractor's** expense.

2.3.9. Tests. When test boring or soil test information are included with the Contract Documents or otherwise made available to the **Contractor** and such test boring or soil test information was obtained by the **City** for use by the **Design Professional** in the design of the Project or Work, the **City** does not hold out such information to the **Contractor** as an accurate or approximate indication of subsurface conditions, and no claim for extra cost of extension of time resulting from a reliance by the **Contractor** on such information shall be allowed except as otherwise provided herein. Any such reports are not part of the Contract Documents.

2.3.10. Joining Work. Where the Work is to fit with existing conditions or work to be performed by others, the **Contractor** shall fully and completely join the Work with such conditions or work, unless otherwise specified.

2.4. Organization.

2.4.1. Except as provided in M.G.L. c. 149, §44F, the organization of the Specifications into divisions, sections, and articles, and the arrangement of Plans shall not control the **Contractor** in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

2.5. References.

2.5.1. Where codes, manuals, specifications, standards, requirements and publications of public and private bodies are referred to in the Contract Documents whether specifically or by implication, references shall be understood to be to the latest revision prior to the date of receiving bids, except where otherwise indicated. Where statutes are referred to in the Contract Documents whether specifically or by implication, references shall be understood to be to the latest revision.

2.5.2. References herein to particular paragraphs or Articles are solely to facilitate finding additional information with regard to the specific matters and are not to be construed in any way as limiting the possible paragraphs and Articles in which such matters may be found elsewhere in this document.

2.6. Reuse of Design Professional's Written Instruments.

2.6.1. Neither the **Contractor** nor any Subcontractor or Supplier shall have or acquire any title to or ownership rights in any of the Plans, Specifications, or other documents prepared by the **Design Professional** and shall not reuse any of such Plans, Specifications, or other documents without prior written consent of the **City** and the **Design Professional**.

2.7. Written Material of the Contractor.

2.7.1. All written material prepared or collected by the **Contractor** in the course of completing the Work shall be the exclusive property of the **City** and shall not be used by the **Contractor** for any purpose other than the purpose of this Contract.

2.8. Modifying Words.

2.8.1. In the interest of simplicity, modifying words such as "all" and "any" may be omitted, but the fact that such words may be absent from one sentence and appear in another is not intended to affect the interpretation of either statement.

2.9. Use of Certain Words and Terms.

2.9.1. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the **City** or of the **Design Professional** as to the Work, it is intended that such requirement, direction, review, or judgment will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise).

2.9.2. The use of any such term or adjective shall not be effective to change the duties and responsibilities of the **City** or the **Design Professional** from those assigned in the Contract Documents or to assign any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of the Contract Documents.

2.9.3. When the words "Contractor," "Subcontractor," Sub-subcontractor," and "Supplier" are used, they are intended to include their employees and agents, unless otherwise specified.

2.10. Modification of the Contract Documents.

2.10.1. Major Modifications. Major Modifications may affect the Contract Sum or the Contract Time. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways, all of which must contain a written endorsement by the **City**:

2.10.1.1. a formal written amendment;
2.10.1.2. a Change Order;
2.10.1.3. a **Construction Change** Directive; or
2.10.1.4. the **Design Professional's** written interpretation, clarification, or decision.

2.10.2. Minor Modifications. Minor modifications do not affect the Contract Sum or the Contract Time. The requirements of the Contract Documents may be supplemented and minor variations and deviations of the Work may be authorized in one or more of the following ways:

2.10.2.1. a Field Order; or
2.10.2.2. the **Design Professional's** approval of a Shop Drawing or Sample.

ARTICLE 3
THE CITY

3.1. Signatory.

3.1.1. All documents which require a signature or an endorsement by the **City** must be signed by the Mayor in order to be deemed ratified by the **City**.

3.2. Requirements to Provide Documents.

3.2.1. To the extent they are available, the **City** shall furnish surveys describing physical characteristics, legal limitations, and utility locations for the site of the Project, and a legal description of the Site.

3.2.2. The **City** shall obtain and pay for necessary approvals, easements, assessments, and charges that are customarily secured prior to the execution of the Contract.

3.2.3. The **City** shall furnish information or services required of the **City** hereunder with reasonable promptness after receipt from the **Contractor** of a written request for such information or services.

3.2.4. The **City** shall provide the **Contractor**, at no charge, such copies of the Project Manual as are reasonably necessary for the execution of the Work.

3.3. Clerk of the Works.

3.3.1. The **City** may engage a Clerk of the Works for this Project, in which case the **City** shall, upon request of the **Contractor**, provide the **Contractor** with a written statement of the duties, responsibilities, and limitations of authority of such Clerk of the Works. Except as expressly set forth in such written statement, the Clerk of the Works shall have no authority to approve Work, to approve Change Orders, or to exercise any of the power and authority of the **City** or the **Design Professional**. The Clerk of the Works shall observe the **Contractor's** operations and construction activities for compliance with the Plans and Specifications. The Clerk of the Works shall have access to all areas of the Project at all times. The **Contractor** shall fully cooperate with the Clerk of the Works in the performance of the Clerk's duties.

3.4. City's Right to Perform Construction and to Award Separate Contracts.

3.4.1. The **City** reserves the right to perform construction or operations at the Site with its own forces or others. If the **Contractor** claims that a delay or additional cost is involved because of such action by the **City**, the **Contractor** shall make such Claim as provided elsewhere in the Contract Documents.

3.4.2. When the separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "**Contractor**" in the Contract Documents in each case shall mean the **Contractor** who executes each separate City-Contractor Agreement.

3.4.3. The **City** shall provide for coordination of the activities of the **City's** own forces and of each separate contractor with the Work of the **Contractor**, who shall cooperate with them. The **Contractor** shall afford each other person access to the Site and shall properly coordinate its Work with that of the persons performing other work. The **Contractor** shall participate with other separate contractors and the **City** in reviewing their construction schedules when directed to do so. The **Contractor** shall make any revisions to the construction schedules deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the **Contractor**, separate contractors, and the **City** until subsequently revised.

3.5. Limitations on the City's Responsibilities.

3.5.1. The **City** shall not supervise, direct, or have control or authority over, nor be responsible for the **Contractor's** means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, or for any failure of the **Contractor** to comply with laws, codes and regulations applicable to the furnishing or performance of the Work. The **City** will not be responsible for the **Contractor's** failure to perform or furnish the Work in accordance with the Contract Documents. The **City** is not responsible for the acts or omissions of the **Contractor**, any Subcontractor, Supplier, or anyone for whose acts the **Contractor**, any Subcontractor or Suppliers may be liable.

3.5.2. The **City's** authority to review any of the **Contractor's** progress schedules, or its decision to raise or not to raise any objections about such schedules shall not impose on the **City** any responsibility for the timing, planning, scheduling, or execution of the Work, nor in any way give rise to any duty or responsibility on the part of the **City** to exercise this authority for the benefit of the **Contractor**, any Subcontractor or Supplier or any other party.

3.5.3. The **City's** decision to raise or not to raise objections with regard to any aspects of the **Contractor's** insurance shall in no way give rise to any duty or responsibility on the part of the **City** to or for the benefit of the **Contractor**, any Subcontractor, any Supplier, or any other party.

3.6. Reservation of Rights.

3.6.1. The **City** reserves the right to correct at any time any error in any progress payment that may have been made.

3.6.2. Should defective Work be discovered subsequent to final payment, the **City** reserves the right to make a claim and recover all costs and professional fees associated therewith, including the cost of removing and/or replacing the defective Work.

3.7. Waivers.

3.7.1. All waivers by the **City** are valid only to the extent that they are signed by the **City**. Any such waivers pertain only to the specific matter contained in the waiver and not to any similar, subsequent matters.

ARTICLE 4
THE DESIGN PROFESSIONAL

4.1. City's Representative.

4.1.1. The **Design Professional** is the **City's** representative (1) during construction, (2) until final payment is due, and (3) with the **City's** concurrence, from time to time during the correction period described in Article 10. The **Design Professional** will advise and consult with the **City**. The **Design Professional** will have authority to act on behalf of the **City** only to the extent provided in the Contract Documents, unless otherwise modified by a written instrument in accordance with other provisions of the Contract.

4.1.2. The duties, responsibilities, and the limitations of authority of the **Design Professional** as the **City's** representative during construction are set forth in the Contract Documents and shall not be extended without the written consent of the **City** and the **Design Professional**.

4.2. Administration of the Contract.

4.2.1. The **Design Professional** will provide administration of the Contract as described in the Contract Documents, unless the **City** has engaged a construction manager.

4.3. Visits to the Site.

4.3.1. The **Design Professional** will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the **Design Professional** will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of on-site observations as an architect, engineer, or landscape architect, the **Design Professional** will keep the **City** informed of progress of the Work in writing and will endeavor to guard the **City** against defects and deficiencies in the Work.

4.4. Communications Facilitating Contract Administration.

4.4.1. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the **City** and the **Contractor** shall endeavor to communicate through the **Design Professional**. Communications by and with the **Design Professional's** consultants shall be through the **Design Professional**. Communications by and with Subcontractors and Suppliers shall be through the **Contractor**. Communications by and with **City** employees and separate contractors shall be through the **City**.

4.4.2. When it deems it necessary or expedient, the **City** may communicate directly with the **Contractor**, any Subcontractors, Suppliers, or consultants.

4.5. Certification of Applications for Payment.

4.5.1. Based on the **Design Professional's** observations and evaluations of the **Contractor's** applications for payment, the **Design Professional** will review and certify the amounts due the **Contractor** and will issue certificates for payment in such amounts.

4.6. Rejection of Work.

4.6.1. The **Design Professional** will have authority to reject or disapprove Work (1) that does not conform to the Contract Documents; (2) that the **Design Professional** believes to be defective; and (3) that the **Design Professional** believes will not produce a completed Project conforming to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Whenever the **Design Professional** considers it necessary or advisable for implementation of the intent of the Contract Documents, the **Design Professional** will have authority to require additional inspection or testing of the Work in accordance with Article 9, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the **Design Professional** nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the **Design Professional** to the **Contractor**, Subcontractors, Suppliers, or other persons performing portions of the Work.

4.7. Review of Submittals.

4.7.1. The **Design Professional** will review or take other appropriate action upon the **Contractor's** submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents and only to the extent that the **Design Professional** believes desirable to protect the **City's** interest. The **Design Professional's** action will be taken with reasonable promptness, while allowing sufficient time in the **Design Professional's** professional judgment to permit adequate review, taking into account the

time periods set forth in the latest schedule prepared by the **Contractor** and approved by the **Design Professional**. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the **Contractor** as required by the Contract Documents. The **Design Professional's** review of the **Contractor's** submittals shall not relieve the **Contractor** of the obligations under Article 5. The **Design Professional's** review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The **Design Professional's** approval of a specific item shall not indicate approval of an assembly of which the item is a component. After the rejection of the second resubmittal of any one Submittal, the **Contractor** shall bear the cost of the review of each subsequent resubmittal.

4.8. Preparation of Change Orders and Construction Change Directives.

4.8.1. The **Design Professional** will prepare Change Orders and **Construction Change** Directives and may authorize minor Modifications in the Work as provided in Article 11.

4.9. Inspections.

4.9.1. The **Design Professional** will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; will receive and forward to the **City** for the **City's** review and records written warranties and related documents required by the Contract and assembled by the **Contractor**; and will issue a final certificate for payment upon the **Contractor's** compliance with all of the requirements of the Contract Documents.

4.10. Interpretations, Clarifications, and Decisions.

4.10.1. The **Design Professional** will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the **City** or the **Contractor**. The **Design Professional's** response to such requests will be made with reasonable promptness and within the time set forth in the Agreement between the **City** and the **Design Professional**. Any such written interpretations, clarifications, and decisions shall be binding on the **Contractor**.

4.10.2. Interpretations, clarifications, and decisions of the **Design Professional** will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. The **Design Professional** will not be liable to the **Contractor**, any Subcontractor, or Supplier for results of interpretations, clarifications, or decisions so rendered in good faith.

4.10.3. The **Design Professional** may, as the **Design Professional** judges desirable, issue additional drawings or instructions indicating in greater detail the construction or design of the various parts of the Work; such drawings or instructions may be effected by a Field Order or other notice to the **Contractor**, and provided such drawings or instructions are reasonably consistent with the previously existing Contract Documents, the Work shall be executed in accordance with such additional drawings or instructions without any additional cost or an extension of the Contract Time.

4.10.4. The **Design Professional's** decisions on matters relating to aesthetic effect must be consistent with the **City's** and will be final.

4.11. Limitation on the Design Professional's Responsibilities.

4.11.1. Neither the **Design Professional's** authority to act under the provisions of the Contract Documents nor any decision made by the **Design Professional** in good faith to exercise or not to exercise such authority shall give rise to any duty or responsibility of the **Design Professional** to the **Contractor**, any Subcontractor, any Supplier, any surety for any of them or any other person.

4.11.2. The **Design Professional** will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the **Contractor's** responsibility as provided in Article 5. The **Design Professional** will not be responsible for the **Contractor's** failure to carry out the Work in accordance with the Contract Documents. The **Design Professional** will not have control over or charge of and will not be responsible for acts or omissions of the **Contractor**, Subcontractors, Suppliers, or of any other persons performing portions of the Work.

ARTICLE 5
THE CONTRACTOR

5.1. Relationship with the City.

5.1.1. The **Contractor** is an independent contractor and not an employee of the **City.** The **Contractor** is engaged by virtue of the Contract to perform only those services contained therein. The **Contractor** is not authorized to contract on behalf of the **City** or to incur any liability on the part of the **City**.

5.2. Code of Conduct.

5.2.1. M.G.L. c. 268A establishes standards of conduct for officials and employees of the **City**. The **Contractor** shall familiarize itself with the statute and act accordingly.

5.3. Quality Assurance.

5.3.1. The **Contractor** shall be responsible for ensuring that it, all Subcontractors, Suppliers, and all persons employed to do the Work under the Contract Documents perform in a professional manner, provide a high quality of service and Work, and perform in accordance with the Contract Documents.

5.4. Supervision.

5.4.1. Competence and Efficiency. The **Contractor** shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills, attention and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

5.4.2. Construction Means, Methods, Techniques, Etc. The **Contractor** shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract. Where the Contract Documents refer to particular construction means, methods, techniques, sequences, or procedures or indicate or imply that such are to be used in the Work, such mention is intended only to indicate that the operations of the **Contractor** shall be such as to produce at least the quality of Work implied by the operations described. The actual determination of whether or not the described operations may be safely and suitably employed on the Work shall be the responsibility of the **Contractor**, who shall notify the **Design Professional** in writing, prior to implementation, of the actual means, methods, techniques, sequences, or procedures which will be employed on the Work, if these differ from those mentioned in the Contract Documents. All loss, damage, liability or cost of correcting defective work arising from the employment of any construction means, methods, techniques, sequences, or procedures shall be borne by the **Contractor**, notwithstanding that such construction means, methods, techniques, sequences, or procedures are referred to, indicated or implied by the Contract Documents, unless the **Contractor** has given timely notice to the **City** and the **Design Professional** in writing that such means, methods, techniques, sequences, or procedures are not safe or suitable, and the **City** has then instructed the **Contractor** in writing to proceed at the **City's** risk.

5.4.3. Variance between the Contract Documents and Statutes, Ordinances, Codes, Rules, and Regulations. The **Contractor** shall promptly notify the **Design Professional** and the **City** in writing of any variances between the Contract Documents and statutes, ordinances, codes, rules, and regulations. If the **Contractor,** without written notice to the **Design Professional** and the **City,** performs Work knowing that it is contrary to statutes, ordinances, codes, rules, and regulations, the **Contractor** shall assume full responsibility for such Work and shall bear the costs associated therewith, i.e., replacement, repairs, removal, and fines.

5.4.4. Acts and Omissions. The **Contractor** shall be responsible to the **City** for the acts and omissions of all persons performing or supplying the Work.

5.4.5. Inspections. The **Contractor** shall be responsible for inspection of portions of Work already performed under this Contract to determine whether such portions are in proper condition to receive subsequent Work.

5.5. Personnel.

5.5.1. Suitability. The **Contractor** shall provide competent, properly licensed and/or certified, suitably qualified, and reliable personnel to perform the Work required by the Contract Documents. The **Contractor** shall enforce strict discipline and maintain good order at the site at all times. The **Contractor** shall not employ any Subcontractor, Supplier, or other person, whether initially or as a substitute, against whom the **City** may have reasonable objection. Acceptance of any Subcontractor or other person by the **City** shall not constitute a waiver of any right of the **City** to reject defective Work.

5.5.2. Sexual Harassment. Sexual harassment is an unlawful practice under M.G.L. c. 151B. The **Contractor**, Subcontractors, and all other persons responsible for any portion of the Work shall refrain from engaging in sexual harassment. The **Contractor** shall be responsible for any acts of sexual harassment committed by any persons responsible for any portion of the Work. The **Contractor** shall take appropriate action against any such individuals.

5.5.3. Weapons and Illegal Drugs. No weapons or illegal drugs are permitted on the Site. It is the responsibility of the **Contractor** to ensure that no weapons or illegal drugs are brought to the Site.

5.5.4. Maximum Work Day and Work Week. (*Reference:* M.G.L. c. 149, §§30 and 34;). No laborer, worker, mechanic, foreperson or inspector working within this Commonwealth in the employ of the **Contractor**, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the Contract, shall be required or permitted to work more than eight (8) hours in any one day or more than forty-eight (48) hours in any one week, or more than six (6) days in any one week, except in cases of emergency.

5.5.5. Lodging. (*Reference:* M.G.L. c. 149, §25;). Every employee under this Contract shall lodge, board and trade where and with whom he or she elects, and neither the **Contractor** nor its agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

5.5.6. Wage Rates. (*Reference:* M.G.L. c. 149, §27). Mechanics and apprentices, teamsters, chauffeurs and laborers performing Work shall be paid no less than the minimum rate of wages included in the bid documents and the Project Manual and which are made part of the Contract. They shall continue to be the minimum rate of wages for said employees during the life of the Contract. The **Contractor** shall keep a legible copy of the wage rates posted in a conspicuous place at the site during the life of the Contract. These rates of wages shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in M.G.L. c. 149, §26;, and such payments shall be considered as payments to persons under M.G.L. c. 149, §27 performing work as therein provided. If the **Contractor** does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in the rates of wages, the **Contractor** shall pay the amount of said payments directly to each employee engaged in the Work. If the **Contractor** pays less than the rate of wages, including payments to health and welfare funds and pension funds, or the equivalent payments in wages to any person performing Work within the classifications as determined by the Commissioner of Labor and Industries, and if the **Contractor** takes or receives for its own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any part or portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to such person for Work done or service rendered on the Project, the **Contractor** will be subject to the penalties set forth in M.G.L. c. 149, §27. Notwithstanding the foregoing and the requirements of 5.5.7.1 and 5.5.7.2 below, if the Contract is federally funded, federal labor standards apply, including Davis Bacon minimum wage rates and payroll reporting requirements. See the "Federal Requirements" section at the end of these contract documents.

5.5.7. Payroll Records of Employees. (*Reference:* M.G.L. c. 149, §27B;). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs, and laborers performing Work showing the name, address and occupational classification of each such employee, the hours worked by and the wages paid to all such employees. The **Contractor** and the Subcontractors shall submit a copy of said record to the **City** on a weekly basis.

5.5.7.1. (*Reference:* M.G.L. c. 149, §27B;). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall preserve their payroll records for a period of three (3) years from the date of completion of the Contract.

5.5.7.2. (*Reference:* M.G.L. c. 149, §27B). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall furnish to the Commissioner of Labor and Industries and the **City** within fifteen (15) days after completion of their portion of the Work a statement executed by the **Contractor** or Subcontractor or by any authorized officer or employee of the **Contractor** or Subcontractor who supervises the payment of wages in the form found in M.G.L. c.149, §27B.

5.6. Superintendence.

5.6.1. Employment of a Superintendent. The **Contractor** shall employ a competent, properly licensed superintendent, reasonably acceptable to the **City**, and necessary assistants who shall be in attendance at the Site full time during the progress of the Work until the date of Substantial Completion and for such additional time thereafter as the **Design Professional** or the **City** may determine to be necessary for the expeditious completion of the Work, including final completion. If continually in the employ of the Contractor, the same Superintendent shall be assigned to this project.

5.6.2. Removal/Replacement of a Superintendent. The **Contractor** shall remove the superintendent if requested to do so in writing by the **City** and shall promptly replace such superintendent with a competent person reasonably acceptable to the **City**. The superintendent shall represent the **Contractor**, and communications given to the superintendent shall be as binding as if given to the **Contractor**. The **Contractor** shall not replace the superintendent without written notice to the **City** and the **Design Professional**.

5.6.3. Registered Professional Engineer or Registered Land Surveyor. The **Contractor** shall retain a competent Registered Professional Engineer or Registered Land Surveyor, acceptable to the **Engineer**, who shall establish the exterior lines and required elevations of all buildings and structures to be erected on the site and shall establish sufficient lines and grades for the construction of associated Work such as, but not limited to, roads, utilities, and site grading. The Engineer or Land Surveyor shall certify as to the actual location of the constructed facilities in relation to property lines, building lines, easements, and other restrictive boundaries.

5.6.4. Building Grades, Lines, Etc.; The **Contractor** shall establish the building grades; lines; levels; and column, wall and partition lines required by the various Subcontractors in laying out their Work.

5.6.5. Coordination and Supervision. The **Contractor** shall coordinate and supervise the Work performed by Subcontractors to the end that the Work is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the Work. The **Contractor** and all Subcontractors shall at all times afford each trade, any separate contractor, or the **City**, every reasonable opportunity for the installation of Work and the storage of materials.

5.6.6. Job Meetings. There shall be job meetings held on a weekly basis, or more often if required by the **City**. The **Contractor** shall arrange for and attend weekly job meetings with the **Design Professional** and such other persons as the **Design Professional** may from time to time wish to have present. The **Contractor** shall be represented by a principal, project manager, general superintendent or other authorized main office representative, as well as by the **Contractor's** own superintendent. An authorized representative of any Subcontractor or Sub-subcontractor shall attend such meetings if the representative's presence is requested by the **Design Professional**. Such representatives shall be empowered to make binding commitments on all matters to be discussed at such meetings, including costs, payments, Change Orders, time schedules and workforce power. Any notices required under the Contract may be served on such representatives.

5.7. Materials, Labor, Equipment, Etc.

5.7.1. Provision of. Unless otherwise provided in the Contract Documents, the **Contractor** shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the Work. The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings, and in accordance with the directions of the Design Professional or CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) as given from time to time during the progress of the work. He shall furnish, erect, maintain and remove such construction plant and such temporary works as may be required. The Contractor shall observe, comply with and be subject to all terms, conditions, requirements and limitations of the contract and specifications, and shall do, carry on and complete the entire work to the satisfaction of the Design Professional and CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT).

5.7.1.1. The Contractor shall furnish, install and/or maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations. Nothing in this Section shall be construed as forbidding the use of facilities available in existing buildings on the job site if they meet the above requirements and the use of them will not interfere with the progress of the work.

5.7.2. Quality and Use of. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by the **Design Professional**, the **Contractor** shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

5.7.3. Discrepancies or Defects. If the **Contractor** is unable to perform its Work because of discrepancies or defects in the work of the **City's** own forces or of a separate contractor, the **Contractor** shall immediately notify the **Design Professional** and the **City** in writing of the conditions that render unable to so perform. Failure to notify the **Design Professional** constitutes an acknowledgment and acceptance of the other work as being fit and proper for integration with the **Contractor's** Work except for latent or non-apparent defects and deficiencies in the other work.

5.8. Contractor's Management and Financial Statement Requirements. (*Reference:* M.G.L. c. 30, §39R)

5.8.1. The words defined herein shall have the meaning stated below whenever they appear in this Paragraph:

5.8.1.1. "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to M.G.L. c.149, §44A-H or M.G.L. c. 30, §39M, inclusive.

5.8.1.2. "Contract" means any contract awarded or executed pursuant to M.G.L. c. 149, §44A-H or M.G.L. c. 30, §39M, which is for an amount or estimate amount that exceed the dollar amount set forth in M.G.L. c. 30, §39R.

5.8.1.3. "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

5.8.1.4. "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his/her residence or principal office and who is

in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the **City**.

5.8.1.5. "Audit," when used in regard to financial statement, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

5.8.1.6. "Accountant's Report," when used in regard to financial statements, means a document in which an independent certified accountant indicates the scope of the audit which s/he has made and sets forth his/her opinion regarding the financial statements taken as a whole with listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.

5.8.1.7. "Management," when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the Contractor.

5.8.1.8. Accounting terms, unless otherwise defined herein shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

5.8.2. The Contractor shall make, and keep for at least six (6) years after final payment, books, Records, and accounts that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor.

5.8.2.1 Federal Requirements: The Contractor shall permit the City, HUD and/or any other administering agency named herein, the Comptroller General of the United States, or any of their duly authorized representatives, to have access to any books, documents, papers, and records of the Contractor which are directly pertinent to a specific HUD program for the purpose of making audits, examinations, excerpts, and transcriptions.

5.8.3. Until the expiration of six (6) years after final payment, the Office of the Inspector General, and the Deputy Commissioner of the Division of Capital Asset Management shall have the right to examine any books, documents, papers or Records of the Contractor or of its Subcontractors that directly pertain to, and involve transactions relating to, the Contractor or its Subcontractors.

5.8.4. The Contractor shall describe any change in the method of maintaining Records or recording transactions which materially affect any statements filed with the **City**, including in its description the date of the change and reasons therefor, and shall accompany said description with a letter from the Contractor's Independent Certified Public Accountant approving or otherwise commenting on the changes.

5.8.5. The Contractor shall file a Statement of Management on internal accounting controls as set forth below prior to the execution of the Contract.

5.8.6. The Contractor shall file prior to the execution of the contract and shall continue to file annually, an Audited Financial Statement for the most recent completed fiscal year as set forth below.

5.8.7. The Contractor shall file with the **City** a Statement of Management as to whether the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:

5.8.7.1. transactions are executed in accordance with Management's general and specific authorization;

5.8.7.2. transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets;

5.8.7.3. access to assets is permitted only in accordance with Management's general or specific authorization; and

5.8.7.4. the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any difference.

5.8.7.5. The Contractor shall also file with the **City** a statement prepared and signed by an Independent Certified Public Accountant stating that s/he has examined the Statement of Management on internal accounting controls, and expressing an opinion as to:

5.8.7.5.1. whether the representation of Management in response to this paragraph and paragraphs 5.8.2. through 5.8.6 above are consistent with the result of Management's evaluation of the system of internal accounting controls; and

5.8.7.5.2. whether such representations of Management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

5.8.8. The Contractor shall annually file with the Commissioner of the Division of Capital Asset Management during the term of the contract a financial statement prepared by an Independent Certified Public Accountant on the basis of an Audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the **City** upon request.

5.8.9. The City's Contracting Department, its authorized representative and agents and the HUD Representative for the Secretary shall, at all times have access to and be permitted to observe and review all work materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) through its authorized representatives or agents. Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in G.L. 4, §7 or equivalent federal legislation. They shall not be made available to the public, but shall be available only to the governmental authorities named herein.

5.9. Taxes.

5.9.1 The **Contractor** shall pay all sales, consumer, use, and other similar taxes for the Work or portions thereof which are provided by the **Contractor** which are legally enacted when bids are received, whether or not yet effective or merely scheduled to go into effect. However, the **Contractor** shall not pay, and the **City** shall not reimburse or pay the **Contractor** for, any sales taxes for building supplies or materials for which an exemption is provided in M.G.L. c. 64H, §6(f). The **City's** tax exemption number to be used by the **Contractor** in this regard is E04-600-1414.

5.10. Permits, Licenses, and Fees.

5.10.1 Unless otherwise provided, the **Contractor** shall obtain and pay the fees for all permits, licenses, and inspections that are necessary for the proper execution and completion of the Work and which are customarily secured after execution of the Contract and which are legally required. All fees for permits, licenses, and inspections required by any **City** department shall be waived. Unless otherwise agreed by the Awarding Authority in writing, the Contractor shall, prior to commencement of the work, (i) meet with the City of Somerville Inspectional Services Department to determine what permits are needed for the work; (ii) obtain all such permits; and (iii) provide copies of such permits to the Awarding Authority. Permits shall include, without limitation, demolition, foundation, digsafe, and building permits; permits for removal, sealing up, or installation of utilities, including gas, electrical, water and sewer; and permits for obstructing public streets and sidewalks.

5.11. Notices Required By Statutes, Ordinances, Codes, Rules, Regulations, and Orders of the City.

5.11.1 The **Contractor** shall give notices required by statutes, ordinances, codes, rules, regulations, and orders of the **City** bearing on performance of the Work.

5.12. Additional Information from Design Professional.

5.12.1. The **Contractor** shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Article 4.

5.12.2. The **Contractor** shall give the **Design Professional** timely notice of any additional Plans, Specifications, or instructions required to define the Work in greater detail, or to permit the proper progress of the Work.

5.12.3. The **Contractor** shall not proceed with any Work not clearly and consistently defined in detail in the Contract Documents, but shall request additional drawings or instructions from the **Design Professional** as provided in the previous Paragraph. If the **Contractor** proceeds with such Work without obtaining further drawings, Specifications, or instructions, the **Contractor** shall correct Work incorrectly done at the **Contractor's** own expense.

5.13. "Or equal."

5.13.1. Requirements for Substitutions. (*Reference:* M.G.L. c. 30, §39M(b).) Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the words "or approved equal" shall be understood to follow. An item shall be considered equal to the item so named or described if, in the opinion of the **Design Professional**:

5.13.1.1. it is at least equal in quality, durability, appearance, strength, and design;

5.13.1.2. it performs at least equally the function imposed by the general design for the Work;

5.13.1.3. it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the Specifications.

5.13.2. Net Savings. No proposed substitution will be permitted unless the **Contractor** certifies that the proposed substitution will yield a net savings to the **City** and will not extend the Contract Time.

5.13.3. Contractor's Expense. Any structural or mechanical changes made necessary to accommodate substituted

equipment under this paragraph (including but not limited to engineering fees) shall be at the expense of the **Contractor** or **Subcontractor** responsible for the Work item.

5.13.3.1. Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the **Contractor**, notwithstanding approval or acceptance of such substitution by the **City** or the **Design Professional**, unless such substitution was made at the written request or direction of the **City** or the **Design Professional**.

5.13.3.2. All data to be provided by the **Contractor** in support of any proposed "or equal" or substitute item will be at the **Contractor's** expense.

5.13.4. Meeting Requirements. The **Contractor** shall be responsible for determining that all materials furnished for the Work meet all requirements of the Contract Documents. The **Design Professional** may require the **Contractor** to produce reasonable evidence that a material meets such requirements, such as certified reports of past tests by qualified testing laboratories, reports of studies by qualified experts, or other evidence which, in the opinion of the **Design Professional,** would lead to a reasonable certainty that any material used, or proposed to be used, in the Work meets the requirements of the Contract Documents. All such data shall be furnished at the **Contractor's** expense. This provision shall not require the **Contractor** to pay for periodic testing of different batches of the same material, unless such testing is specifically required by the Contract Documents to be performed at the **Contractor's** expense.

5.13.5. Named Manufacturer's Product. In all cases in which a manufacturer's name, trade name, or other proprietary designation is used in connection with materials or articles to be furnished under this Contract, whether or not the phrase "or equal" is used after such name, the **Contractor** shall furnish the product of the name manufacturer(s) without substitution, unless a written request for a substitute has been submitted by the **Contractor** and approved in writing by the **Design Professional** as provided in the following paragraph.

5.13.6. Deviations. If the **Contractor** proposes to use a material which while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, the **Contractor** shall inform the **Design Professional** in writing of the nature of such deviations at the time the material is submitted for approval and shall request written approval of the deviation from the requirements of the Contract Documents.

5.13.7. Rejection of Deviations. In requesting approval of deviations or substitutions, the **Contractor** shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the **Design Professional**, the evidence presented by the **Contractor** does not provide a sufficient basis for such reasonable certainty, the **Design Professional** may reject such substitution or deviation without further investigation.

5.13.8. Consistent Character and Quality of Design. The Contract Documents are intended to produce a building of consistent character and quality of design. All components of the building including visible items of mechanical and electrical equipment have been selected to have a coordinated design in relation to the overall appearance of the Project. The **Design Professional** shall judge the design and appearance of proposed substitutes on the basis of their suitability in relation to the overall design of the Project, as well as for their intrinsic merits. The **Design Professional** will not approve as equal to materials specified proposed substitutes that, in the **Design Professional's** opinion, would be out of character, obtrusive, or otherwise inconsistent with the character or quality of design of the Project. In order to permit coordinated design of color and finishes the **Contractor** shall, if required by the **Design Professional**, furnish the substituted material in any color, finish, texture, or pattern which would have been available from the manufacturer originally specified, at no additional cost to the **City**.

5.13.9. Warranty. The warranties provided herein shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

5.13.10. Design Professional's Approval. The **Design Professional** will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed, or utilized without the **Design Professional's** prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. The **City** may require the **Contractor** to furnish at the **Contractor's** expense a special performance guarantee or other surety with respect to any "or equal" or substitute. The **Design Professional** will record the time required by the **Design Professional** and its consultants in evaluating substitutes proposed or submitted by the **Contractor** and in making changes in the Contract Documents (or in the provisions of any other direct contract with the **City** for work on the Project) occasioned thereby. Whether or not the **Design Professional** accepts a substitute item so proposed or submitted by the **Contractor**, the **Contractor** shall reimburse the **City** for the charges of the **Design Professional** and its consultants for evaluating each such proposed substitute item.

5.14. Substitute Construction Methods or Procedures.

5.14.1 If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, the **Contractor** may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to the **Design Professional**. The **Contractor** shall submit sufficient information to allow the **Design Professional**, in the **Design Professional's** sole discretion, to determine whether the substitute

proposed is equivalent to that expressly called for by the Contract Documents.

5.15. Contractor's Progress Schedule.

5.15.1. Before Starting Construction. Within ten (10) days after the date of the Notice to Proceed, the **Contractor** shall submit to the **Design Professional** for review:

5.15.1.1. a preliminary progress schedule indicating the times (number of days or dates) for starting and completing the various stages of the Work;

5.15.1.2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

5.15.1.3. a refined schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Sum and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

5.15.2. Review of Progress Schedule. At least ten (10) days prior to the commencement of construction, the **Design Professional**, the **Contractor,** and any other appropriate persons will meet to review and discuss the acceptability to the **Design Professional** of the progress schedule. The **Contractor** will have an additional ten (10) days to make corrections and adjustments and to complete and resubmit the schedule. No progress payment shall be made to the **Contractor** until the schedule is submitted to and found acceptable by the **Design Professional** as provided below.

5.15.3. Acceptability of Progress Schedule. The progress schedule will be acceptable to the **Design Professional** if, according to the **Design Professional**, it provides an orderly progression of the Work to completion within any specified time frame, but such acceptance will neither impose on the **Design Professional** responsibility for the sequencing, scheduling, or progress of the Work nor interfere with or relieve the **Contractor** from the **Contractor's** full responsibility therefore. The **Contractor's** schedule of Submittals must be acceptable to the **Design Professional** in providing a workable arrangement for reviewing and processing the required Submittals. The **Contractor's** schedule of values must be acceptable to the **Design Professional** as to form and substance.

5.15.4. Sepia and Copies. After the **Design Professional** has approved the schedule, the **Contractor** shall submit to the **Design Professional** one (1) sepia and four (4) copies bearing the **Contractor's** stamp of approval as a representation to the **City** that the **Contractor** has determined or verified all data on that progress schedule and that the **Contractor**, the Subcontractors and Suppliers have reviewed and coordinated the sequences in that progress schedule with the requirements of the Work.

5.15.5. Adjustment of Schedule. The **Contractor** shall adhere to the established progress schedule which may be adjusted from time to time as follows: the **Contractor** shall submit to the **Design Professional** for acceptance proposed adjustments in the progress schedule that will not change the Contract Time. Such adjustments will conform generally to the progress schedule then in effect and will comply with any provisions of the requirements applicable thereto.

5.15.6. During Construction. The **Contractor** shall submit monthly progress schedules to the **Design Professional**. The schedules shall stay current with the **Contractor's** approach to the Work remaining.

5.15.7. Schedule of Submittals. The **Contractor** shall prepare and keep current, for the **Design Professional's** approval, a schedule of Submittals that is coordinated with the **Contractor's** construction schedule and allows the **Design Professional** reasonable time to review Submittals.

5.16. Project Coordination.

5.16.1. In General. The **Contractor** shall be responsible for the proper coordination of the Work of all of the trades.

5.16.2. Coordination with Subcontractors. The **Contractor** shall coordinate the work of each Subcontractor with the Work of every other Subcontractor whose Work affects the other.

5.16.3. Coordination with the City's Own Forces or Separate Contractors. The **Contractor** shall coordinate its operations with those of the **City's** own forces or separate contractors. The **Contractor** shall provide the **City's** own forces and separate contractors a reasonable opportunity for the handling, unloading and storage of their materials and equipment and execution of their work. The **Contractor** shall connect and coordinate its Work with theirs.

5.16.4. Coordination with Utility Companies. The **Contractor** shall coordinate its operations with all the appropriate utility companies to assure that the utilities required on the Project are available and functioning properly pursuant to the requirements of the Contract Documents.

5.17. Project Photographs.

5.17.1. In General. The **Contractor** shall take, at its own expense, interior and exterior photographs at the site, from different vantages as directed by the **Design Professional** or the **City**, before beginning any Work and thereafter, at a minimum, on the first work day of each month until final completion of the Work, including final Site photos. Photos shall be taken of any

Work that will be buried or concealed while the Work is still exposed. The photographs shall be taken by a skilled commercial photographer. The number of photographs required shall be at the discretion of the **City** or the **Design Professional**. One aerial photo shall be required a) prior to commencement of the work and b) at the completion of the work. See Section 01320 – Construction Progress Documentation.

5.17.2. Prints and Digital Media. Within fourteen (14) days after the photographs have been taken, the **Contractor** shall cause prints to be made and delivered to the **City** and the **Design Professional**. All photographs shall be 8" x 10". Each print shall state the date of the photograph, the name of the Project, the description of the view and the name and address of the photographer. The **City** shall receive one glossy print of each photo as well as all prints in digital form on compact disc. The **Design Professional** shall receive one glossy print.

5.17.3. Failure to Comply. Should the **Contractor** fail to adhere to any requirement set forth in the previous two paragraphs, the **City** may have the photographs taken at the **Contractor's** expense or receive a set-off against the **Contractor's** next application for payment.

5.18. Record Documents and Samples at the Site.

5.18.1 The **Contractor** shall maintain in a safe place at the site one record copy of all Plans, Specifications, Modifications, Change Orders, **Construction Change** Directives, Field Orders and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to the **Design Professional** for reference. Upon completion of the Work, these record documents, Samples and Shop Drawings will be delivered by the **Contractor** to the **Design Professional** for the **City**.

5.19. Submittals.

5.19.1. Purpose. The purpose of Submittals is to demonstrate for those portions of the Work for which Submittals are required the way the **Contractor** proposes to conform to the information given and the design concept expressed in the Contract Documents.

5.19.2. Submittal Procedure. Within ten (10) days from the Notice to Proceed, the **Contractor** shall submit to the **Design Professional** a completed Submittals schedule. The **Contractor** shall review, approve, and submit to the **Design Professional** Submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the **City** or of separate contractors. Submittals made by the **Contractor** that are not required by the Contract Documents may be returned without action. The schedules shall be updated and resubmitted each month. All Submittals will be identified as the **Design Professional** may require and in the number specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show the **Design Professional** the materials and equipment that the **Contractor** proposes to provide and to enable the **Design Professional** to review the information for the limited purposes stated below.

5.19.3. Samples. The **Contractor** shall also submit Samples to the **Design Professional** for review and approval in accordance with said accepted schedule of Submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as the **Design Professional** may require to enable the **Design Professional** to review the Submittal for the limited purposed stated below. The numbers of each Sample to be submitted will be as specified in the Specifications. Unless otherwise specified in the Specifications, three (3) specimens of each Sample shall be submitted.

5.19.3.1. The Samples shall be of sufficient size to permit proper evaluation of material. Where variations in color or other characteristics are to be expected, samples showing the minimum range of variation shall be submitted. Materials exceeding the range of variation of the approved Samples will not be approved on the Work.

5.19.3.2. All costs associated with delivery of Samples will paid by the **Contractor**.

5.19.4. Contractor's Verifications. Before submitting each Submittal, the **Contractor** shall have determined and verified:

5.19.4.1. all field measurements, quantities, dimensions specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

5.19.4.2. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

5.19.4.3. all information relative to the **Contractor's** sole responsibilities in respect of means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.

5.19.5. Contractor's Representations. By approving and providing Submittals, the **Contractor** thereby represents that the **Contractor** has determined and verified all dimensions, quantities, field dimensions, relations to existing Work, coordination with Work to be installed later, coordination with information on previously accepted Submittals and verification of

compliance with all the requirements of the Contract Documents. The accuracy of all such information is the responsibility of the **Contractor**. In reviewing Submittals, the **Design Professional** shall be entitled to rely upon the **Contractor's** representation that such information is correct and accurate.

5.19.6. Coordination. The **Contractor** shall also have reviewed and coordinated each Submittal with other Submittals and with the requirements of the Work and the Contract Documents.

5.19.7. Stamp or Specific Written Indication. Each Submittal will bear a stamp or specific written indication that the **Contractor** has satisfied the **Contractor's** obligations under the Contract Documents with respect to the **Contractor's** review and approval of that Submittal.

5.19.8. Written Notice of Variations. At the time of each Submittal, the **Contractor** shall give the **Design Professional** specific written notice of such variations, if any, that the Submittal may have from the requirements of the Contract Documents. Such notice is to be in a written communication separate from the Submittal. Moreover, the **Contractor** shall make a specific notation on each Submittal to the **Design Professional** for review and approval of each such variation.

5.19.9. Review and Approval by the Design Professional. The **Contractor** shall perform no portion of the Work requiring a Submittal until the respective Submittal has been approved by the **Design Professional**. Such Work shall be in accordance with approved Submittals.

5.19.9.1. The **Design Professional** will review and approve Submittals in accordance with the schedule of Submittals accepted by the **Design Professional** as required above. The **Design Professional's** review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. The **Design Professional's** review and approval will not extend to means, method, technique, sequences, or procedures of construction (except where a particular means, method, technique, sequences or procedures of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

5.19.10.Deviations. The **Contractor** shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the **Design Professional's** approval of Submittals unless the **Contractor** has specifically informed the **Design Professional** in writing of such deviation at the time of Submittal and the **Design Professional** has given written approval to the specific deviation. The **Contractor** shall not be relieved of responsibility for errors or omissions in Submittals by the **Design Professional's** approval thereof.

5.19.11.Revisions. The **Contractor** shall make corrections required by the **Design Professional** and shall return the required number of corrected copies of Submittals and submit as required new Submittals for review and approval. The **Contractor** shall direct specific attention, in writing or on resubmitted Submittals, to revisions other than those requested by the **Design Professional** on previous Submittals. Unless such written notice has been given, the **Design Professional's** approval of a resubmitted Submittal shall not constitute approval of any changes not requested on the prior Submittal.

5.19.12.Related Work. Where a Submittal is required by the Contract Documents or the schedule of Submittals accepted by the **Design Professional**, any related Work performed prior to the **Design Professional's** review and approval of the pertinent Submittal will be at the sole expense and responsibility of the **Contractor**.

5.19.13.Informational Submittals. Informational Submittals upon which the **Design Professional** is not expected to take responsive action may be so identified in the Contract Documents.

5.19.14.Certification. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the **City** shall be entitled to rely upon such certifications, and neither the **City** nor the **Design Professional** shall be expected to make any independent examination with respect thereto.

5.20. Continuing the Work.

5.20.1. The **Contractor** shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the **City**. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as otherwise provided herein or as the **City** and the **Contractor** may agree in writing.

5.21. Use of Site; **Access to Work.**

5.21.1. The right of possession of the premises and the improvements made thereon by the **Contractor** shall remain at all times in the **City**. The **Contractor's** right to entry and use thereof arises solely from the permission granted by the **City** under the Contract Documents. The **Contractor** shall confine the **Contractor's** apparatus, the storage of materials, and the operations of the **Contractor's** workers to limits indicated by law, ordinance, the Contract Documents and permits and/or directions of the **Design Professional** and shall not unreasonably encumber the premises with the **Contractor's** materials. The **City** shall not be liable to the **Contractor**, the Subcontractors, Suppliers, or anyone else with respect to the conditions of the premises, except for a condition caused directly and solely by the negligence of the **City**.

5.21.2. At all times, the **City** and the **Design Professional** shall have access to the Work.

5.22. Protection of Persons and Property.

5.22.1. In General. The **Contractor** shall be responsible for initiating, maintaining, and supervising all health and safety precautions and programs in connection with the performance of the Contract. The **Contractor** is responsible for the implementation of all Federal, State, and local health and safety requirements. The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT).

The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays and holidays, as necessary, from the time the work is commenced until final completion and acceptance. Sufficient lighting shall be provided to aid in the prevention of injury to passersby or vandalism to the property or other illegal activities.

The Contractor shall avoid damage as a result of its operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc. and the Contractor shall at its own expense completely repair any damage thereto caused by its operations.

The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structure adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of work. The Contractor shall indemnify and save harmless the City of Somerville and CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) from any liability for damages on account of settlement or the loss of lateral support of adjoining property resulting from the Contractor's failure to comply with this section.

5.22.1.1. If this contract is in excess of $100,000 and is federally funded, the Contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.)

5.22.1.2. If this contract is in excess of $2,000 and is federally funded, the Contractor shall comply with Sections 103 and 107 of the Contract Work Hours Safety Standards Acts (40 U.S.C. 327-333), as supplemented by Department of Labor regulations at 29 CFR part 5. To that end, the Contractor shall compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible, provided that the worker is compensated at a rate of not less than 1-1/2 times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The Contractor shall ensure that no laborer or mechanic is required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous.

5.22.2. The **Contractor** shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

5.22.2.1. employees on the site and other persons who may be affected thereby;

5.22.2.2. the Work, materials, and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the **Contractor**, Subcontractors, or Sub-subcontractors;

5.22.2.3. other property at the site or adjacent or in close proximity thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and

5.22.2.4. any other property of the **City**, whether or not forming part of the Work, located at the site or adjacent thereto in areas to which the **Contractor** has access.

5.22.3. Notices and Compliance. The **Contractor** shall give notices and comply in all other respects with applicable laws, ordinances, rules, regulations, codes, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss. The **Contractor** shall notify owners of adjacent and nearby properties of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

5.22.3.1. Should the Contractor in the execution of his work uncover or discover utility service lines not indicated on the relevant drawings, or that do not show signs of singular service to any existing structures being demolished, the Contractor shall cease work in that area immediately and promptly notify the Public Works Department. Within forty-eight hours, the Public Works Department will inspect the site and issue written instructions to the Contractor. The Contractor shall proceed

with only after such written instructions have been received and shall proceed in full compliance with such instructions. The above mentioned situation or similar circumstances and/or modification if any, shall not relieve the Contractor from his responsibilities in this Contract and also it is without prejudice to any and all rights of CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) covering this said contract and surety or bonds.

5.22.4. Erection and Maintenance of Safeguards. The **Contractor** shall erect and maintain, as required by existing conditions and the terms of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent and nearby sites and utilities.

5.22.5. Hazardous Materials and Equipment. When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the **Contractor** shall exercise utmost care and carry on such activities under the supervision of properly qualified personnel.

5.22.6. Damage to Property. The **Contractor** shall promptly remedy damage and loss to property referred to above. If the damage or loss is due in whole or in part to the **Contractor's** failure to take the precautions required herein, the **Contractor** shall bear the cost, subject to any reimbursement to which the **Contractor** is entitled under property insurance required by the Contract Documents. The **Contractor** shall be fully and solely responsible for all Work and other operations carried out on adjacent properties. The insurance required under Article 8 shall cover such Work or operations, and the **Contractor** shall indemnify and defend the **City**, the **Design Professional**, and the owners of such adjacent or nearby properties from and against all claims, suits, losses, or costs arising out of such Work or operations.

5.22.7. Fire Protection Equipment and Services. The **Contractor** shall provide and maintain in good operating condition suitable and adequate fire protection equipment and services and shall comply with all reasonable recommendations regarding fire protection made by the representatives of the fire insurance company carrying insurance on the Work or by the local fire chief or fire marshal. The area within the site limits shall be kept orderly and clean and all combustible rubbish shall be promptly removed from the site.

5.22.8. Protection of Excavations, Trenches, etc. The **Contractor** shall at all times protect excavations, trenches, buildings and materials from rain water, ground water, backup or leakage of sewers, drains and other piping, and from water of any other origin and shall remove promptly any accumulation of water. The **Contractor** shall provide and operate all pumps, piping, and other equipment necessary to this end.

5.22.9. Snow and Ice Removal. The **Contractor** shall remove snow and ice that might result in damage or delay.

5.22.10. Safety Representative. The **Contractor** shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

5.22.11. Weather Protection. (*Reference:* M.G.L. c. 149, §44F(1).) The **Contractor** shall install weather protection and furnish adequate heat in the protected area from November 1 through March 31. In the event of temporary suspension of work, during inclement weather, the Contractor will carefully protect and will cause his subcontractors to carefully protect all work and materials against damage or injury from the weather. If, in the opinion of the Design Professional or CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT), any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect the work, such work or materials shall be removed and replaced at the expense of the Contractor. These Specifications are not to be construed as requiring enclosures or heat for operations that are not economically feasible to protect in the judgment of CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT). Included in the preceding category, without limitation, are such items as site work, excavation, pile driving, steel erection, erection of certain "exterior" wall panels, roofing, and similar operation:

(1) "WEATHER PROTECTION" shall mean the temporary protection of that work adversely affected by moisture, wind and cold, by covering, enclosing and/or heating.

This protection shall provide adequate working areas during the months of November through March as determined by the Design Professional and consistent with the approved construction schedule to permit the continuous progress of all work necessary to maintain an orderly and efficient sequence of construction operations. The General Contractor shall furnish and install all "Weather Protection" material and be responsible for all costs, including heating required to maintain a minimum temperature of 40 degrees F, at the working surface. This provision does not supersede any specific requirements for methods of construction, curing of materials or the applicable General Conditions set forth in the Contract Articles with added regard to performance obligations of the Contractor.

(2) Within 30 calendar days after his award of contract, the General Contractor shall submit in writing to CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) for approval, three copies of his proposed methods for "Weather Protection".

(3) Installation of weather protection and heating devices shall comply with all safety regulations including provisions for

adequate ventilation and fire protection devices. Heating devices which may cause damage to finish surfaces shall not be used.

(4) The General Contractor shall furnish and install one accurate Fahrenheit thermometer at each work area as designated by the Designer. However, one additional accurate Fahrenheit thermometer shall be provided for every 2,000 square feet of floor space where the work areas exceed 2,000 square feet.

5.22.12. Security. The **Contractor** shall provide, within the Contract Sum, a sufficient number of security personnel at the Site at all times when the **Contractor's** personnel are not present, from commencement of the Work until Substantial Completion to assure that the Site, the facility, and the Work, and all materials and equipment stored at the Site are fully and completely protected against loss or damage due to vandalism, theft, or malicious mischief. If the **Contractor** elects, in addition, to use guard dogs for this purpose, each dog shall at all times be accompanied by an adult handler. If the **Contractor** fails to comply with the requirements of this paragraph, then the **City** may provide appropriate security and charge the cost thereof to the **Contractor**. The **City's** provision of such security, or failure to do so, shall not relieve the **Contractor** of its responsibility to pay for loss or damage due to vandalism, theft, or malicious mischief at the Site.

5.22.13. Hazard Communication Programs. The **Contractor** shall be responsible for coordinating any exchange of material safety data sheets or other hazard communications information required to be made available to or exchanged between or among employers at the site in accordance with laws, codes and regulations.

5.22.14. Noise Pollution Control. The **Contractor** shall comply with all applicable provisions of Somerville Municipal Code §9-109.

5.23. Cutting and Patching.

5.23.1. In General. Unless otherwise provided in the Contract Documents, the **Contractor** shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly, including the work of the City or of separate contractors.

5.23.2. Damage to Work of City or of Separate Contractor. The **Contractor** shall not damage or endanger a portion of the Work or fully or partially completed construction of the **City** or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The **Contractor** shall not cut or otherwise alter such construction by the **City** or a separate contractor except with prior written consent of the **City** and of such separate contractor; such consent shall not be unreasonably withheld. The **Contractor** shall not unreasonably withhold from the **City** or a separate contractor the **Contractor's** consent to cutting or otherwise altering the Work.

5.23.3. Damage Caused by Contractor. Should the **Contractor** cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of the **Contractor's** performance of Work at the Site be made by any separate contractor against the **Contractor**, the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, the **Contractor** shall promptly attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law. The **Contractor** shall, to the fullest extent permitted by laws and regulations, indemnify and hold harmless the **City**, the **Design Professional**, and the **Design Professional's** consultants from and against all claims, damages, losses and expenses (including, but not limited to, fees of the Design Professional, the Design Professional's consultants,, attorneys, and other professionals, and court and arbitration or mediation costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate contractor against the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, to the extent based on a claim arising out of the **Contractor's** performance of the Work. Should a separate contractor cause damage to the Work or property of the **Contractor** or should the performance of work by any separate contractor at the site give rise to any other claim, the **Contractor** shall not institute any action, legal or equitable, against the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, on account of any such damage or claim. If the **Contractor** delays at any time in performing or furnishing Work by any act or neglect of a separate contractor and the City and the Contractor are unable to agree as to the extent of any adjustment in the Contract Time attributable thereto, the **Contractor** may make a claim for an extension of time in accordance with Article 16. An extension of the Contract Time shall be the **Contractor's** exclusive remedy with respect to the **City**, the **Design Professional**, and the **Design Professional's** consultants, for any delay, disruption, interference, or hindrance caused by any separate contractor.

5.24. Cleaning Up.

5.24.1. During the progress of the Work, the **Contractor** shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract or other debris. At the completion of the Work, the **Contractor** shall remove from and about the Project all waste materials, rubbish, and debris, and the **Contractor's** tools, construction equipment, machinery, and surplus materials. Surplus materials to be provided to the **City** by specifications shall be stored in a clean, safe and secure area as directed by the **City**. The **Contractor** shall leave the site clean and ready for

occupancy by the **City** at Substantial Completion of the Work. Immediately prior to the **Design Professional's** inspection for Substantial Completion, the **Contractor** shall completely clean the premises. Concrete and ceramic surfaces shall be cleaned and washed. Resilient coverings shall be cleaned, waxed and buffed. Woodwork shall be dusted and cleaned. Sash, fixtures and equipment shall be thoroughly cleaned. Stains, spots, dust, marks and smears shall be removed from all surfaces. Hardware and all metal surfaces shall be cleaned and polished. Glass and plastic surfaces shall be thoroughly cleaned by professional window cleaners. All damaged, broken or scratched glass or plastic shall be replaced by the **Contractor** at the **Contractor's** expense. The **Contractor** shall restore to original condition all property not designated for alteration by the Contract Documents.

5.24.2. If the **Contractor** fails to clean up as provided herein, the **City** may do so and charge the cost thereof to the **Contractor**.

5.25. Royalties and Patents.

5.25.1 The **Contractor** shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. To the fullest extent permitted by law, the **Contractor** shall indemnify and hold harmless the **City** and the **Design Professional** from and against all claims, costs, losses, and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, product, or device not specified in the Contract Documents.

5.26. Contractor's Obligation to Perform.

5.26.1. The **Contractor's** obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of the **Contractor's** obligation to perform the Work in accordance with the Contract Documents:

5.26.1.1. observations by the **Design Professional**;
5.26.1.2. recommendation of any progress or final payment by the **Design Professional**;
5.26.1.3. the issuance of a certificate of Substantial Completion or any payment by the **City** to the **Contractor** under the Contract Documents;
5.26.1.4. use or occupancy of the Work, Project, or Site, or any part thereof, by the **City**;
5.26.1.5. any acceptance by the **City** or any failure to do so;
5.26.1.6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptance by the **Design Professional**;
5.26.1.7. any inspection, test, or approval by others; or
5.26.1.8. any correction of defective Work by the **City**.

5.27. Indemnification; and Covenant Not To Sue.

5.27.1. To the fullest extent permitted by law, the **Contractor** shall assume the defense of, indemnify and hold harmless the **City**, the **Design Professional**, the **Design Professional's** consultants, and agents and employees of any of them, from and against claims, suits, causes of action, demands, liabilities, damages, losses, and expenses, including, but not limited, to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, caused in whole or in part by alleged negligent acts or omissions of the **Contractor**, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.

5.27.2. In claims against any person or entity indemnified under the foregoing paragraph by an employee of the **Contractor**, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under the foregoing paragraph shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the **Contractor** or a Subcontractor under Workers' Compensation laws, disability benefit acts or other employee benefit acts.

5.27.3. The obligations of the **Contractor** in this Article shall not extend to the liability of the **Design Professional**, the **Design Professional's** consultants, and agents or employees of any of them arising out of (1) the preparation of maps, Plans, opinions, reports, surveys, Change Orders, designs, or Specifications, or (2) directions or instructions given by the **Design Professional**, the **Design Professional's** consultants and agents or employees of any of them, provided such instructions or directions are the primary cause of the injury or damage.

5.27.4. The **Contractor**, or any successor, assign, or subrogee of the **Contractor** agrees not to bring any civil suit,

action, or other proceeding in law, equity or arbitration against the **Design Professional**, or the officers, employees, agents, or consultants of the **Design Professional**, for the enforcement of any action which the **Contractor** may have arising out of or in any manner connected with the Work. The **Contractor** shall assure that this covenant not to sue is contained in all subcontracts and sub-subcontracts of every tier and shall assure its enforcement. The **Design Professional**, its officers, employees, agents, and consultants are intended third-party beneficiaries of this covenant not to sue, and are entitled to enforce this covenant in law or equity.

5.28. Survival of Obligations.

5.28.1 All representations, indemnifications, warranties, and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Work and termination or completion of the Contract.

ARTICLE 6
SUBCONTRACTORS

6.1 Use of Subcontractors.

The **Contractor** shall use the Subcontractors named in the **Contractor's** Bid. The Contractor shall not award any work to any Subcontractor without prior written approval of the CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT). The Contractor shall not award any work to any subcontractor without prior written approval of CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT), which approval will not be given until the Contractor submits a written approval statement concerning the proposed award to the subcontractor, which statement shall contain such information as CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) may require. All subcontracts subject to Mass. General laws, Chapter 149, Sections 44A-J, shall comply with the filed sub-bid requirements of that statute. The Contractor shall be as fully responsible for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. The Contractor shall cause appropriate provisions to be inserted in all subcontractors relative to the work to bind subcontractors to the Contractor by the Terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) may exercise over the Contractor under any provision of the contract documents. Nothing contained in this contract shall create any contractual relation between any subcontractor and CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT).

6.2 Substitution of Subcontractors.

6.2.1 The **Contractor** shall not substitute another Subcontractor therefor without notice to the **City** and the **City's** prior written consent of such substitution.

6.3 Names of Subcontractors.

6.3.1 Upon execution of the Contract with the **City**, the **Contractor** shall provide in writing to the **City**, through the **Design Professional,** the names, addresses, telephone numbers, and fax numbers of all persons proposed for each principal portion of the Work.

6.4. Objections to Subcontractors.

6.4.1 The **Contractor** shall not use any Subcontractor against whom the **City** has a reasonable objection. The **Contractor** shall not be required to contract with any person or entity against whom it has a reasonable objection.

6.5. Form of the Subcontract.

6.5.1 All Work performed by a Subcontractor shall be through an appropriate subcontract. The form of subcontract shall be submitted to the **City for its** approval, which shall not be unreasonably withheld or delayed.

6.6. Content of the Subcontract.

6.6.1. In addition to all statutorily mandated provisions and provisions required elsewhere in the Contract Documents, each subcontract shall expressly provide that:

6.6.1.1. Each subcontract agreement for a portion of the Work is assigned by the **Contractor** to the **City** provided that:

6.6.1.1.1. the assignment is effective only after termination of the Contract by the **City** or the **Contractor** and only for those subcontract agreements which the **City** accepts by notifying the Subcontractor in writing; and

6.6.1.1.2. the assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

6.6.1.2. Each Subcontractor is bound by the requirements of the Contract Documents for the express benefit of the **City.**

6.6.1.3. Each Subcontractor shall assume toward the **Contractor** all the obligations that the **Contractor** assumes toward the **City** and the **Design Professional**, unless otherwise provided by law.

ARTICLE 7
PERFORMANCE AND PAYMENT BONDS

7.1. Form of Bonds.

7.1.1 The performance and labor and material or payment bonds shall be in the form required by the **City**, copies of which are included in the Project Manual. The **City** reserves the right to reject any bond that does not conform to the **City's** requirements.

7.2. Furnished by the Contractor. (*Reference:* M.G.L. c. 30, §39M(c);, M.G.L. c. 149, §29).

7.2.1 The **Contractor** shall furnish a performance bond and a labor and materials or payment bond, each with a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the **City** and each in the sum of the Contract Sum, the premiums for which are to be paid by the **Contractor** and are included in the Contract Sum. The bonds shall remain in effect until final payment is made. The sum of the performance bond shall increase each time the Contract Sum is increased as a result of a Change Order.

7.3. Submission to the City.

7.3.1 The **Contractor** must submit the performance and a labor and materials or payment bonds to the **City** upon the **Contractor's** execution of the Agreement.

ARTICLE 8
INSURANCE REQUIREMENTS

8.1 Insurance Certificates.

8.1.1 Prior to starting work on this project, the contractor shall deposit with the **City**, certificates from insurers clearly stating that the required insurance policies have been issued to the **Contractor** and will remain in effect during the time period required to complete this contract. ACCORD forms will not be accepted. The certificates must be in a form satisfactory to the **City**. The insurance shall include all major divisions of coverage, and shall be on a comprehensive general basis including: Premises and Operations (including X-C-U), Owners and Contractors Protective, Products and Completed Operations, Owned, Non-owned or Hired and/or Leased Motor Vehicles. Such insurance shall be written for not less than any limits of liability, required by law or the following limits, whichever are greater.

8.2 Minimum Coverages. The **Contractor** shall possess and maintain throughout the contract period/project, insurance in the kinds and amounts as stated in the Specification included in Appendix C of this Agreement. The **Contractor** may purchase and maintain excess liability insurance in the in the umbrella form in order to satisfy the limits of liability required for the insurance to be purchased and maintained in accordance with the required requirements set forth above (in addition to the umbrella limits required). Evidence of such excess liability shall be delivered to the **City** in the form of a certificate and the certificate indicating the policy numbers and limits of liability of all underlying insurance.

8.3 Additional Insured. The **City** shall be named as an additional insured on each certificate, and the certificate must have the endorsement of the insurance agency.

8.4 Notice. Each certificate shall contain a notation that the insurer will give 30 days notice to the **City** prior to cancellation, change or non-renewal of policy.

8.5 Carrier Rating. Insurance carriers MUST have an A.M. Best rating of "A" or better.

8.6 Material Breach. Failure of the contractor to provide and continue in force such insurance shall be deemed a material breech of contract and shall operate as immediate termination thereof.

ARTICLE 9
TESTS AND INSPECTIONS

9.1. Access.

9.1.1 The **City**, the **Design Professional**, and all other persons designated by the **City** shall have access to the Work at reasonable times for observing, inspecting, and testing. The **Contractor** shall provide them with proper and safe conditions for such access and advise them of the **Contractor's** site safety procedures and programs so that they may comply therewith as applicable.

9.2. Tests and Inspections.

9.2.1. The **Contractor** shall give the **Design Professional** timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

9.2.2. Unless otherwise provided, the **Contractor** shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the **City**, or with the appropriate public authority and shall bear all related costs of tests, inspections, and approvals. If the laws or regulations of any public body having jurisdiction require any Work or part thereof specifically to be inspected, tested, or approved by an employee or other representative of such public body, the **Contractor** shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith and furnish the **Design Professional** with the required certificates of inspection, testing, or approval.

9.2.3. The **Contractor** shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for the **Design Professional's** acceptance of materials or equipment to be incorporated into the Work, or of materials, mix designs, or equipment submitted for approval prior to the **Contractor's** purchase thereof for incorporation into the Work.

9.2.4. If any Work that is to be inspected, tested, or approved is covered by the **Contractor**, Subcontractor, or Sub-subcontractor without the prior written consent of the **Design Professional**, it must be uncovered for observation, inspection, testing, or approval, if requested by the **Design Professional**. The **Contractor** must recover the Work at its own expense.

9.2.5. The **Contractor** shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the **Design Professional** in the **Design Professional's** administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the **Contractor**.

ARTICLE 10
UNCOVERING AND CORRECTING WORK

10.1. Uncovering Work.

10.1.1. If a portion of the Work is covered contrary to the **Design Professional's** request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the **Design Professional**, be uncovered for the **Design Professional's** observation and be replaced, both at the **Contractor's** expense and without change in the Contract Time.

10.1.2. If a portion of the Work has been covered which the **Design Professional** has not specifically requested to observe prior to its being covered, the **Design Professional** may request to see such Work, and it shall be uncovered by the **Contractor**. If it is found that such Work is in accordance with the Contract Documents, costs of uncovering and replacing shall, by appropriate Change Order, be charged to the **City**. If it is found that such Work is defective or not in accordance with the Contract Documents, the **Contractor** shall pay all claims, costs, losses, and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection, and testing and of satisfactory replacement of reconstruction (including, but not limited to, all costs of repair or replacement of work of others); and the **City** shall be entitled to an appropriate decrease in the Contract Sum. The **City** may take such decrease by reducing the then current application for payment accordingly or subsequent applications, if necessary, until the decrease is paid in full.

10.2. Correcting Work.

10.2.1. The **Contractor** shall promptly correct Work rejected by the **Design Professional** or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. The **Contractor** shall bear all costs of correcting such rejected Work including additional testing and inspections and
compensation for the **Design Professional's** services and expenses made necessary thereby and any cost, loss, or damages to the **City** resulting from such failure or defect.

10.2.2. If, within one (1) year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established in Article 15, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the **City** to do so, unless the **City** has previously given the **Contractor** a written acceptance of such condition. This period of one (1) year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation to correct under this paragraph shall survive acceptance of the Work under the Contract and termination of the Contract. The **City** shall give such notice promptly after discovery of the condition.

10.2.3. The **Contractor** shall correct, remove, or replace portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the **Contractor** nor accepted by the **City**.

10.2.4. If the **Contractor** fails within a reasonable time to correct nonconforming Work, or to remove and replace rejected Work, or fails to perform the Work in accordance with the Contract Documents, the **City** may correct it in accordance with the provisions herein. If the **Contractor** does not proceed with correction, removal, or replacement of such nonconforming Work within seven (7) days from the date of written notice from the **Design Professional**, the **City** may correct it and store any salvageable materials or equipment at the **Contractor's** expense. If the **Contractor** does not pay costs of any such removal and storage within ten (10) days after written notice, the **City** may upon ten (10) additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the **Contractor**, including compensation for the **Design Professional's** services and expenses made necessary thereby. If such proceeds of sale do not cover all the costs that the **Contractor** should have born, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the **Contractor** are not sufficient to cover such amount, the **Contractor** shall pay the difference to the **City**.

10.2.5. The **Contractor** shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the **City** or separate contractors caused by the **Contractor's** correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

10.2.6. Nothing contained in this paragraph shall be construed to establish a period of limitation with respect to other obligations that the **Contractor** might have under the Contract Documents. Establishment of the time period of one (1) year as described in the above paragraph related only to the specific obligation of the **Contractor** to correct the Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced nor to the time within which proceedings may be commenced to establish the **Contractor's** liability with respect to the **Contractor's** obligations other than specifically to correct the Work.

10.3. Acceptance of Nonconforming Work.

10.3.1 If, instead of requiring correction or removal and replacement of defective or nonconforming Work, the **City** prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the **City** may do so instead of requiring its removal and correction, in which case the **Contractor** shall pay all claims, costs, losses, and damages attributable to the **City's** evaluation of and determination to accept such defective or non-conforming Work. The Contract Sum will be reduced as appropriate. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 11
CHANGES IN THE WORK

11.1. In General.

11.1.1. The Contract Sum constitutes the total compensation (subject to authorized adjustments) payable to the **Contractor** for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the **Contractor** shall be at the **Contractor's** expense without any change in the Contract Sum.

11.1.2. Without invalidating the Contract and without notice to any surety, the **City** may, at any time or from time to time, order additions to, deletions from, or revisions in the Work. Such additions, deletions, or revisions will be authorized by a Change Order, a Modification or a **Construction Change** Directive. Upon receipt of any such document, the **Contractor** shall promptly proceed with the Work involved that will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

11.1.3. The **Contractor** shall not be entitled to an increase in the Contract Sum or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified, or supplemented, except as otherwise provided herein.

11.2. Change Orders.

11.2.1. (*Reference:* M.G.L. c. 30, §39I;). The **Contractor** shall perform all the Work required by this Contract in conformity with the Plans and Specifications contained herein. No willful and substantial deviation from said Plans and Specifications shall be made unless authorized in writing by the **City** and the **Design Professional** in charge of the Work who is duly authorized by the **City** to approve such deviations. In order to avoid delays in the prosecution of the Work required by such Contract, such deviation from the Plans or Specifications may be authorized by a written order of the **City** or the **Design Professional** so authorized to approve such deviation. Within thirty (30) days thereafter, such written order shall be confirmed by a certificate of the **City,** using AIA Document G701 (or its equivalent), stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures, or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor; (2) that the specified deviation does not materially injure the Project as a whole; (3) that either the work substituted for the Work specified is of the same cost and quality, or that an equitable adjustment has been agreed upon between the **City** and the **Contractor** and the amount in dollars of said adjustment; and (4) that the

deviation is in the best interest of the **City**. The Change Order shall also indicate whether or not the date of substantial completion has been extended. The equitable adjustment in price shall be determined by the unit prices, if any, in the General Contractor's bid; otherwise, it shall be a number which is agreed to by both parties as a fair adjustment and which can be itemized and substantiated to the reasonable satisfaction of the Contracting Authority. Where increases and decreases to the Contract Sum are included in one Change Order, the negotiated allowance for overhead and profit shall be calculated on the basis of the net increase, if any.

11.3. Construction Change Directive.

11.3.1. A **Construction Change** Directive shall be used in the absence of total agreement on the terms of a Change Order.

11.3.2. Upon request of the **City** or the **Design Professional**, the **Contractor** shall without cost to the **City** submit to the **Design Professional** in such form as the **Design Professional** may require, an accurate written estimate of the cost of any proposed extra work or change. The estimate shall indicate the quantity and unit cost of each item of materials, and the number of hours of work and hourly rate for each class of labor, as well as the description and amounts of all other costs chargeable under the terms of this Article. Unit labor costs for the installation of each item of materials shall be shown if required by the **Design Professional**. If required by the **Design Professional**, in order to establish the exact cost of new Work added or of previously required Work omitted, the **Contractor** shall obtain and furnish to the **Design Professional** bona fide proposals from recognized Suppliers for furnishing any material included in such Work. Such estimates shall be furnished promptly so as to occasion no delay in the Work, and shall be furnished at the **Contractor's** expense.

11.3.3. The **Contractor** shall state in the estimate any extension of time required for the completion of the Work if the change or extra Work is ordered. The **Contractor** shall document, through a critical path analysis, or some other clearly delineated explanation, how the proposed change affects other aspects of the Work, and why it would require an extension of time. The **Contractor** shall promptly revise and resubmit such estimate if the **Design Professional** determines that it is not in compliance with the requirements of this Article, or that it contains errors of fact or mathematical errors.

11.3.4. If the **Construction Change** Directive provides for an adjustment to the Contract Sum**,** the adjustment shall be based on one of the following methods, as selected by the **City**, selection of which does not require the consent of the **Contractor**:

11.3.4.1. by unit prices stated in the Contract Documents or otherwise mutually agreed upon; or

11.3.4.2. by Cost and Percentages estimated by the **Contractor** as provided herein and accepted by the **City**, whereupon the **Contractor's** estimate shall become a fixed price which shall not be changed by any variation in the actual cost of executing the Work covered by the change; or

11.3.4.3. by actual Cost determined after the Work covered by the change is completed, plus Percentage; or

11.3.4.4. by submission to arbitration or a court, which shall determine the fair value of the Work covered by the change.

11.3.5. "Cost" shall mean the estimated or actual net increase or decrease in cost to the **Contractor**, Subcontractor, or Sub-subcontractor for performing the Work covered by the change, including actual payments for materials, equipment rentals, expendable items, wages, and associated benefits to the workers and to supervisors employed full time at the Site, insurance, bonds, and other provable direct costs, but not including any administrative, accounting or expediting costs, or other indirect or overhead costs, or any wages or benefits of supervisory personnel not assigned full time to the Site, or any amount for profit or fee to the **Contractor**, Subcontractor, or Sub-subcontractor.

11.3.6. "Percentage" shall mean an allowance to be added to or subtracted from the Cost in lieu of overhead and profit and of any other expense that is not included in the Cost of the Work covered by the change, as defined above. Percentage for a Sub-subcontractor shall be 8% of any net increase or decrease of Cost of any Work performed by the Sub-subcontractor's own forces plus 4% of any net increase or decrease in Cost of any Work performed for the Sub-subcontractor by lower tier Sub-subcontractors. Percentage for a Subcontractor shall be 12% of any net increase or decrease of Cost of any Work performed by the Subcontractor's own forces plus 4% of the Cost of Work performed by Sub-subcontractors. Percentage for the **Contractor** shall be 15% of any net increase or decrease of Cost of any Work performed by the **Contractor's** own forces plus 5% of any net increase or decrease in the Cost for all other Work covered by the change. When the **Contractor** is also performing Work as a Subcontractor or Sub-subcontractor, the **Contractor** shall only be entitled to a total of no more than 15% of any net increase or decrease of Cost of any Work.

11.3.7. When in the reasonable judgment of the **Design Professional** a series of **Construction Change** Directives or Change Orders effect a single change, Percentage shall be calculated on the cumulative net increase or decrease in Cost, if any.

11.3.8. If unit prices are stated in the Contract Documents or are subsequently agreed upon, and if quantities originally contemplated are so changed in a Proposed Change Order or **Construction Change** Directive that the application of such unit prices to quantities of Work proposed will cause substantial inequity to the **City** or the **Contractor**, the applicable unit prices shall be equitably adjusted. Wherever the estimated quantities of work to be done and materials to be furnished under this

contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) to complete the work contemplated by the contract, nor shall any such increases or diminution shall in no way violate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

11.3.9. If the **City** elects to determine the Cost of the Work as provided in method (11.3.4.1) using unit prices stated in the Contract Documents or subsequently agreed upon, the unit prices shall be subject to the prior paragraph. Notwithstanding the inclusion of unit prices in the Contract Documents, it shall be the **City's** option to require the Cost of any given change to be determined by one of the other methods stated in 11.3.4. If the **City** elected to determine the Cost of the change by unit prices and the nature of the work is such that its extent cannot readily be measured after the completion of such work or any subsequent Work, the **Contractor** shall keep daily records, available at all times to the **Design Professional** for inspection, of the actual quantities of such Work put in place, and delivery receipts or other adequate evidence, acceptable to the **Design Professional**, indicating the quantities of materials delivered to the Site for use in such unit price Work, and distinguishing such from other similar material delivered for use in Work include in the base Contract Sum. If so required by the **Design Professional**, materials for use in unit price Work shall be stored apart from all other materials on the Project.

11.3.10. If the **City** elects to determine the Cost of the Work as provided in methods 11.3.4.3. or 11.3.4.4. or if the method of determining the Cost has not been established before the Work is begun, the **Contractor** shall keep detailed daily records of labor and material costs applicable to the Work.

11.3.11. Upon receipt of a **Construction Change** Directive, the **Contractor** shall promptly proceed with the change in the Work involved and advise the **Design Professional** in writing of the **Contractor's** agreement or disagreement with the method, if any, provided in the **Construction Change** Directive for determining the proposed adjustment in the Contract Time.

11.3.12.A **Construction Change** Directive signed by the **Contractor** indicates the agreement of the **Contractor** therewith, including adjustment in the Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

11.3.13. If the **Design Professional** and the **Contractor** do not agree with the adjustment in the Contract Time or the method for determining it, the adjustment or the method shall be referred to the **Design Professional** for determination.

11.4. Minor Changes in the Work.

11.4.1. The **Design Professional** has the authority to order minor changes in the Work. "Minor changes" as used in this paragraph mean changes which are so insignificant as to not affect the Contract Sum or the Contract Time and which are not inconsistent with the intent of the Contract Documents. Any minor change shall be committed to a written order which shall be binding on both the **City** and the **Contractor** and which shall be promptly carried out by the **Contractor**.

11.5. Certificate of Appropriations. (*Reference:* M.G.L. c. 44, §31C;). This Contract shall not be deemed to have been made until the **City's** auditor has certified thereon that an appropriation in the amount of this Contract is available therefor and that an officer or agent of the **City** has been authorized to execute said Contract and approve all requisitions and change orders. No order to the **Contractor** for a change in or addition to the Work, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the **Contractor** is willing to perform without any increase to the Contract price, shall be deemed to be given until the auditor has certified thereon that an appropriation in the amount of such order is available therefore; but such certificate shall not be construed as an admission by the **City** of its liability to pay for such work. The certificate of the auditor that an appropriation in the amount of this Contract or in the amount of such order is available shall bar any defense by the **City** on the grounds of insufficient appropriation.

ARTICLE 12
CHANGE IN THE CONTRACT TIME

12.1. Date of Commencement.

12.1.1 The date of commencement of the Work is the date established in the Notice to Proceed. The date shall not be postponed by the failure to act of the **Contractor** or persons or entities for whom the **Contractor** is responsible.

12.2. Progress and Completion.

12.2.1. Time is of the essence; all time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the **Contractor** confirms that the Contract Time is a reasonable period for performing the Work.

12.2.2. The **Contractor** shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

12.2.3. At least ten (10) working days after the Notice to Proceed or twenty (20) working days before the first application for payment, the **Contractor** shall submit to the **Design Professional** a progress schedule showing for each class of

Work included in the schedule of values, the percentage of completion to be obtained and the total dollar value of Work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of Work in place, but may include, at the **Design Professional's** discretion, the value of materials delivered but not in place.

12.2.4. The progress schedule shall be based on an orderly progression of the Work, allowing adequate time for each operation (including adequate time for submission and review of submittals), and leading to a reasonable certainty of Substantial Completion by the date established in the Agreement. The progress schedule will be reviewed by the **Design Professional** for compliance with the requirements of this Article and will be accepted by the **Design Professional** or returned to the **Contractor** for revision and resubmittal. Unless specifically required by law, no payment under this Contract shall be due until the progress schedule has been approved by the **Design Professional**. The **Design Professional's** review of the progress schedule shall not impose any duty on the **Design Professional** or the **City** with respect to the timing, planning, scheduling, or execution of the Work. In particular, if the **Contractor** proposes a progress schedule indicating a date of Substantial Completion which is earlier than the Contract Time, the **Contractor** shall not be entitled to additional payment or compensation of any kind if, for any reason, the full Contract Time is required to achieve Substantial Completion of the Work.

12.2.5. If in any Application for Payment, the total value of the completed Work in place, as certified by the **Design Professional**, is less than 90% of the total value of the Work in place estimated in the progress schedule, the **City** may, at the **City's** option, require the **Contractor** to accelerate the progress of the Work without cost to the **City** by increasing the workforce or hours or Work or by other reasonable means approved by the **Design Professional**.

12.2.6. If each of three successive applications, as certified by the **Design Professional**, indicate that the actual Work completed is less than 90% of the values estimated in the progress schedule to be completed by the respective dates, the **City** may at the **City's** option, treat the **Contractor's** delinquency as a default justifying the action permitted under Article 18.

12.2.7. If the **Design Professional** has determined that the **Contractor** should be permitted to extend the time for completion as provided below, the calendar dates in the progress schedule shall be adjusted accordingly to retain their same relationship to the adjusted date of Substantial Completion, and the dollar value of the Work to be completed as of the first of each month shall be adjusted pro rata.

12.2.8. If the **Contractor** fails to submit any application for payment in any month, the **Design Professional** shall, for the purpose of this evaluation of progress, certify separately to the actual value of the Work in place completed as of the first of the month to the best of the **Design Professional's** knowledge.

12.2.9. Nothing herein shall limit the **City's** right to liquidated or other damages for delays by the **Contractor** or to any other remedy which the **City** may be entitled or may possess under other provisions of the Contract Documents or by law.

12.3. Delays and Extensions of Time.

12.3.1. If the **Contractor** is delayed at any time in the progress of the Work by an act or neglect of the **City** or the **Design Professional**, or of an employee of either, or of a separate contractor employed by the **City**, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes (except weather) beyond the **Contractor's** control, or by delay authorized by the **City**, or by other causes which the **Design Professional** determines may justify delay, then the Contract Time shall be extended by Change Order or **Construction Change** Directive for such reasonable time as the **Design Professional** may determine.

12.3.2. Claims relating to time shall be made in accordance with applicable provisions of Article 16.

12.3.3. No claim for extension of time shall be allowed on account of failure of the **Design Professional** to furnish Plans, Specifications or instructions or to return Shop Drawings or Samples until fifteen (15) days after receipt by the **Design Professional** by registered or certified mail of written demand for such instructions, Plans, Specifications, or Samples, and then not unless such claim is reasonable.

12.3.4. No extensions of time shall be granted because of seasonal or abnormal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the **Contractor**, whether occurring within the time originally scheduled for completion or within the period of any extension granted. There shall be no increase in the Contract Sum on account of any additional costs of operations or conditions resulting therefrom.

12.3.5. The **Contractor** hereby agrees that the **Contractor** shall have no claim for damages of any kind against the **City** or the **Design Professional** on account of any delay in the commencement of the Work and/or any hindrance, delay, or suspension of any portion of the Work, whether such delay is caused by the **City**, the **Design Professional**, or otherwise, except as and to the extent expressly provided under M.G.L. c. 30, §39O, in the case of written orders by the **City**. The **Contractor** acknowledges that the **Contractor's** sole remedy for any such delay and/or suspension will be an extension of time as provided in this Article.

12.3.6. (*Reference:* M.G.L. c. 30, §39O;). (a) The **City** may order the **Contractor** in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the **City**, provided however that if there is a suspension, delay, or interruption for fifteen (15) days or more due to a failure of the **City** to act within the time specified in this Contract, the **City** shall make an adjustment in the

Contract prices for any increase in the cost of performance of this Contract under this provision for any suspension, delay, interruption, or failure to act to the extent that such is due to any cause for which this Contract provides for an equitable adjustment of the Contract price under any other Contract provisions.

(b) The **Contractor** must submit the amount of a claim under provision (a) to the **City** in writing as soon as practicable after the end of the suspension, delay, interruption, or failure to act and, in any event, not later than the date of final payment under this Contract and, except for costs due to a suspension order, the **City** shall not approve any costs in the claim incurred more than twenty (20) days before the **Contractor** notified the **City** in writing of the act or a failure to act involved in the Claim.

In the event a suspension, delay, interruption, or failure to act of the **City** increases the cost of performance to any Subcontractor, that Subcontractor shall have the same rights against the **Contractor** for payment for an increase in the cost of its performance as provisions (a) and (b) give the **Contractor** against the **City**, but nothing in provisions (a) and (b) shall in any way change, modify, or alter any other rights which the **Contractor** or the Subcontractor may have against each other.

12.4. Liquidated Damages.

12.4.1. If the **Contractor** shall fail to achieve Substantial Completion within the Contract Time, it shall be liable to pay the **City** the daily amount specified in the Agreement, not as a penalty, but as a fixed and agreed upon damages for breach of contract. The said amount is fixed and agreed upon because of the difficulty of ascertaining the **City's** actual damages. It is mutually understood that the said amount is a reasonable approximation or estimate thereof as of the date of the Agreement. The **City** may elect to withhold said amount from periodic or final payments due to the **Contractor**, in addition to retainage and other back charges.

12.5. Changes in the Contract Time.

12.5.1. In Writing. The Contract Time may only be changed by a Change Order or a Modification. Any claim for an adjustment of the Contract Time shall be based on a written notice delivered to the party making the claim to the other party and to the **Design Professional** promptly (but in no event later that seven (7) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty (30) days after such occurrence and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by the **Design Professional** in accordance with Article 16. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph.

12.5.2. Early Completion. The Contract Time shall not be changed due to a delay in the **Contractor's** early completion date.

ARTICLE 13
PAYMENTS

13.1. Schedule of Values.

13.1.1. The **Contractor** shall submit to the **Design Professional** a schedule of values which shall subdivide the Work into its component parts and shall include quantities, direct craft labor worker hours, labor cost and material/equipment cost. Labor cost shall include an appropriate amount of construction equipment costs, supplemental costs, administrative expenses, contingencies, and profit. The **Contractor** shall prepare the schedule of values in such form and supported by such data to substantiate its accuracy as the **Design Professional** may require and shall be revised if later found by the **Design Professional** to be inaccurate. This schedule, unless objected to by the **Design Professional**, shall be used as a basis for reviewing the **Contractor's** applications for payment.

13.2. Content and Submission of Applications for Payment.

13.2.1. At least ten (10) days before the date established for each progress payment, the **Contractor** shall submit to the **Design Professional** six (6) copies of an itemized application for payment for Work completed in accordance with the schedule of values. Such application shall be in a form or format established or approved by the **Design Professional** and shall be supported by documentation substantiating the **Contractor's** right to payment.

13.2.2. When **Construction Change** Directives have set forth an adjustment to the Contract Sum but have not yet been included in Change Orders, the value established by the **City** may be included in the application.

13.2.3. Applications covering Work of Subcontractors or Suppliers shall not include requests for payments of amounts the **Contractor** does not intend to pay to a Subcontractor or Supplier because of a dispute or other reason. The **Contractor** shall not be paid for any Work performed by a Subcontractor unless and until the **City** receives for that Subcontractor a certificate of insurance that conforms to the requirements of the Contract Documents .

13.2.4. Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and

equipment delivered and suitably stored at the Site for subsequent incorporation in the Work. If approved in advance by the **City**, payment may similarly be made for materials and equipment suitably stored off the Site at a location agreed upon in writing. Payment for materials and equipment stored on or off the Site shall be conditioned upon the application for payment being accompanied by a bill of sale, an invoice, or other documentation warranting that the **City** has received the materials and equipment free and clear of all liens, claims, security interests, or encumbrances, hereinafter collectively referred to as "liens," and evidence that the materials and equipment are covered by appropriate insurance and other arrangements to protect the **City's** interest therein.

13.2.5. Each application for payment or periodic estimate requesting payment shall be accompanied by, at the **City's** option, a certificate from each Subcontractor stating that the Subcontractor has been paid all amounts due the Subcontractor on the basis of the previous periodic payment to the **Contractor**, or else stating the amount not so paid and the reason for the discrepancy. In the event of any such discrepancy, the **Contractor** shall furnish the **Contractor's** own written explanation to the **City** through the **Design Professional**. Such waiver or certificate shall be in a form acceptable to the **City**.

13.3. False Applications for Payment.

13.3.1. (*Reference:* M.G.L. c. 266, §§67B). Any person who makes or presents to any claim upon or against any employee or department of the **City**, knowing such claim to be false, fictitious, or fraudulent shall be punished by a fine or not ore than ten thousand dollars ($10,000) or by imprisonment in the state prison for not more than five (5) years, or in the house of correction for not more than two and one-half years, or both.

13.4. Review of Applications for Payment.

13.4.1. The **Design Professional** shall review each application for payment and will reject any application that (1) is not accompanied by the required documentation or (2) contains errors, mathematical or otherwise.

13.4.2. Within five (5) business days after receipt of an application for payment, the **Design Professional** will either (1) return the application to the **Contractor** with a written explanation as to why it was rejected or (2) issue to the **City** a certificate for payment, with a copy to the **Contractor**, for such amount as the **Design Professional** determines is properly due. In the event an application is returned to the **Contractor**, the date of receipt of the application shall be the date of receipt of the corrected application.

13.4.3. The **Design Professional** or the **City** may make changes to any application submitted by the **Contractor**.

13.4.4. By recommending any payment, the **Design Professional** will not thereby be deemed to have represented that: (1) exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to the **Design Professional** in the Contract Documents or (2) that there may not be other matters or issues between the parties that might entitle the **Contractor** to be paid additionally by the **City** or entitle the **City** to withhold payment to the **Contractor**. The **Design Professional's** approval of the application for payment and the accompanying documentation shall indicate that to the best of the **Design Professional's** knowledge, information, and belief, the Work has progressed to the point indicated by the **Contractor**, and that the quality of the Work is in accordance with the Contract Documents, subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests specified in the Contract Documents, final determination of quantities and classifications for unit price work and any other qualifications so stated.

13.4.5. The **Design Professional's** recommendation of any payment shall not mean that the **Design Professional** is responsible for the **Contractor's** means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the **Contractor** to comply with laws and regulations applicable to the furnishing or performance of Work, of for any failure of the **Contractor** to perform or furnish Work in accordance with the Contract Documents.

13.4.6. No certificate given or payment made shall be evidence of the performance of this Contract, either wholly or in part and no payment, whether made upon the final certificate or otherwise, shall be construed as an acceptance of defective work or materials.

13.5. Decisions to Withhold Certification.

13.5.1. The **Design Professional** may refuse to recommend the whole or any part of any payment if, in the **Design Professional's** opinion, it would be incorrect to make the representations to the **City** referred to above.

13.5.2. If the **Contractor** and the **Design Professional** cannot agree on a revised amount, the **Design Professional** will promptly approve a certificate for payment for the amount for which the **Design Professional** is able to make such representations to the **City**. The **Design Professional** may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a certificate for payment previously issued, to such extent as may be necessary in the **Design Professional's** opinion to protect the **City** from loss because of:

13.5.2.1. defective Work not remedied;

13.5.2.2. third party claims filed or reasonable evidence indicating probable filing of such claims;

13.5.2.3. failure of the **Contractor** to make payments properly to Subcontractors or for labor, materials or equipment;

13.5.2.4. reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

13.5.2.5. damage to the **City** or another contractor;

13.5.2.6. reasonable evidence that the Work will not be completed within the Contract Time, and that retainage currently held by the **City** would not be adequate to cover actual or liquidated damage for the anticipated delay;

13.5.2.7. persistent failure to carry out the Work in accordance with the Contract Documents; or

13.5.2.8. failure of mechanical trade or electrical trade subcontractors to comply with mandatory requirements for maintaining record drawings. The **Contractor** shall check record drawings each month. Written confirmation that the record drawings are current will be required by the **Design Professional** before approval of the **Contractor's** monthly payment requisition.

13.5.3. When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

13.6. Progress Payments.

13.6.1. After the **Design Professional** has issued a certificate for payment, the **City** shall make payment in the manner and within the time provided in the Contract Documents.

13.6.2. (*Reference:* M.G.L. c. 30, §39G, 39K;). In the case of Contracts for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building when the amount is more than two thousand dollars, the following paragraph applies: Within fifteen days (30 days in the case of the commonwealth, including local housing authorities) after receipt from the contractor, at the place designated by the awarding authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the awarding authority will make a periodic payment to the contractor for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that the materials are free from all encumbrances, but less (1) a retention based on its estimate of the fair value of its claims against the contractor and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, and less (3) a retention not exceeding five per cent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the awarding authority, less than one per cent of the original contract price, or (b) the contractor substantially completes the work and the awarding authority takes possession for occupancy, whichever occurs first, the awarding authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, or based on the record of payments by the contractor to the subcontractors under this contract if such record of payment indicates that the contractor has not paid subcontractors as provided in section thirty-nine F. If the awarding authority fails to make payment as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate than charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days (twenty-four days in the case of the commonwealth) after receipt of such a periodic estimate from the contractor, at the place designated by the awarding authority if such a place is so designated. The contractor agrees to pay to each subcontractor a portion of any such interest paid in accordance with the amount due each subcontractor.

For all other construction contracts, progress payments are governed by chapter 30, §39G, and as follows: The **City** shall pay the amount due pursuant to any periodic, Substantial Completion or final estimate within thirty-five (35) days after receipt of written acceptance for such estimate from the **Contractor**. In the case of periodic payments, the **City** may deduct from its payment a retention based on its estimate of the fair value of its claims against the **Contractor**, a retention for direct payments to Subcontractors based on demands for same in accordance with M.G.L. c. 30, §39F; and a retention to secure satisfactory performance of the contractual work, not exceeding five percent (5%) of the approved amount of any periodic payment, and the same right to retention shall apply to bonded Subcontractors entitled to direct payment under M.G.L. c. 30, §39F; provided, that a five percent (5%) value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

Retainage prior to Substantial Completion. In all construction contracts, the City may hold back a retainage of up to five percent of each progress payment to ensure satisfactory completion of the work. In addition, the City may withhold any amounts in dispute, including disputed change orders and direct payments owed to subcontractors pursuant to Chapter 30, §39F of the General Laws.

Payment upon Substantial Completion. In the case of contracts for construction, reconstruction, alteration, repair, remodeling, or demolition of a public building, where the amount is more than $2,000, Chapter 30, Section 39K, of the General Laws governs payment upon substantial completion. For all other contracts, Chapter 30, Section 39F of the General Laws governs payment upon substantial completion.

13.6.3. No periodic, Substantial Completion or final estimate or acceptance or payment thereof shall bar the **Contractor** from reserving all rights to dispute the quantity and amount of, or the failure of the **City** to approve a quantity and amount of, all or part of any Work item or extra Work item.

13.7. Final Payment.

13.7.1. After final inspection and after the **Contractor** has completed all the required corrections to the satisfaction of the **Design Professional** and the **City** and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, bonds, certificates, or other evidence of insurance, certificates of inspection, marked-up record documents, and all other documents called for in the Contract Documents, as well as any surplus materials requested by the **City,** the **Contractor** may make an application for final payment as provided below.

13.7.2. (*Reference:* M.G.L. c. 30, §39G;). Within thirty (30) days after receipt by the **City** of a notice from the **Contractor** stating that all of the Work required by the Contract has been completed, the **City** shall prepare and forthwith send to the **Contractor** for acceptance a final estimate for the quantity and price of the Work done and all retainage on the Work less all payments made to date, unless the **City's** inspection shows that Work required by the Contract remains incomplete or unsatisfactory, or that documentation required by the Contract has not been completed.

13.7.3. The making and acceptance of final payment will constitute a waiver of all claims by the **Contractor** against the **City** other than those previously made in writing and still unsettled.

13.7.4. Interest. If the City fails to pay the Contractor within the time periods mandated by statute, the City shall pay interest to the Contractor in accordance with Chapter 30, Sections 39G and 39K, whichever is applicable.

13.8. Payments to Subcontractors.

13.8.1. Neither the **City** nor the **Design Professional** shall have an obligation to pay or see to the payment of money to a Subcontractor, Sub-subcontractor, or Supplier except as may otherwise be required by law.

13.8.2. (*Reference:* M.G.L. c. 30, §39F;) (1) Every contract awarded pursuant to sections forty-four A to L, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.

(a) Forthwith after the **Contractor** receives payment on account of a periodic estimate, the **Contractor** shall pay to each Subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the **Contractor**.

(b) Not later than the sixty-fifth day after each Subcontractor substantially completes its Work in accordance with the Plans and Specifications, the entire balance due under the subcontract, less amounts retained by the **City** as the estimated cost of completing the incomplete and unsatisfactory items of Work, shall be due the Subcontractor; and the **City** shall pay that amount to the **Contractor**. The **Contractor** shall forthwith pay to the Subcontractor the full amount received from the **City** less any amount specified in any court proceeding barring such payment and also less any amount claimed due from the Subcontractor by the **Contractor**.

(c) Each payment made by the **City** to the **Contractor** pursuant to paragraphs (a) and (b) of M.G.L. c. 30, §39F(1);, for the labor performed and the materials furnished by a Subcontractor shall be made to the **Contractor** for the account of that Subcontractor; and the **City** shall take reasonable steps to compel the **Contractor** to make each such payment to each such Subcontractor. If the **City** has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the **Contractor** or which is to be include in a payment to the **Contractor** for payment to the Subcontractor as provided in paragraphs (a) and (b) of M.G.L. c. 30, §39F(1), the **City** shall act upon the demand as provided in M.G.L. c. 30, §39F.

(d) If, within seventy (70) days after the Subcontractor has substantially completed the subcontract Work, the Subcontractor has not received from the **Contractor** the balance due under the subcontract including any amount due for extra labor and materials furnished to the **Contractor**, less any amount retained by the **City** as the estimated cost of completing the incomplete and unsatisfactory items of Work, the Subcontractor may demand direct payment of that

balance from the **City**. The demand shall be by a sworn statement delivered to or sent by certified mail to the **City**, and a copy shall be delivered to or sent by certified mail to the **Contractor** at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract Work. [The demand letter shall indicate the certified mail number assigned by the postal service or the date of delivery to the **Contractor**.] Any demand made after substantial completion of the subcontract Work shall be valid even if delivered or mailed prior to the seventieth day after the Subcontractor has substantially completed the subcontract Work. Within ten (10) days after the Subcontractor has delivered or so mailed the demand to the **City** and delivered or so mailed a copy to the **Contractor**, the **Contractor** may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the **City**, and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the **Contractor** and of the amount due for each claim made by the **Contractor** against the Subcontractor.

(e) Within fifteen (15) days after receipt of the demand by the **City**, but in no event prior to the seventieth day after substantial completion of the subcontract Work, the **City** shall make direct payment to the Subcontractor of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the **Contractor**, less any amount (i) retained by the **City** as the estimated cost of completing the incomplete or unsatisfactory items of Work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the **Contractor** in the sworn reply; provided that the **City** shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to or for which the sworn reply does not contain the detailed breakdown required by the previous paragraph. The **City** shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this paragraph.

(f) The **City** shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of the previous paragraph in an interest-bearing joint account in the names of the **Contractor** and the Subcontractor in a bank in Massachusetts selected by the **City** or agreed upon by the **Contractor** and the Subcontractor and shall notify the **Contractor** and the Subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the **Contractor** and the Subcontractor or as determined by decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to the previous paragraph shall be made out of amounts payable to the **Contractor** at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the **Contractor** and in the order of receipt of such demands from Subcontractors. All direct payments shall discharge the obligation of the **City** to the **Contractor** to the extent of such payment.

(h) The **City** shall deduct from payments to a **Contractor** amounts that, together with the deposits in interest-bearing accounts pursuant to paragraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the **Contractor**.

(i) If the Subcontractor does not receive payment as provided in paragraph (a) or if the **Contractor** does not submit a periodic estimate for the value of the labor or materials performed or furnished by the Subcontractor and the Subcontractor does not receive payment for same when due less the deductions provided for in paragraph (a), the Subcontractor may demand direct payment by following the procedure in paragraph (d) and the **Contractor** may file a sworn reply as provided in that same paragraph. A demand made after the first day of the month following that for which the Subcontractor performed or furnished the labor and materials for which the Subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the **Contractor**. Thereafter the **City** shall proceed as provided in paragraphs (e), (f), (g), and (h). "Subcontractor" as used in this paragraph (1)(i) shall mean a person approved by the **City** in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the **Contractor**.

(2) Any assignment by a Subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of M.G.L. c. 149, §29; shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the **City** or which are on deposit pursuant to paragraph (g) shall be subordinate to the rights of all Subcontractors who are entitled to be paid under this section and who have not been paid in full.

(3) A **Contractor** or a Subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in herein by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A Subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in paragraph (f) by a petition in equity in the superior court against the **City** and the **Contractor** shall not be a

necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. M.G.L. c. 231, §§59 and 59B shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to §§59 and 59B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any Subcontractor with the petition of one or more Subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other that the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will present unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a Subcontractor filing a demand for direct payment for which no funds due the **Contractor** are available for direct payment shall have a right to file a petition in court of equity against the **City** claiming a demand for direct payment is premature, and such Subcontractor must file the petition before the **City** has made a direct payment to the Subcontractor and has made a deposit of the disputed portion as provided in part (iii) of paragraph (e) and in paragraph (f).

(4) In any petition to collect any claim for which a Subcontractor has filed a demand for direct payment the court shall, upon motion of the **Contractor**, reduce by the amount of any deposit of a disputed amount by the **City** as provided in part (iii) of paragraph (e) and in paragraph (f) any amount held under a trustee writ or pursuant to a restraining order or injunction.

ARTICLE 14
SUBSTANTIAL COMPLETION

14.1. Substantial Completion.

14.1.1. Upon Substantial Completion of the Work, the **Contractor** shall present in writing to the **City** its certification that the Work has been substantially completed and include in its certification (1) a list of items to be completed or corrected, (2) all special warranties required by the Contract Documents, endorsed by the **Contractor** and in a form reasonably acceptable to the **Design Professional** and (3) the permits and certificates referred to in 13.7.1., or elsewhere. The failure to include any item on the list mentioned in the preceding sentence does not alter the responsibility of the **Contractor** to complete all Work in accordance with the Contract Documents. When the **Design Professional** on the basis of an inspection determines that the Work or designed portion thereof is substantially complete and the other conditions have been met, the **Design Professional** will then prepare a certificate of Substantial Completion which shall establish the date of Substantial Completion, shall state the responsibilities of the **City** and the **Contractor** for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the **Contractor** shall complete the items listed therein. The certificate of Substantial Completion shall be submitted to the **City** and the **Contractor** for their written acceptance of the responsibilities assigned to them in such certificate.

14.1.2. Within twenty-one (21) days after receipt of the certification from the **Contractor**, the **City** shall present to the **Contractor** either a written declaration that the Work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the Contract sufficient to demonstrate that the Work has not been substantially completed. The **City** may include with such list a notice setting forth a reasonable time within which the **Contractor** must achieve Substantial Completion of the Work. If the **City** fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the **Contractor's** certification within the twenty-one (21) day period, the **Contractor's** certification shall take effect as the **City's** declaration that the Work has been substantially completed.

14.2. Partial Use or Occupancy of the Premises.

14.2.1. The **City** may occupy or use any completed or partially completed portion of the Work at any stage. Such partial occupancy or use may begin whether or not the portion is substantially complete, provided that the respective responsibilities of the **City** and the **Contractor** with respect to payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work, insurance, correction of the Work, and warranties shall be established by agreement of the **City** and the **Contractor** or, absent such agreement, shall be determined by the **Design Professional** subject to the right of either party to contest such determination as provided in Article 16.

14.2.2. Immediately prior to such partial occupancy or use, the **City**, the **Contractor** and the **Design Professional** shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

14.2.3. Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

14.2.4. (*Reference:* M.G.L. c. 30, §39G;). Within sixty-five (65) days after the effective date of a declaration of

Substantial Completion, the **City** shall prepare and send to the **Contractor** for acceptance a Substantial Completion estimate for the quantity and price of the Work done and all but one percent (1%) retainage on that Work, including the quantity, price and all but one percent (1%) retainage for the undisputed part of each item and extra work item in dispute, but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory items and less the total periodic payments made to date for the Work. The **City** shall also deduct from the Substantial Completion estimate an amount equal to the sum of all demands for direct payment filed by Subcontractors and not yet paid to Subcontractors or deposited in joint accounts pursuant to M.G.L. c. 30, §39F.

14.2.5. (*Reference:* M.G.L. c. 30, §39G). If the **City** fails to prepare and send to the **Contractor** any Substantial Completion estimate required by the provisions herein on or before the date specified, the **City** shall pay to the **Contractor** interest on the amount which would have been due to the **Contractor** pursuant to such Substantial Completion estimate at the rate of three (3) percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the **City** sends that Substantial Completion estimate to the **Contractor** for acceptance or to the date of payment therefor, whichever occurs first. The **City** shall include the amount of such interest in the Substantial Completion estimate.

14.2.6. (*Reference:* M.G.L. c. 30, §39G). Within fifteen (15) days after the effective date of the declaration of Substantial Completion, the **City** shall send to the **Contractor** by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory items, and unless delayed by causes beyond its control, the **Contractor** shall complete all such items within forty-five (45) days after the receipt of such list or before the date for final payment and acceptance, whichever is later. If the **Contractor** fails to complete such Work within such time, the **City** may, subsequent to seven (7) days' written notice to the **Contractor** by certified mail, return receipt requested, terminate the Contract and complete the incomplete or unsatisfactory items and charge the cost of same to the **Contractor**.

14.3. Final Inspection.

14.3.1. Upon written notice from the **Contractor** that the entire Work or an agreed portion thereof is complete, the **Design Professional** will make a final inspection with the **City** and the **Contractor** and will notify the **Contractor** in writing of all particulars which this inspection reveals that the Work is incomplete or defective. The **Contractor** shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

ARTICLE 15
GUARANTEES AND WARRANTIES

15.1. In General.

15.1.1. All guarantees and warranties specifically called for by the Specifications shall expressly run to the benefit of the **City**. Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the City shall constitute any acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) will give notice of observed defects with reasonable promptness.

15.2. Warranties.

15.2.1. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof, unless otherwise provided in the certificate of Substantial Completion.

15.2.2. The **Contractor** warrants that the materials and equipment furnished under the Contract will be new and of recent manufacture unless otherwise specified, and that all Work will be of good quality, free from faults and defects, and in conformance with the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The **Contractor's** warranty excludes remedy for damage or defect caused by abuse, Modifications not executed by the **Contractor**, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the **Design Professional**, the **Contractor** shall furnish satisfactory evidence as to the kind and quality of material and equipment.

15.2.3. The **Contractor** warrants that title to all Work covered by an application for payment will pass to the **City** either by incorporation in the construction or upon the receipt of payment by the **Contractor**, whichever occurs first, free and clear of all liens. The **Contractor** further agrees that the submission of any application for payment shall conclusively be deemed to waive all liens with respect to said Work to which the **Contractor** may then be entitled, provided that such waiver of the lien rights shall not waive the **Contractor's** right to payment for such Work.

15.2.4. The **Contractor** warrants and guarantees that title to all Work, materials, and equipment covered by any

application for payment, whether incorporated in the Project or not, will pass to the **City** no later than the time of payment free and clear of all liens.

15.2.5. No materials or supplies for the Work shall be purchased by the **Contractor** or Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The **Contractor** warrants that it has good title to all materials and supplies used by it in the Work, free from all liens.

15.2.6. The **Contractor** shall indemnify and hold the **City** harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workers, mechanics, material persons, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this Contract. The **Contractor** shall at the **City's** request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the **Contractor** fails to do so, then the **City** may, after having served written notice on the **Contractor** either pay unpaid bills, of which the **City** has written notice, direct, or withhold from the **Contractor's** unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the **Contractor** shall be resumed, in accordance with the terms of this Contract, but in no event shall the provisions of this sentence be construed to impose any obligations on the **City** to either the **Contractor** or its surety. In paying any unpaid bills of the **Contractor**, the **City** shall be deemed the agent of the **Contractor** and any payment so made by the **City** shall be considered as payment made under the Contract by the **City** to the **Contractor** and the **City** shall not be liable to the **Contractor** for any such payment made in good faith.

15.3. Extended Warranties and Guarantees.

15.3.1. Any defective Work that is either corrected or replaced will be warranted and guaranteed for a period of three (3) years from the date of such correction or replacement.

ARTICLE 16
CLAIMS

16.1. In General.

16.1.1. Written Notice. A Claim must be made by written notice to the other party.

16.1.2. Content of Notice. The notice must include all written supporting data.

16.1.3. Burden of Proof. The party making the Claim must substantiate the Claim.

16.2. Time Limits on Claims.

16.2.1. Unless otherwise provided, all Claims must be made within twenty-one (21) days after the occurrence of the event giving rise to such Claim or within twenty-one (21) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Any change or addition to a previously made Claim shall be made by a written notice within the twenty-one-day period in order to be valid.

16.3. Continuing Contract Performance.

16.3.1. Pending final resolution of a Claim including arbitration, unless otherwise agreed in writing, the **Contractor** shall proceed diligently with performance of the Contract and the **City** shall continue to make payments in accordance with the Contract Documents.

16.4. Types of Claims.

16.4.1. Claims for Differing Subsurface or Latent Physical Conditions. (*Reference:* M.G.L. c. 30, §39N;). If, during the progress of the Work, the **Contractor** or the **City** discovers that the actual subsurface or latent physical conditions encountered at the Site differ substantially or materially from those shown on the Plans or indicated in the Contract Documents, either the **Contractor** or the **City** may request an equitable adjustment in the Contract Sum of the Contract applying to Work affected by the differing Site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a **Contractor**, or upon its own initiative, the **City** shall make an investigation of such physical conditions, and if they differ substantially or materially from those shown on the Plans or indicated in the Contract Documents or from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Plans and Contract Documents and are of such a nature as to cause an increase or decrease in the cost of performance of the Work or a change in the construction methods required for the performance of the Work which results in an increase or decrease in the cost of the Work, the **City** shall make an equitable adjustment in the Contract Sum and the Contract shall be modified in writing accordingly.

16.4.2. Claims for Additional Cost. If the **Contractor** claims that any acts or omissions of the **City** or the **Design Professional**, including any instructions or orders, whether oral, written, by drawings, or otherwise, involve extra cost or time, and the **Contractor** has not received a written acknowledgment by the **City** or the **Design Professional** that extra payment will

be made or time extended on account thereof, the **Contractor** shall promptly so notify the **Design Professional** in writing of such Claim and shall proceed with the Work relating to such Claim and all rights of both parties with respect to such Claim shall be deemed to have been reserved. No Claim by the **Contractor** on account of such acts, omissions, instructions, or orders shall be valid unless the **Contractor** has so notified the **Design Professional** before proceeding.

16.4.2.1. Under no circumstances shall a Claim be made for additional cost where adverse weather conditions are the basis for the Claim.

16.4.3. Claims for Additional Time. If the **Contractor** wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The **Contractor** shall have the burden of demonstrating the effect of the claimed delay on the Contract Time and shall furnish the **Design Professional** with such documentation relating thereto as the **Design Professional** may reasonably require. Under no circumstances shall the **Contractor** make a Claim for an increase in the Contract Time due to a change in the **Contractor's** early completion date. If the increase in the Contract Time extends beyond the Contract Time established by the **City**, only the time that so extends beyond the Contract Time shall be reviewed and considered. In the case of a continuing delay, only one Claim is necessary.

16.4.3.1. Under no circumstances shall a Claim be made for additional time where adverse weather conditions are the basis for the Claim.

16.4.4. Claims for Injury to Person or Damage to Property. Should either party to the Contract suffer injury to person or damage to property because of any error, omission, or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, a Claim will be made in writing to the other party within twenty-one (21) days of the occurrence of the act giving rise to the injury or damage.

16.5. Review of Claims.

16.5.1. Initial Referral. All Claims, the bases of which arise prior to final payment or the earlier termination of the Contract, shall be referred initially to the **Design Professional** for action as provided herein.

16.5.2. Time Period and Action. The **Design Professional** shall review Claims and shall do one of the following within fourteen (14) days of receipt of the Claim:

16.5.2.1. defer any action with respect to all or any part of a Claim for the purpose of requesting and receiving additional information from either party;

16.5.2.2. decline in writing to render a decision for any reason which it deems appropriate (including, but not limited to, the fact that the Claim involves allegations of fault on the part of the **Design Professional**); or

16.5.2.3. render a decision on all or a part of the Claim.

16.5.3. If the **Design Professional** requests additional information, the **Design Professional** shall take action with respect to the Claim no later than fourteen (14) days after receipt of the additional information. The **Design Professional** shall notify the parties in writing of its disposition of such Claim. If the **Design Professional** renders a decision or declines to render a decision, either party may proceed in accordance with paragraph 16.7.

16.6. Decisions.

16.6.1. Decisions by the City or the Design Professional. (*Reference:* M.G.L. c. 30, §39P;). In every case in which this Contract requires the **City**, any official, or its **Design Professional** to make a decision on interpretation of the Specifications, approval of equipment, material or any other approval, or progress of the Work, the decision shall be made promptly and, in any event, no later than fourteen (14) days after the written submission for decision; but if such decision requires extended investigation and study, the **City**, the official, or the **Design Professional** shall, within fourteen (14) days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty-day period and the date by which the decision will be made.

16.6.2. When Decision of the Design Professional is Final and Binding. The decision of the **Design Professional** shall be final and binding on the parties, unless a party files suit or a demand for arbitration within thirty (30) days after the date of the decision.

16.6.3. When Decision of the Design Professional is Not Final and Binding. (*Reference:* M.G.L. c. 30, §39J). Notwithstanding any contrary provision of this Contract, no decision by the **City** or by the **Design Professional** on a dispute, whether of fact or of law, arising under said Contract shall be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, arbitrarily, is unsupported by substantial evidence, or is based upon error of law.

16.6.4. Resolved Claims. If a Claim is resolved, the **Design Professional** shall obtain or prepare the appropriate documentation and provide the **City** and the **Contractor** with a copy of same.

16.7. Arbitration.

16.7.1. Controversies and Claims Subject to Arbitration. Any controversy or Claim arising out of or related to the

Contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof, except controversies or Claims relating to aesthetic effect, subject to the provisions of paragraph 16.7.7. In any such arbitration in which the amount stated in the demand is $100,000 or less, the American Arbitration Association shall appoint a single arbitrator in accordance with such Rules, who shall be a lawyer. In any such arbitration in which the amount stated in the demand is in excess of $100,000, the demand shall include the name of an arbitrator appointed by the claimant. The respondent shall appoint a second arbitrator and shall notify the claimant in writing of such appointment within thirty (30) days of receipt of the demand, failing which the matter shall be decided by the arbitrator named in the claimant's demand. Within thirty (30) days after the claimant's receipt of notice of the appointment of the second arbitrator, the two arbitrators shall appoint a neutral arbitrator and shall notify the parties in writing of such appointment, failing which either party may apply to the American Arbitration Association to appoint such neutral arbitrator. If such neutral arbitrator is appointed by the American Arbitration Association, he or she shall be a lawyer.

16.7.2. Rules for Arbitration. If the neutral arbitrator is appointed by the American Arbitration Association, the said Association shall administer the arbitration and its Construction Industry Arbitration Rules shall govern all aspects of the proceeding including the enforcement of any award. If the neutral arbitrator is not appointed by the American Arbitration Association, then the panel of arbitrators shall act as the administrator of the arbitration but the Construction Industry Arbitration Rules of the Association shall nonetheless govern all aspects of the proceeding, including the enforcement of any award, provided however that the arbitration panel shall have all of the powers and duties conferred on the Association pursuant to said rules. In addition, the following rules shall govern the selection of arbitrators and the proceedings:

16.7.2.1. Neither party may appoint as arbitrator an employee or an owner of that party, nor the parent, spouse, or child of an employee or owner of that party.

16.7.2.2. After the neutral arbitrator has been appointed, neither party may engage in *ex parte* communication with any arbitrator.

16.7.3. When Arbitration May Be Demanded. Demand for arbitration of any Claim, the basis of which arises prior to final payment or the earlier termination of the Contract may not be made before the earlier of (1) the date on which the **Design Professional** has rendered a written decision on the Claim or has notified the parties in writing that such decision will not be rendered or (2) forty-five (45) days following receipt by the **Design Professional** of a written request for a decision sent by registered or certified mail to both the **Design Professional** and the other party to this Contract.

16.7.3.1. In no event shall a demand for arbitration be made after the date when the institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations.

16.7.4. Limitation on Consolidation or Joinder. No arbitration arising out of or relating to the Contract Documents shall include, by consolidation or joinder or in any other manner, the **Design Professional**, the **Design Professional's** employees or consultants, except by written consent containing specific reference to the Contract and signed by the **Design Professional**, the **City**, the **Contractor,** and any other person or entity sought to be joined. No arbitration shall include, by consolidation or joinder or in any other manner, parties other than the **City**, the **Contractor**, a separate contractor, and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the **City**, the **Contractor,** or a separate contractor shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a dispute not described therein or with a person or entity so named or described herein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Contract shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

16.7.5. Claims and Timely Assertion of Claims. A party who files a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. When a party fails to include a Claim through oversight, inadvertence, or excusable neglect, or when a Claim has matured or been acquired subsequently, the arbitrator or arbitrators may permit amendment.

16.7.6. Award Final. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

16.7.7. The City's Reservation of Rights. Notwithstanding any provision contained in this Article 16 or elsewhere in the Contract Documents, the **City** reserves the following rights in connection with Claims between the **City** and the **Contractor**, which rights may be exercised by the **City** unilaterally, in the **City's** sole discretion, and without the consent of the **Contractor**:

16.7.7.1. the right to institute legal action against the **Contractor** in any court of competent jurisdiction in lieu of demanding arbitration, in which case the dispute or disputes which are the subject of such action shall be decided by such court, and not by arbitration;

16.7.7.2. the right to obtain from any court of competent jurisdiction a stay of any arbitration instituted by the **Contractor**, provided that the application for such stay is made before the appointment of the neutral arbitrator in

such arbitration, in which case the dispute or disputes which are the subject of such arbitration shall be decided by such court and not by arbitration;

16.7.7.3. the right to require the **Contractor** to join as a party in any arbitration between the **City** and the **Design Professional** relating to the Project, in which case the **Contractor** agrees to be bound by the decision of the arbitrator or arbitrators in such arbitration.

16.7.8. In case the **City** elects to proceed in accordance with 16.7.7.1. or 16.7.7.2. above, the word "litigation" shall be deemed to replace the word "arbitration" wherever the latter word appears in the Contract Documents.

ARTICLE 17
EMERGENCIES

17.1. In an emergency affecting the health and safety of persons or property, the **Contractor** shall act to prevent threatened damage, injury, or loss.

17.2. In emergencies affecting the health, safety, or protection of persons, the Work or property at the Site or adjacent thereto, the **Contractor**, without special instruction or authorization from the **City** or the **Design Professional**, is obligated to act to prevent threatened damage, injury, or loss. The **Contractor** shall give the **Design Professional** prompt written notice if the **Contractor** believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If the **Design Professional** determines that a change in the Contract Documents is required because of the action taken by the **Contractor** in response to such an emergency, a **Construction Change** Directive or Change Order will be issued to document the consequences of such action.

ARTICLE 18
TERMINATION OR SUSPENSION OF THE CONTRACT

18.1. Suspension by the City.

18.1.1. At any time and without cause, the **City** may suspend the Work or any portion thereof for a period of not more than ninety (90) days by notice in writing to the **Contractor** and the **Design Professional** that will fix the date on which Work will be resumed. The **Contractor** shall resume Work on the date so fixed. The **Contractor** shall be allowed an adjustment in the Contract Sum or an extension of the Contract Time, or both, directly attributable to any such suspension if the **Contractor** makes an approved Claim therefor, provided, however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the Awarding Authority to act within the time specified in this contract, the Awarding Authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the General Contractor on such increase; and provided further, that the Awarding Authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption, or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions. The General Contractor must submit the amount of a claim under provision (1) to the Awarding Authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the Awarding Authority shall not approve any costs in the claim incurred more than twenty days before the General Contractor notified the Awarding Authority in writing of the act or failure to act involved in the claim. The General Contractor must submit the amount of a claim under provision (1) to the Awarding Authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the Awarding Authority shall not approve any costs in the claim incurred more than twenty days before the General Contractor notified the Awarding Authority in writing of the act or failure to act involved in the claim.

18.1.1.1 Notwithstanding the above, if the City is required to suspend the work as a result of a request from the Office of the Attorney General in connection with a bid protest or an injunction, the Contractor shall not have a claim for damages, but the City shall extend the date of substantial completion for a period of time commensurate with the period of the suspension, and the liquidated damages clause shall not take effect until the extended date of substantial completion. If any of the following occurrences causes a delay in the work, the Contractor shall immediately notify CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) in writing. If, upon investigation, the City finds that the delay is excusable, the City shall extend the date of substantial completion for a period of time commensurate with the period of the excusable delay, and the liquidated damages clause shall not take effect until the extended date of substantial completion:(1) any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency; (2) delays which are caused by the City and which are not occasioned by the Contractor's failure to supply CONTRACTING DEPARTMENT (AS STATED ON THE FIRST PAGE OF THE AGREEMENT) or its design professional with progress schedules, documents, samples, and the like, in a timely manner; (3) causes not reasonably foreseeable by the parties to this Contract, which are beyond the reasonable

control of the Contractor, such as blizzards, floods, hurricanes, tornadoes, and strikes; (4) any delay of any subcontractor resulting from paragraphs (1), (2), or (3).

18.1.2. If the Work is defective, if the **Contractor** fails to provide a sufficient number of skilled workers or suitable materials or equipment, or if the **Contractor** defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the **City** to begin and prosecute correction of such default or neglect with diligence and promptness, the **City** may correct such deficiencies, without prejudice to other remedies the **City** may have. In such case, an appropriate **Construction Change** Directive shall be issued deducting from payments then or thereafter due to the **Contractor** the cost of correcting such deficiencies including compensation for the **Design Professional's** additional services and expenses made necessary by such default, neglect, or failure and any and all direct, indirect, or consequential costs associated with the order to stop the Work. If such payments then or thereafter due the **Contractor** are not sufficient to cover such amounts, the **Contractor** shall immediately pay the difference to the **City**. The **Contractor** shall remain responsible for maintaining progress and shall not be entitled to any increase in the Contract Time or the Contract Sum.

18.2. Termination by the Contractor.

18.2.1. If, through no act or fault of the **Contractor**, a Subcontractor, or a Sub-subcontractor, the Work is suspended for a period of more than ninety (90) days by the **City**, or under an order of court or other public authority, or the **Design Professional** fails to act on any application for payment within thirty (30) days after it is submitted in proper form and content or the **City** fails for thirty (30) days to pay the **Contractor** any sum finally determined to be due, then the **Contractor** may terminate the Contract upon seven (7) days' written notice to the **City**, provided that the **City** does not remedy such suspension or failure within that time.

18.3. Termination by the City.

18.3.1. If the **Contractor** is adjudged a bankrupt, or if the **Contractor** makes a general assignment for the benefit of the **Contractor's** creditors, or if a receiver is appointed on account of the **Contractor's** insolvency, or if the Contractor makes a written admission of the Contractor's inability to pay debts, or if the Contractor becomes a debtor or defendant in (i) a voluntary or involuntary petition in bankruptcy, (ii) a petition for appointment of a receiver, (iii) a levy of an attachment or execution, (iv) a winding up or dissolution of a partnership or corporation, (v) or any other proceeding under which a court of competent jurisdiction assumes custody or control over the Contractor, or if the **Contractor** persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or fails to prosecute the work with such diligence as will, in the reasonable estimation of the City, ensure substantial completion within the time specified in the Contract Documents, or if the **Contractor** fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction or disregards an instruction, order, or decision of the **Design Professional**, or otherwise is in breach of any provision of the Contract and has failed to cure such breach after written notice from the City specifying 1) the breach, 2) what must be done to cure the breach, and 3) the time within which the breach must be cured, or otherwise is guilty of substantial violation of any provision of the Contract, then the **Contractor** shall be in default, and the **City** may, without prejudice to any other right or remedy and upon written notice to the **Contractor**, temporarily withhold cash payments pending correction of the deficiency, hold the Contractor and its sureties liabile in damages, require the Contractor's sureties to complete the Contract, take possession of all materials, tools, appliances, equipment, construction equipment and machinery and vehicles, offices and other facilities on the Project Site, and all materials intended for the Work, wherever stored, without liability for loss or damage, following which use, the Contractor shall be liable for their removal from the site; and, seven (7) days after such notice, may terminate the employment of the **Contractor**, accept assignment of any or all subcontracts pursuant to Paragraph 6.6.1.1, and finish the Work by whatever method the **City** may deem expedient (including but not limited to using the services of another contractor (in which case the City shall have no obligation to use a competitive process to obtain the lowest contract prices) and look to the Contractor and the Contractor's sureties for the difference between the cost to complete the work and the contract sum hereunder.

. The **City** shall be entitled to collect from the **Contractor** all direct, indirect, and consequential damages suffered by the **City** on account of the **Contractor's** default, including without limitation additional services and expenses of the **Design Professional** made necessary thereby. The **City** shall be entitled to hold all amounts due to the **Contractor** at the date of termination until all of the **City's** damages have been established, and to apply such amounts to such damages.

18.3.1.1. HUD Action. If the Contractor is in default, HUD and/or any other administering agency named herein may, with or without the consent of the City, cancel, suspend, or terminate this Contract in whole or in part; require the withholding or disallowance all or part of the funding for the project; declare the contractor ineligible for further Government contracts or avail itself of any other remedies available under the law.

18.3.2. (*Reference:* Somerville Municipal Code Chapter 2.117, Section 2.117.110C). In the event the **Contractor** or any of its agents or employees violates any provision of Somerville Municipal Code Chapter 2.117 that is applicable to **City**

contractors in connection with the awarding, administration, or performance of the Contract, the **City** may terminate the sat Contract.

18.3.3. (a) The City may terminate this Contract without cause, at any time, effective upon the date of termination specified by written notice to the Contractor, in which case, the Contractor shall be compensated for: (1) sums due under this Contract incurred up to the date of termination for all Work performed and accepted by the City up to the termination date, calculated on a percentage completion basis covering the period of time between the last approved application for payment and the date of termination using the progress schedule and schedule of values. The Contractor shall use its best efforts to mitigate any expenses and shall in no event incur any new obligations after the date of termination.

(1) Payment by the City as provided in this section shall be deemed to fully compensate the Contractor for all expenses and those of any consultants, subcontractors and suppliers, directly or indirectly attributable to the termination. Lost profits shall not be payable. Any such termination shall not give rise to any cause of action for damages against the City.

(b) Contractor's Duties Upon Termination For Convenience. Upon termination of this Contract without cause, the Contractor shall: (1) immediately stop the Work; (2) stop placing orders and Subcontracts in connection with this Contract; (3) cancel all existing orders and Subcontracts (subject to the City providing notice that it accepts assignment of any or all subcontracts pursuant to Paragraph 6.6.1.1); (4) surrender the site to City in a safe condition; and (5) promptly transfer to City all materials, supplies, work in process, appliances, facilities, equipment and machinery of this Contract, and all work product, plans, drawings, specifications and other information and documents used in connection with Services performed under this Contract. Failure by the Contractor to comply with said duties shall relieve the City of its obligation to compensate the Contractor, as provided for under this section.

ARTICLE 19
AMERICANS WITH DISABILITIES ACT (42 U.S. 12131)

19.1. On July 26, 1994, the Americans with Disabilities Act ("the Act") became effective for employers of fifteen or more employees.

19.2. The Act protects against discrimination of the basis of "disability," which is defined as a physical or mental impairment that substantially limits at least one "major life activity;" or discrimination against an individual who has a record of such impairment; or discrimination against an individual being regarded - even if inaccurately - as having such impairment. The Act also expressly prohibits job discrimination that is based on any individual's relationship or association with a disabled person.

19.3. If the **Contractor** is subject to the Act, it must comply with its provisions.

ARTICLE 20
WRITTEN NOTICE TO THE PARTIES

20.1. In General.

20.1.1. All written communications from the **Design Professional** to the **Contractor** shall be copied to the **City**. All written communications from the **Contractor** to the **Design Professional** shall be copied to the **City**. All written communications from the **Contractor** to the **City** shall be copied to the **Design Professional**.

20.2. Addresses.

20.2.1. To the City. Written notice to the **City** shall be sent or hand-delivered to:

Mayor
City of Somerville
93 Highland Avenue
Somerville, MA 02143

City Solicitor
Law Department
93 Highland Avenue
Somerville, MA 02143

Director of Contracting Department (as stated on first page of this Agreement)
City Hall
93 Highland Avenue
Somerville, MA 02143

20.2.2. To the Contractor. Both the address given on the bid form upon which the Agreement is founded and the **Contractor's** office at or near the Site of the Work are hereby designated as places to either of which notices, letters, and other communications to the **Contractor** shall be certified, mailed, or delivered. Delivery of any notice, letter, or other communication to the **Contractor** at or depositing same in a postpaid wrapper directed to either place shall be deemed sufficient service thereof upon the **Contractor**. Written notice shall be deemed to have been duly served on the **Contractor** if it is sent or hand-delivered to any member or officer of the **Contractor**. The date of said service shall be the date of such delivery or mailing. The address may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor** and delivered to the **City** and to the **Design Professional**. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter. or other communication upon the **Contractor** personally. Moreover, any notice, letter, or other communication required under the Contract may be served on the **Contractor's** representative at job meetings. The **Contractor** shall provide the **City** with its change of address seven (7) days prior to its effective date.

20.2.3. To the Design Professional. Written notice to the **Design Professional** shall be sent or hand-delivered to the address appearing on the Project Manual. Written notice shall be deemed to have been duly served on the **Design Professional** if it is sent or hand-delivered to any member or officer of the **Design Professional**.

ARTICLE 21
MISCELLANEOUS PROVISIONS

21.1. Governing Law.

21.1.1. This Contract shall be governed by the laws of the Commonwealth of Massachusetts and the United States of America.

21.2. Venue.

21.2.1. Venue for any court action or proceeding shall be Middlesex County in the Commonwealth of Massachusetts only. The **Contractor**, all Subcontractors, and Suppliers waive any and all jurisdictional and venue defenses.

21.3. Successors and Assigns.

21.3.1. The **Contractor** shall not assign, in whole or in part, its rights and obligations under the Contract Documents without prior written consent of the **City**. An assignment without the prior written consent of the **City** shall not relieve the **Contractor** of its obligations thereunder.

21.3.2. The **City** and the **Contractor** respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents.

21.4. Statutory Limitation Period.

21.4.1. It is expressly agreed that the obligations of the **Contractor** hereunder arise out of contractual duties, and that the failure of the **Contractor** to comply with the requirements of the Contract Documents shall constitute a breach of contract, not a tort, for the purpose of applicable statutes of limitations and repose. Any cause of action which the **City** may have on account of such failure shall be deemed to accrue only when the **City** has obtained actual knowledge of such failure, not before.

21.5. Rights and Remedies.

21.5.1. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

21.5.2. No action or failure to act by the **City**, the **Design Professional,** or the **Contractor** shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

21.6 Severability. In the event that any provision of this Agreement is found to be legally unenforceable, the remainder of the Agreement shall remain in full force and effect.

21.7 Conflict of Interest Laws. The City and the Contractor shall comply with all applicable conflict of interest statutes and regulations.

21.8 If this contract is in excess of $2,000 and is federally funded, the Contractor shall comply with the Copeland "Anti-Kickback Act" (18 U.S.C. 874 and 29 CFR Part 3), and shall not induce any person employed in the construction, completion, or repair of a public building or public work, to give up any part of the compensation to which he would otherwise be entitled.

21.9. EQUAL EMPLOYMENT OPPORTUNITY/NONDISCRIMINATION

a) the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, sexual orientation, national origin, age, disability, Vietnam Era veteran status or because an employee or applicant is a recipient of federal, state, or local public assistance or housing subsidies; and

b) the Contractor shall not discriminate, in any stage of the contract from award to completion, in the selection or retention of subcontractors, suppliers, and materialmen, or in the procurement of materials or supplies, or the rental of equipment, on the basis of race, religion, sex, marital status, sexual orientation, national origin, age, disability, Vietnam Era veteran status, or because an individual is a recipient of federal, state, or local public assistance or housing subsidies; and

c) the Contractor shall post an equal employment opportunity notice in conspicuous places at the worksite, shall make copies of such notice available to employees and job applicants, and shall send such notice to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding; and

d) the Contractor shall, to the greatest extent feasible, give employment and on-site training opportunities, to lower-income, minority, women, and disabled members of the local community and shall award subcontracts, when possible, to Minority Business Enterprises (MBE) and Women Business Enterprises (WBE).

e) the contractor shall include language similar to the above in all subcontracts.

END

PART 3: TECHNICAL SPECIFICATIONS, PLANS AND DETAILS

PART 3: TECHNICAL SPECIFICATIONS

Background

The City of Somerville Department of Public Works seeks a qualified Contractor to provide preventative maintenance, repair, and installation services for all HVAC assets and related equipment at City and school buildings, as detailed in the Scope of Work.

Site Visit

The Building Systems Manager will lead a mandatory site visit to up to four (4) representative sites on Thursday, 11/12/2026 at 9:00 AM. Bidders interested in attending a site visit must notify Procurement Manager Logan Carroll at lcarroll@somervillema.gov by Tuesday, 11/10/2026 at 4:00 PM.

Additional site visit(s) may be scheduled if attendance is high. All Bidders will be notified if additional site visits are scheduled. Bidders are not allowed to tour facilities unescorted or at any time other than on a scheduled site visit.

The Contractor will not be relieved from assuming all responsibility for properly estimating the difficulties and the cost of performing the services required with this specification, because of failure to investigate the conditions or become acquainted with all the information concerning the services to be performed.

By responding to this bid, the Contractor accepts all equipment as is, in a maintainable condition. No additional charges or bills will be accepted to upgrade equipment to the Contractor's definition of maintainable. It is the Contractor's responsibility to assume all costs and risks associated with performing maintenance services at the facilities included in scope buildings.

Scope of Work

The Contractor will furnish all labor, materials, parts, and equipment required to maintain, inspect, test, and repair all HVAC mechanical systems (including but not limited to heating, air conditioning, ventilation, humidity control, temperature control components etc.) supporting schools and City buildings in the City of Somerville, in accordance with the specifications set forth in this Agreement.

Services will be performed at various locations throughout the City of Somerville. See **Exhibit A** for the list of included buildings and **Appendices A–E** for asset inventories, equipment lists, building plans and as-built drawings.

The Contractor will develop an Annual Maintenance Plan for all systems covered by the Preventative Maintenance Program. The Annual Maintenance Plan will include, but not be limited to, the Preventative Maintenance tasks defined in **Exhibit B**.

The Contractor will perform Preventative Maintenance tasks in accordance with the Annual Maintenance Plan; provide on-call and emergency services as needed; and perform scheduled repair, upgrade and installation work upon request.

Repairs, replacements and installation work costing **up to $30,000** may be performed under this Agreement, at the discretion of the Department of Public Works. Any project estimated to cost over $30,000 for a single proposal will be procured separately. See **Section F.4. Project Dollar Limit** for details.

The Contractor will furnish cost estimates and survey potential work at no additional cost to the City.

Changes may be made to included equipment, services or building locations during the term of the contract. Any updates to the scope, term or value of the contract will be made via negotiated change order.

A. CONTRACTOR QUALIFICATIONS & REQUIREMENTS

1. **Experience.** The Contractor must have a minimum of ten (10) years of service and installation experience in the commercial mechanical and temperature control business.

2. **Licenses and Certifications**

   - The Contractor must be certified by the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM) in the HVAC category. The Contractor must submit a Certificate of Eligibility and Update Statement with the bid package. Any bid submitted without both the appropriate Certificate of Eligibility and the Update Statement will be considered an invalid bid and will be rejected by the City.
   - The Contractor must hold all licenses and certifications required by federal, state and local authorities to perform the services described in this specification.
   - The Contractor and all tradespeople designated to work under this Contract must have completed at least 10 hours of OSHA approved training in Construction Safety and Health.
   - Bidders must submit copies of all licenses and certificates with their bid.

3. **References**

   - Bidders must submit a list of three (3) references with similar full responsibility mechanical service contracts of at least $1,000,000 per year, who have been under contract with the bidder for a period of not less than three (3) years. The reference list will include names, addresses, and current telephone numbers of clients for whom the Bidder has performed similar work. At least one (1) of the three (3) references will be from a municipality or school department located in Massachusetts.
   - The City reserves the right to judge the quality of bidders' workmanship based either on work done for the City in the past or on work done for other companies and/or municipalities.

4. **Contractor Service Area.** The Contractor must be located within a 25-mile radius of Somerville or have area service available for emergency calls and respond within 2 hours of notification for emergency service.

5. **Qualification Compliance.** Bidders will indicate their compliance with the above Contractor Qualifications by a letter signed by a corporate officer of the firm, with a complete listing of exceptions, if any. Bidders will submit all information and documents listed above.

B. RECORDKEEPING AND COMMUNICATION

1. **Work Order Tracking**

   - The Contractor must use work order tracking software to schedule preventative and reactive maintenance, track work orders (including hours spent and materials used), and report on repair trends for equipment as requested by the City.
   - After each service call is completed, a service report will be emailed to the DPW Commissioner or Designee for review.
   - The Contractor will attach a copy of the relevant service report to each invoice.
   - The Contractor will maintain service history records at the equipment level for tracking and system improvement purposes.
   - The Contractor will provide the City with access to the work order tracking program and data during the contract term and will furnish all records upon request.

2. **Annual Maintenance Plan.** The Contractor will develop and maintain an Annual Maintenance Plan for systems throughout the City's facilities.

   - The Annual Maintenance Plan will detail all components to be maintained under the Preventative Maintenance (PM) Program and the corresponding schedule for service.

- The Annual Maintenance Plan will be based on equipment run time and condition, manufacturer's maintenance recommendations, and industry best practices.
- The Contractor will provide a copy of the Annual Maintenance Plan to the DPW Commissioner or Designee within ninety (90) days of the contract start date. The Contractor will provide an updated Annual Maintenance Plan at the contract renewal date.

3. **Monthly Maintenance Schedules.** The Contractor will generate monthly maintenance schedules based on the Annual Maintenance Plan.

    - The Contractor will provide a spreadsheet (Excel file or equivalent) of each month's maintenance schedule to the DPW Commissioner or Designee in the third week of the preceding month.

4. **Biweekly Project Meetings.** The Contractor and designees from the City will meet biweekly to review current and upcoming projects, areas of concern, and opportunities for equipment and performance improvements. Meeting schedules will be coordinated by the Contractor and the DPW Commissioner or Designee.

5. **Quarterly Service Review.** On a quarterly basis, the Contractor will advise and assist in the determination of improvements to the mechanical and control systems that will conserve energy and minimize utility expenditures. Consultation regarding design changes and equipment selection will be available at no additional charge to the City.

6. **Deliverables**

    - Within sixty (60) days of contract start date, an annual maintenance plan for systems throughout the City's facilities. The annual maintenance plan will detail all components to be maintained under the Preventative Maintenance Program and the corresponding schedule for service.
    - After first filter change, quantity and sizes of air filters for each piece of equipment.
    - After first filter change, method of drive for all motor-driven equipment. If belt, provide belt & coupling size and manufacturer.
    - The Contractor will provide a spreadsheet (Excel file or equivalent) containing invoice data including, but not limited to, invoice number and date, City-approved purchase order number, quote number (if applicable), work location, labor hours, labor and materials costs, service date, description of work, etc. to the Building Systems Manager and DPWBG@somervillema.gov by the 5th of each month, containing data from the previous 12 months on a rolling 12-month basis.

C. CONTRACT PERSONNEL

1. **Technician Requirements.** The Contractor will employ a minimum of five (5) full time, competent service technicians who have the technical mastery and expertise to maintain the City's mechanical and temperature control systems.

    - All work will be done in a thorough, workmanlike manner by fully qualified, skilled technicians.
    - Each of the on-site technicians designated to work under this Agreement must hold the Massachusetts trade licenses required to perform the services included under this Agreement.
    - Bidders must submit a resume or bio containing professional experience, education and training/certifications; and copies of all applicable licenses for each technician designated to work under this Agreement.
    - The work of apprentices is acceptable under the supervision of one of the licensed technicians designated to work under this Agreement.
    - The Contractor must be able to prove that all personnel designated to work under this Agreement can pass a CORI background check.

2. **Working Hours**

   - Normal working hours under this Agreement are defined as 6:00 AM–4:00 PM, Monday through Saturday. Technicians will be available during normal working hours to work exclusively on the City's systems.
   - PM Services are normally performed during normal working hours. If the Contractor, at their discretion, chooses to perform services covered under the PM Program outside of normal working hours, those labor hours are included in the fixed monthly PM fee, and are not billable at overtime rates.
   - Repairs & Replacement Services are normally performed during normal working hours. If the City authorizes work to begin or end outside normal working hours, the Contractor will bill time worked outside normal working hours at the rate specified in Bid Form.

3. **Test Equipment and Tools.** The Contractor will ensure that all technicians arrive at the job site with the proper tools and test equipment required to maintain all the systems covered by the PM Program.

4. **Access to City Facilities.** The City will ensure that Contractor personnel have access to all buildings and mechanical spaces as required to fulfil the services included under this Agreement.

   - All service technicians must have the Contractor's name easily identifiable on their shirts and outerwear and carry photo identification.
   - At school buildings, all Contractor personnel must sign in/out with the front office upon arrival/departure.

5. **Engineering Support.** The Contractor is required to maintain an engineering department staffed with five (5) full-time professionals, including one (1) licensed mechanical engineer, in the fields of refrigeration, boilers, pneumatic, electric, and electronic controls.

6. **Subcontractors.** All service and repairs will be performed by qualified, licensed service technicians who are directly employed by the Contractor. The Contractor must obtain prior written approval from the DPW Commissioner or Designee before subcontracting any work to be performed under this Contract. Failure to obtain approval prior to utilizing a subcontractor may result in the City not reimbursing the Contractor for the subcontractor's fees.

D. EQUIPMENT, PARTS & MATERIALS

All equipment, parts and materials described in this section are included in the scope of this agreement. "Covered" equipment, parts and materials refer specifically to those components covered under the fixed monthly fee of the PM Program, as described in Section E. Preventative Maintenance Program.

1. **Environmental and Mechanical Equipment**

   - The Contractor will be responsible for maintenance and repairs to all HVAC systems and components including ***but not limited to****:* boilers/burners, circulating pumps, air handling units (AHU), fan coil units (FCU), energy recovery units, DX air conditioning, air and water-cooled chillers, split systems, heat pumps, exhaust/supply/return fans, humidifiers/dehumidifiers, expansion tanks, UV-C fixtures, cabinet heaters, steam traps, drive motors/bearings/couplings/ belts, air compressors for pneumatic controls, etc.
   - If the City purchases mobile or temporary heating and/or cooling equipment in the future, maintenance and repair of said equipment may be added to the scope of this Agreement via negotiated change order.
   - Building Management System (BMS) maintenance and repairs are **not** included in the scope of this Agreement. However, the work may require coordination with the City's BMS contractors to test and validate proper operation.

2. **Parts and Component Replacement**

- All replacement equipment, parts and materials used will be exact duplicates of the existing part unless otherwise specified by the City. If an exact duplicate is not available, the Contractor will propose a substitute to the DPW Commissioner or Designee for approval prior to procurement and installation.
- Equipment and parts will be new, unused, and of equal or better quality to what is being replaced. The Contractor will not install rebuilt or refurbished equipment or parts without prior authorization from the DPW Commissioner or Designee.
- At the discretion of the DPW Commissioner or Designee, the City reserves the right to supply parts or devices for installation by the Contractor. The Contractor will honor installation labor warrantee for all City-supplied materials, where materials are new-in-box.
- The DPW Commissioner or Designee may request that the Contractor furnish quotes to purchase "attic stock" for installation at a later date. Any "attic stock" purchased by the City will be owned by the City and stored at a location determined by the City.
- The City reserves the right to inspect equipment and parts removed during repairs/maintenance prior to disposal.
- The Contractor is responsible for proper off-site disposal of all equipment, parts and materials removed from the HVAC systems during maintenance/repair work, including all packaging, tanks, trash, etc.

E. PREVENTATIVE MAINTENANCE PROGRAM

The purpose of the Preventative Maintenance Program is to optimize performance of HVAC systems, reduce service disruptions, and prolong equipment life. The Contractor will provide Preventative Maintenance (PM) services for all equipment and devices related to the heating, ventilating, air conditioning, humidity control and temperature control systems included in this specification.

1. **PM Procedures**

- The Contractor will determine scheduling (both calendar period and operating hours) for PM tasks for each piece of equipment. PM schedules will be based on the Annual Maintenance Plan.
- For each scheduled service, the Contractor will issue a work order to the service technician(s) on the job. Work orders will detail exactly what tasks to perform, skill levels required, and special tools and instrumentation needed to maintain the systems at optimum comfort and efficiency levels.
- All maintenance and inspections will comply with manufacturer's recommendations, industry best practices, and all federal, state and local requirements.
- Preventative Maintenance will include, but not be limited to, the tasks outlined in **Exhibit B**.
- The Contractor will report any needed repairs identified during a PM service visit to the DPW Commissioner or Designee.

2. **Fixed Monthly Fee.** The Contractor will bid a fixed monthly fee for the cost of the PM Program. The following expenses will be covered by the fixed monthly fee of the PM Program:

- Labor for all services listed in section **E.3. Services Covered by PM Program**, below. All equipment included in this Agreement is covered by the PM Program, unless stated otherwise in section **E.5. Exclusions**.
- Maintenance materials & consumable supplies, including but not limited to air/water filters, humidifier tanks, belts, drive shaft couplings, valve packings, lubricants, tools, paints, test instruments, meters, etc. See section **E.4. Parts & Materials Covered by PM Program**, below, for a more detailed list of covered materials and supplies.

- The Contractor may install non-covered parts and materials during a PM visit. For such repairs, the Contractor will furnish parts and materials according to the supply rates indicated on the Bid Form.

3. **Services Covered by PM Program.** The PM Program will include, but is not limited to, the maintenance activities listed below (see task frequency in **Exhibit B**). Other maintenance activities may be identified as new or replacement equipment comes online.

Environmental & Mechanical Systems

- Prepare boilers for heating season prior to **September 15th** of each year. The Contractor is responsible for scheduling the State Boiler Inspections for all boilers on or prior to **August 15th**. A service technician will be on site for state boiler inspections.
- Winterize all systems prior to **October 31** of each year. The Contractor will be responsible for the sourcing, addition, and removal/storage of glycol. The Contractor is responsible for verifying that isolation valves on drained equipment do not leak-by. Damage to HVAC equipment due to improper winterization and/or failed valves will be repaired by the Contractor at no cost to the City.
- Coordinate and work with the City's controls service vendor(s) to perform spring and fall changeovers between heat and air conditioning.
- Examine each piece of equipment or device to confirm that it functions properly and is in good operating condition.
- Confirm that all equipment and devices report out to the BMS system as designed. Work may require coordination with controls service vendor(s).
- Inspect and service all HVAC motors, fans, pumps, bearings, actuators, valves, piping, expansion tanks, etc. Clean all components of dust, old lubricants, etc. to allow the equipment to function as designed.
- Inspect and clean condenser and evaporator coils to ensure proper system operation.
- Inspect and clean hot water/cold water (HW/CW) coils and heat exchangers.
- Lubricate equipment as needed to permit bearings, gears, and all contact wearing points to operate freely and without undue wear. Use the proper specific lubricant.
- Change belts and rubber couplings as needed and perform laser alignments if motors/shafts/pulleys are misaligned.
- Adjust all linkages, motors, drives, etc. that have drifted from the initial design settings and positions.
- Work with controls service vendor(s) to calibrate all sensing, monitoring, output, safety, and read-out devices for proper ranges, settings, and optimum efficiencies two (2) times per year, or as needed per demand.
- Test and cycle all equipment as a system after it has been cleaned, lubricated, adjusted, and calibrated to assure that it operates to original design specifications and is communicating with the BMS if applicable.
- Paint equipment as needed to protect against corrosion and deterioration.

Air Filtration Systems

- All filters will be supplied by the Contractor under the Preventative Maintenance Program, including but not limited to: pre-filters, frame filters, pouch filters, fan coil filters, automatic roll-type filters and bag filters, as applicable. Filters for Carrier air scrubbers are excluded from the PM Program.
- Filter changes will occur at least four (4) times per year, around the following dates: January 1; April 1; July 1; October 1. Final dates to be determined by the City. See Buildings List for details about filter change frequency at East Somerville Community School.

- MERV-13 pleated filters are required, except where equipment specifications or limitations call for a different efficiency rating or material type.
- Filter frames, if applicable, will be of the reusable type and will be of a permanent rigid construction that permits the insertion of media pads, and may also allow the use of optional pads with different efficiencies, as needed.
- Filters and filter frames will be sized to entirely fill the full width of all filter racks to prevent blow-by and eliminate filter spacers in the system.
- A list of filters, their respective locations, and each corresponding piece of equipment will be submitted to DPW Project Manager (see section B.6. Deliverables) within 2-weeks of completion of the 1st filter change under this contract.

4. **Parts & Materials Covered by PM Program.** The monthly fixed PM fee of the will cover the cost of maintenance materials and consumable supplies including, but not limited to, those listed below.

    - Maintenance materials, replaced on a set schedule:
        - Air filters
        - Water filters
        - Boiler kits, as specified by boiler manufacturer
        - Electrodes
        - Humidifier cylinders and cartridges
        - Rubber couplings
        - Gaskets and gasket materials
        - UV-C light tubes
        - Lubricants
        - Caulk
        - Oil
        - Miscellaneous hardware (bolts, screws, washers, etc.)
        - Cleaning solvents/supplies
    - Repair materials, replaced as needed at no charge:
        - Linkages
        - Belts
        - Unit controls sensors
        - Electrical terminal blocks
        - Relays

5. **Exclusions.** The following equipment, parts and materials are **not** covered under fixed fee of the PM Program:

    - Portions of the systems and equipment that are not maintainable or non-moving, including but not limited to foundations, structural supports, domestic water lines, drains, plumbing, gas lines, pneumatic tubing, refrigerant piping, boiler refractory, boiler shell and tubes, heat exchangers, insulation, duct work and sheet metal, air handler cabinets, electrical wiring, manual valves, Variable Frequency Drives, glycol, and refrigerant.
    - Portable air conditioning units and window/sleeved air conditioning units.
    - Portable air scrubbers (Carrier or equivalent).
    - Instructional mechanical equipment used in Somerville High School trades programs.
    - Any kitchen refrigeration equipment.
    - Chiller for ice making at Founders Memorial Rink.
    - PoolPak dehumidifier at Kennedy School Pool.
    - Parts, components and materials that are not covered by the PM Program, but installed during PM tasks/visits, will be billed according to the supply rates indicated on the Bid Form.

- Repairs or replacements that are not covered by the PM Program (Service Calls or Scheduled Repairs) will be billed according to the labor and supply rates indicated on the Bid Form.

6. Adjustments, Repairs & Replacements

- If the Contractor identifies needed repairs during a scheduled PM visit, the Contractor will notify the DPW Commissioner or Designee. The DPW Commissioner or Designee may request a written quote for the repair, detailing all costs for labor and materials.
- The Contractor will not begin any work that has not been authorized in writing by the DPW Commissioner or Designee, and for which no approved Purchase Order has been issued.
- Any replacement of parts or equipment not covered by the Preventative Maintenance Program shall be detailed in writing and all costs for labor and material shall be submitted to the City for prior approval.

7. Service Agreement Coverage

- All travel and related expenses required to perform the services described above will be included in the fixed monthly fee for the PM Program.
- The Contractor may install diagnostic devices and/or software at their own expense to monitor system operation. If this option is exercised, the City will provide connection to the switched telephone network for the diagnostic devices and/or software. The Contractor must work with DPW Commissioner or Designee and City's IT Department to obtain prior approval before any equipment is connected to a City communication or data network. Upon termination of this Agreement, the Contractor may remove diagnostic devices and/or software at their own expense.
- The Contractor will review the services delivered under the PM Program on an annual basis and make written recommendations for changes in service to the DPW Commissioner or Designee.

F. REPAIR & REPLACEMENT SERVICES

1. Service Requests and Authorization for Work

- The DPW Commissioner or Designee will submit service requests to the Contractor in writing. The City forwarding a 311 ticket to the Contractor is considered a written request.
- The DPW Commissioner or Designee must authorize all work in writing before work can begin.
- Scheduling of Repair & Replacement Services will be coordinated between the Contractor and the DPW Commissioner or Designee.
- If the Contractor finds upon examination of the assigned job that the work will be more extensive than originally ordered, the Contractor will notify the DPW Commissioner or Designee of the additional work required. The Contractor will not proceed with additional work without written authorization from the DPW Commissioner or Designee.
- Upon completion of a job, the Contractor will notify the DPW Commissioner or Designee in writing.
- For repairs and installations that fall outside of the Preventative Maintenance Program, the Contractor will provide written quotes according to the labor and supply rates indicated on the Bid Form.

2. Response Time

The Contractor will comply with the response time requirements specified below. The Contractor's failure to comply with response times may result in cancellation of the contract.

- **Emergency Repairs.** The Contractor will acknowledge all emergency service calls **within one (1) hour of notification** by the DPW Commissioner or Designee. Repair personnel will arrive at the designated job site **within two (2) hours of notification** by the DPW Commissioner or Designee.

- Emergency response is required 24 hours per day, 7 days per week.
- The Contractor will provide emergency contact information including, but not limited to, an after-hours phone answering service or a cell phone number that is available 24 hours per day, seven (7) days per week; and service email address(es). A passive answering machine is not acceptable.

- **Routine Repairs.** The Contractor will acknowledge non-emergency service calls **within two (2) regular business hours** of notification by the DPW Commissioner or Designee.
  - The DPW Commissioner or Designee may direct the Contractor to start time-sensitive work within 24 hours of initial notification, if needed.

3. **Scheduled Repairs & Replacements**

- The Contractor will identify needed repairs during PM & Service Calls. The City will also identify needed repairs and/or projects.
- The Contractor will furnish quotes for scheduled work to the DPW Commissioner or Designee.
- The Contractor will not begin any work that has not been authorized in writing by the DPW Commissioner or Designee, and for which no approved Purchase Order has been issued.
- DPW personnel will coordinate project scheduling with the Contractor.

4. **Project Dollar Limit.** Repairs of **up to $30,000** may be performed under this Agreement, at the discretion of the Department of Public Works. Any project estimated to cost over $30,000 for a single proposal will be procured separately. The City reserves the right to competitively procure repair/replacement work of any dollar value under $30,000.

   For projects **up to $30,000**, the Contractor must provide documentation for materials purchases under the following circumstances:

- For any single part or piece of equipment that costs **more than $3,000** after markup/discount, the Contractor must submit original purchase invoice and proof of payment with the invoice for the project.
  - The Contractor may elect to furnish the part for less than the contractual markup or discounted rate.
- For any single part or piece of equipment that costs **more than $5,000** after markup/discount, the Contractor must furnish three (3) quotes to the DPW Commissioner or Designee prior to ordering the part(s). The Contractor will also submit original purchase invoice and proof of payment with the invoice for the project.
  - If the Contractor recommends against sourcing from the lowest quoter, the Contractor must provide written justification for approval by the DPW Commissioner or Designee.
    - For example, if the lowest quote has an extended lead time but a higher quote is available immediately or near-term, the DPW Commissioner or Designee may direct the Contractor to source the available part at higher cost, based on needs assessment.
  - If the Contractor is unable to provide three (3) quotes due to proprietary systems, system compatibility, vendor availability, etc., the Contractor must provide written justification for approval by the DPW Commissioner or Designee.
    - For example, a part or subcontractor service may only be available directly from the manufacturer or manufacturer's authorized dealer.
- DPW reserves the right to seek pricing directly from suppliers and/or provide parts and equipment for the Contractor to install, if the DPW Commissioner or Designee determines it to be in the best interest of the City.

  - In a documented Urgent or Critical repair situation, DPW may waive the three (3) quote requirement if the DPW Commissioner or Designee determines it to be in the best interest of the City. The Contractor must submit original purchase invoice and proof of payment with the invoice for the project regardless.
  - Urgent or Critical repairs are repairs that are required to mitigate or prevent an immediate or imminent significant impact to public health or safety, school or City property/systems, and/or school or City operations. The DPW Commissioner or Designee will determine whether a repair is Urgent or Critical.
  - The Contractor will honor installation labor warrantee for all City-supplied materials, where materials are new-in-box.
- Consumables and commodities (filters, belts, copper piping, etc.) are excluded from the above requirements.
- The following DPW personnel are authorized Designees of the DPW Commissioner for the purposes of the above procedures: Director of Operations, Superintendent of Facilities, Building Systems Manager, and Supervisor of Facilities.

G. GENERAL CONDITIONS

1. **Protection of Property.** The Contractor will take all precautions to protect public and private property from injury and will be held responsible for all employees or any person or persons, instruments or devices directly or indirectly employed by them. Any corresponding damages will be replaced, repaired and paid for by the Contractor to the satisfaction of the City.

    - The Contractor will be responsible to repair any damage caused by the Contractor, their technicians or subcontractors. Any such damages, including but not limited to rental costs for temporary HVAC equipment or remediation costs, will be remedied at the Contractor's expense.
    - If equipment fails due to failure of the Contractor to perform according to the contract, the Contractor will reimburse the City for all damages or losses incurred because of such failure. Losses include, but are not limited to, rental costs for temporary HVAC equipment, remediation costs, etc.
    - If the Contractor identifies damage caused by improper operation, freeze-up, negligence, abuse or misuse of the equipment by the City, the City will be responsible for the cost of repairs. The Contractor will submit a written quote, detailing all costs for labor and materials, to the DPW Commissioner or Designee.

2. **Conditions of Work**
    - All work will be performed using the highest industry standards and practices. The Contractor will comply with all local, state and federal laws, codes, regulations and policies. Any work that does not comply with relevant standards and regulations will be remedied at the Contractor's expense.
    - The Contractor will obtain all permits, inspections and licenses required for work under this Agreement. The City will waive building permit fees within its jurisdiction. Exception: Fire or Police Details, if required by the City or building code, will be paid for directly by the Contractor.
    - In cases where the services of a licensed subcontractor (electrician, plumber, etc.) are required by municipal building code, the Contractor will obtain written authorization from the DPW Commissioner or Designee before subcontracting those services. The City reserves the right to supply the licensed tradesperson.
    - The Contractor will properly dispose of all waste and hazardous materials (including refrigerant, grease/lubricants, etc.) off-site and in compliance with all federal, state and local laws, regulations, codes and policies. The Contractor will not charge the City for disposal costs.
    - The City reserves the right to reject the Contractor's work, in whole or in part, if the workmanship or material is not satisfactory to the City.

- **Warranty/Guarantee.** The Contractor guarantees that all work, materials and equipment furnished and installed under this Agreement are in accordance with the specifications and shall be free from defects in material and craftsmanship for a period of one (1) year.
    - At the discretion of the DPW Commissioner or Designee, the City reserves the right to supply parts or devices for installation by the Contractor. The Contractor will honor installation labor warrantee for all City-supplied materials, where materials are new-in-box.
- The Contractor will be alert to and avoid any action effecting equipment covered by the manufacturer's and installer's warranty. The Contractor will immediately notify the DPW Commissioner or Designee if required services may be covered by manufacturer's or installer's warranty, or may void such warranty. The Contractor will not perform such services without prior written approval from the DPW Commissioner or Designee.

3. Billing & Payment

- The Contractor will not begin any work that has not been authorized in writing by the DPW Commissioner or Designee, and for which no approved Purchase Order has been issued. The Contractor assumes all risks and financial liability for any services rendered without proper authorization and Purchase Order.
- The Contractor will be paid per invoice. An invoice will be presented for services performed. Each invoice will identify, at a minimum, the work completed, location of the work performed, date and time of the work, DPW personnel who authorized the work, a City of Somerville issued Purchase Order number and the applicable service report(s). Additionally, it will detail the unit cost and extended cost for each wage/labor category; and unit cost, extended cost and applicable markup/discount for parts and/or materials. Prevailing wage rates are required.
- For any single part or piece of equipment that costs **more than $3,000** after markup/discount, the Contractor must submit original purchase invoice and proof of payment with the invoice for the project.
- The fixed monthly Preventative Maintenance fee will be billed on a separate invoice each month. Repair work will not be billed on the monthly PM invoice.
- All invoices shall be submitted within thirty (30) days of project completion. Invoices for PM service shall be submitted within the first fifteen (15) days of the month following service.
- The required Massachusetts Weekly Certified Payroll Report Forms must be submitted with all invoices. No invoices will be processed without receipt of Certified Payroll forms.
- The Contractor will not charge for mileage or travel time. Billable hourly rates will apply only to actual time worked.
- The Contractor will properly dispose of all waste and hazardous materials off site and at their own expense. The City will not pay disposal fees.
- All invoices must be submitted via email to the Project Manager and to DPWBG@somervillema.gov.
- The Contractor will supply materials, supplies and parts needed to properly complete all work performed under this Contract. The Contractor's own purchase invoices for materials, supplies and equipment used for any work must be made available to the City upon request for auditing purposes.
- The City reserves the right to audit the Contractor's records at any time to verify the original costs of all materials, parts and equipment. Failure to cooperate with this request at any time may result in termination of the contract, and non-payment for any materials for which the Contractor's original purchase invoice is not made available for audit.

Exhibit A – Detailed Building List

The scope of this Agreement includes the schools and City buildings listed below. Changes may be made to included equipment, services or building locations during the term of the contract. Any updates to the scope, term or value of the contract will be made via negotiated change order.

Building	Address	Building Type	Occupied	Year Built	Approx. Sq. Ft.	Notes
Archives/Immigrant Affairs Building	42 Cross St.	City	Yes	1960	3,781	2 RTU package units
Argenziano School	290 Washington St.	School	Yes	2006	110,000	HW, DX cooling. 3 Lochinvar boilers replaced Fall 2026.
Armory	191 Highland Ave.	City	Yes	1905	33,020	Approximately 25 residential gas fired forced air furnaces, 25 A/C condensing units installed in 2008
Brown School	201 Willow Ave.	School	Yes	1900	28,475	Steam heating system. 2 boilers replaced Fall 2025.
Capuano Early Childhood Center	150 Glen St.	School	Yes	2002	85,448	HW, air cooled chiller
Central Library	79 Highland Ave.	Library	Yes	1930	27,900	HW, chiller, cooling tower
City Hall	93 Highland Ave.	City	Yes	1930	37,960	Steam heating system. Temporary mobile boiler excluded from contract scope.
City Hall Annex	50 Evergreen St.	City	Yes	1962	12,196	HW
Cross Street Center	165 Broadway	City	Yes	1900	10,947	HW
Cummings School	42 Prescott St./ 93 School St.	City	Yes	1930	31,386	Steam boiler replaced in 2022. Building heated by steam and HW.
Department of Public Works Complex	1-17 Franey Rd.	City	Yes	1955	89,448	3 steam boilers replaced 2023-2025.
Dilboy Stadium	110 Alewife Brook Pkwy.	City	Yes	2006	9,263	2-4 heat pump mini-splits, several electric unit heaters/ cabinet heaters
East Branch Library	115 Broadway	Library	Yes	1906	5,080	1 gas fired package unit

East Somerville Community School	50 Cross St./ 115 Pearl St.	School	Yes	2014	152,832	HW, air cooled chiller, HRUs. Change filters every other month (high pollen area).
Edgerly Education Center	8 Bonair St./ 33 Cross St.	School	Yes	1920	91,920	Steam heating system
Founders Memorial Rink	14 Bleachery Ct.	City	Yes	2012	14,280	Gas-fired rooftop dehumidification AHU. Chiller for rink ice making is excluded from contract scope.
Healey School	5 Meacham St.	School	Yes	1997	53,863	HW, chiller, cooling tower
Kennedy School, including Ginny Smithers Pool	5 Cherry St./ 75 Elm St.	School	Yes	1997	151,986	HW. Chiller, cooling tower, plate frame heat exchangers installed in 2024. PoolPak dehumidification unit is excluded from contract scope.
Public Safety Building (includes SFD Engine 3 on Somerville Ave. side)	220 Washington St.	Police/Fire Station	Yes	1927	89,595	HW, DX cooling
Ralph & Jenny Buildings	9 New Washington St./ 17 Innerbelt Rd.	City	Yes	1992	4,802	HW
SCAT Building	90 Union Square	City	No	1900	13,965	HW
SFD Reilly-Brickley Fire Station	266 Broadway	Fire Station	Yes	1975	10,772	Electric heat, 4 gas-fired RTU package units
SFD Engine 1 – Lowell St. Station	651 Somerville Ave.	Fire Station	Yes	1963	6,925	HW
SFD Engine 2 – Assembly Sq. Station	45 Middlesex Ave.	Fire Station	Yes	2025	10,000	Heat pump, HRUs
SFD Engine 6 – Teele Sq. Station	2 Newbury St.	Fire Station	Yes	1900	13,385	HW, DX cooling
SFD Engine 7 – Highland Ave. Station	79 Highland Ave.	Fire Station	Yes	1894	9,743	Steam heating system
Somerville High School	81 Highland Ave.	School	Yes	2020	520,736	HW, air cooled chiller, HRUs
Traffic & Parking Department	133 Holland St.	City	Yes	1940	11,593	Heat pumps installed Fall 2026

Nathan Tufts Field House	838 Broadway	City	Yes	1900	2,964	Electric forced air furnace with central air, electric baseboard heaters
West Branch Library	40 College Ave.	Library	Yes	1924	7,140	HW, heat pumps
West Somerville Neighborhood School	177 Powder House Blvd.	School	Yes	1995	56,426	HW, air cooled chiller, large RTU package unit
Winter Hill Community School	115 Sycamore St.	School	No	1974	90,034	HW, electric reheats/ baseboard heaters
Buildings with No Functioning HVAC Assets						
1895 Building	89 Highland Ave.	City	No	1895	158,880	No functioning HVAC assets
45 College Ave.	45 College Ave.	City	Storage	1885	5,380	Electric baseboard heaters – not included in contract scope
508-512 Columbia Ave. Outbuildings	508 Columbia St.	City	No	1890	2,644	Not currently heated
9 Allen St.	9 Allen St.	City	No	1890	1,802	No functioning HVAC assets
11 Allen St.	11 Allen St.	City	No	1890	1,692	No functioning HVAC assets
Blessing of the Bay Boathouse	32 Shore Dr.	City	Seasonal	Unknown	2,420	No functioning HVAC assets
Dilboy Pool House	324 Alewife Brook Pkwy.	City	Seasonal	1960	4,065	Electric unit heaters – not included in contract scope
Recreation Building	19 Walnut St.	City	Storage	1900	13,464	No functioning HVAC assets
Skilton Ave. Outbuilding	Skilton Ave.	City	No	Unknown	1,600	No functioning HVAC assets

Exhibit B – Preventative Maintenance Tasks & Frequency

This list is not all inclusive and serves as a reference to typical maintenance activities for equipment at City-owned buildings. Other maintenance activities may be identified as new or replacement equipment comes online.

The following maintenance activities will be performed on a **quarterly basis:**

- Change air filters on all units, around the following dates: April 1; July 1; October 1; January 1. Final dates to be determined by the City. All filters will be supplied by the Contractor and covered by the fixed monthly PM Program fee.
- Clean all washable filter units.
- Inspect boiler flue and fresh air intake piping.
- Clean/inspect interior of all AHU's, MUA's, ERU's, EF's and DOAS units.
- Inspect and clean all Fan Powered Box units (FPB) and duct mounted hot water coils.
- Inspect and service related motors, pumps, bearings, valves and piping.
- Inspect and clean hot water/terminal heating units: radiant panels, fin-tube radiation, unit heaters, air curtains, cabinet heaters, etc.
- Perform coupon sampling/inspection and analysis and corresponding system treatment.
- Check glycol concentrations. If glycol concentration requires adjustment, report to the DPW Commissioner or Designee.
- Check all domestic and non-potable water pumps, aqua stats, gauges, and valves.
- Check to ensure all variable frequency drive (VFD) units operate as designed.
- Inspect all sensors, relays, differentials, pressure sensing devices related to all heating, cooling, domestic hot water, non-potable water systems including all AHU/DOASA/ERU/MUA units to ensure they are working as designed.
- Inspect Smardt chiller components: fans, compressors, differential sensors, expansion valves, isolation valves, etc.

The following maintenance activities will be performed on a **semi-annual basis:**

- Clean all condenser coils to ensure proper system operation.
- Clean all exhaust systems thoroughly, including belt replacements (for belt driven units).
- Ensure that all actuators, dampers, fans, and economizers are functioning properly and communicating with the building's BMS system as heating/cooling system equipment.
- Lubricate all mechanical pump bearings and electric motors on all mechanical equipment including domestic water booster pumps, fan motors, HVAC pumps/motors/bearings, fuel oil pump system, etc.

The following maintenance activities will be performed on an **annual basis:**

- Clean all heating/cooling coils in AHU's, MUA's, ERU's, DOAS, ERU's, Ductless Splits, VRFs units, Freezer units, FPB, Ducted VRF units and Smardt chillers.
- Condenser coils: Condenser coils will be cleaned at least once per year at startup. The Annual Maintenance Plan will identify which condenser coils need to be cleaned at additional intervals during the cooling season.
- Clean strainers on pumps, valve assemblies, etc.
- Clean motors and amperage/rotation check on 3 phase power.
- Clean boiler fire box/flue, and internal/external of the boilers and pressure relief valve functions. Open and clean gas fired burners and perform efficiency/combustion tests on all boiler systems **prior to Oct. 1.**

- Winterize all cooling systems, including Smardt chillers, prior to **October 31st.** The Contractor will be responsible for the sourcing, addition, and removal/storage of glycol.
- Inspect and maintain HVAC pneumatic controls air compressor units, oil, belts, starters, etc.
- Monitor liquid gauges on any related non-potable water, heating/cooling system components and repair/replace as needed.
- Replace pH neutralization lime chips and/or tanks on condensing boilers.
- Test safety stops/relief valves and resets.
- Confirm that all equipment and devices function properly and report out to the BMS system as designed. Work may require coordination with controls service vendor(s).

Appendix A:

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Ductless mini split system	Archives Building	Primary Building	Roof		HVAC	Condensing Unit	Mitsubishi	Illegible	
Package unit	Archives Building	Primary Building	Roof		HVAC	Other	Carrier	48TCEA06 A2A5A0A0 A0	
Package unit	Archives Building	Primary Building	Roof		HVAC	Other	Carrier	48TCEA06 A2A5A0A0 A0	
ACC-1	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Trane	RAUCC604 BY13ABD0 00000	
ACC-2	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Trane	RAUCC604 BY13ABD0 00000	
ACC-3	Argenziano Elementary	Primary Building	Roof	2nd Fl	HVAC	Condensing Unit	Trane	RAUCC604 BY13ABD0 00000	
ACC-4	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Trane	TTA240B40 0FA	
ACC-5	Argenziano Elementary	Primary Building	Roof	2nd Fl	HVAC	Condensing Unit	Trane	TTA180B40 0FA	
ACC-6	Argenziano Elementary	Primary Building	Roof	2nd Fl	HVAC	Condensing Unit	Trane	TTA180B40 0FA	
ACC-7	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Mitsubishi	PUY- A24NHA	
ACC-8	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Trane	2TTB3018A 1000AA	
ACC-9	Argenziano Elementary	Primary Building	Roof	2nd Fl	HVAC	Condensing Unit	Mitsubishi	PUY- A36NHA	
ACC-10	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Mitsubishi	Not Accessible	
ACC-11	Argenziano Elementary	Primary Building	Roof	2nd Fl	HVAC	Condensing Unit	Trane	2TTB3018A 1000AA	
ACU-1	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Air Handling Unit	Trane	YCD151C4 HKBB	
AHU-1	Argenziano Elementary	Primary Building	3rd Floor	M-301	HVAC	Air Handling Unit	Trane	MCCB040U A0B0UA	
AHU-2	Argenziano Elementary	Primary Building	3rd Floor	M-301	HVAC	Air Handling Unit	Trane	MCCB050U A0B0UB	
AHU-3	Argenziano Elementary	Primary Building	2nd Floor	M-201	HVAC	Air Handling Unit	Trane	MCCB050U A0B0UB	
AHU-4	Argenziano Elementary	Primary Building	3rd Floor	M-301	HVAC	Air Handling Unit	Trane	MCCB014U A0B0UB	
AHU-5	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Air Handling Unit	Trane	MCCB017U A0B0UA	
Boiler 1	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Boiler - Gas	Lochinvar		New Lochinvar boiler installed Fall 2026
Boiler 2	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Boiler - Gas	Lochinvar		New Lochinvar boiler installed Fall 2026
Boiler 3	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Boiler - Gas	Lochinvar		New Lochinvar boiler installed Fall 2026
Cabinet Unit	Argenziano Elementary	Primary Building	1st Floor		HVAC	Unit Heater HW/Steam	Trane	Not Accessible	
Condensing unit	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Condensing Unit	Sanyo	C3682	
Exhaust Fan EF-1	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE- 200HB-30- G	
Exhaust Fan EF-2	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE-090- 4	
Exhaust Fan EF-3	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-094-4	
Exhaust Fan EF-4	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-101-4	
Exhaust Fan EF-5	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-141-4	
Exhaust Fan EF-6	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-071-6	
Exhaust Fan EF-7	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-081-6	
Exhaust Fan EF-8	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE-121- 5	
Exhaust Fan EF-9	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE-131- 3	
Exhaust Fan EF-10	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-071-6	
Exhaust Fan EF-11	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	GB-081-6	
Exhaust Fan EF-13	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	SWB-212-4- CW-UB-F	
Exhaust Fan EF-15	Argenziano Elementary	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE-131- 5	
Fan Box	Argenziano Elementary	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit	Trane		
Fin Tube	Argenziano Elementary	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit			
HRU-1	Argenziano Elementary	Primary Building	2nd Floor	M-201	HVAC	Air Handling Unit	AnnexAir	ERP-1-05- HW-C-H	
HRU-2	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Air Handling Unit	AnnexAir	ERV-E-16	
HRU-3	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Air Handling Unit	AnnexAir	ERV-E-07	
Hydronic Unit Heaters	Argenziano Elementary	Primary Building	1st Floor	All levels	HVAC	Unit Heater HW/Steam	Rittling	Not Accessible	
MAU-1	Argenziano Elementary	Primary Building	Roof	Upper Roof	HVAC	Make Up Air Unit	Trane	Not Accessible	
Pump 1	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Other	Armstrong	4030	
Pump 2	Argenziano Elementary	Primary Building	Boiler Room		HVAC	Other	Armstrong	4030	
Radiant Heat Panel	Argenziano Elementary	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit			
Unit Heater, Electric	Argenziano Elementary	Primary Building	1st Floor	EL-100- 103,-106, FP-101	HVAC	Unit Heater Electric	Berko	Various	
VAV box	Argenziano Elementary	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit	Trane	Various	
4-pipe bare pipe radiator	Brown School	Primary Building	Basement	Art CR	HVAC	Room Terminal Unit			
4-pipe bare pipe radiator	Brown School	Primary Building	Basement	CR Left	HVAC	Room Terminal Unit			
4-pipe bare pipe radiator	Brown School	Primary Building	Basement	CR Right	HVAC	Room Terminal Unit			
5-pipe bare pipe radiator	Brown School	Primary Building	Basement	Custodian Rm	HVAC	Room Terminal Unit			
5-pipe bare pipe radiator	Brown School	Primary Building	Basement	Kitchen	HVAC	Room Terminal Unit			
Air-cooled condensing unit	Brown School	Primary Building	Roof	2nd Floor	HVAC	Condensing Unit	Goodman	VSX130601 BB	
Burner Fuel/Air Control Boiler & Damper control	Brown School	Primary Building	Basement	Boiler Room	HVAC	Controls	Honeywell		
Cast Iron gravity convectors	Brown School	Primary Building	1st Floor	Common Corridor	HVAC	Room Terminal Unit			
Cast Iron gravity convectors	Brown School	Primary Building	1st Floor	Stair Landing	HVAC	Room Terminal Unit			

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Cast Iron gravity convectors	Brown School	Primary Building	Basement	Storage Rm	HVAC	Room Terminal Unit			
Cast Iron gravity convectors	Brown School	Primary Building	Basement	Storage Rm	HVAC	Room Terminal Unit			
Cast Iron gravity convectors	Brown School	Primary Building	Basement	Work Rm	HVAC	Room Terminal Unit			
Cast Iron gravity convectors	Brown School	Primary Building	Basement		HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	1st Floor	Common Corridor	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	1st Floor	Corridor	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	1st Floor	CR Left Front	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	1st Floor	CR Right Front	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	2nd Floor	Corridor Connecting	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	2nd Floor	Corridor Right Front	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	2nd Floor	Office	HVAC	Room Terminal Unit			
Cast Iron Radiator	Brown School	Primary Building	2nd Floor	Toilet Rm Staff	HVAC	Room Terminal Unit			
Cast iron/steam	Brown School	Primary Building	Basement	Boiler Room	HVAC	Boiler - Gas	HB Smith	28HE-S-04	Boilers replaced in 2025
Ceiling Destratification Fans	Brown School	Primary Building	3rd Floor	CR Left Rear	HVAC	Fan	Nu-Tone		
Ceiling Destratification Fans	Brown School	Primary Building	3rd Floor	CR Right Rear	HVAC	Fan	Nu-Tone		
Ceiling Exhaust Fan	Brown School	Primary Building	1st Floor	Women's Rm	HVAC	Fan			
Ceiling Exhaust Fan	Brown School	Primary Building	3rd Floor	Men's Rm	HVAC	Fan			
Ceiling Exhaust Fan	Brown School	Primary Building	3rd Floor	Women's Rm	HVAC	Fan			
Duplex condensate pump w/tank N/A	Brown School	Primary Building	Basement	Boiler Rm	HVAC	Piping			
Electric wall heater	Brown School	Primary Building	Basement	CR Left	HVAC	Room Terminal Unit	Berko		
Electric wall heater	Brown School	Primary Building	Basement	CR Right	HVAC	Room Terminal Unit	Berko		
Exhaust Fan	Brown School	Primary Building	Basement	HC Toilet Rm	HVAC	Fan	Nu-Tone		
Exhaust Fan	Brown School	Primary Building	Basement	Toilet Rm	HVAC	Fan			
Exhaust system	Brown School	Primary Building	Basement	Main Toilet Rm	HVAC	Fan			
Finned Pipe	Brown School	Primary Building	1st Floor	CR Left Rear	HVAC	Room Terminal Unit			
Finned Pipe	Brown School	Primary Building	1st Floor	Various	HVAC	Room Terminal Unit			
Finned Pipe	Brown School	Primary Building	2nd Floor	Corridor Left	HVAC	Room Terminal Unit			
Finned Pipe	Brown School	Primary Building	2nd Floor	CR Left Rear	HVAC	Room Terminal Unit			
Floor Mounted Unit Ventilator	Brown School	Primary Building	3rd Floor	CR Left Rear	HVAC	Air Handling Unit	Trane		
Floor Mounted Unit Ventilator	Brown School	Primary Building	3rd Floor	CR Right Rear	HVAC	Air Handling Unit	Trane		
Gravity convector grille & Foul Air Damper combination	Brown School	Primary Building	1st Floor	Classrooms	HVAC	Room Terminal Unit			
Gravity convector grille & Foul Air Damper combination	Brown School	Primary Building	2nd Floor	Classrooms	HVAC	Room Terminal Unit			
Horizontal Unit Ventilator	Brown School	Primary Building	3rd Floor	Library	HVAC	Air Handling Unit	Trane	TVVA10HA 2CS2BG14 G12	
HW baseboard/ fin-tube	Brown School	Primary Building	3rd Floor	CR Left Front	HVAC	Room Terminal Unit			
HW baseboard/ fin-tube	Brown School	Primary Building	3rd Floor	Library	HVAC	Room Terminal Unit			
HW baseboard/ fin-tube	Brown School	Primary Building	3rd Floor	Men's Rm	HVAC	Room Terminal Unit			
HW baseboard/ fin-tube	Brown School	Primary Building	3rd Floor	Storage Rm	HVAC	Room Terminal Unit			
HW baseboard/ fin-tube	Brown School	Primary Building	3rd Floor	Women's Rm	HVAC	Room Terminal Unit			
In-Line Pumps	Brown School	Primary Building	3rd Floor	Boiler Rm	HVAC	Piping	Taco	007-F5	
Low sidewall vent	Brown School	Primary Building	1st Floor	Various	HVAC	Room Terminal Unit			
Perforated Ceiling Diffusers	Brown School	Primary Building	3rd Floor	CR Left Rear	HVAC	Room Terminal Unit			
Perforated Ceiling Diffusers	Brown School	Primary Building	3rd Floor	CR Right Rear	HVAC	Room Terminal Unit			
Steam Traps	Brown School	Primary Building	Various	Various	HVAC	Steam Trap	Various	Various	
Steam Unit Heater	Brown School	Primary Building	1st Floor	CR Right Rear	HVAC	Room Terminal Unit	Fedders		
Toilet Exhaust System & Grilles	Brown School	Primary Building	1st Floor	Women's Rm	HVAC	Room Terminal Unit			
Vent	Brown School	Primary Building	2nd Floor	Corridor Left	HVAC	Room Terminal Unit			
Vent	Brown School	Primary Building	2nd Floor	Corridor Right Front	HVAC	Room Terminal Unit			
Vent	Brown School	Primary Building	2nd Floor	Corridor Right Rear	HVAC	Room Terminal Unit			
Vents	Brown School	Primary Building	3rd Floor	Library	HVAC	Room Terminal Unit			
Vertical air handler	Brown School	Primary Building	3rd Floor	Storage Rm	HVAC	Air Handling Unit	Goodman		
AHU-1	Capuano School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	E74334803 0	
AHU-2	Capuano School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	E74334804 0	
Air Cooled	Capuano School	Primary Building	Roof		HVAC	Chiller	McQuay	ALS186C2 7-ER11	
Chilled Water Pump	Capuano School	Primary Building	Boiler Room		HVAC	Other	Bell & Gossett	1510 BFW	
Chilled Water Pump	Capuano School	Primary Building	Boiler Room		HVAC	Other	Bell & Gossett	1510 BFW	
Condensing Unit	Capuano School	Primary Building	Roof		HVAC	Condensing Unit	Mitsubishi	PUG188KB	
Exhaust Fan	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-090-4X-QD-R3	
Exhaust Fan, EF-1	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-070-4X-QD-R3	
Exhaust Fan, EF-1	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-141HP-4	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Exhaust Fan, EF-2	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-180-15	
Exhaust Fan, EF-3	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-121-4X-QD	
Exhaust Fan, EF-4	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-141-5X-QD	
Exhaust Fan, EF-5	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-100-15	
Exhaust Fan, EF-7	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-101-4	
Exhaust Fan, EF-8	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE- 180HP-20-6	
Exhaust Fan, EF-11	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-121-4X-QD	
Exhaust Fan, EF-13	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	CUBE-141HP-4	
Exhaust Fan, EF-14	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-101-4	
Exhaust Fan, EF-15	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-121-3	
Exhaust Fan, EF-16	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-101-3	
Exhaust Fan, EF-17	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-101-4X-QD-R3	
Exhaust Fan, EF-18	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-180-3	
Exhaust Fan, EF-20	Capuano School	Primary Building	Roof		HVAC	Fan	Greenheck	CUE-095-D	
Fintube radiation	Capuano School	Primary Building	All levels		HVAC	Room Terminal Unit	Various	Not Accessible	
Glycol Feeder	Capuano School	Primary Building	Boiler Room		HVAC	Other	Neptune	Not Accessible	
Hot Water	Capuano School	Primary Building	Boiler Room		HVAC	Boiler - Gas	Burnham	V1114	
Hot Water	Capuano School	Primary Building	Boiler Room		HVAC	Boiler - Gas	Burnham	V1114	
Hot Water Pump	Capuano School	Primary Building	Boiler Room		HVAC	Other	Bell & Gossett	1510 BFW	
Hot Water Pump	Capuano School	Primary Building	Boiler Room		HVAC	Other	Bell & Gossett	1510 BFW	
RF 2	Capuano School	Primary Building			HVAC	Fan	Not Accessible	Not Accessible	
RTU 1	Capuano School	Primary Building	Roof		HVAC	Air Handling Unit	McQuay	RPS050CS W	
RTU 2	Capuano School	Primary Building	Roof		HVAC	Air Handling Unit	McQuay	RDS800CY Y	
Unit Heater, Electric	Capuano School	Primary Building	2nd Floor	Generator Room	HVAC	Unit Heater Electric	Qmark	MLH0541	
Unit Ventilator	Capuano School	Primary Building	All levels		HVAC	Room Terminal Unit	Herman Nelson	Various	
VAV box	Capuano School	Primary Building	All levels		HVAC	Room Terminal Unit	Not Accessible	Not Accessible	
2,400 MBH, hot water	Central Library	Primary Building	Basement	Boiler Room	HVAC	Boiler - Gas	Laars	RHHH2400 AIF2EXN	
60 ton, Air-Cooled	Central Library	Primary Building	Site	Chiller Area	HVAC	Chiller	Carrier	30RBA060 54-5---3	
AHU-1, single zone	Central Library	Primary Building	2nd Floor	Mechanical Room M-202	HVAC	Air Handling Unit	Dunham-Bush	Not Accessible	
AHU-2, single zone	Central Library	Primary Building	2nd Floor	Mechanical Room M-203	HVAC	Air Handling Unit	Dunham-Bush	HAH-80	
AHU-MZ-1, multi-zone	Central Library	Primary Building	Basement	Boiler Room	HVAC	Air Handling Unit	Dunham-Bush	MZ-48-D	
AHU-MZ-2, multi-zone	Central Library	Primary Building	1st Floor	Mechanical Room M-102	HVAC	Air Handling Unit	Dunham-Bush	MZ-64	
AHU-MZ-3, multi- zone	Central Library	Primary Building	1st Floor	Mechanical Room M101	HVAC	Air Handling Unit	Dunham-Bush	MZ-48-D	
Compressed air dryer, serves pneumatic HVAC controls	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	Hankison	8025	
Dehumidifier for basement archive area	Central Library	Primary Building	Basement	Elevator Mechanical	HVAC	Dehumidifier	Aprilaire	1750A	
Dehumidifier for basement archive area	Central Library	Primary Building	Basement	Staff Workroom	HVAC	Dehumidifier	Aprilaire	1750A	
Dehumidifier for basement archive area	Central Library	Primary Building	Basement	Staff Workroom	HVAC	Dehumidifier	Aprilaire	1750A	
Exhaust Fan #2, serves AHU-MA-2, centrifugal	Central Library	Primary Building	2nd Floor	Mechanical Room M-103	HVAC	Fan	American Air Filter Company	BAZK 2406-08	
Exhaust Fan serving AHU-MZ-1, centrifugal	Central Library	Primary Building	Basement	Boiler Room	HVAC	Fan	Not Accessible	Not Accessible	
Heating hot water circulation pump, Pump #1	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	No Information	No Information	
Heating hot water circulation pump, Pump #2	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	Armstrong Pumps, Inc.	H53	
Heating hot water circulation pump, Pump #3	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	Armstrong Pumps, Inc.	H54	
Lower chilled water (HVAC) supply pump	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	Not Accessible	Not Accessible	
Roof-mounted Exhaust Fan	Central Library	Primary Building	Roof	Roof	HVAC	Fan	Illegible	S-CBF-33	
Roof-mounted Exhaust Fan	Central Library	Primary Building	Roof	Roof	HVAC	Fan	CentriMaster	PRN126NE	
Roof-mounted Exhaust Fan	Central Library	Primary Building	Roof	Roof	HVAC	Fan	CentriMaster	PRN145G	
Roof-mounted Exhaust Fan	Central Library	Primary Building	Roof	Roof	HVAC	Fan	Illegible	Illegible	
Roof-mounted Exhaust Fan	Central Library	Primary Building	Roof	Roof	HVAC	Fan	Illegible	S-CBF-33	
Upper chilled water (HVAC) supply pump	Central Library	Primary Building	Basement	Boiler Room	HVAC	Other	Not Accessible	Not Accessible	
3rd Floor Unit	City Hall	Primary Building	3rd Floor		HVAC	Air Handling Unit	Carrier	517A120	
3rd Floor Unit	City Hall	Primary Building	Roof		HVAC	Condensing Unit	Carrier	566DPX12 0000AAAA	
AC Fan coil	City Hall	Primary Building	1st Floor	1st and 2nd Floors	HVAC	Unit	Not Applicable	Not Applicable	
AC-1	City Hall	Primary Building	Attic		HVAC	Air Handling Unit	Carrier	FE4ANB00 6	
AC-2	City Hall	Primary Building	Attic		HVAC	Air Handling Unit	Carrier	FE4ANB00 6	
Air Cooled Chiller Unit	City Hall	Primary Building	Site		HVAC	Chiller	York	LCHAC50-25	
Chilled Water Pump	City Hall	Primary Building	Chiller Room		HVAC	Other	Not Accessible	Not Accessible	
Condensate Return unit	City Hall	Primary Building	Chiller Room		HVAC	Other	Hoffman	Not Accessible	
Council Chamber Unit 1	City Hall	Primary Building	Roof		HVAC	Condensing Unit	Carrier	25HPA560 A300	
Council Chamber Unit 2	City Hall	Primary Building	Roof		HVAC	Condensing Unit	Carrier	25HPA560 A300	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Ductless Split AC - IT Room	City Hall	Primary Building	Basement	IT room	HVAC	Other	Sanyo	C2672R	
Ductless Split AC - IT Room	City Hall	Primary Building	Basement	MIS room	HVAC	Other			Installed 2025
Ductless Split AC - IT Room	City Hall	Primary Building	Basement		HVAC	Other	Daikin	RKS36LVJ U	
Ductless Split AC - Mayor's Office	City Hall	Primary Building	Attic		HVAC	Other	Freidrich	MR30C3F	
Steam Boiler System for SHS and City Hall	City Hall	Primary Building	Boiler Room	In High School	HVAC	Boiler - Gas	Cleaver-Brooks	CB600-150	
Steam Radiator	City Hall	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit	Various		
1/2 HP circulation pump	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Other	Bell & Gossett		
1/2 HP circulation pump	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Other	Bell & Gossett		
1/2 HP circulation pump	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Other	Bell & Gossett		
327 MBH Gas-fired boiler	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Boiler - Gas	Caravan Slant/Fin Galaxy	GC-399- HEC	
327 MBH Gas-fired boiler	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Boiler - Gas	Caravan Slant/Fin Galaxy	GC-399- HEC	
327 MBH Gas-fired boiler	City Hall Annex	Primary Building	Boiler Room	Basement	HVAC	Boiler - Gas	Caravan Slant/Fin Galaxy	GC-399- HEC	
Hydronic radiant baseboard	City Hall Annex	Primary Building	1st Floor	Throughout Building	HVAC	Unit Heater HW/Steam			
Boiler, 200 MBH, Left	Cross Street Center	Primary Building	Basement	Basement	HVAC	Boiler - Gas	Weil McLain	CGi-7-PIN	
Boiler, 200 MBH, Right	Cross Street Center	Primary Building	Basement	Basement	HVAC	Boiler - Gas	Weil McLain	CGi-7-PIN	
Circulation Pump, Heating Water, Fractional HP, Left	Cross Street Center	Primary Building	Basement	Basement	HVAC	Other	Bell & Gossett	Series PR- M61	
Circulation Pump, Heating Water, Fractional HP, Right	Cross Street Center	Primary Building	Basement	Basement	HVAC	Other	Bell & Gossett	Series 100 L40	
Condensing Unit, Split System, 5 Ton	Cross Street Center	Primary Building	Roof	Low Roof	HVAC	Condensing Unit	Thermal Zone	Not Found	
Condensing Unit, Split System, 8-10 Ton	Cross Street Center	Primary Building	Roof	Low Roof	HVAC	Condensing Unit	Not Found	Not Found	
Fan Coil Unit, 5 Ton	Cross Street Center	Primary Building	1st Floor	Main Room	HVAC	Other	International Comfort Products	NFCP6000 D1	
Fan Coil Unit, 8-10 ton	Cross Street Center	Primary Building	2nd Floor	Main Room	HVAC	Other	Not Found	Not found	
Air Compressor	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Controls	Johnson Controls	Illegible	
Air Handler, Interior, 4,701 to 5.200 CFM	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Air Handling Unit	Inaccessible	Inaccessible	
Boiler, 2,001 to 5,000 MBH	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Boiler - Gas	Burnham		Installed in 2023
Circulation Pump, Heating Water, 1.5 HP	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Other	Bell & Gossett	Illegible	
Circulation Pump, Heating Water, 1.5 HP	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Other	Bell & Gossett	Illegible	
Commercial Kitchen, Exhaust Hood	Cummings School	Primary Building	0th Floor	Kitchen	HVAC	Other	Inaccessible	Inaccessible	
Condensate Receiver Station, 15 gal	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Other	Not Found	Not Found	
Ductless Split System, Single Zone, 1.5 to 2 Ton	Cummings School	Primary Building	1st Floor	Throughout Building	HVAC	Room Terminal Unit	Various	Various	
Heat Exchanger, Steam-to-Water, 106 to 130 GPM	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Heat Exchanger	Not Found	Not Found	
Heat Exchanger, Steam-to-Water, 106 to 130 GPM	Cummings School	Primary Building	1st Floor	Boiler Room	HVAC	Heat Exchanger	Not Found	Not Found	
Split-system condensing unit, ductless, 2 Ton	Cummings School	Primary Building	Roof	Addition Roof	HVAC	Condensing Unit	Fujitsu	A0U24RLB	
Split-system condensing unit, ductless, 2 Ton	Cummings School	Primary Building	Roof	Addition Roof	HVAC	Condensing Unit		MR24Y3F	
Steam Traps	Cummings School	Primary Building	Various	Various	HVAC	Steam Trap	Various	Various	
Unit Ventilator, 751 to 1,250 CFM (approx. 3 Ton)	Cummings School	Primary Building	Ground Floor	Throughout Building	HVAC	Room Terminal Unit	Not Found	Various	
Boiler, Gas	DPW Complex	DPW Admin Building	Basement	DPW Office	HVAC	Boiler - Gas	Smith	28A Series	
Boiler, Gas	DPW Complex	Water Department	Basement	Water Dept.	HVAC	Boiler - Gas	Burnham	V1112	
Boiler, Gas	DPW Complex	Electrical Division	Basement	Electrical Division	HVAC	Boiler - Gas	Burnham	V1112	
Condensate receiver	DPW Complex	DPW Admin Building	Basement	DPW Office	HVAC	Other	Various	Various	
Condensate receiver	DPW Complex	Water Department	Basement	Water Dept.	HVAC	Other	Sterling Co.	502200-JDF	
Condensate receiver	DPW Complex	West Garages	1st Floor	West Garages	HVAC	Other	No Information	No Information	
Condensing Unit	DPW Complex	Highway Department	1st Floor	Highway Dept.	HVAC	Condensing Unit	Heat Controller Inc.	RSG1324S 1E	
Condensing Unit	DPW Complex	Water Department	Roof	Water Dept.	HVAC	Condensing Unit	Heat Controller Inc.	RSG1324S 1E	
Condensing Unit	DPW Complex	Water Department	Roof	Water Dept.	HVAC	Condensing Unit	Fujitsu	AOU12RLS	
Ductless split AC	DPW Complex	Throughout Complex	Various	Various	HVAC	Condensing Unit			
Fan Cabinet Unit	DPW Complex	Fleet Garage	1st Floor	Truck Bay	HVAC	Room Terminal Unit	Trane	Not Accessible	
Fintube radiation	DPW Complex	DPW Admin Building	1st Floor	All levels	HVAC	Room Terminal Unit			
Fintube radiation	DPW Complex	Water Department	1st Floor	Water Dept.	HVAC	Room Terminal Unit			
Gas furnace w/evaporator coil	DPW Complex	Highway Department	1st Floor	Highway breakroom	HVAC	Air Handling Unit	No Information	No Information	
Gas furnace w/evaporator coil	DPW Complex	Water Department	1st Floor	Conference Room	HVAC	Air Handling Unit	No Information	No Information	
Gas furnace w/o evaporator coil	DPW Complex	Building Shop	1st Floor	Building Shop breakroom	HVAC	Air Handling Unit	No Information	No Information	
Gas furnace w/o evaporator coil	DPW Complex	Fleet Garage	1st Floor	Fleet Breakroom	HVAC	Air Handling Unit	No Information	No Information	
Heat Pump/AC	DPW Complex	Throughout Complex	Multiple	Various	HVAC	Heat Pump/AC			
Infrared tube heater	DPW Complex	North Garages	1st Floor	Animal Control	HVAC	Unit Heater Gas	Infra save	Not Accessible	
Steam Traps	DPW Complex	Throughout Complex	Various	Various	HVAC	Steam Trap	Various	Various	
Unit Heater - Gas	DPW Complex	Fleet Garage	1st Floor	Police vehicle shop	HVAC	Unit Heater Gas	Modine	Not Accessible	
Unit Heater - Gas	DPW Complex	Fleet Garage	1st Floor	Police vehicle shop	HVAC	Unit Heater Gas	Modine	Not Accessible	
Unit Heater, Electric	DPW Complex	Guard Shack	Site	Guard Shack	HVAC	Unit Heater Electric	Dayton	Not Accessible	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Unit Heater, HW/Steam	DPW Complex	East Garages	1st Floor	East Garages	HVAC	Unit Heater HW/Steam			
Unit Heater, HW/Steam	DPW Complex	West Garages	1st Floor	West Garages	HVAC	Unit Heater HW/Steam			
Vehicle Exhaust Fan	DPW Complex	Fleet Garage	1st Floor	Truck Bay	HVAC	Fan	Not Accessible	Not Accessible	
Packaged Unit: Rooftop Heating and Cooling - 10 Ton	East Branch Library	Primary Building	Roof		HVAC	Make Up Air Unit	Carrier	48TME012- A-501	
ACCU-1. Ductless Split System, Single Zone, 2.5 to 3 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Carrier	38HDF030-301	
ACCU-10. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
ACCU-11. Ductless Split System, Single Zone, 1.5 to 2 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Carrier	38HDF018-301	
ACCU-2. Ductless Split System, Single Zone, 2.5 to 3 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Carrier	38HDF030-301	
ACCU-3. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
ACCU-4. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
ACCU-5. Ductless Split System, Single Zone, 2.5 to 3 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Carrier	38HDF030-301	
ACCU-6. Ductless Split System, Single Zone, 2.5 to 3 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Carrier	38HDF030-301	
ACCU-7. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
ACCU-8. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
ACCU-9. Ductless Split System, Single Zone, 0.75 to 1 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Panasonic	CU- KS12NK1A	
AHU-1. Package Unit, Variable Volume, 21 to 30 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	RVE-80-58P-30H-29.0	
AHU-2. Package Unit w/heat Recovery, 16 to 20 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	RVE-50-46P-30H-17.5	
AHU-3. Package Unit w/heat Recovery, 16 to 20 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	RVE-50-46P-30H-17.5	
AHU-4. Package Unit, Variable Volume, 21 to 30 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	RVE-80-58P-30H-29.0	
AHU-5. Air Handler, Interior, 5,201 to 6,500 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-64H-30-75-ES	
AHU-6. Air Handler, Interior, 4,701 to 5,200 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-58H-15-75-ES	
AHU-7. Air Handler, Interior, 4,001 to 4,700 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-58H-30-50-ES	
AHU-8. Air Handler, Interior, 4,001 to 4,700 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-58H- 30-50-ES	
AHU-9. Air Handler, Interior, 4,701 to 5,200 CFM	East Somerville School	Primary Building	1st Floor	Storage/ Mechanical 169	HVAC	Air Handling Unit	Greenheck	ERT-52S-15-30-ES	
AHU-10. Air Handler, Interior, 1,301 to 2,500 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-52S- 15-20-ES	
AHU-11. Air Handler, Interior, 2,501 to 4,000 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Greenheck	ERT-52S-15-50-ES	
AHU-12. Package Unit w/heat Recovery, 16 to 20 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	RVE-50-46P-30H-20.0	
AHUP-1. Circulation Pump, Chilled Water, 10 HP	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Other	Inaccessible	Inaccessible	
AHUP-2. Circulation Pump, Chilled Water, 10 HP	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Other	Inaccessible	Inaccessible	
B-1. Boiler, Gas, 2,501 to 4,200 MBH	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Boiler - Gas	Buderus	SB735-790	
B-2. Boiler, Gas, 2,501 to 4,200 MBH	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Boiler - Gas	Buderus	SB735-790	
BCU-1. Air Handler, Interior, 2,501 to 4,000 CFM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Air Handling Unit	Trane	BCHC090G 1F0A4LG6 P000000B C00000000 0000000	
Cabinet Unit Heater, Hydronic, 37 to 85 MBH	East Somerville School	Primary Building	1st Floor	Throughout Building	HVAC	Unit Heater HW/Steam	Inaccessible	Inaccessible	
CH-1. Air-Cooled, 201 to 300 Ton	East Somerville School	Primary Building	Roof	Roof	HVAC	Chiller	McQuay	AGS275DF SNN-ER10	
Chilled Beam	East Somerville School	Primary Building	1st Floor	Throughout Building	HVAC	Room Terminal Unit	Price	Various	
CHWP-1. Circulation Pump, Chilled Water, 5 HP	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Other	Inaccessible	Inaccessible	
CHWP-2. Circulation Pump, Chilled Water, 5 HP	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Other	Inaccessible	Inaccessible	
EF-1. Exhaust Fan, Roof Mounted, 501 to 800 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-141HP- 4-X	
EF-2. Roof Mounted, 2,001 to 5,000 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-141-10- X	
EF-3. Roof Mounted, 1,001 to 1,500 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-121-4-X	
EF-4. Roof Mounted, 401 to 500 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-081-6-X	
EF-5. Roof Mounted, 1,001 to 1,500 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-131-3-X	
EF-6. Roof Mounted, 2,001 to 5,000 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-180-7-X	
GDF-1. Gas Heater, Duct, 100 to 120 MBH	East Somerville School	Primary Building	1st Floor	Recycling & Trash 168	HVAC	Unit Heater Gas	Reznor	Inaccessible	
Heat Exchanger, Water-to-Water, 381 to 620 GPM	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Heat Exchanger	Inaccessible	Inaccessible	
KEF-1. Exhaust Fan, Roof Mounted, 5,001 to 8,500 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	GB-141HP- 4-X	
Laboratory Exhaust Hood, 4 LF	East Somerville School	Primary Building	2nd Floor	208	HVAC	Other	bmc	Not Found	
MAU-1. Make-Up Air Unit, 2,000 to 6,000 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Make Up Air Unit	Greenheck	DGX-112- H22-DB	
Refrigerant Leak Monitoring System	East Somerville School	Primary Building	Roof	Penthouse	HVAC	Other	Honeywell	301EM	
SF-1. Roof Mounted, 1,001 to 1,500 CFM	East Somerville School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	SAF-110-5	
Unit Heater, Hydronic, 37 to 85 MBH	East Somerville School	Primary Building	1st Floor	Throughout Building	HVAC	Unit Heater HW/Steam	Various	Various	
Air Conditioning Unit, Self-Contained (Indoor), 5 Ton	Edgerly School	Primary Building	2nd Floor	210 Special Education	HVAC	Other	Not Found	Not Found	
Air Conditioning Unit, Self-Contained (Indoor), 5 Ton	Edgerly School	Primary Building	2nd Floor	Special Education, Conference Room	HVAC	Other	Carrier	50AH series	
Air Conditioning Unit, Self-Contained (Indoor), 5 Ton	Edgerly School	Primary Building	2nd Floor	Special Education, Offices	HVAC	Other	Not Found	Not Found	
Boiler Feedwater Tank w/Duplex Pumps	Edgerly School	Primary Building	Boiler Room	Boiler Room	HVAC	Other	Petro	BFCP2D63 0	
Boiler, Oil, 5,001 to 10,000 MBH	Edgerly School	Primary Building	Boiler Room	Boiler Room	HVAC	Boiler - Oil	Weil McLain	Nameplate covered	
Exhaust Fan, Propeller	Edgerly School	Primary Building	1st Floor	Boxer's Club	HVAC	Fan	Central-Aire	K-20	
Steam Traps	Edgerly School	Throughout Building	Various	Various	HVAC	Steam Trap	Various	Various	
Unit Heater, Hydronic	Edgerly School	Primary Building	1st Floor	Boxer's Club	HVAC	Unit Heater HW/Steam		Various	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Unit Ventilator, 751 to 1,250 CFM	Edgerly School	Primary Building	1st Floor	Throughout building	HVAC	Room Terminal Unit	Not Found	Not found	
Baseboard Heater, Electric	Fire Station Headquarters	Primary Building	1st Floor	Throughout building	HVAC	Other	NA	NA	
Ductless Split System, Single Zone, 3 Ton	Fire Station Headquarters	Primary Building	Site	Site	HVAC	Condensing Unit	Fujitsu	AOU36RLX B	
Exhaust Fan, Centrifugal, 251 to 800 CFM	Fire Station Headquarters	Primary Building	1st Floor	Apparatus Room	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Centrifugal, 3,501 to 5,000 CFM	Fire Station Headquarters	Primary Building	1st Floor	Mechanical/ Electrical Rooms	HVAC	Fan	Penn	SX275BC	
Exhaust Fan, Centrifugal, 801 to 2,000 CFM	Fire Station Headquarters	Primary Building	1st Floor	Service Garage	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Propeller	Fire Station Headquarters	Primary Building	2nd Floor	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan		PRN110	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Illegible	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Exhaust Fan, Roof Mounted	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Fan	Not Found	Not Found	
Infrared Heater, Gas-Fired Tubular 20' to 80' Length, 40 to 80 MBH	Fire Station Headquarters	Primary Building	1st Floor	Apparatus Room	HVAC	Unit Heater Gas	Reznor	TR75	
Infrared Heater, Gas-Fired Tubular 20' to 80' Length, 40 to 80 MBH	Fire Station Headquarters	Primary Building	1st Floor	Apparatus Room	HVAC	Unit Heater Gas	Reznor	TR75	
Infrared Heater, Gas-Fired Tubular 20' to 80' Length, 40 to 80 MBH	Fire Station Headquarters	Primary Building	1st Floor	Apparatus Room	HVAC	Unit Heater Gas	Reznor	Not Found	
Infrared Heater, Gas-Fired Tubular 20' to 80' Length, 40 to 80 MBH	Fire Station Headquarters	Primary Building	1st Floor	Apparatus Room	HVAC	Unit Heater Gas	Reznor	TR75	
RTU-1. Packaged Unit (RTU), 5 Ton	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Other	Trane	YSC063G3 RHA01D00 000000000 0000F0000 000000	
RTU-2. Packaged Unit (RTU), 7.5 Ton	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Other	Trane	YSC063G3 RHA01D00 000000000 0000F0000 000000	
RTU-3. Packaged Unit (RTU), 7.5 Ton	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Other	Trane	YSC063G3 RHA01D00 000000000 0000F0000 000000	
RTU-4. Packaged Unit (RTU), 4 Ton	Fire Station Headquarters	Primary Building	Roof	Roof Access Stairwell	HVAC	Other	Trane	YSC063G3 RHA01D00 000000000 0000F0000 000000	
Unit Heater, Electric, 3 to 6 kW,	Fire Station Headquarters	Primary Building	1st Floor	Mechanical/ Electrical Rooms	HVAC	Unit Heater Electric	Singer	Not Found	
Unit Heater, Natural Gas, 26 to 55 MBH	Fire Station Headquarters	Primary Building	1st Floor	103	HVAC	Unit Heater Gas	Not Found	Not found	
Unit Heater, Natural Gas, 26 to 55 MBH	Fire Station Headquarters	Primary Building	1st Floor	Throughout building	HVAC	Unit Heater Electric	Various	Various	
Unit Heater, Natural Gas, 26 to 55 MBH	Fire Station Headquarters	Primary Building	2nd Floor	Locker Room	HVAC	Unit Heater Gas	Reznor	Illegible	
Unit Heater, Natural Gas, 26 to 55 MBH	Fire Station Headquarters	Primary Building	2nd Floor	Locker Room	HVAC	Unit Heater Gas	Reznor	Illegible	
Boiler	Fire Station: Engine 1 - Lowell St. Station	Primary Building	Boiler Room		HVAC	Boiler - Gas		LGB Series 2	
Circulator Pump	Fire Station: Engine 1 - Lowell St. Station	Primary Building	Boiler Room		HVAC	Other	Bell & Gossett	No Information	
Exhaust Vent system	Fire Station: Engine 1 - Lowell St. Station	Primary Building	1st Floor		HVAC	Fan	PlymoVent	No Information	
Fintube radiation	Fire Station: Engine 1 - Lowell St. Station	Primary Building	1st Floor		HVAC	Room Terminal Unit			
Unit Heaters	Fire Station: Engine 1 - Lowell St. Station	Primary Building	1st Floor		HVAC	Unit Heater HW/Steam	Modine	Not Accessible	
1/2 HP Circulation pump	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Basement	Boiler Room	HVAC	Other	Bell & Gossett	172556	
Air Handler 1200 CFM	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Attic		HVAC	Air Handling Unit	Trane	Not Accessible	
Air Handler 1200 CFM	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Attic		HVAC	Air Handling Unit	Trane	Not Accessible	
Condenser 2 ton	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Site		HVAC	Condenser	York	R2A336GK N300	
Condenser 3 1/2 ton	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Site		HVAC	Condenser	Goodman	GSC13042 1AC	
Gas Boiler 637 MBH	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	Basement	Boiler Room	HVAC	Boiler - Gas	HB Smith	MAW56869	
Hydronic unit heaters	Fire Station: Engine 6 - Teele Sq. Station	Primary Building	1st Floor	Basement and Ground Floor	HVAC	Unit Heater HW/Steam	Trane	Various	
Baseboard and pipe radiation	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	1st Floor		HVAC	Room Terminal Unit			
Boiler	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	Basement		HVAC	Boiler - Gas	Burnham	K-5009B	
Condensate receiver	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	Basement		HVAC	Other	Hoffman	50 VBF-S-B	
Steam radiator	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	2nd Floor		HVAC	Room Terminal Unit			
Unit heater, steam	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	1st Floor		HVAC	Unit Heater HW/Steam	Modine	Not Accessible	
Vehicle Exhaust system	Fire Station: Engine 7 - Highland Ave. Station	Primary Building	1st Floor		HVAC	Fan	PlymoVent	Not Accessible	
~~Chiller for Ice Rink~~	~~Founders Memorial Skating Rink~~	~~Primary Building~~	~~Roof~~		~~HVAC~~	~~Chiller~~	~~Trane~~	~~CGAM 100F 2F02~~	Excluded from HVAC contract scope
Exhaust Fan, EF-3	Founders Memorial Skating Rink	Primary Building	Roof		HVAC	Fan	Greenheck	GB-141-10- X	
Exhaust Fan-100 CFM	Founders Memorial Skating Rink	Primary Building	Roof		HVAC	Fan	Greenheck	G-095- VC6X-QD	
Exhaust Fan-400 CFM	Founders Memorial Skating Rink	Primary Building	Roof		HVAC	Fan	Greenheck	GB-0981-4- X	
Exhaust Fan-800 CFM	Founders Memorial Skating Rink	Primary Building	Roof		HVAC	Fan	Greenheck	GRS1-24	
Rooftop Dehumidification Air-Handling Unit	Founders Memorial Skating Rink	Primary Building	Roof		HVAC	Dehumidifier	Concepts + Designs	CDH-160	
Suspended Unit Heater, Electric	Founders Memorial Skating Rink	Primary Building	1st Floor	General Interior	HVAC	Unit Heater Electric	Not Accessible	Not Accessible	
Suspended Unit Heater, Gas	Founders Memorial Skating Rink	Primary Building	1st Floor	General Interior	HVAC	Unit Heater Gas	Trane	Not Accessible	
AHU-1. Air Handler, Exterior, 4,001 to 6,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Air Handling Unit	McQuay	LSL111CH	
AHU-2. Air Handler, Exterior, 2,001 to 3,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Air Handling Unit	McQuay	LSL106CH	
AHU-3. Air Handler, Exterior, 4,001 to 6,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Air Handling Unit	McQuay	LSL111CH	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
AHU-4. Air Handler, Interior, 1,301 to 2,500 CFM. (Possibly AHU-4, tag not accessible.)	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Air Handling Unit	Inaccessible	Inaccessible	
AHU-5. Air Handler, Interior, 1,301 to 2,500 CFM.	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Air Handling Unit	McQuay	LDH104CH	
AHU-6. Air Handler, Interior, 8,001 to 10,000 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Air Handling Unit	McQuay	LSL117DV	
AHU-7. Air Handler, Interior, 6,501 to 8,000 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Air Handling Unit	McQuay	LSL114DV	
AHU-8. Air Handler, Interior, 1,301 to 2,500 CFM.	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Air Handling Unit	McQuay	LSL103CV	
B-1. Boiler, Gas, 2,501 to 4,200 MBH	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Boiler - Gas	Cleaver- Brooks	CB700-100	
B-2. Boiler, Gas, 2,501 to 4,200 MBH	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Boiler - Gas	Cleaver- Brooks	CB700-100	
CH-1. Chiller, Centrifugal, 101 to 200 Ton	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Chiller	McQuay	PFS200CS 27	
Condensing Unit, Split System, 11 to 12.5 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	McQuay	ALP012DY 27	
Condensing Unit, Split System, 11 to 12.5 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	McQuay	ALP012DY 27	
Condensing Unit, Split System, 16 to 20 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	McQuay	ALP019DY 27	
Condensing Unit, Split System, 21 to 30 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	McQuay	ALP027VY 27	
Condensing Unit, Split System, 31 to 50 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	McQuay	ALP041CY 27	
CT-1. Cooling Tower, 51 to 75 Tons	Healey School	Primary Building	Roof	Main Roof	HVAC	Other		Not Found	
Ductless Split System, Single Zone, 2.5 to 3 Ton	Healey School	Primary Building	Roof	Main Roof	HVAC	Condensing Unit	Sanyo	CL3632	
EF-1. Exhaust Fan, Centrifugal, 8,001 to 10,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Fan	Greenheck	BSO-240- 50	
EF-10. Exhaust Fan, Centrifugal, 251 to 800 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	BSQ-70-4	
EF-2. Exhaust Fan, Centrifugal, 2,001 to 3,500 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	BSO-160- 15	
EF-3. Exhaust Fan, Propeller, 2,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Fan	Inaccessible	Inaccessible	
EF-4. Exhaust Fan, Centrifugal, 3,501 to 5,000 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	18-AFSW-21-10-T	
EF-5. Exhaust Fan, Centrifugal, 5,001 to 8,000 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	24-AFSW-21-10-T	
EF-6. Exhaust Fan, Centrifugal, 801 to 2,000 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Fan	Greenheck	Illegible	
EF-9. Exhaust Fan, Centrifugal, 2,001 to 3,500 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Fan	Greenheck	BSO-140-5	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	Healey School	Primary Building	Roof	Low Roof	HVAC	Fan	Acme	PV150ET	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	Healey School	Primary Building	Roof	Low Roof	HVAC	Fan	Acme	PV150ET	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	Healey School	Primary Building	Roof	Low Roof	HVAC	Fan	Greenheck	CUBE- 180HP-15- G	
Exhaust hood, commercial kitchen	Healey School	Primary Building	Kitchen	Kitchen	HVAC	Fan	Avtec	No Information	
Exhaust hood, commercial kitchen	Healey School	Primary Building	Kitchen	Kitchen	HVAC	Fan	Avtec	AXWD	
Pump-1. Circulation Pump, Condenser Water, 12.5 to 15 HP	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Other	Paco	Illegible	
Pump-2. Circulation Pump, Condenser Water, 12.5 to 15 HP	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Other	Paco	Illegible	
Pump-3. Circulation Pump, Dual Temperature Water, 12.5 to 15 HP	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Other	Paco	Illegible	
Pump-4. Circulation Pump, Dual Temperature Water, 12.5 to 15 HP	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Other	Paco	Illegible	
Pump-5. Circulation Pump, Dual Temperature Water, 12.5 to 15 HP	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Other	Paco	Illegible	
RAF-1. Exhaust Fan, Centrifugal, 8,001 to 10,000 CFM	Healey School	Primary Building	Boiler Room	Penthouse	HVAC	Fan	Greenheck	BSO-240- 50	
RAF-3. Exhaust Fan, Centrifugal, 3,501 to 5,000 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	Illegible	
RAF-5. Exhaust Fan, Centrifugal, 8,001 to 10,000 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Fan	Greenheck	BSO-240- 20	
RAF-6. Exhaust Fan, Centrifugal, 8,001 to 10,000 CFM	Healey School	Primary Building	2nd Floor	216 Mechanical Room	HVAC	Fan	Inaccessible	Inaccessible	
SF-2. Exhaust Fan, Centrifugal, 5,001 to 8,000 CFM	Healey School	Primary Building	Chiller Room	Penthouse	HVAC	Fan	Greenheck	Illegible	
Unit Heater, Electric, 3 to 6 kW	Healey School	Primary Building	1st Floor	Throughout building	HVAC	Unit Heater Electric	Qmark	Various	
Unit Heater, Hydronic, 37 to 85 MBH	Healey School	Primary Building	1st Floor	Throughout building	HVAC	Unit Heater HW/Steam	Standard Fin-Pipe	Various	
Unit Ventilator, 751 to 1,250 CGM (approx. 3 Ton)	Healey School	Primary Building	1st Floor	Throughout building	HVAC	Room Terminal Unit	Inaccessible	Inaccessible	
ACCU-1	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit	McQuay	ALP012DY 27	
ACCU-2	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit	McQuay	ALP012DY 27	
ACCU-3	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit	McQuay	ALP019DY 27	
ACCU-4	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit	McQuay	ALP037CY 27	
ACCU-5	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit	American Standard	7C0036A40 0A0	
AHU-1	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	LSL106CH	
AHU-2	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	LSL111CH	
AHU-3	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	LSL106CH	
AHU-4	Kennedy School	Primary Building	2nd Floor	Kitchen Penthouse	HVAC	Unit	McQuay	Not Accessible	
AHU-5	Kennedy School	Primary Building	2nd Floor	Kitchen Penthouse	HVAC	Air Handling Unit	McQuay	Not Accessible	
AHU-7	Kennedy School	Primary Building	2nd Floor	Kitchen Penthouse	HVAC	Air Handling Unit	McQuay	Not Accessible	
AHU-8	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	CPB103CH	
AHU-9	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	LHD106CH	
AHU-10	Kennedy School	Primary Building	Boiler Room		HVAC	Air Handling Unit	McQuay	LHD106CH	
CH-1	Kennedy School	Primary Building	Boiler Room		HVAC	Chiller			New chiller installed in 2025 - See Appendix D
Chilled Water Pump P-4	Kennedy School	Primary Building	Boiler Room		HVAC	Other	Taco	FE3008E2	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Chilled Water Pump P-5	Kennedy School	Primary Building	Boiler Room		HVAC	Other	Taco	FE3008E2	
Cooling Tower	Kennedy School	Primary Building	Roof		HVAC	Other			New cooling tower installed in 2025 - See Appendix D
Dual Temp Pump P-1	Kennedy School	Primary Building	Boiler Room		HVAC	Other	Taco	Not Accessible	
Dual Temp Pump P-2	Kennedy School	Primary Building	Boiler Room		HVAC	Other	Taco	Not Accessible	
Dual Temp Pump P-3	Kennedy School	Primary Building	Boiler Room		HVAC	Other	Taco	Not Accessible	
EF-7	Kennedy School	Primary Building	2nd Floor	Kitchen Penthouse	HVAC	Condensing Unit	Greenheck	BSO-360-15	
Exhaust Fan	Kennedy School	Primary Building	Roof		HVAC	Fan		Illegible	
Exhaust Fan EF-2	Kennedy School	Primary Building	Boiler Room		HVAC	Fan	Greenheck	BSO-240-10	
Exhaust Fan EF-9	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-100-4X-QD-3A	
Exhaust Fan EF-14	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-80-4X-QD-R4	
Exhaust Fan EF-15	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	G-170-C	
Exhaust Fan EF-21	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	Illegible	
Exhaust Fan EF-22	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	G-85-DGF-X-QD	
Exhaust Fan EF-23	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-100-4X-QD-2A	
Exhaust Fan EF-24	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	Illegible	
Exhaust Fan EF-28	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	Illegible	
Exhaust Fan EF-29	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-90-4X-QD-R4	
Exhaust Fan EF-31	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-90-4X-QD	
Exhaust Fan EF-32	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-70-4X-QD-R4	
Exhaust Fan EF-38	Kennedy School	Primary Building	Roof		HVAC	Fan	Greenheck	GB-70-4X-QD	
Fan Coil units	Kennedy School	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit		Various	
Fintube radiation	Kennedy School	Primary Building	1st Floor	All levels	HVAC	Room Terminal Unit	Not Accessible	Not Accessible	
Heating Boiler B-1	Kennedy School	Primary Building	Boiler Room		HVAC	Boiler - Gas	Cleaver-Brooks	C8700-150	
Heating Boiler B-2	Kennedy School	Primary Building	Boiler Room		HVAC	Boiler - Gas	Cleaver-Brooks	C8700-150	
Hydronic unit heater	Kennedy School	Primary Building	1st Floor	Utility Rooms	HVAC	Unit Heater HW/Steam	Standard	Various	
Kitchen Exhaust Fan	Kennedy School	Primary Building	Roof		HVAC	Fan		PV150	
Kitchen Exhaust Fan	Kennedy School	Primary Building	Roof		HVAC	Fan		PV150	
Natatorium Air Handler	Kennedy School	Primary Building	1st Floor	Mech Room 115B	HVAC	Air Handling Unit	PoolPak	SWHP190-30E	
Plate & Frame Heat Exchangers	Kennedy School	Primary Building	Roof		HVAC	Heat Exchanger			Installed 2025 - See Appendix D
Pool Heating Boiler	Kennedy School	Primary Building	Boiler Room		HVAC	Boiler - Gas	Lochinvar	FTX850N	
RTU-1	Kennedy School	Primary Building	Roof		HVAC	Make Up Air Unit	Sterling	E1N-PV80A3J01M64S5HB5E3H3L1	
Split System AC	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit		MR12C1F	
Split System AC	Kennedy School	Primary Building	Roof		HVAC	Condensing Unit		MR30C3F	
Air Handler	Public Safety Building	Primary Building	Rooftop		HVAC	Air Handling Unit	Trane		
Air Handler #1	Public Safety Building	Primary Building	Mech Room		HVAC	Air Handling Unit			
Air Handler #2	Public Safety Building	Primary Building	Mech Room		HVAC	Air Handling Unit			
Air Handler #3	Public Safety Building	Primary Building	Mech Room		HVAC	Air Handling Unit			
Air Handler #4	Public Safety Building	Primary Building	Office Closet		HVAC	Air Handling Unit			
Air Handler #5	Public Safety Building	Primary Building	911 Attic		HVAC	Air Handling Unit			
Air Handler #6	Public Safety Building	Primary Building	Basement		HVAC	Air Handling Unit			
Boiler #1	Public Safety Building	Primary Building	Boiler Room		HVAC	Boiler - Gas			
Boiler #2	Public Safety Building	Primary Building	Boiler Room		HVAC	Boiler - Gas			Converted from oil to gas winter 2026
Condenser	Public Safety Building	Primary Building			HVAC	Condensing Unit			
Exhaust	Public Safety Building	Primary Building			HVAC	Fan			
Pump #1	Public Safety Building	Primary Building	Boiler Room		HVAC	Other			
Pump #2	Public Safety Building	Primary Building	Boiler Room		HVAC	Other			
Pump #3	Public Safety Building	Primary Building	Boiler Room		HVAC	Other			
Pump #4	Public Safety Building	Primary Building	Boiler Room		HVAC	Other			
Rooftop AC	Public Safety Building	Primary Building	Rooftop		HVAC	Condensing Unit			
Split System AC	Public Safety Building	Primary Building		2nd Floor Lobby	HVAC	Condensing Unit	Sanyo		
Split System AC	Public Safety Building	Primary Building		Computer Room	HVAC	Condensing Unit	Sanyo		
Split System AC	Public Safety Building	Primary Building		Training Office	HVAC	Condensing Unit	Sanyo		
Split System AC - 3 Ton	Public Safety Building	Primary Building			HVAC	Condensing Unit	Sanyo		
Split System AC - 3 Ton	Public Safety Building	Primary Building			HVAC	Condensing Unit	Sanyo		
10-Ton	SCAT Building	Primary Building	Site	Fence enclosure beside building	HVAC	Condensing Unit	Bryant	569DPX09 0000AA	
12-Ton	SCAT Building	Primary Building	Site	Fence enclosure beside building	HVAC	Condensing Unit	Trane	RAUC- C106-B	
5-Ton RTU	SCAT Building	Primary Building	Roof		HVAC	Condensing Unit	York	H2CB060A 06C	
5-Ton RTU	SCAT Building	Primary Building	Roof		HVAC	Condensing Unit	York	H2CB060A 06C	
Air Handler - 1000 CFM	SCAT Building	Primary Building	Attic	Attic	HVAC	Air Handling Unit	York	N2AHD20A 06C	

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Air Handler - 1000 CFM	SCAT Building	Primary Building	Attic	Attic	HVAC	Air Handling Unit	Not Accessible	Not Accessible	
Air Handler - 2000 CFM	SCAT Building	Primary Building	1st Floor	Mechanical Room	HVAC	Air Handling Unit	Bryant	524AEB090 000ABGC	
Furnace and Air Handler - 2000 CFM	SCAT Building	Primary Building	1st Floor	Mechanical Room	HVAC	Air Handling Unit	Trane	BACA C106D	
Rooftop Exhaust Fan - 200 CFM	SCAT Building	Primary Building	Roof		HVAC	Fan	Bryant	569DPX09 0000AA	
Gas-fired boiler 190 MBH	Traffic and Parking Building	Primary Building	Basement	Mechanical Room	HVAC	Boiler - Gas	Buderus	GB 142 60	Heat pumps installed fall 2026
Gas-fired boiler 190 MBH	Traffic and Parking Building	Primary Building	Basement	Mechanical Room	HVAC	Boiler - Gas	Buderus	GB 142 60	Heat pumps installed fall 2026
Gas-fired boiler 91 MBH	Traffic and Parking Building	Primary Building	Basement	Mechanical Room	HVAC	Boiler - Gas	Buderus	GB 142 30	Heat pumps installed fall 2026
Rooftop Packaged Unit - Cooling only	Traffic and Parking Building	Primary Building	Roof		HVAC	Make Up Air Unit	Bryant	580JP14D2 24A2A0AA A	Heat pumps installed fall 2026
Terminal units - Heating coil	Traffic and Parking Building	Primary Building	1st Floor	Throughout First Floor	HVAC	Room Terminal			
Baseboard radiators	Tufts Field House	Primary Building	1st Floor		HVAC	Room Terminal Unit			
Condensing unit	Tufts Field House	Primary Building	Site		HVAC	Condensing Unit	Bryant	561CJ036-E	
Dehumidifier	Tufts Field House	Primary Building	Basement		HVAC	Dehumidifier	Aprilaire	1750A	
Indoor Fan coil unit	Tufts Field House	Primary Building	1st Floor		HVAC	Air Handling Unit	Bryant	FB4ANF03 60000AFA A	
Radiator	Tufts Field House	Primary Building	1st Floor		HVAC	Room Terminal Unit			
AC-3. Packaged Unit (RTU), Variable Volume, 41 to 60 Ton	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Trane	SLHFC504BE 45C6AD#001 ADEGKLMNR T8#	
ACC-1. Condensing Unit/Heat Pump, Split System, 76 to 100 Ton	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Trane	RAUCC804P D132BDF13	
ACCU-1. Condensing Unit/Heat Pump, Split System, 5 Ton	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Trane	TTR060C400 A0	
ACCU-2. Condensing Unit/Heat Pump, Split System, 1 Ton	West Somerville Neighborhood School	Primary Building	Roof	High Roof	HVAC	Condensing Unit	Trane	TTR012C100 A1	
ATC Compressor. Air Compressor, 3 HP, Duplex	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Controls	Illegible	ACP-C4S- 38DP3	
Boiler #1. Boiler, Gas, 1,001 to 2,000 MBH	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Boiler - Gas		CBH700-40	
Boiler #2. Boiler, Gas, 1,001 to 2,000 MBH	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Boiler - Gas		CBH700-40	
Cabinet Unit Heater, Hydronic, 37 to 85 MBH	West Somerville Neighborhood School	Primary Building	1st Floor	Throughout Building	HVAC	Unit Heater - HW/Steam	Inaccessible	Inaccessible	
Ductless Split System, Single Zone	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Condensing Unit		MR30C3F	
EF-1. Exhaust Fan, Roof Mounted, 1,001 to 1,500	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-180-7	
EF-2. Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	High Roof	HVAC	Fan	Greenheck	CUBE-130-5	
EF-3. Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-180-10	
EF-5. Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-180-7	
EF-6. Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-120-4	
EF-7. Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-180-10	
EF-8. Exhaust Fan, Roof Mounted, 1,001 to 1,500	West Somerville Neighborhood School	Primary Building	Roof	High Roof	HVAC	Fan	Greenheck	CUBE-120-4	
EF-9. Exhaust Fan, Centrifugal, 2,001 to 3,500 CFM	West Somerville Neighborhood School	Primary Building	1st Floor	122 Receiving Room	HVAC	Fan	Greenheck	BSQ-160-10	
EF-10. Exhaust Fan, Roof Mounted, 501 to 800 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	G-60-DGEX- QD	
EF-12. Exhaust Fan, Centrifugal, 251 to 800 CFM	West Somerville Neighborhood School	Primary Building	1st Floor	123 Kitchen Storage	HVAC	Fan	Inaccessible	Inaccessible	
EF-13 paint needed	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Other	Greenheck	54-AFSW-21-10-CCW-TA	
EF-14. Exhaust Fan, Centrifugal, 801 to 2,000 CFM	West Somerville Neighborhood School	Primary Building	1st Floor	122 Receiving Room	HVAC	Fan	Greenheck	BSQ-90-4	
Exhaust Fan, Centrifugal, 16,001 to 25,000 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	54-AFSW-21-10-CCW-TA	
Exhaust Fan, Centrifugal, 801 to 2,000 CFM	West Somerville Neighborhood School	Primary Building	Roof	Emergency Electric Room	HVAC	Fan	Inaccessible	Inaccessible	
Exhaust Fan, Propeller, 4,700 CFM	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Fan	Greenheck	Inaccessible	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	CentriMaster	PV150	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	CentriMaster	PV150	
Exhaust Fan, Roof Mounted, 1,001 to 1,500 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CUBE-70-4X- QD	
Heat Exchanger, Refrigerant-to-Water, 131 to 380 GPM	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Heat Exchanger	Inaccessible	Inaccessible	
HV-1. Make-Up Air Unit, 6,001 to 12,000 CFM	West Somerville Neighborhood School	Primary Building	Roof	Roof	HVAC	Make Up Air Unit	Sterling	E1N- PV50A6J01B 63S5HBE3H3 L1F2	
P1. Circulation Pump, Chilled Water, 7.5 HP	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Other	Taco	Inaccessible	
P2. Circulation Pump, Dual Temperature Water, 7.5 HP	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Other	Taco	Inaccessible	
P3. Circulation Pump, Heating Water, 7.5 HP	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Other	Taco	FE2508E2G1 F2L0A	
Unit Heater, Hydronic, 86 to 100 MBH	West Somerville Neighborhood School	Primary Building	Roof	Mechanical Penthouse	HVAC	Unit Heater - HW/Steam	Trane	Various	
Unit Ventilator, 751 to 1,250 CFM (approx. 3 Ton)	West Somerville Neighborhood School	Primary Building	1st Floor	Throughout Building	HVAC	Room Terminal Unit	Inaccessible	Various	
AHU-1 Central air handling unit	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Air Handling Unit	Custom built		
AHU-2 Central air handling unit	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Air Handling Unit	Custom built		
AHU-3 Cafeteria air handling unit	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Air Handling Unit	Trane	Climate Changer	
AHU-3, 4 control panels	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Controls			
Air Compressor	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Controls	Quincy	230 32	
Cabinet Unit Heater	Winter Hill Community School	Primary Building	1st Floor	Stair #2,#3	HVAC	Unit Heater Electric			
Centrifugal chiller	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Chiller	Carrier	19XR-3031244BF S64	
Cooling tower makeup water	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Piping			

City of Somerville - HVAC Asset Inventory

* Note: This inventory may not be comprehensive. The DPW Commissioner or Designee will provide further information upon request.

Description	Location	Bldg./Unit	Area	Area Number	Classification	Type	Manufacturer	Model Number	Notes
Duct-mounted hot water coil	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Unit Heater HW/Steam			
EF-1 Kitchen Hood	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Fan			
Elecric baseboard heater	Winter Hill Community School	Primary Building	Building	Various	HVAC	Room Terminal Unit		Various	
ERV-1 energy recovery ventilator	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Greenheck	ERV-521H- 15-D-ES	
EX-? (RF-4) Roof Centrifugal Exhaust Fan	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CBE-18-5	
EX-? (RF-5) Roof Centrifugal Exhaust Fan	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CBE-14-4	
EX-6 Roof Centrifugal Exhaust Fan	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CBE-18-10	
EX-7 Roof Centrifugal Exhaust Fan	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CBE-18-5	
Forced Draft Cooling Tower	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Condensing Unit	Baltimore Air Coil	15200	
Gas-Fired Heating Unit	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Air Handling Unit	Reznor	Unknown	
Kiln Vent Fan	Winter Hill Community School	Primary Building	4th Floor	Art Classroom	HVAC	Fan	Skutt	EnviroVent 2 Model SE2	
Kitchen make-up air unit	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Make Up Air Unit	Reznor		
Kitchen Range Hood	Winter Hill Community School	Primary Building	2nd Floor	Classroom	HVAC	Fan			
Natural Draft Gas-Fired Boiler	Winter Hill Community School	Primary Building	1st Floor	Hot Water Rm	HVAC	Boiler - Gas	RayPak	H3-0514	
Outdoor Natural Draft Gas-Fired Boiler	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Boiler - Gas	Teledyne Lars	Mighty Therm	
P-1,2 chilled water/horizontal double-suction	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Other	Taco	HS Series	
P-1,2 hot water pumps/end-suction	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Other	Bell & Gossett	1510-108TB F39	
P-3 Condenser - water/horizontal double-suction	Winter Hill Community School	Primary Building	Roof	Mech Penthouse	HVAC	Other	Taco	HS Series	
RAF-1 Return Air Fan	Winter Hill Community School		Roof	Mech Penthouse	HVAC	Fan	McQuay	LFY111CH	
Roof Centrifugal Exhaust Fan	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Acme	CentriMasterPV150ET	
Roof Centrifugal Exhaust Fan (RF-1,2)	Winter Hill Community School	Primary Building	Roof	Roof	HVAC	Fan	Greenheck	CBE-14-4	
Variable Air Volume Terminal	Winter Hill Community School	Primary Building	Building	Various	HVAC	Room Terminal Unit			

Appendix B:

Somerville High School
HVAC Equipment Schedule for Record

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0001	AHU-1 Air Handling Unit	AHU	ERP-I-09-HP-H-C-SS	Annexaire	Administration - C
0002	AHU-2 Air Handling Unit	AHU	ERP-E-20-EW09-H-C-SS	Annexaire	Upper Dining Commons - C
0003	AHU-3 Air Handling Unit	AHU	ERP-E-20-EW09-H-UP-HE-C-SS	Annexaire	Auditorium - D
0004	AHU-4 Air Handling Unit	AHU	AHU-E-09-H-UP-HE-C-SS	Annexaire	Stage - D
0005	AHU-5 Air Handling Unit	AHU	ERP-E-09-EW03-H-C-SS	Annexaire	Media Center - B
0006	AHU-6 Air Handling Unit	AHU	ERP-E-07-EW02-H-C-SS	Annexaire	Lecture Hall - A
0007	AHU-7 Air Handling Unit	AHU	ERP-I-07-EW03-H-C-SS	Annexaire	Lower Dining Commons - B
0008	AHU-8 Air Handling Unit	AHU	ERP-E-20-EW09-H-C-SS	Annexaire	Gym - B
0009	AHU-9 Air Handling Unit	AHU	ERP-E-20-EW09-H-C-SS	Annexaire	Gym - B
0010	AHU-10 Air Handling Unit	AHU	ERP-E-12-EW05-H-C-SS	Annexaire	Core Areas - C
0011	AHU-11 Air Handling Unit	AHU	ERP-I-05-EW02-H-C-SS	Annexaire	Early Education - A
0012	AHU-12 Air Handling Unit	AHU	ERP-E-20-EW09-H-C-SS	Annexaire	Music, Core Areas - A
0013	AHU-13 Air Handling Unit	AHU	ERP-I-09-EW05-H-C-SS	Annexaire	Next Wave Full Circle - A
0014	AHU-14 Air Handling Unit	AHU	ERP-I-05-EW02-H-C-SS	Annexaire	Fitness, Multi-Purpose - B
0015	DOAS-1 Dedicated Outdoor Air System	DOAS	ERP-E-20-EW16-H-C-SS	Annexaire	Science - C
0016	DOAS-2 Dedicated Outdoor Air System	DOAS	ERP-I-07-HP-H-C-SS	Annexaire	Cosmetology/Broadcast - D
0017	DOAS-3 Dedicated Outdoor Air System	DOAS	ERP-E-16-EW12-H-C-SS	Annexaire	Classrooms - C
0018	DOAS-4 Dedicated Outdoor Air System	DOAS	ERP-E-09-EW-H-C-SS	Annexaire	Classrooms - A
0019	DOAS-5 Dedicated Outdoor Air System	DOAS	MAU-E-09-H-C	Annexaire	Culinary Arts - A
0020	DOAS-6 Dedicated Outdoor Air System	DOAS	ERP-I-16-HP-H-C-SS	Annexaire	Shops - B
0021	ERU-1 Energy Recoved Unit	ERU	ERP-I-07-HP-H-C-SS	Annexaire	Locker Rooms/Lower Level C
0022	MAU-1 Make Up Air Unit - Gas Fired	MAU	DGX-P120-H32	Greenheck	Main Kitchen (D149.1) Hoods
0023	MAU-2 Make Up Air Unit - Gas Fired	MAU	DGX-P114-H12	Greenheck	Culinary Arts Classroom (A235) Hood
0024	MAU-3 Make Up Air Unit - Gas Fired	MAU	DGX-P125-H32	Greenheck	Culinary Arts Classroom (A235) Hood
0025	MAU-4 Make Up Air Unit - Gas Fired	MAU	DGX-P114-H12	Greenheck	Culinary Arts Kitchen Bakery (A234) Hoods
0026	CH-1 450 Ton Smardt Chiller	Chiller	AD150.4EG09.F2AGUB.A020YA.E1	Smardt	Phase 1 Roof
0027	CH-2 450 Ton Smardt Chiller	Chiller	AD150.4EG09.F2AGUB.A020YA.E1	Smardt	Phase 1 Roof
0028	AS-2 Air Separator	Air Sep.	R-10FB	Bell & Gossett	Chilled Water System/Penthouse
0029	ET-3 Exp Tank	Exp Tank	B-1200	Bell & Gossett	Chilled Water System/Penthouse
0030	ET-4 Exp Tank	Exp Tank	B-1200	Bell & Gossett	Chilled Water System/Penthouse
0031	B-1 Boiler	Boiler	FBN5001	Lochinvar	Hot Water System/Penthouse
0032	B-2 Boiler	Boiler	FBN5001	Lochinvar	Hot Water System/Penthouse
0033	B-3 Boiler	Boiler	FBN5001	Lochinvar	Hot Water System/Penthouse
0034	B-4 Boiler	Boiler	FBN5001	Lochinvar	Hot Water System/Penthouse
0035	AS-1 Air Separator	Air Sep.	R-8FB	Bell & Gossett	Hot Water System/Penthouse
0036	ET-1 Exp Tank	Exp Tank	B-1200	Bell & Gossett	Hot Water System/Penthouse
0037	ET-2 Exp Tank	Exp Tank	B-1200	Bell & Gossett	Hot Water System/Penthouse
0038	P-1 IN-LINE PRIMARY HW	In-Line Pump	Series e-80 4x4x11B	Bell & Gossett	Penthouse
0039	P-2 IN-LINE PRIMARY HW	In-Line Pump	Series e-80 4x4x11B	Bell & Gossett	Penthouse
0040	P-3 IN-LINE PRIMARY HW	In-Line Pump	Series e-80 4x4x11B	Bell & Gossett	Penthouse
0041	P-4 IN-LINE PRIMARY HW	In-Line Pump	Series e-80 4x4x11B	Bell & Gossett	Penthouse
0042	P-5 BASE MOUNTED SECONDARY HW	Base Pump	Series e-1510 3GB	Bell & Gossett	Penthouse
0043	P-6 BASE MOUNTED SECONDARY HW	Base Pump	Series e-1510 3GB	Bell & Gossett	Penthouse
0044	P-7 BASE MOUNTED SECONDARY HW	Base Pump	Series e-1510 3GB	Bell & Gossett	Penthouse
0045	P-8 BASE MOUNTED SECONDARY HW	Base Pump	Series e-1510 3GB	Bell & Gossett	Penthouse
0046	P-9 BASE MOUNTED PRIMARY CHW	Base Pump	Series e-1510 5EB	Bell & Gossett	Penthouse
0047	P-10 BASE MOUNTED PRIMARY CHW	Base Pump	Series e-1510 5EB	Bell & Gossett	Penthouse
0048	P-11 BASE MOUNTED PRIMARY CHW	Base Pump	Series e-1510 5EB	Bell & Gossett	Penthouse
0049	P-12 BASE MOUNTED SECONDARY CHW	Base Pump	Series e-1510 5GB	Bell & Gossett	Penthouse
0050	P-13 BASE MOUNTED SECONDARY CHW	Base Pump	Series e-1510 5GB	Bell & Gossett	Penthouse
0051	P-14 BASE MOUNTED SECONDARY CHW	Base Pump	Series e-1510 5GB	Bell & Gossett	Penthouse
0052	ACCU-1 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P216YSKMU-A	Mitsubishi Electric	Broadcast, 1st Flr D
0053	ACCU-2 VRF Air Cooled Condenser	Outdoor Condenser	PUMY-P60NKMU1	Mitsubishi Electric	Auditorium Lobby, 2nd Flr D
0054	ACCU-3 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P288YSKMU-A	Mitsubishi Electric	Cosmetology, 1st Flr D
0055	ACCU-4 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P288YSKMU-A	Mitsubishi Electric	Servery, Life Skills, 1st Flr A
0056	ACCU-5 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P144YKMU-A	Mitsubishi Electric	MDF C107.4
0057	ACCU-6 VRF Air Cooled Condenser	Outdoor Condenser	PUMY-P48NKMU1	Mitsubishi Electric	Tech Career Resource Center B038
0058	ACCU-7 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P96YKMU-A	Mitsubishi Electric	Culinary Arts, 2nd Flr A
0059	ACCU-8 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P72YKMU-A	Mitsubishi Electric	Language Lab A339
0060	ACCU-9 VRF Air Cooled Condenser	Outdoor Condenser	PUHY-P168YSKMU-A	Mitsubishi Electric	Visual Arts, 4th Floor C
0061	ACU-A-1-01 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-P08NFMU-E	Mitsubishi Electric	SCHOOL STORE (D152) ACCU-3
0062	ACU-A-1-02 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	FAMILY & CONSUMER SCIENCE LAB (D151) ACCU-3
0063	ACU-A-1-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	FAMILY & CONSUMER SCIENCE LAB (D151) ACCU-3
0064	ACU-A-1-04 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	STAFF LUNCH ROOM (D148) ACCU-4
0065	ACU-A-1-05 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	STAFF LUNCH ROOM (D148) ACCU-4
0066	ACU-A-1-06 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	TEACHER SERVERY (D149.12) ACCU-4
0067	ACU-A-1-07 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP36NEMU-E	Mitsubishi Electric	SERVERY (D149) ACCU-4
0068	ACU-A-1-08 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP36NEMU-E	Mitsubishi Electric	SERVERY (D149) ACCU-4
0069	ACU-A-1-09 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	HALLWAY (AH135) ACCU-4
0070	ACU-A-1-10 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	HALLWAY (AH135) ACCU-4
0071	ACU-A-1-11 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	LIFE SKILLS MODEL APARTMEN (A146)T ACCU-4
0072	ACU-A-1-12 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	LIFE SKILLS MODEL APARTMEN (A146)T ACCU-4
0073	ACU-A-1-13 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	LIFE SKILLS CLASSROOM (A147) ACCU-4
0074	ACU-A-1-14 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	LIFE SKILLS CLASSROOM (A147) ACCU-4
0075	ACU-A-1-16 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-P08NFMU-E	Mitsubishi Electric	OFFICE (D149.4) ACCU-4
0076	ACU-A-2-01 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP48NEMU-E	Mitsubishi Electric	CULINARY ARTS RESTAURANT A236 ACCU-7
0077	ACU-A-2-02 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP48NEMU-E	Mitsubishi Electric	CULINARY ARTS RESTAURANT A236 ACCU-7
0078	ACU-A-3-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP30NEMU-E	Mitsubishi Electric	LANGUAGE LAB A339 ACCU-8
0079	ACU-A-3-04 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP30NEMU-E	Mitsubishi Electric	LANGUAGE LAB A239 ACCU-8
0080	ACU-B-0-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	TECH CARREER RESOURCE CENTER B038 ACCU-6
0081	ACU-B-0-04 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	TECH CARREER RESOURCE CENTER B038 ACCU-6
0082	ACU-C-1-01 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP48NEMU-E	Mitsubishi Electric	MDF (C107.4) ACCU-5
0083	ACU-C-1-02 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP48NEMU-E	Mitsubishi Electric	MDF (C107.4) ACCU-5
0084	ACU-C-1-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP48NEMU-E	Mitsubishi Electric	MDF (C107.4) ACCU-5
0085	ACU-C-4-02 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP30NEMU-E	Mitsubishi Electric	VISUAL COMM. STUDIO C400.1 ACCU-9
0086	ACU-C-4-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP30NEMU-E	Mitsubishi Electric	VISUAL COMM. STUDIO C400.1 ACCU-9
0087	ACU-C-4-04 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-P08NFMU-E	Mitsubishi Electric	OFFICE C400.3 ACCU-9
0088	ACU-C-4-06 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	GALLERY (C400) ACCU-9
0089	ACU-C-4-07 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	GRAPHIC DESIGN STUDIO (C400.4) ACCU-9
0090	ACU-C-4-08 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	GRAPHIC DESIGN STUDIO (C400.4) ACCU-9
0091	ACU-D-1-03 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	SCC EDITING SUITE (D159.1) ACCU-1
0092	ACU-D-1-04 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	SCC CONTROL BOOTH (D159) ACCU-1
0093	ACU-D-1-05 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	ENTRY VESTIBULE (DH140) ACCU-1
0094	ACU-D-1-06 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	TV MEDIA CONTROL BOOTH (D156.1) ACCU-1
0095	ACU-D-1-07 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	BARBERING LAB (D155.4) ACCU-3
0096	ACU-D-1-08 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	BARBERING LAB (D155.4) ACCU-3
0097	ACU-D-1-09 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	TV COMPUTER LAB (D156) ACCU-1
0098	ACU-D-1-10 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	TV COMPUTER LAB (D156) ACCU-1
0099	ACU-D-1-11 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	TRANSITION SKILLS CLASSROOM (D154) ACCU-3
0100	ACU-D-1-12 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP36NEMU-E	Mitsubishi Electric	COSMETOLOGY LAB (D155) ACCU-3
0101	ACU-D-1-13 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP36NEMU-E	Mitsubishi Electric	COSMETOLOGY LAB (D155) ACCU-3
0102	ACU-D-1-14 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	COSMETOLOGY LAB (D155) ACCU-3
0103	ACU-D-1-15 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP18NEMU-E	Mitsubishi Electric	COSMETOLOGY LAB (D155) ACCU-3
0104	ACU-D-1-16 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-EP24NEMU-E	Mitsubishi Electric	HALLWAY (DH139) ACCU-3
0105	ACU-D-1-17 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-P08NFMU-E	Mitsubishi Electric	OFFICE (D155.1) ACCU-3
0106	ACU-D-1-18 Air Conditioning Unit (VRF Indoor)	Ceiling Cass. Split	PLFY-P08NFMU-E	Mitsubishi Electric	SRO OFFICE (D153) ACCU-3
0107	ACU-D-1-20 Air Conditioning Unit (VRF Indoor)	Ducted Split	PEFY-P72NMHSU-E	Mitsubishi Electric	BROADCAST STUDIO D157 ACCU-1
0108	ACU-D-2-01 Air Conditioning Unit (VRF Indoor)	Ducted Split	PEFY-P72NMHSU-E	Mitsubishi Electric	AUDITORIUM LOBBY D240 ACCU-2
0109	ACU-A-0-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	CUSTODIAL A097
0110	ACU-A-00-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A24NHA7	Mitsubishi Electric	MAIN EMER ELEC RM (A012)
0111	ACU-A-0-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	MAIN ELEC (A092)

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0112	ACU-A-0-03 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	MAIN ELEC (A092)
0113	ACU-A-0-04 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (A091)
0114	ACU-A-1-15 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	IDF (A145)
0115	ACU-A-3-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (A348)
0116	ACU-A-3-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	ELEC ROOM (AE349)
0117	ACU-A-4-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (AT448)
0118	ACU-A-4-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A24NHA7	Mitsubishi Electric	ELEC ROOM (AE449)
0119	ACU-B-0-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (B038.1)
0120	ACU-B-0-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	ELEC RM (B038.2)
0121	ACU-B-1-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A12NKA7	Mitsubishi Electric	FIRE COMMAND CENTER B100
0122	ACU-C-0-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (C021)
0123	ACU-C-1-09 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A24NHA7	Mitsubishi Electric	ELEC RM (CE105.2)
0124	ACU-C-2-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	ELEC RM (CE228)
0125	ACU-C-2-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (C219)
0126	ACU-C-3-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A12NKA7	Mitsubishi Electric	ELECTRICAL CE326
0127	ACU-C-3-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (C317)
0128	ACU-C-4-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A30NHA7	Mitsubishi Electric	IDF (C418)
0129	ACU-C-5-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A12NKA7	Mitsubishi Electric	ELECTRICAL CE523
0130	ACU-D-1-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A24NHA7	Mitsubishi Electric	ELEC RM (D159.2)
0131	ACU-D-1-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A24NHA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (D115)
0132	ACU-D-2-02 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A24NHA7	Mitsubishi Electric	ELEC RM (D239.9)
0133	ACU-D-2-03 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUY-A18NKA7	Mitsubishi Electric	IDF (D239.61)
0134	ACU-D-3-01 Air Cooled Condenser (Split Outdoor)	Outdoor Condenser	PUZ-A36NKA7	Mitsubishi Electric	AUDITORIUM CONTROL ROOM D351
0135	ACC-A-0-01 Air Cooled Condenser (Split Indoor)	Ducted Split	PEAD-A36AA7	Mitsubishi Electric	CUSTODIAL A097
0136	ACC-A-00-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A24KA7	Mitsubishi Electric	MAIN EMER ELEC RM (A012)
0137	ACC-A-0-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A36KA7	Mitsubishi Electric	MAIN ELEC (A092)
0138	ACC-A-0-03 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A36KA7	Mitsubishi Electric	MAIN ELEC (A092)
0139	ACC-A-0-04 Air Cooled Condenser (Split Indoor)	Ducted Split	PEAD-A36AA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (A091)
0140	ACC-A-1-15 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A36KA7	Mitsubishi Electric	IDF (A145)
0141	ACC-A-3-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (A348)
0142	ACC-A-3-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	ELEC ROOM (AE349)
0143	ACC-A-4-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (AT448)
0144	ACC-A-4-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A24KA7	Mitsubishi Electric	ELEC ROOM (AE449)
0145	ACC-B-0-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (B038.1)
0146	ACC-B-0-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A36KA7	Mitsubishi Electric	ELEC RM (B038.2)
0147	ACC-B-1-01 Air Cooled Condenser (Split Indoor)	Ceiling Cass. Split	PLA-A12EA7	Mitsubishi Electric	FIRE COMMAND CENTER B100
0148	ACC-C-0-01 Air Cooled Condenser (Split Indoor)	Ducted Split	PEAD-A36AA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (C021)
0149	ACC-C-1-09 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A24KA7	Mitsubishi Electric	ELEC RM (CE105.2)
0150	ACC-C-2-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A36KA7	Mitsubishi Electric	ELEC RM (CE228)
0151	ACC-C-2-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (C219)
0152	ACC-C-3-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A12HA7	Mitsubishi Electric	ELECTRICAL CE326
0153	ACC-C-3-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (C317)
0154	ACC-C-4-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A30KA7	Mitsubishi Electric	IDF (C418)
0155	ACC-C-5-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A12HA7	Mitsubishi Electric	ELECTRICAL CE523
0156	ACC-D-1-01 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A24KA7	Mitsubishi Electric	ELEC RM (D159.2)
0157	ACC-D-1-02 Air Cooled Condenser (Split Indoor)	Ducted Split	PVA-A24AA7	Mitsubishi Electric	ELEVATOR MACHINE ROOM (D115)
0158	ACC-D-2-02 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A24KA7	Mitsubishi Electric	ELEC RM (D239.9)
0159	ACC-D-2-03 Air Cooled Condenser (Split Indoor)	Wall Mount Split	PKA-A18HA	Mitsubishi Electric	IDF (D239.61)
0160	ACC-D-3-01 Air Cooled Condenser (Split Indoor)	Ceiling Cass. Split	PLA-A36EA7	Mitsubishi Electric	AUDITORIUM CONTROL ROOM D351
0161	Mitsubishi Central Controller - Main Controller	Controller	AE-200	Mitsubishi Electric	CUSTODIANS OFFICE
0162	Mitsubishi Central Controller - Sub Controller	Controller	AE-50	Mitsubishi Electric	MDF ROOM
0163	Mitsubishi Central Controller - Expansion Controller	Controller	EW-50A	Mitsubishi Electric	ELEC ROOM (D249)
0164	P-15 Fuel Oil Pump Set & Tank - Teaching Boilers	Fuel Oil Spec.	HPI-015-SS	Hayes Pump	Fuel Oil/Sub Level
0165	Fuel Oil Tank	Fuel Oil Spec.	120 GAL DW Lube Tank	Highland Tank	Fuel Oil/Sub Level
0166	ACD-A-0-01 HW Air Curtain	Air Curtain	PH1296-2HW-PW	Mars	Hallway/Storage DH053.9
0167	ACD-A-0-02 HW Air Curtain	Air Curtain	PH1272-2HW-PW	Mars	Hallway/Storage DH053.9
0168	ACD-B-0-01 HW Air Curtain	Air Curtain	HV296-2HW-TS	Mars	Metal Fabrication Shop B031.3
0169	HWC-1 Duct Hot Water Coil	HW Coil	HWP-8.0AS-16.5 x 16.0-2-22	Aerofin	Girl's Athletic Lockers C133.5
0170	HWC-2 Duct Hot Water Coil	HW Coil	HWP-8.0AS-16.5 x 16.0-2-22	Aerofin	Girl's PE Lockers C133.21, Girl's Team Room C133.2
0171	HWC-3 Duct Hot Water Coil	HW Coil	HWP-8.0AS-7.5 x 8.0-2-11	Aerofin	Athletics Office C133.3
0172	HWC-4 Duct Hot Water Coil	HW Coil	HWP-8.0AS-7.5 x 6.0-2-11	Aerofin	PE Office C132
0173	HWC-5 Duct Hot Water Coil	HW Coil	HWP-8.0AS-12.0 x 12.0-2-11	Aerofin	Trainers Office C134
0174	HWC-6 Duct Hot Water Coil	HW Coil	HWP-8.0AS-7.5 x 6.0-2-11	Aerofin	Asst Athletic Director C105.1
0175	HWC-7 Duct Hot Water Coil	HW Coil	HWP-8.0AS-16.5 x 16.0-2-22	Aerofin	Boys PE Lockers C135.21, Boys Tennis Rm C135.2
0176	HWC-8 Duct Hot Water Coil	HW Coil	HWP-8.0AS-16.5 x 16.0-2-22	Aerofin	Boys Athletic Lockers C135.5
0177	HWC-9 Duct Hot Water Coil	HW Coil	HWP-8.0AS-7.5 x 8.0-2-11	Aerofin	Athletics Office C135.3
0178	HWC-10 Duct Hot Water Coil	HW Coil	HWP-8.0AS-10.5 x 8.0-2-11	Aerofin	Girl's Locker Room C133
0179	HWC-11 Duct Hot Water Coil	HW Coil	HWP-8.0AS-10.5 x 8.0-2-11	Aerofin	Boys Locker Room C135
0180	UH-1 Hot Water Unit Heater	Unit Heater	HV-240	Vulcan	Auto Tech Shop A090
0181	UH-1 Hot Water Unit Heater	Unit Heater	HV-240	Vulcan	Auto Tech Shop A090
0182	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0183	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0184	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0185	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0186	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0187	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mech Area A013
0188	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Boiler Rm A550
0189	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Boiler Rm A550
0190	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Electrical Shop B500
0191	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mechanical Alcove C008
0192	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Mechanical Alcove C008
0193	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Custodian's Storage C009.1
0194	UH-2 Hot Water Unit Heater	Unit Heater	HV-120	Vulcan	Storage C009
0195	UH-3 Hot Water Unit Heater	Unit Heater	HV-60	Vulcan	PH Neutralization Rm C027
0196	UH-3 Hot Water Unit Heater	Unit Heater	HV-60	Vulcan	Water Room D096
0197	UH-3 Hot Water Unit Heater	Unit Heater	HV-60	Vulcan	PH Neutralization Rm A010
0198	UH-3 Hot Water Unit Heater	Unit Heater	HV-60	Vulcan	Fire Pump Rm A098
0199	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Culinary Arts Kitchen A234
0200	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Culinary Arts Kitchen A234
0201	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls AT347
0202	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys AT344
0203	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Entrance A334
0204	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Hallway AH332
0205	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls AT447
0206	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys AT444
0207	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys BT142
0208	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls CT023
0209	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys CT024
0210	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls CT227
0211	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys CT226
0212	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys CT324
0213	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls CT325
0214	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Men's C425
0215	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Women's C426
0216	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Locker Vestibule C500.3
0217	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls CT522
0218	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Boys CT521
0219	CUH-1 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-10	Vulcan	Girls BT141-1
0220	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Lower Level, A Stairwell - East
0221	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STA2-1
0222	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STA1-2
0223	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STA-3
0224	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STA1-4
0225	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STA2-4
0226	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Outside Boiler Rm A550 - Top of Stairwell

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0227	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STB2-0
0228	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stairwell-North (Outside Welding Manifold Rm C028)
0229	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Hallway CH002
0230	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STC1-1
0231	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Lower Level, C Stairwell (East)
0232	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Vestibule CV1-28
0233	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Stair STB2-2
0234	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	STC1-3
0235	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	3rd Level, C Stairwell (East)
0236	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	5th Level, C Stairwell (East)
0237	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Vestibule DV1-6?
0238	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Vestibule DV1-5
0239	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Vestibule DV2-6
0240	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Vestibule DV2-6
0241	CUH-2 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-20/2	Vulcan	Elevator Lobby Elev-2
0242	CUH-3 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-14/2	Vulcan	Vestibule BV1-1.1
0243	CUH-3 Hot Water Cabinet Unit Heater	Cab UH	RC-1200-14/2	Vulcan	Vestibule BV1-1.1
0244	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Lobby D240
0245	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Lobby D240
0246	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Stair STB2-5
0247	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Lower Level, A Stairwell - West
0248	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Vestibule AV0-16
0249	CUH-5 Hot Water Cabinet Unit Heater	Cab UH	RW-1120-10/2	Vulcan	Stairs STA2-S
0250	CUH-6 Hot Water Cabinet Unit Heater	Cab UH	WI-1090-14/2	Vulcan	Vestibule BV1-1
0251	CUH-6 Hot Water Cabinet Unit Heater	Cab UH	WI-1090-14/2	Vulcan	Vestibule BV1-1
0252	RH-1 Relief Hood	Roof Relief	FGR-48x56	Greenheck	Stairs Pressurization Roof Relief
0253	RH-1 Relief Hood	Roof Relief	FGR-48x56	Greenheck	Stairs Pressurization Roof Relief
0254	RH-1 Relief Hood	Roof Relief	FGR-48x56	Greenheck	Stairs Pressurization Roof Relief
0255	RH-1 Relief Hood	Roof Relief	FGR-48x56	Greenheck	Stairs Pressurization Roof Relief
0256	RH-2 Relief Hood	Roof Relief	FGR-24x24	Greenheck	Elevator Shaft Relief
0257	RH-2 Relief Hood	Roof Relief	FGR-24x24	Greenheck	Elevator Shaft Relief
0258	RH-2 Relief Hood	Roof Relief	FGR-24x24	Greenheck	Elevator Shaft Relief
0259	EF-A-01 Exhaust Fan	FAN	CUBE-360XP-50	Greenheck	MAIN KITCHEN HOOD A149.
0260	EF-A-02 Exhaust Fan	FAN	CUBE-360XP-50	Greenheck	MAIN KITCHEN HOOD A149.
0261	EF-A-03 Exhaust Fan	FAN	BSQ-300HP-30	Greenheck	MECHANICAL AREA A013
0262	EF-A-04 Exhaust Fan	FAN	G-103-VG	Greenheck	STAIR STA-1
0263	EF-A-05 Exhaust Fan	FAN	CUE-101HP-VG	Greenheck	DISHWASHER D 149.5
0264	EF-A-06 Exhaust Fan	FAN	G-143HP-VG	Greenheck	TOILETS, A
0265	EF-A-07 Exhaust Fan	FAN	G-143HP-VG	Greenheck	TOILETS, A
0266	EF-A-08 Exhaust Fan	FAN	G-098-VG	Greenheck	NWFC KITCHEN SERVERY, A
0267	EF-A-09 Exhaust Fan	FAN	G-143HP-VG	Greenheck	STORAGE, A
0268	EF-A-10 Exhaust Fan	FAN	G-143-VG	Greenheck	TOILETS, A
0269	EF-A-11 Exhaust Fan	FAN	CMB-14	Carmon	AUTO TECHNOLOGY SHOP, A
0270	EF-A-12 Exhaust Fan	FAN	CSW-13-BI-41-10-I-7	Greenheck	SPRAY BOOTH A439
0271	EF-A-13 Exhaust Fan	FAN	VEKTOR-H-36	Greenheck	CULINARY ARTS HOOD A234
0272	EF-A-14 Exhaust Fan	FAN	CUE-101HP-VG	Greenheck	DISHWASHING A234.6
0273	EF-A-15 Exhaust Fan	FAN	G-097-VG	Greenheck	CULINARY ARTS DRY STORA
0274	EF-A-16 Exhaust Fan	FAN	G-143HP-VG	Greenheck	(JANITOR CLOSETS, STORAGE)
0275	EF-A-17 Exhaust Fan	FAN	CUBE-300XP-30	Greenheck	CULINARY ARTS BAKERY HO
0276	EF-A-18 Exhaust Fan	FAN	CUBE-161XP-7	Greenheck	CULINARY ROOL-IN OVEN A
0277	EF-A-19 Exhaust Fan	FAN	G-123-VG	Greenheck	ART CLASSROOM A439
0278	EF-A-20 Exhaust Fan	FAN	CUE-101HP-VG	Greenheck	PHOTO DARK ROOM A438.1
0279	EF-A-21 Exhaust Fan	FAN	BSQ-300HP-30	Greenheck	MECHANICAL AREA A013
0280	EF-A-22 Exhaust Fan	FAN	CUE-141HP-VG	Greenheck	KILN A437.2
0281	EF-A-23 Exhaust Fan	FAN	G-070-VG	Greenheck	ART STORAGE A437.1
0282	EF-A-24 Exhaust Fan	FAN	G-103-VG	Greenheck	ART CLASSROOM A438
0283	EF-A-25 Exhaust Fan	FAN	G-103HP-VG	Greenheck	ART CLASSROOM A437
0284	EF-A-26 Exhaust Fan	FAN	CUBE-240XP-20	Greenheck	CULINARY ARTS CLASSROOM
0285	EF-A-27 Exhaust Fan	FAN	G-090-VG	Greenheck	STAIR STA-2
0286	EF-A-28 Exhaust Fan	FAN	BSQ-180-15	Greenheck	BOILER ROOM A550
0287	EF-A-29 Exhaust Fan	FAN	SQ-80-VG	Greenheck	PH NEUTRALIZATION ROM A
0288	EF-A-30 Exhaust Fan	FAN	HS1 4"	Tjernlund	PLUMBING SHOP B041.6, T
0289	EF-A-31 Exhaust Fan	FAN	HSJ 4"	Tjernlund	PLUMBING SHOP B041.6, T
0290	EF-A-32 Exhaust Fan	FAN	HSJ 4"	Tjernlund	PLUMBING SHOP B041.6, T
0291	EF-A-33 Exhaust Fan	FAN	HSJ 4"	Tjernlund	DRYER FAN A234.2 160 1
0292	EF-B-01 Exhaust Fan	FAN	G-143-VG	Greenheck	EF-B-01 (STAFF TOILETS GANG BATHROOM)
0293	EF-B-02 Exhaust Fan	FAN	SP-B150	Greenheck	TOILET AT333.1 100 0.5
0294	EF-B-03 Exhaust Fan	FAN	HSJ 4"	Tjernlund	HVAC SHOP B041.3, TEACH
0295	EF-B-04 Exhaust Fan	FAN	HSJ 4"	Tjernlund	HVAC SHOP B041.3, TEACH
0296	EF-B-05 Exhaust Fan	FAN	HSJ 4"	Tjernlund	HVAC SHOP B041.3, TEACH
0297	EF-B-06 Exhaust Fan	FAN	HSJ 4"	Tjernlund	HVAC SHOP B041.3, TEACH
0298	EF-C-01 Exhaust Fan	FAN	BSQ-300HP-50	Greenheck	MECHANICAL ALCOVE C008
0299	EF-C-02 Exhaust Fan	FAN	G-090-VG	Greenheck	EF-C-02 C TOILETS VESTIBULE
0300	EF-C-03 Exhaust Fan	FAN	G-090-VG	Greenheck	STAIR STB2
0301	EF-C-04 Exhaust Fan	FAN	VEKTOR-H-16	Greenheck	FUME HOODS, C
0302	EF-C-05 Exhaust Fan	FAN	G-080-VG	Greenheck	PREP ROOM (C503.4)
0303	EF-C-06 Exhaust Fan	FAN	G-143HP-VG	Greenheck	EF-C-06 (STAFF TOILETS C)
0304	EF-C-07 Exhaust Fan	FAN	G-080-VG	Greenheck	PREP ROOM (C511.2)
0305	EF-C-08 Exhaust Fan	FAN	VEKTOR-H-16	Greenheck	FUME HOODS, C
0306	EF-C-09 Exhaust Fan	FAN	G-103HP-VG	Greenheck	PH NEUTRALIZATION C027
0307	EF-C-10 Exhaust Fan	FAN	G-143HP-VG	Greenheck	EF-C-10 (STAFF TOILETS C)
0308	EF-C-11 Exhaust Fan	FAN	G-090-VG	Greenheck	STAIR STC2
0309	EF-C-12 Exhaust Fan	FAN	G-090-VG	Greenheck	EF-C-12 (CT GANGBATHROOMS)
0310	EF-C-13 Exhaust Fan	FAN	G-143HP-VG	Greenheck	EF-C-13 PLANNING (C4090 TEACHER PLANNING (C209)
0311	EF-C-14 Exhaust Fan	FAN	G-098-VG	Greenheck	EF-C-14 (CT GANGBATHROOMS)
0312	EF-C-15 Exhaust Fan	FAN	GB-200HP-VGD-30	Greenheck	EF-C-15 (CT GANGBATHROOMS)
0313	EF-C-16 Exhaust Fan	FAN	G-090-VG	Greenheck	STAIR (STC1)
0314	EF-C-17 Exhaust Fan	FAN	SQ-130HP-VG	Greenheck	STORAGE C009
0315	EF-D-01 Exhaust Fan	FAN	LT4	Tjernlund	DRYER FAN, STORAGE D151
0316	EF-D-02 Exhaust Fan	FAN	CUE-141HP-VG	Greenheck	COSMETOLOGY, D
0317	EF-D-03 Exhaust Fan	FAN	LT4	Tjernlund	DRYER FAN, STORAGE (D15
0318	SF-A-01 Supply Fan	FAN	BSQ-300HP-50	Greenheck	MECHANICAL AREA A013
0319	SF-A-02 Supply Fan	FAN	BSQ-300HP-30	Greenheck	MECHANICAL AREA A013
0320	SF-A-03 Supply Fan	FAN	BSQ-180-15	Greenheck	BOILER ROOM A550
0321	SF-C-01 Supply Fan	FAN	BSQ-300HP-50	Greenheck	MECHANICAL ALCOVE C008
0322	F-1 (QTY 167) Ceiling Fan 52"	CLASS FAN	Haiku L 52	BigAss Fan	CLASSROOMS
0323	F-2 (QTY 1) Complete BAF Ceiling Fan	CLASS FAN	Basic 6 - 8'	BigAss Fan	Robotic Arm Rm C009.3
0324	F-3 (QTY 13) Complete BAF Ceiling Fan	CLASS FAN	Basic 6 - 10'	BigAss Fan	Shops
0325	F-4 (QTY 1) Complete BAF Ceiling Fan	CLASS FAN	Basic 6 - 14'	BigAss Fan	Multi-Purpose
0326	AV-1 (QTY 9) Complete Air Valves - Fume Hoods	LAB CONTROL	Model VV Venturi	Antec Controls	Fume Hood Air Valve w/ Controls
0327	SPF-1 Stairwell Pressurization Fan	FAN VFD	USF-322-BI	Greenheck	Stairwell Pressurization Fan
0328	SPF-2 Stairwell Pressurization Fan	FAN VFD	USF-324-BI	Greenheck	Stairwell Pressurization Fan
0329	SPF-3 Stairwell Pressurization Fan	FAN VFD	USF-324-BI	Greenheck	Stairwell Pressurization Fan
0330	SPF-4 Stairwell Pressurization Fan	FAN VFD	USF-322-BI	Greenheck	Stairwell Pressurization Fan
0331	VFD - EF-A-12	FAN VFD	FC-102P1K1T4	Danfoss	Mechanical Room
0332	VFD - EF-A-28	FAN VFD	FC-102P1K1T4	Danfoss	Variable Frequency Drive
0333	VFD - SF-A-03	FAN VFD	FC-102P1K1T4	Danfoss	Variable Frequency Drive
0334	VFD - EF-A-26	FAN VFD	FC-102P1K5T4	Danfoss	Variable Frequency Drive
0335	VFD - EF-A-03	FAN VFD	FC-102P2K2T4	Danfoss	Variable Frequency Drive
0336	VFD - EF-A-17	FAN VFD	FC-102P2K2T4	Danfoss	Variable Frequency Drive
0337	VFD - SF-A-02	FAN VFD	FC-102P2K2T4	Danfoss	Variable Frequency Drive
0338	VFD - SPF-1	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0339	VFD - SPF-2	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0340	VFD - SPF-3	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0341	VFD - SPF-4	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0342	VFD - EF-A-01	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0343	VFD - EF-A-02	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0344	VFD - EF-A-21	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0345	VFD - EF-C-01	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0346	VFD - EF-C-04	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0347	VFD - EF-C-08	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0348	VFD - SF-A-01	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0349	VFD - SF-C-01	FAN VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0350	VFD - P-1	PUMP VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0351	VFD - P-2	PUMP VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0352	VFD - P-3	PUMP VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0353	VFD - P-4	PUMP VFD	FC-102P3K7T4	Danfoss	Variable Frequency Drive
0354	VFD - EF-A-13	FAN VFD	FC-102P15KT4	Danfoss	Variable Frequency Drive
0355	VFD - P-5	PUMP VFD	FC-102P18KT4	Danfoss	Variable Frequency Drive
0356	VFD - P-6	PUMP VFD	FC-102P18KT4	Danfoss	Variable Frequency Drive
0357	VFD - P-7	PUMP VFD	FC-102P18KT4	Danfoss	Variable Frequency Drive
0358	VFD - P-8	PUMP VFD	FC-102P18KT4	Danfoss	Variable Frequency Drive
0359	VFD - P-9	PUMP VFD	FC-102P30KT4	Danfoss	Variable Frequency Drive
0360	VFD - P-10	PUMP VFD	FC-102P30KT4	Danfoss	Variable Frequency Drive
0361	VFD - P-11	PUMP VFD	FC-102P30KT4	Danfoss	Variable Frequency Drive
0362	VFD - P-12	PUMP VFD	FC-102P45KT4	Danfoss	Variable Frequency Drive
0363	VFD - P-13	PUMP VFD	FC-102P45KT4	Danfoss	Variable Frequency Drive
0364	VFD - P-14	PUMP VFD	FC-102P45KT4	Danfoss	Variable Frequency Drive
0365	FPB-A-0-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Conference A051
0366	FPB-A-0-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Rec & Workstation AH031-1
0367	FPB-A-0-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A030
0368	FPB-A-0-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Science A079
0369	FPB-A-0-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A052
0370	FPB-A-0-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A053
0371	FPB-A-0-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	NWFC Commons A050
0372	FPB-A-0-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Director Office A078
0373	FPB-A-0-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A054
0374	FPB-A-0-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A055
0375	FPB-A-0-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Classroom A073
0376	FPB-A-0-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Student Shop A071
0377	FPB-A-0-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Teacher Planning A072
0378	FPB-A-0-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NWFC Time Out Rm A056
0379	FPB-A-0-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Asst Principal Office A070
0380	FPB-A-0-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH034
0381	FPB-A-0-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Classroom A061
0382	FPB-A-0-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	FC Crisis Counselor Office A062
0383	FPB-A-0-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Classroom A057
0384	FPB-A-0-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Classroom A056
0385	FPB-A-0-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Crisis Counselor Office A059
0386	FPB-A-0-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Classroom A060
0387	FPB-A-0-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	CTE Director's Office B040.1
0388	FPB-A-0-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Hallway AH037
0389	FPB-A-0-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Hallway DH038
0390	FPB-A-0-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Hallway/Storage DH053.9
0391	FPB-A-0-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Auto Technology Shop A090
0392	FPB-A-0-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Auto Technology Shop A090
0393	FPB-A-0-29 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Auto Technology CR A090.4
0394	FPB-A-0-30 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Plumbing Shop B041.0
0395	FPB-A-0-31 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Office A090.6
0396	FPB-A-0-32 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Lockers A090.2
0397	FPB-A-0-33 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NW Commons AH036
0398	FPB-A-1-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Fitness Room A138
0399	FPB-A-1-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Fitness Room A138
0400	FPB-A-1-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0401	FPB-A-1-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0402	FPB-A-1-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0403	FPB-A-2-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Practice A233.2
0404	FPB-A-2-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH235
0405	FPB-A-2-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH233
0406	FPB-A-2-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Practice A231.3
0407	FPB-A-2-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Music Office A231.2
0408	FPB-A-2-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Multi-Purpose Dance Studio -1 A139-1
0409	FPB-A-2-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Multi-Purpose Dance Studio -1 A139-1
0410	FPB-A-3-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Language Lab A339
0411	FPB-A-3-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A340
0412	FPB-A-3-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A341
0413	FPB-A-3-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Small Group A338
0414	FPB-A-3-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Chorus A233
0415	FPB-A-3-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A345
0416	FPB-A-3-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A346
0417	FPB-A-3-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Small Group Seminar AH336
0418	FPB-A-3-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH303
0419	FPB-A-3-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Ship Medically Frag. Student Classroom A334
0420	FPB-A-3-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Dept Head Office A335-1
0421	FPB-A-3-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Chorus A233
0422	FPB-A-3-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Orchestra A232
0423	FPB-A-3-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Orchestra A232
0424	FPB-A-3-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH332
0425	FPB-A-3-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Book Storage Rm A333
0426	FPB-A-3-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Band A231
0427	FPB-A-3-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Band A231
0428	FPB-A-3-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH331
0429	FPB-A-3-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A332
0430	FPB-A-3-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A331
0431	FPB-A-3-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Adj Counselor Office A350
0432	FPB-A-4-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A439
0433	FPB-A-4-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A439
0434	FPB-A-4-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A440
0435	FPB-A-4-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A441
0436	FPB-A-4-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A438
0437	FPB-A-4-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A438
0438	FPB-A-4-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Photo Dark Room A438.1
0439	FPB-A-4-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A445
0440	FPB-A-4-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A446
0441	FPB-A-4-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Small Group Seminar AH435
0442	FPB-A-4-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Drafting A436
0443	FPB-A-4-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Drafting A436
0444	FPB-A-4-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH432
0445	FPB-A-4-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A434-1
0446	FPB-A-4-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A437
0447	FPB-A-4-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Art Office A435
0448	FPB-A-4-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Art Classroom A437
0449	FPB-A-4-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A433
0450	FPB-A-4-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH431
0451	FPB-A-4-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A432
0452	FPB-A-4-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General A431
0453	FPB-A-4-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway AH434
0454	FPB-B-0-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	PLBG./HVAC Office B041.5
0455	FPB-B-0-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Plumbing/HVAC CR B039
0456	FPB-B-0-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway BH004

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0457	FPB-B-0-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Tech Career Resource Center B038
0458	FPB-B-0-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	HVAC Shop-1 B041.3-1
0459	FPB-B-0-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General B037
0460	FPB-B-0-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Carpentry CR B034
0461	FPB-B-0-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General B035
0462	FPB-B-0-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Carpentry Shop B036.3
0463	FPB-B-0-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	FAB Lab B032
0464	FPB-B-0-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Machine Tool Technology Shop B033
0465	FPB-B-0-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	MF/MT Office B031.5
0466	FPB-B-0-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Metal Fabrication Shop B031.3
0467	FPB-B-0-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Metal Fab CR B030
0468	FPB-B-0-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway BH002
0469	FPB-B-0-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Hallway CH002
0470	FPB-B-0-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Robotic Arm Rm C009.3
0471	FPB-B-0-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Carpentry Office B036.5
0472	FPB-B-0-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Simulation Rm B033.1
0473	FPB-B-0-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway BH003
0474	FPB-B-1-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0475	FPB-B-1-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0476	FPB-B-1-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0477	FPB-B-1-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0478	FPB-B-1-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0479	FPB-B-1-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0480	FPB-B-1-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dining Commons AH132
0481	FPB-B-2-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Dining Overlook West BH232
0482	FPB-B-2-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Hallway BH200/Dining Commons Stairwell
0483	FPB-B-2-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	CTE Conference Rm B241
0484	FPB-B-2-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dining Overlook East BH230
0485	FPB-B-2-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway BH200
0486	FPB-C-0-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Storage C-001
0487	FPB-C-1-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Conference Rm C101.2
0488	FPB-C-1-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Principal's Office C101.3
0489	FPB-C-1-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Principal's Secretary/Waiting C101
0490	FPB-C-1-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Copy/Mail Rm C101.1
0491	FPB-C-1-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Testing C104.1
0492	FPB-C-1-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH101
0493	FPB-C-1-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Registrar's Office C101.5
0494	FPB-C-1-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Welcome Center C104
0495	FPB-C-1-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	ELL Liasson Work Room C104.5
0496	FPB-C-1-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Conference Rm C104.6
0497	FPB-C-1-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Nurse's Office & Waiting Rm C106
0498	FPB-C-1-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Interview Rm C106.1
0499	FPB-C-1-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Examination Rm/Resting C106.8
0500	FPB-C-1-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Triage Rm C106.3
0501	FPB-C-1-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Multi-Purpose C111.10
0502	FPB-C-1-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Nurse C111.8
0503	FPB-C-1-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Consult C111.3
0504	FPB-C-1-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Athletic Director's Office C102
0505	FPB-C-1-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Health/Wellness Supervisor Office C103
0506	FPB-C-1-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Tech Help Desk C107
0507	FPB-C-1-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Work Rm C107.1
0508	FPB-C-1-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Tech Office 107.2
0509	FPB-C-1-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Mediation Office C109.1
0510	FPB-C-1-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Med Safety Zone C111.5
0511	FPB-C-1-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Mediation Room C109.4
0512	FPB-C-1-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Early Education & Care C110.5
0513	FPB-C-1-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Day Care C110.1
0514	FPB-C-1-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH101
0515	FPB-C-2-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Therapeutic CR C224
0516	FPB-C-2-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Small Group C225
0517	FPB-C-2-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH202
0518	FPB-C-2-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Business Computer Lab C225
0519	FPB-C-2-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C222
0520	FPB-C-2-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-ESL C220
0521	FPB-C-2-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C221
0522	FPB-C-2-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C218
0523	FPB-C-2-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C217
0524	FPB-C-2-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH205
0525	FPB-C-2-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	ASD Classroom C216
0526	FPB-C-2-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	PT/OTSensory C214
0527	FPB-C-2-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Speech Therapy Office C213
0528	FPB-C-2-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Quiet Rm C212.1
0529	FPB-C-2-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	ASD Classroom C212
0530	FPB-C-2-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Physics Lab C210
0531	FPB-C-2-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Conference Rm C211.1
0532	FPB-C-2-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	HM2 Reception C211
0533	FPB-C-2-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	House Master's Office C211.3
0534	FPB-C-2-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Teacher's Breakout C209.1
0535	FPB-C-2-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Det Head Office C209.2
0536	FPB-C-2-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Teacher Planning C209
0537	FPB-C-2-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH203
0538	FPB-C-2-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	SPED Office Adjustment Counselor C206
0539	FPB-C-2-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Hallway CH201
0540	FPB-C-2-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Rm C204.1
0541	FPB-C-2-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Physics Lab-1 C204.1
0542	FPB-C-2-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Rm C202.1
0543	FPB-C-2-29 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH202
0544	FPB-C-2-30 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Physics Lab C202
0545	FPB-C-2-31 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Re-Direct Classroom C201
0546	FPB-C-3-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Resource Room C332
0547	FPB-C-3-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	SPED Work Room C323
0548	FPB-C-3-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C319
0549	FPB-C-3-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C321
0550	FPB-C-3-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C320
0551	FPB-C-3-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C313
0552	FPB-C-3-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C316
0553	FPB-C-3-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C315
0554	FPB-C-3-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH305
0555	FPB-C-3-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C314
0556	FPB-C-3-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	SPED Office Dept Head C313
0557	FPB-C-3-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Small Group C312
0558	FPB-C-3-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-ESL C311
0559	FPB-C-3-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Biology Lab C309
0560	FPB-C-3-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Conference Rm 310
0561	FPB-C-3-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	HM3 Reception C310
0562	FPB-C-3-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	House Master's Office C310.2
0563	FPB-C-3-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Teacher Break-Out C308.1
0564	FPB-C-3-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Dept Head Office C308.2
0565	FPB-C-3-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Teacher Planning C308
0566	FPB-C-3-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH303
0567	FPB-C-3-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Room C305-1
0568	FPB-C-3-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH302-1
0569	FPB-C-3-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Resource Room C306
0570	FPB-C-3-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Biology Lab C305
0571	FPB-C-3-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Room C303.1

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0572	FPB-C-3-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway 2 CH302.2
0573	FPB-C-3-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	SEI Science C303
0574	FPB-C-3-29 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Media Center Maker Space B301
0575	FPB-C-3-30 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Counseling Career Center C302.1
0576	FPB-C-3-31 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Counselor's Office C302.3
0577	FPB-C-3-32 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Media Center Office B300.2
0578	FPB-C-3-33 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Counseling Conf Rm C302.4
0579	FPB-C-3-34 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Study B300.3
0580	FPB-C-3-35 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Study B300.4
0581	FPB-C-3-36 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Large Group Instruction C205
0582	FPB-C-3-37 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Large Group Instruction C205
0583	FPB-C-4-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Study Skills CR C423
0584	FPB-C-4-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Resource Rm C424
0585	FPB-C-4-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH405
0586	FPB-C-4-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C421
0587	FPB-C-4-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C422
0588	FPB-C-4-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C420
0589	FPB-C-4-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C419
0590	FPB-C-4-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C417
0591	FPB-C-4-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C416
0592	FPB-C-4-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH404
0593	FPB-C-4-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C415
0594	FPB-C-4-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Bus. Mngr. Office C414
0595	FPB-C-4-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Small Group C413
0596	FPB-C-4-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-ESL C412
0597	FPB-C-4-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Chemistry Lab C410
0598	FPB-C-4-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Conference Rm C411.1
0599	FPB-C-4-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	NM4 Receptrion C411
0600	FPB-C-4-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	House Master's Office C411.2
0601	FPB-C-4-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Teacher Break-Out C409.1
0602	FPB-C-4-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Dept Head Office C409.3
0603	FPB-C-4-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Teacher Planning C409
0604	FPB-C-4-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH402
0605	FPB-C-4-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Room C410.1
0606	FPB-C-4-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Resource Rm C406
0607	FPB-C-4-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C405
0608	FPB-C-4-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Chemistry Lab C404
0609	FPB-C-4-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Small Group Seminar CH401
0610	FPB-C-4-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Rm C401.1
0611	FPB-C-4-29 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Chemistry Lab C401
0612	FPB-C-4-30 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Visual Communication Studio C400.1
0613	FPB-C-4-31 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 20 w/ IAS-FF SA	Price Industries	Gallery C400
0614	FPB-C-4-32 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Graphic Design Studio C400.4
0615	FPB-C-5-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Health Assisting Lab-1 C507.1
0616	FPB-C-5-02 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Pharmacy Lab C507.2
0617	FPB-C-5-03 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Student Services Office C520
0618	FPB-C-5-04 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	In-School Suspension Room C519
0619	FPB-C-5-05 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C518
0620	FPB-C-5-06 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C517
0621	FPB-C-5-07 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	X-Ray C509.5
0622	FPB-C-5-08 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C516
0623	FPB-C-5-09 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C515
0624	FPB-C-5-10 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH503
0625	FPB-C-5-11 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C514
0626	FPB-C-5-12 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Teacher Planning C513
0627	FPB-C-5-13 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	HMI Reception C512
0628	FPB-C-5-14 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Biology Lab C511
0629	FPB-C-5-15 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dental Assisting Lan C509.2
0630	FPB-C-5-16 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH501
0631	FPB-C-5-17 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Dental Assist CR C509
0632	FPB-C-5-18 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Room C511.1
0633	FPB-C-5-19 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Health Assist CR507.1
0634	FPB-C-5-20 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Office 509.4
0635	FPB-C-5-21 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Biology Lab C506
0636	FPB-C-5-22 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Prep Rm C503.3
0637	FPB-C-5-23 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Office B500.1
0638	FPB-C-5-24 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	SPED Office - Adjustment Counselor B502
0639	FPB-C-5-25 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Hallway CH504
0640	FPB-C-5-26 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 50 w/ IAS-FF SA	Price Industries	Biology Lab C503
0641	FPB-C-5-27 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Classroom-General C501
0642	FPB-C-5-28 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Electrical Shop B500
0643	FPB-C-5-29 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Electrical Shop B500
0644	FPB-C-5-30 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	Conference Rm C512.1
0645	FPB-C-5-31 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 10 w/ IAS-FF SA	Price Industries	House Master's Office C512.3
0646	FPB-C-5-32 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 30 w/ IAS-FF SA	Price Industries	Electrical CR C500.7
0647	FPB-D-2-01 Fan-Powered Box w/ HW Re-Heat	Fan Power Box	FDC- 40 w/ IAS-FF SA	Price Industries	Lobby DH214
0648	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Storage A090.5
0649	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC A069
0650	FTR-7 Finned Tube Radiation - 20'	Panel Rad.	R2F-4	Runtal Radiators	Multi-Purpose Dance Studio -1 A139-1 (Assoc w/ FPB-A-2-06)
0651	FTR-7 Finned Tube Radiation - 20'	Panel Rad.	R2F-4	Runtal Radiators	Multi-Purpose Dance Studio -1 A139-1 (Assoc w/ FPB-A-2-07)
0652	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Chair/Table Storage D150
0653	FTR-9 Finned Tube Radiation - 108' (18-6' Pcs)	Bare FTR	VS144 Element	Vulcan	Culinary Arts Underfloor Soffit
0654	FTR-7 Finned Tube Radiation - 10'	Panel Rad.	R2F-4	Runtal Radiators	Band A231 (Assoc. w/ FPB-A-3-17)
0655	FTR-7 Finned Tube Radiation - 10'	Panel Rad.	R2F-4	Runtal Radiators	Band A231 (Assoc. w/ FPB-A-3-18)
0656	FTR-7 Finned Tube Radiation - 15'	Panel Rad.	R2F-4	Runtal Radiators	Chorus A233 (Assoc. w/ FPB-A-3-05)
0657	FTR-7 Finned Tube Radiation - 18'	Panel Rad.	R2F-4	Runtal Radiators	Orchestra A232 (Assoc. w/ FPB-A-3-14)
0658	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Toilet AT237
0659	FTR-6 Finned Tube Radiation - 25'	Wall FTR	LV4R24	Vulcan	Auditorium (Stage)
0660	FTR-6 Finned Tube Radiation - 25'	Wall FTR	LV4R24	Vulcan	Auditorium (Stage)
0661	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Art Storage A437.1
0662	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC AJ443
0663	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Plbg Storage B041.7
0664	FTR-10 Finned Tube Radiation - 18'	Wall FTR	LV4R24	Vulcan	Plumbing Shop B041.6
0665	FTR-10 Finned Tube Radiation - 16'	Wall FTR	LV4R24	Vulcan	Plumbing Shop B041.6
0666	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	HVAC Tool Storage B041.4
0667	FTR-4 Finned Tube Radiation - 15'	Coil Convector	PowerKon Element	Kampmann	Media Center/Reading Rm West B300.1
0668	FTR-4 Finned Tube Radiation - 15'	Coil Convector	PowerKon Element	Kampmann	Media Center/Reading Rm West B300.1
0669	FTR-4 Finned Tube Radiation - 15'	Coil Convector	PowerKon Element	Kampmann	Media Center/Reading Rm West B300.1
0670	FTR-4 Finned Tube Radiation - 15'	Coil Convector	PowerKon Element	Kampmann	Media Center/Reading Rm West B300.1
0671	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Tool Storage B036.4
0672	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	MT Storage B033.2
0673	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Equipment Rm B032.2
0674	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	MF Tool Storage B031.4
0675	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Metal Fabrication Shop B031.3
0676	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Metal Fabrication Shop B031.3
0677	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Machine Tool Technology Shop B033
0678	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Machine Tool Technology Shop B033
0679	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Carpentry Shop B036.3
0680	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Carpentry Shop B036.3
0681	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	Carpentry Shop B036.3
0682	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	HVAC Shop-1 B041.3-1
0683	FTR-10 Finned Tube Radiation - 14'	Wall FTR	LV4R24	Vulcan	HVAC Shop-1 B041.3-1
0684	FTR-10 Finned Tube Radiation - 10'	Wall FTR	LV4R24	Vulcan	HVAC Shop-1 B041.3-1
0685	FTR-8 Finned Tube Radiation - 45' (3-15' Pcs)	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Gym B
0686	FTR-8 Finned Tube Radiation - 30' (2-15' Pcs)	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Gym B

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0687	FTR-8 Finned Tube Radiation - 30' (2-15' Pcs)	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Gym B
0688	FTR-8 Finned Tube Radiation - 30' (2-15' Pcs)	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Gym B
0689	FTR-8 Finned Tube Radiation - 30' (2-15' Pcs)	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Gym B
0690	FTR-2 Finned Tube Radiation - 12'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0691	FTR-2 Finned Tube Radiation - 12'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0692	FTR-2 Finned Tube Radiation - 8'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0693	FTR-2 Finned Tube Radiation - 18'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0694	FTR-2 Finned Tube Radiation - 22'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0695	FTR-2 Finned Tube Radiation - 18'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0696	FTR-2 Finned Tube Radiation - 3'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0697	FTR-2 Finned Tube Radiation - 10'	Panel Rad.	R3F-3	Runtal Radiators	Media Center/Reading Rm East B300
0698	FTR-2 Finned Tube Radiation - 5'	Panel Rad.	R3F-3	Runtal Radiators	Study B300.3 (Assoc. w/ FPB-C-3-34)
0699	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media B331 - Assume B431
0700	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media B331 - Assume B431
0701	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media B331 - Assume B431
0702	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media B331 - Assume B431
0703	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media Center B431
0704	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media Center B431
0705	FTR-3 Finned Tube Radiation - 12'	Bare FTR	VC144 Element	Vulcan	Media Center B431
0706	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC020
0707	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Records Room C101.6
0708	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Storage C106.5
0709	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Athletic Storage C131
0710	FTR-1 Finned Tube Radiation - 16'	Wall FTR	LV4R14	Vulcan	Office C110.3
0711	FTR-1 Finned Tube Radiation - 7'	Wall FTR	LV4R14	Vulcan	Office C110.6
0712	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Gym Storage C137
0713	FTR-1 Finned Tube Radiation - 6'	Wall FTR	LV4R14	Vulcan	Toilet CT136
0714	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Toilet CT133.1
0715	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Toilet CT135.1
0716	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Boys Showers C135.4
0717	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Girls Showers 133.4
0718	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Boys Toilets CT135.6
0719	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Girls Toilets CT133.6
0720	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC CJ327
0721	FTR-1 Finned Tube Radiation - 6'	Wall FTR	LV4R14	Vulcan	Counseling Career Center C302.1
0722	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC CJ428
0723	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Tool Storage B500.2
0724	FTR-8 Finned Tube Radiation - 10'	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Prep Room C511.2
0725	FTR-8 Finned Tube Radiation - 10'	Floor FTR	JV4AR-PM10-TFLI	Vulcan	Prep Room C503.4
0726	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Dental Storage C510
0727	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Health Storage C505
0728	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC CJ524
0729	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Linens C509.62
0730	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Girls Lockers C509.63
0731	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Boys Lockers C509.65
0732	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Sterilization C509.3
0733	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Storage C509.1
0734	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Custodian's Workshop D094
0735	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	D095?
0736	FTR-1 Finned Tube Radiation - 6'	Wall FTR	LV4R14	Vulcan	SCC Storage D157.1
0737	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	SCC Storage D157.2
0738	FTR-1 Finned Tube Radiation - 6'	Wall FTR	LV4R14	Vulcan	Storage D155.3
0739	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Storage D151.1
0740	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	JC/Trash D149.11
0741	FTR-1 Finned Tube Radiation - 4'	Wall FTR	LV4R14	Vulcan	Dry Food Storage D149.9
0742	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0743	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0744	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0745	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0746	FTR-1 Finned Tube Radiation - 5'	Wall FTR	LV4R14	Vulcan	Toilet DT240.21
0747	FTR-1 Finned Tube Radiation - 5'	Wall FTR	LV4R14	Vulcan	Toilet DT240.22
0748	FTR-1 Finned Tube Radiation - 8'	Wall FTR	LV4R14	Vulcan	Dressing Rm D350.1
0749	FTR-4 Finned Tube Radiation - 23' (1-15' Pc, 1-8' Pc)	Coil Convector	PowerKon Element	Kampmann	Lecture Hall-1 D336-1
0750	FTR-4 Finned Tube Radiation - 23' (1-15' Pc, 1-8' Pc)	Coil Convector	PowerKon Element	Kampmann	Lecture Hall-1 D336-1
0751	FTR-4 Finned Tube Radiation - 15'	Coil Convector	PowerKon Element	Kampmann	Lecture Hall-1 D336-1
0752	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT090.1
0753	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT090.3
0754	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Nurse's Toilet 068.1
0755	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT067
0756	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT066
0757	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT065
0758	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT064
0759	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT063
0760	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet AT442
0761	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT041.1
0762	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT041.2
0763	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT036.1
0764	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT036.2
0765	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT031.1
0766	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT031.2
0767	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet BT140
0768	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet BT143
0769	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet CT021
0770	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT022
0771	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT110.8
0772	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT110.9
0773	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT109.2
0774	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT110.2
0775	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Medical Suite Toilet CT106.6
0776	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet CT108
0777	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT104
0778	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet CT101.4
0779	CC-2 HW Convector	HW Convect.	FWG-A (6x48x24)	Vulcan	Toilet CT500.5
0780	CC-2 HW Convector	HW Convect.	FWG-A (6x48x24)	Vulcan	Toilet CT500.4
0781	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet CT504
0782	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet CT508
0783	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT509.66
0784	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet CT509.64
0785	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet DT160
0786	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet DT155.8
0787	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet DT155.7
0788	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet DT155.2
0789	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Staff Toilet DT149.2
0790	CC-1 HW Convector	HW Convect.	FWG-A (4x32x24)	Vulcan	Toilet AT149.3
0791	FTR-1 Finned Tube Radiation	Wall FTR	LV4R14	Vulcan	Re-Direct Office C201.1
0792	FTR-1 Finned Tube Radiation - 6'	Wall FTR	LV4R14	Vulcan	JC CJ428
0793	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0794	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0795	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0796	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0797	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0798	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0799	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0800	FTR-5 Finned Tube Radiation - 12'	Trench FTR	NK380/200	Kampmann	Auditorium
0801	CV-001 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Conference A051

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0802	CV-002 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Rec & Workstation AH031-1
0803	CV-003 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A030
0804	CV-004 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Science A079
0805	CV-005 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A052
0806	CV-006 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A053
0807	CV-007 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	NWFC Commons A050
0808	CV-008 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Director Office A078
0809	CV-009 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A054
0810	CV-010 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A055
0811	CV-011 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Classroom A073
0812	CV-012 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Student Shop A071
0813	CV-013 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Teacher Planning A072
0814	CV-014 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NWFC Time Out Rm A056
0815	CV-015 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Asst Principal Office A070
0816	CV-016 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH034
0817	CV-017 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Classroom A061
0818	CV-018 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	FC Crisis Counselor Office A062
0819	CV-019 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Classroom A057
0820	CV-020 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Classroom A056
0821	CV-021 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Crisis Counselor Office A059
0822	CV-022 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Classroom A060
0823	CV-023 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	CTE Director's Office B040.1
0824	CV-024 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH037
0825	CV-025 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Hallway DH038
0826	CV-026 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Hallway/Storage DH053.9
0827	CV-027 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Auto Technology Shop A090
0828	CV-028 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Auto Technology Shop A090
0829	CV-029 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Auto Technology CR A090.4
0830	CV-030 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Plumbing Shop B041.0
0831	CV-031 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Office A090.6
0832	CV-032 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Lockers A090.2
0833	CV-033 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NW Commons AH036
0834	CV-034 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Fitness Room A138
0835	CV-035 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Fitness Room A138
0836	CV-036 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Dining Commons AH132
0837	CV-037 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Commons AH132
0838	CV-038 Control Valve	Control Valv.	VG1241AF+9A4GGA	Johnson Controls	Dining Commons AH132
0839	CV-039 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Practice A233.2
0840	CV-040 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH235
0841	CV-041 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH233
0842	CV-042 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Practice A231.3
0843	CV-043 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Music Office A231.2
0844	CV-044 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Multi-Purpose Dance Studio -1 A139-1
0845	CV-045 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Multi-Purpose Dance Studio -1 A139-1
0846	CV-046 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Language Lab A339
0847	CV-047 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A340
0848	CV-048 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A341
0849	CV-049 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group A338
0850	CV-050 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Chorus A233
0851	CV-051 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A345
0852	CV-052 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A346
0853	CV-053 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Small Group Seminar AH336
0854	CV-054 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH303
0855	CV-055 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Ship Medically Frag. Student Classroom A334
0856	CV-056 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dept Head Office A335-1
0857	CV-057 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Chorus A233
0858	CV-058 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Orchestra A232
0859	CV-059 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Orchestra A232
0860	CV-060 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH332
0861	CV-061 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Book Storage Rm A333
0862	CV-062 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Band A231
0863	CV-063 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Band A231
0864	CV-064 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH331
0865	CV-065 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A332
0866	CV-066 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A331
0867	CV-067 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Adj Counselor Office A350
0868	CV-068 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A439
0869	CV-069 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A439
0870	CV-070 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A440
0871	CV-071 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A441
0872	CV-072 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A438
0873	CV-073 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A438
0874	CV-074 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Photo Dark Room A438.1
0875	CV-075 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A445
0876	CV-076 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A446
0877	CV-077 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group Seminar AH435
0878	CV-078 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Drafting A436
0879	CV-079 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Drafting A436
0880	CV-080 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH432
0881	CV-081 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A434-1
0882	CV-082 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A437
0883	CV-083 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Office A435
0884	CV-084 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Classroom A437
0885	CV-085 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A433
0886	CV-086 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH431
0887	CV-087 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A432
0888	CV-088 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General A431
0889	CV-089 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH434
0890	CV-090 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	PLBG./HVAC Office B041.5
0891	CV-091 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Plumbing/HVAC CR B039
0892	CV-092 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway BH004
0893	CV-093 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Tech Career Resource Center B038
0894	CV-094 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	HVAC Shop-1 B041.3-1
0895	CV-095 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General B037
0896	CV-096 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Carpentry CR B034
0897	CV-097 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General B035
0898	CV-098 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Carpentry Shop B036.3
0899	CV-099 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	FAB Lab B032
0900	CV-100 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Machine Tool Technology Shop B033
0901	CV-101 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	MF/MT Office B031.5
0902	CV-102 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Metal Fabrication Shop B031.3
0903	CV-103 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Metal Fab CR B030
0904	CV-104 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway BH002
0905	CV-105 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH002
0906	CV-106 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Robotic Arm Rm C009.3
0907	CV-108 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Carpentry Office B036.5
0908	CV-109 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Simulation Rm B033.1
0909	CV-110 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway BH003
0910	CV-111 Control Valve	Control Valv.	VG1241AF+9A4GGA	Johnson Controls	Dining Commons AH132
0911	CV-112 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Commons AH132
0912	CV-113 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Commons AH132
0913	CV-114 Control Valve	Control Valv.	VG1241AF+9A4GGA	Johnson Controls	Dining Commons AH132
0914	CV-115 Control Valve	Control Valv.	VG1241AF+9A4GGA	Johnson Controls	Dining Commons AH132
0915	CV-116 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Dining Commons AH132
0916	CV-117 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Commons AH132

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
0917	CV-118 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Overlook West BH232
0918	CV-119 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Hallway BH200/Dining Commons Stairwell
0919	CV-120 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	CTE Conference Rm B241
0920	CV-121 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dining Overlook East BH230
0921	CV-122 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway BH200
0922	CV-123 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Storage C-001
0923	CV-124 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm C101.2
0924	CV-125 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Principal's Office C101.3
0925	CV-126 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Principal's Secretary/Waiting C101
0926	CV-127 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Copy/Mail Rm C101.1
0927	CV-128 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Testing C104.1
0928	CV-129 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH101
0929	CV-130 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Registrar's Office C101.5
0930	CV-131 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Welcome Center C104
0931	CV-132 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	ELL Liasson Work Room C104.5
0932	CV-133 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm C104.6
0933	CV-134 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Nurse's Office & Waiting Rm C106
0934	CV-135 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Interview Rm C106.1
0935	CV-136 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Examination Rm/Resting C106.8
0936	CV-137 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Triage Rm C106.3
0937	CV-138 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Multi-Purpose C111.10
0938	CV-139 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Nurse C111.8
0939	CV-140 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Consult C111.3
0940	CV-141 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Athletic Director's Office C102
0941	CV-142 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Health/Wellness Supervisor Office C103
0942	CV-143 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Tech Help Desk C107
0943	CV-144 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Work Rm C107.1
0944	CV-145 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Tech Office 107.2
0945	CV-146 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Mediation Office C109.1
0946	CV-147 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Med Safety Zone C111.5
0947	CV-148 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Mediation Room C109.4
0948	CV-149 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Early Education & Care C110.5
0949	CV-150 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Day Care C110.1
0950	CV-151 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH101
0951	CV-152 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Therapeutic CR C224
0952	CV-153 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group C225
0953	CV-154 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH202
0954	CV-155 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Business Computer Lab C225
0955	CV-156 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C222
0956	CV-157 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-ESL C220
0957	CV-158 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C221
0958	CV-159 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C218
0959	CV-160 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C217
0960	CV-161 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH205
0961	CV-162 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	ASD Classroom C216
0962	CV-163 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	PT/OTSensory C214
0963	CV-164 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Speech Therapy Office C213
0964	CV-165 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Quiet Rm C212.1
0965	CV-166 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	ASD Classroom C212
0966	CV-167 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Physics Lab C210
0967	CV-168 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm C211.1
0968	CV-169 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HM2 Reception C211
0969	CV-170 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	House Master's Office C211.3
0970	CV-171 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher's Breakout C209.1
0971	CV-172 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Det Head Office C209.2
0972	CV-173 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Planning C209
0973	CV-174 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH203
0974	CV-175 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SPED Office Adjustment Counselor C206
0975	CV-176 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH201
0976	CV-177 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Rm C204.1
0977	CV-178 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Physics Lab-1 C204.1
0978	CV-179 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Rm C202.1
0979	CV-180 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH202
0980	CV-181 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Physics Lab C202
0981	CV-182 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Re-Direct Classroom C201
0982	CV-183 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Resource Room C332
0983	CV-184 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SPED Work Room C323
0984	CV-185 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C319
0985	CV-186 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C321
0986	CV-187 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C320
0987	CV-188 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C313
0988	CV-189 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C316
0989	CV-190 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C315
0990	CV-191 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH305
0991	CV-192 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C314
0992	CV-193 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SPED Office Dept Head C313
0993	CV-194 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group C312
0994	CV-195 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-ESL C311
0995	CV-196 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Biology Lab C309
0996	CV-197 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm 310
0997	CV-198 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HM3 Reception C310
0998	CV-199 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	House Master's Office C310.2
0999	CV-200 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Break-Out C308.1
1000	CV-201 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dept Head Office C308.2
1001	CV-202 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Planning C308
1002	CV-203 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH303
1003	CV-204 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C305-1
1004	CV-205 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH302-1
1005	CV-206 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Resource Room C306
1006	CV-207 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Biology Lab C305
1007	CV-208 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C303.1
1008	CV-209 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway 2 CH302.2
1009	CV-210 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	SEI Science C303
1010	CV-211 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center Maker Space B301
1011	CV-212 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Counseling Career Center C302.1
1012	CV-213 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Counselor's Office C302.3
1013	CV-214 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center Office B300.2
1014	CV-215 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Counseling Conf Rm C302.4
1015	CV-216 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Study B300.3
1016	CV-217 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Study B300.4
1017	CV-218 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Large Group Instruction C205
1018	CV-219 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Large Group Instruction C205
1019	CV-220 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Study Skills CR C423
1020	CV-221 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Resource Rm C424
1021	CV-222 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH405
1022	CV-223 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C421
1023	CV-224 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C422
1024	CV-225 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C420
1025	CV-226 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C419
1026	CV-227 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C417
1027	CV-228 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C416
1028	CV-229 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH404
1029	CV-230 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C415
1030	CV-231 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Bus. Mngr. Office C414
1031	CV-232 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group C413

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
1032	CV-233 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-ESL C412
1033	CV-234 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Chemistry Lab C410
1034	CV-235 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm C411.1
1035	CV-236 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	NM4 Receptrion C411
1036	CV-237 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	House Master's Office C411.2
1037	CV-238 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Break-Out C409.1
1038	CV-239 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dept Head Office C409.3
1039	CV-240 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Planning C409
1040	CV-241 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH402
1041	CV-242 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C410.1
1042	CV-243 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Resource Rm C406
1043	CV-244 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C405
1044	CV-245 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Chemistry Lab C404
1045	CV-246 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Small Group Seminar CH401
1046	CV-247 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Rm C401.1
1047	CV-248 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Chemistry Lab C401
1048	CV-249 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Visual Communication Studio C400.1
1049	CV-250 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Gallery C400
1050	CV-251 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Graphic Design Studio C400.4
1051	CV-252 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Health Assisting Lab-1 C507.1
1052	CV-253 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Pharmacy Lab C507.2
1053	CV-254 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Student Services Office C520
1054	CV-255 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	In-School Suspension Room C519
1055	CV-256 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C518
1056	CV-257 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C517
1057	CV-258 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	X-Ray C509.5
1058	CV-259 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C516
1059	CV-260 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C515
1060	CV-261 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH503
1061	CV-262 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C514
1062	CV-263 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Teacher Planning C513
1063	CV-264 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HMI Reception C512
1064	CV-265 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Biology Lab C511
1065	CV-266 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dental Assisting Lan C509.2
1066	CV-267 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH501
1067	CV-268 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dental Assist CR C509
1068	CV-269 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C511.1
1069	CV-270 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Health Assist CR507.1
1070	CV-271 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Office 509.4
1071	CV-272 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Biology Lab C506
1072	CV-273 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Rm C503.3
1073	CV-274 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Office B500.1
1074	CV-275 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SPED Office - Adjustment Counselor B502
1075	CV-276 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway CH504
1076	CV-277 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Biology Lab C503
1077	CV-278 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Classroom-General C501
1078	CV-279 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Electrical Shop B500
1079	CV-280 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Electrical Shop B500
1080	CV-281 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Conference Rm C512.1
1081	CV-282 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	House Master's Office C512.3
1082	CV-283 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Electrical CR C500.7
1083	CV-284 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lobby DH214
1084	CV-285 Control Valve	Control Valv.	VG1241FS+948GGA	Johnson Controls	Administration - C
1085	CV-286 Control Valve	Control Valv.	VG1241BL+923GGA	Johnson Controls	Administration - C
1086	CV-287 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Upper Dining Commons - C
1087	CV-288 Control Valve	Control Valv.	VG1241ER+928GGA	Johnson Controls	Upper Dining Commons - C
1088	CV-289 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Auditorium - D
1089	CV-290 Control Valve	Control Valv.	VG1241ER+928GGA	Johnson Controls	Auditorium - D
1090	CV-291 Control Valve	Control Valv.	VG1241ER+948GGA	Johnson Controls	Stage - D
1091	CV-292 Control Valve	Control Valv.	VG1241BL+923GGA	Johnson Controls	Stage - D
1092	CV-293 Control Valve	Control Valv.	VG1241FS+948GGA	Johnson Controls	Media Center - B
1093	CV-294 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Media Center - B
1094	CV-295 Control Valve	Control Valv.	VG1241ER+948GGA	Johnson Controls	Lecture Hall - A
1095	CV-296 Control Valve	Control Valv.	VG1241CN+923GGA	Johnson Controls	Lecture Hall - A
1096	CV-297 Control Valve	Control Valv.	VG1241ER+948GGA	Johnson Controls	Lower Dining Commons - B
1097	CV-298 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Lower Dining Commons - B
1098	CV-299 Control Valve	Control Valv.	VG12A5GU+94NGGA	Johnson Controls	Gym - B
1099	CV-300 Control Valve	Control Valv.	VG1241FS+928GGA	Johnson Controls	Gym - B
1100	CV-301 Control Valve	Control Valv.	VFC040HB294NBGA	Johnson Controls	Gym - B
1101	CV-302 Control Valve	Control Valv.	VFC040HB294NBGA	Johnson Controls	Gym - B
1102	CV-303 Control Valve	Control Valv.	VG12A5GU+94NGGA	Johnson Controls	Gym - B
1103	CV-304 Control Valve	Control Valv.	VG1241FS+928GGA	Johnson Controls	Gym - B
1104	CV-305 Control Valve	Control Valv.	VFC040HB294NBGA	Johnson Controls	Gym - B
1105	CV-306 Control Valve	Control Valv.	VFC040HB294NBGA	Johnson Controls	Gym - B
1106	CV-307 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Core Areas - C
1107	CV-308 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Core Areas - C
1108	CV-309 Control Valve	Control Valv.	VG1241ER+948GGA	Johnson Controls	Early Education - A
1109	CV-310 Control Valve	Control Valv.	VG1241BL+923GGA	Johnson Controls	Early Education - A
1110	CV-311 Control Valve	Control Valv.	VG12A5GU+94NGGA	Johnson Controls	Music, Core Areas - A
1111	CV-312 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Music, Core Areas - A
1112	CV-313 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Next Wave Full Circle - A
1113	CV-314 Control Valve	Control Valv.	VG1241CN+923GGA	Johnson Controls	Next Wave Full Circle - A
1114	CV-315 Control Valve	Control Valv.	VG1241ER+948GGA	Johnson Controls	Fitness, Multi-Purpose - B
1115	CV-316 Control Valve	Control Valv.	VG1241BL+923GGA	Johnson Controls	Fitness, Multi-Purpose - B
1116	CV-317 Control Valve	Control Valv.	VG12A5HV+94NGGA	Johnson Controls	Science - C
1117	CV-318 Control Valve	Control Valv.	VG1241FS+928GGA	Johnson Controls	Science - C
1118	CV-319 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Cosmetology/Broadcast - D
1119	CV-320 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Cosmetology/Broadcast - D
1120	CV-321 Control Valve	Control Valv.	VG12A5GU+94NGGA	Johnson Controls	Classrooms - C
1121	CV-322 Control Valve	Control Valv.	VG1241FS+928GGA	Johnson Controls	Classrooms - C
1122	CV-323 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Classrooms - A
1123	CV-324 Control Valve	Control Valv.	VG1241ER+928GGA	Johnson Controls	Classrooms - A
1124	CV-325 Control Valve	Control Valv.	VG12A5GT+94NGGA	Johnson Controls	Culinary Arts - A
1125	CV-326 Control Valve	Control Valv.	VG1241ER+928GGA	Johnson Controls	Culinary Arts - A
1126	CV-327 Control Valve	Control Valv.	VG12A5HV+94NGGA	Johnson Controls	Shops - B
1127	CV-328 Control Valve	Control Valv.	VG1241FS+928GGA	Johnson Controls	Shops - B
1128	CV-329 Control Valve	Control Valv.	VG1241FS+948GGA	Johnson Controls	Locker Rooms/Lower Level C
1129	CV-330 Control Valve	Control Valv.	VG1241DP+928GGA	Johnson Controls	Locker Rooms/Lower Level C
1130	CV-331 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1131	CV-332 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1132	CV-333 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1133	CV-334 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1134	CV-335 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1135	CV-336 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mech Area A013
1136	CV-337 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	PH Neutralization Rm A010
1137	CV-338 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Auto Tech Shop A090
1138	CV-339 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Auto Tech Shop A090
1139	CV-340 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Fire Pump Rm A098
1140	CV-341 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Boiler Rm A550
1141	CV-342 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Boiler Rm A550
1142	CV-343 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Electrical Shop B500
1143	CV-344 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mechanical Alcove C008
1144	CV-345 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Mechanical Alcove C008
1145	CV-346 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Custodian's Storage C009.1
1146	CV-347 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Storage C009

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
1147	CV-348 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	PH Neutralization Rm C027
1148	CV-349 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Water Room D096
1149	CV-350 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stairs STA2-S
1150	CV-351 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule AV0-16
1151	CV-352 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lower Level, A Stairwell - West
1152	CV-353 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lower Level, A Stairwell - East
1153	CV-354 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STA2-1
1154	CV-355 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STA1-2
1155	CV-356 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Culinary Arts Kitchen A234
1156	CV-357 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Culinary Arts Kitchen A234
1157	CV-358 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls AT347
1158	CV-359 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys AT344
1159	CV-360 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Entrance A334
1160	CV-361 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Hallway AH332
1161	CV-362 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STA-3
1162	CV-363 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls AT447
1163	CV-364 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys AT444
1164	CV-365 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STA1-4
1165	CV-366 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STA2-4
1166	CV-367 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Outside Boiler Rm A550 - Top of Stairwell
1167	CV-368 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys BT142
1168	CV-369 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls BT141-1
1169	CV-370 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Vestibule BV1-1.1
1170	CV-371 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Vestibule BV1-1.1
1171	CV-372 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Vestibule BV1-1
1172	CV-373 Control Valve	Control Valv.	VG1241AG+9A4GGA	Johnson Controls	Vestibule BV1-1
1173	CV-374 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STB2-0
1174	CV-375 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stairwell-North (Outside Welding Manifold Rm C028)
1175	CV-376 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Hallway CH002
1176	CV-377 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls CT023
1177	CV-378 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys CT024
1178	CV-379 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STC1-1
1179	CV-380 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lower Level, C Stairwell (East)
1180	CV-381 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule CV1-28
1181	CV-382 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls CT227
1182	CV-383 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys CT226
1183	CV-384 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STB2-2
1184	CV-385 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys CT324
1185	CV-386 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls CT325
1186	CV-387 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	STC1-3
1187	CV-388 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	3rd Level, C Stairwell (East)
1188	CV-389 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Men's C425
1189	CV-390 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Women's C426
1190	CV-391 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Locker Vestibule C500.3
1191	CV-392 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Stair STB2-5
1192	CV-393 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls CT522
1193	CV-394 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys CT521
1194	CV-395 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	5th Level, C Stairwell (East)
1195	CV-396 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule DV1-6?
1196	CV-397 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule DV1-5
1197	CV-398 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule DV2-6
1198	CV-399 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Vestibule DV2-6
1199	CV-400 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lobby D240
1200	CV-401 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Lobby D240
1201	CV-402 Control Valve	Control Valv.	VG1241AE+9A4GGA	Johnson Controls	Elevator Lobby Elev-2
1202	CV-403 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Storage A090.5
1203	CV-404 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC A069
1204	CV-405 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Multi-Purpose Dance Studio -1 A139-1 (Assoc w/ FPB-A-2-06)
1205	CV-406 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Multi-Purpose Dance Studio -1 A139-1 (Assoc w/ FPB-A-2-07)
1206	CV-407 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Chair/Table Storage D150
1207	CV-408 Control Valve	Control Valv.	VG1241AF+9A4GGA	Johnson Controls	Culinary Arts Underfloor Soffit
1208	CV-409 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Band A231 (Assoc. w/ FPB-A-3-17)
1209	CV-410 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Band A231 (Assoc. w/ FPB-A-3-18)
1210	CV-411 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Chorus A233 (Assoc. w/ FPB-A-3-05)
1211	CV-412 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Orchestra A232 (Assoc. w/ FPB-A-3-14)
1212	CV-413 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT237
1213	CV-414 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Auditorium (Stage)
1214	CV-415 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Auditorium (Stage)
1215	CV-416 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Art Storage A437.1
1216	CV-417 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC AJ443
1217	CV-418 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Plbg Storage B041.7
1218	CV-419 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Plumbing Shop B041.6
1219	CV-420 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Plumbing Shop B041.6
1220	CV-421 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HVAC Tool Storage B041.4
1221	CV-422 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm West B300.1
1222	CV-423 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm West B300.1
1223	CV-424 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm West B300.1
1224	CV-425 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm West B300.1
1225	CV-426 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Tool Storage B036.4
1226	CV-427 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	MT Storage B033.2
1227	CV-428 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Equipment Rm B032.2
1228	CV-429 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	MF Tool Storage B031.4
1229	CV-430 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Metal Fabrication Shop B031.3
1230	CV-431 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Metal Fabrication Shop B031.3
1231	CV-432 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Machine Tool Technology Shop B033
1232	CV-433 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Machine Tool Technology Shop B033
1233	CV-434 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Carpentry Shop B036.3
1234	CV-435 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Carpentry Shop B036.3
1235	CV-436 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Carpentry Shop B036.3
1236	CV-437 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HVAC Shop-1 B041.3-1
1237	CV-438 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HVAC Shop-1 B041.3-1
1238	CV-439 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	HVAC Shop-1 B041.3-1
1239	CV-440 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Gym B
1240	CV-441 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Gym B
1241	CV-442 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Gym B
1242	CV-441A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Gym B
1243	CV-442A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Gym B
1244	CV-443 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1245	CV-444 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1246	CV-445 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1247	CV-446 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1248	CV-447 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1249	CV-448 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1250	CV-449 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1251	CV-450 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center/Reading Rm East B300
1252	CV-451 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Study B300.3 (Assoc. w/ FPB-C-3-34)
1253	CV-452 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media B331 - Assume B431
1254	CV-453 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media B331 - Assume B431
1255	CV-454 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media B331 - Assume B431
1256	CV-455 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media B331 - Assume B431
1257	CV-456 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center B431
1258	CV-457 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center B431
1259	CV-458 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Media Center B431
1260	CV-459 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC020
1261	CV-460 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Records Room C101.6

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
1262	CV-461 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Storage C106.5
1263	CV-462 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Athletic Storage C131
1264	CV-463 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Office C110.3
1265	CV-464 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Office C110.6
1266	CV-465 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Gym Storage C137
1267	CV-466 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT136
1268	CV-467 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT133.1
1269	CV-468 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT135.1
1270	CV-469 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys Showers C135.4
1271	CV-470 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls Showers 133.4
1272	CV-471 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys Toilets CT135.6
1273	CV-472 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls Toilets CT133.6
1274	CV-473 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC CJ327
1275	CV-474 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Counseling Career Center C302.1
1276	CV-475 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC CJ428
1277	CV-476 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Tool Storage B500.2
1278	CV-477 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C511.2
1279	CV-478 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Prep Room C503.4
1280	CV-479 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dental Storage C510
1281	CV-480 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Health Storage C505
1282	CV-481 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC CJ524
1283	CV-482 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Linens C509.62
1284	CV-483 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girls Lockers C509.63
1285	CV-484 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys Lockers C509.65
1286	CV-485 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Sterilization C509.3
1287	CV-486 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Storage C509.1
1288	CV-487 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Custodian's Workshop D094
1289	CV-488 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	D095?
1290	CV-489 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SCC Storage D157.1
1291	CV-490 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	SCC Storage D157.2
1292	CV-491 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Storage D155.3
1293	CV-492 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Storage D151.1
1294	CV-493 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC/Trash D149.11
1295	CV-494 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dry Food Storage D149.9
1296	CV-495 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Johnson Controls	Auditorium
1297	CV-496 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Johnson Controls	Auditorium
1298	CV-497 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Johnson Controls	Auditorium
1299	CV-498 Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Johnson Controls	Auditorium
1300	CV-499 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet DT240.21
1301	CV-500 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet DT240.22
1302	CV-501 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Dressing Rm D350.1
1303	CV-502 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Lecture Hall-1 D336-1
1304	CV-503 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Lecture Hall-1 D336-1
1305	CV-504 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Lecture Hall-1 D336-1
1306	CV-505 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT090.1
1307	CV-506 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT090.3
1308	CV-507 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Nurse's Toilet 068.1
1309	CV-508 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT067
1310	CV-509 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT066
1311	CV-510 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT065
1312	CV-511 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT064
1313	CV-512 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT063
1314	CV-513 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet AT442
1315	CV-514 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT041.1
1316	CV-515 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT041.2
1317	CV-516 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT036.1
1318	CV-517 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT036.2
1319	CV-518 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT031.1
1320	CV-519 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT031.2
1321	CV-520 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet BT140
1322	CV-521 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet BT143
1323	CV-522 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet CT021
1324	CV-523 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT022
1325	CV-524 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT110.8
1326	CV-525 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT110.9
1327	CV-526 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT109.2
1328	CV-527 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT110.2
1329	CV-528 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Medical Suite Toilet CT106.6
1330	CV-529 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet CT108
1331	CV-530 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT104
1332	CV-531 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet CT101.4
1333	CV-532 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT500.5
1334	CV-533 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT500.4
1335	CV-534 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet CT504
1336	CV-535 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet CT508
1337	CV-536 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT509.66
1338	CV-537 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet CT509.64
1339	CV-538 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet DT160
1340	CV-539 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet DT155.8
1341	CV-540 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet DT155.7
1342	CV-541 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet DT155.2
1343	CV-542 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Staff Toilet DT149.2
1344	CV-543 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Toilet AT149.3
1345	CV-544 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girl's Athletic Lockers C133.5
1346	CV-545 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girl's PE Lockers C133.21, Girl's Team Room C133.2
1347	CV-546 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Athletics Office C133.3
1348	CV-547 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	PE Office C132
1349	CV-548 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Trainers Office C134
1350	CV-549 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Asst Athletic Director C105.1
1351	CV-550 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys PE Lockers C135.21, Boys Tennis Rm C135.2
1352	CV-551 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys Athletic Lockers C135.5
1353	CV-552 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Athletics Office C135.3
1354	CV-553 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Girl's Locker Room C133
1355	CV-554 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Boys Locker Room C135
1356	CV-555 Control Valve	Control Valv.	VG12A5GS+920HGA	Johnson Controls	Boiler Room A550
1357	CV-556 Control Valve	Control Valv.	VG12A5HV+920HGA	Johnson Controls	Boiler Room A550
1358	CV-557 Control Valve	Control Valv.	VG1241BL+9A4GGA	Johnson Controls	Hallway/Storage DH053.9
1359	CV-558 Control Valve	Control Valv.	VG1241BL+9A4GGA	Johnson Controls	Hallway/Storage DH053.9
1360	CV-559 Control Valve	Control Valv.	VG1241BL+9A4GGA	Johnson Controls	Metal Fabrication Shop B031.3
1361	CV-560 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	Re-Direct Office C201.1
1362	CV-561 Control Valve	Control Valv.	VG1241AD+9A4GGA	Johnson Controls	JC CJ428
1363	CV-562A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1364	CV-563A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1365	CV-564A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1366	CV-565A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1367	CV-566A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1368	CV-567A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1369	CV-568A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1370	CV-569A Control Valve	Control Valv.	Z2050Q-F+CQB24-SR-L	Belimo	Auditorium
1371	SA-1S Duct Sound Attenutator	DUCT SA	RL56/XB	Price Industries	AHU-1 Supply
1372	SA-1R Duct Sound Attenutator	DUCT SA	ERM56/XB	Price Industries	AHU-1 Return
1373	SA-2S Duct Sound Attenutator	DUCT SA	ERM58/5A	Price Industries	AHU-2 Supply
1374	SA-2R Duct Sound Attenutator	DUCT SA	ERM58/5A	Price Industries	AHU-2 Return
1375	SA-3S Duct Sound Attenutator	DUCT SA	ERM56/XB	Price Industries	AHU-3 Supply
1376	SA-3R Duct Sound Attenutator	DUCT SA	ERM56/XB	Price Industries	AHU-3 Return

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
1377	SA-4S Duct Sound Attenutator	DUCT SA	ERM48/VD	Price Industries	AHU-4 Supply
1378	SA-4R Duct Sound Attenutator	DUCT SA	ERM60/YC	Price Industries	AHU-4 Return
1379	SA-5S Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	AHU-5 Supply
1380	SA-5R Duct Sound Attenutator	DUCT SA	ERM64/ZA	Price Industries	AHU-5 Return
1381	SA-6S Duct Sound Attenutator	DUCT SA	ERM42/8C	Price Industries	AHU-6 Supply
1382	SA-6R Duct Sound Attenutator	DUCT SA	ERM42/8C	Price Industries	AHU-6 Return
1383	SA-7S Duct Sound Attenutator	DUCT SA	ERM36/4B	Price Industries	AHU-7 Supply
1384	SA-7R Duct Sound Attenutator	DUCT SA	ERM36/4B	Price Industries	AHU-7 Return
1385	SA-8S Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	AHU-8 Supply
1386	SA-8R Duct Sound Attenutator	DUCT SA	ERM52/WB	Price Industries	AHU-8 Return
1387	SA-9S Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	AHU-9 Supply
1388	SA-9R Duct Sound Attenutator	DUCT SA	ERM52/WB	Price Industries	AHU-9 Return
1389	SA-10S Duct Sound Attenutator	DUCT SA	ERM66/8A	Price Industries	AHU-10 Supply
1390	SA-10R Duct Sound Attenutator	DUCT SA	ERM42/8B	Price Industries	AHU-10 Return
1391	SA-11S Duct Sound Attenutator	DUCT SA	RL36/WB	Price Industries	AHU-11 Supply
1392	SA-11R Duct Sound Attenutator	DUCT SA	RL36/WB	Price Industries	AHU-11 Return
1393	SA-12S Duct Sound Attenutator	DUCT SA	ERM42/8B	Price Industries	AHU-12 Supply
1394	SA-12R Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	AHU-12 Return
1395	SA-13S Duct Sound Attenutator	DUCT SA	ERM36/XB	Price Industries	AHU-13 Supply
1396	SA-13R Duct Sound Attenutator	DUCT SA	ERM36/XB	Price Industries	AHU-13 Return
1397	SA-14S Duct Sound Attenutator	DUCT SA	ERM54/XB	Price Industries	AHU-14 Supply
1398	SA-14R Duct Sound Attenutator	DUCT SA	ERM54/XB	Price Industries	AHU-14 Return
1399	SA-15S Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	DOAS-1 Supply
1400	SA-15R Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	DOAS-1 Return
1401	SA-16S Duct Sound Attenutator	DUCT SA	RL36/WB	Price Industries	DOAS-2 Supply
1402	SA-16R Duct Sound Attenutator	DUCT SA	RL36/WB	Price Industries	DOAS-2 Return
1403	SA-17S Duct Sound Attenutator	DUCT SA	ERM44/9B	Price Industries	DOAS-3 Supply
1404	SA-17R Duct Sound Attenutator	DUCT SA	ERM44/9B	Price Industries	DOAS-3 Return
1405	SA-18S Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	DOAS-4 Supply
1406	SA-18R Duct Sound Attenutator	DUCT SA	CUSTOM	Price Industries	DOAS-4 Return
1407	SA-19S Duct Sound Attenutator	DUCT SA	ERM36/5B	Price Industries	DOAS-5 Supply
1408	SA-20S Duct Sound Attenutator	DUCT SA	ERM40/7B	Price Industries	DOAS-6 Supply
1409	SA-20R Duct Sound Attenutator	DUCT SA	ERM40/7B	Price Industries	DOAS-6 Return
1410	SA-21S Duct Sound Attenutator	DUCT SA	ERM40/6B	Price Industries	ERU-1 Supply
1411	SA-21R Duct Sound Attenutator	DUCT SA	ERM40/6B	Price Industries	ERU-1 Return
1412	SA-22S Duct Sound Attenutator	DUCT SA	ERM36/4B	Price Industries	MAU-1 Supply
1413	SA-23S Duct Sound Attenutator	DUCT SA	ERM36/2D	Price Industries	MAU-2 Supply
1414	SA-24S Duct Sound Attenutator	DUCT SA	RL36/8A	Price Industries	MAU-3 Supply
1415	SA-25S Duct Sound Attenutator	DUCT SA	ERM36/2B	Price Industries	MAU-4 Supply
1416	HV-03 HVAC Shop Teaching Equipment (Qty 2)	Teach Equip	OMF098J10B	Tempstar	HVAC SHOP B041.3
1417	HV-04 HVAC Shop Teaching Equipment (Qty 2)	Teach Equip	TZ80MSS050A30SA	Thermal Zone	HVAC SHOP B041.3
1418	HV-05 HVAC Shop Teaching Equipment (Qty 2)	Teach Equip	R92TA0851521MSA	Rheem	HVAC SHOP B041.3
1419	HV-06 HVAC Shop Teaching Equipment (Qty 2)	Teach Equip	ASU12RLF1	Fujitsu	HVAC SHOP B041.3
1420	HV-07 HVAC Shop Teaching Equipment (Qty 2)	Teach Equip	AOU12RLFW	Fujitsu	HVAC SHOP B041.3
1421	HV-08 HVAC Shop Teaching Equipment	Teach Equip	YHE18B21S	York	HVAC SHOP B041.3
1422	HV-09 HVAC Shop Teaching Equipment	Teach Equip	YHE24B21S	York	HVAC SHOP B041.3
1423	HV-10 HVAC Shop Teaching Equipment	Teach Equip	GSX139241	Goodman Mfg	HVAC SHOP B041.3
1424	HV-11 HVAC Shop Teaching Equipment	Teach Equip	GSZ140181	Goodman Mfg	HVAC SHOP B041.3
1425	PL-09 Plumbing Shop Teaching Equipt	Teach Equip	G115WS/3	Buderus	PLUMBING SHOP B041.6
1426	PL-10 Plumbing Shop Teaching Equipt	Teach Equip	Q90-100	Dunkirk	PLUMBING SHOP B041.6
1427	PL-11 Plumbing Shop Teaching Equipt	Teach Equip	K2WT-100	Burnham	PLUMBING SHOP B041.6
1428	PL-12 Plumbing Shop Teaching Equipt	Teach Equip	P-EG-40	Weil-McLain	PLUMBING SHOP B041.6
1429	Dust Collector System	Teach Equip	DT-HHF 1500	Dustpipe	Carpentry Shop B036.3
1430	Control Damper CD-01	Control Damp.	VOWSN-042X022	Johnson Controls	Exhaust Air Damper/AHU-1 - Mech Alcove C008
1431	Control Damper CD-02	Control Damp.	VOWSN-042X022	Johnson Controls	Outdoor Air Damper/AHU-1 - Mech Alcove C008
1432	Control Damper CD-03	Control Damp.	VOWSN-046X020	Johnson Controls	Exhaust Air Damper/AHU-7 - Mech Area A013
1433	Control Damper CD-04	Control Damp.	VOWSN-046X020	Johnson Controls	Outdoor Air Damper/AHU-7 - Mech Area A013
1434	Control Damper CD-05	Control Damp.	VOWSN-036X020	Johnson Controls	Exhaust Air Damper/AHU-11 - Mech Alcove C008
1435	Control Damper CD-06	Control Damp.	VOWSN-036X020	Johnson Controls	Outdoor Air Damper/AHU-11 - Mech Alcove C008
1436	Control Damper CD-07	Control Damp.	VOWSN-056X020	Johnson Controls	Exhaust Air Damper/AHU-13 - Mech Area A013
1437	Control Damper CD-08	Control Damp.	VOWSN-056X020	Johnson Controls	Outdoor Air Damper/AHU-13 - Mech Area A013
1438	Control Damper CD-09	Control Damp.	VOWSN-036X020	Johnson Controls	Exhaust Air Damper/AHU-14 - Mech Area A013
1439	Control Damper CD-10	Control Damp.	VOWSN-020X036	Johnson Controls	Outdoor Air Damper/AHU-14 - Mech Area A013
1440	Control Damper CD-11	Control Damp.	VPWSN-036X024	Johnson Controls	Exhaust Air Damper/DOAS-2 - Mech Area A013
1441	Control Damper CD-12	Control Damp.	VPWSN-036X024	Johnson Controls	Outdoor Air Damper/DOAS-2 - Mech Area A013
1442	Control Damper CD-13	Control Damp.	VPWSN-060X026	Johnson Controls	Exhaust Air Damper/DOAS-6 - Mech Area A013
1443	Control Damper CD-14	Control Damp.	VPWSN-060X026	Johnson Controls	Outdoor Air Damper/DOAS-6 - Mech Area A013
1444	Control Damper CD-15	Control Damp.	VPWSN-034X024	Johnson Controls	Exhaust Air Damper/ERU-1 - Mech Alcove C008
1445	Control Damper CD-16	Control Damp.	VPWSN-034X024	Johnson Controls	Outdoor Air Damper/ERU-1 - Mech Alcove C008
1446	Control Damper CD-17	Control Damp.	VPWSN-034X026	Johnson Controls	Outdoor Air Supply Isolation Damper/SF-A-01 - Mech Area A013
1447	Control Damper CD-18	Control Damp.	VPWSN-030X026	Johnson Controls	Outdoor Air Supply Isolation Damper/SF-A-02 - Mech Area A013
1448	Control Damper CD-19	Control Damp.	VPWSN-060X036	Johnson Controls	Outdoor Air Supply Isolation Damper/SF-A-03 - Boiler Rm A550
1449	Control Damper CD-20	Control Damp.	VPWSN-036X024	Johnson Controls	Outdoor Air Supply Isolation Damper/SF-C-01 - Mech Alcove C008
1450	Control Damper CD-21	Control Damp.	VPWSN-032X026	Johnson Controls	Exhaust Air Isolation Damper/EF-A-03
1451	Control Damper CD-22	Control Damp.	VPWSN-012X012	Johnson Controls	Exhaust Air Isolation Damper/EF-A-04
1452	Control Damper CD-23	Control Damp.	VPWSN-014X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-05
1453	Control Damper CD-24	Control Damp.	VPWSN-014X012	Johnson Controls	Exhaust Air Isolation Damper/EF-A-06
1454	Control Damper CD-25	Control Damp.	VPWSN-016X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-07
1455	Control Damper CD-26	Control Damp.	VPWSN-008X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-08
1456	Control Damper CD-27	Control Damp.	VPWSN-020X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-09
1457	Control Damper CD-28	Control Damp.	VPWSN-018X014	Johnson Controls	Exhaust Air Isolation Damper/EF-A-10
1458	Control Damper CD-29	Control Damp.	VPWSN-014X014	Johnson Controls	Exhaust Air Isolation Damper/EF-A-11
1459	Control Damper CD-30	Control Damp.	VPWSN-014X014	Johnson Controls	Exhaust Air Isolation Damper/EF-A-12
1460	Control Damper CD-31	Control Damp.	VPWSN-010X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-14
1461	Control Damper CD-32	Control Damp.	VPWSN-008X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-15
1462	Control Damper CD-33	Control Damp.	VPWSN-014X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-16
1463	Control Damper CD-34	Control Damp.	VPWSN-020X012	Johnson Controls	Exhaust Air Isolation Damper/EF-A-19
1464	Control Damper CD-35	Control Damp.	VPWSN-012X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-20
1465	Control Damper CD-36	Control Damp.	VPWSN-034X026	Johnson Controls	Exhaust Air Isolation Damper/EF-A-21
1466	Control Damper CD-37	Control Damp.	VPSSN-014X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-22
1467	Control Damper CD-38	Control Damp.	VPWSN-008X008	Johnson Controls	Exhaust Air Isolation Damper/EF-A-23
1468	Control Damper CD-39	Control Damp.	VPWSN-016X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-24
1469	Control Damper CD-40	Control Damp.	VPWSN-016X010	Johnson Controls	Exhaust Air Isolation Damper/EF-A-25
1470	Control Damper CD-41	Control Damp.	VPWSN-012X012	Johnson Controls	Exhaust Air Isolation Damper/EF-A-27
1471	Control Damper CD-42	Control Damp.	VPWSN-060X036	Johnson Controls	Exhaust Air Isolation Damper/EF-A-28
1472	Control Damper CD-43	Control Damp.	VPWSN-014X014	Johnson Controls	Exhaust Air Isolation Damper/EF-A-29
1473	Control Damper CD-44	Control Damp.	VPWSN-022X014	Johnson Controls	Exhaust Air Isolation Damper/EF-B-01
1474	Control Damper CD-45	Control Damp.	VPWSN-006X006	Johnson Controls	Exhaust Air Isolation Damper/EF-B-02
1475	Control Damper CD-46	Control Damp.	VPWSN-036X024	Johnson Controls	Exhaust Air Isolation Damper/EF-C-01
1476	Control Damper CD-47	Control Damp.	VPWSN-010X010	Johnson Controls	Exhaust Air Isolation Damper/EF-C-02
1477	Control Damper CD-48	Control Damp.	VPWSN-012X012	Johnson Controls	Exhaust Air Isolation Damper/EF-C-03
1478	Control Damper CD-49	Control Damp.	VPWSN-010X008	Johnson Controls	Exhaust Air Isolation Damper/EF-C-05
1479	Control Damper CD-50	Control Damp.	VPWSN-014X014	Johnson Controls	Exhaust Air Isolation Damper/EF-C-06
1480	Control Damper CD-51	Control Damp.	VPWSN-010X008	Johnson Controls	Exhaust Air Isolation Damper/EF-C-07
1481	Control Damper CD-52	Control Damp.	VPWSN-010X008	Johnson Controls	Exhaust Air Isolation Damper/EF-C-09
1482	Control Damper CD-53	Control Damp.	VPWSN-014X014	Johnson Controls	Exhaust Air Isolation Damper/EF-C-10
1483	Control Damper CD-54	Control Damp.	VPWSN-012X012	Johnson Controls	Exhaust Air Isolation Damper/EF-C-11
1484	Control Damper CD-55	Control Damp.	VPWSN-012X010	Johnson Controls	Exhaust Air Isolation Damper/EF-C-12
1485	Control Damper CD-56	Control Damp.	VPWSN-014X012	Johnson Controls	Exhaust Air Isolation Damper/EF-C-13
1486	Control Damper CD-57	Control Damp.	VPWSN-010X010	Johnson Controls	Exhaust Air Isolation Damper/EF-C-14
1487	Control Damper CD-58	Control Damp.	VPWSN-024X022	Johnson Controls	Exhaust Air Isolation Damper/EF-C-15
1488	Control Damper CD-59	Control Damp.	VPWSN-012X012	Johnson Controls	Exhaust Air Isolation Damper/EF-C-16
1489	Control Damper CD-60	Control Damp.	VPWSN-010X010	Johnson Controls	Exhaust Air Isolation Damper/EF-C-17
1490	Control Damper CD-61	Control Damp.	VPWSN-012X010	Johnson Controls	Exhaust Air Isolation Damper/EF-D-02
1491	Control Damper CD-62	Control Damp.	VPWSN-028X028	Johnson Controls	Stairwell Pressurization Outdoor Air Supply/SPF-1 - Stairwell STC-2

Line	Equip. Tag	Type	Model Number	Manufacturer	Location/Service
1492	Control Damper CD-63	Control Damp.	VPWSN-038X020	Johnson Controls	Stairwell Pressurization Outdoor Air Supply/SPF-2 - Stairwell STA-2
1493	Control Damper CD-64	Control Damp.	VPWSN-030X026	Johnson Controls	Stairwell Pressurization Outdoor Air Supply/SPF-3 - Stairwell STB-2
1494	Control Damper CD-65	Control Damp.	VPWSN-028X028	Johnson Controls	Stairwell Pressurization Outdoor Air Supply/SPF-4 - Stairwell STC-1

Somerville High School
Filter Schedule with Locations

Equip. Tag	Location	Service	Required Set	Filter Size(s)	Filter Type
AHU-1	Administration - C - Lower Level Part C	Outside Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-1	Administration - C - Lower Level Part C	Supply Air Filters	1	(8) 20"x20"x4"	MERV10 Pleated
AHU-1	Administration - C - Lower Level Part C	Return Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-2	Upper Dining Commons - C - Field House Roof Part B	Outside Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-2	Upper Dining Commons - C - Field House Roof Part B	Supply Air Filters	1	(2) 20"x20"x4"; (9) 24"x20"x4"; (4) 24"x24"x4"	MERV13 Pleated
AHU-2	Upper Dining Commons - C - Field House Roof Part B	Return Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-3	Auditorium - D - Roof Part D	Outside Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-3	Auditorium - D - Roof Part D	Supply Air Filters	1	(6) 20"x20"x4"; (2) 24"x24"x4";(7) 20"x24"x4"	MERV13 Pleated
AHU-3	Auditorium - D - Roof Part D	Return Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-4	Stage - D - Roof Part A	Outside Air Pre-Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-4	Stage - D - Roof Part A	Outside Air Filters	1	(8) 20"x20"x4"	MERV13 Pleated
AHU-4	Stage - D - Roof Part A	Supply Air Pre-Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-4	Stage - D - Roof Part A	Supply Air Filters	1	(8) 20"x20"x4"	MERV13 Pleated
AHU-4	Stage - D - Roof Part A	Return Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-5	Media Center - B - Roof Part B	Outside Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-5	Media Center - B - Roof Part B	Supply Air Filters	1	(4) 24"x20"x4";(4) 20"x20"x4"	MERV13 Pleated
AHU-5	Media Center - B - Roof Part B	Return Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-6	Lecture Hall - A - Roof Part A	Outside Air Filters	1	(6) 24"x20"x2"	MERV10 Pleated
AHU-6	Lecture Hall - A - Roof Part A	Supply Air Filters	1	(6) 24"x20"x4"	MERV13 Pleated
AHU-6	Lecture Hall - A - Roof Part A	Return Air Filters	1	(6) 24"x20"x2"	MERV10 Pleated
AHU-7	Lower Dining Commons - B	Outside Air Filters	1	(6) 20"x20"x2"	MERV10 Pleated
AHU-7	Lower Dining Commons - B	Supply Air Filters	1	(6) 20"x20"x4"	MERV13 Pleated
AHU-7	Lower Dining Commons - B	Return Air Filters	1	(6) 20"x20"x2"	MERV10 Pleated
AHU-8	Gym - B - Field House Roof Part B	Outside Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-8	Gym - B - Field House Roof Part B	Supply Air Filters	1	(9) 24"x20"x4"; (4) 24"x24"x4"; (2) 20"x20"x4"	MERV13 Pleated
AHU-8	Gym - B - Field House Roof Part B	Return Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-9	Gym - B - Field House Roof Part B	Outside Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-9	Gym - B - Field House Roof Part B	Supply Air Filters	1	(9) 24"x20"x4"; (4) 24"x24"x4"; (2) 20"x20"x4"	MERV13 Pleated
AHU-9	Gym - B - Field House Roof Part B	Return Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-10	Core Areas - C - Roof Part C	Outside Air Filters	1	(8) 24"x24"x2"	MERV10 Pleated
AHU-10	Core Areas - C - Roof Part C	Supply Air Filters	1	(8) 24"x24"x4"	MERV13 Pleated
AHU-10	Core Areas - C - Roof Part C	Return Air Filters	1	(8) 24"x24"x2"	MERV10 Pleated
AHU-11	Early Education - C- Lower Level Part C	Outside Air Filters	1	(8) 20"x16"x2"	MERV10 Pleated
AHU-11	Early Education - C- Lower Level Part C	Supply Air Filters	1	(6) 20"x16"x4"	MERV13 Pleated
AHU-11	Early Education - C - Lower Level Part C	Return Air Filters	1	(6) 20"x16"x2"	MERV10 Pleated
AHU-12	Music, Core Areas - A- Roof Part A	Outside Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-12	Music, Core Areas - A- Roof Part A	Supply Air Filters	1	(10) 20"x20"x4"; (5) 20"x24"x4"	MERV13 Pleated
AHU-12	Music, Core Areas - A - Roof Part A	Return Air Filters	1	(15) 20"x20"x2"	MERV10 Pleated
AHU-13	Next Wave Full Circle - A - Sublevel Part A	Outside Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-13	Next Wave Full Circle - A - Sublevel Part A	Supply Air Filters	1	(4) 20"x20"x4"; (4) 20"x24"x4"	MERV13 Pleated
AHU-13	Next Wave Full Circle - A - Sublevel Part A	Return Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
AHU-14	Fitness, Multi-Purpose - B - Sublevel Part A	Outside Air Filters	1	(6) 20"x16"x2"	MERV10 Pleated
AHU-14	Fitness, Multi-Purpose - B - Sublevel Part A	Supply Air Filters	1	(6) 20"x16"x4"	MERV13 Pleated
AHU-14	Fitness, Multi-Purpose - B - Sublevel Part A	Return Air Filters	1	(6) 20"x16"x2"	MERV10 Pleated
DOAS-1	Science - C- Roof Part C	Outside Air Filters	1	(12) 24"x20"x2"; (3) 20"x20"x2"	MERV10 Pleated
DOAS-1	Science - C- Roof Part C	Supply Air Filters	1	(12) 24"x20"x4"; (3) 20"x20"x4"	MERV13 Pleated
DOAS-1	Science - C- Roof Part C	Return Air Filters	1	(12) 24"x20"x2"; (3) 20"x20"x2"	MERV10 Pleated
DOAS-2	Cosmetology/Broadcast - D - Sublevel Part A	Outside Air Filters	1	(6) 20"x20"x2"	MERV10 Pleated
DOAS-2	Cosmetology/Broadcast - D - Sublevel Part A	Supply Air Filters	1	(6) 20"x20"x4"	MERV13 Pleated
DOAS-2	Cosmetology/Broadcast - D - Sublevel Part A	Return Air Filters	1	(6) 20"x20"x2"	MERV10 Pleated
DOAS-3	Classrooms - C - Roof Part C	Outside Air Filters	1	(8) 24"x20"x2"; (4) 24"x12"x2"	MERV10 Pleated
DOAS-3	Classrooms - C - Roof Part C	Supply Air Filters	1	(8) 24"x20"x4"; (4) 24"x12"x4"	MERV13 Pleated
DOAS-3	Classrooms - C - Roof Part C	Return Air Filters	1	(8) 24"x20"x2"; (4) 24"x12"x2"	MERV10 Pleated
DOAS-4	Classrooms - A - Roof Part A	Outside Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
DOAS-4	Classrooms - A - Roof Part A	Supply Air Filters	1	(8) 20"x20"x4"	MERV13 Pleated
DOAS-4	Classrooms - A - Roof Part A	Return Air Filters	1	(8) 20"x20"x2"	MERV10 Pleated
DOAS-5	Culinary Arts - A - Roof Part A	Outside Air Pre-Filters	1	(8) 20"x20"x2"	MERV10 Pleated
DOAS-5	Culinary Arts - A - Roof Part A	Outside Air Filters	1	(8) 20"x20"x4"	MERV13 Pleated
DOAS-5	Culinary Arts - A - Roof Part A	Supply Air Pre-Filters	1	(8) 20"x20"x2"	MERV10 Pleated
DOAS-5	Culinary Arts - A - Roof Part A	Supply Air Filters	1	(8) 20"x20"x4"	MERV13 Pleated
DOAS-6	Shops - B - Sublevel Part A	Outside Air Filters	1	(9) 24"x20"x2"; (3) 20"x20"x2"	MERV10 Pleated
DOAS-6	Shops - B - Sublevel Part A	Supply Air Filters	1	(9) 24"x20"x4"; (3) 20"x20"x4"	MERV13 Pleated
DOAS-6	Shops - B - Sublevel Part A	Return Air Filters	1	(9) 24"x20"x2"; (3) 20"x20"x2"	MERV10 Pleated
ERU-1	Locker Rooms/Lower Level C	Outside Air Filters	1	(3) 24"x24"x2"; (3) 24"x12"x2"	MERV10 Pleated
ERU-1	Locker Rooms/Lower Level C	Supply Air Filters	1	(3) 24"x24"x4"; (3) 24"x12"x4"	MERV13 Pleated
ERU-1	Locker Rooms/Lower Level C	Return Air Filters	1	(3) 24"x24"x2"; (3) 24"x12"x2"	MERV10 Pleated
MAU-1	Main Kitchen (D149.1) Hoods - Roof Part A	Outside Air Pre-Filters	1	(16) 20"x25"x2"	MERV10 Pleated
MAU-1	Main Kitchen (D149.1) Hoods - Roof Part A	Outside Air Filters	1	(16) 20"x25"x2"	MERV13 Pleated
MAU-1	Main Kitchen (D149.1) Hoods - Roof Part A	Weatherhood	1	(6) 20"x25"x2"	Washable Aluminum Mesh
MAU-2	Culinary Arts (A235) Hood - Roof Part A	Outside Air Pre-Filters	1	(8) 16"x20"x2"	MERV10 Pleated
MAU-2	Culinary Arts (A235) Hood - Roof Part A	Outside Air Filters	1	(8) 16"x20"x2"	MERV13 Pleated
MAU-2	Culinary Arts (A235) Hood - Roof Part A	Weatherhood	1	(4) 16"x20"x4"	Washable Aluminum Mesh
MAU-3	Culinary Arts Kitchen (A234) Hood - Roof Part A	Outside Air Pre-Filters	1	(16) 20"x25"x2"	MERV10 Pleated
MAU-3	Culinary Arts Kitchen (A234) Hood - Roof Part A	Outside Air Filters	1	(16) 20"x25"x2"	MERV13 Pleated
MAU-3	Culinary Arts Kitchen (A234) Hood - Roof Part A	Weatherhood	1	(6) 20"x25"x2"	Washable Aluminum Mesh
MAU-4	Culinary Arts Kitchen Bakery (A234) Hood - Roof Part A	Outside Air Pre-Filters	1	(8) 16"x20"x2"	MERV10 Pleated
MAU-4	Culinary Arts Kitchen Bakery (A234) Hood - Roof Part A	Outside Air Filters	1	(8) 16"x20"x2"	MERV13 Pleated
MAU-4	Culinary Arts Kitchen Bakery (A234) Hood - Roof Part A	Weatherhood	1	(4) 16"x20"x2"	Washable Aluminum Mesh
FPB-A-0-01	NWFC Conference A051	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-02	NWFC Rec & Workstation AH031-1	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-03	FC Classroom A030	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-04	FC Science A079	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-05	FC Classroom A052	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-06	FC Classroom A053	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-07	NWFC Commons A050	FPB Return Air	1	17-7/8" x 19-7/8" x 1"	MERV 8 Pleated
FPB-A-0-08	NWFC Director Office A078	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-09	FC Classroom A054	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-10	FC Classroom A055	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-11	FC Classroom A073	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-12	NWFC Student Shop A071	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-13	NWFC Teacher Planning A072	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-14	NWFC Time Out Rm A056	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-15	Asst Principal Office A070	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-16	Hallway AH034	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-17	NW Classroom A061	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-18	FC Crisis Counselor Office A062	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-19	NW Classroom A057	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated

Somerville High School
Filter Schedule with Locations

Equip. Tag	Location	Service	Required Set	Filter Size(s)	Filter Type
FPB-A-0-20	NW Classroom A056	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-21	NW Crisis Counselor Office A059	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-22	NW Classroom A060	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-23	CTE Director's Office B040.1	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-A-0-24	Hallway AH037	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-25	Hallway DH038	FPB Return Air	1	17-7/8" x 19-7/8" x 1"	MERV 8 Pleated
FPB-A-0-26	Hallway/Storage DH053.9	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-27	Auto Technology Shop A090	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-28	Auto Technology Shop A090	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-29	Auto Technology CR A090.4	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-30	Plumbing Shop B041.0	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-31	Office A090.6	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-32	Lockers A090.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-0-33	NW Commons AH036	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-1-01	Fitness Room A138	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-1-02	Fitness Room A138	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-1-03	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-1-04	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-1-05	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-01	Practice A233.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-02	Hallway AH235	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-03	Hallway AH233	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-04	Practice A231.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-05	Music Office A231.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-06	Multi-Purpose Dance Studio -1 A139-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-2-07	Multi-Purpose Dance Studio -1 A139-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-01	Language Lab A339	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-02	Classroom-General A340	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-03	Classroom-General A341	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-04	Small Group A338	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-05	Chorus A233	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-06	Classroom-General A345	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-07	Classroom-General A346	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-08	Small Group Seminar AH336	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-09	Hallway AH303	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-10	Ship Medically Frag. Student Classroom A334	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-11	Dept Head Office A335-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-12	Chorus A233	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-13	Orchestra A232	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-14	Orchestra A232	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-15	Hallway AH332	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-16	Book Storage Rm A333	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-17	Band A231	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-18	Band A231	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-19	Hallway AH331	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-20	Classroom-General A332	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-21	Classroom-General A331	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-3-22	Adj Counselor Office A350	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-01	Art Classroom A439	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-02	Art Classroom A439	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-03	Classroom-General A440	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-04	Classroom-General A441	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-05	Art Classroom A438	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-06	Art Classroom A438	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-07	Photo Dark Room A438.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-08	Classroom-General A445	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-09	Classroom-General A446	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-10	Small Group Seminar AH435	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-11	Drafting A436	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-12	Drafting A436	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-13	Hallway AH432	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-14	Classroom-General A434-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-15	Art Classroom A437	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-16	Art Office A435	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-17	Art Classroom A437	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-18	Classroom-General A433	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-19	Hallway AH431	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-20	Classroom-General A432	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-21	Classroom-General A431	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-A-4-22	Hallway AH434	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-01	PLBG./HVAC Office B041.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-02	Plumbing/HVAC CR B039	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-03	Hallway BH004	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-04	Tech Career Resource Center B038	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-05	HVAC Shop-1 B041.3-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-06	Classroom-General B037	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-07	Carpentry CR B034	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-08	Classroom-General B035	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-09	Carpentry Shop B036.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-10	FAB Lab B032	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-11	Machine Tool Technology Shop B033	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-12	MF/MT Office B031.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-13	Metal Fabrication Shop B031.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-14	Metal Fab CR B030	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-15	Hallway BH002	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-16	Hallway CH002	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-17	Robotic Arm Rm C009.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-19	Carpentry Office B036.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-20	Simulation Rm B033.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-0-21	Hallway BH003	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-01	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-02	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-03	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-04	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-05	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-06	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-1-07	Dining Commons AH132	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated

Somerville High School
Filter Schedule with Locations

Equip. Tag	Location	Service	Required Set	Filter Size(s)	Filter Type
FPB-B-2-01	Dining Overlook West BH232	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-2-02	Hallway BH200/Dining Commons Stairwell	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-2-03	CTE Conference Rm B241	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-2-04	Dining Overlook East BH230	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-B-2-05	Hallway BH200	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-0-01	Storage C-001	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-01	Conference Rm C101.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-02	Principal's Office C101.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-03	Principal's Secretary/Waiting C101	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-04	Copy/Mail Rm C101.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-05	Testing C104.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-06	Hallway CH101	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-07	Registrar's Office C101.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-08	Welcome Center C104	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-09	ELL Liasson Work Room C104.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-10	Conference Rm C104.6	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-11	Nurse's Office & Waiting Rm C106	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-12	Interview Rm C106.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-13	Examination Rm/Resting C106.8	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-14	Triage Rm C106.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-15	Multi-Purpose C111.10	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-16	Nurse C111.8	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-17	Consult C111.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-18	Athletic Director's Office C102	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-19	Health/Wellness Supervisor Office C103	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-20	Tech Help Desk C107	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-21	Work Rm C107.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-22	Tech Office 107.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-23	Mediation Office C109.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-24	Med Safety Zone C111.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-25	Mediation Room C109.4	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-26	Early Education & Care C110.5	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-27	Day Care C110.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-1-28	Hallway CH101	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-01	Therapeutic CR C224	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-02	Small Group C225	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-03	Hallway CH202	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-04	Business Computer Lab C225	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-05	Classroom-General C222	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-06	Classroom-ESL C220	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-07	Classroom-General C221	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-08	Classroom-General C218	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-09	Classroom-General C217	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-10	Hallway CH205	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-11	ASD Classroom C216	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-12	PT/OTSensory C214	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-13	Speech Therapy Office C213	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-14	Quiet Rm C212.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-15	ASD Classroom C212	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-16	Physics Lab C210	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-17	Conference Rm C211.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-18	HM2 Reception C211	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-19	House Master's Office C211.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-20	Teacher's Breakout C209.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-21	Det Head Office C209.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-22	Teacher Planning C209	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-23	Hallway CH203	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-24	SPED Office Adjustment Counselor C206	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-25	Hallway CH201	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-26	Prep Rm C204.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-27	Physics Lab-1 C204.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-28	Prep Rm C202.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-29	Hallway CH202	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-30	Physics Lab C202	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-2-31	Re-Direct Classroom C201	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-01	Resource Room C332	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-02	SPED Work Room C323	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-03	Classroom-General C319	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-04	Classroom-General C321	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-05	Classroom-General C320	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-06	Classroom-General C313	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-07	Classroom-General C316	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-08	Classroom-General C315	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-09	Hallway CH305	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-10	Classroom-General C314	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-11	SPED Office Dept Head C313	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-12	Small Group C312	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-13	Classroom-ESL C311	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-14	Biology Lab C309	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-15	Conference Rm 310	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-16	HM3 Reception C310	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-17	House Master's Office C310.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-18	Teacher Break-Out C308.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-19	Dept Head Office C308.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-20	Teacher Planning C308	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-21	Hallway CH303	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-22	Prep Room C305-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-23	Hallway CH302-1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-24	Resource Room C306	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-25	Biology Lab C305	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-26	Prep Room C303.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-27	Hallway 2 CH302.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-28	SEI Science C303	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-29	Media Center Maker Space B301	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-30	Counseling Career Center C302.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-31	Counselor's Office C302.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-32	Media Center Office B300.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated

Somerville High School
Filter Schedule with Locations

Equip. Tag	Location	Service	Required Set	Filter Size(s)	Filter Type
FPB-C-3-33	Counseling Conf Rm C302.4	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-34	Study B300.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-35	Study B300.4	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-36	Large Group Instruction C205	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-3-37	Large Group Instruction C205	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-01	Study Skills CR C423	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-02	Resource Rm C424	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-03	Hallway CH405	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-04	Classroom-General C421	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-05	Classroom-General C422	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-06	Classroom-General C420	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-07	Classroom-General C419	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-08	Classroom-General C417	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-09	Classroom-General C416	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-10	Hallway CH404	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-11	Classroom-General C415	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-12	Bus. Mngr. Office C414	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-13	Small Group C413	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-14	Classroom-ESL C412	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-15	Chemistry Lab C410	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-16	Conference Rm C411.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-17	NM4 Receptrion C411	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-18	House Master's Office C411.2	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-19	Teacher Break-Out C409.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-20	Dept Head Office C409.3	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-21	Teacher Planning C409	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-22	Hallway CH402	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-23	Prep Room C410.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-24	Resource Rm C406	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-25	Classroom-General C405	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-26	Chemistry Lab C404	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-27	Small Group Seminar CH401	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-28	Prep Rm C401.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-29	Chemistry Lab C401	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-30	Visual Communication Studio C400.1	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-31	Gallery C400	FPB Return Air	1	15-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-4-32	Graphic Design Studio C400.4	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-01	Health Assisting Lab-1 C507.1	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-02	Pharmacy Lab C507.2	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-03	Student Services Office C520	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-04	In-School Suspension Room C519	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-05	Classroom-General C518	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-06	Classroom-General C517	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-07	X-Ray C509.5	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-08	Classroom-General C516	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-09	Classroom-General C515	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-10	Hallway CH503	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-11	Classroom-General C514	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-12	Teacher Planning C513	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-13	HMI Reception C512	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-14	Biology Lab C511	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-15	Dental Assisting Lan C509.2	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-16	Hallway CH501	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-17	Dental Assist CR C509	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-18	Prep Room C511.1	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-19	Health Assist CR507.1	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-20	Office 509.4	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-21	Biology Lab C506	FPB Return Air	1	17-7/8" x 19-7/8" x 1"	MERV 8 Pleated
FPB-C-5-22	Prep Rm C503.3	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-23	Office B500.1	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-24	SPED Office - Adjustment Counselor B502	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-25	Hallway CH504	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-26	Biology Lab C503	FPB Return Air	1	17-7/8" x 19-7/8" x 1"	MERV 8 Pleated
FPB-C-5-27	Classroom-General C501	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-28	Electrical Shop B500	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-29	Electrical Shop B500	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-C-5-30	Conference Rm C512.1	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-31	House Master's Office C512.3	FPB Return Air	1	9" x 15-1/4" x 1"	MERV 8 Pleated
FPB-C-5-32	Electrical CR C500.7	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
FPB-D-2-01	Lobby DH214	FPB Return Air	1	17-7/8" x 17-7/8" x 1"	MERV 8 Pleated
CUH-1	Culinary Arts Kitchen A234	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Culinary Arts Kitchen A234	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls AT347	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys AT344	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Hallway AH332	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls AT447	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys AT444	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls BT141-1	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys CT024	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls CT227	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys CT226	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls CT325	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Entrance A334	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys BT142	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls CT023	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys CT324	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Men's C425	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Women's C426	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Locker Vestibule C500.3	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Girls CT522	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-1	Boys CT521	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Lower Level, A Stairwell - East	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STA2-1	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STA1-2	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STA-3	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STA1-4	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STA2-4	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter

Somerville High School
Filter Schedule with Locations

Equip. Tag	Location	Service	Required Set	Filter Size(s)	Filter Type
CUH-2	Outside Boiler Rm A550 - Top of Stairwell	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STB2-0	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stairwell-North (Outside Welding Manifold Rm C028)	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Hallway CH002	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STC1-1	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Lower Level, C Stairwell (East)	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Vestibule CV1-28	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Stair STB2-2	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	STC1-3	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	3rd Level, C Stairwell (East)	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Vestibule DV1-6?	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Vestibule DV2-6	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Vestibule DV2-6	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	5th Level, C Stairwell (East)	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Vestibule DV1-5	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-2	Elevator Lobby Elev-2	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-3	Vestibule BV1-1.1	HW CUH Return Air	1	69-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-3	Vestibule BV1-1.1	HW CUH Return Air	1	69-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Stairs STA2-S	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Vestibule AV0-16	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-6	Vestibule BV1-1	HW CUH Return Air	1	69-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-6	Vestibule BV1-1	HW CUH Return Air	1	69-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Lower Level, A Stairwell - West	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Stair STB2-5	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Lobby D240	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
CUH-5	Lobby D240	HW CUH Return Air	1	50-3/4" x 8-11/16" x 15/32"	Washable Fabric Filter
FFD-1	Ship Medically Frag. Student Classroom A334	Fan Filter Diffusers	1	24"x48"	Price BTR Filter
FFD-2	Ship Medically Frag. Student Classroom A334	Fan Filter Diffusers	1	24"x48"	Price BTR Filter
FFD-3	Ship Medically Frag. Student Classroom A334	Fan Filter Diffusers	1	24"x48"	Price BTR Filter
ACD-A-0-01	Hallway/Storage DH053.9	HW Air Curtian	2	40-7/8"(L)x7-5/8"(H)	Washable Aluminum Mesh
ACD-A-0-02	Hallway/Storage DH053.9	HW Air Curtain	2	34-3/8"(L)x11-1/2"(H)	Washable Aluminum Mesh
ACD-B-0-01	Metal Fabrication Shop B031.3	HW Air Curtain	2	46-1/4"(L) x15-1/8" (H)	Washable Aluminum Mesh
EF-A-01	Main Kitchen (D149.1) Hoods (Rooftop A Fan)	CUBE-360XP-50 Grease Trap Filter	1	Greenheck #476084	Grease Absorber
EF-A-02	Main Kitchen (D149.1) Hoods (Rooftop A Fan)	CUBE-360XP-50 Grease Trap Filter	1	Greenheck #476084	Grease Absorber
EF-A-17	Culinary Arts Bakery Hood A234 (Rooftop A Fan)	CUBE-300XP-30 Grease Trap Filter	1	Greenheck #476084	Grease Absorber
EF-A-18	Culinary Roll-in Over A234 (Rooftop A Fan)	CUBE-161XP-7 Grease Trap Filter	1	Greenheck #476084	Grease Absorber
EF-A-26	Culinary Arts Classroom A235 (Rooftop A Fan)	CUBE-240XP-20 Grease Trap Filter	1	Greenheck #476084	Grease Absorber
B-1	Mechanical Room A550 - Boiler 1	FBN5001 Combustion Air Filter	1	30"x32"x1"	MERV6 Filter
B-2	Mechanical Room A550 - Boiler 2	FBN5001 Combustion Air Filter	1	30"x32"x1"	MERV6 Filter
B-3	Mechanical Room A550 - Boiler 3	FBN5001 Combustion Air Filter	1	30"x32"x1"	MERV6 Filter
B-4	Mechanical Room A550 - Boiler 4	FBN5001 Combustion Air Filter	1	30"x32"x1"	MERV6 Filter
ACU-A-0-01	Custodial A097	Ducted Unit Filter Box	1	(2) 14"x20"x2"; (1) 14"x14"x2"	MERV13 Pleated
ACU-A-0-04	Elevator Machine Room A091	Ducted Unit Filter Box	1	(2) 14"x20"x2"; (1) 14"x14"x2"	MERV13 Pleated
ACU-C-0-01	Elevator Machine Room C021	Ducted Unit Filter Box	1	(2) 14"x20"x2"; (1) 14"x14"x2"	MERV13 Pleated
ACU-D-1-20	Broadcast Studio D157	Ducted Unit Filter Box	1	(2) 24"x24"x4"	MERV13 Pleated
ACU-D-2-01	Auditorium Lobby D240	Ducted Unit Filter Box	1	(2) 24"x24"x4"	MERV13 Pleated

Appendix C:

HEAT PUMP SCHEDULE - INDOOR UNITS

SYMBOL	SERVICE	TYPE	SUPPLY FAN			TOTAL COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	ELECTRICAL					MANUFACTURER & MODEL #	ASSOCIATED BCC / ACCU
			SUPPLY CFM	MIN. OA CFM	E.S.P.			MCA	MOP	V	PH	HZ		
DHP-1	COMMUNITY ROOM	DUCTED	1,450	225	0.6	60	54	3.41	15	208	1	60	MITSUBISHI PEFY-P54NMAU-E3	ACCU-2
DHP-2	ENTRANCE LOBBY	DUCTED	1,450	200	0.6	54	48	3.41	15	208	1	60	MITSUBISHI PEFY-P48NMAU-E3	ACCU-2
DHP-3	MAKERS SPACE	DUCTED	880	230	0.6	27	24	2.73	15	208	1	60	MITSUBISHI PEFY-P24NMAU-E3	BCC-1 / ACCU-1
DHP-4	CHILDREN'S ROOM	DUCTED	2,048	425	0.64	80	72	6.18	15	208	1	60	MITSUBISHI PEFY-P72NMHSU-E	BCC-1 / ACCU-1
FHP-1	MEETING ROOM	FLOOR MOUNTED, CUSTOM CABINET	229	40	-	6.7	6	.34	15	208	1	60	MITSUBISHI PFFY-P06NRMU-E	BCC-1 / ACCU-1
FHP-2	STACKS	FLOOR MOUNTED, CUSTOM CABINET	388	115	-	17	15	.44	15	208	1	60	MITSUBISHI PFFY-P15NRMU-E	BCC-1 / ACCU-1
FHP-3	STACKS	FLOOR MOUNTED, CUSTOM CABINET	388	115	-	17	15	.44	15	208	1	60	MITSUBISHI PFFY-P15NRMU-E	BCC-1 / ACCU-1
FHP-4	READING ROOM	FLOOR MOUNTED, CUSTOM CABINET	494	85	-	27	24	.64	15	208	1	60	MITSUBISHI PFFY-P24NRMU-E	BCC-1 / ACCU-1
FHP-5	ENTRY HALL	FLOOR MOUNTED, CUSTOM CABINET	317	75	-	13.5	12	.38	15	208	1	60	MITSUBISHI PFFY-P12NRMU-E	BCC-1 / ACCU-1
FHP-6	READING ROOM	FLOOR MOUNTED, CUSTOM CABINET	494	85	-	27	24	.64	15	208	1	60	MITSUBISHI PFFY-P24NRMU-E	BCC-1 / ACCU-1
FHP-7	REAR READING ROOM	FLOOR MOUNTED, CUSTOM CABINET	494	70	-	13.5	12	.38	15	208	1	60	MITSUBISHI PFFY-P12NRMU-E	BCC-1 / ACCU-1
FHP-8	REAR READING ROOM	FLOOR MOUNTED, CUSTOM CABINET	494	70	-	13.5	12	.38	15	208	1	60	MITSUBISHI PFFY-P12NRMU-E	BCC-1 / ACCU-1
FHP-9	REAR READING ROOM	FLOOR MOUNTED, CUSTOM CABINET	494	70	-	13.5	12	.38	15	208	1	60	MITSUBISHI PFFY-P12NRMU-E	BCC-1 / ACCU-1
FHP-10	WORK ROOM	FLOOR MOUNTED, CUSTOM CABINET	229	40	-	6.7	6	.34	15	208	1	60	MITSUBISHI PFFY-P06NRMU-E	BCC-1 / ACCU-1
FHP-11	STAFF OFFICE	FLOOR MOUNTED, CUSTOM CABINET	229	-	-	6.7	6	.34	15	208	1	60	MITSUBISHI PFFY-P06NRMU-E	BCC-1 / ACCU-1
FHP-12	STAFF ROOM	FLOOR MOUNTED, CUSTOM CABINET	229	-	-	6.7	6	.34	15	208	1	60	MITSUBISHI PFFY-P06NRMU-E	BCC-1 / ACCU-1
FHP-13	MEETING ROOM	FLOOR MOUNTED, CUSTOM CABINET	229	40	-	6.7	6	0.34	15	208	1	60	MITSUBISHI PFFY-P06NRMU-E	BCC-1 / ACCU-1

1. PROVIDE FILTER BOXES FOR ALL PEFY UNITS.
2. PROVIDE INTEGRAL CONDENSATE PUMP FOR ALL PEFY UNITS.

PUMP SCHEDULE

SYMBOL	SERVICE	LOCATION	TYPE	FLUID		GPM	HEAD (FT.)	PUMP RPM	ELECTRICAL			MANUFACTURER / MODEL #	REMARKS
				TYPE	TEMP.				MOTOR HP	V	PH		
P-1A/P-1B	MAIN HOT WATER LOOP	BOILER ROOM	INLINE	35% PROP. GLYCOL	180	20	10	-	1/4	208	1	TACO VR3452-HB1	SEE NOTE #1
BP-1/BP-2	BOILER CIRCULATORS	BOILER ROOM	INLINE	35% PROP. GLYCOL	180	16	-	-	-	120	1	TACO ECM 0015e	SEE NOTE #2

1. P-1A/P-1B - LEAD/LAG, PROVIDE WITH CONTROL MODULE AND COMMUNICATION MODULE. CONNECT TO BMS.
2. BP-1/BP-2 - CONNECT TO BOILER CONTROLS, PUMP POWER THROUGH BOILER

BOILER SCHEDULE

SYMBOL	LOCATION	GROSS OUTPUT (MBH)	FIRING RATE	DOE AFUE	FLUID (35% PROPYLENE GLYCOL)			ELECTRICAL				MANUFACTURER / MODEL #	REMARKS
			MBH		ENT (°F)	LVG (°F)	GPM	FLA	V	PH	HZ		
B-1 & 2	BOILER ROOM	124	155	95.1%	160	180	20	8.4	115	1	60	WEIL-MCCLAIN EVG-155	SEE NOTES

1. PROVIDE CONTROLS FOR STAGING BOILERS BASED ON LOAD.
2. PROVIDE AUTOMATIC LEAD/LAG AND STAGING CONTROLS FOR BOILERS.
3. PROVIDE CONTROLS FOR HW TEMPERATURE RESET SCHEDULE BASED ON OA
4. INCLUDE BOILER CIRCULATOR WITH EACH BOILER. TACO ECM 0015e OR EQUAL. POWER THROUGH BOILER. SEE BP-1 AND BP-2 LISTED IN PUMP SCHEDULE ON THIS SHEET.
5. INCLUDE CONDENSATE NEUTRALIZER KIT, WALL-MOUNT KIT, AND CONCENTRIC VENT KIT.
6. BOILER SHALL BE COMPATIBLE WITH 35% PROPYLENE GLYCOL.

GLYCOL MAKE-UP TANK

SYMBOL	LOCATION	TANK CAPACITY (GAL)	MAX PRESSURE (PSI)	ELECTRICAL			MANUFACTURER / MODEL #	REMARKS
				V	PH	HZ		
GT-1	MECHANICAL ROOM	18	30	115	1	60	WESSELS GMP-18	SEE NOTES

1. INCLUDE PRESSURIZATION ASSEMBLY CONSISTING OF PUMP WITH PRESSURE CONTROLS, PRV, AND PRESSURE GAUGE TO MONITOR OUTLET PRESSURE.
2. INCLUDE ALARM KIT WITH PANEL AND FLOAT. CONNECT ALARM TO THE BMS SYSTEM.
3. TANK SHALL PROVIDE 35% GLYCOL TO THE HW SYSTEM.

OUTSIDE AIR ENERGY RECOVERY UNIT

SYMBOL	SERVICE	SUPPLY FAN			RETURN/EXHAUST FAN			ENERGY RECOVERY CORE EFFICIENCY			WEIGHT (LB)	ELECTRICAL						MANUFACTURER/MODEL NUMBER
								TEMPERATURE	ENTHALPY									
		CFM	E.S.P.	MOTOR HP	CFM	E.S.P.	MOTOR HP		HEATING	COOLING		MCA	MOCP	W	V	PH	HZ	
ERV-1	NEW ADDITION	450	.43	1/2	450	.43	1/2	67%	64%	51%	119	7.1	15	1,303	208	1	60	MITSUBISHI LGH-F470RX5-E1
ERV-2	BASEMENT AND 1ST FLR	1,000	.43	1/2	1,000	.43	1/2	68%	65%	53%	265	7.1	15	1,303	208	1	60	MITSUBISHI LGH-F1200RX5-E1
ERV-3	2ND FLOOR	450	.43	1/2	450	.43	1/2	67%	64%	51%	119	3.1	15	538	208	1	60	MITSUBISHI LGH-F470RX5-E1

1. PROVIDE MOUNTING SUPPORT BRACKETS HUNG BY THREADED RODS.
2. PROVIDE TEMPERATURE ACTIVATED FROST PREVENTION MODE.
3. HEAT RECOVERY CORE SHALL TRANSFER BOTH SENSIBLE AND LATENT HEAT.
4. CONNECT TO VRF HEAT PUMP CONTROLS.
5. PROVIDE MERV-8 FILTERS TO INSTALL IN UNIT. FILTER SIZE SHALL MATCH FILTER RACK PROVIDED IN UNIT.

SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE (COOLING ONLY)

SYMBOL	SERVICE	TYPE	TOTAL COOLING CAPACITY (MBH)	SEER	AIRFLOW (CFM)	ELECTRICAL						MANUFACTURER / MODEL #
						MCA	KW	BREAKER SIZE	V	PH	HZ	
AC-3/ACCU-3	IT	WALL MOUNTED	12.0	15.2	425	11	2.24	28	208	1	60	MITSUBISHI PUY-A12NKA7/PKA-AHA7
AC-4/ACCU-4	ELEVATOR M.R.	WALL MOUNTED	12.0	15.2	425	11	2.24	28	208	1	60	MITSUBISHI PUY-A12NKA7/PKA-AHA7

1. AC-1 AND AC-2 TAGS NOT USED
2. ALL PIPING SHALL BE SIZED PER MANUFACTURER SPECIFICATIONS.
3. INDOOR UNIT RECEIVES POWER FROM OUTDOOR UNIT.
4. PROVIDE REMOTE CONTROLLER TO BE MOUNTED IN SPACE. PAC-YT53CRAU
5. PROVIDE WITH SERVICE DISCONNECT SWITCH.
6. PROVIDE LOW AMBIENT COOLING WIND BAFFLES 100% COOLING CAPACITY AT 0°F.
7. MOUNT UNIT 18" ABOVE ROOF ON SNOW STANDS WITH OPEN BASE - QUICKSLING, BIGFOOT, OR SIMILAR. STAND SHALL HAVE RUBBER FEET. INCLUDE 1" SPRING ISOLATORS BETWEEN CONDENSING UNITS AND STAND.
8. PROVIDE REQUIRED ACCESSORIES FOR M-NET INTEGRATION. INTEGRATE WITH AE-200 CENTRAL CONTROLLER.
9. PROVIDE INTEGRAL CONDENSATE PUMP FOR INDOOR UNITS.

HEAT PUMP SCHEDULE - AIR COOLED CONDENSING UNITS

SYMBOL	SERVICE	HEATING CAPACITY (MBH)	COOLING CAPACITY (MBH)	AIRFLOW (CFM)	EER/IEER (COOLING)	COP	MANUFACTURER / MODEL #
ACCU-1	MAIN LIBRARY	215	192	13,100	12.1/23.9	3.59	MITSUBISHI PURY-P192TSLMU-A
ACCU-2	ASSEMBLY HALL	108	96	6,200	12.6/19.7	3.95	MITSUBISHI PUHY-P96TKMU-A

1. ALL PIPING SHALL BE SIZED PER MANUFACTURER SPECIFICATIONS. WHERE REQUIRED, PROVIDE LONG LINE PIPING PACKAGES WITH ALL REQUIRED ACCESSORIES FOR PROPER OPERATION.
2. PROVIDE INVERTER DRIVEN VARIABLE SPEED COMPRESSOR THAT IS CONTROLLED BY REMOTE CONTROLLER.
3. PROVIDE WITH SERVICE DISCONNECT SWITCH.
4. PROVIDE SEACOAST PROTECTION ON CONDENSER COILS.
5. MOUNT UNITS 18" ABOVE ROOF ON SNOW STANDS WITH OPEN BASE - QUICKSLING, BIGFOOT, OR EQUAL. INCLUDE 1" SPRING ISOLATORS BETWEEN CONDENSING UNITS AND STAND.
6. PROVIDE SNOW/HAIL GUARDS.
7. PROVIDE AE-200 TOUCH SCREEN CONTROLLER

ACCU-1 ELECTRICAL INFORMATION

MODULE	MCA	BREAKER SIZE	V	PH	HZ
MODULE #1	60	80	208	3	60
MODULE #2	60	80	208	3	60

ACCU-2 ELECTRICAL INFORMATION

MODULE	MCA	BREAKER SIZE	V	PH	HZ
MODULE #1	60	80	208	3	60

CONDENSATE PUMP SCHEDULE

SYMBOL	TANK SIZE (GALLONS)	GPH	HEAD (FT.)	PUMP RPM	ELECTRICAL				MANUFACTURER / MODEL #
					MOTOR HP	FLA	V	PH	
CP-1 THRU CP-5	1/2	35	10	-	1/30	0.5	208	1	LITTLE GIANT VCMA-20UL

BRANCH CIRCUIT CONTROLLER

SYMBOL	SERVICE	NUMBER OF PORTS	CONNECTED CAPACITY (MBH)	ELECTRICAL				MANUFACTURER / MODEL #
				MCA	V	PH	HZ	
BCC-1	ACCU-1	16	192	1.93	208	1	60	MITSUBISHI CMB-P1016NU-HA1

1. INCLUDE DIAMONDBACK BALL VALVES BV-SERIES, 700PSIG WORKING PRESSURE, FULL PORT, R-410A RATED.
2. CONNECT TO CONTROLS SYSTEM PROVIDED WITH ACCU-1.

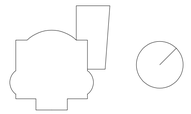
Somerville West Branch Library

40 College Ave.
Somerville MA 02144

designLAB architects
35 Channel Center Street, Suite 103
Boston, MA 02210
t: 617.350.3005
www.designLABarch.com

Consultants:
ARCHITECTURAL ENGINEERS
Mechanical | Electrical | Plumbing | Fire Protection | Lighting
63 Franklin Street, Boston, Massachusetts 02110 617. 542 . 0810

Key Plan:



Legend:

Stamp:

REV No:	DATE:	NAME:
0	10/11/18	100% CDs
1	10/31/18	ADDENDUM #1

PROJECT NO: 16003.00
DRAWN BY: CP
CHECKED BY: SW
DATE: 02-05-19

DRAWING TITLE:
MECHANICAL SCHEDULES

CONFORMED CONSTRUCTION DOCUMENT SET

SHEET NUMBER:
M-9.00

AIR CLEANING SYSTEM/AIR FILTER SCHEDULE

SYMBOL	SERVICE	CONFIGURATION	FILTER STAGE 1	FILTER STAGE 2	AIRFLOW (CFM)	DIMENSIONS	CLEAN ΔP AIR (IN. W.C.)	MAX FACE VELOCITY (FPM)	MANUFACTURER & MODEL #
AF-1	ERU-1 OA	DRAW-THROUGH	MERV-8 PRE-FILTER	MERV-13 FINAL FILTER	450	15"Hx24"Wx25"D	0.3	350	FARR GLIDEPACK MT25I 1/2Hx1W
AF-2	ERU-2 OA	DRAW-THROUGH	MERV-8 PRE-FILTER	MERV-13 FINAL FILTER	1000	15"Hx24"Wx25"D	0.3	500	FARR GLIDEPACK MT25I 1/2Hx1W
AF-3	ERU-3 OA	DRAW-THROUGH	MERV-8 PRE-FILTER	MERV-13 FINAL FILTER	1000	15"Hx24"Wx25"D	0.3	350	FARR GLIDEPACK MT25I 1/2Hx1W

1. PROVIDE NEW FILTER HOUSING UNITS AND MEDIA.
2. COORDINATE DOOR ORIENTATION WITH FIELD CONDITIONS TO ENSURE PROPER ACCESS IS PROVIDED.
3. HOUSING SHALL BE FULLY INSULATED WHILE PRESERVING ACCESS FOR FILTER CHANGE.

FINNED TUBE RADIATION SCHEDULE

SYMBOL	SERVICE	ENCLOSURE LENGTH	TOTAL BTU	ACTIVE LENGTH	BTUH/LF	TUBE SIZE	TUBE TYPE	FIN SIZE (IN. SQ.)	FIN TYPE	FIN/FT	GPM	MANUFACTURER / MODEL NUMBER
FT-1	130 - WOMEN'S RR	6' 0"	2,400	3' 0"	800	1-1/4"	COPPER	3-1/4"	ALUMINUM	32	.3	STERLING JVA-S14
FT-2	131 - MEN'S RR	6' 0"	2,400	3' 0"	800	1-1/4"	COPPER	3-1/4"	ALUMINUM	32	.3	STERLING JVA-S14
FT-3	203 - BATHROOM	6' 0"	2,400	3' 0"	800	1-1/4"	COPPER	3-1/4"	ALUMINUM	32	.3	STERLING JVA-S14
FT-4	204 - BATHROOM	6' 0"	2,400	3' 0"	800	1-1/4"	COPPER	3-1/4"	ALUMINUM	32	.3	STERLING JVA-S14

1. PROVIDE WITH SLANTED COVER ENCLOSURE WITH END CAPS AND ACCESS TO VALVES WHERE NOTED ON PLANS. ARCHITECT TO APPROVE COLOR.
2. PROVIDE EACH SECTION OF FTR WITH CONTROL VALVE, BALANCING VALVE AND ISOLATION VALVES ON SUPPLY AND RETURN. CONNECT CONTROL VALVE TO THERMOSTAT SHOWN ON PLANS. CONTROL VALVE SHALL OPEN WHEN SPACE TEMPERATURE DROPS BELOW SETPOINT.

DIFFUSER, REGISTER & GRILLE SCHEDULE

SYMBOL	FUNCTION	OVERALL SIZE	MATERIAL	MOUNTING	MANUFACTURER / MODEL #	REMARKS
FG-1	SUPPLY	24"x4"	STEEL	SURFACE-MOUNT	TITUS 480	
RG-1	RETURN	SEE PLANS	ALUMINUM	SURFACE-MOUNT	TITUS 350 RS	
SG-1	SUPPLY	18"x6"	STEEL	SURFACE-MOUNT	TITUS 250	
CD-1	SUPPLY	12"x12"	STEEL	SURFACE-MOUNT	TITUS OMNI	
CD-2	SYOOKT	24"x24"	STEEL	SURFACE-MOUNT	TITUS OMNI	

1. ALL FINISHES TO BE APPROVED BY ARCHITECT.

ELECTRIC WALL HEATER SCHEDULE

SYMBOL	SERVICE	MOUNTING	ELECTRICAL					MANUFACTURER / MODEL #	REMARKS
			A	W	V	PH	HZ		
EWH-1	ELEV SHAFT	SURFACE	10.0	1800	208	1	60	QMARK GFR2404T2	INTEGRAL DOUBLE POLE THERMOSTAT

GRAVITY INTAKE SCHEDULE

SYMBOL	SERVICE	CFM	TOTAL S.P. (IN. W.G.)	INTAKE VELOCITY (FPM)	THROAT SIZE		CURB CAP SIZE		WEIGHT (LB)	MANUFACTURER
					L (IN)	W (IN)	L (IN)	L (IN)		
GI-1	APPARATUS BAY INTAKE	1,500	.09	400	16	20	22	26	54	GREENHECK FGI
GI-2	APPARATUS BAY EXHAUST	1,500	.09	400	16	20	22	26	54	GREENHECK FGR

1. INCLUDE ALUMINUM BIRDSCREEN.
2. INCLUDE 24" ROOF CURB.
3. 12" BASE OPTION.

DUCT HEATING COIL (HOT WATER, 35% PROP. GLYCOL)

SYMBOL	SERVICE	CFM	MBH	EAT(°F)	LAT(°F)	GPM	EWT(°F)	LWT(°F)	#OF COIL ROWS	ΔP WATER	MANUFACTURER / MODEL NUMBER	REMARKS
DHC-1	ERV-1 OA	450	14	0	30	1.40	180	160	1	0.7	GREENHECK HW58S01A06-12x12	
DHC-2	ERV-2 OA	1,000	32.4	0	30	3.24	180	160	1	0.7	GREENHECK HW58S01B06-12x24	
DHC-3	ERV-3 OA	450	14	0	30	1.40	180	160	1	0.7	GREENHECK HW58S01A06-12x12	

1. SEE SEQUENCE ON SHEET M-8.00.
2. SEE CONNECTION DETAIL ON SHEET M-7.00.

UNIT HEATER SCHEDULE

SYMBOL	LOCATION	TYPE	OUTPUT MBH	AIR			MOTOR		HTG COIL (35% PROP. GLYCOL)				PIPE RUN - OUT SIZES	ELECTRICAL				MANUFACTURER / MODEL NUMBER (AS STANDARD)
				CFM	EAT (°F)	LAT (°F)	HP	RPM	GPM	EWT (°F)	LWT (°F)	P.D. (FT)		FLA	V	PH	HZ	
CUH-1	ENTRANCE	CEILING CONCEALED	16.4	230	60	135	1/15	1,050	1.64	180	160	.15	3/4"	0.8	120	1	60	STERLING RC-02
CUH-2	FRONT STAIRS	FLOOR CABINET	15.0	185	60	135	1/15	1,050	1.5	180	160	.15	3/4"	0.8	120	1	60	STERLING F-02
CUH-3	REAR STAIRS	FLOOR	15.0	185	60	135	1/15	1,050	1.5	180	160	.15	3/4"	0.8	120	1	60	STERLING F-02

1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE WALL MOUNTED THERMOSTAT AND AQUASTAT.

UNIT HEATER SCHEDULE (HOT WATER, 35% PROP. GLYCOL)

SYMBOL	LOCATION	TYPE	OUTPUT MBH	CFM	MOTOR		35% PROP. GLYCOL				PIPE RUN - OUT SIZES	APPROX. WEIGHT (LBS.)	ELECTRICAL				MANUFACTURER / MODEL NUMBER (AS STANDARD)	REMARKS
					HP	RPM	GPM	EWT (°F)	LWT (°F)	P.D. (FT)			FLA	V	PH	HZ		
UH-1	MECHANICAL ROOM	HORIZONTAL	18.4	500	16 WATT	1550	1.9	180	160	2.2	3/8"	24	0.8	120	1	60	STERLING HS-118A	SEE NOTES
UH-2	BOILER ROOM	HORIZONTAL	18.4	500	16 WATT	1550	1.9	180	160	2.2	3/8"	24	0.8	120	1	60	STERLING HS-118A	SEE NOTES
UH-3	ATTIC	HORIZONTAL	21.2	580	25 WATT	1550	2.2	180	160	2.2	3/8"	25	1.2	120	1	60	STERLING HS-125A	SEE NOTES
UH-4	ATTIC	HORIZONTAL	21.2	580	25 WATT	1550	2.2	180	160	2.2	3/8"	25	1.2	120	1	60	STERLING HS-125A	SEE NOTES

1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE WALL MOUNTED THERMOSTAT AND AQUASTAT.
3. PROVIDE FAN GUARD.

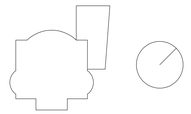
Somerville West Branch Library

40 College Ave.
Somerville MA 02144

designLAB architects
35 Channel Center Street, Suite 103
Boston, MA 02210
t: 617.350.3005
www.designLABarch.com

Consultants:
ARCHITECTURAL ENGINEERS
Mechanical | Electrical | Plumbing | Fire Protection | Lighting
63 Franklin Street, Boston, Massachusetts 02110 617. 542 . 0810

Key Plan:



Legend:

Stamp:

REV No:	DATE:	NAME:
0	10/11/18	100% CDs
1	10/31/18	ADDENDUM #1

PROJECT NO: 16003.00
DRAWN BY: CP
CHECKED BY: SW
DATE: 02-05-19

DRAWING TITLE:

MECHANICAL SCHEDULES

CONFORMED CONSTRUCTION DOCUMENT SET

SHEET NUMBER:

M-9.01

Appendix D:

This attachment was to large to include please follow the link for the full appendix D https://drive.google.com/file/d/1Jb1GHvQsDFXVBmy0180FiUWZ-IgM93by/view?usp=sharing

Appendix E:

MECHANICAL LEGEND

- (NAME) — NEW PIPING (BOLD)
- (NAME) — EXISTING PIPING (LIGHT)
- CO — CLEAN OUT
- RG / RL — REFRIGERANT GAS / REFRIGERANT LIQUID
- C — CONDENSATE
- PC — PUMP CONDENSATE
- D — DRAIN
- AUTOMATIC FLOW CONTROL VALVE
- BALL VALVE
- BALL VALVE W/ CAPPED HOSE BIBB
- BRANCH OUT OF TOP OF MAIN
- BRANCH OUT OF BOTTOM OF MAIN
- CAP
- CO2 — CARBON DIOXIDE SENSOR
- CO — CARBON MONOXIDE SENSOR
- NO2 — NITROGEN DIOXIDE SENSOR
- CHECK VALVE
- COMBINATION PRESSURE/TEMPERATURE PORT
- CONCENTRIC REDUCER
- FLANGE
- FLEXIBLE PIPE CONNECTION
- PIPE ANCHOR
- PIPE ALIGNMENT GUIDES
- PIPE CONTINUES
- PIPE RISING
- PIPE TURNING DOWN
- H — ROOM HUMIDITY SENSOR
- T — ROOM LOCAL THERMOSTAT
- S — ROOM TEMPERATURE SENSOR
- TEE TURNED DOWN
- TEE TURNED UP
- WALL OR ROOF PENETRATION
- BOD 12'-0" — BOTTOM OF DUCT ELEVATION

DIFFUSER / REGISTER / GRILLE AIR PATTERNS
(SHADING INDICATES QUADRANTS WITHOUT AIR)

- 4 WAY SUPPLY
- 3 WAY SUPPLY
- 2 WAY SUPPLY
- 2 WAY CORNER SUPPLY
- 1 WAY SUPPLY
- RETURN / EXHAUST REGISTER OR GRILLE
- LINEAR SUPPLY DIFFUSER
- SIDEWALL GRILLE

- NEW DUCTWORK (BOLD)
- EXISTING DUCTWORK (LIGHT)
- RETURN AIR DUCT DOWN
- RETURN AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- SUPPLY AIR DUCT UP
- DOUBLE WALL DUCT
- LINED DUCTWORK
- X" x Y" — RECTANGULAR DUCTWORK
- X"Ø — ROUND DUCT ("X" INDICATES DIAMETER)
- X" x Y" — OVAL DUCT
- PERFORATED DUCTWORK
- D — DROP IN DUCT (IN DIRECTION OF AIRFLOW)
- R — RISE IN DUCT (IN DIRECTION OF AIRFLOW)
- MITERED ELBOW W/ TURNING VANES
- RADIUS ELBOW
- RADIUS OFFSET (RECTANGULAR DUCT)
- ROUND SUPPLY AIR DUCT DOWN
- ROUND SUPPLY AIR DUCT UP
- VOLUME CONTROL DAMPER
- FLEXIBLE DUCT CONNECTION
- INSULATED BOILER BREECHING
- S — DUCT TEMPERATURE SENSOR
- SP — STATIC PRESSURE SENSOR
- BDD — BACK DRAFT DAMPER
- ACD — AUTOMATIC CONTROL DAMPER
- VOLUME DAMPER
- M — MOTORIZED DAMPER
- CONNECT TO EXISTING
- LIMIT OF REMOVAL
- OR — DESIGNATES EQUIPMENT WITHOUT POWER
- DESIGNATES EQUIPMENT WITH POWER
- ROOF EXHAUST FAN
- ROOF INTAKE FAN
- EXHAUST GRAVITY VENTILATOR
- INTAKE GRAVITY VENTILATOR

PIPING DWGS. / DUCTWORK DWGS.

- BOX DESIGNATION — VV3 / VV3 — BOX DESIGNATION
- BTU'S X 1000 — MBH / CFM — MAX CFM
- GALLONS PER MINUTE — GPM / CFM — MIN CFM

- FIRE DAMPER W/ ACCESS DOOR
- S — SMOKE DAMPER W/ ACCESS DOOR
- SD — COMBINATION FIRE/ SMOKE DAMPER W/ ACCESS DOOR
- S — SMOKE DETECTOR

MECHANICAL ABBREVIATIONS

A	AIR COMPRESSED
AAV	AIR ADMITTANCE VALVE
AC	AIR CONDITIONING
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
ACU	AIR CONDITIONING UNIT
A/D	ACCESS DOOR
AD	APPARATUS DEW POINT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISHED GRADE
AFL	ACTIVE FIN LENGTH
AHU	AIR HANDLING UNIT
AMPS	AMPERE
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
AS	AIR SEPARATOR
ATG	AUTOMATIC TEMPERATURE CONTROLS
AVG	AVERAGE
B	BOILER
BA	BYPASS AIR
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BFP	BACK FLOW PREVENTER
BFW	BOILER FEED WATER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BP	BOILER PUMP
BT	BUFFER TANK
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
C / A	COMBUSTION AIR
CAF	COMBUSTION AIR FAN
CAP	CAPACITY
CC	COOLING COIL
CF	CUBIC FEET / CHEMICAL FEEDER
CFI	LLED
CFM	CUBIC FEET PER MINUTE
CH	CABINET HEATER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CLG	CEILING
CO	CLEANOUT
CO'	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COMP'D	COMPRESSED
COND / C	CONDENSATE
CONN	CONNECTION
CONT	CONTINUATION
CONV	CONVECTOR
CP	CIRCULATING PUMP
CU	CUBIC / COPPER
CUH	CABINET UNIT HEATER
CV	CONSTANT VOLUME BOX
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DROP/ DEPTH
DB	DRY BULB
DC	DUST COLLECTOR
DIA, Ø	DIAMETER
DL	DOOR LOUVER
DN	DOWN
DS	DOWN SPOUT
DWG	DRAWING
(E)	EXISTING
E/P	ELECTRIC/PNEUMATIC
EA	EXHAUST AIR / EACH
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
EL	ELBOW
ELEV	ELEVATION
EM	ELECTRIC MOTOR
EQ	EQUALS
ER	EXHAUST REGISTER
ERU	ENERGY RECOVERY UNIT
ES	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
ETP	ELECTRONIC TRAP PRIMER
ETR	EXISTING TO REMAIN
EW	EACH WAY
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXP	EXPANSION
°F	FAHRENHEIT DEGREES
FC	FLEX CONNECTOR
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FF	FINISH FLOOR
FLA	FINISHED LOAD AMPS
FPHB	FROST PROOF HOSE BIBB
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FS	FLOOR SINK
FT	FEET / FINTUBE RADIATION
FV	FACE VELOCITY
FW	FINISHED WALL
G	GAS
GA	GUAGE
GAL	GALLONS
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
GE	GENERAL EXHAUST
GEV	GENERAL EXHAUST VALVE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
H	HEIGHT, HOOD
HB	HOSE BIBB
HC	HEATING COIL
HD	HEAD
HE	HOOD EXHAUST / HELIUM
HEV	HOOD EXHAUST VALVE
HGT	HEIGHT
HORI	HORIZONTAL
HP	HEAT PUMP / HORSEPOWER
HR	HOUR
HRU	HEAT RECOVERY UNIT
HW	HOT WATER
HWP	HOT WATER PUMP
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
IBC	NTERNATIONAL BUILDING CODE
IBC	INTERNATIONAL MECHANICAL CODE
ID	INSIDE DIAMETER
IN	INCH
INV	INVERT
IW	INDIRECT WASTE
KC	KITCHEN CONSULTANT
KEF	KITCHEN EXHAUST FAN
KW	KILOWATT
L	LENGTH, LOUVER
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS	POUNDS
LCW	LAB COLD WATER
LD	LINEAR DIFFUSER
LEF	LABORATORY EXHAUST FAN
LF	LINEAR FOOT
LHW	LAB HOT WATER
LLT	LEAVING LIQUID TEMPUERATURE
LP	LIQUEFIED PROPANE GAS
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LV	LAB VENT
LW	LAB WASTE
LWT	LEAVING WATER TEMPERATURE
MA	MEDICAL AIR
MAX	MAXIMUM
MBH	BTU PER HOUR(THOUSAND)
MCA	MINIMUN CIRCUIT AMPS
MECH	MECHANICAL
MED	MEDICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTG	MOUNTING
MTG HT	MOUNTING HEIGHT
MTR	MOTOR
MV	MEDICAL VACUUM
N	NITROGEN
N/A	NOT APPLICABLE
N2	HIGH PURITY NITROGEN
N20	NITROUS OXIDE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OC	ON CENTER
OD	OUTSIDE DIMENSION / OUTSIDE DIAMETER
OED	OPEN END DUCT
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFI	OWNER FURNISHED AND INSTALLED
OR	OPERATING ROOM
ORL	OVERFLOW RAIN LEADER
OX	OXYGEN
P	PUMP
PART	PARTIAL
PD	PRESSURE DROP
PH	PHASE
PR / PRV	PRESSURE RELIEF OR REDUCING VALVE
PS	PRESSURE SENSOR
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PUH	PROPELLER UNIT HEATER
QTY	QUANTITY
RA	RETURN AIR
RAV	RETURN AIR VALVE
RD	ROOF DRAIN
REQ'D	REQUIRED
RF	RETURN FAN
RG	RETURN GRILL, REFRIGERANT GAS
RH	RELATIVE HUMIDITY
RL	REFRIGERANT LIQUID
RLA	RUNNING LOAD AMPS
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAV	SUPPLY AIR VALVE
SCH	SCHEDULE
SD	SMOKE DETECTOR, SUMP DRAIN, SUPPLY DIFFUSER
SENS	SENSIBLE
SF	SQUARE FEET; SUPPLY FAN
SP	STATIC PRESSURE
SQ FT	SQUARE FEET
SR	SUPPLY REGISTER
SS	STAINLESS STEEL
ST	STORM
TA	THROW AWAY
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
THRU	THROUGH
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDER CUT
V	VOLTS, VENT
VAV, VV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VOL	VOLUME
W/	WITH
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WPD	WATER PRESSURE DROP

MECHANICAL TRADE NOTES

M-1 REVIEW ALL PROJECT CONSTRUCTION DOCUMENTS TO BECOME FAMILIAR WITH ENTIRE PROJECT SCOPE.

M-2 COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT AND SYSTEM COMPONENTS WITH ALL OTHER TRADES.

M-3 MAINTAIN MINIMUM REQUIRED WORKING CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT PER NATIONAL ELECTRIC CODE (LATEST EDITION).

M-4 PROVIDE APPROPRIATE TYPE SLEEVES WHEREVER PIPING OR DUCTWORK PENETRATES ANY WALL, FLOOR, CEILING, AND/OR ROOFING.

M-5 ALL PENETRATIONS THROUGH NEW WALLS, FLOORS, CEILINGS, AND ROOFING SHALL BE EITHER CORE DRILLED OR SAW CUT. CHISELED OR HAMMERED PENETRATIONS SHALL NOT BE ALLOWED.

M-6 ALL DUCTWORK AND PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE. CAREFUL LAYOUT, COORDINATION AND INSTALLATION OF MECHANICAL SYSTEMS IS ESSENTIAL. COORDINATION WITH ELECTRICAL SYSTEMS AND ARCHITECTURAL FEATURES IS REQUIRED TO ACHIEVE A NEAT AND ORDERLY INSTALLATION.

M-7 INSTALL ALL PIPING, DUCTWORK, AND WIRING NEATLY AND SQUARE WITH ALL BUILDING FEATURES.

M-8 THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF DUCT MOUNTED SMOKE DETECTORS IN THE DUCTWORK. EACH DUCT MOUNTED SMOKE DETECTOR SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. COORDINATE WITH THE CONSTRUCTION MANAGER AS REQUIRED.

M-9 THE CONSTRUCTION MANAGER SHALL BE RESPONSIBLE FOR INSTALLING ACCESS PANELS PROVIDED BY THE MECHANICAL CONTRACTOR FOR ACCESS TO MECHANICAL EQUIPMENT AND DEVICES.

M-10 DUCT-MOUNTED SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY DIV. 26 (THE ELECTRICAL CONTRACTOR) AND INSTALLED IN THE DUCTWORK BY DIV. 23 (THE MECHANICAL/SHEET-METAL CONTRACTOR). PROVIDE ACCESS DOOR AT EACH DUCT-MOUNTED SMOKE DETECTOR.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, P.C., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS. CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-2 CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER IN WRITING BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS, OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER AND OWNER PRIOR TO IMPLEMENTATION.

G-3 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-4 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS(AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-5 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-6 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE RENDERED HARMLESS.

G-7 IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND/OR TRADE INVOLVED IN THIS PROJECT TO COORDINATE WITH EACH OTHER AND THE CONSTRUCTION MANAGER IN ORDER TO DETERMINE LOGICAL, EFFICIENT AND WORKMANLIKE LAY-OUTS FOR ABOVE CEILING EQUIPMENT AND SYSTEMS IN ORDER TO ACHIEVE AND MAINTAIN THE DESIGNED CEILING HEIGHTS, WHILE MAINTAINING MAXIMUM ACCESSIBILITY, SERVICEABILITY, AND FLEXIBILITY FOR THOSE SYSTEMS AND EQUIPMENT.

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

BID DOCUMENTS

Job # 2116.002
Project ASSEMBLY SQUARE FIRE HOUSE
Drawn By Author Checked Checker
Date 9.18.2023
Scale 1/8" = 1'-0"

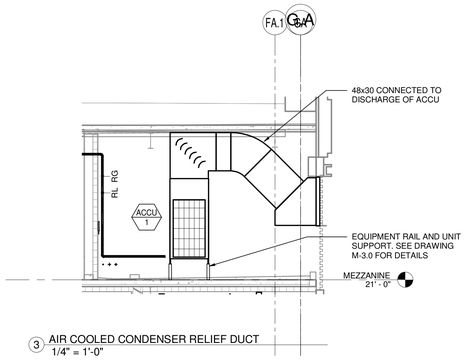
Drawing Title
LEGEND, NOTES AND ABBREVIATIONS

M0.0

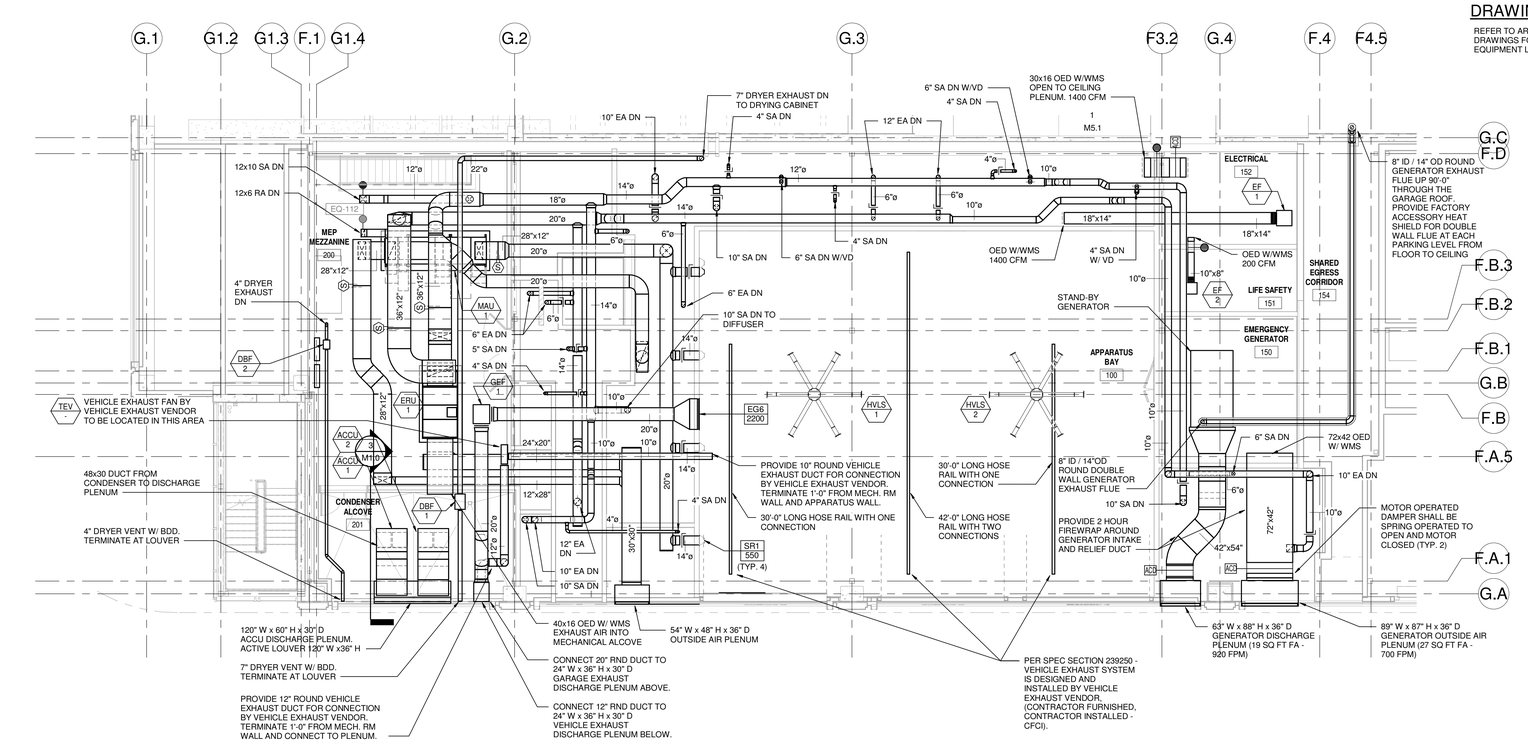
9/18/2023 2:13:12 PM

DRAWING NOTE:

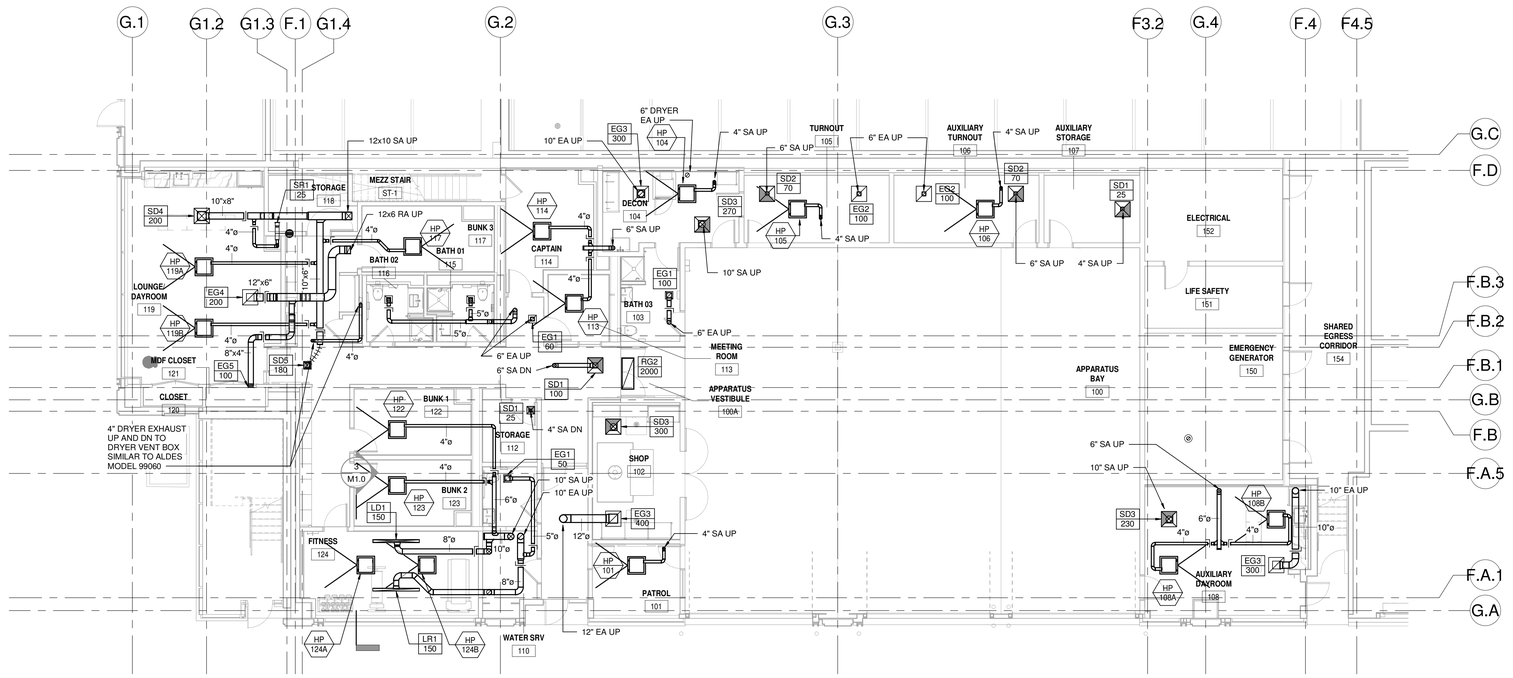
REFER TO ARCHITECTURAL RCP DRAWINGS FOR DEVICE AND EQUIPMENT LOCATIONS.



3 AIR COOLED CONDENSER RELIEF DUCT
1/4" = 1'-0"



2 MEZZANINE LEVEL
1/8" = 1'-0"



1 GARAGE LEVEL
1/8" = 1'-0"

9/18/2023 2:13:15 PM

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

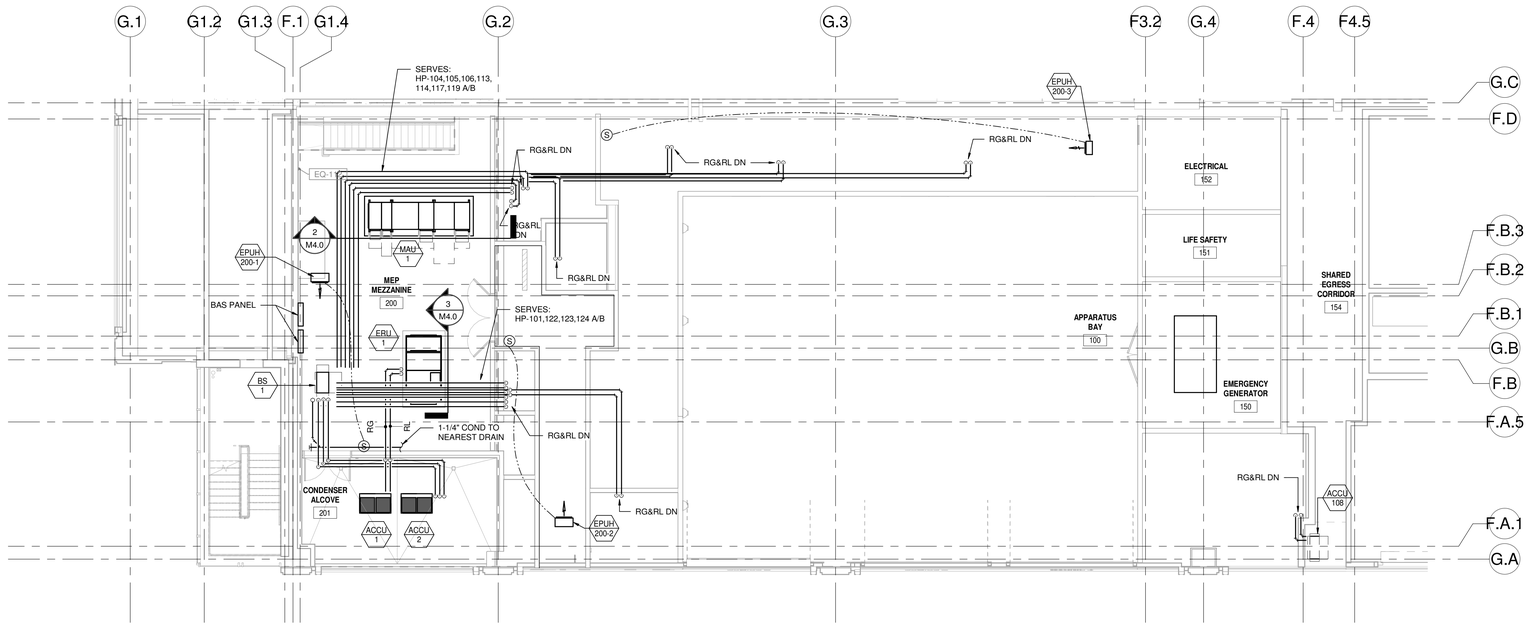
BID DOCUMENTS

Job #	2116.002
Project	ASSEMBLY SQUARE FIRE HOUSE
Drawn By	Author
Checked	Checker
Date	9.18.2023
Scale	As indicated

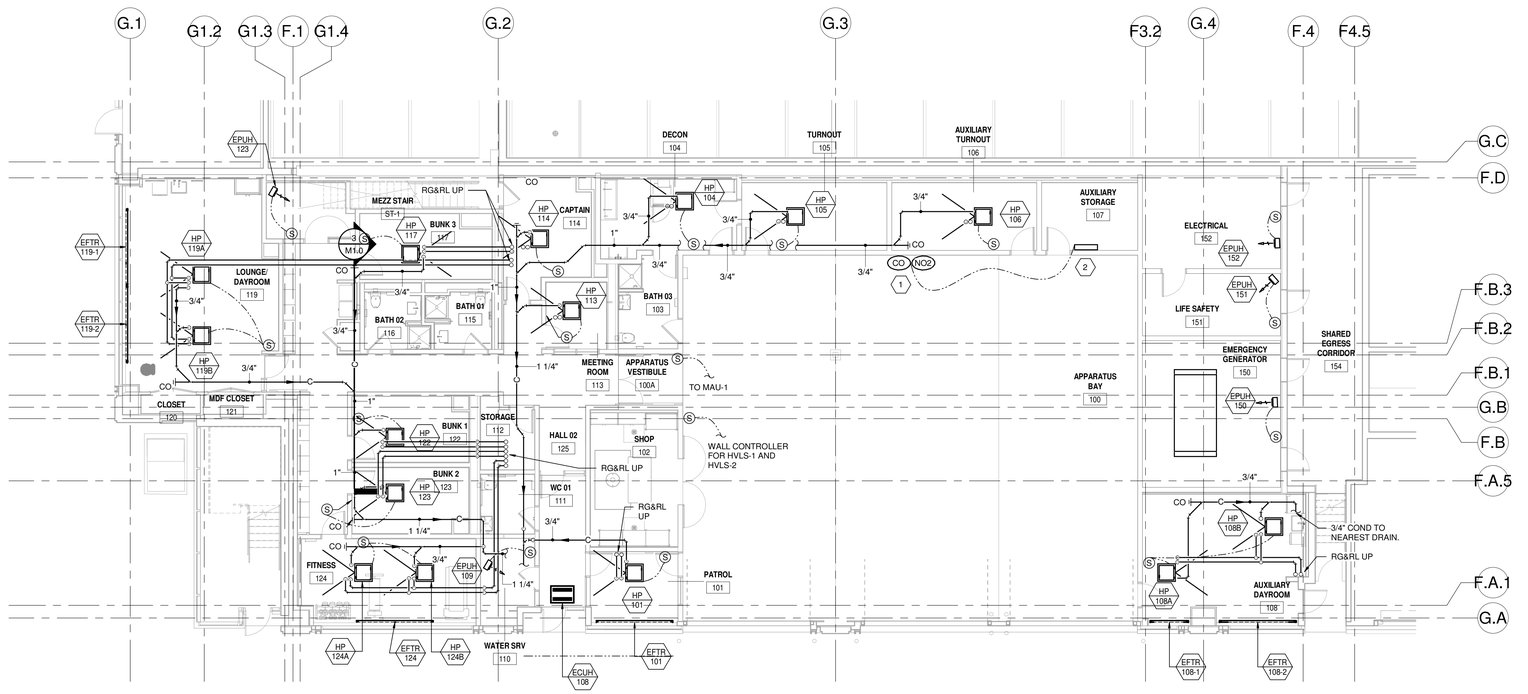
Drawing Title

GARAGE LEVEL AND MEZZANINE DUCTWORK PLANS

M1.0



2 MEZZANINE LEVEL
1/8" = 1'-0"



1 GARAGE LEVEL
1/8" = 1'-0"

DRAWING NOTES:

1. MOUNT CO/NO2 SENSORS 5'-0" ALL. WIRE CO SENSOR, NO2 SENSOR, REMOTE HORN AND REMOTE STROBE LIGHT TO GAS DETECTION PANEL. PROVIDE HEATERS MOUNTED IN CO & NO2 SENSOR. PROVIDE INTEC CONTROLS MODEL DT6-CO-NO2 SENSOR.
2. LOCATION OF INTEC CONTROLS MODEL DGC6 GAS DETECTION CONTROL PANEL. MOUNT SO CENTERLINE ON DEVICE IS 48" AFF.

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617-492-7000 Fax 492-7007

RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

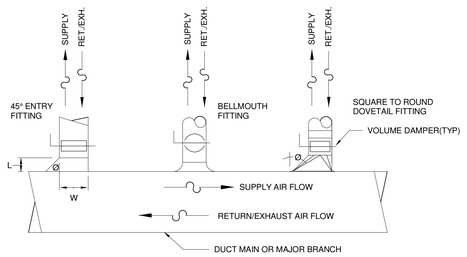
BID DOCUMENTS

Job # 2116.002
Project ASSEMBLY SQUARE FIRE HOUSE
Drawn By Author Checked Checker
Date 9.18.2023
Scale 1/8" = 1'-0"

Drawing Title
GARAGE LEVEL AND MEZZANINE PIPING PLANS

M2.0

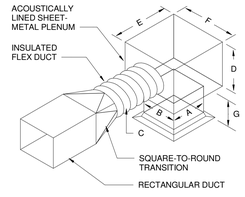
9/18/2023 2:13:17 PM



NOTES:

1. "SPIN-IN" TAKE-OFF FITTINGS, EXTRACTORS, SCOOPS, OR SPLITTER DAMPERS ARE NOT ACCEPTABLE.
2. ACCOUNT FOR DUCT HEIGHT WHEN SELECTING CONICAL OR BELLMOUTH BRANCH TAKE-OFF FITTINGS.
3. PROVIDE AIR BALANCING VOLUME DAMPER, W/ LOCKING QUADRANT & SHAFT SEALS, AT EACH BRANCH TAKE-OFF DOWNSTREAM OF VAV BOXES & AT ALL OTHER LOW PRESSURE BRANCHES. DO NOT PROVIDE VOLUME DAMPERS IN MEDIUM PRESSURE SUPPLY DUCTWORK UPSTREAM OF VAV BOXES.
4. L = W/4; L = 4" MINIMUM. Ø = 45°.
5. BELLMOUTH FITTINGS MAY BE ROUND, FLAT OVAL, OR RECTANGULAR.

TYPICAL DUCT BRANCH TAKE-OFFS
NTS

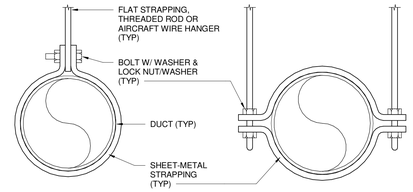


A	B	MAX CFM	C	D	E	F	G
6"	6"	125	6"Ø	8"	10"	10"	4"
9"	9"	280	10"Ø	12"	10"	12"	4"
12"	12"	480	12"Ø	14"	14"	14"	4"
15"	15"	750	14"Ø	16"	16"	16"	4"

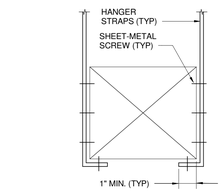
NOTES:

1. THIS DETAIL IS TYPICAL FOR ALL AIR OUTLETS AND INLETS AT: (LIST ROOMS HERE).
2. FLEX DUCT SHALL BE A MAXIMUM OF 3'-0" LONG WITH NO BENDS EXCEEDING 15° OFFSET FROM CENTERLINE OF FLEX DUCT.
3. IN AREAS WHERE PLENUM CONNECTION SHOWN CAN NOT BE INSTALLED DO TO SPECIAL CONFLICTS, DIRECT HARD DUCT TO DIFFUSER CONNECTIONS MAY BE USED WITH ENGINEER'S APPROVAL.
4. DIRECT FLEXIBLE DUCT TO DIFFUSER CONNECTIONS SHALL NOT BE PERMITTED, EXCEPT AS NOTED ABOVE.
5. ACOUSTICAL LINING SHALL BE HOSPITAL GRADE CLOSED CELL FOAM INSULATION.
6. SUPPORT AIR TERMINAL DEVICE INDEPENDENT OF CEILING. PROVIDE AIR TERMINAL W/ APPROPRIATE FRAME TYPE(S) FOR CEILING(S). COORDINATE AIR TERMINALS W/ ARCHITECTURAL CEILING PLAN, AND/OR CEILING CONTRACTOR.
7. INSTALL AIR TERMINAL DEVICES FLUSH TO CEILING W/ CONCEALED MOUNTING & SUPPORT HARDWARE.

PLENUM AIR TERMINAL CONNECTION DETAIL
NTS

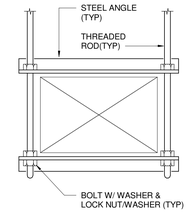


SUPPORT FOR DUCTS 6"Ø TO 12"Ø

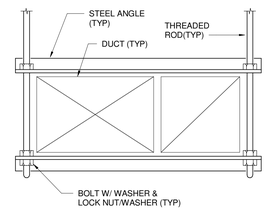


SUPPORT FOR DUCTS 14"Ø & LARGER

LOW PRESSURE DUCTS LESS THAN 60" WIDE



ALL MEDIUM PRESSURE DUCTS & LOW PRESSURE DUCTS 60" WIDE & GREATER



MULTIPLE DUCTS ON TRAPEZE HANGERS

NOTES:

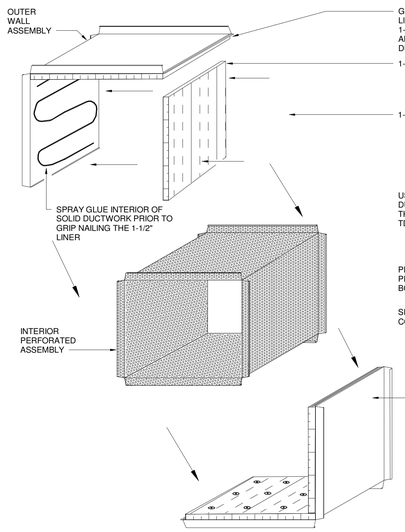
1. SELECT AND INSTALL HANGERS AND SUPPORTS AS PER SMACNA DUCT CONSTRUCTION STANDARDS IN ACCORDANCE WITH THE PRESSURE CLASSIFICATION OF EACH DUCT SYSTEM. HANGERS SHALL BE FLAT STRAPPING, THREADED ROD OR AIRCRAFT WIRE AS SPECIFIED. PROVIDE LATERAL OR SEISMIC BRACING AS APPROPRIATE TO THE INSTALLATION (REFER TO PROJECT SPECIFICATIONS).
2. ATTACH HANGERS TO BUILDING STRUCTURE VIA BEAM CLAMPS, EXPANSION ANCHORS, AND/OR CONCRETE INSERTS, AS APPROPRIATE TO THE APPLICATIONS. SUPPORT DUCTS AT 8 FT. O.C. MIN.
3. WHERE BELOW AMBIENT TEMPERATURE AIR IS CONVEYED IN THE DUCTWORK (I.E., SUPPLY AIR OR HERE BELOW AMBIENT TEMPERATURE AIR IS CONVEYED IN THE DUCTWORK (I.E., SUPPLY AIR OR OUTSIDE AIR), INSULATION WITH A VAPOR BARRIER SHALL BE PROVIDED ON THE SUPPORTS AND HANGERS TO A POINT AT LEAST 6" CLEAR OF THE DUCT INSULATION. (APPLIES TO CONCEALED INSULATED DUCTWORK; DOES NOT APPLY TO UN-INSULATED EXPOSED DUCTWORK.)
4. DUCT REINFORCEMENT MAY BE USED FOR ATTACHMENT AND SUPPORT PROVIDED IT QUALIFIES FOR BOTH DUTIES, AND DUCT STRENGTH IS NOT COMPROMISED BY USING REINFORCEMENT FOR SUPPORT.
5. SUBMIT DUCT SUPPORT DETAILS FOR ENGINEER'S REVIEW PRIOR TO FABRICATION.

ROUND DUCTWORK SUPPORT DETAIL
NTS

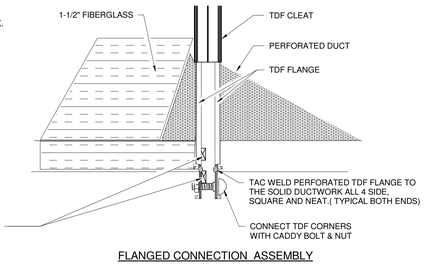
NOTES:

1. SELECT AND INSTALL HANGERS AND SUPPORTS AS PER SMACNA DUCT CONSTRUCTION STANDARDS IN ACCORDANCE WITH THE PRESSURE CLASSIFICATION OF EACH DUCT SYSTEM. HANGERS SHALL BE THREADED ROD, STRAPPING, ANGLE OR AIRCRAFT WIRE AS SPECIFIED. PROVIDE LATERAL OR SEISMIC BRACING AS APPROPRIATE TO THE INSTALLATION (REFER TO PROJECT SPECIFICATIONS).
2. ATTACH HANGERS TO BUILDING STRUCTURE VIA BEAM CLAMPS, EXPANSION ANCHORS, AND/OR CONCRETE INSERTS, AS APPROPRIATE TO THE APPLICATIONS. SUPPORT DUCTS AT 8 FT. O.C. MIN.
3. WHERE BELOW AMBIENT TEMPERATURE AIR IS CONVEYED IN THE DUCTWORK (I.E., SUPPLY AIR OR OUTSIDE AIR), INSULATION WITH A VAPOR BARRIER SHALL BE PROVIDED ON THE SUPPORTS AND HANGERS TO A POINT AT LEAST 6" CLEAR OF THE DUCT INSULATION. (APPLIES TO CONCEALED INSULATED DUCTWORK; DOES NOT APPLY TO UN-INSULATED EXPOSED DUCTWORK.)
4. PROVIDE INTERMEDIATE SUPPORT WHERE TRAPEZE HANGERS EXCEED 60" IN LENGTH.
5. DUCT REINFORCEMENT MAY BE USED FOR ATTACHMENT AND SUPPORT PROVIDED IT QUALIFIES FOR BOTH DUTIES, AND DUCT STRENGTH IS NOT COMPROMISED BY USING REINFORCEMENT FOR SUPPORT.
6. SUBMIT DUCT SUPPORT DETAILS FOR ENGINEER'S REVIEW PRIOR TO FABRICATION.

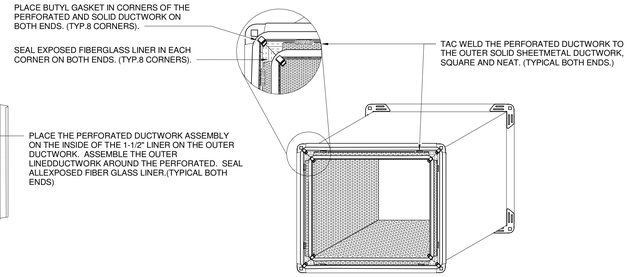
RECTANGULAR DUCTWORK SUPPORT DETAIL
NTS



DUCTWORK ASSEMBLY

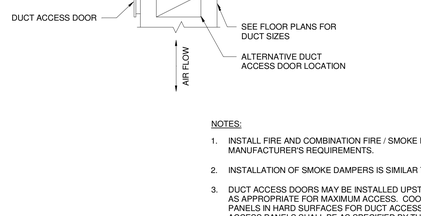


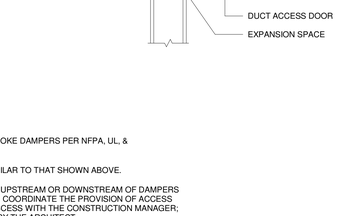
FLANGED CONNECTION ASSEMBLY



FULLY CONSTRUCTED ASSEMBLY

DOUBLEWALL DUCTWORK DETAIL
NTS

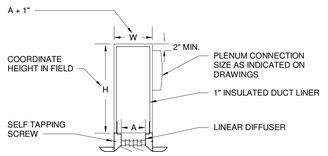




NOTES:

1. INSTALL FIRE AND COMBINATION FIRE / SMOKE DAMPERS PER NFPA, UL, & MANUFACTURER'S REQUIREMENTS.
2. INSTALLATION OF SMOKE DAMPERS IS SIMILAR TO THAT SHOWN ABOVE.
3. DUCT ACCESS DOORS MAY BE INSTALLED UPSTREAM OR DOWNSTREAM OF DAMPERS AS APPROPRIATE FOR MAXIMUM ACCESS. COORDINATE THE PROVISION OF ACCESS PANELS IN HARD SURFACES FOR DUCT ACCESS WITH THE CONSTRUCTION MANAGER; ACCESS PANELS SHALL BE AS SPECIFIED BY THE ARCHITECT.

FIRE DAMPER DETAIL
NTS

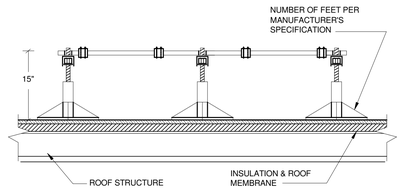


DIMENSION SIZE SCHEDULE								
	NUMBER OF ROWS					DUCT WIDTH	CEILING OPENING	OVERALL WIDTH
DIMENSION	3	6	9	12	15			
A	1	1	2	3	4	A+1	A+1	A+2

NOTE:

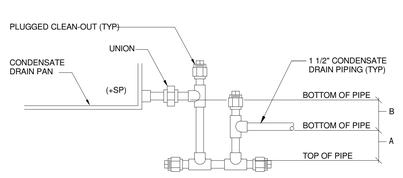
1. DIRECTION OF FLOW OF THE EH SERIES LINEAR DIFFUSER W / PFS FRAME IS AS INDICATED ON THE DRAWINGS.

TYPICAL LINEAR DIFFUSER AND PLENUM BOX DETAIL
NTS



NOTES
1. SYSTEM SHALL BE "BIG FOOT" CUSTOM FRAMEWORK AS MANUFACTURED BY AIRTEC PRODUCTS CORP., WITH GALVANIZED STEEL FRAMEWORK.
2. SYSTEM SHALL BE USED TO SUPPORT ACC OUTDOOR UNITS AND ASSOCIATED PIPING AND CONDUIT.

ACC ROOF SUPPORT DETAIL
NTS

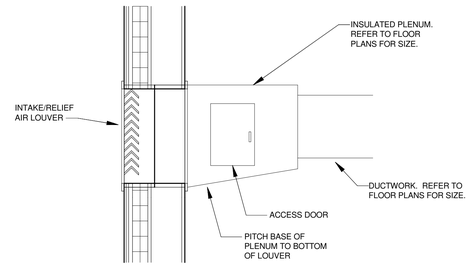


A = CASING STATIC PRESSURE + 1/2"
B = 1" MINIMUM

NOTES:

1. PITCH ALL CONDENSATE DRAIN PIPING DOWN TOWARDS ITS OUTLET AT 1/8" PER FOOT (MINIMUM).
2. PROVIDE PLUGGED CLEAN-OUTS AT EACH 90° CHANGE IN DIRECTION.
3. INSTALL DRAIN TRAPS AND PIPING PER MANUFACTURER'S RECOMMENDATIONS.
4. PRIME CONDENSATE DRAIN TRAPS WITH WATER PRIOR TO START-UP.
5. PROVIDE DRAINS AT ALL AHU COILS AND AT BOTH SIDES OF AHU HEAT EXCHANGERS (INTAKE AND EXHAUST SIDES), AS APPROPRIATE.
6. THIS DETAIL APPLIES TO ALL DRAIN PANS WHICH ARE ON THE DISCHARGE SIDE OF THE ASSOCIATED SYSTEM FAN (I.E., THERE IS A POSITIVE AIR PRESSURE AT THE DRAIN PAN CONNECTION). FOR NEGATIVE PRESSURE CONDITION ADJUST TRAP DEPTH PER MANUFACTURES RECOMMENDATIONS.

BLOW-THRU CONDENSATE DRAIN PAN DETAIL
NTS



NOTES:

1. DETAIL APPLIES TO BACK OF PLENUM CONNECTIONS.
2. FABRICATE PLENUM W/ STANDING SEAMS NOT EXCEEDING 21" CENTERS.
3. REINFORCE PLENUM W/ STEEL ANGLE PER SMACNA.
4. PITCH BASE OF PLENUM TO BOTTOM OF LOUVER.
5. SEAL PLENUM WATER AND AIR TIGHT.
6. BLANK OFF AND INSULATE UNUSED PORTION OF LOUVER, WHERE APPLICABLE.
7. LOUVER TO HAVE BIRD SCREEN.

LOUVER PLENUM CONNECTION DETAIL
NTS

9/18/2023 2:13:17 PM

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

BID DOCUMENTS

Job # 2116.002
Project ASSEMBLY SQUARE FIRE HOUSE
Drawn By GR Checked MAD
Date 9.18.2023
Scale 1/8" = 1'-0"

Drawing Title
MECHANICAL DETAILS

M3.0

ENERGY RECOVERY UNIT SCHEDULE - SINGLE POINT CONNECTION - ERU

SYMBOL	EQUIPMENT TAG	LOCATION	SERVES	SUPPLY FAN DATA: TOTAL UNIT AIRFLOW (CFM)	MIN. O.A. CFM	TSP (W.C.)	ESP (W.C.)	FAN TYPE	FAN WHEEL DIA. (IN)	FAN RPM	FAN MOTOR HP	MAX FAN BHP	EXHAUST/RETURN FAN DATA: CFM	TSP (W.C.)	ESP (W.C.)	FAN TYPE	FAN WHEEL DIA. (IN)	FAN RPM	FAN MOTOR HP	MAX FAN BHP	WINTER CONDITIONS: OA EAT (F)	OA LAT (F)	EA EAT (F)	EA - LAT (F)	CAPC. MBH	SUMMER CONDITIONS: OA EAT (F) DB/WB	OA LAT (F) DB/WB	EA EAT (F) DB/WB	EA LAT (F) DB/WB	CAPC. MBH	DX HEATING COIL DATA: MAX APD (W.C.)	DX COOLING COIL DATA: EAT (F)	LAT (F)	MBH	APD (W.C.)	EAT DB/WB (F)	LAT DB/WB (F)	TOTAL CAP. MBH	SENS. CAP. MBH	FILTERS: PRE-FILTER	FILTER	ELECTRICAL: MCA	MFS	VOLTS	PHASE	REMARKS
ERU	1	MEP MEZZANINE 200	GARAGE LEVEL 01	2800	2800	3.4	1.5	ECM	-	2269	3.2	2.4	1800	2.0	1.0	ECM	-	1665	3.2	1.0	7.0	44.8	70.0	10.0	114	91 / 73	83.2/67.6	75 / 62.5	90 / 72.3	64	0.5	ROTARY	0.4	45.0	103.0	170.0	0.5	83.2 / 67.6	53.4 / 51.9	135.0	90.2	MERV 8	MERV 13	8.8	15	460	3	1, 2, 3, 4, 5, 6, 7, 8, MODEL GOLD F RX 014

1. SELECTION BASED ON SWEGON.
2. PROVIDE NON-FUSED DISCONNECT SWITCH AND SINGLE POINT POWER CONNECTION.
3. PROVIDE INTERGRATED FACTORY CONTROLS AND BAS INTERFACE.
4. SUPPLY AND EXHAUST FAN SHALL BE ECM MOTOR WITH 0 TO 10 VOLT SIGNAL TO CONTROL SPEED.
5. PROVIDE AIRFLOW MONITORING.
6. PROVIDE ALUMINUM ROTARY HEAT EXCHANGER.
7. PROVIDE MOTOR OPERATED OUTDOOR AND EXHAUST AIR DAMPERS.
8. PROVIDE DX COIL WITH HEAT PUMP CONDENSING UNIT, ELECTRONIC EXPANSION VALVE AND CONTROLLER (WITH SEPARATE POWER FEED).

MAKE-UP AIR UNIT SCHEDULE - MAU

TAG	NUMBER	LOCATION	SERVES	SUPPLY AIRFLOW (CFM)	O.A. MAX/MIN (CFM)	SUPPLY FAN DATA: TSP (W.C.)	ESP (W.C.)	FAN TYPE	FAN (QTY)	FAN WHEEL DIA. (IN)	FAN RPM	HP	MAX FAN BHP	VOLT	PHASE	FLA	MFS	ELECTRIC HEATING COIL DATA: EAT (F)	LAT (F)	MCA	HEAT COIL KW	VOLT	PHASE	FILTERS: PRE-FILTER	FILTER	REMARKS
MAU	1	MEP MEZZANINE 200	APPARATUS BAY 100	2200	2200 / 200	2.8	1.5	AIRFOIL	1	14	2497	2.0	1.5	460	3	2.9	-	7	90	-	58	460	3	MERV 8	MERV 13	1, 2, 3, 4, 5, 6, MODEL CAH006GVGM

1. SELECTION BASED ON DAIKIN.
2. PROVIDE FACTORY INSTALLED DISCONNECT SWITCH.
3. PROVIDE VARIABLE FREQUENCY DRIVE ON SUPPLY FAN.
4. PROVIDE MIXING BOX WITH MOTORIZED SUPPLY AND RETURN DAMPERS.
5. PROVIDE AIRFLOW MONITORING FOR OUTSIDE AND RETURN AIR.
6. PROVICE SCR CONTROL AND 0-10V CONTROL SIGNAL ON ELECTRIC HEAT COIL.

AIR COOLED CONDENSING UNIT - ACCU

SYMBOL	TAG NUMBER	SERVES	LOCATION	AMBIENT AIR TEMP (F)	REFRIGERANT TYPE	NOMINAL CAPACITY (Tons)	ELECTRICAL DATA: MAX FUSE SIZE	MCA	VOLT	PH	REMARKS
ACCU	1	ERU-1	CONDENSER ALCOVE 201	95F / 0F	R410A	12	35	26.0	460	3	1, 2, 3, 4, 5, MODEL RXYQ144XAYDA
ACCU	2	BS-1	CONDENSER ALCOVE 201	95F / 0F	R410A	10	25	21.0	460	3	1, 2, 3, 4, 5, MODEL REYQ120XAYDB
ACCU	108	HP-108A / HP-108B	SHARED EGRESS CORRIDOR 154	95F / -13F	R410A	2	25	20.0	208	1	1, 2, 3, 6, MODEL 3MXL24WMVJU9

1. SELECTION BASED ON DAIKIN.
2. PROVIDE WITH COMPLETE OPERATIONAL CONTROL SYSTEM.
3. EQUIPMENT MANUFACTURER SHALL PROVIDE INITIAL SYSTEM PROGRAMMING AND EQUIPMENT STARTUP.
4. PROVIDE WITH 12" FACTORY OR FIELD FABRICATED SUPPORT STAND.
5. PROVIDE WITH CUSTOM FIELD FABRICATED ELBOW ON TOP OF THE CONDENSER AND DUCTED TO THE PLENUM ATTACHED TO THE LOUVER.
6. PROVIDE WALL BRACKET. INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT.

HEAT PUMP AIR CONDITIONING UNIT SCHEDULE - HP, CU

SYMBOL	EQUIPMENT TAG	SERVES	ASSOCIATED ACCU	OA CFM	COOLING CAPACITY (MBH) INDOOR / OUTDOOR	HEATING CAPACITY (MBH)	INDOOR UNIT ELECTRICAL DATA: MCA	INDOOR UNIT ELECTRICAL DATA: MOCP	POWER SUPPLY VOLT	POWER SUPPLY PH	REMARKS
HP	101	PATROL 101	ACCU-2	30	18.0	20.0	0.6	15	208	1	1, 2, 3, 4, MODEL FXZQ018
HP	104	DECON 104	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	105	TURN OUT 105	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	106	AUXILIARY TURNOUT 106	ACCU-2	100	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	108A	AUXILIARY DAYROOM 108	ACCU-108	35	12.0	11.0	0.4	-	208	1	1, 2, 3, 4, MODEL FFQ12Q2VJU POWERED BY OUTDOOR UNIT
HP	108B	AUXILIARY DAYROOM 108	ACCU-108	35	12.0	11.0	0.4	-	208	1	1, 2, 3, 4, MODEL FFQ12Q2VJU POWERED BY OUTDOOR UNIT
HP	113	MEETING ROOM 113	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	114	CAPTAIN 114	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	117	BUNK 117	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	119A	LOUNGE DAYROOM 119	ACCU-2	35	12.0	13.5	0.4	15	208	1	1, 2, 3, 4, MODEL FXZQ012
HP	119B	LOUNGE DAYROOM 119	ACCU-2	35	12.0	13.5	0.4	15	208	1	1, 2, 3, 4, MODEL FXZQ012
HP	122	BUNK 122	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	123	BUNK 123	ACCU-2	30	5.8	6.5	0.3	15	208	1	1, 2, 3, 4, MODEL FXZQ05
HP	124A	FITNESS 124	ACCU-2	0	15.0	17.0	0.4	15	208	1	1, 2, 3, 4, MODEL FXZQ015
HP	124B	FITNESS 124	ACCU-2	0	15.0	17.0	0.4	15	208	1	1, 2, 3, 4, MODEL FXZQ015

1. SELECTION BASED ON DAIKIN.
2. PROVIDE WITH MICROPROCESSOR CONTROL BOARD.
3. EQUIPMENT MANUFACTURER SHALL PROVIDE INITIAL SYSTEM PROGRAMMING AND EQUIPMENT START-UP.
4. PROVIDE WITH INTEGRAL CONDENSATE PUMP.

VRF BRANCH SELECTOR SCHEDULE - BS

SYMBOL	EQUIP TAG	LOCATION	ASSOCIATED ACCU	QTY. BRANCHES	ELECTRICAL DATA: VOLT	PHASE	MCA	REMARKS
BS	1	TURNOUT 103	ACCU-2	12	208-230	1	1.2	1, MODEL BS12Q54TAVJ

1. SELECTION BASED ON DAIKIN.

HIGH VELOCITY LOW VOLUME CEILING FAN SCHEDULE - HVLS

SYMBOL	NUMBER	SERVES	LOCATION	FAN DIA.	MOTOR DATA: HP	VOLTS	PHASE	REMARKS
HVLS	1	APPARATUS BAY 100	APPARATUS BAY 100	12'	1.5	480	3	1, 2, 3, 4, MODEL BASIC 6
HVLS	2	APPARATUS BAY 100	APPARATUS BAY 100	12'	1.5	480	3	1, 2, 3, 4, MODEL BASIC 6

1. SELECTION BASED ON BIG ASS FAN.
2. PROVIDE INTEGRAL VARIABLE FREQUENCY DRIVE.
3. PROVIDE MANUFACTURERS WALL MOUNTED MULTI FAN CONTROLLER WITH INTERNAL TIMECLOCKS AND THERMOSTAT FOR INTERGRATION WITH BAS.
4. PROVIDE CONTROL WIRE FROM FAN TO CONTROLLER.

FAN SCHEDULE - EF, GEF, DBF

SYMBOL	EQUIPMENT TAG	SERVES	LOCATION	CFM	SP IN WC	FAN TYPE	DRIVE TYPE	FAN RPM	ELECTRICAL DATA: HP (WATTS)	VOLT	PH	REMARKS
DBF	1	DECON 104 CABINET	MEP MEZZANINE 200	460	1.5	INLINE	DIRECT	-	1/2	120	1	2, 4, MODEL CDB8
DBF	2	DRYER	MEP MEZZANINE 200	200	-	INLINE	DIRECT	3000	110 WATTS	120	1	2, 5, MODEL LB2XL
EF	1	ELECTRICAL 152	ELECTRICAL 152	1400	0.5	INLINE	DIRECT	1394	3/4	208	1	1, 3, MODEL SQ-80-VG
EF	2	LIFE SAFETY 151	LIFE SAFETY 151	200	0.5	CABINET	DIRECT	1385	1/4	120	1	1, 3, MODEL SQ-97-VG
GEF	1	APPARATUS BAY 100	MEP MEZZANINE 200	2200	0.75	INLINE	DIRECT	1345	1 HP	208	1	1, 3, MODEL SQ-160HP-VG

1. SELECTION BASED ON GREENHECK.
2. SELECTION BASED ON TJERNLUND.
3. PROVIDE DISCONNECT SWITCH, ECM MOTOR WITH SPEED CONTROL, AND BACKDRAFT DAMPER.
4. PROVIDE FACTORY CONTROLLER WITH STATUS PANEL, PRESSURE AND TEMPERATURE SENSOR (COP2DB) AND IN-LINE ELBOW KIT.
5. PROVIDE FACTORY CONTROLLER WITH STATUS PANEL, PRESSURE AND TEMPERATURE SENSOR AND SECONDARY LINT TRAP.

DIFFUSER, REGISTER, & GRILLE SCHEDULE - DD, EG, LD, RG, SD, TG

TAG	NUMBER	UNIT SIZE W x H	NECK SIZE W x H	CFM RANGE	MODEL	BLOW PATTERN	MOUNTING TYPE	REMARKS
SR	1	18" RND	16" RND	550	PK-E 16	1-WAY	WALL	4,
SD	1	12x12	6x6	0 - 125	SMD	2-WAY	LAY-IN	1,2,3,
SD	2	24x24	6x6	0 - 125	SMD	2-WAY	LAY-IN	1,2,3,
SD	3	24x24	12x12	251 - 480	SMD	2-WAY	LAY-IN	1,2,3,
SD	4	24x24	12x12	251 - 480	SMD	4-WAY	LAY-IN	1,2,3,
SD	5	12x12	9x9	126 - 250	SMD	3-WAY	LAY-IN	1,2,3,
RG	2	50x20	48x18	2000	610Z	-	SEE PLANS	1,2,3,
LR	1	4'-0"x0'-4.5"	4'-0"x0'-4.5"	30 CFM/LF	SDS/SDB		CEILING	1,2,3, MODEL SDS-75, 2 SLOTS, 7"Ø CONNECTION
LD	1	4'-0"x0'-4.5"	4'-0"x0'-4.5"	30 CFM/LF	SDS/SDB		CEILING	1,2,3, MODEL SDS-75, 2 SLOTS, 7"Ø CONNECTION
EG	1	12x12	6x6	0 - 125	SMD	-	CEILING	1,2,3,
EG	2	24x24	6x6	0 - 125	SMD	-	SEE PLANS	1,2,3,
EG	3	24x24	12x12	251 - 480	SMD	-	SEE PLANS	1,2,3,
EG	4	24x24	12x12	126 - 250	SMD	-	SEE PLANS	1,2,3,
EG	5	18x10	16x8	300	610Z	-	SEE PLANS	1,2,3,
EG	6	50x20	48x18	2200	610z	-	SEE PLANS	1,2,3,

1. SELECTION BASED ON PRICE INDUSTRIES.
2. COLOR SELECTION BY ARCHITECT.
3. COORDINATE ALL MOUNTING TYPES, LOCATIONS AND CEILING ASSEMBLY AND DIFFUSER FRAME REQUIREMENTS WITH ARCHITECTURAL PLANS.
4. SELECTION BASED ON SEIHO.

ELECTRIC CABINET UNIT HEATER - ECUH

EQUIPMENT TAG	NUMBER	LOCATION	DIMENSIONS LxWxH	MOUNTING	AIRSIDE: CFM	EAT(F)	MBH	MOTOR / ELECTRICAL DATA: HEAT COIL KW	VOLTS	PHASE	REMARKS
ECUH	108	VESTIBULE 108	33"x25"x9"	CEILING MOUNTED RECESSED	500	65	10.2	5	460	3	1, 2, 3, 4, MODEL 6333D0548338306D0F

1. SELECTION BAED ON MARKEL.
2. CUSTOM COLOR BY ARCHITECT.
3. PROVIDE WITH SINGLE POINT POWER CONNECTION AND INTEGRAL DISCONNECT SWITCH.
4. PROVIDE FILTER AND MULTI-STAGE SETBACK THERMOSTAT.

ELECTRIC PROPELLER UNIT HEATER SCHEDULE - EPUH

SYMBOL	EQUIPMENT TAG	LOCATION	SERVES	AIR SIDE: TOTAL (CFM)	EAT (F)	MAX MHT HGT (FT)	MAX THROW (FT)	MBH	MOTOR/ ELECTRICAL DATA: KW	AMPS	VOLT	PH	REMARKS
EPUH	109	WATER SERVICE 109	WATER SERVICE 109	400	65	9'	12'	11.2	2	4.0	480	3	1, 2, 3, MODEL 5100P3P5103CA1N
EPUH	123	STORAGE 123	STORAGE 123	400	65	9'	12'	11.2	2	4.0	480	3	1, 2, 3, MODEL 5100P3P5103CA1N
EPUH	150	EMERGENCY GENERATOR 150	EMERGENCY GENERATOR 150	400	65	9'	12'	11.2	2	4.0	480	3	1, 2, 3, MODEL 5100P3P5103CA1N
EPUH	151	LIFE SAFETY 151	LIFE SAFETY 151	400	65	9'	12'	11.2	2	4.0	480	3	1, 2, 3, MODEL 5100P3P5103CA1N
EPUH	152	ELECTRICAL 152	ELECTRICAL 152	400	65	9'	12'	11.2	2	4.0	480	3	1, 2, 3, MODEL 5100P3P5103CA1N
EPUH	200-1	MEP MEZZANINE 200	MEP MEZZANINE 200	700	65	10'	22'	25.6	7.5	9.1	480	3	1, 2, 3, MODEL 5100P3P5107CA1N
EPUH	200-2	AREA ABOVE WATER SERVICE 109	CEILING PLENUM	700	65	10'	22'	25.6	7.5	9.1	480	3	1, 2, 3, MODEL 5100P3P5107CA1N
EPUH	200-3	AREA ABOVE AUXILIARY STORAGE 142	CEILING PLENUM	400	65	9'	12'	17.1	5	6.1	480	3	1, 2, 3, MODEL 5100P2P5105CA1N

1. SELECTION BASED ON MARKEL.
2. PROVIDE SINGLE POINT POWER WITH INTEGRAL DISCONNECT SWITCH.
3. PROVIDE 480/24v TRANSFORMER FOR LOW VOLTAGE BAS THERMOSTAT.

ELECTRIC BASEBOARD RADIATION SCHEDULE - EFTR

SYMBOL	EQUIPMENT TAG	LOCATION	CAPACITY (BTUH)	Length	OUTPUT (KW)	FLA	VOLTS	PHASE	REMARKS
EFTR	101	PATROL 101	5000	10'-0"	1.5	7.0	208	1	1, 2, 3, 4, MODEL EB3-208D-120
EFTR	108-1	AUXILIARY DAYROOM 108	2500	5'-0"	0.7	3.5	208	1	1, 2, 3, 4, MODEL EB3-208D-60
EFTR	108-2	AUXILIARY DAYROOM 108	5000	10'-0"	1.5	7.0	208	1	1, 2, 3, 4, MODEL EB3-208D-120
EFTR	119-1	LOUNGE / DAYROOM 119	5000	10'-0"	1.5	7.0	208	1	1, 2, 3, 4, MODEL EB3-208D-120
EFTR	119-2	LOUNGE / DAYROOM 119	5000	10'-0"	1.5	7.0	208	1	1, 2, 3, 4, MODEL EB3-208D-120
EFTR	124	FITNESS 124	5000	10'-0"	1.5	7.0	208	1	1, 2, 3, 4, MODEL EB3-208D-120

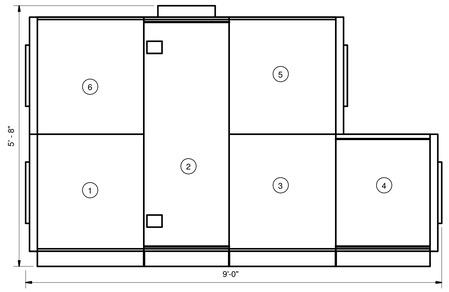
1. SELECTION BASED ON RUNTAL.
2. CUSTOM COLOR SELECTED BY ARCHITECT.
3. ELECTRIC HEAT SHALL BE CONTROLLED BY LOW VOLTAGE SENSOR.
4. BASEBOARD HEATER SHALL BE CENTERED UNDER THE WINDOWS.

ERU-1 DRAWING NOTES

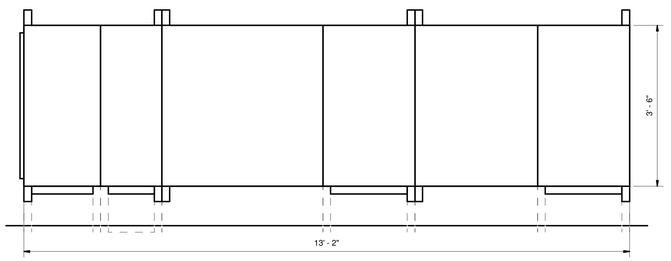
1. OUTSIDE AIR INLET DAMPER AND FILTER
2. ROTARY HEAT EXCHANGER
3. SUPPLY FAN
4. HEATING / COOLING DX COIL
5. RETURN AIR INLET AND FILTER
6. EXHAUST FAN AND OUTLET DAMPER

MAU-1 DRAWING NOTES

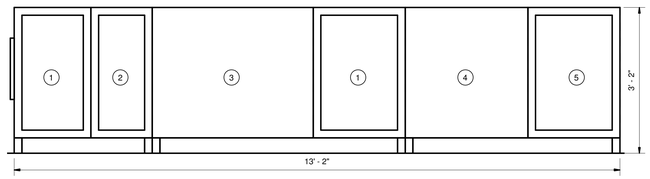
1. MIXING BOX INLET DAMPERS
2. FILTER SECTION
3. ELECTRIC HEAT SECTION
4. ACCESS SECTION
5. SUPPLY FAN
6. DISCHARGE PLENUM



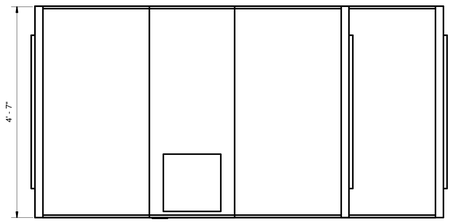
3 ERU-1 ELEVATION VIEW
NOT TO SCALE



1 MAU-1 PLAN VIEW
NOT TO SCALE



2 MAU-1 ELEVATION VIEW
NOT TO SCALE



4 ERU-1 PLAN VIEW
NOT TO SCALE

9/18/2023 2:13:17 PM

MUNICIPAL FREEDOM GIVES NATIONAL STRENGTH
TOWN 1842 1872 CITY
OLD TOWER HOUSE
SOMERVILLE, MASS.

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617-492-7000 Fax 492-7007

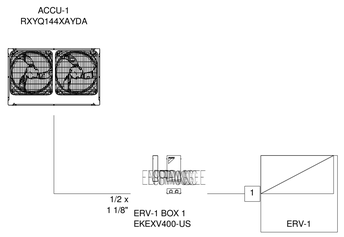
RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

BID DOCUMENTS

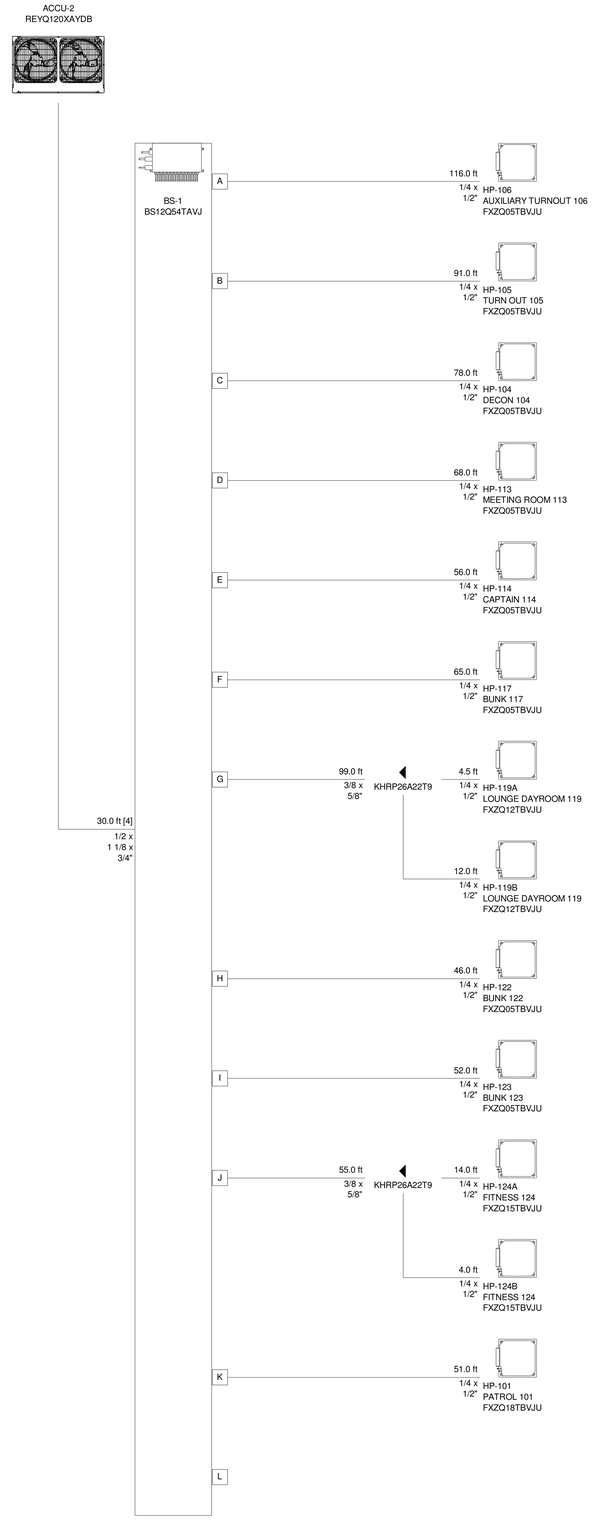
Job #	2116.002
Project	ASSEMBLY SQUARE FIRE HOUSE
Drawn By	Author
Checked	Checker
Date	9.18.2023
Scale	3/4" = 1'-0"
Drawing Title	MECHANICAL SCHEDULES

M4.0



ACCU-1 PIPING DIAGRAM

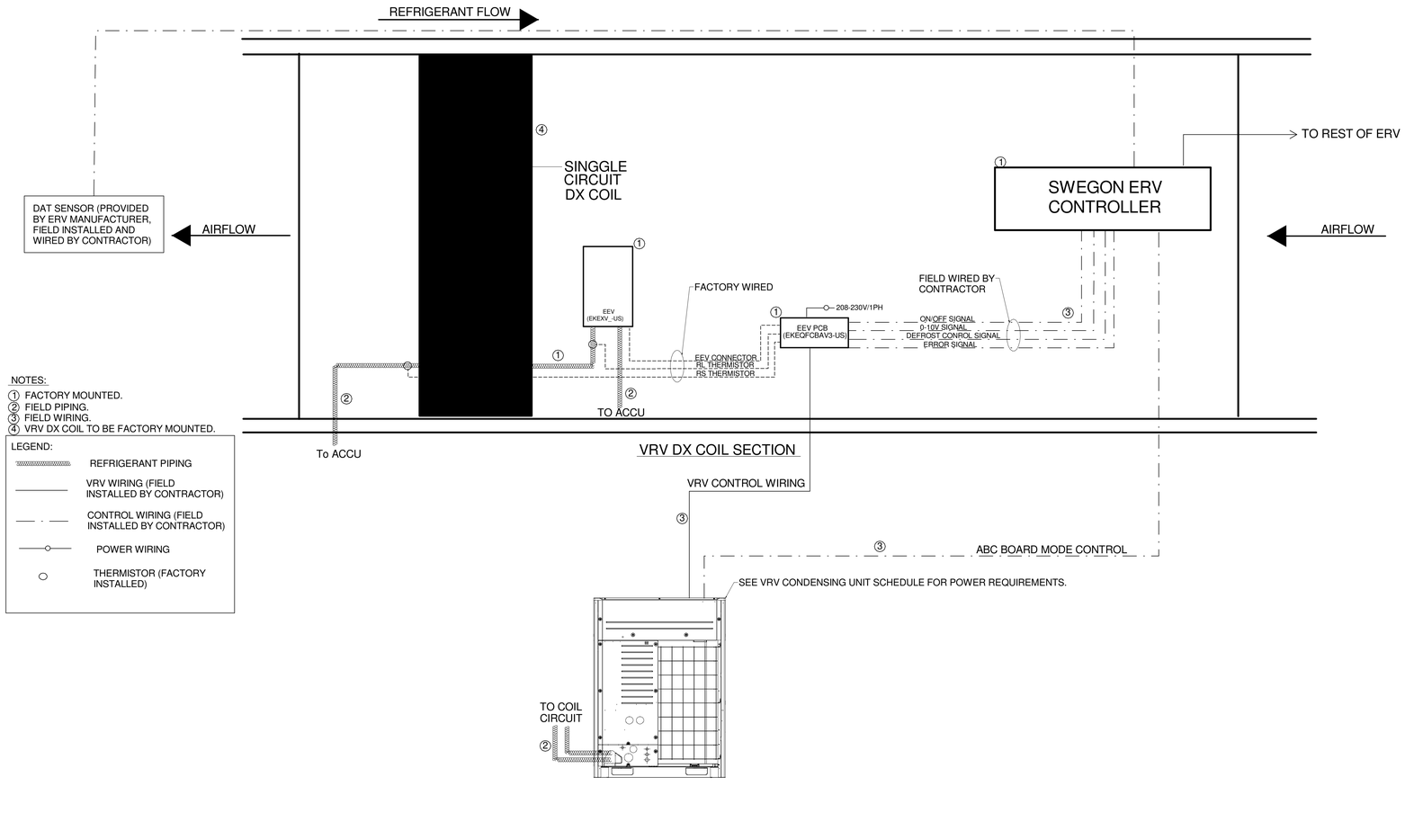
SCALE: NONE



ACCU-2 PIPING DIAGRAM

SCALE: NONE

ERV VRV DX COIL PIPING AND WIRING SCHEMATICS



NOTES:

① FACTORY MOUNTED.
② FIELD PIPING.
③ FIELD WIRING.
④ VRV DX COIL TO BE FACTORY MOUNTED.

LEGEND:

- REFRIGERANT PIPING
- VRV WIRING (FIELD INSTALLED BY CONTRACTOR)
- CONTROL WIRING (FIELD INSTALLED BY CONTRACTOR)
- POWER WIRING
- THERMISTOR (FACTORY INSTALLED)

SINGLE CIRCUIT PIPING AND WIRING DIAGRAM

SCALE: NONE

9/18/2023 2:13:18 PM

City of Somerville

ASSEMBLY SQUARE FIRE HOUSE

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

RFS engineering
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 9634.001

No.	Description	Date

BID DOCUMENTS

Job # 2116.002
Project ASSEMBLY SQUARE FIRE HOUSE
Drawn By Author Checked Checker
Date 9.18.2023
Scale

Drawing Title
VRF PIPING DIAGRAM

M5.0