# CITY OF PORTSMOUTH Department of Public Works

## RFP 16-15 HVAC Equipment Service

### **REQUEST FOR PROPOSALS**

<u>Sealed</u> Request for Proposals, <u>plainly marked with</u> "RFP 16-15 HVAC Equipment Service" on <u>the outside of the mailing envelope</u>, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire 03801, will be accepted <u>2:00 p.m.</u>, <u>January 6, 2015</u>.

The City of Portsmouth Public Works Department is seeking Proposals from firms to provide comprehensive services for providing preventive maintenance, repair and emergency services for HVAC Equipment throughout the City of Portsmouth. The goal of this maintenance service contract is to ensure optimal performance of the City's HVAC systems and to minimize energy use and cost to operate. The purpose of this RFP is to contract for these services for 3 years with an option to renew for up to an additional 2 years.

<u>Mandatory Site Visit</u>: There will be a mandatory site visit for vendors who are interested in submitting a proposal. Interested vendors are to meet at <u>9 a.m., December</u> <u>17, 2014</u> in City Hall Conference Room B, 1 Junkins Ave., Portsmouth, NH. This visit will give vendors an opportunity to look at the equipment to be serviced.

Specifications may be obtained from the City's web site: <a href="http://www.cityofportsmouth.com/finance/purchasing.htm">http://www.cityofportsmouth.com/finance/purchasing.htm</a>, by contacting the Finance/Purchasing Department on the third floor at the above address, or by calling the Purchasing Coordinator at 603-610-7227. Questions may be addressed to the Project Manager. Addenda to this proposal document, if any, including written answers to questions, will be posted on the City of Portsmouth website under the project heading. Addenda will not be provided directly to Service Companies.

The City of Portsmouth reserves the right to reject any or all Proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

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### 1. General Instructions

A. <u>Submission:</u> Submit 5 copies of Service Company's proposal in 8-1/2" x 11" format by <u>2 p.m.</u>, on <u>January 6</u>, <u>2015</u>. Proposal shall include a response to Parts A and B as described in Section 3 "Proposal Format" and a fully completed Fee Proposal Form. Copies shall be mailed or hand delivered clearly marked "RFP 16-15 HVAC Equipment Service" to:

Finance/Purchasing Department CITY OF PORTSMOUTH 1 Junkins Avenue Portsmouth, NH 03801

Phone: 610-7227

B. Equipment List: The equipment lists provided in Attachments A, B and C are a basis for proposal pricing and may not be a complete list. Each Service Company is required to visit the site of the equipment and proposed work prior to submitting their proposal. The purpose of this visit is to acquaint the Service Company with any and all conditions at the site and to identify, inspect and inventory the equipment. Service companies are not allowed to tour unescorted or at any time other than on a scheduled tour.

The Service Company shall not be relieved from assuming all responsibility for properly estimating the difficulties and the cost of performing the services required with this RFP, because of failure to investigate the conditions or become acquainted with all the information concerning the services to be performed.

C. <u>Questions:</u> Written questions pertaining to all issues associated with this RFP shall be directed via Fax or E-mail by <u>4:30 p.m. on December 24, 2014</u> to:

Jim Dumont CITY OF PORTSMOUTH Department of Public Works 680 Peverly Hill Road Portsmouth, NH 03801

Phone: 766-1426

E-mail: ildumont@cityofportsmouth.com

If any person contemplating submission of a proposal finds discrepancies in or omissions from, or is in doubt as to the true meaning of any part of the RFP Documents, he/she shall request an interpretation thereof prior to the Deadline for

Submission of Questions. Any interpretations or corrections released by Addendum shall be binding. Addenda to this proposal document, if any, including written answers to questions, will be posted on the City of Portsmouth website under the project heading. Addenda will not be provided directly to Service Companies. Each Service Company shall ascertain prior to submitting their Proposal that he/she has received all Addenda issued

### D. **RFP Tentative Time Line:**

December 17, 2014 Mandatory Pre-Proposal Meeting and Site Visit

December 24, 2014 Deadline for Submission of Questions

December 30, 2014 Questions and Answers Released to All SERVICE

COMPANYS

January 6, 2015 Proposals Due

- E. <u>Selection Criteria:</u> The selection criteria for ranking the proposals will include, but not be limited to, the following items:
  - Branch Location, organization, capabilities
  - Ability to staff the project for immediate execution
  - References
  - Qualifications and experience
  - Technical support capabilities
  - Experience/qualifications to provide equipment and control systems maintenance on the City of Portsmouth's specific infrastructure
  - After hours support capability
  - Fee Proposal
- F. <u>Selection Process:</u> The selection committee may, at its discretion, select a minimum of one and no more than three qualified firms to proceed to the competitive oral interview stage of the procurement process. The Service Company proposals shall be ranked and the City will attempt to negotiate a contract with the highest ranked Service Company. If agreement cannot be reached with the highest ranked firm contract the City may proceed with negotiations with the next ranked firm.
- G. Reservation of Rights: The City reserves the right to negotiate a contract for specific tasks identified in this scope of work depending on funding availability. The City of Portsmouth reserves the right to reject any or all submittals, to waive technical or legal deficiencies, to proceed or not to proceed with any subsequent proposal process, or to negotiate without further process any contract as may be in the best interest of the City.

The City further reserves the right to undertake such investigation as it deems necessary to evaluate the qualifications of the Consultant and to evaluate its submittal. Firms may be asked to submit releases as part of the investigation and review of qualifications. Failure to provide a release if requested will result in disqualification. The City reserves the right to request additional information including but not limited audited or other financial statements and reports.

H. All concepts, designs, information and cost savings ideas that may be generated during the selection process shall become the property of the City of Portsmouth.

### 2. Program Scope

The City of Portsmouth has established the following goals as it relates to this service specification:

- 1. Improve comfort conditions
- **2.** Reduce energy and operational costs
- **3.** Improve system reliability
- 4. Extend the useful life of existing infrastructure
- 5. Improve utilization of technology
- **6.** Upgrade old and inefficient systems
- 7. Provide training opportunities for the Facilities Department staff
- **8.** Improve and maintain remote accessibility of controls and operation for City staff.
- **9.** Provide 24 hour emergency service to reduce downtime and inconvenience
- 10. Price stability
- A. The Service Company shall provide the City of Portsmouth with preventive maintenance, parts replacement and emergency service for the heating, ventilating, air conditioning, temperature control and building automation systems as outlined within this specification at the following locations:
  - Portsmouth City Hall
  - Seybolt Building
  - City of Portsmouth Police Department at the City Hall Complex
  - City Hall Main Boiler Plant
  - City of Portsmouth Library
  - City of Portsmouth Public Works
  - Spinnaker Point Recreation Center
  - Portsmouth Indoor Pool
  - Pierce Island WWTF
  - Pease WWTF
  - Madbury WTP
  - Portsmouth Central Fire Station One
  - Portsmouth Fire Station 2
  - Portsmouth Fire Station 3

The scope of the work and anticipated contract terms are set forth in greater detail in the attached Specifications.

See Equipment Lists, Attachments A, B and C, for the equipment to be covered under this Service Agreement.

B. This Maintenance Contract will be for a period of three years, with an option to renew for up to two additional years. Start date shall be mutually determined and approved by the Service Company and City of Portsmouth.

### 3. Proposal Format

- A. Service Company shall submit its technical proposal on the Service Company's letterhead with contact information clearly identified. Proposal must identify all equipment and services to be performed. Confirm in your technical proposal compliance to all requirements and specifications of this Proposal document or a statement taking exception to specific requirements.
- B. Service Company shall demonstrate the Service Company's qualifications by responding to the requirements described below in the sequence set forth:
  - 1. The Service Company shall demonstrate a minimum of fifteen (15) years' experience in the commercial mechanical, temperature control and building automation business.
  - 2. The Service Company shall employ a minimum of five (5) full time, competent servicemen who are resident within fifty (50) miles of the job site and who have been within their employment for a minimum of eight (8) years. The servicemen assigned to maintain mechanical systems will be journeymen with a minimum of eight 8 years of experience working on similar systems. The servicemen assigned to maintain mechanical systems will be qualified to service the equipment type under contract as well as all associated pneumatic, electric and electronic controls. See table below for suggested format for response.

TECHNICIAN NAME	<u>ADDRESS</u>	YEARS EMPLOYED BY SERVICE COMPANY	PROFESSIONAL CERTIFICATIONS

3. The Service Company shall submit a list of five (5) local clients with similar full responsibility contracts in excess of \$50,000 in Annual Service Agreements for each site and who have been under contract with the Service Company for a period of not less than three (3) years. See table below for suggested format for response.

COMPANY NAME	YEARS UNDER CONTRACT	CONTACT NAME	TITLE

- 4. The Service Company is required to maintain an engineering department staffed with full time professionals in the fields of refrigeration, boilers, and pneumatic, electric and electronic controls, which includes at least one professional engineer (PE).
- 5. The Service Company shall schedule preventive maintenance tasks by computer to assure a uniform and detailed method of scheduling work. A reference list of five customers with whom the Service Company has for five (5) years had computerized preventive maintenance covering total systems will be submitted upon request.
- 6. A computerized preventive maintenance plan will be submitted with the Service Company's proposal that identifies the general tasks and schedule of preventive maintenance services to be provided under this Service Agreement.
- 7. The Service Company shall maintain in their local office an adequate inventory of replacement parts and components, and shall demonstrate they own the proper tools and test equipment to maintain all the mechanical, temperature control and building automation systems under contract. In addition the Service Company shall maintain a central warehouse whose inventory includes replacement parts for components in the system under contract to ensure fast availability in emergency situations. This includes all temperature sensors, controllers, dampers, valves, actuators, relays, air compressors, flame safeguards and boiler controls.

## 4. <u>Fee Proposal Form</u>

A.	Comp	elete the Fee Proposal Form as itemized:
	1.	Municipal Complex that includes Portsmouth City Hall, Seybolt Building, Police Department, Boiler Plant
		Annual Service cost In Figures \$
		In Words \$
	2.	Portsmouth Public Library
		Annual Service cost In Figures \$
		In Words \$
	3.	Portsmouth Public Works Building
		Annual Service cost In Figures \$
		In Words \$
	4.	Spinnaker Point Recreation Center, Portsmouth Indoor Pool
		Annual Service cost In Figures \$
		In Words \$
	5.	Portsmouth Indoor Pool
		Annual Service cost In Figures \$
		In Words \$
	6.	Pierce Island WWTF
		Annual Service cost In Figures \$
		In Words \$
	7.	Pease WWTF and WW Pump Stations
		Annual Service cost In Figures \$
		In Words \$
TOT	AL BA	SE PRICE (Items 1-7)
		In Figures \$
		In Words \$

Add Alternate 1.
Madbury WTP (Attachment B)
In Figures \$
In Words \$
Add Alternate 2.
Fire Station One, Fire Station 2, Fire Station 3 (Attachment C)
In Figures \$
In Words \$
US Department of Labor's CONSUMER PRICE INDEX (CPI) for this region. If the Service Company proposes something other as a price adjustment to the Annual Service Cost indicate such alternative method below:
Receipt of Addendum No Acknowledged by:
Company Name:
Address:
Telephone #:
Date:

### 5. **Specifications**

### GENERAL MAINTENANCE PROCEDURES OVERVIEW

### A. PREVENTIVE MAINTENANCE PROCEDURES AND RECORDS

- All preventive maintenance tasks shall be computer generated based on a program using each building's run time, on manufacturer's maintenance recommendations and on no less than a ten (10) year data bank of maintenance experience and manufacturers' specifications to assure uniform, detailed and all inclusive method of defining preventive maintenance tasks. The Service Company will be required to show copies of said computer preventive maintenance reports to demonstrate compliance to this requirement.
- 2) The Service Company shall control scheduling the interval of preventive maintenance and task functions to be performed by both calendar periods and operating hours (runtime) as pertinent to each piece of equipment.
  - a. The Service Company will submit the schedule to the City's Project Manager for approval prior to commencing the work.
- As work is scheduled, the Service Company shall issue to the mechanic on the job (via hand held field automation tool), a computer-prepared service report detailing exactly what tasks to perform, time of performance, skill levels required and special tools and instrumentation needed to maintain the systems at optimum comfort and efficiency levels.
- 4) After each service call is completed, a service report shall be furnished to a designated representative of the client for signature. This will be done on the Service Company's field automation tool and e-mailed to the customer.
- 5) After each service call report is signed off, details from the completed service report will be reentered in the data bank to assure closed-loop performance control and continuous program updating. The client has ongoing access to this file.
- 6) On a semi-annual basis, the Service Company shall advise and assist in the determination of improvements to the mechanical systems that shall conserve energy and/or increase reliability and system performance.

### B. PREVENTIVE MAINTENANCE CALLS

1) All planned maintenance service under this agreement will be performed during the client's normal working hours.

2) Client will provide reasonable means of access to all equipment covered by this agreement. Successful Service Company will be free to start and stop all primary equipment incidental to the operation of the mechanical system(s) as arranged with client's representatives.

### C. EMERGENCY SERVICE

- 1) Every activity performed under this agreement is designed to minimize the incidence of emergency situations. However, backup emergency service will be provided 24 hours a day to minimize downtime and inconvenience.
- 2) The Service Company shall provide emergency service on an as required basis. Emergency service shall be considered as calls in addition to the scheduled preventive maintenance calls.
- 3) All labor, overtime, travel costs, parts, supplies, and any other expenses incurred and expended on such a call shall be provided by the Service Company and shall be included in the cost of the service program.
- 4) This emergency service shall be provided as often as needed, on a 24-hour basis, 7 days a week, 365 days a year, weekends and legal holidays included.
- 5) The Service Company shall respond to emergency situations within four (4) hours after notification of system problems.
- The Service Company shall supply two (2) phone numbers. A person or persons under direct employment of the Service Company must answer these phones and they must be trained and certified on the client's specific HVAC systems and their operation.
- 7) If an emergency service call is requested, and inspection does not reveal any defect in the systems and equipment for which the Service Company is responsible, compensation shall be made to the Service Company at the regular rates prevailing for such service.

### D. PARTS AND COMPONENT REPLACEMENT

- The service company will repair or replace worn parts or complete components with new parts or reconditioned components as part of this Service Agreement. It is understood that this undertaking by the Service Company applies only to the systems and mechanical equipment covered.
- 2) The service company shall not make replacements or repairs necessitated by reason of negligence or misuse of the equipment by other than the Service Company or by reason of any other cause beyond his control except ordinary wear and tear.

### **BUILDING SERVICES**

### A. FIELD AUTOMATION SERVICE TOOL

- 1) All mechanics and technicians will be equipped with this hand held computer that automates dispatching and replaces paper work with electronic records accessible through a web based Service Portal application.
- 2) Will maintain complete and detailed service and maintenance records for each piece of equipment in a secure central database and be provided upon request.
- 3) Will have the ability to provide status of any current work order at any time and make that status available via the Internet.
- 4) Will have the ability to provide verification of completed work order or preventive maintenance form within one (1) day of the completion of that service or maintenance action. A paperless version is preferred and may be required.
- 5) Will have the ability to receive service requests via an Internet web site or a centralized call center 24/7/365. E-mail requests are not acceptable.
- 6) Will have the ability to digitally capture customer signature for authorization of work and work completed; the signature will be digitally recorded for verification reasons but will not be used again for any other purpose.
- 7) Will provide work orders that are legible and contain sufficient information about the work performed.

### B. WEB BASED SERVICE PORTAL

- 1) Provide secure access to service information on-line, submit electronic service request, and instantly receive a tracking number.
- 2) Ability to see when preventive maintenance is scheduled and performed and determine the status of all service calls, whether scheduled, open or closed 24/7/365.
- 3) Ability to gain access to service history and the details of work done on completed service calls with the ability to track all work by location and/or contract.
- 4) All records must be available to each and all technicians servicing any piece of equipment at any time.
- 5) Ability to access contract and equipment coverage and warranty details such records must be secure and available to authorized City of Portsmouth personnel or Service Company's personnel.

### C. DISPATCH CENTER

- 1) Service Company must have the ability to receive data from the Field Automation Service Tool & Web Based Service Portal and provide centralized service management, dispatching, remote monitoring, and technical assistance.
- 2) Dispatch Center must be staffed 24 hours a day, 7 days a week, and 365 days a year.

# AUTOMATIC TEMPERATURE CONTROL AND BUILDING AUTOMATION SYSTEMS MAINTENANCE

### A. EQUIPMENT INCLUDED

- 1) The intent of this maintenance program is to provide the City of Portsmouth with a predictable fixed annual cost to maintain the facilities automatic temperature control and building automation systems. These systems include but are not limited to:
  - a) Electric and electronic thermostats,
  - b) space temperature sensors,
  - c) outside air temperature sensors,
  - d) mixed air sensors,
  - e) averaging sensors,
  - f) pressure controls,
  - g) safety controls,
  - h) relays,
  - i) limits,
  - i) valve bodies,
  - k) valve operators,
  - 1) damper motors,
  - m) linkages,
  - n) humidity controls,
  - o) capacity controls,
  - p) safety controls,
  - q) control panels,
  - r) gauges,
  - s) air compressors and air compressor controls,
  - t) direct digital controls (DDC),
  - u) building automation controllers,
  - v) Building automation front end interface.

\*\*For complete details, please refer to Attachments A, B and C Equipment Lists \*\*

### B. SERVICES INCLUDED

- 1) A computerized preventive maintenance plan will be submitted with the Service Company's proposal that identifies the general tasks and schedule of preventive maintenance services to be provided.
- 2) The general services listed below shall apply to the systems and equipment as described in the section entitled Equipment Included as a minimum requirement.
- 3) The following shall be completed at the initial visit:
  - a. Examine each piece of equipment and device to see that it is functioning properly and is in good operational condition.
  - b. Check all room thermostats and sensors, calibrate as needed.
  - c. Adjust all linkages, dampers, etc. that have drifted from the initial design settings and positions.
  - d. Calibrate all sensing, monitoring, output, safety, and readout devices for proper ranges, settings, and optimum efficiencies.
  - e. Review DDC system for proper operation, verify all associated devices start and stop properly, check that all set points are maintained and verify scheduling. Review sequence of operation to ensure DDC system is operating as originally designed. Make necessary changes to programs as required.
- 4) Make backup copies of software configurations and operating systems. Provide the City of Portsmouth facility personnel with access to the most recent copy.
- 5) Test and calibrate all devices including but not limited to thermostats, sensors, dampers, damper actuators, safety controls, valves and valve operators.
- Replace the device by the addition of replacement parts, should the above maintenance not be adequate.
- 7) Replace the device if needed, in view of its condition, age, and cost of previous and subsequent repair.
- 8) Test and cycle all equipment as a system after it has been cleaned, lubricated, adjusted, and calibrated, to see that it is in good operational condition and at optimum efficiency.

### C. PARTS REPLACEMENT

1) All parts, components, or devices for the environmental system as listed above that are worn or are not in proper operational condition, shall be repaired, and/or replaced with new parts, components, or devices at no additional cost to the City of Portsmouth.

- 2) When equipment or parts are replaced in their entirety and a newer design of this device is available and is functionally equivalent and compatible, the device of the newer design shall be used as the replacement.
- 3) All replacement parts, components, and devices for the environmental systems and equipment as listed above shall be supplied by the Service Company, including markup, and shall be included in the cost of the service program.
- 4) All miscellaneous parts and supplies necessary to maintain the environmental systems and equipment shall be supplied by the Service Company, including markup, and shall be included in the cost of the service program.
- 5) The Service Company shall not be made responsible for repairs or replacements necessitated by reason of negligence or misuse of the equipment by other than the Service Company, or by reason of any other cause beyond the control of the Service Company, except ordinary wear and tear.
- 6) The Service Company shall be available, at no additional charge, for consultation regarding design changes and equipment selection, based on past experiences with similar systems.
- 7) The Service Company shall provide and maintain a parts supply which shall be located in a central storage area on the City of Portsmouth premises. Critical, unique, or frequently used parts and supplies shall be stocked therein. This equipment shall remain the property of the Service Company until used and/or installed in the environmental systems.

### MECHANICAL SYSTEMS MAINTENANCE

### A. EQUIPMENT INCLUDED

- 1) The intent of this maintenance program is to provide the City of Portsmouth with a fixed annual cost to maintain the facilities heating, ventilating, air conditioning and exhaust systems. These systems include but are not limited to:
  - a) Packaged air conditioning units,
  - b) gas fired packaged air conditioning units,
  - c) heat pumps,
  - d) split system air conditioning units,
  - e) chillers.
  - f) chilled water circulating pumps,
  - g) humidifiers,
  - h) dehumidification units,
  - i) ductless split system air conditioning units,
  - i) gas fired make-up air units,

- k) make-up air units,
- 1) air handling units,
- m) exhaust fans,
- n) gas fired unit heaters,
- o) cabinet heaters,
- p) gas fired radiant heaters,
- q) cooling towers,
- r) cooling tower circulating pumps,
- s) glycol circulating pumps,
- t) computer room air conditioning unit.

# \*\*For complete details, please refer to Attachments A, B, and C Equipment Lists.

- 2) The responsibility of the Service Company shall not be limited only to these major pieces of equipment as shown on the Equipment List, but shall also include all appurtenant devices and systems as listed below that are related to the heating, ventilating, and air conditioning system. These systems include but are not limited to:
  - a) <u>Heating System:</u> Gas fired burners, furnaces, safety controls and limits, gas valves, pumps, cleaning of heating coils, water strainers, unit heaters, duct heaters, heat exchangers, humidifiers, temperature control devices, etc.
  - b) <u>Cooling System:</u> Air conditioning compressor(s), evaporative condensers, air cooled condensers, condenser fan motors, chilled water and condenser water pumps, cooling towers, reciprocating chillers, contactors, relays, expansion valves, solenoid valves, temperature control devices, cleaning of cooling coils, etc.
  - c) <u>Air Handling System:</u> Fan motors, dampers, linkages, belts, fan shaft bearings, safety controls, automatic temperature control devices, etc.
  - d) <u>Miscellaneous Equipment:</u> Exhaust fans, belts, automatic valves, float valves, direct expansion valves, thermometers, gauges, motor starters, pump and fan motor drives, belts, check valves, and refrigerant.
  - e) <u>Air Filter Services:</u> Air Filters will be supplied and changed by the Service Company according to the Equipment List provided. Service Company will change air filters two (2) times per year. Thirty (30) percent efficient pleated filters will be used in most applications. Washable filters will be used in areas with direct fired heating equipment.

### B. EQUIPMENT NOT INCLUDED

- 1) Maintenance services, including repair labor and parts replacement, for portions of the systems and equipment that are non-moving or structural are not included as part of this specification.
- 2) Excluded items shall be considered as: foundations, structural supports, domestic water lines, drains, plumbing, oil lines, gas lines, piping, oil storage tanks, air handling duct work, boiler shell and tubes, unit cabinets, boiler trim and reflector material, cooling tower structures, etc.
- 3) This specification covers only that equipment as listed herein, and in the event the system is altered, changed, or if any equipment is added, then that portion shall be added or deleted as required, and shall be in accordance with this specification.

### C. SERVICES INCLUDED

- The general services listed below shall apply to the systems and equipment as described in the section entitled Equipment Included. A computerized preventive maintenance plan will be submitted with the Service Company's Proposal that identifies the general tasks and schedule of preventive maintenance services to be provided under this Service Agreement.
- 2) Examine each piece of equipment and device to see that it is functioning properly and is in good operational condition. Perform required preventive maintenance tasks per the Service Company's preventive maintenance schedule. As a minimum requirement:
  - a) Air conditioning condenser coils will be cleaned annually and may require an additional cleaning at no additional cost to the City of Portsmouth due to high pollen count or other environmental factors.
  - b) Check and record volts/amps of air conditioning compressors.

    Check refrigerant charge, add additional refrigerant as necessary. If leaks are found, repair leaks, recharge and test the system. Check oil level in compressors, check for oil contamination (replace as required), check head pressure controls, check hot gas bypass control where applicable, check superheat and adjustment. Check unloader operation where applicable and check all system operating controls.
  - c) Boilers will be cleaned annually with an efficiency reports provided to City of Portsmouth facility personnel. Replace gaskets as required. Tune burners.
  - d) Check fan shafts and fan bearings of all air handling equipment. Check all sheaves for proper alignment. Check for proper belt alignment. Lube motor bearings where applicable.

- e) Check all air handling systems for proper flow, operation and sequencing. All related controls are included. Check fans and fan shafts for proper balance.
- f) Check and tighten all electrical connections.
- g) Check all safety controls and limits.
- h) Replace the device by the addition of replacement parts, should the above maintenance not be adequate.
- 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.
- j) Service provider shall perform spectrochemical analysis of refrigeration compressor oil (City Hall chiller only) to determine the concentration levels of contaminants.
  - 1. This analysis will consist of a minimum of the following four (4) tests:
    - a. Total Acid (ASTMD 664)
    - b. Viscosity (ASTMD 445)
    - c. Water Content (ASTMD 1744)
    - d. Total Solids (ASTMD 91)
  - 2. Oil analysis shall be performed by Service provider during spring start up and by qualified laboratory. Service provider shall provide owner with a detailed report.
- k) This preventive maintenance program includes all parts, labor and materials necessary to perform preventive maintenance services to increase the performance and reliability of the equipment but also includes the repairs and in addition the necessary replacement of components of units including but not limited to:
  - 1. Air Filters
  - 2. Circulating pumps and pump motors
  - 3. Supply and exhaust fans
  - 4. Fan motors
  - 5. Belts
  - 6. Motor starters
  - 7. Heating coils (cleaning only)
  - 8. Cooling coils (cleaning only)
  - 9. Motor bearings
  - 10. Water strainers
  - 11. Capacity and safety controls and devices
  - 12. Unit heaters
  - 13. Cabinet heaters
  - 14. Air handling units

- 15. Air conditioning compressors
- 16. Air cooled condensers
- 17. Packaged rooftop units

### D. PARTS REPLACEMENT

- 1) All parts, components, or devices for the mechanical systems as listed above that are worn or are not in proper operational condition shall be repaired, and/or replaced with new parts, components, or devices.
- 2) When equipment or parts are replaced in their entirety, and a newer design of this device is available and is functionally equivalent and compatible, the device of the newer design shall be used as the replacement.
- 3) All repair and replacement parts, components, and devices for the mechanical systems and equipment as listed above, including markup, shall be supplied by the Service Company and shall be included in the cost of the service program. The Service Company is responsible for all required rigging of equipment, crane charges and other costs associated with the repair or replacement of covered equipment. The City of Portsmouth will not accept any charges associated with the repair or replacement of covered equipment. Important to highlight at Proposal walk and confirm when Proposals are received.
- 4) All miscellaneous parts and supplies necessary to maintain the mechanical systems and equipment shall be supplied by the Service Company and shall be included in the cost of the service program (belts, valve packings, lubricants, tools, paints, refrigerant, test instruments, meters, etc.).
- The Service Company shall not be made responsible for repairs or replacements necessitated by reason of negligence or misuse of the equipment by other than the Service Company, or by reason of any other cause beyond the control of the Service Company, except ordinary wear and tear.

### **SPECIAL CONDITIONS**

- A. The Service Company shall not be required to make safety tests and to install new attachments or additional controls or equipment as recommended or directed by any governmental authority to make replacements mentioned herein with parts or devices of a different design for any reason whatsoever. Service Company shall be reimbursed for any expenses, parts or labor, which is incurred because of the above-mentioned work.
- B. The Service Company may not make any modification to the existing system that will violate the U.L. listing as a system.
- C. The City of Portsmouth will provide access to all devices, which are to be serviced. The Service Company shall be free to start and stop all primary

- equipment incidental to the operation of the mechanical system(s) as arranged with and directed by the client's representative.
- D. The Service Company shall not be liable for any loss, delay, injury, or damage, whether direct or consequential, that may be caused by conditions beyond the Service Company's direct control including, but not limited to, acts of government, strikes, lockouts, fire, explosion, theft, riot, civil commotion, wars, malicious mischief, floods and other acts of God.
- E. The Service Company will provide as part of this proposal a fixed annual service price for each twelve-month period that this service agreement is to be in effect. These prices are to reflect maintenance of the equipment detailed in this specification. If during the term of the service agreement, the City of Portsmouth adds some equipment to a building or buildings that City of Portsmouth would like covered under the service agreement, City of Portsmouth and Service Company will directly negotiate the additional service at the time that the new equipment will begin operating.
- F. It is understood that no other agreement, oral or written, expressed or implied, shall limit or qualify the terms of this agreement unless such additional agreement is accepted in writing by both parties.
- G. It should further be understood that, should any major components of the system be replaced by City of Portsmouth, a credit shall be issued by the Service Company prorated over the period during which service and repair of the new equipment is covered by the manufacturer's or installer's warranty.
- H. Nonperformance by either party under the provisions of this contract shall permit either party to terminate this agreement by sending the other party by certified mail a written notice stating when, not less that 30 days thereafter, termination shall be effective.
- I. The servicemen assigned to maintain the City's systems must pass a background check by the Portsmouth Police Department for work in secure areas.
- J. Services that are to be provided will be performed by qualified and trained service personnel that are directly employed by the Service Company. No work shall be subcontracted.

### **GENERAL CONTRACT TERMS:**

- A. Workmanship & Materials:
  - 1. All work shall be accomplished in an expeditious manner by professionals trained for such work and in strict accordance with appropriate provisions of governing codes.
  - 2. All materials required for this work shall be of the latest proven technology, new and in original containers.
  - 3. The Service Company shall furnish all personnel, parts, materials, test equipment, tools, and services in conformance with the terms and conditions as outlined below.
- B. Substitutions: The City of Portsmouth reserves the right to determine the acceptability of any products or services submitted as an alternate to that specified within this document. Substitution requests must be submitted prior to the Deadline for Submission of Questions in order to receive consideration.
- C. Permits: The Service Company is responsible for all permits and for compliance with all applicable codes.
- D. Regulations: The Service Company will comply with all applicable Federal and State labor, compensation, and employer liability insurance for all their employees engaged in the work on the job site.
- E. Payment: Continuation of the Service Agreement beyond year one is subject to annual municipal appropriations. City shall make good faith efforts to obtain such funding from the Portsmouth City Council. Payment and Terms

All invoices must be submitted to:

City of Portsmouth Public Works Department 680 Peverly Hill Road Portsmouth, NH 03801

Payment shall be within 30 days of receipt and approval of invoice.

### F. Insurance:

Service Company shall be required to obtain and keep in force, and produce upon request, evidence of liability, property damage and workers' compensation insurance as follows:

• Workers' Compensation Insurance in compliance with New Hampshire

• Comprehensive General Liability Insurance as outlined below to include product and completed operations coverage and contractual liability coverage for the indemnity provided under this contract. It shall provide that the City of Portsmouth, and their divisions, officers and employees, are Additional Insured but only with respect to the Service Company's services to be provided under this Contract.

Comprehensive General Liability: Bodily Injury or Property Damage - \$2,000,000 Single Occurrence/aggregate Automobile and Truck Liability: Bodily Injury or Property Damage - \$2,000,000

- There shall be no cancellation, material change, reduction of limits or intent not to renew the insurance coverage(s) without 30 days written notice from the Service Company or its insurer(s) to the City of Portsmouth.
- As evidence of the insurance coverage required by this Contract, the Service Company shall furnish acceptable insurance memoranda to the City of Portsmouth prior to issuance of a Notice to Proceed. Insuring Companies or entities are subject to the City of Portsmouth's acceptance. If requested, complete copies of insurance policies, trust agreements, etc. shall be provided to the City of Portsmouth. The Service Company shall be financially responsible for all pertinent deductibles, self-insured retentions and/or self-insurance. The City of Portsmouth shall be named as Additionally Insured.

## ATTACHMENT A

## PART 1 Building Automation Controls

LOCATION	QTY	DESCRIPTION	MANUFACTURER	MODEL
City Hall Basement				
Basement Police	1	DDC XL100	Honeywell	XI.100B2
Cooling Yower	1	XL50	Honeywell	XL50B2
City Hall Penthouse				<u> </u>
Penthouse	1	Cooling Tower Fan Motor Variable Frequency Drive	Toshiba	ĺ
Main Boiler Plant**				
Boiler Room Sensor01	2	DDC PTS Analog Sensor	Honeywell	· · · · · · · · · · · · · · · · · · ·
Boiler Room Sensor02	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor03	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor04	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room	1	CPO 6A	Honeywell	1
Boiler Room	7	HSC controllers (Packaged Controls)	HSC Controls	
Portsmouth Pool	,_,,,_,			
Boiler Room sensor	1	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor01	3.	DDC PTS Analog Sensor	Honeywell	
AHU's Sensor02	2	DDC PTS Analog Sensor	Honeywell	
Pool Area Sensor03	1	DDC PTS Analog Sensor	Honeyweil	
Throughout Building	1	DDC PTS Analog Sensor	Honeywell	
Boiler Room	1	XI,100	Honeywell	
Spinnaker Point				
Gym	2	XL10	Honeywell	Gvm
Gym	1	DDC PTS Analog Sensor	Automation Panel	Gym
Public Works Building				
Office	1	XB\$ System	Honeywell	XL 5000
Portsmouth Public Library*				
Siemens temperature control	ors, outsid	components to include, space de air sensors, control relays, de	temperature sensors, duct amper operators, heat pump	Siemens Drawing 521E-1492 Pages 001 thru 009

<sup>\*</sup>Personal computer, monitor and keyboard are excluded from coverage.

Access to equipment to be provided by the City of Portsmouth during normal working hours.

Operating system upgrades to include software or hardware upgrades, are not included in contract coverage.

LOCATION	QTY	DESCRIPTION	MANUFACTURER	MODEL
City Hall Basement				
Basement Police	1	DDC XL100	Honeywell	XI, 100B2
Cooling Tower	1	XL50	Honeywell	XL50B2
City Hall Penthouse			\$	
Pentliouse	1	Cooling Tower Fan Motor Variable Frequency Drive	Toshiba	
Main Boiler Plant**				
Boiler Room Sensor01	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor02	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor03	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor04	2	DDC PTS Analog Sensor	Honeywell	
Boiler Room	1	CPO 6A	Honeywell	
Boiler Room	7	HSC controllers (Packaged Controls)	HSC Controls	
Portsmouth Pool				
Boiler Room sensor	1	DDC PTS Analog Sensor	Honeywell	
Boiler Room Sensor01	3	DDC PTS Analog Sensor	Honeywell	<u> </u>
AHU's Sensor02	2	DDC PTS Analog Sensor	Honeywell	
Pool Area Sensor03	1	DDC PTS Analog Sensor	Honeywell	
Throughout Building	. 1	DDC PTS Analog Sensor	Honeywell	
Boiler Room	1	XL100	Honeywell	
Calman an Dains				
Spinnaker Point	1	XL10	Honeywell	Gym
Gym Gym	1	DDC PTS Analog Sensor	Automation Panel	Gym
Public Works Building				
Office	1	XB\$ System	Honeywell	XL 5000
Portsmouth Public Library*				
Siemens temperature control	ors, outsid	components to include, space de air sensors, control relays, de	temperature sensors, duc amper operators, heat pump	t Siemens Drawing 521E-1492 Pages 001 thru 009

### PART 2

## **Mechanical Equipment**

Location	Quantity	Description	Manufacturer	Model
Police Station				
Basement				
Mech Room	1	Chiller	Carrier	30HXC146
Fitness	1	Heating Cabinet	McQuay	TSF021DRA
		Heater Fan Coils	. ,	
Range Control	1	Heating Cabinet	McQuay	TSF021DRA
		Heater Fan Coils		
Range Hallway	1	Heating Cabinet	McQuay	TSF021DRA
		Heater Fan Coils		
Ammo Storage	1	Heating Cabinet	McQuay	TSF021DRA
		Heater Fan Coils		
Gun Cleaning	1	Heating Cabinet	McQuay	TSF021DRA
		Heater Fan Coils		
Generator Room	1	HW Unit Heater	Modine	
Mech Room	1	HW Unit Heater	Modine	HS63S01
Mech Room off	1	Water Heater	Teledyne-Laars	PW0125CN12CBACN
Weight Room			•	
Outside Basement	1	Pkg Unit/HP Split	Carrier	38TG042320
SWAT		Outdoor Section		
		ACS-4		
Outside Basement	1	Pkg Unit/HP Split	Carrier	R0532024M
SWAT		Indoor Section		
		ACS-4		
Outside Basement	1	Pkg Unit/HP Split	Carrier	38TKB06605000
Computer rm		Outdoor Section		
1		ACS-6		
Outside Basement	1	Pkg Unit/HP Split	Carrier	38QH024300
Computer rm		Indoor Section		
F		ACS-6		
Dispatch Control	1	Pkg Unit/HP Split	Trane	2TTA0042A3000AA
2 ispaton control		Outdoor Section	114110	2111100 (2110 0001111
Dispatch Control	1	Pkg Unit/HP Split	Trane	BchC036A2A0A1AV
AHU10		Indoor Section		
PD server room	1	Pkg Unit/HP Split	Mitsubishi	PUG18BK8
		Outdoor Section		
PD server room	1	Pkg Unit/HP Split	Mitsubishi	PL 18AK
		Indoor Section		
Mech Room off	1	In-Line Pump	Grundfos	Frac Hp
Weight Room		HTG/CLG		
Mech Room Pmp01	1	In-Line Pump	Taco	FM30087.6B4F1C1L0
		HTG/CLG		
Mech Room Pmp02	1	In-Line Pump	Taco	FM30087.6B4F1C1L0
		HTG/CLG		
Mech Room Pmp 03	1	In-Line Pump	Taco	FM30087.6B4F1C1L0
Off. Young		HTG/CLG	M.C	I GI 102GV
Office ACS03	1	Supply Fan Vent	McQuay	LSL103CV
Diametel ACCOA	1	SF, GN, CC	MaC	I CI 104CV
Dispatch ACS04	1	Supply Fan Vent	McQuay	LSL104CV
Mech Room ACS06	1	Supply Fan Vent	McQuay	LSL104CV

Location	Quantity	Description	Manufacturer	Model
Mech Room ACS07	1	Supply Fan Vent	McQuay	LSL106CV
Mech Room ACS05	1	Supply Fan Vent	McQuay	LSC104CV
Mech Room HV001	1	Supply Fan Vent	McQuay	LHD108CV
Mech Room HV002	1	Supply Fan Vent	Carrier	39CA108KA1131-L
Mech Room HV003		Supply Fan Vent  Supply Fan Vent		LHD122CV
Mech Room H v 003	1	Supply Fan Vent	McQuay	LHD122CV
Police Station 1st				
Floor				TGF024DD 4
Room 152 Detective	9	Heating Cabinet	McQuay	TSF021DRA
D 150	1	Heater Fan Coils	M.O.	T0F0(1DD
Room 159	1	Heating Cabinet	McQuay	TSF061DR
Room 120	1	Heater Fan Coils	MaQuan	TSF021DRA
K00m 120	1	Heating Cabinet	McQuay	1SF021DKA
Records' Area	2	Heater Fan Coils Heating Cabinet	McQuay	TSF021DRA
Records Area	2	Heater Fan Coils	McQuay	ISFUZIDKA
Room 151	1	Heating Cabinet	McQuay	TSF021DRA
Koom 131	1	Heater Fan Coils	MeQuay	151 021DKA
Office	1	Heating Cabinet	McQuay	TSF021DRA
Office	1	Heater Fan Coils	MeQuay	151 021DKA
Lobby Reception	1	Heating Cabinet	McQuay	TSF021DRA
Lobby Reception	1	Heater Fan Coils	Mequay	151 0215101
Room 107	1	Heating Cabinet	McQuay	TSF021DRA
Room 107	1	Heater Fan Coils	Mequay	151 0215101
Lobby	3	Heating Cabinet	McQuay	TSF041DR
,		Heater Fan Coils		
Stairwell	2	Electric Unit Heater	Qmark	
Dispatch	1	Humidifier, Steam,	Dri-Steam	VM99-4
-		HW, Electric Vent		
Dispatch	1	Trane Split System	Trane	31/2 Ton
		Air Conditioning		
		Unit		
Mechanical Room	1	Booster Pump		
Mechanical Room	1	Domestic Hot Water		
		Circulating Pump		
Telephone room	1	Supply Fan Vent	McQuay	LSL103CV
Cell Area AHU	1	Supply Fan Vent	McQuay	L2J104CH
Police Second Floor		<del>                                     </del>		
Room 211	2	Cabinet Heater/Fan	Carrier	42VB5AL2P
ROOM 211		Coil	Carrier	42VB3AL2P
Room 209	1	Cabinet Heater/Fan	Carrier	42VB5AL2P
		Coil		
Room 209B	1	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Room 206	2	Cabinet Heater/Fan	Carrier	42VB5AL2P
100111 200	2	Coil	Currer	12 ( 13) ( 11) 21

Room 206 Welfare	2	Radiator	McQuay	
Location	Quantity	Description	Manufacturer	Model
Room 204	1	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Room 209	1	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Room 217	1	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Room 220	1	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Room 223A	2	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 223	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 225	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 227	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 229	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 231	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Chief Office	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 232	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 230	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Room 228	1	Cabinet Heater/Fan Coil	McQuay	TSF021DRA
Motor Vehicles	6	Cabinet Heater/Fan Coil	Carrier	42VB5AL2P
Taxes City Clerk	2	Cabinet Heater/Fan Coil	Carrier	42VB3AL2P
Assessor	1	Cabinet Heater/Fan Coil	Carrier	42VB3AL2P
Hallway	1	Cabinet Heater/Fan Coil	Carrier	42VB3AL2P
City Clerk office	1	Cabinet Heater/Fan Coil	Carrier	42VB3AL2P
City Hall Third Floor				
Room 300	1	Cabinet Heater/Fan Coil	Trane	
Room 302	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Room 303	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Room 305	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Room 310	2	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P

Location	Quantity	Description	Manufacturer	Model
Room 313	Quantity	Cabinet Heater/Fan	Carrier	42VB2AL2P
KOOIII 313	1	Coil	Carrier	42 V DZALZP
Room 311	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 307	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Billing Office	7	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 316	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 318	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 320	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 329	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 327	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 325	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 323	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 321	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 319	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 317	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 315	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 331	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 333	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 335	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 337	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 339	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Hallway	2	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 336	2	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 334	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 332	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Server Room	1	Split AC System	Carrier	4AQ024300BB
Server Room	1	ASU	Fujitsu	ASU36CLX
		+	<u> </u>	
		i l		

Location	Quantity	Description	Manufacturer	Model
City Hall Fourth	Quantity	Description	Manufacturer	Wiouci
Floor				
Room 420	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 421	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 421B	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 423	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 423B	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil	~ .	
Room 423C	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
D 404	1	Coil	G :	40VDQ 4 I 2D
Room 424	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
Room 427	1	Coil Cabinet Heater/Fan	Carrier	42VB2AL2P
K00III 427	1	Cabinet Heater/Fan Coil	Carrier	42 V B2AL2P
Room 427B	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
K00III 427D	1	Coil	Carrier	42 V D2AL2I
Room 428	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
Room 420	1	Coil	Currier	72 V D21 LL21
Room 434	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 403	2	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 404	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 405	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 408	2	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 413	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Room 415	2	Cabinet Heater/Fan	Carrier	42VB2AL2P
D 405	1	Coil	G :	101100 11 00
Room 425	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
Room 440	1	Coil	Carrier	40VD0 A L 2D
K00III 44U	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
Room 445	1	Coil Cabinet Heater/Fan	Airtemp	041 1L-F
Room <del>11</del> 3	1	Coil	Antemp	0+1 1L-1
Room 451	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
10011 131	1	Coil	Carrier	12 ( D2AL21
Room 452	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
- <del>-</del>		Coil		·
Room 453	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
		Coil		
Mayor's Office	1	Cabinet Heater/Fan	Carrier	42VB2AL2P
•		Coil		
	ī			

		T		I
Location	Quantity	Description	Manufacturer	Model
Legal Office	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Hallway	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Weatherization	1	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Conference Room	2	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
Admin	1	Cabinet Heater/Fan Coil	Airtemp	041 1L-F
City Manager's Office	5	Cabinet Heater/Fan Coil	Carrier	42VB2AL2P
City Hall Rooftop & Penthouse				
Rooftop	1	Tower	Evapco	AT 8-63
Rooftop Serving Council Chambers	1	Rooftop Pkg Unit	Trane	YSD150F3RVA
Rooftop Serving Conference Room A and Portsmouth Room	1	Split Syatem Air Conditioning Unit	Mitsubishi	PUMY-P60NKMU
Conference Room A	1	Fan Coil Unit with Duct Heater	Mitsubishi	PEFY-P48
Conference Room A	1	ERV	Lossnay	LGH-F47
Portsmouth Room		Fan Coil Unit with Duct Heater	Mitsubishi	PEFY-P24
Penthouse	1	Exhaust Fan Vent	Trane	
Rooftop Serves Lunch Room 3rd Fl	1	Exhaust Fan Vent		
Rooftop Exfan 03	1	Exhaust Fan Vent	Loren Cook	MK-EF-5
Rooftop Exfan 04	1	Exhaust Fan Vent	Loren Cook	MK-EF-5
Rooftop	1	Exhaust Fan Vent	Greenheck	CBE104
Penthouse	1	Hot Water Unit Heater	Modine	
Main Boiler Plant				
Boiler Room Boiler 01	1	High Effiecnecy Gas Boiler B-1	Cleaver Brooks	CFC-1800
Boiler Room Boiler 02	1	High Effiecnecy Gas Boiler B-2	Cleaver Brooks	CFC-1800
Boiler Room Boiler 03	1	High Efficenecy Gas Boiler B-3	Cleaver Brooks	CFC-1800
Boiler Room Boiler 04	1	High Effiecnecy Gas Boiler B-4	Cleaver Brooks	CFC-1800
Boiler House	1	Pump P-1	Wilo	NL 4x3x6
Boiler House	1	Pump P-2	Wilo	NL 4x3x6
Boiler House	1	In-Line Pump BP-1	Wilo	Stratos 3x3-30
Boiler House	1	In-Line Pump B P-2	Wilo	Stratos 3x3-30

Location	Quantity	Description	Manufacturer	Model
Boiler House	1	In-Line Pump BP-3	Wilo	Stratos 3x3-30
Boiler House	1	In-Line Pump BP-4	Wilo	Stratos 3x3-30
Boiler House	4	Unit Heater	Modine	
Boiler Room	1	Exhaust Fan Vent	Greenheck	SE2-18-423-B6
_ 5.1.0.1.00m	_	EF-1	Greenine en	522 10 .20 20
Boiler Room	1	Unit Water Heater	Vulcan	HV-108
		UH-1		
Boiler Room	1	Unit Water Heater	Vulcan	HV-108
		UH-2		****
Boiler Room	1	Unit Water Heater	Vulcan	HV-96
Boiler Room	1	UH-3 Unit Water Heater	Vulcan	HV-96
Donei Room	1	UH-4	vuican	11 V - 30
		011-4		
Seybolt Basement		+		
Storage	6	Cabinet Heater/Fan	Trane	FCBB0301JL0AEH20
		Coil		
Storage	2	Cabinet Heater/Fan	Trane	FCBB0401K10AEH20
		Coil		
Basement	1	Water Heater	General Electric	GG50T6A
Mech Room	1	In-Line Pump	Taco	164103N58.4
		HTG/CLG 2HP		
Mech Room	1	VFD	Toshibia	
Carrie ald 2m d Ela an				
Seybolt 2nd Floor	1			ECDD 401H 0 A EH20 A
Room 201	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Room 202	1	Coil Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
100m 202	1	Coil	Trane	T CDD+013L071L112071
Room 203	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 204	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 205	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
D 206	1	Coil	T	ECDD 401H 0 A EH20 A
Room 206	1	Cabinet Heater/Fan Coil	Trane	FCBB401JL0AEH20A
Room 207	2	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
100m 207	2	Coil	Trane	T CDB+013E071E112071
Senior Services	1	Con		
Maintenance Office	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Office 1	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Office 2	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
O.CC: 2	4	Coil	T.	ECDD 404 H 0 4 EM20 4
Office 3	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Entrance	1	Coil Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Lituance	1	Cabinet Heater/Fan  Coil	Hane	1°CDD+013L0AEH20A
	l	Con		

Hallway	1	Cabinet Heater/Fan Coil	Trane	FCBB401JL0AEH20A
Location	Quantity	Description	Manufacturer	Model
Seybolt 3rd Floor	+	1		
Hallway	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
liunway	1	Coil	Trune	T CDD 1013E071E112071
Room 301	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 302	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 303	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 304	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
D 205	1	Coil	TD	ECDD 401 H 0 A EH20 A
Room 305	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Room 306	1	Coil Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Kooiii 500	1	Coil	Traile	TCDD4013L0AE1120A
Room 307	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Room 507	1	Coil	Trune	T CDD 1013E071E112071
Room 308	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 309	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 311	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
		Coil		
Room 312	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
D 212	1	Coil	T.	ECDD 401 H 0 A EH20 A
Room 313	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Room 314	1	Coil Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
Koom 514	1	Coil	Traile	TCDD4013L0AE1120A
Room S314	1	Cabinet Heater/Fan	Trane	FCBB401JL0AEH20A
1100111 2011		Coil	114110	1 022 101020112112011
Seybolt 4th Floor	+			
Hallway	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		
Hallway	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		
Hallway	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		
Room 403	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		
Room 404	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
Vitahan	1	Coil	Trong	ECDD0201V10AEU20
Kitchen	1	Cabinet Heater/Fan Coil	Trane	FCBB0301K10AEH20
Reception Desk	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
Teophon Desk	1	Coil	Tranc	1 CDD 03011K10/1L1120
Sun Room	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		
Office 1	1	Cabinet Heater/Fan	Trane	FCBB0301K10AEH20
		Coil		

Office 2	1	Cabinet Heater/Fan Coil	Trane	FCBB0301K10AEH20
Location	Quantity	Description	Manufacturer	Model
Portsmouth Pool		1		
Boiler Room	1	Hot Water Boiler	HB Smith	28-7
Boner Room	1	Section	TID Silitin	20 7
Boiler Room	1	Gas Burner Atmos		PWRFLAME C2-GO
Main Entrance	1	Cabinet Heater/Fan	Trane	N46A003
		Coil		
Boiler Room	1	Hot Water Unit	Modine	HS245
		Heater		
Filter Room	1	Hot Water Unit	Modine	HS245
		Heater		
Boiler Room	1	Water Heater	Teledyne-Laars	W0400CN12CBACX
Outside	1	Pkg Condenser Air		HUSSMANN ASVF34
		MultiFan DD/BLT		
Boiler Room	1	Pkg Unit Comp	Zephyr	DP6000
Doner Room	1	2Herm & Cond	Zepnyi	D1 0000
Boiler Room	1	In-Line Pump	Taco	12
DOMPMP01	-	HTG/CLG	1400	
Boiler Room	1	In-Line Pump	Taco	6
DOMPMP02		HTG/CLG		
Boiler Room PMP01	1	In-Line Pump	Bell & Gossett	1/2 Hp
		HTG/CLG		
Boiler Room PMP02	1	In-Line Pump	Bell & Gossett	1/6 Hp
		HTG/CLG		
Boiler Room PMP03	1	In-Line Pump	Bell & Gossett	1/6 Hp
		HTG/CLG		
Boiler Room PMP04	1	In-Line Pump	Bell & Gossett	1 1/2 Hp
Boiler Room PMP05	1	HTG/CLG	T	10
Boiler Room PMP05	1	In-Line Pump HTG/CLG	Taco	10
Boiler Room PMP06	1	In-Line Pump	Taco	1600 Series
Boner Room i wii oo	1	HTG/CLG	Taco	1000 Series
Boiler Room PMP07	1	In-Line Pump	Taco	1600 Series
	_	HTG/CLG		
Boiler Room PMP08	1	In-Line Pump	Taco	1600 Series
		HTG/CLG		
Pool Area	4	Exhaust Fan Vent		Frac Hp
Boiler Room HRU01	1	Supply Fan Vent	VenMar	9212
		SF, GN, CC		
Boiler Room HRU02	1	Supply Fan Vent	VenMar	D2P1XC1DXS
		SF, GN, CC		
		Spinnaker Poi	nt	
Rooftop HVAC 1	1	Lounge/Exercise	Carrier	MD48DF028
		Package Air		
		Conditioning Unit		
Equipment Room	2	Gas Fired Make Up	Sterling	MAUH-800
		Air Units – 5 Hp		

		Lockers/Track		
Location	Quantity	Description	Manufacturer	Model
Mechanical Room	1	Gas Fired Heater -	Teledyne Lars	LLG400
		Pool		
	1	Domestic Hot Water	Lochivar	MC48J2PA10
	1	Heater Circulating Pump 3/4	Dynaglas	M#C48J2PA1C
	1	Hp	Dynagias	WI#C46J2FATC
Pool Mechanical	1	Dehumidification	Zephyr	MM#1800
Room		Unit 7 GPM		
		Pool Area		
	1	Jacuzzi Heater	Teledyne Lars	LLG250
	1	Gas Fired Heater	Sterling	MCS400
Ceiling 2 <sup>nd</sup> Floor	1	Exhaust Fan	Fractional Hp	
Rooftop	1	Exhaust Fan for	11/2 Hp	
		Track/Locker		
Gym	1	Make-Up Air Unit	Fractional Hp	
	1	Exhaust Fan Motor	Fractional Hp	
Bicycle Room	1	Air handling Unit	Fractional Hp	
Dicycle Room	_	*Not Covering Parker	-	
			~, stem	
1 <sup>st</sup> Floor	1	Gas Fired Furnace	Trane	XE90
Rooftop Serves 1st	1	Rooftop Package	Trane	YCD120B
Floor		Unit		
Truck Bay	2	Gas Fired Infrared	Solarronics	
102A	1	Heaters Gas Fired Infrared	Solarronics	
102A	1		Solarronics	
102B		Heaters	201411011145	
<u> </u>	1	Heaters Gas Fired Infrared	Solarronics	
	1			
102C	1	Gas Fired Infrared Heaters Gas Fired Infrared		
	1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters	Solarronics Solarronics	
102C 102D		Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared	Solarronics	
102D	1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters	Solarronics Solarronics	Maintenance Garage
102D	1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared	Solarronics Solarronics	Maintenance Garage
102D Maintenance Garage	1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared	Solarronics Solarronics	Maintenance Garage
102D Maintenance Garage	1 1 4	Gas Fired Infrared Heaters	Solarronics Solarronics Solartronics	Maintenance Garage
102D Maintenance Garage	1 1 4	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C	Solarronics Solarronics Solartronics Trane	Maintenance Garage
Maintenance Garage  2 <sup>nd</sup> Floor Storage area	1 1 4 1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C Condensing Unit	Solarronics Solarronics Solarronics Trane Bryant	
Maintenance Garage  2 <sup>nd</sup> Floor Storage area	1 1 4	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C Condensing Unit Gas Fired Furnaces	Solarronics Solarronics Solartronics Trane	Maintenance Garage  XE90
102D  Maintenance Garage  2 <sup>nd</sup> Floor Storage area	1 1 4 1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C Condensing Unit	Solarronics Solarronics Solarronics Trane Bryant	
102D  Maintenance Garage  2 <sup>nd</sup> Floor Storage area	1 1 4 1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C Condensing Unit Gas Fired Furnaces	Solarronics Solarronics Solarronics Trane Bryant Trane	
	1 1 4 1	Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Infrared Heaters Gas Fired Furnaces with A/C Condensing Unit Gas Fired Furnaces with A/C Coil	Solarronics Solarronics Solarronics Trane Bryant Trane	

Boiler Room				
Bolici Roolli	2	Circulating Pumps 180 Degree Loop	11/2 Hp	Weinman
DOHE! KOOIII	2	Pumps	11/2 11p	vv emman
Location	Quantity	Description	Manufacturer	Model
Boiler Room	2	Boiler Loop	1 Hp	Weinman
Doner Room	_	Circulating Pumps	1114	VV CIIIIIIIII
Boiler Room	6	Variable Frequency		
		Drives		
Rooftop	1	Cooling Tower	30 Hp	Evapco
Rooftop	1	Cooling Tower	2 Hp	Evapco
toortop		Spray Pump	2116	Lvapeo
First Floor	5	Cabinet Unit	Fractional Hp	Rittling
11501		Heaters	Tractional Tip	Titting
Penthouse	2	Energy Recovery	1 Hp Supply	Venmar
Charoase	_	Ventilators	1 11p Suppiy	Volillar
		ERV-1 and ERV-2	1 Hp Exhaust	
Penthouse	1	Water Source Heat	4 Ton	Carrier
. CHUIOUSE	1	Pump HP 2-1	7 1011	Carrier
Penthouse	1	Water Source Heat	5 Ton	Carrier
Pentnouse	1		5 1011	Carrier
0 4	1	Pump HP 2-2	21/2 F	
Penthouse	1	Water Source Heat	31/2 Ton	Carrier
		Pump HP 2-3		
Penthouse	1	Water Source Heat	2 Ton	Carrier
		Pump HP 2-4		
Penthouse	1	Water Source Heat	21/2 Ton	Carrier
		Pump HP 2-5		
Penthouse	1	Water Source Heat	5 Ton	Carrier
		Pump HP 2-6		
Penthouse	1	Water Source Heat	11/2 Ton	Carrier
		Pump HP 2-7		
Penthouse	1	Water Source Heat	2 Ton	Carrier
		Pump HP 2-8		
Penthouse	1	Water Source Heat	5 Ton	Carrier
		Pump HP 2-9		
Penthouse	1	Water Source Heat	1 Ton	Carrier
· chinouse	1	Pump HP 2-10	1 1011	Currer
Penthouse	1	Water Source Heat	11/2 Ton	Carrier
Chinouse	1	Pump HP 2-11	11/2 1011	Carrier
Penthouse	1	Water Source Heat	1 Ton	Carrier
renthouse	1		1 1011	Carrier
<u> </u>	1	Pump HP 2-12	01/0 TF	<u> </u>
Penthouse	1	Water Source Heat	21/2 Ton	Carrier
0 4		Pump HP 2-13	11/0 F	
Penthouse	1	Water Source Heat	11/2 Ton	Carrier
		Pump HP 2-14		
Penthouse	1	Water Source Heat	31/2 Ton	Carrier
		Pump HP 2-15		
Penthouse	1	Water Source Heat	3 Ton	Carrier
		Pump HP 2-16		
			Manufacturer	

Penthouse	1	Water Source Heat Pump HP 2-17	9000 BTU	Carrier
D d	1	-	1 Ton	Committee of
Penthouse	1	Water Source Heat Pump HP 2-18	1 Ion	Carrier
Penthouse	1	Water Source Heat	21/2 Ton	Carrier
		Pump HP 2-19		
Penthouse	1	Water Source Heat	4 Ton	Carrier
		Pump HP 2-20		
Penthouse	1	Water Source Heat	4 Ton	Carrier
		Pump HP 2-21		
Penthouse	1	Water Source Heat	4 Ton	Carrier
		Pump HP 2-22		
Penthouse	1	Water Source Heat	10 Ton	Carrier
		Pump HP 2-23		
First Floor Ceiling	1	Water Source Heat	1 Ton	Carrier
- 11001 001 mg	_	Pump HP 1-1	1 1011	
First Floor	1	Water Source Heat	21/2 Ton	Carrier
1 1150 1 1001	1	Pump HP 1-2	21/2 1011	Currer
First Floor	1	Water Source Heat	2 Ton	Carrier
1 1130 1 1001	1	Pump HP 1-3	2 1011	Carrier
First Floor	1	Water Source Heat	1 Ton	Carrier
1 1150 1 1001	1	Pump HP 1-4	1 1011	Carrier
First Floor	1	Water Source Heat	4 Ton	Carrier
1118011001	1	Pump HP 1-5	4 1011	Carrier
First Floor	1	Water Source Heat	31/2 Ton	Carrier
171181 171001	1	Pump HP 1-6	31/2 1011	Carrier
First Floor	1	Water Source Heat	3 Ton	Carrier
FIISt FIOOI	1	Pump HP 1-7	3 1011	Carrier
First Floor	1	Water Source Heat	1 Ton	Carrier
riist riooi	1	Pump HP 1-8	1 1011	Carrier
First Floor	1	Water Source Heat	31/2 Ton	Carrier
riist riooi	1	Pump HP 1-9	31/2 1011	Carrier
First Floor	1	Water Source Heat	5 Ton	Carrier
riist riooi	1	Pump HP 1-10	3 1011	Carrier
First Floor	1	Water Source Heat	2 Ton	Carrier
1 1150 1 1001	1	Pump HP 1-11	2 1011	Carrier
First Floor	1	Water Source Heat	5 Ton	Carrier
1 1130 1 1001	1	Pump HP 1-12	3 1011	Carrier
First Floor	1	Water Source Heat	4 Ton	Carrier
11301	1	Pump HP 1-13	1 1011	Cullion
First Floor	1	Water Source Heat	11/2 Ton	Carrier
11101		Pump HP 1-14	11/2 1011	Curror
Location	Quantity	Description	Manufacturer	Model
First Floor	1	Water Source Heat	11/2 Ton	Carrier
		Pump HP 1-15		
First Floor	1	Water Source Heat	21/2 Ton	Carrier
		Pump HP 1-16		
First Floor	1	Water Source Heat	31/2 Ton	Carrier
	İ	Pump HP 1-17		

First Floor	1	Water Source Heat	4 Ton	Carrier
		Pump HP 1-18		
First Floor	1	Water Source Heat	31/2 Ton	Carrier
		Pump HP 1-19		
First Floor	1	Water Source Heat	4 Ton	Carrier
		Pump HP 1-20		
Rooftop	1	Exhaust Fan F-1	1 Hp	Greenheck
Rooftop	1	Exhaust Fan F-2	¹⁄4 Hp	Greenheck

#### **Waste Water Facilities**

Location	Quantity	Description	Manufacturer	Model
Mechanic St.	1	Rooftop	Trane	YCD151CYHAAA
Pump Station		12 1/2 ton		
	1	Ductless Split	Carrier	40QAC060-311
Deer St	1	AC	Trane	MCCB008UA0COUA
Pump Station				
Pease	1	AC	Rheem	RAMA-060JAZ
Admin Bldg.				
Pease	1	AC	Fujitsu	ADU24RLX
Chart Bldg				
Pease	1	AC	Heat Controller INC	A-SMA18SC
Interim Pump house				
*Access to equ	uipment to be pro	ovided by the City of	Portsmouth during norm	nal working hours.

PART 3

### **Automatic Temperature Control Components**

Location	Quantity	Description	
City Hall			
Police Station Basement			
Mech Room	· 1		
		Electric Converter Control/DA/Room Controls	
Fitness	1	Elec Mix/DA/Rom Controls	
Range Control	1	Electric Converter Control	
Range Hallway	1	Electric Valve Control	
Ammo Storage	1	Elec Mix Air/DA/Room Control	
Gun Cleaning	1	Elec Mix Air/DA/Room Control	
Generator Room	1	Elec Mix Air/DA/Room Control	
Mech Room	1	Elec Mix Air/DA/Room Control	
Mech Room off Weight Room	1	Elec Mix Air/DA/Room Control	
Outside Basement SWAT	1	Elec Mix Air/DA/Room Control	
Outside Basement SWAT	1	Elec Mix Air/DA/Room Control	
Outside Basement Computer rm	1	Elec Mix Air/DA/Room Control	
Outside Basement Computer rm	1	Elec Mix Air/DA/Room Control	
Dispatch Control	1	Elec Mix Air/DA/Room Control	
Dispatch Control AHU10	1	Elec Mix Air/DA/Room Control	
PD server room	1	Elec Mix Air/DA/Room Control	
PD server room	1	Elec Mix Air/DA/Room Control	
Mech Room off Weight Room	1	Elec Mix Air/DA/Room Control	
Mech Room Pmp01	1	Elec Mix Air/DA/Room Control	
Mech Room Pmp02	1	Elec Mix Air/DA/Room Control	
Mech Room Pmp 03	1	Elec Mix Air/DA/Room Control	
Office ACS03	1	Elec Mix Air/DA/Room Control	
Police Station 1st Floor			
Room 152 Detective	9	Elec Mix Air/DA/Room Control	
Room 159	1	Elec Mix Air/DA/Room Control	
Room 120	1	Elec Mix Air/DA/Room Control	
Records' Area	2	Elec Mix Air/DA/Room Control	
Room 151	1	Elec Mix Air/DA/Room Control	
Office	1	Elec Mix Air/DA/Room Control	
Lobby Reception	1	Elec Mix Air/DA/Room Control	
Room 107	1	Elec Mix Air/DA/Room Control	
Lobby	3	Elec Mix Air/DA/Room Control	
Stairwell	2	Elec Mix Air/DA/Room Control	
Dispatch	1	Elec Mix Air/DA/Room Control	
Dispatch	1	Elec Mix Air/DA/Room Control	
Mechanical Room	1	Elec Mix Air/DA/Room Control	
Mechanical Room	1	Elec Mix Air/DA/Room Control	
Telephone room	1	Elec Mix Air/DA/Room Control	
		Elec Mix Air/DA/Room Control	
		The same of the sa	

		RFP 16-15 HVAC Equipment Serv
Police Station Second Floor	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	
Location	Quantity	Description
Room 211	2	Elec Mix Air/DA/Room Control
Room 209	1	Elec Mix Air/DA/Room Control
Room 209B	1	Elec Mix Air/DA/Room Control
Room 206	2	Elec Mix Air/DA/Room Control
Room 206 Welfare	2	Elec Mix Air/DA/Room Control
Room 204	1	Elec Mix Air/DA/Room Control
Room 209	1	Elec Mix Air/DA/Room Control
Room 217	1	Elec Mix Air/DA/Room Control
Room 220	1	Elec Mix Air/DA/Room Control
Room 223A	2	Elec Mix Air/DA/Room Control
Room 223	l	Elec Mix Air/DA/Room Control
Room 225	1	Elec Mix Air/DA/Room Control
Room 227	1	Elec Mix Air/DA/Room Control
Room 229	1	Elec Mix Air/DA/Room Control
Room 231	1	Elec Mix Air/DA/Room Control
Chief Office	1	Elec Mix Air/DA/Room Control
Room 232	1	Elec Mix Air/DA/Room Control
Room 230	1	Elec Mix Air/DA/Room Control
Room 228	1	Elec Mix Air/DA/Room Control
Motor Vehicles	6	Elec Mix Air/DA/Room Control
Taxes City Clerk	2	Elec Mix Air/DA/Room Control
Assessor	1	Elec Mix Air/DA/Room Control
Hallway	1	Elec Mix Air/DA/Room Control
City Clerk office	1	Elec Mix Air/DA/Room Control
City Hall Third Floor		
Room 300	1	Elec Mix Air/DA/Room Control
Room 302	1	Elec Mix Air/DA/Room Control
Room 303	1	Elec Mix Air/DA/Room Control
Room 305	1	Elec Mix Air/DA/Room Control
Room 310	2	Elec Mix Air/DA/Room Control
Room 313	1	Elec Mix Air/DA/Room Control
Room 311	1	Elec Mix Air/DA/Room Control
Room 307	1	Elec Mix Air/DA/Room Control
Billing Office	7	Elec Mix Air/DA/Room Control
Room 316	1	Elec Mix Air/DA/Room Control
Room 318	1	Elec Mix Air/DA/Room Control
Room 320	1	Elec Mix Air/DA/Room Control
Room 329	1	Elec Mix Air/DA/Room Control
Room 327	1	Elec Mix Air/DA/Room Control
Room 325	1	Elec Mix Air/DA/Room Control
Room 323	1	Elec Mix Air/DA/Room Control
Room 321	1	Elec Mix Air/DA/Room Control
Room 319	1	Elec Mix Air/DA/Room Control

Room 317	1	Elec Mix Air/DA/Room Control	
Location	Quantity	Description	
Room 315	1	Elec Mix Air/DA/Room Control	
Room 331	1	Elec Mix Air/DA/Room Control	
Room 333	1	Elec Mix Air/DA/Room Control	
Room 335	. 1	Elec Mix Air/DA/Room Control	
Room 337	1	Elec Mix Air/DA/Room Control	
Room 339	1	Elec Mix Air/DA/Room Control	
Hallway	2	Elec Mix Air/DA/Room Control	
Room 336	2	Elec Mix Air/DA/Room Control	
Room 334	1	Elec Mix Air/DA/Room Control	
Room 332	1	Elec Mix Air/DA/Room Control	
Server Room	1	Elec Mix Air/DA/Room Control	
Server Room	1	Elec Mix Air/DA/Room Control	
City Hall Fourth Floor			
Room 420	1	Elec Mix Air/DA/Room Control	
Room 421	1	Elec Mix Air/DA/Room Control	
Room 421B	1	Elec Mix Air/DA/Room Control	
Room 423	1	Elec Mix Air/DA/Room Control	
Room 423B	1	Elec Mix Air/DA/Room Control	
Room 423C	1	Elec Mix Air/DA/Room Control	
Room 424	1	Elec Mix Air/DA/Room Control	
Room 427	1	Elec Mix Air/DA/Room Control	
Room 427B	1	Elec Mix Air/DA/Room Control	
Room 428	1	Elec Mix Air/DA/Room Control	
Room 434	1	Elec Mix Air/DA/Room Control	
Room 403	2	Elec Mix Air/DA/Room Control	
Room 404	1	Elec Mix Air/DA/Room Control	
Room 405	1	Elec Mix Air/DA/Room Control	
Room 408	2	Elec Mix Air/DA/Room Control	
Room 413	1	Elec Mix Air/DA/Room Control	
Room 415	2	Elec Mix Air/DA/Room Control	
Room 425	1	Elec Mix Air/DA/Room Control	
Room 440	1	Elec Mix Air/DA/Room Control	
Room 445	1	Elec Mix Air/DA/Room Control	
Room 451	1	Elec Mix Air/DA/Room Control	
Room 452	1	Elec Mix Air/DA/Room Control	
Room 453	1	Elec Mix Air/DA/Room Control	
Mayor's Office	1	Elec Mix Air/DA/Room Control	
Legal Office	1	Elec Mix Air/DA/Room Control	
Hallway	1	Elec Mix Air/DA/Room Control	
Weatherization	1	Elec Mix Air/DA/Room Control	
Conference Room	1	Elec Mix Air/DA/Room Control	
Admin	1	Elec Mix Air/DA/Room Control	
City Manager Office	1	Elec Mix Air/DA/Room Control	
, , , , , , , , , , , , , , , , , , , ,	*	DIVINITALIBITATION CONTROL	

Location	0	D
City Hall Rooftop & Penthouse	Quantity	Description
Penthouse	1	Elec Mix Air/DA/Room Control
2 011110 430	1	Elec witx All/DA/Room Control
City Hall-Seybolt Basement		
Storage	6	Elec Mix Air/DA/Room Control
Storage	2	Elec Mix Air/DA/Room Control
Basement	1	Elec Mix Air/DA/Room Control
Mech Room	1	Electric Converter Control
Mech Room	1	Electric Valve Control
Seybolt 2nd Floor	A COLOR OF THE COL	
Room 201	1	Elec Mix Air/DA/Room Control
Room 202	1	Elec Mix Air/DA/Room Control
Room 203	1	Elec Mix Air/DA/Room Control
Room 204	1	Elec Mix Air/DA/Room Control
Room 205	1	Elec Mix Air/DA/Room Control
Room 206	1	Elec Mix Air/DA/Room Control
Room 207	2	Elec Mix Air/DA/Room Control
Senior Services	1	Elec Mix Air/DA/Room Control
Maintenance Office	1	Elec Mix Air/DA/Room Control
Office 1	1	Elec Mix Air/DA/Room Control
Office 2	1	Elec Mix Air/DA/Room Control
Office 3	1	Elec Mix Air/DA/Room Control
Entrance	1	Elec Mix Air/DA/Room Control
Hallway	1	Elec Mix Air/DA/Room Control
Seybolt 3rd Floor		
Hallway	1	Elec Mix Air/DA/Room Control
Room 301	1	Elec Mix Air/DA/Room Control
Room 302	1	Elec Mix Air/DA/Room Control
Room 303	1	Elec Mix Air/DA/Room Control
Room 304	1	Elec Mix Air/DA/Room Control
Room 305	1	Elec Mix Air/DA/Room Control
Room 306	1	Elec Mix Air/DA/Room Control
Room 307	1	Elec Mix Air/DA/Room Control
Room 308	1	Elec Mix Air/DA/Room Control
Room 309	1	Elec Mix Air/DA/Room Control
Room 311	1	Elec Mix Air/DA/Room Control
Room 312	1	Elec Mix Air/DA/Room Control
Loom 313	1	Elec Mix Air/DA/Room Control
Loom 314	1	Elec Mix Air/DA/Room Control
.oom S314	1	Elec Mix Air/DA/Room Control
eybolt 4th Floor	7900 JB	
[allway	1	Elec Mix Air/DA/Room Control

Hallway	1	Elec Mix Air/DA/Room Control
Location	Quantity	Description
Hallway	1	Elec Mix Air/DA/Room Control
Room 403	1	Elec Mix Air/DA/Room Control
Room 404	1	Elec Mix Air/DA/Room Control
Kitchen	. 1	Elec Mix Air/DA/Room Control
Reception Desk	1	Elec Mix Air/DA/Room Control
Sun Room	1	Elec Mix Air/DA/Room Control
Office 1	1	Elec Mix Air/DA/Room Control
Office 2	1	Elec Mix Air/DA/Room Control
Main Dallan Diag		
Main Boiler Plant Second Floor		
Boiler Room	1	Elec Mix Air/DA/Room Control
Boiler Room	3	Elec Mix Air/DA/Room Control
Bollet Room	6	Electric Valve Control
Portsmouth Pool		
Main Entrance	1	Elec Mix Air/DA/Room Control
Office&Locker Room	2	Elec Mix Air/DA/Room Control
Boiler Room	3	Electric Valve Control
Boiler Room	3	Electric Valve Control
Boiler Room	1	Electric Valve Control
Boiler Room	5	Electric Valve Control
Portsmouth Spinnaker Point	-	
Basement Mech Room off Pool	1	Elec Mix Air/DA/Room Control
Pool Area	1	Elec Mix Air/DA/Room Control
Basement Mech Room off Track	1	Elec Mix Air/DA/Room Control
Gym 2nd Floor	1	Elec Mix Air/DA/Room Control
Basement Mech Room off Pool	1	Elec Mix Air/DA/Room Control
Cardio Room	1	Elec Mix Air/DA/Room Control
Weight Room	1	Elec Mix Air/DA/Room Control
Pool Area	1	Elec Mix Air/DA/Room Control
Aerobic Room	1	Elec Mix Air/DA/Room Control
Cardio Room	1	Elec Mix Air/DA/Room Control
Men's Locker Room	1	Elec Mix Air/DA/Room Control
Basement Mech Room off Pool	1	Elec Mix Air/DA/Room Control
Gym	1	Elec Mix Air/DA/Room Control
Basement Mech Room off Track	2	Elec Mix Air/DA/Room Control
Basement Mech Room off Track	2	Elec Mix Air/DA/Room Control
Basement Mech Room off Pool	1	Electric Changeover Control
Basement Mech Room off Track	1	Electric Changeover Control
Gym Utility Closet	1	Electric Changeover Control
Gym Area	1	Electric Damper Control
Attic	4	Electric Damper Control

Location	Quantity	Description
Portsmouth Dept of Public Works	Quantity	Description
Garage Area	4	Elec Fan Motor Control
Office Area First floor	4	Elec Mix Air/DA/Room Control
Office Area Second floor	. 4	Elec Mix Air/DA/Room Control
Portsmouth Public Library	******	
Boiler Room	2	Electric Valve Control
Penthouse	2	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
First Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
Second Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control
econd Floor	1	Elec Mix Air/DA/Room Control

PART 4 Air Filter Changes

Location	Quantity	Size	Changes per Year
Police Station Basement	†		
Basement ACS5	1	20X20X2	2
Basement HV2	1	16X25X2	2
Basement HV1	1	16X25X2	2
Office	1	20X20X2	2
New Dispatch ACS4	1	16X16X2	2
	1	16x20x2	†
Basement HV3	1	16X25X1	2
Basement HV3	1	16X20X2	2
Basement HV4	1	20X20X2	2
Basement ACS3	1	16X20X2	2
Basement ACS6	1	20X20X2	2
Basement ACS7	1	16X25X2	2
Fitness Basement	1	8 X 18 1/2 X 3/4	2
Range Control Basement	1	8X18 1/2 X 3/4	2
Range Hallway Basement	1	8X18 1/2 X 3/4	2
Ammo Storage Basement	1	8X18 1/2 X 3/4	2
Gun Cleaning Basement		8X18 1/2 X 3/4	2
Police Station 1st Floor			
Dispatch	2	16x20x2	2
Room 152 Detective	9	8 X 18 1/2 X 3/4	2
Room 159	1	8 X 18 1/2 X 3/4	2
Room 120	1	8 X 18 1/2 X 3/4	2
Records' Area	1	8 X 18 1/2 X 3/4	2
Room 151	1	8 X 18 1/2 X 3/4	2
Office	1	8 X 33 1/2 X 3/4	2
Lobby Reception	1	8 X 43 1/2 X 3/4	2
Room 107	1	8 X 18 1/2 X 3/4	2
Lobby	1	8 X 18 1/2 X 3/4	2
Front Lobby	3	8 X 18 1/2 X 3/4	2
Records' Area	2	8 X 18 1/2 X 3/4	2
Room 151	1	8 X 18 1/2 X 3/4	2
Office	1	8 X 18 1/2 X 3/4	2
Telephone room	1	16x20x2	2
Cell Area AHU	1	16x20x2	2
Police Station 2nd Floor			
Room 211	2	8 X 18 1/2 X 3/4	2
Room 209	1	8 X 18 1/2 X 3/4	2
Room 209B	1	8 X 18 1/2 X 3/4	2
Room 206	2	8 X 18 1/2 X 3/4	2
Room 206 Welfare	2	8 X 18 1/2 X 3/4	2
Room 204	1	8 X 18 1/2 X 3/4	2

PART 4 Air Filters 1 of 6

Location	Quantity	Size	Changes per Year
Room 209	1	8 X 18 1/2 X 3/4	2
Room 217	1	8 X 18 1/2 X 3/4	2
Room 220	1	8 X 18 1/2 X 3/4	2
Room 223A	2	8 X 18 1/2 X 3/4	2
Room 223	1	8 X 18 1/2 X 3/4	2
Room 225	1	8 X 18 1/2 X 3/4	2
Room 227	1	8 X 18 1/2 X 3/4	2
Room 229	1	8 X 18 1/2 X 3/4	2
Room 231	1	8 X 18 1/2 X 3/4	2
Chief Office	1	8 X 18 1/2 X 3/4	2
Room 232	1	8 X 18 1/2 X 3/4	2
Room 230	1	8 X 18 1/2 X 3/4	2
Room 228	1	8 X 18 1/2 X 3/4	2
Motor Vehicles	6	8 X 18 1/2 X 3/4	2
Taxes City Clerk	2	8 X 31 1/2 X 3/4	2
Assessor	1	8 X 25 1/2 X 3/4	2
Hallway	1	8 X 25 1/2 X 3/4	2
City Clerk office	1	8 X 41 1/2 X 3/4	2
		011 11 1/2 11 3/ 1	
City Hall 3rd Floor			
Room 300	1	13 1/4 X 20 3/4 X 1	2
Room 302	1	8 X 25 1/2 X 3/4	2
Room 303	1	8 X 21 1/2 X 3/4	2
Room 305	1	8 X 21 1/2 X 3/4	2
Room 310	2	8 X 21 1/2 X 3/4	2
Room 313	1	8 X 25 1/2 X 3/4	2
Room 311	1	8 X 25 1/2 X 3/4	2
Room 307	1	8 X 25 1/2 X 3/4	2
Billing Office	7	8 X 21 1/2 X 3/4	2
Room 316	1	8 X 25 1/2 X 3/4	2
Room 318	1	8 X 41 1/2 X 3/4	2
Room 320	1	8 X 21 1/2 X 3/4	2
Room 329	1	8 X 21 1/2 X 3/4	2
Room 327	1	8 X 41 1/2 X 3/4	2
Room 325	1	8 X 41 1/2 X 3/4	2
Room 323	1	8 X 41 1/2 X 3/4	2
Room 321	1	8 X 21 1/2 X 3/4	2
Room 319	1	8 X 21 1/2 X 3/4	2
Room 317	1	8 X 21 1/2 X 3/4	2
Room 315	1	8 X 21 1/2 X 3/4	2
Room 331	1	8 X 21 1/2 X 3/4	2
Room 333	1	8 X 21 1/2 X 3/4	2
Room 335	1	8 X 21 1/2 X 3/4	2
Room 337	1	8 X 25 1/2 X 3/4	2
Room 339	1	8 X 23 1/2 X 3/4 8 X 21 1/2 X 3/4	2
Room 333	1	8 X 21 1/2 X 3/4 8 X 21 1/2 X 3/4	2
KUUIII 333	1	δ Λ 21 1/2 <b>X</b> 3/4	

PART 4 Air Filters 2 of 6

Location	Quantity	Size	Changes per Year
Room 335	1	8 X 21 1/2 X 3/4	2
Room 337	1	8 X 21 1/2 X 3/4	2
Room 339	1	8 X 21 1/2 X 3/4	2
Room 336	2	8 X 21 1/2 X 3/4	2
Room 334	1	8 X 31 1/2 X 3/4	2
Room 332	1	8 X 31 1/2 X 3/4	2
Server Room	1	16x20x2	2
Server Room	1	16x20x2	2
City Hall 4th Floor		0.33.01.1/0.33.074	
Room 420	1	8 X 31 1/2 X 3/4	2
Room 421	1	8 X 25 1/2 X 3/4	2
Room 421B	1	8 X 25 1/2 X 3/4	2
Room 423	1	8 X 25 1/2 X 3/4	2
Room 423B	1	8 X 25 1/2 X 3/4	2
Room 423C	1	8 X 31 1/2 X 3/4	2
Room 424	1	8 X 41 1/2 X 3/4	2
Room 427	1	8 X 41 1/2 X 3/4	2
Room 427B	1	8 X 21 1/2 X 3/4	2
Room 428	1	8 X 25 1/2 X 3/4	2
Room 434	1	8 X 21 1/2 X 3/4	2
Room 403	2	8 X 21 1/2 X 3/4	2
Room 404	1	8 X 30 1/2 X 3/4	2
Room 405	1	8 X 21 1/2 X 3/4	2
Room 408	2	8 X 30 1/2 X 3/4	2
Room 413	1	8 X 25 1/2 X 3/4	2
Room 415	2	8 X 30 1/2 X 3/4	2
Room 425	1	8 X 25 1/2 X 3/4	2
Room 440	1	8 X 31 1/2 X 3/4	2
Room 445	1	8 X 30 1/2 X 3/4	2
Room 451	1	8 X 21 1/2 X 3/4	2
Room 452	1	8 X 25 1/2 X 3/4	2
Room 453	1	8 X 21 1/2 X 3/4	2
Mayor's Office	1	8 X 21 1/2 X 3/4	2
Legal Office	1	8 X 30 1/2 X 3/4	2
Hallway	1	8 X 21 1/2 X 3/4	2
Weatherization	1	8 X 30 1/2 X 3/4	2
Conference Room	2	8 X 25 1/2 X 3/4	2
Admin	1	8 X 30 1/2 X 3/4	2
City Manager's Office	5	8 X 25 1/2 X 3/4	2
Council Chambers Unit	2	20X20X2	2
	4	20X25X2	2
Conference Room A	1	Polypropylene	2
<del></del>		Honeycomb	
Portsmouth Room	1	Polypropylene	2
		Honeycomb	1

PART 4 Air Filters 3 of 6

Location	Quantity	Size	Changes per Year
Main Boiler Plant			
Louver 1	4	8 3/4 X 19 X 3/4	2
Louver 2	4	8 3/4 X 19 X 3/4	2
Louver 3	4	8 3/4 X 19 X 3/4	2
Seybolt Basement			
Storage	6	8 3/4 X 19 X 3/4	2
Storage	2	8 3/4 X 24 X 3/4	2
Seybolt 2nd Floor			
Room 201	1	8 3/4 X 24 X 3/4	2
Room 202	1	8 3/4 X 24 X 3/4	2
Room 203	1	8 3/4 X 19 X 3/4	2
Room 204	1	8 3/4 X 24 X 3/4	2
Room 205	1	8 3/4 X 33 X 3/4	2
Room 206	1	8 3/4 X 24 X 3/4	2
Room 207	2	8 3/4 X 24 X 3/4	2
Senior Services	1	8 3/4 X 24 X 3/4	2
Maintenance Office	1	8 3/4 X 18 X 3/4	2
Office 1	1	8 3/4 X 18 X 3/4	2
Office 2	1	8 3/4 X 18 X 3/4 8 3/4 X 24 X 3/4	2
Office 3		5 1/2 X 24 X 3/4	
	1		2
Entrance	1	8 3/4 X 19 X 3/4	2
Hallway	1	8 3/4 X 24 X 3/4	2
Seybolt 3rd Floor			
Room 201	1	8 3/4 X 19 X 3/4	2
Room 202	1	8 3/4 X 24 X 3/4	2
Room 203	1	8 3/4 X 24 X 3/4	2
Room 204	1	8 3/4 X 19 X 3/4	2
Room 205	1	8 3/4 X 24 X 3/4	2
Room 206	1	8 3/4 X 24 X 3/4	2
Room 207	2	8 3/4 X 24 X 3/4	2
Senior Services	1	8 3/4 X 19 X 3/4	2
Maintenance Office	1	8 3/4 X 19 X 3/4	2
Office 1	1	8 3/4 X 24 X 3/4	2
Office 2	1	8 3/4 X 19 X 3/4	2
Office 3	1	8 3/4 X 24 X 3/4	2
Entrance	1	8 3/4 X 24 X 3/4	2
Hallway	1	8 3/4 X 24 X 3/4	2
11a11way	1	0 J/+ A Z+ A 3/4	<u> </u>
Seybolt 4th Floor			
Room 201	1	8 3/4 X 19 X 3/4	2
Room 202	1	8 3/4 X 24 X 3/4	2
Room 203	1	8 3/4 X 24 X 3/4	2
Room 204	1	8 3/4 X 24 X 3/4	2

PART 4 Air Filters 4 of 6

Location	Quantity	Size	Changes per Year
Room 205	1	8 3/4 X 24 X 3/4	2
Room 206	1	8 3/4 X 19 X 3/4	2
Room 207	2	8 3/4 X 19 X 3/4	2
Senior Services	1	8 3/4 X 24 X 3/4	2
Maintenance Office	1	8 3/4 X 24 X 3/4	2
Office 1	1	8 3/4 X 24 X 3/4	2
Office 2	1	8 3/4 X 24 X 3/4	2
Portsmouth Pool			
HRU 1	1	20 X 20 X 2	4
HRU 2	1	12 X 24 X 4	4
Zephyer Unit	1	25 X 25 X 4	4
Zephyer Unit	1	20 X 25 X 4	4
Entrance Unit	1	8 X 28 X 1	4
Entrance Ont	1	0 A 20 A 1	,
Department of Public Works	l.		
RTU-3	3	16x20x3	2
	3	20x20x2	2
Trane Furnaces 2 Units 2 <sup>nd</sup> Floor	2	231/2x243/4x1	4
Trane Furnace – Water Replenishment	1	231/2x243/4x1	2
Bryant Unit	2	20x20x1	4
New Trane Furnace – 2 <sup>nd</sup> Floor Storage Area	1	24x24x1	4
-			
Spinnaker Point			
Gym Make –Up Air Unit	2	20x25x2	4
Bicycle Room Air Handling Unit	2	16x20x2	4
Portsmouth Public Library	1	20, 20, 1	2
Penthouse HP 2-1	1	20x20x1	2
Penthouse HP 2-2	1	20x20x1	2
Penthouse HP 2-3	1	20x20x1	2
Penthouse HP 2-4	1	20x20x1	2
Penthouse HP 2-5	1	20x20x1	2
Penthouse HP 2-6	1	20x20x1	2
Penthouse HP 2-7	1	20x20x1	2
Penthouse HP 2-8	1	20x20x1	2
Penthouse HP 2-9	1	20x20x1	2
Penthouse HP 2-10	1	20x20x1	2
Penthouse HP 2-11	1	20x20x1	2
Penthouse HP 2-12	1	20x20x1	2
Penthouse HP 2-13	1	20x20x1	2
Penthouse HP 2-14	1	20x20x1	2

PART 4 Air Filters 5 of 6

Location	Quantity	Size	Changes per Year
Penthouse HP 2-15	1	20x20x1	2
Penthouse HP 2-16	1	20x20x1	2
Penthouse HP 2-17	1	20x20x1	2
Penthouse HP 2-18	1	20x20x1	2
Penthouse HP 2-19	1	20x20x1	2
Penthouse HP 2-20	1	20x20x1	2
Penthouse HP 2-21	1	20x20x1	2
Penthouse HP 2-22	1	20x20x1	2
Penthouse HP 2 23	1	20x20x1	2
Penthouse ERV-1	1	20x20x1	2
Penthouse ERV-2	1	20x20x1	2
Cabinet Unit Heater	2	8x32x1	2
First Floor Ceiling HP-1	1	20x20x1	2
First Floor HP 1-1	1	20x20x1	2
First Floor HP 1-2	1	20x20x1	2
First Floor HP 1-3	1	20x20x1	2
First Floor HP 1-4	1	20x20x1	2
First Floor HP 1-5	1	20x20x1	2
First Floor HP 1-6	1	20x20x1	2
First Floor HP 1-7	1	20x20x1	2
First Floor HP 1-8	1	20x20x1	2
First Floor HP 1-9	1	20x20x1	2
First Floor HP-1-10	1	20x20x1	2
First Floor HP 1-11	1	20x20x1	2
First Floor HP 1-12	1	20x20x1	2
First Floor HP 1-13	1	20x20x1	2
First Floor HP 1-14	1	20x20x1	2
First Floor HP 1-15	1	20x20x1	2
First Floor HP 1-16	1	20x20x1	2
First Floor HP 1-17	1	20x20x1	2
First Floor HP 1-18	1	20x20x1	2
First Floor HP 1-19	1	20x20x1	2
First Floor HP 1-20	1	20x20x1	2
Cabinet Unit Heater	2	8x32x1	2

PART 4 Air Filters 6 of 6

#### PART 1

# **Building Automation Control Components**

List of Covered	Software:	-	•	
Drawing number	r(s) and date(s) (i	fapplicable	(	
Quantity	Software Product Number	Version	Product Description	Location
1		13	KMC Controls Web portal system	Admin Area

QTY	Description	Model Number	Location
1	12x16 Commiller KMC	BAC-5831	Room 124 Laboratory
3	12x16 Controller KMC	BAC-5831	Chemical Area
( , , , ,	12x16 Comroller KMC	BAC-5831	Room 109
7.	VAV Controllers	BAC-7001	Boiler Room/HVAC
i, -	12x16 Controller KMC	BAC-5831	Boiler Room 109
1	12x16 Controller KMC	BAC-5831	Boiler Room Heat punips
1	8x8 Controller KMC	BAC-5802	Mechanical Room
i	8x8 Controller KMC	BAC-5802	Main Admin Corridor
2: 14	8x8 Controller KMC	BAC-5802	Chemical Area
1	4x4 Controller KMC	BAC-7301	Room 125
l .	4x4 Controller KMC	BAC-7301	Roomi 122
1	4x4 Controller KMC	BAC-7301	Room 121
l	4x4 Controller KMC	BAC 7301	Room 120
1	4x4 Controller KMC	BAC-7301	Room 129
1	4x4 Controller KMC	BAC-7301	Room 128
l	4x4 Controller KMC	BAC-7301	Room 123
î .	4x4 Controller KMC	BAC-7301	Room 124
i	4x4 Controller KMC	BAC-7301	Room 122
Ì	Bacnet Router	BAC-5050	Admin Area
1	Dell Computer	Vostro	Admin Area
2 .	Thermostat	Dynacon ETD-SSS	Lebby
[	Thermostat	Dynacon ETD-5SS	Laboratory room
<u></u> L	Thermostat	Dynacon ETD-5SS	Conference room
i	Thomostat	Dynacon ETD-5SS	Control Room
<u>.</u>	Thermostat	Dynacon ETD-5SS	Chief operator room
<u> </u>	Freezestat	Dynacon FS-33	Lab area Room 124
l ·	Preezestat.	Dynacon FS-33	Process area
2	THE PARTY OF THE P	MFP-425100	Chemical Area
<del></del>	KMC Damper Actuators	DALSR-P16000	Admin Area
l .	Occupancy Sensor	the state of the s	
<u> </u>	Occupancy Sensor  8" Duct sensor KMC	DAT SR-P16000	Process Area Process Area
		STE-1402	The second secon
12	4" Immersion Sensor	- STE-1421	Chemical Area
26	Wall Sensor KMC	STE-6019-10	Madbury Facility
2	Wall Humidity/Temp	H12S1H	Process Area
<u>.                                    </u>	Total Control KMC	TC-BAC	Admin Area
2	Wet Diff pressureTransducer	TPE-1483	Process Area
	Duct Diff Pressure	TPE-1476-21	Chemical Area
0 .	Spdt Relay	V100	Process Area
	SPDT Relay/HOA	V101	Process Area
	DiffPressureSensor W/Display	ZPS-05-SR01-NT-125-D-PM	Process Area
6	Aquastat	A19DAC-1	Process Area
	VAV	VAV-1	Room 108
	VAV	VAV-2	Room 107 Coagulant
	VAV	VAV-3	Room 199
	VAV	VAV-4	Room 110
	VAV	VAV-5	HVAC Room
-	VAV	VAV-6	Shop Corridor
1 .	VAV	VAV-7	Shop Corridor Room 105

L =	 	m management (management)
High Service Area	 	
2 Thermostat	 Dynacon ETD-5SS	Process Area

PART 2 Mechanical Equipment

Qty	Description	Model Number	Location
[	Air Handler Unit	AHU-1	Room 103
1	Air Handler Unit	AHU-2	Room 124 Laboratory
	Air Handler Unit	AHU-3	Room 113
	Exhaust Fan	EF-1	Room 110 Chemical Corridor
1	Exhaust Fan	EF-2	Room 110 Chemical Corridor
1	Exhaust Fan	EF-3	Room 108 Caustic
1	Exhaust Fan	EF-4	Coagulant
1	Exhaust Fan	EF-6	Room 103 Chemical Area
1	Exhaust Fan	EF-7	Room 104 Chemical Area
1	Exhaust Fan	EF-8	Room 105 Shop
1	Exhaust Fan	EF-9	Room 105 Shop Welder
Í,	Exhaust Fan	EF-10	Room 106 Compressor Room
1	Exhaust Fan	EF-11	Room 113 DAF/Filter
1	Exhaust Fan	EF-12	Room 113 Process Room
1	Exhaust Fan	EF-13	Room 113 Lab
1	Exhaust Fan Fume Hood	EF-14	Room 124
1	Exhaust Fan	EF-15	Process Area
1	Exhaust Fan	EF-16	Process Area
1	Exhaust Fan	EF-17	Process Area
1	Energy Ventilation Unit-	ERV-1	Room 125
1	Fan Coil Unit	FCU-1	Room 122
1	Fan Coil Unit	FCU-2	Room 121
1	Fan Coil Unit	FCU-3	Room 120
1 .	Fan Coil Unit	FCU-4	Room 129
I	Fan Coil Unit	FCU-5	Room 128
Į.	Fan Coil Unit	FCU-6	Room 123
1	Fan Coil Unit	FCU-7	Room 124
Ī	Fan Coil Unit	FCU-8	Main Admin Corridor
į –	Cabinet Unit Heater	CUH-1	Loading Dock
[	Cabinet Unit Heater	CUH-2	Chemical Area
[	Cabinet Unit Heater	CUH-3	Office Area
l	Cabinet Unit Heater	CUH-4	Entry Vestible
[	Unit Heater	UH-1	Room 102
l	Unit Heater	UH-2	Room 105
l	Unit Heater	UH-3	Room 106
	Unit Heater	UH-4	Room 101
	Unit Heater	UH-5	Room 103
	Unit Heater	UH-6	Shop Corridor
	Unit Heater .	UH-7	Room 107
	Unit Heater	UH-8	Room 108
	Unit Heater	UH-9	Chemical Corridor
	Unit Heater	UH-10	Room 108
	Unit Heater	UH-11	Room 107 Coagulant
	Split System	AC-1	Telephone room
	Condensing Gas Boiler	Viessman CT#28	Boiler Room
	Circulating Pumps	P-1,P-2,P-11,P-12,T-1,T-2,	Mechanical Room

#### Madbury Treatment Plant Alternate 1

4	rumps	r-10,r-17	Admin Area
7	Circulating Pumps	P-5,P-6,P-7,P-9,P-10 P-13 P-14	Chemical Area
1	Glycol Pump	P-15	Chemical Area
2	Heat Pumps	HP-1,HP-2	Boiler Room
2	DHW Recalculation Pumps	RP-1,RP-2	Boiler Room
1	Gas Fired HWH	HWD-I	Boiler Room
	High Service Area	***************************************	
J.	Split System Condenser unit	410 Darkin RZQ42MVJU	Outside HSA
1	Split System Condenser unit	A-2 Darkin	Pump Room
2. ,	Unit Heater	EUH-1,EUH-2	Pump Room
1	Exhaust Fan	EF-16	Pump Room
4	Variable Frequency Drives	VFD-1,VFD-2,VFD-3, VFD-4	Mechanical Room

## PART 3

## **Air Filter Changes**

Fan System Unit	Quantity	Size	Туре	Changes per year (1,2,4,6, or 12)
Maio Plant				
AHU-1 room 103	1	24x20x2	Pleated	2
AHU-2 room 124	1	24x20x2	Pleated	2
AHU-3 room 113	f.	24x20x2	Pleated	2
Exhaust Fan 124	I	14x20x2	Pleated	2
Room 104	1	24x20x2	Pleated	2
Room 106	I	24x20x2	Pleated	2
Filter Room	6	24x20x2	Pleated	2
Boiler Room Louvres	4	14x20x2	Pleated	2
High Service Area				
Pump Room Louvres	4	175/8x175/8x 2	Pleated	2
MMC Room Louvres	4	175/8x175/8x2	Pleated	2

#### ATTACHMENT C

#### PART 1

## **Building Automation Control Components**

#### List of Covered Equipment:

Quantity	Description	Model Number	Location
Fire station 1	La Caranta de Caranta		
T	CPO controller	CPO-6A	Computer room 2nd Floor
	VAV-1.2,3	Nailor D36VRR	Attic
1	VAV-4 Heat Coil	Nailer DHR	Attic
I	Daroper	Nailer	Attic

## List of Covered Software;

Drawing number	r(s) and date(s)	(if applicable)		
Quantity	Software Product Number	Version	Product Description	Location
Fire station 1	CP-SPC	CPO	Confort Point Open	Computer Room 2nd Floor

Quantity	Description	Model Number	Location
Fire station 2		·	
T or	RFHS System	Andover J2867	Mechanical Room 2nd floor
1	HWS System	Andover I2851	Mechanical Room 2nd floor
16	VAV- 1,2,3,4,5,6,7,8,9,10,11, 12,13,14,15,16	Andever 12866-V	1 <sup>#</sup> and 2 <sup>nd</sup> Floor Ceilings
in the second se	Exhaust fans FF-3,4,5	Andover 12851	2 <sup>nd</sup> fleor:
	Snow melt	Andover-12867	Mechanical Room 2nd floor
I S	Snowmelt HWS System	Andover 12887	Mechanical Room 2nd floor
r	Bay Area IR	Andover 12867	Mechanical Room 2 <sup>rd</sup> floor

#### List of Covered Software:

Drawing number(s)	and date(s) (i	fapplicable	3	
Quantity	Software Product Number	Version	Product Description	Location
Fire station 2	12851	Andover	Andover Continuum	Tel/data 1st Floor

### PART 2

## **Mechanical Equipment Maintenance**

Quantity Description		Model Number	Location
Fire station 1			4
1	RTU-1	Trane YCD15OC3HOBA	Rootop
1	Cabinet Unit Heater		Stairway 2nd floor
1	Cabinet Unit Heater		Stairway 1st floor
6	Hanging Unit Heater	Modine.	Bay Area
1	Hanging Unit Heater	Modine	Bay Area locker room
5	Hanging Unit Heater	Modine	Basement
6	Boiler pumps	Taco 007-FS	Boiler room
1	Boiler pumps	Taco 161OC3ES	Boiler room
I	Water Heater	Super Stor	Boiler room
Ľ	Lochinvar Boiler	KBN-701	Beiler room

Fire station 2			
1	RTU- York 25 ton	V32A532MOKBZ0002A	Reoftop
1	RTU- York 10 ton	DH120S15Q2ZZ3000D	Rooftop
1	RTU- Enviro Air	KIHA4000DOO	Rooftop
1	RTU- Enviro Air	KIHA4000DOO	Rooftop
1	Hot water unit	560-P250A-PV	2 <sup>nd</sup> Boiler room
1	Gas Boiler	Munchkin 399 M R2	2nd Boiler room
2	Gas Boiler	Dietrich C230 Eco-A	2 <sup>nd</sup> Boiler room
5	Circulator Pumps	RB-120	2 <sup>nd</sup> Boiler room
2.	VFD	VFD-1,VFD-2	2 <sup>nd</sup> Boiler room
3	Exhaust Fans	EF-3,EF-4,EF-5	2 <sup>nd</sup> floor
1	Sump pump		1st floor
2	Cabinet Unit Heaters		West stairway
į	Cabinet Unit Heaters		East Staiway
1	Unit Heater	Modine	Coatroom
2.	IR Heaters	Reverberray	Bay Area

Fire Station 3			
1	Boiler	Burnham Series HB	Boiler Room
3	Circ. Pumps	Taco	Boiler Room
3	unit heaters	Modine	

## PART 3

# **Air Filter Changes**

Fan System Unit	Quantity	Size	Туре	Changes per year (1,2,4,6, or 12)
Fire station 1		T .		
Trane RTU	3	20x25x2	Pleated	2
Fire station 2				
York 10 ton	6	20x25x2	Pleated	2
York 25 ton	6	20x25x2	Pleated	2