REQUEST FOR PROPOSAL

2020 – 2024 CONTRACT HVAC PREVENTATIVE MAINTENANCE & REPAIR SERVICES For Renton Regional Fire Authority RFA Worksites

RENTON REGIONAL FIRE AUTHORITY 18002 108TH AVE SE RENTON WA 98055

RENTON REGIONAL FIRE AUTHORITY REPRESENTATIVE: KYLE KAUZLARICH, FACILITY MANAGER (425) 430-7740

ANTICIPATED TIME SCHEDULE:

Proposal Submittal Deadline	Friday, May 17 th , 2019
Job Walk	
Issue RFP	Friday, May 3 rd , 2019

CONTRACT HVAC PREVENTATIVE MAINTENANCE & REPAIR SERVICES

SECTION 1 - TABLE OF CONTENTS

SECTION 1	- TARIF	OF CONTE	NTS

SECTION 2 - SYNOPSIS OF PROPOSAL INFORMATION

SECTION 3 - REQUEST FOR PROPOSALS

SECTION 4 - INSTRUCTIONS TO CONTRACTORS

SECTION 5 - INFORMATION TO BE SUBMITTED WITH PROPOSAL

SECTION 6- GENERAL SCOPE OF WORK & TASKING

SECTION 7 - SITE LOCATIONS AND FREQUENCY SCHEDULES

EXHIBIT A - CONTRACT AGREEMENT

EXHIBIT B - STATEMENT OF CONTRACTOR'S QUALIFICATIONS & LIST OF SUB-CONTRACTORS

EXHIBIT C - PROPOSAL FORM

EXHIBIT D - COMBINED AFFIDAVIT AND CERTIFICATION FORM

EXHIBIT E - PREVAILING WAGES

EXHIBIT F - PRICING SHEET

EXHIBIT G - WAGE PAYMENT CERTIFICATION

SECTION 2 - SYNOPSIS OF PROPOSAL INFORMATION

- A. <u>Contract</u>: Contract HVAC, Backflows/Plumbing, Fire Sprinkler/Alarming/Monitoring, and Generator, Preventative Maintenance & Repair Services.
- B. <u>Work Description</u>: The Contractor will furnish all labor, supplies, materials and equipment to perform HVAC, backflow/plumbing, Fire Sprinkler/Alarming/Monitoring, and generator preventative maintenance & repair services for listed Renton Regional Fire Authority owned and leased properties.
- C. Work Locations:
- 1. Station 11, 211 Mill Ave S
- 2. Station 12, 1209 Kirkland Ave NE
- 3. Station 13, 18002 108th Ave SE
- 4. Fleet Shop, 18006 108th Ave SE
- 5. Station 14, 1900 Lind Ave SW
- 6. Station 15, 1404 N 30th St
- 7. Station 16, 12923 156th Ave SE
- 8. Station 17, 14810 SE Petrovitsky Rd
- D. Owner: Renton Regional Fire Authority

18002 108th Ave SE Renton, WA 98055

E. Owner's Project Manager: Kyle Kauzlarich, Facilities Manager

Support Services Division

Mailing Address: 18002 108th Ave SE Renton, WA 98055

Cell Phone (425) 970-5063 Office Phone (425) 430-7740

FAX (425) 430-7044

F. Proposals Due: Friday, May 17th, 2019 until 11:00 a.m.

G. Wages: Pay state prevailing wage rates

SECTION 3 - REQUEST FOR PROPOSALS

(Copy of Published Advertisement)

Renton Regional Fire Authority

Request for Proposals

Facilities Maintenance Contract: HVAC, Backflow/Plumbing, Fire Sprinkler/Alarm/Monitoring, and Generator Preventative Maintenance & Repair Services

The Renton Regional Fire Authority is requesting Proposals for CONTRACT HVAC, BACKFLOW/PLUMBING, FIRE SPRINKLER/ALARM/MONITORING, and GENERATOR PREVENTATIVE MAINTENANCE & REPAIR SERVICES. The Proposal is for a contract to provide up to five (5) years of complete preventative maintenance for the crafts listed above and repairs services for eight (8) sites through December 31, 2024, based upon available funding in any given year, with an option to renew for up to an additional three (3) years. Financial scope & service review meetings will occur no less than annually, or more frequently as requested by RRFA. Sealed proposals will be received at Renton Regional Fire Authority, Station #13, 18002 108th Ave SE, Renton, WA 98055 until 11:00 a.m., Friday, May 17th 2019.

Obtain the complete proposal document on-line via the Renton Regional Fire Authority website, RFPs & Bids page, at https://rentonrfa.com/rfp-bids/

Questions and requests for proposal documents shall be addressed to Kyle Kauzlarich, Facilities Manager, 18002 108th Ave SE, Renton, WA 98055 telephone (425) 430-7740. The Renton Regional Fire Authority reserves the right to reject any and all proposals and to waive minor irregularities in the proposal process.

SECTION 4 - INSTRUCTIONS TO CONTRACTORS

Pre-Proposal Conference & Site Review

A pre-proposal conference and site review will convene on Wednesday, May 8th, 2019 at 8:00 a.m. at the Renton Regional Fire Authority, Station 13, 18002 108th Ave SE, Kent, WA 98055 and will proceed to all project sites. Prospective Proposers are <u>strongly encouraged</u> to attend.

Submission of Proposals

Two (2) copies of the Proposal, and other documents required to be submitted with the proposal, shall be enclosed in a sealed envelope. The envelope shall be addressed to Renton Regional Fire Authority, 18002 108th Avenue SE, Renton, WA 98055 and shall be identified with the project name, "SEALED PROPOSAL HVAC, BACKFLOW/PLUMBING, FIRE SPRINKLER/ALARM/MONITORING, and GENERATOR MAINTENANCE AND REPAIR SERVICES ENCLOSED", and the Contractor's name and address.

Proposals shall be deposited at the designated location on or before Friday, May 17th, 2019 prior to 11:00 a.m. Proposals received after the time and date of receipt of Proposals will be returned unopened.

Considerations of Proposals

The RFA reserves the right to reject any or all Proposals, reject a Proposal not accompanied by required documents, or reject a Proposal which is in any way incomplete or irregular.

The RFA shall have the right to waive informalities or irregularities in a Proposal received and to accept the Proposal which, in the RFA's judgment, is in the RFA's best interest.

The RFA reserves the right to request clarification of information submitted and to request additional information from any proposer.

Any proposal may be withdrawn up to and until the date and time set above for receiving proposals (Friday, May 17th 2019, 11:00 a.m.). Any proposal not so timely withdrawn shall constitute an irrevocable offer, for a period of ninety (90) days to contract with the RRFA for services described in the attached specifications, or until one of more of the proposals have been approved by the RFA, whichever occurs first.

The hourly wages to be paid to laborers, workers, or other occupations under this contract agreement shall not be less than the prevailing rate of wage for an hour's work in the same trade or occupation and shall be in accordance with the provisions of Chapter 39.12 RCW.

The RFA shall not be responsible for any costs incurred by the Contractor in preparing, submitting, or presenting its proposal/response to this Request for Proposal (RFP).

The RFA reserves the right to award the contract to the next most qualified Contractor, if the successful Contractor does not execute a contract within thirty (30) days after the award of the contract. It is expected that the date of commencement for the contract will be January 1, 2020 and continue for five (5) years, subject to termination provisions set forth in the contract, and also subject to available funding in any one of the five (5) years. The contract will also include an option to renew for up to an additional three (3) years.

Selection Criteria

The following criteria will be used in evaluating each proposal:

Cost of services 40%
Responsiveness of the Contractor's proposal 20%
Past performance/references 40%
Total Criteria Weight 100%

The individual criteria will include the following:

Cost of services (Exhibit F): The RFA is seeking an economical solution. The RFA reserves the right to award a single contract for all sites.

Responsiveness of the Contractor's proposal: In addition to the Proposal Form, the Contractor will provide all the information required in Exhibit B.

Past performance/references: The RFA will contact the references supplied by the Contractor and will rate this criteria based on the references received.

The selection criteria above are based on obtaining the best value for the RFA. Each proposal will be independently evaluated by a committee comprised of representatives of the RFA. The committee will use the evaluation criteria above to rank the proposing firms.

The RFA may interview Contractor(s) within three (3) weeks after the submittal deadline.

SECTION 5 - INFORMATION TO BE SUBMITTED WITH PROPOSAL

Each Contractor shall fully complete the Statement of Qualifications set forth as Exhibit B. An incomplete or inaccurate response may prevent the Contractor from further consideration for the services described in this Request for Proposal (RFP).

List of Subcontractors & Scope

List all subcontractors and the work to be subcontracted to them. HVAC, Plumbing, Generator, Fire Monitoring, Fire Sprinkler, Fire Extinguisher Maintenance, Fire Alarming. All sub-contractors are subject to requirements set forth in RCW 39.30.060. One section of the proposal submitted should be dedicated to subcontractor explanations of service & scope (Exhibit B).

Contractor's Rates

Provide standard cost per task and schedule of monthly expenses for services requested in this proposal (Exhibit F). This will serve as the basis of monthly payments and for any additional services requested on a temporary, one-time change upon completion of a Change Order.

Permanent changes to the Scope of Work will be made by a Change Order.

Describe the Contractor's on-call and emergency response procedures to deal with emergency requests. Provide a list of hourly rates for emergency services and any minimum call-out hours.

Service Response Times

Contractor shall indicate minimum response times for callouts to each worksite. A minimum response time of 2 hours is required.

Other Information/Questions

Has the Contractor ever been terminated, replaced, or failed to complete work awarded under a contract? If so, name the client and describe the circumstances.

Has the Contractor ever been named as a defendant in any litigation brought on by a client as a result of a contract? If so, describe the circumstances fully.

Safety

Provide company incident rate for 2018 as well as a statement about company safety protocols.

Combined Affidavit, Certification Form, & Wage Certification Form

Contractor shall sign and submit the Combined Affidavit and Certification Form supplied in Exhibit D & G.

SECTION 6 - SCOPE OF WORK FOR HVAC, BACKFLOW/PLUMBING, FIRE SPRINKLER/ALARM/MONITORING, AND GENERATOR PREVENTATIVE MAINTENANCE & REPAIR SERVICES

The number in the maintenance schedule is a minimum; HOWEVER, some areas may need to be done more frequently to assure that the task is maintained.

Service Locations

- 1. Station 11, 211 Mill Ave S
- 2. Station 12, 1209 Kirkland Ave NE
- 3. Station 13, 18002 108th Ave SE
- 4. Fleet Shop, 18006 108th Ave SE
- 5. Station 14, 1900 Lind Ave SW
- 6. Station 15, 1404 N 30th St
- 7. Station 16, 12923 156th Ave SE
- 8. Station 17, 14810 SE Petrovitsky Rd

Time Performance

The Contractor shall follow a recurring schedule as set forth in a HVAC, Backflow/Plumbing, Fire Sprinkler/Alarm/Monitoring, and Generator Preventative Maintenance & Repair Services schedule, (Section 7). The Contractor shall provide a daily location of work schedule prior to beginning of work and updated as the schedule may change.

Invoice

The Contractor will submit a detailed quarterly invoices, together with maintenance. All invoices shall describe the task completed and the corresponding amount for that task. All invoices submitted in less detailed forms will be returned for correction. Payments may be delayed until the invoice has been submitted in the proper form. No interest on the payment will be due from the RRFA for invoices not in the proper form.

General Scope of HVAC, Backflow/Plumbing, Fire Sprinkler/Alarm/Monitoring, Fire Extinguisher and Generator Preventative Maintenance / Major Inspection & Repair Services Work Includes But Not Limited To:

Backflows testing tasking - 1x annually Performance

- Test and calibrate
- Check valve operation with test set

Inspection

- Check for dirt or debris
- Check for damage
- Check for worn or loose disc
- Check for worn or loose guide assembly
- Check for corrosion build-up

General Maintenance

- Check for leaks under pressure
- Bleed air from backflow preventer

Documentation

File report with water purveyor

Fire Sprinkler tasking - 1x annually (Reports available upon request)

Testing

- Two-inch main drain-test
- Record City water pressure
- Test control valve supervisory switches
- Inspect alarm devices on sprinkler system
- Test waterflow alarms and gongs

Safeties

- Inspect gauges
- Inspect hydraulic nameplate
- Check sprinkler system for proper signage

Valves

- Inspect and test control valves
- Lubricate stems of OS&Y valve if necessary
- Inspect exterior of alarm valves

Piping/Heads

- Inspect visible hangers and seismic bracing
- Inspect visible sprinklers
- Inspect Fire Department connections

• Inspect all standpipe components

Reporting

- Notify authorities prior to testing any alarm system
- Report deficiencies to customer
- Send reports of inspection to customer
- Send reports to Fire Department if requested

Fire Alarm System tasking - 1x annually (Reports available upon request)

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Panels

- Test and inspection of control panel
- Test and inspection of NAC panel

Devices

- Test and inspection of smoke detectors
- Test and inspection of heat detectors
- Test and inspection of duct detectors
- Test and inspection of pull stations
- Test and inspection of horns
- Test and inspection of strobes

Switches

- Test and inspect flow and tamper switches
- Test auxiliary outputs elevator recall
- Test auxiliary outputs door holders

Peripherals

- Check speakers
- Check back-up batteries

Documentation

Verify signals send to central station

Fire Alarm Monitoring tasking - 24/7/365 (Reports available upon request)

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact
- Test phone lines
- Verify signals sent to central station
- Check back-up batteries
- Check primary power
- Verify 24-hour auto test
- Review data in central station
- Test each zone in transmitter
- Review monitoring information with customer

Generators - 2x annually

Engine - Battery System

- Check Battery Electrolyte Level
- Check Battery Connections & Terminals
- Check Battery Age
- Load test batteries and document

Engine - Lubricating System

- Check for leaks
- Check Oil Levels
- Check Engine Oil pressure and document
- Change Engine Oil, Oil Filters
- For all MTU Series 4000 Engines Prelube Oil Filters using the X4 Harness
- Take Oil Sample

Engine Cooling System

- Check for leaks
- Cooling System Type
- Check Coolant level & freeze point, document
- Check coolant condition and document
- Check radiator hose connection & connections and document
- Check coolant heater operation
- Check Radiator cap
- Check Operating water temperature
- Pressure test cooling system
- Change coolant filters

Fire Extinguisher tasking - 1x annually (Total number of extinguishers unavailable at this time, count on job walk)

Site Visit Baseline

- Check manufacturing date
- Verify weight of cylinder
- Inspect handle for free movement
- Check pull pin for free movement
- Install "bullseye" seal
- Check gauge
- Examine hose/nozzle for obstructions
- Check valve stem for powder
- Loosen powder if applicable
- Inspect cylinder for corrosion
- Check nameplate for legibility
- Tag and explain inspection
- Explain how to use extinguisher
- Check bracket mounting
- Make report of deficiencies and quote to correct
- Review paperwork with Owners' Rep
- Take coolant sample
- Check fan hub, drive pulley, belt tension / condition& water pump weep hole
- Check radiator, ductwork, and fan shroud
- Check mechanical / motorized louver operation

Engine - Air Intake System

- Check for leaks
- Check air filters for restriction
- Check all air intake piping

Engine - Fuel System

- Check for leaks
- Fuel System type
- Check fuel level, and document
- Check fuel lines & connections
- Change fuel filters
- Change water separator filters
- Take fuel sample
- Check governor control linkage
- Check fuel tank condition, rust, corrosion

Engine - Fuel System - Day Tank

- Check day tank for leaks
- Check day tank fuel level
- Check day tank fuel lines & connections

- Change day tank fuel supply filters
- Check day tank fuel transfer pump for leaks and operation

Engine - Electrical System

- Check battery charger, document volts
- Check engine alternator, document volts
- Check spark plugs, plug wires, points, cond, cap & rotor
- Check engine safety controls & alarms on Non ECM based engines

Engine - Related Systems

- Check for vibration & metal cracks
- Check engine mounting hardware
- Check engine for signs of excessive heat or other irregularities

Engine - Exhaust System

- Check for leaks
- Check exhaust condition (i.e. flex, pipe, silencer, hangers, rain cap, etc.)

Gas Heat Large

Site Visit Baseline

- Check-in with Facilities contact
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

Note current outside air temperature

- Note current weather conditions
- Check heating/cooling operation
- Check/Record supply air temperature
- Check/Record return air temperature
- Check/Record system static pressure
- Note any abnormal vibration or noise

Compressors

- Note cleanliness/condition
- Record suction pressure
- Record suction temperature
- Record discharge pressure
- Record discharge temperature
- Record operating voltage
- Record operating amps
- Check crankcase heater
- Check unloaders
- Check for refrigerant/oil leaks
- Check crankcase oil level
- Meg ohm readings compressor windings
- Check crankcase heater volts and amps

Main Generator

- Visual inspection of windings for damage or debris
- Check air inlet & outlet restrictions
- Check output circuit breaker for loose or unsatisfactory lug connections

Transfer Switch

- Visually check all connectsions for signs of heat or other problems
- ATS system tested
- Document AC Meter readings & frequency

After-run Checks

- Switch on the generator is in "AUTO" & circuit breakers are closed
- Power generation system is operational at time of inspection
- Provide written status report to Facilities
 Manager including any recommended repairs
 with costs identified

Condenser Fan Section

- Inspect bearings for excessive wear & end play, tighten set screws
- Adjust pulleys & belts
- Number & size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade and tighten set screws
- Verify proper operation of fans
- · Lubricate fan and motor
- Inspect mounting brackets

Exhaust Fan Section

- Inspect bearings for excessive wear & end play, tighten set screws
- Adjust pulleys & belts
- Number & size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate fan and motor

Outdoor Coils

- Note cleanliness of coil
- Record deltaP across coil
- Record deltaT across coil
- Check for refrigerant leaks
- Check coil pan and drain (if applicable)

Indoor Coils

- Note cleanliness of coil
- Record deltaP across coil
- Record deltaT across coil
- Check for refrigerant leaks
- Check condensate pan and drain

Filter Section

- Note filter condition
- Change filters per schedule
- Note condition of outside air filters/screens

Refrigeration System

- Record superheat
- Record sub cooling
- Verify reversing valve operation
- Verify metering devise operation
- · Check cap tube condition
- Check for refrigerant/oil leaks
- Verify hot gas bypass operation
- Check sightglass

Heating Section (Gas)

- Inspect heat exchanger
- Inspect burner section
- Record gas pressures
- Check pilot and flam quality
- Verify combustion blower operation
- Record combustion blower motor amps
- Check Delta T across heat exchanger

Humidification

- Check canister
- Record amperage
- Check drain and fill valve
- Check condition of hoses
- Check heating element (electric)

• Check electric probe (electric)

Return Fan Section

- Inspect bearings for excessive wear & end play, tighten set screws
- Adjust pulleys & belts
- Number & size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade and tighten set screws
- · Verify proper operation of fans

Controls

- Check and tighten all terminations in control panel
- Exercise controls
- Check VFD
- Check safeties and trip points
- Check ambient controls

Economizer Section

- Check for dirt accumulation
- Check damper actuator and linkage operations
- Check and adjust minimum position
- · Check operation of pressure relief dampers
- Confirm enthalpy switch operation

Supply Fan Section

- Inspect bearings for excessive wear & end play, tighten set screws
- Adjust pulleys & belts
- Number & size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- · Verify proper operation of fans
- · Lubricate fan and motor

Heat Pump Air Handler (Air to Air)

Site Visit Baseline

- Check-in with Facilities contact
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

- Note current outside air temperature
- Note current weather conditions
- Check heating/cooling operation
- Check/Record supply air temperature
- Check/Record return air temperature
- · Note any abnormal vibration or noise

Refrigeration System

- Check for refrigerant/oil leaks
- Check sightglass

Controls

- Check and tighten all terminations in control panel
- Exercise controls
- · Check safeties and trip points

Supply Fan Section

- Inspect bearings for excessive wear & end play, tighten set screws
- Adjust pulleys & belts
- Number & size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate fan and motor

Indoor Coils

- Note cleanliness of coil
- Record deltaP across coil
- Record deltaT across coil
- Check for refrigerant leaks
- Check condensate pan and drain

Filter Section

- Note filter condition
- Change filters per schedule
- Note condition of outside air filters/screens

Heating Section (Electric)

- Inspect controls and sequencer operations
- Record voltage
- · Record amperage
- · Check overload and safeties

General Maintenance

Check for corrosion

Housekeeping

- Wipe off any excess lubricates
- Cleanup work area

VAV Fan Powered

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Inspection

• Verity operation

Operational Overview

- Check/Record supply air temperature
- Note any abnormal vibration or noise

Supply Fan Section

- Inspect bearings for excessive wear and end play
- Adjust pulleys and belts
- Number and size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate fan and motor
- Check operation of air valve

Controls

- Check all terminations in control panel
- Exercise controls
- Check safeties and trip points

Controls

- Note filter condition
- Change filters per schedule

Hot Water Unit Heater

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

- Verify overall operation
- · Check heating operation
- Note any abnormal vibration or noise

Hot Water Coils

- Note cleanliness of coil
- Record deltaP across coil
- Record deltaT across coils

Safeties

- Check for loose or burnt wiring
- Check trip all trip points

Housekeeping

- Wipe off any excess lubricates
- Cleanup work area

Controls

- Check all terminations in control panels
- Exercise controls

General Maintenance

• Check for corrosion

Pump Circulation

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Inspection

- Verify operation
- Note any abnormal vibration or noise

Performance

- Record pump discharge pressure
- Record pump suction pressure

Safeties

- Check for loose or burned wiring
- Check trip all trip points

Electrical

- Check electrical contacts for wear & pitting
- Check starter contactors
- Check and tighten electrical connections

Controls

- Check all terminations in control panels
- Exercise controls

Lubrication

- Lubricate motor bearings
- Lubricate solid coupling
- Check pump oil level

General Maintenance

- Check isolation valve packing
- Check isolation valves for leaks

Drive Motors

- Check for dirt & debris around end bell
- Check motor fan
- Check all hold down bolts
- Megger, motor and record results
- Record motor amperages
- Record motor voltages

Drive Components

- Check coupling guard security
- Check coupling alignment

Pump

- Check packing or mechanical seals for leaks
- Repack if required
- Inspect gaskets for leaks & deterioration
- Check all hold down bolts
- Check impeller clearance

Expansion Tank

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

- Check and record precharge pressure
- Check and record system pressure prior to expansion tank
- Check and record system pressure after expansion tank
- Record fluid temperature

Air Separator

- Check air separator for leakage
- Check separator drain valve
- Check air eliminator for proper operation

Mechanical

- Check isolation valve for leaks
- Check isolation valve for proper operation
- Check strainer for debris

Optional Tasks

- Release air, drain expansion tank, remove flange and dip tube and check for interior corrosion
- Recharge tank pressure

* Note: Do not remove drain plug unless air pressure in tank has been bled to 0 psig Do not remove blind flange or system connection until tank has been bled to 0 psig

Chiller Scroll - Air Cooled

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Inspection

- Verify operation
- Document performance & deficiencies

Performance

- Record run time and start counts
- Check and record evaporator pressure
- Check and record evaporator water temps.
- Check and record chilled water temps.
- Check refrigerant charge
- Check and record superheat/subcooling
- Check and record condenser pressure
- Check and record condenser temperatures
- Check dry eye and record color

Safeties

- Check pressure switches for leaks
- Check pressure relief valves

Electrical

- Check for loose or burnt wiring
- Check all contacts for wear or pitting
- Check starter contacts
- Check all electrical connections
- Check amperages and voltages

Controls

- Check all terminations in control panels
- Exercise controls
- Check cabinets for debris

Drive Motors

- Check all hold down bolts
- Check end belts for dirt or debris
- Check motor fan

Drive Components

- Check sheaves for wear and alignment
- Check long coupling alignment
- Lube coupling as needed
- Check coupling for looseness or wear
- Check drive belt for wear

Condenser and Fans

- Check for vibration
- Check fan blades for cracks
- Check fan clearance
- Check mounting bolts
- Check coils for dirt build up
- Inspect coils for leaks
- Lubricate fan motor as required
- Check for proper fan rotation
- Check bearing, collar, sheave, and pulley
- Check air intake
- Check for cleanliness

Evaporator

- Check for leaks
- Check expansion valve

Compressor

- Check and record oil pressure
- Check and record oil level
- Check for leaks
- Check starter/contactor for wear and pitting
- Check amperage for wear and pitting
- Check crankcase heater operation
- Inspect siteglass for leaks

Lubrication

- Lube motor bearings as required
- Lube motor bearings
- Check and record oil pump volts/amps
- Megger oil pumps and record

Housekeeping

- Wipe off excess lubricants
- Clean up work area

Optional Tasks

- Calibrate system pressure gauges
- Calibrate system electrical gauges
- Clean coils
- Check internal interlocks
- Open and inspect evaporator tubes
- Change oil based on analysis
- Open and inspect condenser tubes
- Brush condenser tubes

Air Comp Recip Oil Flooded

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Performance

- Check operating voltage
- Check and record motor amps
- Megger motor and record results
- Check system pressures
- Record 1st stage pressure
- Record 2nd stage pressure

Condition Monitoring

Note abnormal vibration or noises

Safeties

- Check for loose or burned wiring
- Check safety trip points
- Calibrate safety devices
- Operate safety relief valves

Electrical

- Check electrical contacts for wear and pitting
- Check starter contactors
- Check and tighten electrical connections

Drive Motors

- Check for dirt and debris around end bell
- Check motor fan
- Check all hold down bolts
- Check mounting brackets

Drive Components

- Check coupling guard for security
- Check alignment
- Check coupling wear

Compressor

- Check hold down bolts
- Check unloader operation
- Check for leaks
- Check oil differential pressure
- Record discharge temperature

Air System

- Remove and replace intake air filter
- Inspect intake and discharge valves
- Drain and remove moisture from air system
- Inspect aftercooler
- Inspect intercooler
- Inspect moisture trap and drain

Lubrication

- Lubricate motor bearings
- Lubricate solid coupling
- Remove and replace oil filter

General Maintenance

- Check gate valve packing
- Check gate valves for leaks
- Check for corrosion

Air Dryer - Refrigerated

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Heat Exchanger

Inspect and brush as needed

Compressor

- Note cleanliness/condition
- Record suction pressure
- Record suction temperature
- Record discharge pressure
- Record discharge temperature
- Record operating voltage
- Record operating amps
- Check for refrigerant/oil leaks
- Check crankcase oil level
- Meg ohm readings compressor windings

Condenser Fan Section

- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate and motor

Operation Log

- Record inlet air temperature
- Record outlet air temperature
- Record high temperature alarms
- Record low temperature alarms
- Record refrigerant pressure cut out alarms
- Record inlet pressure
- Record outlet pressure
- Operate and inspect condensate drain valves

Electrical

- Check electrical contacts for wear and pitting
- Check starter contactors
- Check and tighten electrical connections

Fuel Oil Storage Tank

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

- Inspect tank for corrosion
- Inspect floating tank roof, lifter or cone
- Inspect automatic float gauge
- Inspect fuel tank fire protection devices
- Inspect berms around fuel storage tank for erosion
- Inspect non-freeze draw valves
- Inspect storage tank vacuum and pressure vents
- Inspect vapor recovery line for deterioration
- Run pump and check operation
- Calibrate and adjust fuel oil pressure
- Inspect fuel strainer and clean as needed
- Inspect tank electrical grounds for breaks
- Inspect tank electrical grounds for loose fittings
- Inspect liquid level gauge for proper operation
- Check actual level against liquid level gauge

Water Heater - Gas

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment & lock out
- Document work done during inspection
- Check out with site contact

Operational Inspection

Verify overall operation

Performance

- Drain several gallons from tank to remove sediment
- Check water temperature

Safeties

- · Check for loose or burnt wiring
- Check trip all trip points

Electrical

- Check electrical contacts for wear & pitting
- Check and tighten electrical connections

Burner

- Check ignition system
- Check burners
- Check flame quality
- Check for CO traces
- Check flu

Thermostat

• Check operation with amp meter

Pressure Relief Valve

- Check valve operation
- Check for leaks
- Check for corrosion

General Maintenance

- Check for water leaks
- Check for corrosion

Optional Tasks

- Check sacrificial anode
- Check pressure relief valve

Make Up Aire Unit Direct Fired - Gas

Site Visit Baseline

- Check-in with site contact person
- Check for safe equipment access
- Isolate equipment and lock out
- Document work done during inspection
- Check out with site contact

Operational Overview

- Note current outside air temp and weather conditions
- Verify overall operation
- Check/Record supply air temperature

Note any abnormal vibration or noise

Controls

- Check all terminations in control panel
- Exercise controls
- Check VFD
- Check safeties and trip points
- Check ambient controls

Economizer Section

- Check for dirt accumulation
- Check damper actuator and linkage operation
- Check and adjust minimum position
- Check operation of pressure relief dampers

Supply Fan Section

- Inspect bearings for excessive wear and end play
- Adjust pulleys and belts
- Number and size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate fan and motor

Exhaust Fan Section

- Inspect bearings for excessive wear and end play
- Adjust pulleys and belts
- Number and size of belts
- Record operating volts
- Record operating amps
- Inspect fan blade
- Verify proper operation of fans
- Lubricate fan and motor

Filter Section

- Note filter condition
- Change filters per schedule
- Note condition of outside air filters/screens

Heating Section (Gas)

- Inspect heat exchanger
- Inspect burner section
- Record gas pressures
- Check pilot and flame quality
- Verify combustion blower operation
- Record combustion blower motor amps
- Check Delta T across heat exchanger

***ANY REPLACEMENT/PARTS WORK BEYOND MAINTENANCE SCOPE DETAILS WILL NEED APPROVAL FROM FACILITIES MANAGER.

SECTION 7 - SITE LOCATIONS, EQUIPMENT LIST & FREQUENCY

Site 1: Station 11, 211 Mill Avenue South, Renton, WA

N/A	AC Unit	Roof	Trane	33816EE4F	2TWR2030B1000AA	2.5 Tons	4XY
AC-5	AC Unit	Mechanical Room	Trane	5223RXX1V	TWE037E13FB1	3 Tons	4XY
AC-3	AC Unit	Mechanical Room	Trane	5223CMA2V	TWE037E13FB1	3 Tons	4XY
N/A	AC Unit	Roof	Trane	5043LLY1F	2TWR2036A1000AB	3 Tons	4XY
AC-4	AC Unit	Mechanical Room	Trane	5254THHBD	TWE060A300EL	5 Tons	4XY
AC-2	AC Unit	1st Floor Electircal Room	Trane	5231WHLBD	TWE060A300EL	5 Tons	4XY
AC-1	AC Unit	1st Floor Electircal Room	Trane	5114KLK2V	TWE065E13FB2	5.5 Tons	4XY
N/A	Air Compressor	Upstairs Storage	Saylor-Beall			300 PSI	1XY
EF-3	Exhaust Fan	Roof	Cook	033SC72182-00/0007009	100 ACEH 100C10DH	.04 HP, 200 CFM	1XY
EF-2	Exhaust Fan	Roof	Cook	033SC78655-00/0005601	90 ACFH 90C10DH	1/4 HP, 200 CFM	1XY
EF-13	Exhaust Fan	Roof	Cook	033SC39946-00/0005501	100 ACFH 10015DH	1/4 HP, 300 CFM	1XY
EF-6	Exhaust Fan	Roof	Cook	033SC72182-00/0007008	1CCACEH 100C10DH	1/4 HP, 300 CFM	1XY
EF-4	Exhaust Fan	Roof	Cook	033SC74178-00/0000704	100 ACEH 100C10DH	1/4 HP, 350 CFM	1XY
EF-1	Exhaust Fan	Roof	Cook	033SC78655-00/0001802			1XY
EF-10	Exhaust Fan	Roof	Cook	033SC78655-00/0000701 90 ACEH 90C15DH		1/4 HP, 500 CFM	1XY
EF-11	Exhaust Fan	Roof	Cook	033SC78655-00/0001801	SC78655-00/0001801 90 ACEH 90C15DH		1XY
EF-14	Exhaust Fan	Roof	Cook	033SC74178-00/0000703	100 ACFH 100C15DH	1/4 HP, 500 CFM	1XY
EF-8	Exhaust Fan	Roof	Cook	033SC78655-00/0003101	100 ACFH 100C15DH	1/4 HP, 600 CFM	1XY
EF-7	Exhaust Fan	Roof	Cook	033SC72182-00/0005601	70 ACEH 70015DH	1/50 HP, 100 CFM	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	704424	HDBI-130	3 HP, 4000 CFM	1XY
N/A	Expansion Tank	1st Floor Electrical Room	Amtrol		ST-30V	14 Gallons	1XY
N/A	Furnace		Lennox		E11Q3-751	16.6 KW, 1275 CFM, 56.6 MBH	4XY
N/A	Furnace		Lennox		E11Q5-1123	24.8 KW, 2590 CFM, 84.6 MBH	4XY
N/A	Heat Pump	Roof	Trane	51827KS2F	2TWA2060A3000AB	5 Tons	4XY
N/A	Heat Pump	Roof	Trane	51827S12F	2TWA2060A3000AB	5Tons	4XY
N/A	Heat Pump	Roof	Trane	51827RM2F	2TWA2060A3000AB	5 Tons	4XY
N/A	Pump	Sump Pump	Paco		SM 2070-0	1 HP, 1000 GPM	1XY
N/A	Pump	Sump Pump	Paco		SM 2070-0	1 HP, 1000 GPM	1Xy
N/A	Furnace		Lennox		E11Q3-371	8.3 KW, 825 CFM, 28.3 MBH	4XY
N/A	Furnace		Lennox		E11Q5-1123	24.8 KW, 2350 CFM, 84.6 MBH	4XY

N/A	Furnace		Lennox		E11Q5-751	16.6 KW, 2150 CFM, 56.6 MBH	4XY
N/A	Unit Heater	Serves multiple areas	Markel		F3F1610C	10,000 Watts	1XY
N/A	Unit Heater	Waiting Area	Markel		FH3255	4500 Watts	1XY
N/A	Unit Heater	Upstairs Storage	Markel		FIF 1502	2000 Watts	1XY
N/A	Unit Heater	Kitchen	Markel		EH792	500 Watts	1XY
N/A	Unit Heater	Corridor	Markel		EH792	500 Watts	1XY
N/A	Unit Heater	Television Room	Markel		E2002	560 Watts	1XY
N/A	Water Heater	1st Floor Electrical Room	A.O Smith	1128M000174	DRE 120 100	119 Gallons	1XY
N/A	Water Heater	Mechanical Room	RUUD	RU 1010R00213	PE2S-30-2	30 Gallons	1XY
N/A	Water Heater	1st Floor storage	RUUD	699135040	PE80-2 A	80 Gallons	1XY

NA	Fire Protection	West side of truck bay	Ames	Model: 200BM3	Serial No: 12082	Size: 3/4"	1XY
NA	Fire Protection	West side of truck bay	Ames	Model: Colt 300-BF	Serial No: HL2448	4"	1XY

N/A	Generator	South Parking Lot	Kohler	30ROZ81/SN.223108	30kw / 3 gal/hr	80 gal capacity 27 hr run time	2XY (One annual, and one 6mo check)
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Site 2: Station 12, 1209 Kirkland Avenue, Renton, WA

AC-1	AC Unit	IT Room	Mitsubishi			2 Tons	4XY
N/A	Air Compressor	Mechanical Room	General Air	OL215-MD96540	OL21533AC	1/3 HP, 50 PSI	1XY
N/A	Air Compressor	Sprinkler Room	Ingersoll-Rand	307110012	2545K10	175 PSI	1XY
N/A	Air Compressor	CO2 fill area	BAUER			7.5 HP, 7500 PSI	1XY
N/A	Air Dryer	Compressor Room				1/3 HP, 208V	1XY
AHU-1	Air Handler Unit	Mechanical Room	York	CDMM 17425D	AP170	10 HP, 8000 CFM, H: 238,000 Btu, C: 310,000 Btu/Hr	4XY
B-1	Boiler	Mechanical Room	Lochinvar	D03H00154255	CHN401	399,999 Btu/Hr	1XY
N/A	Chiller	Outside	York	RDMM005491	YCUL0030EC46XCA	30 Tons	4XY
N/A	Condensing Unit	Outside	Mitsubishi		PU30EK2	2.5 Tons	4XY
N/A	Condensing Unit	Outside	Aaon	200306- CCCC02754	CA0291	2.5 Tons	4XY
N/A	Condensing Unit	Outside	Aaon	200306- CCCC02751	CA0291	2.5 Tons	4XY
N/A	Condensing Unit	Outside	Mitsubishi		PU24EK	2 Tons	4XY
N/A	Condensing Unit	Outside	Mitsubishi		PU24EK	2 Tons	4XY
N/A	Condensing Unit	2nd Floor	Mitsubishi		PU24EK	2 Tons	4XY
EF-5	Exhaust Fan	Ceiling	Greenheck		SP-252	.03 HP, 250 CFM	1XY
EF-3	Exhaust Fan	Ceiling	Greenheck		SP-252	.03 HP, 200 CFM	1XY
EF-4	Exhaust Fan	Ceiling	Greenheck		SP-B150	.17 HP, 120 CFM	1XY
EF-6	Exhaust Fan	Ceiling	Greenheck		SP-B150	.17 HP, 120 CFM	1XY
EF-14	Exhaust Fan	Ceiling	Greenheck		SP-B150	.17 HP, 100 CFM	1XY
EF-11	Exhaust Fan	Ceiling	Greenheck		SP-B150	.17 HP, 120 CFM	1XY
EF-12	Exhaust Fan	Ceiling	Greenheck		SP-B150	.17 HP, 120 CFM	1XY
N/A	Exhaust Fan	Kitchen Hood	Greenheck	03J10377	GHEV-7.00-S	1 HP, 1250 CFM	1XY
EF-7	Exhaust Fan	Roof	Greenheck		GB-360	1 HP, 8000 CFM	1XY
EF-13	Exhaust Fan	Ceiling	Greenheck		SP-262	1/2 HP, 650 CFM	1XY
EF-1	Exhaust Fan	Roof	Greenheck		GB-141	1/3 HP, 1350 CFM	1XY
EF-9	Exhaust Fan	Roof	Greenheck		GB-141	1/3 HP, 1350 CFM	1XY

EF-2	Exhaust Fan	Roof	Greenheck		GB-141	1/4 HP, 1100 CFM	1XY
EF-10	Exhaust Fan	Roof	Greenheck		G-131	1/6 HP, 750 CFM	1XY
EF-8	Exhaust Fan	Roof	Greenheck		GB-240	3/4 HP, 4500 CFM	1XY
N/A	Expansion Tank	Mechanical Room	Amtrol		RP-25	25 Gallons	1XY
EXP-1	Expansion Tank	Mechanical Room	Extrol		AX 60-V	33.6 Gallons	1XY
N/A	Generator	Outside	Kohler	223108	30R0Z281	33 KW, 138A	(2xy) One AN and one Six-month check
N/A	Generator	Outside	KatoLight			415 KW, 624A	(2xy) One AN an one Six-month check
N/A	Pump	Mechanical Room	Armstrong		816366-041	3/4 HP, 35 GPM	1XY
N/A	Pump	Mechanical Room	Armstrong		816366-042	3/4 HP, 35 GPM	1XY
N/A	Pump	Mechanical Room	Armstrong		810119MF-001	1/12 HP, 10 GPM	1XY
RH-1	Radiant Heater	Main Truck Bay area	Thermazone		Black Body	N/A	1XY
RH-2	Radiant Heater	Main Truck Bay area	Thermazone		Black Body	N/A	1XY
RH-3	Radiant Heater	Main Truck Bay area	Thermazone		Black Body	N/A	1XY
RH-4	Radiant Heater	Main Truck Bay area	Thermazone		Black Body	N/A	1XY
N/A	Storage Tank	Mechanical Room	A.O Smith			175 Gallons	1XY
UH-1	Unit Heater	Bay Area	REZNOR		UDAS-125	1/20 HP, 100,000 Btu/Hr	1XY
UH-2	Unit Heater	Bay Area	REZNOR		UDAS-125	1/20 HP, 100,000 Btu/Hr	1XY
UH-3	Unit Heater	Near medical supply room	REZNOR		UDAS-125	1/20 HP, 100,000 Btu/Hr	1XY
FB-112	Variable Air Volume	Kitchen	DTQS			1/4 HP, 1000 CFM, 14 MBH	1XY
FB-109	Variable Air Volume	Exercise Room	DTQS			1/4 HP, 1200 CFM, 15 MBH	1XY
FB-204	Variable Air Volume	Lobby	DTQS			1/6 HP, 400 CFM, 7 MBH	1XY
FB-117	Variable Air Volume	Media Room	DTQS			1/6 HP, 500 CFM, 8.5 MBH	1XY
	Variable Frequency Drive	Mechanical Room	York	2031300093	AYK401600932	10 HP	1XY
N/A	Water Heater	Mechanical Room	A.O Smith	LF03-2507442- 970	BTH 250A 970	100 Gallons, 240,000 Btu/Hr	1XY
N/A	Water Heater	Kitchen	Insinkerator	12068524243	E340 SST	2/3 Gallons	1XY

NA	Boiler Make up	Mechanical Room over truck bay	Wilkins	Model: 975XL	Serial No: 110997	3/4"	1XY
NA	Fire Prevention	Riser Room in SW corner of building	Wilkins	Model: 950XL	Serial No: 2066212	3/4"	1XY
NA	Boiler make up	Riser room in SW corner of building	Wilkins	Model: 350DA	Serial No: N20652	4"	1XY

1	NA	Generator	South Parking lot entry	Katolight	D415FR54/SN.WA535285	415kw / 30 gal/hr	2200 gal capacity 73 hr run time	2XY (One annual and one 6mo check)
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Site 3: Station 13, 18002-108th Avenue SE, 98055, Renton, WA Site 4: Station 13, 18006-108th Avenue SE, 98055, Renton, WA

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N/A	Condensing Unit	Roof	Mitsubishi	6004427	MU-A09WA	3/4 Ton	4XY
N/A	AC Unit	Roof				2 Tons	4XY
N/A	Air Compressor	Sub-building	General Air			1/3 HP,1 50 PSI	1XY
N/A	Air Compressor	Sprinkler System	General Air	OL110-07 05 05 52	OL11016ACT	1/6 HP, 50 PSI	1XY
N/A	Air Compressor	2nd Floor Storage room	Saylor-Beall			3 HP, 200 PSI	1XY
N/A	Air Compressor	Sub-building	Saylor-Beall			3 HP, 200 PSI	1XY
N/A	Automatic Transfer Switch	Mechanical Room	Kohler				1XY
N/A	Condensing Unit	Roof	Mitsubishi	6004427	MU-A09WA	3/4 Tons	1XY
DH 7-1	Duct Heater	Various				1 HP, 115 CFM	1XY
DH 7-2	Duct Heater	Various				1 HP, 115 CFM	1XY
DH 7-3	Duct Heater	Various				1 HP, 115 CFM	1XY
DH 7-4	Duct Heater	Various				1 HP, 115 CFM	1XY
DH 7-5	Duct Heater	Various				2 HP, 220 CFM	1XY
DH 8-1	Duct Heater	Various				1.5 HP, 125 CFM	1XY
DH 8-2	Duct Heater	Various				1.5 HP, 125 CFM	1XY
DH 8-3	Duct Heater	Various				2 HP, 175 CFM	1XY
N/A	Evaporative Unit	Elevator Room	Mitsubishi	6002557	MS-A09WA	1/2 HP, 9500 Btu/Hr	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	700288	SPB-12	1.5 HP, 800 CFM	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	700287-2	SPB-12	1.5 HP, 800 CFM	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	700287-1	SPB-12	1.5 HP, 800 CFM	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	700286	SPB-12	1.5 HP, 800 CFM	1XY
N/A	Exhaust Fan	Roof	Greenheck	07B02621	SWB-130-15- CH-UB-X	1.5 HP, 8500 CFM	1XY
N/A	Exhaust Fan	2nd Floor	Greenheck	07B02554	SE1-12-432-C-X	1/8 HP, 500 CFM	1XY
N/A	Exhaust Fan	2nd Floor	Greenheck	07B02555	SE1-12-432-C-X	1/8 HP, 500 CFM	1XY
N/A	Exhaust Fan	Roof	Greenheck	07B02515	SWB-110-7-CH- UB-X	3/4 HP, 1500 CFM	1XY
N/A	Exhaust Fan	Roof	Greenheck	07B02516	SWB-110-7-CH- UB-X	3/4 HP, 1500 CFM	1XY
N/A	Expansion Tank	Mechanical Room	Amtrol		ST-25V	10.3 Gallons	1XY
N/A	Expansion Tank	2nd Floor Storage room	Amtrol		ST-12	4.4 Gallons	1XY
N/A	Expansion Tank	Sub-building	Amtrol		ST-5	5 Gallons	1XY
TU 2-5	Fan Terminal Unit	Various				1/2 HP, 1110 CFM	1XY
TU 1-1	Fan Terminal Unit	Various				1/2 HP, 1280 CFM	1XY
TU 2-8	Fan Terminal Unit	Various				1/2 HP, 755 CFM	1XY
TU 1-2	Fan Terminal Unit	Various				1/2 HP, 965 CFM	1XY
TU 2-4	Fan Terminal Unit	Various				1/3 HP, 580 CFM	1XY

TU 1-9	Fan Terminal Unit	Various				1/3 HP, 600 CFM	1XY
TU 2-2	Fan Terminal Unit	Various			+	1/3 HP, 600 CFM	1XY
TU 1-6	Fan Terminal Unit	Various		1	+	1/3 HP, 650 CFM	1XY
TU 1-3	Fan Terminal Unit	Various		1	†	1/3 HP, 655 CFM	1XY
TU 2-7	Fan Terminal Unit	Various		1	†	1/3 HP, 680 CFM	1XY
TU 2-1	Fan Terminal Unit	Various		1		1/3 HP, 720 CFM	1XY
TU 1-7	Fan Terminal Unit	Various		1	1	1/3 HP, 740 CFM	1XY
TU 1-5	Fan Terminal Unit	Various		1	1	1/3 HP, 775 CFM	1XY
TU 1-8	Fan Terminal Unit	Various		1	'	1/3 HP, 795 CFM	1XY
TU 2-3	Fan Terminal Unit	Various				1/3 HP, 800 CFM	1XY
TU 1-4	Fan Terminal Unit	Various				1/3 HP, 850 CFM	1XY
TU 2-6	Fan Terminal Unit	Various		<u> </u>		1/6 HP, 400 CFM	1XY
N/A	Generator	Outside	Kohler		<u> </u>	180 KW, 270A	1XY
N/A	Heat Exchanger	2nd Floor Storage room	ThermalSys	623855	AA-50-1		4XY
N/A	Heat Exchanger	Sub-building	ThermalSys	623856	AA-50-1		4XY
N/A	Package Unit	Roof	Trane	706101228D	YCD180B3LBHB	5 HP, H: 250,000 Btu/Hr, C: 180,000 Btu/Hr	4XY
N/A	Package Unit	Roof	Trane	706101217D	YCD151C3L0BB	3 HP, H: 150,000 Btu/Hr, C: 151,000 Btu/Hr	4XY
N/A	Pump	Mechanical Room	Bell and Gossett			1 HP, 38 GPM	1XY
N/A	Pump	Sub-building	Bell and Gossett			1 HP, 38 GPM	1XY
N/A	Radiant Heater	Fire Truck Bay	RE-VERBER- RAY		DX2-40-50N	50,000 Btu/Hr	1XY
N/A	Radiant Heater	Fire Truck Bay	RE-VERBER- RAY		DX2-40-50N	50,000 Btu/Hr	1XY
N/A	Radiant Heater	Fire Truck Bay	RE-VERBER- RAY		DX2-40-50N	50,000 Btu/Hr	1XY
N/A	Radiant Heater	Fire Truck Bay	RE-VERBER- RAY		DX2-40-50N	50,000 Btu/Hr	1XY
N/A	Radiant Heater	Sub-building	RE-VERBER- RAY	<u> </u>	DX2-40-25N	25, 000 Btu/Hr	1XY
N/A	Radiant Heater	Sub-building	RE-VERBER- RAY	<u> </u>	DX2-40-25N	25, 000 Btu/Hr	1XY
N/A	Radiant Heater	Sub-building	RE-VERBER- RAY		DX2-40-25N	25, 000 Btu/Hr	1XY
N/A	Radiant Heater	Sub-building	RE-VERBER- RAY		DX2-40-25N	25, 000 Btu/Hr	1XY
N/A	Unit Heater	Storage Room	REZNOR		'	1/16 HP, 45,000 Btu/Hr	1XY
N/A	Unit Heater	Sub-building	REZNOR		'	1/16 HP, 45,000 Btu/Hr	1XY
N/A	Water Heater	2nd Floor Storage room	A.O Smith	A07M009456	BTH 150 970	100 Gallons, 150,000 Btu/Hr	1XY

H-01	Heater	Hanging in bay	IRH	Field Verify	Field Verify		1XY
H-02	Heater	Hanging in bay	IRH	Field Verify	Field Verify		1XY
H-03	Heater	Hanging in bay	IRH	Field Verify	Field Verify		1XY
WH-01	Water Heater	In mechanical room	AO Smith	GPDT 50 100	A07A081288		1XY
CU	Condensing Unit HP	Outside on right side of bldg	Trane	4TWX4024B1000AA	5283UAX1F		4XY
AHU	Air Handler Unit HP	In ceiling in office	Trane	Field Verify	Field Verify		4XY
N/A	Water Heater	Mechanical Room	A.O Smith	A07M009455	BTH 150 970	100 Gallons, 150,000 Btu/Hr	1XY
N/A	Water Heater	Mechanical Room	A.O Smith	A07M009457	BTH 150 970	101 Gallons, 150,000 Btu/Hr	1XY
N/A	Water Heater	Sub-building	A.O Smith	A07A081288	GPDT 50 100	50 Gallons, 65,000 Btu/Hr	1XY

NA	Domestic	Storage room on east side of bay	Watts	Model: 009	Serial No: 26767	2 1/2"	1XY
NA	Fire Protection	Vault in planter, west side of property	Wilkins	Model: 350ADA	Serial No: V09445	6"	1XY
NA	Fire Protection	Vault in planter, west side of property	Wilkins	Model: 950XLD	Serial No: 2392034	3/4"	1XY
NA	Domestic	Storage room on south side of bay in Fleet shop	Watts	Model: 009M2QT	Serial No: A07169	2"	1XY
NA	Fire Protection	Vault in rear parking area by Fleet shop	Wilkins	Model: 350ADA	Serial No: v09363	6"	1XY
NA	Fire Protection	Vault in rear parking area by Fleet shop	Wilkins	Model: 950XLD	Serial No: 2392170	3/4"	1XY

NA	Generator	South Parking Lot	Kohler	180REOZJC/SN.2137522	180kw / 13 gal/hr	500 gal capacity 15 hr run time	2XY (One Annual, one 6mo check)
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Site 5: Station 14, 1900 Lind Avenue SW, Renton, WA

N/A	AC Unit	Outside on wall	Carrier	0497E63707	52SQC314301AA	1.5 Tons	4XY
N/A	AC Unit	Outside	Carrier	3313X92614	38HDR036510	3 Tons	4XY
N/A	AC Unit	Outside	Carrier	1715X90225	24AHA436A500	2 Tons	4XY
N/A	AC Unit	Outside	Carrier	1315X90952	24AHA460A500	2 Tons	4XY
N/A	Air Compressor	Tool Room	ProAir			6.5 HP, 175 PSI	4XY
N/A	Automatic Transfer Switch	Electrical Room	Generac	38436	97A00829-W	420A, 120/208V	4XY
N/A	Condensing Unit	Outside	Carrier	3396X31417	38HDC048510	4 Tons	4XY
AC-6B	Condensing Unit	Outside	Carrier	3396X31409	38HDC048510	4 Tons	4XY
EF-1	Exhaust Fan	Bay	Cook		SPB36	1 HP, 6000 CFM	1XY
EF-2	Exhaust Fan	Bay	Cook		SPB36	1 HP, 6000 CFM	1XY
N/A	Exhaust Fan	Training Building	Aerovent	98329815-1-1	24Z563-SV40- 1540-1.5	1.5 HP, 50,000 CFM	1XY
EF-6	Exhaust Fan	Fitness Room	Cook		G-9-10	1/2 HP, 1000 CFM	1XY
EF-12	Exhaust Fan	Electrical Room	Cook		10515D	1/20 HP, 650 CFM	1XY
EF-8	Exhaust Fan	Compressor Room	Cook		SWD 18S10D	1/4 HP, 2000 CFM	1XY
EF-9	Exhaust Fan	Compressor Room	Cook		SWD 18S10D	1/4 HP, 2000 CFM	1XY
EF-5	Exhaust Fan	Restroom	Cook		G-6-15	1/4 HP, 300 CFM	1XY
EF-10	Exhaust Fan	Conference Room	Cook		G-6-15	1/4 HP, 300 CFM	1XY
EF-11	Exhaust Fan	Laundry room	Cook		G-6-15	1/4 HP, 300 CFM	1XY
EF-3	Exhaust Fan	Women's Bathroom	Cook		G-6-15	1/4 HP, 600 CFM	1XY
EF-4	Exhaust Fan	Men's Bathroom	Cook		G-6-15	1/4 HP, 600 CFM	1XY
EF-7	Exhaust Fan	Storage Room	Cook		G-6-15	1/4 HP, 600 CFM	1XY
N/A	Exhaust Fan	Training Building	Aerovent	98329815-2-1	30Z532-SV40- 1337-3	3 HP, 51,000 CFM	1XY
N/A	Expansion Tank	Electrical Room	Amtrol		ST-12	4.4 Gallons	1XY
AC-6A	Make Up Air Unit	Attic	REZNOR		SCE-125	1 HP, 1600 CFM, 125,000 Btu/Hr	4XY
AC-1A	Package Unit	Attic	Carrier		58MXA-040-12	1/3 HP,1230 CFM, 40,000 Btu/Hr	4XY
AC-2A	Package Unit	Attic	Carrier		58MXA-040-12	1/3 HP,1230 CFM, 40,000 Btu/Hr	4XY

AC-3A	Package Unit	Attic	Carrier		58MXA-080-20	3/4 HP, 1800 CFM, 80,000 Btu/Hr	4XY
AC-4A	Package Unit	Attic	Carrier		58MXA-080-20	3/4 HP, 1575 CFM, 80,000 Btu/Hr	4XY
AC-5A	Package Unit	Attic	Carrier		58MXA-040-12	1/3 HP, 675 CFM, 40,000 Btu/Hr	4XY
N/A	Pump	Electrical Room	Bell and Gossett			1/12 HP, 10 GPM	1XY
N/A	Pump	Sprinkler System				3/4 HP, 40 GPM	1XY
N/A	Water Heater	Attic	A.O Smith			100 Gallons, 140,000 Btu/Hr	1XY
N/A	Water Heater	Attic	A.O Smith			100 Gallons, 140,000 Btu/Hr	1XY
N/A	Water Heater	Electrical Room	A.O Smith	1339M000906	BTH 199 100	100 Gallons, 199,900 Btu/Hr	1XY
	Water Heater	Kitchen	Insinkerator			2/3 Gallons	1XY
N/A	Water Heater	Kitchen	Insinkerator			2/3 Gallons	1XY

NA	Fire Sprinklers	Vault in front of Training in SW Corner	Watts	Model: 709-6	Serial No: 115575	6"	1XY
NA	Fire Sprinklers	Vault infront of Training in SW Corner	Watts	Model: 007M1QT	Serial No: 10441	3/4"	1XY

N/A	Generator	SE Outside Entry	Generac	97A00829-S/SN.2033163	100 kw / 7 gal/hr	230 gal capacity 33 hr run time	2XY (One annual, one 6mo check)
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Site 6: Station 15, 12923 156th Avenue SE, Renton, WA

WH-01	Water Heater	Rheem	GHE100SU-200A	A271800225	Mezz Area	1XY
AC-01	Air Compressor	Ingersoll Rand	2475	NAR10292602	Mezz Area	1XY
AD-01	Air Dryer	Ingersoll Rand	D42IN	18M-016909	Mezz Area	1XY
HP CU - 01	Heat Pump Condensing Unit	Daikin	RXL15QMVJU	G007851	Rooftop	4XY
HP-1	Outdoor Heat Pump	Daikin	REYQ96TTJU	Field Verify	Mech Enclosure	4XY
AHU-01	Air Handler Unit Multi Zone	Daikin	DPS004AHHE2DW-4	FBOU180901283	Rooftop	4XY (7) 16x16x2 Filter
Indoor 01	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 02	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 03	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 04	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 05	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 06	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 07	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 08	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 09	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 10	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 11	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
Indoor 12	Indoor Air Handler Unit	Daikin	Field Verify	Field Verify	Inside Fire Dept	4XY
	Gas Furnace	Trane	Field Verify	Field Verify	127	1XY

IRH-1	Gas Fired Radiant Heater	RE-Verber-Ray	Field Verify	Field Verify	Арр Вау	1XY
IRH-2	Gas Fired Radiant Heater	RE-Verber-Ray	Field Verify	Field Verify	App Bay	1XY
H-01	Heater	IRH1	Field Verify	Field Verify	In Fire Dept Truck Bay	1XY
H-02	Heater	IRH1	Field Verify	Field Verify	In Fire Dept Truck Bay	1XY
UH-01	Heater	Reznor Heater	Field Verify	Field Verify	In Fire Dept Truck Bay Fire Gear Area	1XY

NA	Irrigation	By hose bib	Watts	Model: LF007M3QT	Serial No: 099257	3/4"	1XY
NA	Irrigation	Right side of entry drive @ meter	Wilkins	Model: 950XLT2	Serial No: 4631855	1 1/2"	1XY
NA	Bypass	Mechanical Room	Ames	Model: DCLF4H	Serial No: 932347	1/2"	1XY
NA	Fire Service	Mechanical Room	Ames	Model: DCDALF4A	Serial No: 70009	4"	1XY
NA	Domestic	Mechanical Room, east side of bldg.	Watts	Model: LF009M2QT	Serial No: 118468	2"	1XY

NA	Generator	NE corner behind station	Kohler	Model: 125REOZJG SN.1017330053/000104	TBD	725 gal capacity Run time, TBD	2XY (One annual, one 6mo check)
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Site 7: Station 16, 12923 156th Avenue SE, Renton, WA

N/A	AC Unit	IT Room				1.5 Tons	4XY
N/A	Air Compressor	Tool Room				2 HP, 200 PSI	1XY
N/A	Automatic Transfer Switch	Tool Room	ASCO	104462		104A, 240V	1XY
N/A	Exhaust Fan	Roof	Cincinnati Fan	908208	HDBI-130	5 HP, 4600 CFM	1XY
N/A	Expansion Tank	Tool Room	Amtrol		ST-12	4.4 Gallons	1XY
N/A	Expansion Tank	Washer/Dryer Room	Amtrol		ST-12	4.4 Gallons	1XY
N/A	Generator	Outside	Olympian	097682/06		17 KW, 60A	2XY (One annual, one 6mo check)
oNE	Package Unit	Roof	Trane	Z321X2M1H	YCC030F1M0BH	1/3 HP, 75,000 Btu/Hr	4XY
N/A	Package Unit	Roof	Trane	Z3212B91H	YCC030F1M0BH	1/3 HP, 75,000 Btu/Hr	4XY
N/A	Package Unit	Roof	Carrier	3413C86009	48TCDA05A2A3A0A0A0	72,000 Btu/Hr	4XY
N/A	Unit Heater	Fire Truck Bay	Hastings			150,000 Btu/Hr	1XY
N/A	Water Heater	Washer/Dryer Room	A.O Smith		BTH-199 200	100 Gallons, 199,900 Btu/Hr	1XY
N/A	Water Heater	Tool Room	RUUD	M061609101	PR0E50 M2 RU95	50 Gallons, 65,000 Btu/Hr	1XY

NA Fire System Vault in front of station Febco Model: 805YD Serial No: B15	51 6"	1XY
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N/A	Generator	West Parking Lot	Olympian	SN.097682/106	17 kw / 2 gal/hr	45 gal capacity 22.5 hr run time	2XY (One annual, one 6mo check)
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Site 8: Station 17, 14810 Petrovitski Road SE, Renton, WA

N/A	Air Compressor	Tank refill room	BAUER			7 HP, 7000 PSI	1XY
CU-1	Condensing Unit	Outside	Mitsubishi	26W00177	PURY-P144TKMU-A	12 Tons	4XY
N/A	Evaporative Unit	Library	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 1	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 2	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 3	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 4	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 5	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Sleeping Room 6	Mitsubishi		PKFY-P06NBMU-E2	.5 Tons	4XY
N/A	Evaporative Unit	Radio Room	Mitsubishi		PKFY-P18NBMU-E2	1.5 Tons	4XY
N/A	Evaporative Unit	Training Room	Mitsubishi		PKFY-P24NKMU-E	2 Tons	4XY
N/A	Evaporative Unit	Lobby	Mitsubishi		PKFY-P12NKMU-E	1 Ton	4XY
N/A	Evaporative Unit	Training	Mitsubishi		PLFY-P12NCMU-E	1 Ton	4XY
N/A	Evaporative Unit	Training	Mitsubishi		PLFY-P12NCMU-E	1 Ton	4XY
N/A	Evaporative Unit	Dayroom	Mitsubishi		PLFY-P15NCMU-E	1 .3 Tons	4XY
N/A	Evaporative Unit	Lobby	Mitsubishi		PLFY-P12NCMU-E	1 Ton	4XY
N/A	Evaporative Unit	Company Officer office	Mitsubishi		PKFY-P08NBMU-E2	3/4 Tons	4XY
N/A	Exhaust Fan	Electrical Room	Dayton			1/15 HP, 1110 CFM	1XY
EF-2	Exhaust Fan	Roof	Greenheck	13107131 1301	G-080-VG-6-X	1/20 HP, 250 CFM	1XY
EF-4	Exhaust Fan	Roof	Cook	033SE49899- 00/0003101	70 ACEH 70017DHEC	1/4 HP, 150 CFM	1XY
EF-3	Exhaust Fan	Roof	Cook	033SE49899- 00/0001901	100 ACEH 100C17DHE0	1/4 HP, 200 CFM	1XY
PH-2	Exhaust Fan	Roof	Cook	033SE49899- 00/0005301	240PR 24 PR	3/4 HP, 1739 CFM	1XY
EF-1	Exhaust Fan	Roof	Cook	033SE49899- 00/0000701	135 ACE 135C17DEC	3/4 HP, 2000CFM	1XY
PH-1	Exhaust Fan	Roof	Cook	033SE49899- 00/0004301	240PR 24 PR	3/4 HP, 2070 CFM	1XY
MAU-1	Make Up Air Unit	Roof	REZNOR	BLL E05647	REH-20A	1/4 HP, 800 CFM	1XY
N/A	Pump	Mechanical Room	Armstrong		Astro 25	1/25 HP, 4 GPM	1XY
N/A	Storage Tank	Outside				300 Gallons	1XY

N/A	Unit Heater	Fire Truck Bay	Hastings			150,000 Btu/Hr	1XY
N/A	Unit Heater	Laundry room	TPI		F3A22TAFC8120T	2000 Watts	1XY
N/A	Water Heater	Mechanical Room	RUUD	1112T0949N	HE-119-130N	120 Gallons, 130,000 Btu/Hr	1XY
N/A	Water Heater	Kitchen				2/3 Gallons	1XY

NA	Domestic	East wall of truck bay	Conbraco	Model: RP40	Serial No: 202176	2"	1XY
NA	Fire System	Vault in SE corner of property	Wilkins	Model: 350ADA	Serial No: V35317	4"	1XY
NA	Fire System	Vault in SE corner of property	Wilkins	Model: 950XL	Serial No: 3687583XLD	3/4"	1XY

N/A	Generator	West Parking Lot	Cummins	SN.H060965305	60kw / 5 gal/hr	148 gal capacity 30 hr run time	2XY (One annual, one 6mo check)
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