



open

control systems

an envelop group company

Service Support Agreement Presented To:



A Proposal by	City of Lawrence HVAC, Controls, & FLS PM Agreement
Envelop Facility Technologies	City of Lawrence
Jon Lofberg	901 E 59 th Street
jonlofberg@envelopgroup.com	Indianapolis, IN 46216
+1 (317) 601-6791	Renea Rafala
Date: 5/22/2025	rrafala@cityoflawrence.org , 317-545-5566

Executive Summary

This proposed service solution, our Service Support Agreement, will proactively serve to protect your facility's significant assets through a program of planned service tasks by the trained technical staff of Open Control Systems, LLC (Service Provider). This Agreement has been specifically developed to support your unique facility needs, and the Services provided herein will help achieve your goals of maximum performance, minimal disruption, and optimized longevity of your facility's equipment.

Scope of Work

To optimize the sophisticated technology of your equipment and its impact on your business, it is critical to provide trained personnel to assist in managing your systems. Our highly trained personnel will work to assure that the building systems listed in this Agreement are operating at peak efficiency in support of your specific facility and organizational objectives. After an initial assessment of the equipment to be covered by this Agreement (the "Qualified Products"), the specific responsibilities under this Agreement include the following:

- Perform comprehensive preventive maintenance inspections and on-going commissioning in accordance with manufacturer recommendations, equipment run hours, application demands, environmental factors, and the experience of the technical team on the attached Schedule of Qualified Products.
- The Service will ensure that the Qualified Products are operating according to manufacturers' recommendations, seasonal requirements, and your business needs. Our highly qualified staff will provide you with recommendations for additional maintenance, as well as identify any worn, broken, or questionable parts. Preventive maintenance services will be determined based upon your business objectives, risk tolerance, manufacturer's recommendations, and our industry experience.
- This level of professional preventive maintenance is designed to keep your assets operating at peak performance to maximize equipment life while reducing operating cost and energy consumption for minimal disruption to business.

Functional Testing Services

Better than a mere traditional test and inspect, we will systematically test the Qualified Products for proper functionality. The tasks for each of the Qualified Products will be performed by equipment type at the intervals noted herein. These tasks are designed to place the equipment into prime operating condition so that Qualified Products will operate effectively, reliably, and efficiently. Any system deficiencies will be brought to your attention through work reports or quality assurance visits.

Benefits

Maintenance tasks based on your operating objectives, equipment needs, and operating conditions provide the following benefits:

- Reduces energy consumption.
- Extended system component life reduces operating costs.
- Reduces comfort problems.
- Reduces costs.
- Protects the value of your system.
- Improves system performance.
- Extended asset life reduces overall ownership costs.
- Optimum energy consumption reduces operations and production costs.
- Reduced system downtime increases productivity.
- Maintaining equipment protects the value of your system.
- Preferred Service Rates.

Contact Information

Client Contact

Renea Rafala	317-545-5566	rrafala@cityoflawrence.org
Jason Mooney	317-391-9449	jmooney@cityoflawrence.org

Making a Service Request

As a Service Support Agreement Client, we will provide you access to 24-hour Client Support regardless of holiday or regular business hours. When you place a service call, the on-call representative will return your call to verify service details, site requirements, and site contact, and confirm an estimated time of arrival.

Priority Response Time

As a Service Support Client, you will be given priority for service calls. Should a service need arise, we will give you priority over non-service contract clients as well as the discounted support program service rates.

Contact Information

+1 (317) 259-7604 Option 1

IN-Service@envelopgroup.com

Operating Hours and Recognized Holidays

Normal business hours are Monday to Friday, 7:30 a.m. to 4:30 p.m. Recognized holidays include:

- | | |
|--|---|
| <ul style="list-style-type: none"> - New Year's Day - Martin Luther King Day - Memorial Day - Independence Day (July 4) - Labor Day | <ul style="list-style-type: none"> - Thanksgiving - Thanksgiving Friday - Christmas Eve - Christmas Day |
|--|---|

Asset Profile: Qualified Products to be Serviced.

FD 36 Equipment 7620 Oaklandon Rd. Indianapolis, IN 46236	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Extinguishers	N/A	N/A	7	Annual		
Fire Alarm	Siemens	SXL-EX	1	Annual		
Sprinkler System	Rasco	N/A	1	Annual		
Kitchen Hood	TBD	TBD	1	Semi Annual Insp & Cleaning		
Split System	Lennox	TBD	2	Semi Annual		Visual Only

FD-37 Equipment 4450 McCoy St. Lawrence, IN 46226	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Extinguishers	N/A	N/A	7	Annual		
Fire Alarm	Pyrotronics	Cerberus	1	Annual		
Sprinkler System	Star	N/A	1	Annual		
Kitchen Hood	TBD	TBD	1	Semi Annual Insp & Cleaning		
Split System	Mitsubishi	PURY-EP96TNU-A	2	Semi Annual	Visual Only	Visual Only
Ceiling Cassettes	Mitsubishi	N/A	9	Semi Annual		

FD-38 Equipment 4450 McCoy St. Lawrence, IN 46226	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Extinguishers	N/A	N/A	7	Annual		
Fire Alarm	Pyrotronics	Cerberus	1	Annual		
Sprinkler System	Rasco	N/A	1	Annual		
Kitchen Hood	TBD	TBD	1	Semi Annual Insp & Cleaning		
RTU	Trane	TBD	5	Semi Annual	Visual Only	Visual Only
VAV's	Trane	TBD	12	Annual		Visual Only
Radiant Heaters	TBD	TBD	3	Annual		
Building Automation	Alerton	Compass	1	Quarterly (2 Onsite, 2 Remote)		

FD-39 Equipment	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Extinguishers	N/A	N/A	9	Annual		
Fire Alarm	Simplex	PXL	1	Annual		
Sprinkler System	Rasco	N/A	1	Annual		
Kitchen Hood	TBD	TBD	1	Semi Annual Insp & Cleaning		
Split System	Carrier	TBD	2	Semi Annual	Visual Only	Visual Only

FD- 40 Equipment	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Extinguishers	N/A	N/A	7	Annual		
Fire Alarm	Pyrotronics	Cerberus	1	Annual		
Sprinkler System	Rasko	N/A	1	Annual		
Kitchen Hood	TBD	TBD	1	Semi Annual Insp & Cleaning		
Split System	Mitsubishi	PURY-EP96TNU-A	2	Semi Annual	Visual Only	
Ceiling Cassette	Mitsubishi	N/A	9	Semi Annual		Visual Only

Lawrence Gov Center	Manufacturer	Model	Quantity	Inspection Frequency	Coil Cleaning	Filters
Fire Alarm	Siemens	Cerberus	1	Annual		
Sprinkler System	Rasko	N/A	1	Annual		
Chemical Suppression	Fike	SHP Pro	1	Semi Annual		
AHU	McQuay	CAH008FDAC	1	Semi Annual	Visual Only	Visual Only
Chiller	McQuay	ALR-075E	1	Semi Annual	Visual Only	
FCU's	McQuay	TSH-041G	64	Semi Annual		Visual Only
Roof Vent	Greenheck	WRH	3	Annual		
Exhaust Fans	Greenheck	BSQ-70-4	15	Annual		
Pumps	Bell & Gossett	1510-2E	5	Annual		
Boilers	Hydrotherm	AM-300	4	Annual		
Controls	Distech	TBD	2	Semi Annual		

Additional Scope Notes:

Customer to receive preferred labor rate at this site during the Term of this Agreement.

Price and Payment Structure

Billing Information

Address: 9001 E 59 th Street Indianapolis, IN 46216	Billing Contact 1	Billing Contact 2
	Renea Rafala	Name
	rrafala@cityoflawrence.org	email
	Phone 1: 317-545-5566	Phone 1:
	Phone 2:	Phone 2:

Term: This Agreement takes effect and will continue for a period of One (1) year, as follows:

	Start	To	Annual Investment	Invoicing
Year 1	June 1, 2025	May 31, 2026	\$40,200	Annual in Advance

Acceptance: This Proposal incorporates by reference the Terms and Conditions on the following pages. This Agreement is binding and enforceable upon execution by both parties and shall take effect on June 1, 2025.

CLIENT:

SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

PRINT NAME

TITLE

SERVICE PROVIDER:

SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

PRINT NAME

TITLE

ADDITIONAL TERMS AND CONDITIONS APPLICABLE TO ALL PROPOSALS/AGREEMENTS/SERVICES

TERMS AND CONDITIONS

1. **DEFINITIONS.** "Company" refers to Open Control Systems, LLC. "Client" refers to the client named in the applicable statement of work or proposal (a "Proposal"). "Services" means the services specifically described in the applicable Proposal to be performed by Company. Services do not include any service (including repair work to a facility) which is not specifically listed in a Proposal.
2. **PROVISION OF SERVICES; LIMITED WARRANTY.** Company will provide the Services in accordance with the Proposal. To the extent that any Services performed or materials provided are found to be defective within thirty (30) days after completion of a Service, Company will re-perform the defective Service or repair or replace a defective component, at Company's sole option. EXCEPT AS EXPLICITLY SET FORTH IN THIS SECTION, COMPANY MAKES NO EXPRESS OR IMPLIED WARRANTIES RELATING TO THE SERVICES AND EXPRESSLY DISCLAIMS ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF DESIGN, MERCHANTABILITY OR FITNESS FOR ANY SPECIFIC OR GENERAL PURPOSE AND THOSE ARISING BY STATUTE, LAW OR FROM A COURSE OF DEALING OR USAGE OF TRADE. This warranty is afforded by Company only to Client. If Client elects to afford any warranty to any other person or entity, Company shall have no liability whatsoever in connection therewith. Employees and sales representatives of Company are not authorized to make warranties; oral or written statements by them do not constitute warranties and shall not be relied upon. Client must inspect and notify Company of any believed non-compliance or defect with the Services immediately upon discovery. Company will work with Client such that Client may benefit from any available manufacturer's or similar warranty.
3. **ACCEPTANCE AND PRICES.** This proposal is subject to acceptance within 30 days from date, and the prices are subject to change without notice prior to acceptance by the Client.
4. **INDEMNIFICATION; LIMITATION OF REMEDIES.** The amounts payable to Company herein under are based upon the value of the Services and the scope of liability as herein set forth and are unrelated to the value of the client's property or property of others located in client's premises. Client and Company shall fully indemnify, defend and hold harmless the other for any and all costs and expenses (including reasonable attorneys' fees) for any and all claims, costs, expenses and damages arising as a result of acts or omissions of the other, its employees, agents, guests, invitees and/or representatives including any violation of laws, except that Company is not indemnified from claims, costs, expenses, and damages arising out of the gross negligence or misconduct of its employees, agents, guests, invitees and/or representatives.
5. **PAYMENT TERMS.**
 - 5.1 All of Company's invoices will be payable upon presentation and due thirty (30) calendar days after the invoice date. In the event that Client fails to pay any invoice by the due date thereof, Company may, in its sole discretion, suspend or cease Services until payments are current. In addition, Client shall pay all expenses of Company to collect any amounts due hereunder, including without limitation court costs and reasonable attorneys' fees.
 - 5.2 Unless specifically indicated, the fees listed in this Agreement do not include taxes, permits, or other such fees. Client shall be responsible for all taxes, tariffs, permits, and transportation costs related to this Agreement (including any value added or sales taxes) other than taxes on Envelop Facility Technologies income. If Client intends to provide a Certificate of Tax Exemption ("Certificate"), Client must provide a valid and fully completed Certificate within seven (7) days of execution of this Agreement.
6. **FORCE MAJEURE.** Except with regard to any payment obligation hereunder, neither party shall be liable for delays in performing or any failure to perform any of the terms of the Agreement caused by the effects of fire, strike, war, terrorism, insurrection, government restriction or prohibition, or other causes reasonably beyond its control and without its fault, but the party failing to perform shall provide the other party with prompt written notice of the reason for the non-performance and shall use all reasonable efforts to resume performance of the Services as soon as feasible.
7. **GOVERNING LAW; JURISDICTION.** The laws of the State of Indiana (without regard to its conflicts of laws principles) govern all matters arising out of or relating to the Services, the Agreement and all of the transactions it contemplates, including without limitation, its interpretation, construction, performance and enforcement. The parties hereby consent to the exclusive jurisdiction and service of process of and venue in the federal and/or state courts located in Marion County, Indiana in the event of any suit arising out of the Agreement.
8. **SHIPMENT DATES.** Shipment dates for material are estimates only. Company shall not be held liable nor accountable to any liquidated or consequential damages, or delay expenses of any kind, due to manufacturing and/or shipping delays caused by the manufacturer.
9. **GENERAL PROVISIONS.**
 - 9.1 This Agreement may not be assigned by either Party without the express written consent of the other Party, which consent shall not be unreasonably withheld; provided, however, that either Party may assign any or all of its rights and obligations under this Agreement without the other Party's written consent to any affiliate or to a third party by way of merger, acquisition, consolidation, sale, or transfer of all or substantially all of the Party's assets or capital stock; provided that such assignee shall expressly assume all of the assigning Party's obligations under this Agreement by written notification delivered to the non-assigning Party. Any attempted assignment, delegation, or transfer in violation hereof shall be invalid. Subject to the foregoing, the rights and liabilities of Company hereunder will bind and inure to the benefit of their respective successors and assigns.
 - 9.2 The Parties shall not be responsible for any failure to perform or delay in performing (except for Customer's obligations to make payments as detailed herein) due to causes beyond their reasonable control including, but not limited to: (i) any fire, explosion, unusually severe weather, natural disaster or act of God or nature; (ii) epidemic; any nuclear, biological or chemical attack; any other public health or safety emergency; any act of terrorism; any action reasonably taken in response to any of the foregoing; (iii) any act of declared or undeclared war or of a public enemy, or any riot or insurrection; (iv) damage to machinery or equipment; any disruption in transportation, communications, electric power or other utilities, or other vital infrastructure; or any means of disrupting or damaging internet or other computer networks or facilities; (v) any strike, lockout or other labor dispute or action; (vi) any action taken in response to any of the foregoing events by any civil military or authority; or (vii) any other event beyond the Parties' control.
 - 9.3 Except to the extent Company is performing Services under an existing, in-force warranty or services agreement between Company and Client, this Agreement supersedes any terms that may otherwise be a part of Client's order, including the specific rejection of any terms and conditions pursuant to Client's order. This expresses the entire understanding of the Parties. The Agreement may not be modified or waived, in whole or part, except in writing and signed by an officer or duly authorized representative of each Party. Any failure to exercise or delay in exercising any right, power or privilege granted under the Agreement shall not operate as a waiver of such right, power or privilege or preclude any further exercise thereof or the exercise of any other right, power or privilege.
 - 9.4 Client acknowledges that Company may use subcontractors to perform some of the Services and other obligations described hereunder. Company shall be permitted to engage subcontractors to fulfill its obligations to Client.

10.0 OTHER EXCLUSIONS. Other exclusions include, but is not limited to, portable toilets, utility usage costs of any nature, utility company costs of any nature, housekeeping pads, painting, fire stopping, fire proofing, access panels, over-time, costs beyond proposal scheduled completion date, cutting and patching, excavation, performance bond, payment bond, permits other than for Envelop Facility Technologies work, back charges or deductive change orders without prior agreement on cost, parking costs, drug testing, safety training, control work, issuing badges, etc.

11.0 Non-Discrimination. The Company agrees that it, and its subcontractors, will not discriminate against any employee or applicant for employment to be employed in the performance of this agreement, with respect to the employee's hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of the employee's race, religion, color, sex, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the agreement.

12.0 Compliance With E-Verify Program. Under Ind. Code § 22-5-1.7-11, by entering into an agreement with the Client, the Company is required to enroll in and verify the work eligibility status of all of its newly hired employees through the E-Verify program. The Company is not required to verify the work eligibility status of all of its newly hired employees through the E-Verify program if the E-Verify program no longer exists. By executing this agreement, the Company affirms that it does not knowingly employ an unauthorized alien. The Company further affirms that, prior to entering into this agreement with the Client, it will enroll in the E-Verify program, and agrees to verify the work eligibility status of all its newly hired employees through the E-Verify program.

13.0 Non-Appropriation. The Parties acknowledge that the Client is a governmental entity whose funds are subject to appropriation by its fiscal body. Therefore, if at any time during the initial term or subsequent term of this agreement, the Client's fiscal body should fail to appropriate sufficient funds to continue this agreement, it will become null and void. The Client shall not be obligated to perform unless and until sufficient funds are appropriated. The Client agrees to seek funding for the continuation of the agreement during each budget cycle during the initial term or subsequent term of this agreement. The Client agrees to inform the Company in writing of any such non-allocation of funds at the earliest possible date, and shall pay for all services provided prior to exhaustion of the appropriated funds.

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Fire Alarm System Inspection Tasking Sheet

Check In

- Report in with Customer Representative.
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.
- Per the NFPA, your fire alarm needs to be inspected by a certified technician once per year.
- However, some insurance companies require inspections twice a year.

Tasks

- Check fire alarm panel to ensure that the alarm initiating devices are communicating properly.
- Verify the alarm indicating devices are functioning properly.
- Verify that the supervisory signal initiating devices are functioning properly.
- Verify system power supplies including battery back-ups are sufficient.
- Inspect detectors. duct detector, & smoke detector.
- Functionally test detectors with test smoke or magnet.
- Pull every pull station and check their accessibility.
- Check remote annunciator(s), verify that the points being monitored are correct.
- If the system is monitored, verify the signal reached the monitoring company's office.
- Attach a new certification tag.
- Upload report to Mobileye's or other jurisdictional tracking system if required.

Check Out

- Report in with Customer Representative.
- Let Customer know if any obstructions are in front of the fire alarm panel.
- Ensure customer understands completed work.
- Review Work Performed and any noted deficiencies.
- Provide Customer Representative Work Order Documentation.

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Fire Sprinkler System Inspection

Tasking Sheet

Check In

- Report In with Customer Representative
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.

Tasks

- Inspect all fire department connections.
- Inspect all flow and pressure switches.
- Inspect all control valves and tamper switches.
- Perform a main drain test on all risers noting static and residual water pressure.
- Test alarms on sprinkler system.
- Verify sprinkler system is notifying the fire alarm panel.
- If there are dry pipe valves, inspect proper air pressure, water pressure and priming water level.
- Drain all low point drains on dry sprinkler systems.
- Verify that the monitoring company receives signal of water flow supervisory devices.
- Verify backflow preventers have been inspected.
- Attach a new certification tag.
- Upload report to Mobileye's or other jurisdictional tracking system if included in Agreement and required.

Check Out

- Report in with Customer Representative.
- Let Customer know if any obstructions are in front of the riser.
- Ensure customer understands completed work.
- Review Work Performed and any noted deficiencies.
- Provide Customer Representative work order documentation.

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Fire Extinguisher Inspection Tasking Sheet

Check In

- Report in with Customer Representative.
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer proper locations for fire extinguishers.
- Fire extinguishers should be checked monthly by the business owner or designated employee and annually by a certified fire extinguisher technician.

Tasks

- Visually inspect extinguisher that is in proper working order.
- Check the manufacture and maintenance dates.
- Weigh extinguisher.
- Visually inspect pressure gauge on dry chemical fire extinguishers.
- Check and remove safety pull pin, reinsert.
- Install new tamper seal.
- Remove discharge hose and inspect valve assembly for dry chemical fire extinguishers.
- Clean extinguisher.
- Attach a new certification tag.
- Upload report to Mobileye's or other jurisdictional tracking system if required
- Complete Fire and Safety Report.

Check Out

- Report in with Customer Representative.
- If a large quantity of fire extinguishers are due for hydro and recharge service, allow customer the ability to purchase from Envelop new fire extinguishers or service the existing fire extinguishers
- Ensure customer understands completed work.
- Let the Customer know if any areas are unprotected and require a fire extinguisher.
- Review work performed and any noted deficiencies.
- Provide Customer Representative work order documentation.

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RTU Operational Tasking Sheet

Check In

- Report in with Customer Representative.
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.

Operational Tasks

- Analyze performance data for volts, amps, and temperature differences (heating and cooling)
- Compare data to recorded start-up data.
- Inspect and lubricate door hinges.
- Inspect all access door gaskets. Gaskets that have hardened or are cracked should be replaced.
- Visually inspect for rust, corrosion, or dirt build-up. If found, clean the area and apply a proper sealant, correct the source of any dirt.
- Inspect all sheet metal seams on the cabinet that have silicone sealant. If the silicone is deteriorating, carefully remove the old material and re-caulk.
- Check all outdoor air hoods to make sure they are still fastened securely, and that silicone caulk is still effective.
- Inspect all access doors for proper door handle tension and door alignment. Doors and door gasketing are engineered to properly seal the unit against both positive and negative static pressure when the doors are correctly aligned. Doors can become misaligned because of accidental abuse or extended use.
- If the unit is equipped with a DX or Split DX cooling system, a complete inspection by an EPA certified technician will be conducted. Verify correct refrigerant pressures and operating temperatures.
- Test-start and run the DX system and verify proper operation.
- Check super heat and sub cooling on all circuits and verify proper operation.
- If the unit is equipped with Digital Scroll compressors, observe the Digital Scroll Controller during operation to verify that unloader solenoid is activating.
- Meg fan motors.
- Check evaporator coil for cleanliness.
- Check condenser coil for cleanliness.
- Check, clean or refill condensate drain as needed.
- Check condenser fan blades for dirt, tightness, and corrosion.
- Run unit through sequence of operation as defined by unit controller. Verify correct operation and adjust as needed.
- Check for loose hardware, component operation, refrigerant leaks, and unusual noises.

Check Out

- Report In with Customer Representative
- Review work performed and any noted deficiencies.
- Provide Customer Representative work order documentation.

850-O Pump Operational Inspection

Check In

- Report in with Customer Representative.
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.

Tasks

- Tighten line voltage electrical connections.
- Check incoming voltage.
- Lubricate pump motor.
- Clean strainers.
- Check amperage draw and voltage of motor.
- Check waterside pressure differentials.
- Check for unusual pump vibration.
- Check the condition of the pump shaft seal.
- Lubricate pump bearing assembly.

Check Out

- Report in with Customer Representative.
- Review work performed and any noted deficiencies.
- Provide Customer Representative work order documentation.

900-O Gas Boiler Operational Tasking Sheet

Check In

- Report in with Customer Representative.
- Review any noted issues or problems with Client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.

Tasks

- Inspect all surfaces for scale and corrosion.
- Drain expansion tanks as needed (water only).
- Check for leaking steam traps if applicable.
- Check boiler water level.
- Check and inspect all associated pressures.
- Check for proper water make-up.
- Validate sequence of operation.
- Inspect pilot frame strength and position.
- Check burner operation.
- Check pilot running tube.
- Check pilot assembly.
- Validate ignition device.
- Inspect induced draft motor and assembly.
- Inspect heat exchanger.
- Test for proper draft.
- Inspect fresh air vents to assure proper combustion air.
- Check operating gas pressure.
- Inspect temperature rise across heat exchanger.
- Check high temperature limit control.
- Clean condensate traps (if applicable).

Check Out

- Report in with Customer Representative.
- Review work performed and any noted deficiencies.
- Provide Customer Representative work order documentation.

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Building Automation Consultation Services

Tasking Sheet

Check In

- Report in with Customer Representative
- Review any noted issues or problems with client.
- Record any abnormal conditions, issues, observations, etc.
- Review any customer logs for operational problems and trends.
- Review with customer representative current comfort, control, and energy optimization objectives.

Consultative Services as Time Allows

- Ensure customer goals for building comfort and mechanical equipment operation are understood and addressed as necessary (i.e. any areas with temperature, humidity, air flow or air quality that are unsatisfactory). Review mechanical equipment “as designed” for functionality.
- Audit specific building locations for occupant and equipment environmental requirements.
- Identify any changes to space utilization requiring control changes.
- Identify mechanical problems hindering proper control.
- Determine control parameters for each location, for both occupied and unoccupied periods.
- Identify necessary changes to setpoints.

Control Strategies as Time Allows

- Analyze implemented control strategies for applicability in achieving environmental parameters and control objectives.
- Review trend data of mechanical equipment as needed.
- Review point history for alarmable points and verify point operation.
- Review setpoints as required to determine if control loops are out of range for extended period of time (, analyze and determine why unit is not maintaining setpoint.
- Inspect air handler controls and mechanical components to verify optimum operation.
- Analyze mechanical cooling, free cooling, and heating system integration strategies.
- Analyze and recommend optimal runtime and night setback strategies to ensure environmental control, while reducing energy consumption.
- Analyze equipment loads and recommend demand limiting and load rolling strategies that reduce energy consumption while ensuring comfort.
- Set and review historical trend data recording and reports, to verify control during occupied and unoccupied periods. Report on control strategy effectiveness and make recommendation for improvement.

Visual Inspections as Time Allows

- Inspect sensors and probes, validate they are not damaged and mounted securely, valves and dampers will stroke fully in both directions, sealing tightly where appropriate.

Central Plant (if applicable as Time Allows)

- **Chill Water Plant**
- Review trend data of Chiller(s) operation(s).
- Review point history for Chiller(s) alarmable points and verify point operation.
- Review Chilled water supply temperature within acceptable parameters of setpoint. If out of range for extended period of time analyze and determine why unit not maintaining setpoint
- Condenser water supply temperature within acceptable parameters of setpoint. If out of range for extended period of time analyze and determine why unit not maintaining setpoint.
- Review and print trend data of Chilled water pump operation.
- Review point history for alarmable points and verify point operation.
- Validate pumps respond to control commands.
- **Boiler / Hot Water Plant**
- Review and print trend data of Boiler operation.
- Review point history for Boiler alarmable points and verify point operation.
- Review Heating water supply temperature / steam pressure is within acceptable parameters of setpoint. If out of range for extended period of time analyze and determine why unit not maintaining setpoint
- Review and print trend data of Heating water pump operation.
- Review point history for alarmable points and verify point operation.
- Pumps respond to control commands.
- Variable volume pumping systems (if applicable) maintain pressure to within acceptable parameters of setpoint.
- Review trend data of Heat exchanger operation (if applicable)

Operational Support Needs as Time Allows

- Analyze the day-to-day informational needs of the operations staff.
- List of areas with comfort problems from customer representative.
- List from owner representative of control strategy concerns or areas requiring process change due to space utilization changes.
- Assist owner representative in clarification and/or implementation requirements on state and federal code changes.
- Assist in the design and implementation of alarm grouping and reporting strategies.
- List of alarms that owner representative wants added/deleted to current reporting strategies.
- Assist in the design and implementation of system status and management reports to aid in decision support for the Facility Management staff.
- Review peak demand trend data. Review and log peak demand value, time, and date over last review period.

Operational Repairs and Enhancements

- Minor programming changes through the course of consultation.
- Areas of the system or programming requiring a sustained presence or additional resources will be proposed to the end-user.

Check Out

- Report In with Customer Representative
- Review Work Performed and any noted deficiencies.
- Provide Customer Representative Work Order documentation.